

Final Environmental
Impact Report
J Street Drain Project
Ventura County, California
SCH # 2008041057

January 2012

Prepared for

**Ventura County Watershed Protection District
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ONE COMPANY | *Many Solutions*SM



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ACRONYMS AND ABBREVIATIONS

AB	Assembly Bill
ACHP	Advisory Council on Historic Preservation
ADT	Average Daily Trips
AEP	Association of Environmental Professionals
ALERT	Automated Local Evaluation in Real Time
AMSL	Above Mean Sea Level
AQMP	Air Quality Management Plan
ARB	Air Resources Board
bgs	Below ground surface
BEMP	Beach Elevation Management Plan
BMP	Best Management Practice
BP	Business Plan
CAA	Clean Air Act
CAAA	Clean Air Act Amendments
Cal-EPA	California Environmental Protection Agency
Cal-OSHA	California Occupational Safety & Health Administration
Caltrans	California Department of Transportation
CAPCOA	California Air Pollution Control Officers Association
CARB	California Air Resources Board
CBC	California Building Code
CBM	Coastal brackish marsh
Cc	Camarillo loam
CCAA	California Clean Air Act
CCC	California Coastal Commission
CCR	California Code of Regulations
Cd	Camarillo sandy loam
CDFG	California Department of Fish and Game
CDMG	California Division of Mines and Geology
CDP	Coastal Development Permit
CDPH	California Department of Public Health
CEQ	Council on Environmental Quality
CEQA	California Environmental Quality Act
CERCLA	Comprehensive Environmental Response Compensation and Liability Act
CESA	California Endangered Species Act
CFCs	Chlorofluorocarbons
CFR	Code of Federal Regulations
cfs	Cubic feet per second
CGS	California Geological Survey
CH ₄	Methane
CHSC	California Health and Safety Code
CIP	Capital Improvement Project
CMWD	Calleguas Municipal Water District
CnB	Coastal beaches
CNDDDB	California Natural Diversity Database
CNEL	Community Noise Equivalent Level
CO	Carbon monoxide
CO ₂	Carbon dioxide

CO _{2e}	Carbon dioxide equivalent
CPT	Cone Penetrometer Test
CUPA	Certified Unified Program Authority
CWA	Clean Water Act
cy	Cubic yards
dB	Decibel
dB(A)	A-weighted decibel
DBH	Diameter at breast height
DEIR	Draft Environmental Impact Report
DFIRM	Digital Flood Insurance Rate Map
DH	Disturbed habitat
District	Ventura County Watershed Protection District
DOGGR	Division of Oil, Gas, and Geothermal Resources
DOT	Department of Transportation
DTSC	Department of Toxic Substances Control
EAP	Emergency Action Plan
EDR	Environmental Data Resources
EIR	Environmental Impact Report
EOT	Emergency Operations Team
EP	Emergency Plan
EPA	Environmental Protection Agency
ESA	Endangered Species Act
EW	Eucalyptus woodland
F	Fahrenheit
FCGMA	Fox Canyon Groundwater Management Agency
FEMA	Federal Emergency Management Agency
FESA	Federal Endangered Species Act
FIA	Federal Insurance Administration
FICON	Federal Interagency Committee on Noise
FIRM	Flood Insurance Rate Map
FY	Fiscal year
GBV	Ground-Borne Vibration
GHG	Greenhouse gas
GMA	Groundwater Management Agency
GPD	Gallons per Day
HCP	Habitat Conservation Plan
HFC	Hydrofluorocarbons
HSLP	Health, Safety & Loss Prevention
HWCL	Hazardous Waste Control Law
I	Interstate
IPM	Integrated Pest Management
IS	Initial Study
IWMD	Integrated Waste Management Division
IWPP	Integrated Watershed Protection Plan
LARWQCB	Los Angeles Regional Water Quality Control Board
LAS	Lower Aquifer System
LCP	Local Coastal Plan
L _{eq}	Equivalent Sound Level
L _{eq} H	Equivalent Sound Level One Hour
LMD	Land Management Division

LOS	Level of Service
MBTA	Migratory Bird Treaty Act
mg/m ³	Milligrams per cubic meter
mgd	Million gallons per day
mm	Millimeter
MM	Mitigation Measure
MMT	Million metric tons
MPH	Miles per hour
MVCAC	Mosquito and Vector Control Association of California
MWDSC	Metropolitan Water District of Southern California
N ₂ O	Nitrous oxide
NAAQS	National Ambient Air Quality Standards
NAGPRA	Native American Graves Protection and Repatriation Act
NAHC	Native American Heritage Commission
NAS	Naval Air Station
NAVD	North American Vertical Datum
NBVC	Naval Base Ventura County
NCBC	Naval Construction Battalion Center
NCCP	Natural Communities Conservation Planning
NEPA	National Environmental Policy Act
NFELC	Naval Facilities Expeditionary Logistics Center
NFIP	National Flood Insurance Program
NGVD	National Geodetic Vertical Datum
NHPA	National Historic Preservation Act
NIH	National Institute of Health
NMFS	National Marine Fisheries Service
NO ₂	Nitrogen Dioxide
NOAA	National Oceanic and Atmospheric Administration
NOI	Notice of Intent
NOP	Notice of Preparation
NO _x	Nitrogen Oxides
NPDES	National Pollutant Discharge Elimination System
NPL	National Priorities List
O ₃	Ozone
O-H	Oxnard-Hueneme
OHP	Office of Historic Preservation
OHWM	Ordinary high water mark
OID	Oxnard Industrial Drain
OPR	Office of Planning and Research (Governor's)
OSHA	Occupational Safety and Health Administration
OW	Open water
OWWTP	Oxnard Wastewater Treatment Plant
Pb	Lead
PCH	Pacific Coast Highway
PFC	Perfluorocarbons
PEA	Preliminary Endangerment Assessment
PGA	Peak Ground Acceleration
PHWA	Port Hueneme Water Agency
PM _{2.5}	Particulate Matter of 2.5 Microns or Less in Diameter
PM ₁₀	Particulate Matter of 10 Microns or Less in Diameter

ppm	Parts Per Million
PRC	Public Resources Code
Qal	Quaternary Alluvium
RCRA	Resource Conservation and Recovery Act
RDEIR	Recirculated Draft Environmental Impact Report
RMP	Risk Management Plan
rms	root-mean-square
ROC	Reactive Organic Compounds
SAA	Streambed Alteration Agreement
SARA	Superfund Amendments and Reauthorization Act
SB	Senate Bill
SCAG	Southern California Association of Governments
SCAT	South Coast Area Transit
SCCIC	South Central Coastal Information Center
SCS	Soil Conservation Service
SCSM	Southern coastal salt marsh
SF ₆	Sulfur hexafluoride
SFD	Southern foredunes
SFHA	Special Flood Hazards Area
SHPO	State Historic Preservation Office
SLC	State Lands Commission
SMARA	Surface Mining and Recovery Act
SO ₂	Sulfur Dioxide
SO _x	Sulfur Oxides
SQMP	Stormwater Quality Management Program
SR	State Route
SWPPP	Storm Water Pollution Prevention Plan
SWRCB	State Water Resources Control Board
TCE	Trichloroethylene
TCP	Traffic Control Plan
TMDL	Total Maximum Daily Loads
UAS	Upper Aquifer System
UBC	Uniform Building Code
UD	Urban developed
UFC	Uniform Fire Code
US-101	Ventura Freeway
USACE	U.S. Army Corp of Engineers
USDA	U.S. Department of Agriculture
USEPA	U.S. Environmental Protection Agency
USFWS	U.S. Fish and Wildlife Service
USGS	U.S. Geological Survey
USNCBC	U.S. Naval Construction Battalion Center
UST	Underground Storage Tank
UWCD	United Water Conservation District
V/C	Volume to Capacity Ratio
VCAPCD	Ventura County Air Pollution Control District
VCRA	Ventura County modified rational method
VCRR	Ventura County Railroad
VCSQMP	Ventura County Stormwater Quality Management Program
VCVCP	Ventura County Vector Control Program

Acronyms and Abbreviations

VCWPD	Ventura County Watershed Protection District
VOC	Volatile Organic Compound
WDR	Wastewater Discharge Permit
WMP	Water Management Plan
$\mu\text{g}/\text{m}^3$	Micrograms per cubic meter

0.1 INTRODUCTION AND SUMMARY

This Final Environmental Impact Report (FEIR) has been prepared in accordance with the California Environmental Quality Act (CEQA) as amended (Public Resources Code Section 21000 et seq.), and *CEQA Guidelines* (California Administrative Code Section 15000 et seq.).

According to *CEQA Guidelines* §15132, the FEIR shall consist of the following:

- a) The Draft Environmental Impact Report (DEIR) or a revision of the Draft;
- b) Comments and recommendations received on the DEIR, either verbatim or in summary;
- c) A list of persons, organizations, and public agencies commenting on the DEIR;
- d) The responses of the Lead Agency to significant environmental points raised in the review and consultation process;
- e) Any other information added by the Lead Agency.

In accordance with these requirements, the J Street Drain EIR is comprised of the following:

- Recirculated Draft Environmental Impact Report (RDEIR), J Street Drain (September 2011) (SCH No. #2008041057), with revisions resulting from the most recent public comments, corrections, and clarifications shown as underlined or strikethrough text. The RDEIR consists of the Executive Summary and Chapters 1.0 through 8.0 of this FEIR.
- This FEIR document, January 2012, that incorporates the information required by §15132.

Format of the Final EIR

This document is organized as follows:

Section 0.1 Introduction

This section describes CEQA requirements and content of this FEIR.

Section 0.2 Corrections and Additions

This section provides a list of those revisions made to the EIR text and figures as a result of comments received and/or clarifications subsequent to release of the Revised Draft EIR for public review.

Section 0.3 Responses to Comment Letters Received on the Revised Draft EIR

This section provides copies of the comment letters received and individual responses to written comments. In accordance with Public Resources Code 21092.5, copies of the written proposed responses to public agencies will be forwarded to the agencies at least 10 days prior to certifying an EIR. The responses will conform to the legal standards established for response to comments on EIRs.

Section 0.4 Mitigation Monitoring and Reporting Program

This section includes the Mitigation Monitoring and Reporting Program (MMRP) which identifies the mitigation measures, timing and responsibility for implementation of the measures.

0.2 CORRECTIONS AND ADDITIONS

This section of the Final EIR (FEIR) identifies the location of or contains revisions to information included in the Revised Draft EIR (RDEIR) dated September 2011, based upon: (1) additional or revised information required to prepare a response to a specific comment; (2) clarifications; (3) updated information required due to the passage of time; and/or (4) typographical or content errors. The information added to the EIR does not meet the requirements for recirculation pursuant to Section 15088.5 of the State *California Environmental Quality Act (CEQA) Guidelines*.

0.2.1 REVISED AND SUPPLEMENTAL TEXT

Changes to the EIR were made in response to comments received on the Revised Draft EIR. Overall, the new information clarifies information and analysis presented in the Revised Draft EIR, or revises mitigation measures that were requested by commenters on the Revised Draft EIR. Text that has been added to the document appears in an underline format. Text that has been deleted appears with strikeout.

The table below identifies the changed Revised Draft EIR sections and accompanying page numbers in the FEIR.

Final EIR Section	Page Number
Table of Contents	v
ES.0 Executive Summary	ES-1, ES-3 – ES-6, Table ES-1, ES-5, and ES-6 (pgs. ES-7, ES 13, ES-14, ES-15, ES-16, ES-17, ES-18, ES-19)
1.0 Introduction and Summary	1-1 – 1-4, 1-6, 1-17, Table 1.5-1 (pgs 1-8 – 1-12), Table 1.8-1 (pgs. 1-19, 1-20, 1-26, 1-27, 1-28, 1-29, 1-30, 1-31)
3.0 Project Description	3-1, 3-10, 3-15, 3-29
4.1 Visual Resources	4.1-6, 4.1-14, 4.1-16, 4.1-17, 4.1-20, and 4.1-21
4.3 Water Resources and Hydraulic Hazards	4.3-1 4.3-6, 4.3-10, 4.3-12, 4.3-22, 4.3-27, 4.3-29, and 4.3-35
4.5 Transportation and Circulation	4.5, 20 and 4.5-22
4.6 Noise and Vibration	4.6-1, 4.6-2, 4.6-3, 4.6-6, 4.6-7, 4.6-8, 4.6-13, 4.6-15, 4.6-16, 4.6-17, 4.6-18, 4.6-19, 4.6-20, 4.6-21, 4.6-22, 4.6-24, 4.6-25, and 4.6-26
4.7 Geologic and Seismic Hazards	4.7-29
4.8 Hazardous Materials and Waste	4.8-1, 4.8-11, 4.8-12, 4.18-14, 4.8-16, 4.8-17, and 4.8-19
5.0 Alternatives	5-4 and 5-12
6.0 Other Environmental Considerations	6-1 and 6-2
8.0 References	8-2 and 8-5

0.2.2 REVISED AND SUPPLEMENTAL MITIGATION MEASURES

Based upon comment letters received on the Revised Draft EIR, new mitigation measures were added in the FEIR, and other mitigation measures were revised or renumbered. Revisions are noted in a strikeout/underline format.

Visual Resources

- VIS-1** The District shall provide landscaping to replace the oleander bushes removed along J Street Drain between Hueneme Road and Redwood Street by agreement with the City of Oxnard. Landscaping shall be replaced incrementally, within six months of completion of each project phase.
- ~~Within six months of project completion, the District shall provide landscaping to replace the oleander bushes removed along J Street Drain between Hueneme Road and Redwood Street by agreement with the City of Oxnard.~~
- VIS-4** Prior to construction a 10- to 12-foot-tall fence with green vinyl screening will be installed along the portion of the District and Oxnard Wastewater Treatment Plant property line that is not currently fenced.
- VIS-5** Although night construction is not anticipated, in the event that it becomes necessary, all lighting shall be shielded to prevent illumination of residences.

Transportation and Circulation

- TR-1** The District shall prepare a construction worksite traffic control plan and submit it to the County ~~and, cities,~~ Gold Coast Transit, Oxnard School District, Oxnard Union High School District, and Hueneme School District for review and approval prior to soliciting bids for the construction contract. This plan shall include such elements as the location of any lane closures, restricted hours during which lane closures would not be allowed, local traffic detours, protective devices and traffic controls (such as barricades, cones, flagmen, lights, warning beacons, temporary traffic signals, warning signs), access to abutting properties, provisions for pedestrians and bicycles, and provisions to maintain emergency access through construction work areas. The contractor shall comply with this plan.

Noise

- NOISE-2** A temporary noise control barrier shall be installed and maintained between the temporary work area and Buildings 6 and 7 in the Surfside III community during periods when heavy equipment is operating within 500 feet of these residences or when heavy-duty trucks are regularly using the access road adjacent to the drain. Additionally, temporary noise control barriers shall be installed and maintained in residential and commercial areas along Phases 2 - 4 to the extent that they do not affect traffic sight lines (e.g., noise barriers would not be installed at intersections). The noise barrier shall be composed of noise control blankets 10 feet tall with a sound transmission class of at least STC-25. In addition to placement of noise control blankets along the construction area adjacent to the Shoreline Care Facility, located at 5225 South J Street, and if needed, Our Saviour's Evangelical Lutheran Church at 905 Redwood Street, to further reduce noise levels below 68 dB(A) L_{eq} , additional noise control barriers shall be installed. To ensure sufficient noise barriers are deployed, construction noise levels shall be monitored ten feet from the exterior of the nursing home and church at the start of work activities within 500 feet of these two locations. Barriers would be installed to reduce noise levels generated by the loudest equipment when construction activities are closest to the nursing home and church. Monitoring would occur at the nursing home during construction Phases 2 and 3 and at the church during construction Phase 4. Construction noise levels

would be monitored weekly thereafter to ensure proper function of the barriers throughout work and that the desired noise attenuation at these locations is achieved.

This noise control barrier will also provide visual screening for all residents along the work area, eastern boundary of including the Surfside III property to shield residents from views of the J Street Drain during construction. If the Surfside III Condominium Owners' Association does not grant a temporary work area to enable installation of temporary noise barriers at Buildings 6 and 7, the District will provide funds for the Association to arrange the barrier installation on their property. Sound barriers would not be installed where encircling block walls already exist (e.g., newer condo/townhome complex west of J St Drain in Phase 1).

Geologic and Seismic Hazards

GEO-3

- a) A Licensed Surveyor shall plan and install a survey monument monitoring system on buildings within 25 feet of proposed vertical shoring to collect monthly baseline data for six months before construction. The monuments shall remain in place and be monitored monthly for one year after construction completion to track any latent changes. During construction, the Licensed Surveyor shall conduct surveys corresponding to major phases of work such as shoring installation, excavation, and backfill.
- b) Before Phase 1 construction may begin, the District shall require the Contractor to prepare a Work Plan, which would take into account all available geotechnical information for the areas where vertical shoring and sheet piles are to be installed. The Plan would specify the contractor's approach to installing vertical shoring and sheet piles in a manner that would avoid and minimize associated potential vibration damage to adjacent structures.
- c) The Work Plan shall require the Contractor to take daily measurements of the survey monuments on adjacent structures described in (a) above to track potential changes during construction.
- d) Should the surveys or measurements described in (a) and (c) above indicate subsidence or other damage due to construction activities, the Contractor shall modify the Work Plan to address the causes. Property owners within 25 feet of the proposed shoring shall be promptly notified of observed damage, and any Work Plan revisions shall be available to property owners upon request. For multi-unit structures, the District shall identify a single designated representative with whom to communicate.
- e) The District shall provide a construction contact telephone number to adjacent residents before work commences so that they may report possible observations of damage immediately to the District.

Hazardous Materials and Wastes

HAZ-1

Prior to dewatering activities between the Ventura County Railroad and the south project terminus, the District shall install or use existing monitoring wells in order to verify the direction of groundwater movement at the time of dewatering. sheet piling shall be placed

0.2 Corrections and Additions

~~on the east side of the drain channel in order to prevent the migration of groundwater from the Halaco site. If it is determined that there is a potential for groundwater migration at the site, the District shall install and operate five injection wells. Injection of water into the shallow aquifer at the beach parking area between the J Street Drain and the Halaco Site would minimize the migration of groundwater from beneath the Halaco Site. Note that additional field testing is currently being conducted to provide a more representative value for hydraulic conductivity for the vicinity of the drain. In the event that the results show the need for sheet piling on both the west and east side of the drain, sheet piling will be placed on both sides of the drain.~~

0.3 RESPONSE TO COMMENTS

This section contains responses to all comment letters received on the November 2011 Recirculated Draft Environmental Impact Report (RDEIR). Twenty-four letters were received during the comment period, which closed November 7, 2011. A copy of each letter with bracketed comment numbers on the right margin is followed by the response for each comment as indexed in the letter. The comment letters are listed in Table 0.3-1.

Table 0.3-1. Comment Letters – J Street Drain

Letter No.	Commenter	Letter Date
1	State Clearinghouse	11/8/11
2	California Department of Fish and Game	11/7/11
3	Ventura County Watershed Protection District – Water and Environmental Resources Division, Groundwater Section	10/28/11
4	Ventura County Watershed Protection District - Water and Environmental Resources Division, Water Quality - County of Ventura Stormwater Program	10/31/11
5	Ventura County Watershed Protection District – Planning and Regulatory Division, Permit Division	11/7/11
6	City of Oxnard Development Services Department	11/7/11
7	Central Coast Alliance United for a Sustainable Economy (CAUSE)	11/4/11
8	Louis Perry	11/7/11
9	Lynn Haile	10/2/11
10	Ira Green	10/3/11
11	Roy Prince	10/19/11
12	Surfside III: J Street Drain Project (JSDP) Committee	11/1/11
13	Frances Woolston	11/2/11
14	Michelle Hoffman	11/2/11
15	Al Galluzzo	11/2/11
16	William and Michelle Shanks	11/3/11
17	Patricia Dileski	11/5/11
18	Terry Ann Smith	11/6/11
19	Marion Kelemen	11/7/11
20	Slaughter & Reagan, LLP	11/7/11
21	Robert Banfill	11/7/11
22	Pamela Evans	11/7/11
23	Linda Kodman	11/7/11
24	Loewenthal, Hillshafer & Rosen LLP (resubmittal)	1/15/10



Edmund G. Brown Jr.
Governor

STATE OF CALIFORNIA
Governor's Office of Planning and Research
State Clearinghouse and Planning Unit



Ken Alex
Director

November 8, 2011

Angela Bonfiglio Allen
Ventura County Watershed Protection District
800 S. Victoria Avenue
Ventura, CA 93009-1610

Subject: J Street Drain Project
SCH#: 2008041057

Dear Angela Bonfiglio Allen:

The State Clearinghouse submitted the above named Draft EIR to selected state agencies for review. The review period closed on November 7, 2011, and no state agencies submitted comments by that date. This letter acknowledges that you have complied with the State Clearinghouse review requirements for draft environmental documents, pursuant to the California Environmental Quality Act.

Please call the State Clearinghouse at (916) 445-0613 if you have any questions regarding the environmental review process. If you have a question about the above-named project, please refer to the ten-digit State Clearinghouse number when contacting this office.

1-1

Sincerely,

Scott Morgan
Director, State Clearinghouse

1400 TENTH STREET P.O. BOX 3044 SACRAMENTO, CALIFORNIA 95812-3044
TEL (916) 445-0613 FAX (916) 323-3018 www.opr.ca.gov

Document Details Report State Clearinghouse Data Base

SCH# 2008041057
Project Title J Street Drain Project
Lead Agency Ventura County Watershed Protection District

Type EIR Draft EIR
Description NOTE: Recirculated

The VCWPD proposes to increase the flow capacity of the existing J Street Drain to accommodate runoff from a 100 yr storm event, thereby, reducing potential flooding in residential and commercial areas of the cities of Oxnard and Port Hueneme. The Drain would be maintained according to best management practices identified in the adopted Final Program Environmental Impact Report for Environmental Protection Measures for the Ongoing Routing Operations and Maintenance Program (May 2008). The proposed project also includes a Beach Elevation Management Plan (BEMP). The BEMP identifies a set of threshold environmental conditions that together activate the need for reducing the height of a short section of sand berm adjacent to the Ormond Beach Lagoon.

Lead Agency Contact

Name Angela Bonfiglio Allen
Agency Ventura County Watershed Protection District
Phone (805) 477-7175 **Fax**
email
Address 800 S. Victoria Avenue
City Ventura **State** CA **Zip** 93009-1610

Project Location

County Ventura
City Oxnard, Port Hueneme
Region
Lat / Long 34° 9' 22" N / 119° 11' 9.5" W
Cross Streets J St and Redwood Avenue to south of Hueneme Road
Parcel No. Rio De Santa Clara Land Grant
Township **Range** **Section** **Base**

Proximity to:

Highways
Airports
Railways VCRR
Waterways
Schools Yes
Land Use Existing drain is maintained by Ventura County Watershed Protection District.

Project Issues Biological Resources; Coastal Zone; Drainage/Absorption; Flood Plain/Flooding; Geologic/Seismic; Noise; Toxic/Hazardous; Traffic/Circulation; Vegetation; Water Quality; Wetland/Riparian; Cumulative Effects; Aesthetic/Visual; Air Quality; Soil Erosion/Compaction/Grading; Solid Waste; Water Supply; Archaeologic-Historic

Reviewing Agencies Resources Agency; California Coastal Commission; Department of Fish and Game, Region 5; Office of Historic Preservation; Department of Parks and Recreation; Department of Water Resources; California Highway Patrol; Caltrans, District 7; Regional Water Quality Control Board, Region 4; Department of Toxic Substances Control; Native American Heritage Commission

Date Received 09/23/2011 **Start of Review** 09/23/2011 **End of Review** 11/07/2011

Note: Blanks in data fields result from insufficient information provided by lead agency.

Letter 1

**Governor's Office of Planning and Research, State Clearinghouse and Planning Unit
November 8, 2011**

- 1-1 The letter acknowledges that the Ventura County Watershed Protection District (District) has complied with the State Clearinghouse review requirements for draft environmental documents, pursuant to the California Environmental Quality Act (CEQA). No further response is required.

From: Daniel Blankenship [DSBlankenship@dfg.ca.gov]
Sent: Monday, November 07, 2011 1:10 PM
To: Angela Bonfiglio
Subject: J Street Drain Project Recirculated Draft EIR

Dear Angela Bonfiglio Allen,

Thank you for the opportunity to review and comment on the above referenced Draft EIR related to potential biological impacts. The Department concurs with the proposed biological mitigation measures BIO-1 - BIO-7 and the Watershed Protection District Best Management Practices. Dan Blankenship will be your contact re: any needed ITP issues and Jeff Humble will be your contact on any Streambed Notification Agreement issues. Thank you for incorporating comments from previous versions into the latest re-circulated DEIR.

2-1

Daniel S. Blankenship
Staff Environmental Scientist
CA Department of Fish and Game
P.O. Box 221480
Newhall, CA 91322-1480
phone/fax (661) 259-3750
cell (661)644-8469
dsblankenship@dfg.ca.gov

file:///C:/pwworking/sao/d0319576/J Street Drain Project Recirculated Draft EIR.htm[11/28/2011 3:00:56 PM]

Letter 2

California Department of Fish and Game

November 7, 2011

- 2-1 This comment indicates that the California Department of Fish and Game (CDFG) concurs with the proposed biological mitigation measures BIO-1 through BIO-7 and the District's best management practices (BMPs). The comment provides contact information and a closing statement. No further response is required.



**Ventura County
Watershed Protection District
Groundwater Section
MEMORANDUM**

DATE: October 28, 2011

TO: Angela Bonfiglio-Allen

FROM: Rick Viergutz *Rick Viergutz*

SUBJECT: FC 08-2322 – J Street Drain

Project Description

Project proposed to increase the flow capacity of the existing J Street Drain to accommodate runoff to a 100-year storm event. The proposed project also includes a Beach Elevation Management Plan that identifies a set of threshold environmental conditions that activate the need for reducing the height of a short section of sand berm adjacent to the Ormond Beach Lagoon. The project is located in the median between the north and south bound traffic lanes of J Street, primarily in the City of Oxnard. South of Hueneme Rd the Drain forms the boundary between the cities of Oxnard and Port Hueneme. The project extends between Redwood Street on the north and Ormond Lagoon/Pacific Ocean on the south.

3-1

Water and Environmental Resources previously reviewed this project on May 2, 2008. Review of the revised sections does not change our comments regarding the Initial Study Assessment Guidelines.

3-2

Letter 3

Ventura County Watershed Protection District

Water and Environmental Resources Division, Groundwater Section

October 28, 2011

- 3-1 This comment provides introductory remarks and a summary of the project. This comment does not address the adequacy of the environmental document; therefore, no additional response is required.
- 3-2 This comment states that the Water and Environmental Resources Division, Groundwater Section, review of the RDEIR (September 2011) does not change their comments provided in May 2008. The previous (May 2008) Water and Environmental Resources Division, Groundwater Section comments are addressed in Section 4.3 of the EIR. No further response is required.

J Street Drain
From: Yugal Lall [Yugal.Lall@ventura.org]
Sent: Monday, October 31, 2011 3:36 PM
To: Angela Bonfiglio
Cc: Ewelina Mutkowska; Karen Martia
Subject: J Street Drain

Angela, Our NPDES concerns has been addressed in the DEIR for J Street Drain.
Thanks Yugal

4-1

Letter 4

Ventura County Watershed Protection District

Water and Environmental Resources Division, Water Quality

County of Ventura Stormwater Program

November 7, 2011

- 4-1 As stated in this comment, the Water and Environmental Resources Division, Water Quality Section's National Pollutant Discharge Elimination System (NPDES) concerns have been addressed in the EIR. No further response is required.



**Ventura County
Watershed Protection District**

**Planning and Regulatory Division
Permit Section**

MEMORANDUM

DATE: November 7, 2011

TO: Angela Bonfiglio Allen, Environmental Planner
Water & Environmental Resources Division

FROM: Tom Wolfington, P.E. – Permit Section *TV*
(805) 654-2061

SUBJECT: J Street Drain, Downstream End to Redwood Street
Cities of Port Hueneme and Oxnard, Zone 2
Recirculated Draft Environmental Impact Report (RDEIR)

Pursuant to your request, this office has reviewed the submittal of the subject RDEIR dated September 2011.

PROJECT DESCRIPTION

The Ventura County Watershed Protection District (District) proposes the J Street Drain Project to increase the flow capacity of the existing J Street Drain within the existing facility right-of-way to accommodate runoff from a 100-year storm event, and reduce potential flooding in residential and commercial areas of the Cities of Oxnard and Port Hueneme. The proposed project involves converting the existing trapezoidal concrete channel into an open rectangular channel with a bottom up to four feet deeper than the existing channel bottom. The existing box culverts under the street crossings and railroad crossing would be replaced by larger structures to improve flow conveyance. The demolition of the existing drain and construction of the new, higher capacity drain would take place in four independent phases beginning at the downstream end.

5-1

WATERSHED PROTECTION DISTRICT PERMIT SECTION COMMENTS

It is noted that the determination of impacts to flood control and drainage is considered less than significant and beneficial, that the authority of the District to require Encroachment and/or Watercourse Permits including for lateral connections is delineated, and that mitigation measures related to construction and following construction are enumerated.

5-2

A preliminary search of records held by the Permit Section using GIS resources reveals that approximately 75 permits have been obtained by public agency and

5-3

November 7, 2011
J Street Drain RDEIR
Page 2 of 2

private applicants along the route of J Street Drain dating back to the early 1960's. The purposes of the permits include access, facility construction and maintenance, aerial and subterranean utility crossings, parallel sewer trunk lines, lateral drain connections, and a variety of other purposes. While the information contained in these permit records is not likely to directly affect the project environmental analysis, the information could be useful in the detailed design phase of work. A cross reference between the record drawings to be prepared for the completed J Street Drain project construction and the historical permit record could be helpful in responding to future permit inquiries.

5-3
Cont.

END OF TEXT

Letter 5

Ventura County Watershed Protection District

Planning and Regulatory Division, Permit Section

November 7, 2011

- 5-1 This comment provides introductory remarks and a summary of the project. This comment does not address the adequacy of the environmental document; therefore, no additional response is required.
- 5-2 This comment summarizes the EIR findings regarding flood control and drainage and acknowledges the authority of the District's Permit Section to require Encroachment and/or Watercourse Permits including permits associated with lateral connections. The District's Permit Section also acknowledges that mitigation measures related to construction activities and post construction are proposed. No further response is required.
- 5-3 The Permit Section indicates that approximately 75 permits have been obtained by public agency and private applicants along the route of J Street Drain dating back to the early 1960's. The Permit Section notes that the information may be useful in the detailed design phase of work and in responding to future permit inquiries. No further response is required.

0.3 Response to Comments



MATTHEW G. WINEGAR, AICP
Development Services Director

Development Services Department
214 South C Street • Oxnard, CA 93030 • (805) 385-7896 • Fax (805) 385-7417

November 7, 2011

Ventura County Watershed Protection District
Attention: Angela Bonfiglio Allen
800 South Victoria Avenue
Ventura, CA 93009-1610

**RE: Comments on Recirculated Draft Environmental Impact Report (RDEIR)
(SCH 2008041057) for the Oxnard J Street Drain Reconstruction Project**

Dear Ms. Allen:

Thank you for providing the City of Oxnard an opportunity to review the Ventura County Watershed Protection District's (District) Recirculated Draft Environmental Impact Report for the J Street Drain Reconstruction Project (Project). This letter serves as a summary of comments, suggestions, and continuing concerns by all of our City departments.

6-1

General Comments

The City is in agreement that the facility is substandard and in need of the reconstruction to increase its storm water capacity. The City's preference is for Alternative A, the covered box culvert that allows for a variety of recreational uses. However, we realize the cost for capping the drain is significant. We encourage the District to work with the City to identify areas where an expanded street culvert or new drain cap crossing would enhance the community's connectivity, aesthetics, and recreational opportunities.

6-2

The existing culvert design results in traffic congestion during peak hours at Pleasant Valley and J Street, Bard Road and J Street and Yucca and J Street. Consideration should be given to new designs in cooperation with the City that create normal intersections instead of intersections with 40-foot medians. It may be possible to design roundabouts at Bard Road and J and Yucca and J to minimize the cost of improved intersections.

6-3

J Street is a designated bike path between from Wooley Road to Hueneme Road. The Project's temporary and permanent construction impacts on the bike path should be examined. The City supports a thorough analysis of partial or full coverage of a box culvert and the placement of a Class I bike trail with landscaping on the covered drain and/or along the adjacent service road.

6-4

We also encourage the District to consider renaming or referencing the J-Street Drain and the Oxnard Industrial Drain to, at a minimum, not use the word "drain."

6-5

RECEIVED

NOV 10 2011

WATERSHED PROTECTION DIST.

Ventura County Watershed Protection District
November 4, 2011
Page 2 of 3

Regulatory Approvals

Please add to this section that encroachment permits, haul route approvals, staging areas, temporary use permits, and other approvals will be required by the City during the Project.

6-6

Mitigations (Table ES-1)

The following comments address mitigations contained in Table ES-1.

- | | | |
|---------|--|------|
| VIS-1 | This mitigation would require replacement landscaping six months after Project completion, which is estimated to take four years. That suggests the entire Project area may be devoid of landscaping for up to four years. The City requests that replacement landscaping, selected by agreement with the City, be planted as the Project is incrementally completed to minimize adverse visual impacts. | 6-7 |
| BIO-6 | This mitigation requires shielded lighting of the beach in the event of night construction. Lighting may be used during the shorter winter days when the sun sets as early as 5:00pm. The City requests shielded lighting be used at any location where homes are exposed to lighting along the length of the Project area. | 6-8 |
| BIO-7 | The last sentence states that trees may be removed outside of the breeding season without restriction. The City requests that the Project include an arborist report of the mature trees along the length of the Project area with the goal of identifying trees that could be transplanted, in consultation with the City Landscape Architect, and that identified transplant trees be offered for transplanting at the Project's expense for 30 days prior to planned removal. | 6-9 |
| TR-1 | Please add to this mitigation: 1) coordination with Gold Coast Transit regarding Project impacts on their routes 1A, 1B, and 3, and 2) coordination with impacted school districts regarding Project impacts to school bus routes. | 6-10 |
| TR-3 | This mitigation refers to the Surfside III property, but resident parking should be mitigated along the entire Project route. | 6-11 |
| NOISE-1 | Noise standards should be consistent with either the City of Oxnard or the City of Port Hueneme, not based on County noise standards. It is possible there are sensitive noise receptors living in the housing adjacent to the Project. This mitigation should include a method of surveying the surrounding community to identify sensitive receptors and not assume there are none based on the type of housing. | 6-12 |
| NOISE-2 | The City requests that the pre- and post-video recording be extended to a full block from the Project site and that all streets and other City and utility infrastructure also be videotaped. This mitigation should be extended to all parties, public or private, that have property near the Project area that may be damaged by ground vibration. | 6-13 |

Ventura County Watershed Protection District
November 4, 2011
Page 3 of 3

Geology and Seismic Hazards

BMP 3 Please define a "permanent stockpile." Stockpiling of soil is not a permitted permanent use within the City of Oxnard.

6-14

Again, thank you for the opportunity to comment on the RDEIR. The City looks forward to working closely with the District on this very important project. If you have questions, please contact Christopher Williamson, AICP, Principal Planner, at (805) 385-8156 or by e-mail at chris.williamson@ci.oxnard.ca.us.

6-15

Sincerely,



Matthew Winegar, AICP
Development Services Director

c. City Council
Edmund Sotelo, City Manager
Rob Roshanian, Public Works Director

Letter 6
City of Oxnard
Development Services Department
November 7, 2011

- 6-1 This comment provides introductory remarks and a summary of the project. This comment does not address the adequacy of the environmental document; therefore, no additional response is required.
- 6-2 As acknowledged in this comment, the District has evaluated an alternative to the proposed project that would involve constructing box culverts instead of an open channel as is currently proposed. The box culvert alternative is identified as “Alternative A” in EIR Section 5.0 Alternatives. While the District agrees that this alternative could provide some benefit in terms of landscaping and recreational opportunities, as identified in the EIR (see page 5-7), this alternative would be more costly to implement as compared to the Preferred Alternative due to the increased construction and landscaping costs.

The District will continue to coordinate with the City as part of final engineering design in an effort to identify areas and/or opportunities where enhanced community connectivity and landscaping opportunities may be available and incorporated into the project. In partnership with the City of Oxnard and the Ventura County Board of Supervisors, the District will explore supplemental funding sources such as grants, donations, or cost sharing opportunities prior to implementing each project phase. If and where sufficient funding can be generated from all parties and additional sources, the District may consider implementing Alternative A.

- 6-3 This comment states that the existing culvert design results in traffic congestion during peak hours at Pleasant Valley Road and J Street, Bard Road and J Street and Yucca Road and J Street. This is an existing condition and the congestion is not caused by the proposed project. While the District acknowledges the comment that the District should consider new designs in cooperation with the City that create normal intersections instead of intersections with 40-foot medians, the project, as currently proposed will not create a new significant traffic impact with respect to intersection and roadway segments during operation of the project (see EIR pages 4.5-17 through 4.5-19).
- 6-4 Section 4.5 of the EIR analyzes the transportation and circulation impacts associated with construction activities, including impacts to bicycle facilities. Specifically, EIR page 4.5-19 addresses the potential construction impact to bikes lanes designated on J Street between Wooley Road and Hueneme Road as identified in this comment. A significant impact to bicycle circulation during construction of the project has been identified. Mitigation measure TR-1 is proposed which would reduce potential impacts associated with disruption of bicycle access and movement during construction to a less than significant level. Specifically, this measure requires that the District prepare a construction worksite traffic control plan and submit it to the County and cities for review and approval prior to soliciting bids for the construction contract. Elements of this plan will address provisions for pedestrians and bicycles (see EIR page 4.5-23).
- 6-5 The District acknowledges this comment regarding the use of “drain” as part of the project description. However, this comment does not address the adequacy of the environmental document; therefore, no additional response is required.

- 6-6 EIR Section 1.5.5.1 identifies that encroachment permits would be required from the City of Oxnard as part of project construction. The District acknowledges that haul route approvals, staging areas, temporary use permits, and other approvals may be required by the City during implementation of the project. For example, Mitigation Measure TR-1 requires the District to prepare a construction worksite traffic control plan and submit it to the City for review and approval. In response to this comment, EIR Section 1.5.5.1 has been revised to include these additional approvals (in addition to those already identified for the City of Oxnard).
- 6-7 As described in EIR Section 3.5 (page 3-10), the project would be constructed in four phases. Each phase would take approximately one year to complete, including landscape replacement. Therefore, vegetation would be devoid from only one project phase at a time. As stated on EIR page 4.1-17, the District is working with the City on an agreement with respect to proposed landscaping replacement. The District will continue to coordinate with City staff regarding the landscaping agreement in order to replace the oleander bushes between Hueneme Road and Redwood Street. To clarify the timing of landscape replacement, Mitigation Measure VIS-1 has been modified.

VIS-1 The District shall provide landscaping to replace the oleander bushes removed along J Street Drain between Hueneme Road and Redwood Street by agreement with the City of Oxnard. Landscaping shall be replaced incrementally, within six months of completion of each project phase.

To further minimize visual impacts, the District proposes an additional mitigation measure that would involve installing a 10- to 12-foot-tall fence with green vinyl screening along the portion of the District and Oxnard Wastewater Treatment Plant property line that is not currently fenced. Mitigation Measure VIS-4 has been added to Section 4.1 of the EIR.

VIS-4 Prior to construction a 10- to 12-foot-tall fence with green vinyl screening will be installed along the portion of the District and Oxnard Wastewater Treatment Plant property line that is not currently fenced.

- 6-8 Nighttime construction is not proposed, or anticipated as part of this project. Mitigation measure BIO-6 was included in the EIR in response to a request from resource agencies to ensure no indirect impacts to sensitive biological species would occur in the event of nighttime work. However, construction would be scheduled during daytime hours only; therefore nighttime lighting would not be required. Nonetheless, in the event of unanticipated emergency work requiring work at night, Mitigation Measure VIS-5 has been added to Section 4.1 of the EIR.

VIS-5 Although night construction is not anticipated, in the event that it becomes necessary, all lighting shall be shielded to prevent illumination of residences.

- 6-9 Mitigation Measure BIO-7 is proposed as a measure to ensure avoidance of impacts to nesting birds should construction occur during the migratory bird nesting season, in compliance with the Migratory Bird Treaty Act (MBTA). Removing trees outside the breeding season would not result in impacts to nesting birds, therefore additional mitigation (in the form of replacement of trees for this specific issue) is not required. Transplanting trees, as requested in this comment, would not reduce a significant impact associated with the proposed project, and may not be feasible due to removal of most of the trees' feeder roots, shock, increased susceptibility to disease and pest infestation, as well as reduced stability in the face of wind or other physical pressure.

- 6-10 In response to this comment, Mitigation Measure TR-1 has been revised to include coordination with Gold Coast Transit and potentially impacted school districts as follows:

TR-1 The District shall prepare a construction worksite traffic control plan and submit it to the County, Cities, Gold Coast Transit, Oxnard School District, Oxnard Union High School District, and Hueneme School District for review and approval prior to soliciting bids for the construction contract. This plan shall include such elements as the location of any lane closures, restricted hours during which lane closures would not be allowed, local traffic detours, protective devices and traffic controls (such as barricades, cones, flagmen, lights, warning beacons, temporary traffic signals, warning signs), access to abutting properties, provisions for pedestrians and bicycles and provisions to maintain emergency access through construction work areas. The contractor shall comply with this plan.

- 6-11 As described in EIR Section 4.5 – Transportation and Circulation, the proposed project would be constructed in phases, consisting of approximately 3,000 to 4,000 linear-foot segments; therefore, road closures would not result in substantial loss of available on-street parking spaces. Private, off-street parking spaces are available to the existing residences, typically in the form of driveways and garages. Given the continued availability of off-street parking throughout construction, the demand for on-street parking during construction from construction workers, equipment materials deliveries, etc. is not expected to result in inadequate off-street parking for the existing residents in the project area north of Hueneme Drain.

The EIR does identify a significant impact associated with the loss of 30 off-street parking spaces associated with the Surfside III residential complex during construction of the project. Mitigation Measure TR-3 requires vertical shoring techniques along the Surfside III property. Employing this construction method would avoid the loss of off-street parking at this location.

- 6-12 A significant noise impact has been identified associated with the Ventura County noise thresholds (see EIR page 4.6-15). The EIR has been revised to address City ordinances. Section 7-188(D) of the City of Oxnard Municipal Code exempts from the provisions of Article XI – Sound Regulation “sound sources associated with or created by construction, repair, remodeling or grading of any real property...provided the activities occur between the hours of 7:00 a.m. and 6:00 p.m. on weekdays, including Saturday.” Project construction would occur between the hours of 7:00 a.m. and 6:00 p.m.; therefore, the project would not exceed the standards of the City of Oxnard ordinance. Additionally, the mitigation measures presented in Section 4.6.6 (Mitigation Measures NOISE-1 and NOISE-2) would reduce construction noise levels to a less than significant level under the County’s threshold. (page 4.6-17).

The City of Port Hueneme Municipal Code does not include an exemption for construction activities; rather, the City’s Noise Ordinance regulates the time in which construction activities are prohibited altogether. According to the City’s ordinance, no person adjacent to or within any residential zone in the city shall operate power construction equipment or tools or perform any outside construction or repair work on buildings or structures, or operate any pile driver, steam shovel, pneumatic hammer, steam or electric hoist, or other construction device so as to create any noise which exceeds the noise level limits of the Noise Ordinance between the hours of 7 p.m. and 7 a.m. Monday through Saturday, and no earlier than 9 a.m. or later than 6 p.m. on Sunday and federal holidays. Project construction would occur between the hours of 7:00 a.m. and 6:00 p.m. Monday through Saturday; therefore, the project would comply with the standards of the City of Port Hueneme’s ordinance with respect to construction time prohibitions.

Although the City's noise ordinance allows for construction activities to occur between the hours of 7 a.m. and 7 p.m., operational exterior noise levels between the hours of 7:00 a.m. and 6:00 p.m. are defined as 55 dB for noise sensitive and residential, 65 dB for commercial and 75 dB for industrial properties in the City of Port Hueneme (Section 3430 of the Port Hueneme Municipal Code). Section 3431 states that "no person shall operate or cause to be operated any source of sound at any location within the City... when measured on any receiving property to exceed the following Noise Level Limits...:

- (a) The Exterior Noise Levels for that land use, as specified in Section 3430 above, for a total period of more than thirty minutes in any consecutive sixty minutes; or
- (b) The Exterior Noise Levels plus 5 dB for a total period of more than fifteen minutes in any consecutive sixty minutes; or
- (c) The Exterior Noise Levels plus 10 dB for a total period of more than five minutes in any consecutive sixty minutes; or
- (d) The Exterior Noise Levels plus 15 dB for a total period of more than one minute in any consecutive sixty minutes; or
- (e) The Exterior Noise Levels plus 20 dB for any period of time."

The land uses within the City of Port Hueneme adjacent to the proposed project site include residential, commercial, and industrial uses. As identified in Section 3431 of the City's Noise Ordinance, there are different thresholds for the different land uses. Construction of the proposed project may exceed the threshold for residences and commercial property within the City of Port Hueneme's city limits.

Construction activities will occur in four phases, with construction within or immediately adjacent to the City of Port Hueneme city limits occurring during phase 1 of the project. Phases 2 through 4 would be constructed within the City of Oxnard, but approximately 70 to 130 feet from residences located within the City of Port Hueneme. Although the City of Port Hueneme's Noise Ordinance does not exempt construction activity, its recognition that daytime construction noise should be regulated differently than non-daytime construction noise is consistent with County Construction Noise Threshold Criteria and the City of Oxnard's Noise Ordinance. Construction noise levels will be substantially similar for those portions of the project located in Port Hueneme and Oxnard. Land uses adjacent to the project are also substantially similar for all phases of the project. There is no basis for making a distinction between those phases of the project to be constructed in the City of Oxnard, and those portions of the project to be constructed in the City of Port Hueneme. The County Construction Noise Threshold Criteria and Control Plan takes into account the many factors that contribute to the potential impacts due to construction noise, including the location of sensitive receptors, the type or phase of construction, the combination of equipment used, the site layout, and the construction methods employed. Given the disparity between City ordinances, the District applies County thresholds for determining noise significance in a uniform manner to all project phases.

The mixed use nature of the area (i.e., residential, commercial and industrial) results in varying noise thresholds within a small area. The Ventura County Watershed Projection District's thresholds of significance for noise provide additional guidance for evaluating noise impacts within a mixed land use area. As shown on Table 4.6-12, noise levels generated from the

proposed off-road equipment that is expected to be used during construction will likely exceed 55dB(A) L_{eq} (south of Hueneme Road) and 68 dB(A) L_{eq} (north of Hueneme Road) daytime County standards for hospitals, nursing homes, schools, churches, and libraries. As discussed above, a nursing home and a church are located north of Hueneme Road. Standards for residential areas apply to evening and night, but because construction is not proposed for these time periods, the standards would not be exceeded. Construction of the proposed project would result in a significant noise impact for the nursing home and church. Construction noise mitigation measures will be implemented during each phase of the proposed project to reduce noise and address County threshold and City ordinances.

Mitigation Measures NOISE-1 and NOISE-2 will be required to be implemented in order to ensure noise levels and nuisance noise is minimized as much as possible during construction activities. As previously written, Mitigation Measure NOISE-2 specifically addresses construction noise related to the Surfside III community, including installation of a noise barrier. These measures are common measures employed for construction activities where nearby residential areas may be affected. Furthermore, no nighttime construction activity is proposed.

Mitigation Measure NOISE-2 has been revised to include sound barriers in residential and commercial areas along Phases 2 – 4, including the nursing home and church, to the extent that they do not affect traffic sight lines (e.g., noise barriers would not be installed at intersections). Sound barriers would not be installed where encircling block walls already exist (e.g., newer condo/townhome complex west of J St Drain in Phase 1).

- 6-13 (NOTE: This comment inadvertently refers to Mitigation Measure NOISE-2 as related to potential vibration impacts, rather than NOISE-3). Mitigation Measure NOISE-3 addresses potential property damage associated with vibration during construction. The measure includes provisions for pre- and post-video recording of the properties adjacent to the project area (including private property and City property). This Mitigation Measure is a precautionary measure intended to protect both adjacent properties and the District from property damage and/or disputes regarding such. Video documentation extending one whole block from the site of construction as suggested by this comment is arbitrary, and may be excessive. The specific methodology in determining the extent to which video recording would be required is identified in EIR pages 4.6-11 and 4.6-12, and includes a propagation assessment which would determine the limits of the video recording and pre- and post-construction assessment.
- 6-14 This comment refers to the District's Best Management Practice (BMP) 3 identified in Table 1.9-1 of the EIR, which are general measures applicable to various District operations and maintenance activities at all its facilities and not specifically associated with the construction of the proposed project. These measures were adopted in May 2008 as part of the District's Final Program Environmental Impact Report for Environmental Protection Measures for the Ongoing Routine Operations and Maintenance Program, Project No. 80030. Permanent or long-term stockpiling is not proposed as part of this project, and so will not occur on properties located in the City of Oxnard. For clarification purposes, this BMP refers to temporary stockpiling during maintenance activities. The excavated material during routine maintenance activities is loaded into dump trucks removed to a disposal/storage site on District property or made available for use by outside contractors at off site locations. If the excavated material is used by an outside contractor, the contract between the District and the contractor specifies restrictions on the placement of the material. Typically, the excavated material is used for agricultural fill or stockpiled at one of the District's maintenance areas for use on County projects.

- 6-15 This comment includes a closing statement and contact at the City of Oxnard. No additional response is required.



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Ventura County Watershed Protection District
 Attn: Angela Bonfiglio Allen
 800 South Victoria Avenue
 Ventura, CA 93009-1600

Re: Revised Draft Environmental Impact Report for the J Street Drain Project

November 4, 2011

Dear Ms. Allen

Over the past three years CAUSE had several visioning sessions for a green and healthy South Oxnard in the community. In these conversations, residents didn't like that there is always trash in the J Street drain and that the fence served as a barrier that separated the community. In addition, the residents from South Oxnard expressed their support of making the J St drain a biking and walking path.

The Ventura County Watershed Protection District Improvements to the J Street Drain will give the County and the City of Oxnard the opportunity to support this vision of South Oxnard as a safer place to bike and walk in. CAUSE strongly supports the Channel A alternative for a Reinforced Box Culvert being chosen to implement. This would allow a biking and walking path on the J Street Drain which we believe many residents in South Oxnard support. In addition to making it safer for residents to bike and walk, the Channel A alternative would also keep trash out of the J Street Drain and thus out of our ocean and beaches. It would also be a wonderful family-friendly alternative to reach the Ormond Beach Wetlands that could attract many people from Oxnard, Ventura County, and beyond.

Sincerely,

Cameron Yee
 CAUSE Researcher

7-1

7-2

7-3

Letter 7

Central Coast Alliance United for Sustainable Economy (CAUSE)

November 4, 2011

- 7-1 This comment notes the residents' concern over trash in the J Street Drain and the fencing surrounding the drain.

The proposed project would not result in an increase of trash entering the J Street Drain over the existing condition. As with the existing condition, the reconstructed drain is proposed to be enclosed with chain link fencing. The primary purpose of the fencing is for safety reasons. However, proposed fencing will continue to preclude a large amount of windblown trash from entering the channel, as would otherwise occur without fencing. As part of on-going maintenance required by the Ventura County Municipal Stormwater Permit (NPDES Permit No. CASOO4002, re-issued July 8, 2010), the channel is regularly maintained, which includes trash and sediment removal, and covering graffiti, if present. The NPDES permit also requires installation of trash excluders or similar devices at "catch basins or outfalls to prevent the discharge of trash to the storm drain system or receiving water...in areas defined as Priority A."

Although neither the City of Oxnard nor the City of Port Hueneme have designated J Street Drain as Priority A (catch basins consistently generating the highest volumes of trash), four of its tributary catch basins or outfalls within the City of Oxnard fall into this category. As a result, it is the responsibility of the City of Oxnard to control these sources of trash under the 2010 NPDES permit. The District is working with the Cities of Oxnard and Port Hueneme on another approach to capturing trash and debris before it reaches Ormond Beach Lagoon and the Pacific Ocean. Long term maintenance of any trash capture device would be performed by the cities. This effort is concurrent with but separate from the J Street Drain capacity improvement project, in compliance with the 2010 NPDES permit.

- 7-2 The District acknowledges this comment supporting a dual use of the J Street Drain as a biking and walking path.

The buried box culverts alternative that would allow for a potential bike/walking path (Alternative A) was analyzed in Section 5.0 of the EIR (see pages 5-7 through 5-8). However, Alternative A is not considered as the Preferred Alternative for several reasons. This alternative would result in substantially higher costs to construct and maintain (roughly double, or approximately \$27 million). As described in the EIR, this alternative would require that the box culverts be strengthened to hold the additional weight of vegetation on top for landscaping as well as pedestrian and bicyclist use. Additionally, Phase 2 of this alternative may create an increased opportunity for mosquito breeding. This would result as water may pond due to the lowered bottom elevation, and there would be difficulties in accessing the covered water surface for vector control treatment. The District acknowledges this concern from area residents, and in particular residents of the adjacent Surfside III development (e.g., see comment letters 8 through 24). Furthermore, the District discussed public access to the Ormond Beach Wetlands with the U.S. Fish and Wildlife Service (USFWS) on February 3, 2010. USFWS discouraged public access via J Street Drain because of the proximity of this route to threatened and endangered bird nesting areas. Therefore, Alternative B, without public access, is preferred in the Phase 1 area.

While the District is not opposed to Alternative A, as stated above, it will cost substantially more than the Preferred Alternative (Alternative B). The District has limited funding derived from property tax revenues to solve flood control problems throughout Ventura County. In partnership

with the City of Oxnard and the Ventura County Board of Supervisors, the District will explore supplemental funding sources such as grants, donations, or cost sharing opportunities prior to implementing each project phase. If and where sufficient funding can be generated from all parties and additional sources, the District may consider implementing Alternative A.

- 7-3 CAUSE notes its strong support for Alternative A. Please see the preceding responses regarding Alternative A. In partnership with the City of Oxnard and the Ventura County Board of Supervisors, the District will explore supplemental funding sources such as grants, donations, or cost sharing opportunities prior to implementing each project phase. If and where sufficient funding can be generated from all parties and additional sources, the District may consider implementing Alternative A.

From: Skip Perry <sperry6252@yahoo.com>
Subject:
To: jstreetdrain.comments@ventura.org
Date: Monday, November 7, 2011, 6:44 AM

Via Registered Mail, fax, hand delivered and or
Email: JStreet Drain.Comments@ventura.org

Ventura County Watershed Protection District

Attn: Angela Bonfiglio Allen

800 South Victoria Avenue

Ventura , CA 93009-1600

Re: ***Re-circulated Draft Environmental Impact Report for J Street Drain project: Comment input during review period.***

As an owner of property in the J Street canal drainage area, a Ventura county tax payer and a resident of Surfside III, I, Louis Perry of 974 Lighthouse Way, Port Hueneme, Ca 93041, hereby submit the following public comments to the Recirculated Draft Environmental Impact Report, J Street Drain Project, Ventura County, California, September 2011, prepared for the Ventura County Watershed District ["District"] by HDR Engineering.

Summary of Issues/Problems with the DEIR and R-DEIR for J Street Drain Project

1. Improper consideration of impact on the Ormond Beach and Ormond Beach Lagoon
2. Incomplete due diligence when exploring options to consider for better drainage
3. Premature development of projects while delaying existing flood risks.
4. Increase of mosquito breeding areas with new J Street Design
5. Possible impact on SS III buildings, landscaping and potential flooding risks
6. Failure to include Oxnard 2020 Plans re: major housing developments in drainage areas
7. VCWPD good faith community interaction/review issues.

8-1

For the above reasons, detailed in the following pages I request VCWPD reassess the priority and design of a J Street canal upgrade at this time and focus funds and assets towards existing higher flood risk areas.

8-2

Expanded detail of summarized items:

1. Improper consideration of impact on the Ormond Beach and Ormond Beach Lagoon
 - a. The proposed BEMP will increase number of lagoon drainages per year
 - b. The lowering of the J Street canal will scour the existing lagoon deeper changing topography, chemistry, possibly vegetation and aquatic life for several years.
 - c. No documented co-ordination of planning and approvals with US F&W, Sierra Club, Oxnard City Plan 2020 and other parties of interest.
 - d. The BEMP requires 3 simultaneous conditions before action can be taken. As well as a conclusion that the water will not breach the Berm and cause overflow. It is unrealistic to expect that all these conditions will consistently happen and not cause a breakdown in the plan at some point. It could be inadequate warning of a rainfall, (plan calls for 72 hrs), An observer for the water level or rain prediction does not feel that the BERM will not breach, or that the water will not overflow the canal in to the Surfside III property. Or there is a mechanical failure of the required equipment, or delays in arriving at the site..something as simple as traffic, or erosion of the beach not allowing equipment to get to the BERM
2. Incomplete due diligence when exploring options to consider for better drainage
 - a. The VCWPD staff indicated they had never requested waivers in writing from USF&WS before considering plans and options on drainage canal design. Since there was flooding on to Surfside III property, I am requesting that a formal application be submitted to the USF&WS for a direct access alternative drain. Especially since the VCWSP has said that the bulk of fresh water for the lagoon comes from the Oxnard Industrial Drain at several public meetings.
3. Premature development of projects while delaying existing flood risks.
 - a. The VCWPD has stated there is not now a FEMA or other required need for the J Street canal improvement and they are doing the project based on their study.
 - b. Existing flood risks in 2010 have been documented from the Oxnard Industrial Drain to

8-3

8-4

8-5

the Oxnard Waste Water Treatment Plant and other industrial sites in the area. Only the BEMP and nothing in the J Street canal design reduces that flooding issue which is of critical interest and potentially high impact to Surfside III and to the city of Oxnard as a whole. The BEMP requires 3 simultaneous conditions to occur and then in addition a decision that impending rainfall will not cause the BERM to breach and cause water to flow over the walls of the proposed project. It is unreasonable to expect that all rainfall will be predicted accurately within 72 hours, it is also unreasonable to expect that a human being can make a prediction of what will happen with the BERM with inaccurately predicted rainfall. Also, the plan has flaws in not allowing for mechanical failures of equipment, whether it be while attempting to breach the BERM or REACH the BERM.

c. There is no guarantee that the beach will not be eroded in such a way that equipment can not reach the BERM or road conditions prevent arrival. Thus the plan is flawed, and there is no back-up plan.

8-5
Cont.

4. Increase of mosquito breeding areas with new J Street Design

a. The new design of the canal will increase the depth of the 'standing water' in the SS III area but will greatly increase the **total square footage of surface water of all depths** up the J Street area thereby increasing standing water much of the year and indirectly increasing mosquito issues.

b. The new standing water in the J Street project, as it is proposed, between a large number of apartments and condominiums occupied by transient low income families with large numbers of children and possible poor vaccination and limited health care coverage could produce both an economic and health problem for Oxnard and Ventura County.

8-6

5. Possible impact on SS III buildings, landscaping and potential flooding risks

a. SS III has two 30+ unit three story condominiums within 10 feet of the proposed project at its maximum depth. These buildings are built over 30 years ago, on filled land, in a

8-7

- | | |
|--|----------------------|
| <p>liquefaction zone, and neighboring a building that has already had a subsidence problem.</p> <p>The project includes ground water pumping, possibly ground water injection which has a potential for damages to the described buildings.</p> <p>b. The proposed insurance is focused on individual contractors and probably requiring litigation by SS III to recover damages. It should be coverage from the VCWPD and/or Ventura County as the responsible financial risk party to SS III. If problems or faults existed with individual contractors that should not be a SS III issue to resolve or seek compensation.</p> | <p>8-7
Cont.</p> |
| <p>6. Failure to include Oxnard 2020 Plans re: major housing developments in drainage areas</p> <p>a. Since the original DEIR and the R-DEIR, the city of Oxnard has passed its 2020 plan which includes a major housing area in/near the drainage areas. These new developments should be integrated into the priority of drainage and flooding upgrades before any area projects are started.</p> | <p>8-8</p> |
| <p>7. VCWPD good faith community interaction/review issues:</p> <p>a. Withdrawal of Initial DEIR with clearly announcing limitations on future R-DEIR comment areas. After design and flooding issues prompted the early withdrawal of the original DEIR for J Street the VCWPD did not clearly notify identified persons of interest of the dis-allowing comments on some DEIR sections and not making those areas public via internet during the R-DEIR review. This should not be allowed to happen.</p> <p>b. VCWPD communications and notifications to impacted home owners has been spotty and in many cases stated notification mailings have not been delivered and were routed through San Diego at the last possible notification date or possibly non-existent. A large population on the J Street Canal area is of Hispanic origin and there is a question about the adequate notification and education to those owners/residents.</p> | <p>8-9</p> |
| <p>Conclusion:</p> <p>A. The J Street Canal project is a premature effort to correct a relatively rare</p> | <p>8-10</p> |

potential flood.

B. The VCWPD and Ventura County Taxpayers have higher priority usage of the VCWPD skills and funds.

C. The design raises significant issues for Surfside III COA and residents

D. The VCWPD is not currently proposing adequate plans and insurance to fully mitigate and possibly compensate SS III for the impact to SS III.

E. The proposed design impacts Ormond Lagoon and doesn't solve the protection of endangered species, possibly exacerbating those risks. Including adding larger amounts of runoff from streets with oil residue and pesticide/fertilizer tainted agricultural run-off.

F. VCWPD does not appear to have conducted good faith and timely notification and inclusion of all potentially interested parties including Oxnard city planning, USF & WS, Sierra Club, Hispanic residents on J Street and timely/complete notification of documents and meetings to self-identified persons wishing to comment.

8-10
Cont.

Sincerely,

Louis Perry

Letter 8

Louis “Skip” Perry

November 7, 2011

- 8-1 This comment provides introductory remarks and outlines comments on the EIR as provided in the letter. Please refer to responses to comments 8-2 through 8-10 for a detailed response to each of these comments.
- 8-2 Comment noted. Please refer to responses to comments 8-2 through 8-10 for a detailed response to each of these comments.
- 8-3 Improper consideration of impact on the Ormond Beach and Ormond Beach Lagoon.

RE: (a) The proposed Beach Elevation Management Plan (BEMP) will increase number of lagoon drainages per year.

Response: The Ormond Beach Lagoon inlet normally remains in a semi-closed condition due to sand accretion on Ormond Beach, but during most winters the lagoon breaches naturally which allows free outflow during storms and some high tides. These events do not drain the lagoon entirely, as urban runoff and high tides contribute fresh and salt water flows. After periods where the lagoon breaches, the natural action of the ocean waves once again builds up a sand berm on the beach. This sand berm periodically blocks the lagoon outlet, preventing J Street drainage from reaching the ocean and preventing tidal flow from entering the lagoon. Under the BEMP, the District will maintain a safe sand berm elevation (elevation 6.5 feet ± NGVD 1929) near the northwest corner of the lagoon, approximately 800 feet southeast of the J Street drain concrete channel outfall. The BEMP is identified to groom the beach sand berm elevation to facilitate natural breaching in response to storm water runoff. During a natural breach condition, surface water from the lagoon would flow into the Pacific Ocean. While the BEMP would facilitate natural breaching in response to storm runoff to avoid flooding impacts, periodic breaching in response to storm runoff is a currently on-going natural event. Thus, the BEMP does not represent a substantial departure from current conditions, and would not result in any significant environmental impact.

RE: (b) The lowering of J Street canal will scour the existing lagoon deeper changing topography, chemistry, possibly vegetation and aquatic life for several years.

Response: The potential impacts associated with scour, sediment transport and coastal processes has been evaluated in detail and the findings are included in the EIR (see Section 4.3 Water Resources and Hydraulic Hazards). Technical studies are provided in EIR Appendix C. No significant impact associated with scour and corresponding issues identified in this comment (altering chemistry and possibly vegetation and aquatic life) have been identified.

As discussed in Section 4.3 of the EIR, the improvements to J Street Drain would lower the channel outlet approximately 2.5 feet below the existing channel bottom. The existing lagoon bottom elevation is approximately at the same elevation as the end of the existing concrete channel. To minimize potential effects to threatened and endangered species, there are no plans to excavate within the lagoon beyond the project limits at the drain outlet. The proposed project would not substantially alter the existing drainage pattern and lagoon topography. The new low-flow channel would effectively lower portions of the lagoon bottom and maintain positive drainage from the J Street Drain outfall to the Pacific Ocean. Vegetation currently exists along the

margins of the lagoon, and would be expected to persist in these areas when the lagoon deepens. The deepened lagoon would also provide more habitat for aquatic species, such as fish and frogs. The project would not change chemical inputs to the lagoon; therefore its existing chemical composition is not expected to change. Additionally, the modification of the bed, bank, and/or vegetation in a natural drainage (and certain man-made drainages) is regulated by the California Department of Fish and Game (CDFG) under Section 1600 et seq. of the Fish and Game Code. Such modifications require a Streambed Alteration Agreement (SAA), which would preclude impacts to vegetation communities without appropriate mitigation.

RE: (c) No documented coordination of planning approvals with U.S. Fish and Wildlife Service (USFWS), Sierra Club, Oxnard City Plan 2020, and other parties of interest.

Response: Section 1.0 of the EIR provides a discussion on regulatory agencies and permitting agencies relative to the proposed project (see pages 1-6 through 1-17). The consultation history with the USFWS and the District is outlined in the revised Biological Technical Report for the proposed project, which is included as Appendix D of the 2011 EIR. The District has actively participated in ongoing consultation with the USFWS in addition to the CDFG, Regional Water Quality Control Board (RWQCB), the U.S. Army Corps of Engineers (USACE) and the Cities of Oxnard and Port Hueneme. The Sierra Club is a non-profit, non-governmental organization with no regulatory or permitting authority, but the District has received and considered Sierra Club comments during the CEQA process.

For clarification, the J Street Drain project would require the following regulatory approvals prior to implementation:

- Consolidated Coastal Development Permit (CDP) from the California Coastal Commission (CCC) (providing for a single CDP to be issued by the Commission rather than separate permits by the two cities and another permit by the CCC for its jurisdictional area) pursuant to the provisions of the California Coastal Act;
- A USACE Individual Permit pursuant to Section 404 of the federal Clean Water Act (CWA) (1990, as amended), and/or qualification under a Nationwide Permit pursuant to Section 404 of the CWA;
- Clean Water Certification in compliance with the California Porter-Cologne Water Quality Control Act as defined by the state RWQCB or CWA Section 401 Certification requirements. Additionally, Waste Discharge Requirements would be required for groundwater discharge activities;
- A Section 1600-Series Streambed Alteration Agreement (SAA) with the CDFG in compliance with the CDFG Code and a Section 2081 Take Permit for potential impacts to state threatened and endangered species in compliance with the California Endangered Species Act (CESA); and
- Section 7 Consultation with the USFWS for potential impacts to federal threatened and endangered species in compliance with the Federal Endangered Species Act (ESA).

RE: (d) Concern that the three criteria to trigger the BEMP will not occur simultaneously, inadequate storm prediction, or mechanical equipment failure resulting in the inability to perform the proper maintenance in time.

Response: Normal Ormond Beach Lagoon conditions result in a natural breaching of the sand berm before the lagoon water elevation reaches its highest recorded elevation of about 7.5 feet NGVD (9.9 feet NAVD). This has resulted in the sand berm naturally breaching each year, typically in the early months of the fall rainy season. The sand berm naturally breaches during this time because increased drainage from seasonal storm water raises the lagoon water level sufficiently above sea level prompting a breach. The breach closes as sand blows and washes in as part of waves and tidal action, and freshwater drainage diminishes. Under the BEMP, the District will maintain a safe sand berm elevation (elevation 6.5 feet \pm NGVD 1929) near the northwest corner of the lagoon, approximately 800 feet southeast of the J Street drain concrete channel outfall. If the Ormond Beach Lagoon is fully enclosed by the Ormond Beach sand berm (i.e., the lagoon has not breached), and the Ormond Beach sand berm elevation adjacent to the lagoon is observed to be above 6.5 feet NGVD (8.9 feet NAVD), the berm would be groomed within 3 days (72 hours) prior to a predicted storm event. Grooming would not be necessary during the dry season, as rainfall recorded at the Port Hueneme – Oxnard Sewer Plant (Rainfall Station No. 017C) during this period is negligible (please see “Normal Monthly and Seasonal Precipitation” at <http://www.vcwatershed.net/hydrodata/php/getstation.php?siteid=017C#top>).

The comment implies that pre-rainfall lagoon water surface must be observed at a particular level before the BEMP will be activated. As described in the next paragraph, the water surface will be monitored only to determine if the lagoon has breached or not. Instead of monitoring water levels, the BEMP requires monitoring of the sand berm elevation. Grooming the sand berm will ensure that even minor flooding, which is observed when the water surface reaches 7.0 feet NGVD, is avoided by providing an outlet for water that exceeds 6.5 feet NGVD in the lagoon (please see the stream gage plot for J Street Drain at Ormond Lagoon - <http://www.vcwatershed.net/fws/VCAHPS/php/ahps.php?gage=793>).

The lead role of the District in flood emergency avoidance is aided by the County’s Flood Warning System and by its Automated Local Evaluation in Real Time (ALERT) system. The Flood Warning System provides advance weather forecasts. ALERT is a hydrologic data collection and recording system for Ventura County developed by the National Weather Service (NWS) of the National Oceanic and Atmospheric Administration (NOAA) that has been in operation since 1979. ALERT provides reliable rainfall and flow information for determination of storm magnitude. ALERT will be used as the primary source for rainfall and storm event data in the BEMP. The District water level gauge(s) in the J Street Drain will be primarily used to monitor water surface elevation to help determine whether the lagoon is currently connected to the ocean (no BEMP action required) or closed off by the beach sand berm (BEMP action required if beach sand elevation exceeds 6.5 feet NGVD). Three days advance warning of a rainfall event allows for ample time for implementation of the BEMP. Delays, such as traffic, would not jeopardize BEMP implementation as ample warning (72 hours) would be provided. The occurrence of a significant unanticipated rainfall event is highly unlikely based on available technologies that track weather systems in the southern California region.

Regular maintenance activities on equipment will ensure that the equipment is functioning properly at the time needed. Furthermore, equipment needed to deploy the BEMP is limited to one bulldozer. The District owns and operates a fleet of vehicles that would be available to perform this operation; therefore, equipment failure would not prevent implementation of the

BEMP. Standard procedures will be incorporated into the maintenance activities to ensure proper implementation of the BEMP.

8-4 Incomplete due diligence when exploring options to consider for better drainage.

RE: (a) This comment notes that the District did not request “waivers” in writing from the USFWS before considering plans and options on drainage canal design. Mr. Perry is requesting that a formal application be submitted to the USFWS for a direct access alternative drain.

Response: Five channel alternatives and three outlet alternatives were considered and analyzed in the EIR (see EIR Section 5.0). The County of Ventura (i.e., the District) is the Lead Agency for the proposed project and has the principal responsibility for carrying out the project. However, the District is required to obtain authorization from the USFWS with respect to potential impacts to endangered species, and as stated in response to comment 8-3, Section 7 Consultation is required; waivers are not an option. Additionally, the project will require an Individual Permit (IP) from the USACE (see response to comment 8-3 above). Section 7 Consultation is carried out by the USACE acting as the federal nexus agency. As part of the IP process, the USACE will also prepare an alternatives analysis and is required under Section 404(b)(1) of the Federal Clean Water Act to select the Least Environmentally Damaging Practicable Alternative (LEDPA). A waiver is not an option in the 404(b)(1) process. For a comparison of the Alternatives analyzed, please refer to Section 5.0 of the EIR.

The District met with the USFWS on February 3, 2010 to discuss the feasibility of pumping water ponded in J Street during breach conditions. This approach would be difficult to authorize under the ESA because of the high potential for “take” of endangered tidewater goby, a fish that resides in the lagoon and the J Street Drain as far north as the Ventura County Railroad. Even if pump intakes are screened, gobies could become impinged on the screens and die. The pumping or continual removal of the backwater in the J Street Drain would not solve the original problem and impetus of the J Street Drain Project, which is the need for 100-year storm flow capacity. The dimensions of the current J Street Drain are not sufficient to contain the flow volume of a 100-year storm. The current J Street Drain would flood during a 100-year storm even if the outlet to the Pacific Ocean was open at the time and the channel was initially empty. Pumping water out of J Street Drain would reduce the size of Ormond Beach Lagoon, resulting in a reduction of foraging habitat for endangered California least terns and critical habitat for endangered tidewater goby. In addition, the act of pumping would cause tidewater gobies to become impinged on the pump screens, resulting in mortality of an endangered species, further violating the ESA.

A “direct access alternative drain” as proposed in the comment would be subject to the same processes that act upon the existing J Street Drain/Lagoon system. A channel directly connected to the ocean (see EIR Section 5.2.1 on page 5-2 – Outlet Alternative A: Dike System) would fill with sand deposited by wind and wave action, just as the lagoon breach does, and would require frequent dredging to avoid backwater in J Street Drain. This level of maintenance would be excessive, and may not be feasible during the summer recreation and spring/summer bird nesting seasons. The BEMP represents a solution that provides flood control with minimal adverse environmental impacts and without the need for excessive new maintenance.

The comment mentions “that the bulk of fresh water for the lagoon comes from the Oxnard Industrial Drain.” This is true, as the size of the Oxnard Industrial Drain (OID) watershed is larger than that of the J Street Drain, and therefore produces more runoff. However, the purpose

of the proposed project is to increase the capacity of J Street Drain from a ten-year to a 100-year flood event. Addressing OID flood conveyance deficiencies would not resolve those of J Street Drain, which would still overflow during events larger than the ten-year flood.

8-5 Premature development of projects while delaying existing flood risks.

RE: (a) This comment notes that the District stated that there is currently no FEMA or other required need for the improvement and that the project is based on their study.

Response: The District has clearly stated the need for the proposed project (see EIR pages 3-2 through 3-10). As described in the EIR, the project area is not currently within Federal Emergency Management Agency (FEMA) Flood Zone A, or the one percent annual chance (also known as the 100-year) flood zone. However, the existing flood zone is based on pre-1984 hydrologic data and hydraulic analyses conducted over 25 years ago. The District's modeled 100-year inundation area is based on approximately 20 additional years of more recent data. The updated 100-year inundation area is fairly extensive, affecting many properties in the area (see EIR Figure 3.0-2a). Protection from a 100-year flood is the standard set by FEMA under the National Flood Insurance Program (NFIP). The need for such protection is evidenced by the studies that show the existing drain has the capacity to handle only a ten-year flood event without overtopping the channel. Without the increase in flood protection the local area would continue to be susceptible to flooding, and may become subject to federal requirements to purchase flood insurance for properties within the 100-year flood zone after FEMA remaps the project area in the future. Implementation of the proposed project will not alter the day to day enjoyment of the area. Temporary impacts will result during construction, however, they are temporary in nature and upon completion of construction activities, operation of the drain and access will continue as it currently does. The District is simply taking a proactive approach to compliance with FEMA regulation.

RE: (b) Existing flood risks in 2010 from the Oxnard Industrial Drain (OID) to the Oxnard Wastewater Treatment Plant (OWWTP) and other industrial sites in the area.

Response: The comment is incorrect in stating that only the BEMP is needed to correct the flooding issues. Rather, both the BEMP and the proposed J Street Drain improvements are required. As described in the EIR (see page 3-29), the outlet of J Street Drain is constrained by the sand berm that can reach over seven feet in height surrounding the Ormond Beach Lagoon. The sand berm hinders the direct flow path of the J Street Drain channel to the Pacific Ocean. The berm currently directs the water to the east, toward the OID. If the berm does not open during a storm event, then storm water ponds in the lagoon and can fill the drain to capacity as far as Hueneme Road, posing a flood risk to the OWWTP, residential, and commercial property during even minor storms. To date, there has been one instance of the inlet remaining closed during a minor storm event and causing upstream flooding; this took place on January 18, 2010. Please note the January 18, 2010 event was smaller than a two-year flood. If it had been larger than a ten-year flood, it would have overtopped the J Street Drain even after the District breached the lagoon, flooding adjacent properties regardless of the conditions in Oxnard Industrial Drain. The January 2010 event flooded the OWWTP, which was at risk of releasing untreated sewage effluent into the surrounding waterways, roads, and residential properties due to electrical failure of inundated equipment. The District developed the BEMP to prepare for the reoccurrence of the combination of the outlet being closed, the sand berm elevation being above 6.5 feet NGVD, and a storm being forecast. Please refer to response 8-3(d) above regarding the BEMP.

RE: (c) Beach erosion and other conditions that may prevent the maintenance vehicles from reaching the berm for routine grooming.

Response: Beach grooming would occur well in advance of storms that would cause beach erosion. Further, the area is easily accessible by maintenance equipment. As described in the EIR (see page 3-30), the grooming would be performed by a tracked dozer designated by the Operations and Maintenance (O&M) Deputy Director in coordination with the District Director or his/her designee. Once the O&M Deputy Director determines that the BEMP threshold criteria have been met, the dozer will be pre-positioned at the south side parking lot of Port Hueneme Beach Park. As soon as the BEMP is enacted, the dozer operator accompanied by District environmental staff would move the dozer to the designated beach grooming location, and shave the sand berm down to the maximum safe beach elevation. The dozer access path to the groom location would be the same as the one currently used by lifeguards from Port Hueneme Beach Park. The grooming procedure would be completed within several hours, including removal of equipment from the beach. Regular maintenance activities on equipment will ensure that the equipment is functioning properly at the time needed. Standard procedures will be incorporated into the maintenance activities to ensure proper implementation of the BEMP.

The BEMP is a maintenance activity that is designed to avoid an emergency response. During the grooming operation, the work site would be secured by the District to prevent interruption by or injury of the general public. Members of the Ventura County Sheriff Department or lifeguards, as well as their designees, may assume responsibility for the protective duty.

If the beach erodes to the point that even before storm onset there is no space for equipment to travel to the grooming location, this would signify that the tides are reaching the lagoon and therefore able to breach the lagoon naturally. Grooming would not be required in this case.

Please also see response 8-3(d) above regarding the BEMP.

8-6 Increase of mosquito breeding areas with new J Street Design.

RE: (a) Increase in standing water much of the year and indirectly increasing mosquito issue.

Response: In response to concerns over mosquito breeding expressed as part of the originally circulated Draft EIR (November 2009), a Mosquito Technical Study for the J Street Drain project was prepared. The technical study provides an analysis of the mosquito production potential of the proposed project compared with the existing J Street Drain and the proposed alternatives. The findings of the study indicate that the proposed project is not expected to increase the suitability of the drain habitat for mosquito breeding. In addition, there are a number of areas more suitable for mosquito breeding in South Oxnard and Port Hueneme near the J Street Drain, as discussed in Section 5 of the Mosquito Technical Study. The complete report is included in Appendix I of the 2011 EIR.

Mosquitoes generally require calm, stagnant water for breeding as opposed to open, exposed water. Flowing waters or waters with surface disturbance from wind, waves, or animals are not suitable habitat for mosquito breeding. Similarly, waters deep enough to sustain populations of fish and other aquatic organisms are not suitable habitat. Wetlands and salt marshes, especially those with unmanaged, dense, emergent vegetation are notorious mosquito breeding habitats.

Section 4.11 of the EIR discusses vector control and mosquitoes. As discussed, the proposed project would increase the surface area and amount of standing water in the drain. However, the proposed project would convert the existing trapezoidal concrete channel into an open rectangular channel with a bottom that will be approximately four feet deeper and the resulting channel walls would be vertical. While the proposed project would result in increased water surface area of standing water, the converted channel would provide less suitable habitat for mosquitoes due to deeper water and less shallow edges. In addition, J Street Drain presents an easier vector source to treat compared to shallow vegetated wetlands to the east and southeast due to the fact that mosquitoes prefer shallow water.

RE: (b) New standing water is a new source for mosquito breeding.

Please refer to response to comment 8-6(a) above with regards to project design and mosquito breeding habitat. Mosquitoes are vectors that can carry/transmit numerous illnesses. Mosquito borne diseases of importance in Ventura County are viral encephalitis (West Nile virus) and malaria, which is caused by a parasite. There are currently no vaccines available for either illness. These issues are identified in the EIR, and as discussed above, the project is not expected to increase the suitability of the drain habitat for mosquito breeding. Furthermore, mosquito/vector control would continue to conduct mosquito surveillance and abatement activities within the project area during operation.

8-7 Possible impact on Surfside III buildings, landscaping and potential flooding risks.

RE: (a) Two of the Surfside III buildings are within 10 feet of the project area and located in a liquefaction zone.

The potential impact to existing adjacent properties and structures associated with implementation of the project has been identified, and addressed in the EIR (e.g. see Mitigation Measure NOISE-3). To specifically address concerns regarding potential movement of Surfside III residential structures nearest the J Street Drain, the following mitigation measure has been added to the EIR:

- GEO-3:**
- a) A Licensed Surveyor shall plan and install a survey monument monitoring system on buildings within 100 feet of proposed vertical shoring to collect monthly baseline data for six months before construction. The monuments shall remain in place and be monitored monthly for one year after construction completion to track any latent changes. During construction, the Licensed Surveyor shall conduct surveys corresponding to major phases of work such as shoring installation, excavation, and backfill.
 - b) Before Phase 1 construction may begin, the District shall require the Contractor to prepare a Work Plan, which would take into account all available geotechnical information for the areas where vertical shoring and sheet piles are to be installed. The Plan would specify the contractor's approach to installing vertical shoring and sheet piles in a manner that would avoid and minimize associated potential vibration damage to adjacent structures.
 - c) The Work Plan shall require the Contractor to take daily measurements of the survey monuments on adjacent structures described in (a) above to track potential changes during construction.

- d) Should the surveys or measurements described in (a) and (c) above indicate subsidence or other damage due to construction activities, the Contractor shall modify the Work Plan to address the causes. Property owners within 100 feet of the proposed shoring shall be promptly notified of observed damage, and any Work Plan revisions shall be available to property owners upon request. For multi-unit structures, the District shall identify a single designated representative with whom to communicate.
- e) The District shall provide a construction contact telephone number to adjacent residents before work commences so that they may report possible observations of damage immediately to the District.

Additionally, Mitigation Measure NOISE-3 requires video documentation of the pre- and post-construction condition of structures adjacent to the J Street Drain in the presence of the property owner. The recording shall be performed and stored by an independent third-party, with a copy given to the property owner. If vibration-induced damages occur as a result of construction, property owners would be invited to submit claims documenting such damages within one year following construction completion. Please refer to response to comment 6-13.

RE: (b) Insurance regarding damage.

The District will require its contractor to exercise due care during construction, and will further require the contractor to repair or replace any damage to adjacent property resulting from construction activities. If any property owner sustains property damage as a result of the project, they may submit a claim for reimbursement to the District.

- 8-8 Failure to include Oxnard 2020 Plans, regarding major housing developments in drainage areas.

RE: (a) City of Oxnard 2020 Plan

Response: The flood plain modeling conducted by the District includes existing and planned development within the watershed, including any new development that may be identified in adjacent jurisdictions, such as the City of Oxnard. Land use plans were available to the District at the time modeling was conducted, and therefore any potential development is already considered in the floodplain model. However, all new development is proposed within the OID watershed, and therefore does not affect the J Street Drain watershed. The City of Oxnard will be responsible for ensuring that adequate on site retention of flood water or other suitable flood control is incorporated into new developments.

The City of Oxnard adopted its 2030 General Plan in October 2011. Many goals and policies are continued from the 2020 General Plan. The J Street Drain is under the jurisdiction of the District; therefore, priority projects within the City of Oxnard's jurisdiction do not necessarily apply to the District's priority projects.

Oxnard General Plan Policy ICS-13.1: 100-year Floodplain states "discourage development, major infill, and structural improvements (except for flood control purposes) within the 100-year floodplain as regulated by FEMA. Recreational activities that do not conflict with habitat uses may be permitted within the floodplain." The project would not place new development within a 100-year flood plain. The project is proposed to increase the existing capacity of J Street Drain to meet the capacity of a 100-year flood, which would reduce the amount of development located

within the 100-year floodplain within the project area. The proposed project is consistent with the policy in the City of Oxnard 2030 General Plan regarding development within a 100-year floodplain.

8-9 The District's good faith community interaction/review issues.

RE: (a) Recirculation of the EIR.

The Recirculated Draft EIR was prepared in compliance with the provisions of the CEQA Guidelines for recirculation of a Draft EIR, specifically CEQA Guidelines Section 15088.5(f)(2) which allows the Lead Agency to limit new comments to only those revised chapters or portions of the EIR, all of which were identified in the EIR in a strikeout/underline format. Additionally, the District provided complete and detailed responses to each of the comments received on the November 2009 Draft EIR, as part of the September 2011 EIR document (see EIR Appendix L).

Public participation opportunities regarding this project have been comprehensive and are in full accord with the provisions of CEQA and the CEQA Guidelines. Compliance with the California Environmental Quality Act (CEQA) did not begin until early 2008, with preparation of the Initial Study and Notice of Preparation (NOP). CEQA does not require the lead agency to consult with the public regarding project development before that point. CEQA is a public disclosure tool with regards to environmental impacts of a proposed project. The following information outlines the CEQA review process.

On April 9, 2008, the NOP was prepared and circulated for review and comment by responsible, trustee, and local agencies and the general public. The NOP was circulated beginning April 10, 2008 and ending on May 9, 2008. Three informational meetings (not required by CEQA) were held to present the project and accept input from interested parties prior to a formal scoping meeting. The formal CEQA scoping meeting was held on February 25, 2008 at the City of Oxnard Recycling Center, 111 South Del Norte Boulevard, Oxnard, CA. Table 1.5-1 of the EIR provides a summary of NOP comment letters and scoping meeting comments. The District has records of public notification for Surfside III residents at the NOP stage; however, based on feedback from Surfside III residents, the NOP letters were not delivered. Common District practice for CEQA notifications includes mailings to all parcels within 500 feet of a proposed project. A portion of the Surfside III development falls outside the 500-foot buffer, so these residents were not included in the original mailings. After receiving Surfside III feedback, the District investigated its mailing list and discovered that parcel data did not account for all units within multi-story buildings. The District has since corrected this problem. To ensure public notification in the event residents do not receive mailings, the District also publishes meeting announcements and other CEQA notifications in the Ventura County Star. Notice of the scoping meeting appeared in the February 17 and 24, 2008 editions of the Ventura County Star. Nonetheless, the District provided Surfside III residents an opportunity to comment before its November 2009 release of the EIR by attending a Homeowner's Association meeting on August 8, 2009 and incorporating comments submitted before November 2009 into the DEIR. In addition, it was agreed at the HOA meeting that District staff would provide electronic notification of upcoming meetings and public review periods to the Surfside III HOA for distribution to all residents. This is in addition to direct mailings and newspaper publications.

Recirculated Draft EIR

The original DEIR (SCH 2008041057) was circulated for public review from November 2, 2009 to January 19, 2010. Based on public requests for more time, the original 45-day review period was extended one additional month. Notice of Availability of the DEIR was published in the Daily News and the Ventura County Star on November 1 and 5, 2009. All interested persons and organizations had an opportunity during this time to submit their written comments on the EIR to the District. These comments along with their responses are located in Appendix L of the EIR. The original DEIR addressed increasing the capacity of the J Street Drain channel to reduce potential flooding in residential and commercial areas of the Cities of Oxnard and Port Hueneme.

As the result of comments on the original DEIR along with the District's responses to those comments, the occurrence of a flood emergency north of Ormond Beach Lagoon on January 18, 2010, the release of new information concerning the Halaco Superfund site in 2010 and 2011, and revisions to Ventura County significance thresholds adopted in 2011, the District determined that the EIR for the J Street Drain project should be recirculated for public review and comment.

All new information in the EIR was presented in an underlined format. Removed language was shown in a ~~strikeout~~ format. Pursuant to CEQA Guidelines Section 15088.5(f)(2), the District requested in the Notice of Availability mailed to nearby residents and published in the Daily News and Ventura County Star that reviewers limit their comments to the revised chapters or portions of the EIR, as indicated by underline and strikeout. Responses to comments received during the original circulation period were included in the RDEIR in Appendix L. In addition, the District held a public meeting at the South Oxnard Center on Monday, September 26, 2011 at 7:00 PM. A Notice of Availability of the RDEIR was mailed to residents within 500 feet of the project, including the residents at Surfside III. The RDEIR was made available to the public at seven public libraries within the County of Ventura, and the Cities of Oxnard and Port Hueneme as well as on the Internet at the following websites: www.jstreetdrain.com or www.vcwatershed.org. The Documents referenced in the RDEIR were available by request at the Watershed Protection District. The public review period for the RDEIR extended from September 23, 2011 through November 7, 2011. Besides direct mailings to residents within 500 feet of the project, direct mailings to Surfside III residents more than 500 feet from the project, and email notification of the Surfside III Homeowner's Association Board, Notice of Availability of the RDEIR was published in the Daily News on September 22 and 25, 2011 and the Ventura County Star on September 23 and 25, 2011.

RE: (b) Notification.

The District has satisfied all noticing requirements of CEQA and the CEQA Guidelines. Please see response to comment 8-9(a) above regarding noticing.

8-10 This comment reiterates Mr. Perry's listed issues above.

RE: (a) The J Street Drain project is a premature effort to correct a relatively rare potential flood.

Please refer to responses to comments 8-5(a) and 8-5(b) above.

RE: (b) Taxpayers have a higher priority.

As described on EIR pages 3-9 and 3-10, the J Street Drain Project was subject to the District's rigorous capital improvement project (CIP) ranking and selection process. The process begins with identifying flood threats to residential, commercial, industrial, and agricultural lands throughout Ventura County. Where flood control facilities already exist, their current condition (e.g., concrete deterioration) is evaluated. Potential solutions to known flood threats, or CIPs, are developed through consideration of a range of alternatives. Section 3.0 of the EIR includes a detailed discussion of the District's project selection and funding processes, which addresses the resident's concern about fiscal responsibility. In partnership with the City of Oxnard and the Ventura County Board of Supervisors, the District will explore supplemental funding sources such as grants, donations, or cost sharing opportunities prior to implementing each project phase. Under existing conditions, the District estimated potential damages of \$55.7 million to residential, commercial, and industrial properties within the J Street Drain watershed during a 100-year flood.

RE: (c) Design concerns for Surfside III residents.

Please refer to comment 8-4(a) above for response regarding design alternatives. The District has considered all of the alternatives analyzed in Section 5.0 in an effort to explore potential solutions to the flooding problem, while balancing specific economic, environmental and social considerations.

RE: (d) Compensation for damaged property.

Please refer to response to comment 8-7(a).

RE: (e) Proposed design's impacts to Ormond Lagoon and endangered species.

Impacts associated with the proposed project in relation to the Ormond Lagoon and endangered species are analyzed in Section 4.2 of the EIR. Incorporation of the identified mitigation measures would reduce all potentially significant impacts to sensitive habitats, sensitive wildlife species, wetlands, jurisdictional areas, and nesting birds/raptors to below a level of significance. Additionally, the proposed project would not result in land uses or impervious areas that would increase the amount of urban pollutants or agricultural runoff. The proposed project is increasing the drain's capacity to direct the flow of existing runoff during a major storm event.

RE: (f) Notification and consultations.

Please refer to responses to comments 8-3(c), 8-9(a) and 8-9(b) for responses regarding CEQA notification and consultation with regulatory agencies.

From: lynne haile [<mailto:lynnehaile@hotmail.com>]
Sent: Sunday, October 02, 2011 4:01 PM
To: ira green; ira green
Subject: J st canal expansion and Bldg 5 rehab in 1986

Ira,
Someone asked me to forward the history of the Bldg 5 rehab, bedrock pylon uplift project.
I live at 727 Reef Circle, the second floor of building 5 at the west end.

9-1

Please forward this information to the Ventura County Watershed District and our committee.

The Foundation of Bldg 5 was not built on bedrock but placed on earth that is subject to movement because our property is in a liquid faction zone. In 1986 Building 5 was a sinking at the west end.

Repairs required pylons be placed under the west end of Bldg. 5. The building was jacked up. We had (4) 4 x6's horizontal beams and jacks placed in our living area.

Drilling was done under the building and bedrock was hit around 13 feet below the building. Cemet was poured into the plyons, the building attached to the pylons and then the jacking up process began. Our living area floor and the floor of our deck has many cracks as you can imagine from the settling and then the jacking up process.

9-2

There should be plans on file with the City of Huneme regarding this rehab event.

This is relavent to the J St expansion as there will be a "Whole lot of shakin" going on when the expansion of the canal takes place. I doubt Bldg 7 is on bedrock anymore than Bldg 5 was on bedrock. I hope the Environmental Impact Stdy includes a geological survey of the foundation/bedrock issue on bldg. 7.

Respectfully submitted,
Lynne Haile

file:///C:/pwworking/sac/d0319576/FW J st canal expansion and Bldg 5 rehab in 1986.htm[11/28/2011 3:00:03 PM]

Letter 9
Lynne Haile
October 2, 2011

- 9-1 This comment forwards a description of the history of the Surfside III building 5 rehabilitation project (pylon uplift project). This comment does not specifically address the adequacy of the EIR. No further response is required.
- 9-2 This comment relates the building's issues to the proposed construction and the residents' concern regarding damage. Please refer to responses to comments 8-7(a) and 8-7(b) regarding this issue.

From: Ira Green [ira.green1@gmail.com]
Sent: Monday, October 03, 2011 7:44 AM
To: 'Angela Bonfiglio'; 'Kirk Norman'
Cc: 'Bill Slaughter'; 'Bevin Berube'; 'Bill Betts'; 'Bob Banfill'; 'Perry, Louis (Skip) - 974 LHW (149)'; 'Madrigal, Michael J. - 683 RC (176)'; 'Marion Kelemen'; 'Haile, Lynne & Marcus - 727 RC (194)'
Subject: FW: J st canal expansion and Bldg 5 rehab in 1986

Angela, Kirk:

Can you please respond to this issue. Clearly if our buildings are in a liquid faction zone, then we could sustain damage during the construction.

10-1

Thanks

Best regards,
Ira Green
(818)766-8011
Cell: (818) 981-6188
ira.green@surfsideiii.com

Letter 10
Ira Green
October 3, 2011

10-1 This comment states concern regarding the liquefaction zone.

Please refer to response to comment 9-2.

J Street Parkway or J Street Green Space
From: Roy Prince [prince@west.net]
Sent: Wednesday, October 19, 2011 9:31 PM
To: Angela.Bonfiglio@ventura.org
Cc: Frank Nilsen; Cameron Yee
Subject: J Street Parkway or J Street Green Space

Hello Angela,

It was a pleasure meeting you at the Ventura County Watershed Protection District public meeting on September 26th, and hearing about the work in progress regarding the redesign of the channelized waterway, currently called the "J Street Drain."

11-1

Currently this channelized waterway divides the homes and neighborhoods on either side of the channel and fails to properly provide flood control protection to the neighborhood.

I spoke on behalf of creating a public place in the form of a parkway from Redwood Street to Port Hueneme Road. This is a particularly timely way to increase park space in Oxnard and provide a walking and biking path between central South Oxnard and the beach area.

My vision of the J Street Parkway or J Street Green Space is one that contains many medium height street trees, creating shade and social gathering areas demarked with variations in pavers and trellises, along a meandering path from Redwood to Hueneme, places with benches and gardens, pathways and resting spaces, along the way. The landscaping should be designed with local drought-tolerant plants intermixed with pavers and the smooth bike path.

11-2

I measured the width of the streets between the east and west sides of J Street and found about 50' between the current curbs on the drain side of the streets. 50' is more than enough width to create a functional, aesthetically pleasing, meandering social space for the people of the nearby neighborhood along the full length of the current water channel.

Please seriously consider the possibilities of a wonderful public green space over what is now a blighted, poorly functioning, problematic eyesore that effectively cuts this Oxnard neighborhood in half.

11-3

Thank you for your consideration of these ideas.
Please feel free to contact me if you have any questions or comments.

11-4

Sincerely,
Roy Prince

--
Roy Prince Architect
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Oxnard, CA 93031

805.485.1234
roy@royprince.com
www.RoyPrince.com

Letter 11
Roy Prince
October 19, 2011

- 11-1 This comment provides introductory remarks. This comment does not address the adequacy of the environmental document; therefore, no additional response is required.
- 11-2 This comment summarizes the J Street Drain location and function and notes that the existing drain does not properly provide flood control protection to the neighborhood. Additionally, this comment provides Mr. Prince's vision to create a parkway from Redwood Street to Port Hueneme Road that includes a bike and walking path. The buried box culverts alternative that would allow for a potential bike/walking path (Alternative A) was analyzed in Section 5.0 of the EIR. Please see response to comment 7-2 for the response regarding park space that includes a bike and walking path.
- 11-3 This comment reiterates Mr. Prince's request for a public green space. This comment does not address the adequacy of the environmental document; therefore, no additional response is required.
- 11-4 This comment provides a closing statement and contact information. This comment does not address the adequacy of the environmental document; therefore, no additional response is required.

November 1, 2011

TO: ANGELA BONFIGLIO- ALLEN
Ventura County Watershed District

RE: J SDP: TECHNICAL INADEQUACY OF THE RDEIR

Following are a number of concerns and 20 related questions regarding the above-referenced project. Some of the issues may have been submitted during the previous Public Comment period. Those which have been repeated, are questions or concerns that have not been adequately addressed in the recirculated DEIR. Other issues are matters of concern arising from several instances of flooding or near-flooding that neighbors have experienced.

12-1

WE STRONGLY OPPOSE THE APPROVAL OF THE J STREET DRAIN PROJECT RECIRCULATED DRAFT ENVIRONMENTAL IMPACT REPORT ON THE BASIS OF TECHNICAL INADEQUACY.

* Several sections of the material presented, includes inaccurate, incomplete, or factually incorrect information.

* Certain assertions regarding controversial issues, are vague and/or contradictory.

12-2

* Conclusions were made that the project would have no significant effect, or would have no significant effect after mitigation, despite considerable evidence to indicate reasonable opposition to these conclusions.

* Most of the issues and concerns expressed by the residents of Surfside III, have NOT been adequately addressed in the RDEIR.

* CEQA Guidelines require "... adequacy, completeness, and good faith effort at full disclosure. The RDEIR fails to meet these requirements.

Respectfully submitted by the members of the Surfside III JSDP Committee.

J SDP: TECHNICAL INADEQUACY OF THE RDEIR

[page one]

RECIRCULATED DRAFT ENVIRONMENTAL IMPACT REPORT INCLUDES INACCURATE, INCOMPLETE, MISLEADING, CONTRADICTORY, INFORMATION

A PURPOSE: REDUCE FLOODING BY INCREASING CAPACITY OF CANAL.

- * VCWPD Inundation Map used to indicate flooding from J Street canal and need to increase capacity to 100-year level.
- * Inundation Map includes OID overflow, as well as low areas.
- * FEMA : J Street area is in 500-year zone – NOT 100-year flood zone.
- * Global Climate Change Evaluation [Appendix H] emphasizes temperature increases and decreases in precipitation.

12-3

1 VCWPD CLIMATE EVALUATION SUPPORTS FEMA DETERMINATION.

- * Backwater in JSDP will remain at a constant high [near-capacity] level – reducing actual capacity of JSDP.
- * Increasing width and depth of JSDP does not affect actual capacity of drain which is already filled with backwater.

12-4

2 INCREASING WIDTH AND DEPTH OF CANAL DOES NOT INCREASE CAPACITY WITH BACKWATER.

- * RDEIR: 500-600 cfs capacity of canal is inadequate.
- * Reduced capacity of JSDP due to BACKWATER ALREADY IN THE CANAL.

12-5

3 NEED CALCULATION OF CAPACITY OF JSDP WITH BACKWATER.

- * OID contributes greatest volume of floodwater to lagoon.
- * JSDP will NOT affect flooding. Level of backwater = water level in lagoon.
- * Only breach condition will prevent flooding.

12-6

4 JSDP IS ENTIRELY DEPENDENT ON NATURAL OR MANUAL BREACHING TO PROVIDE FLOOD PREVENTION.

J SDP: TECHNICAL INADEQUACY OF THE RDEIR

[page two]

- * Reduced capacity of JSDP with backwater is inadequate for 100-year flood.
- * Reduced capacity of JSDP with backwater is inadequate for 10-year flood.

12-7

5 JSDP CANNOT SIGNIFICANTLY REDUCE FLOODING UNDER NORMAL [NON-BREACH] CONDITION.

- * New lagoon-outlet design affects water flow only during breach condition.
- * New low-flow channel plan affects water flow only during breach condition.
- * No provision to address flood-threat during normal conditions.

12-8

6 JSDP – INCLUDING OUTLET AND LOW-FLOW CHANNEL - WILL NOT REDUCE FLOODING UNDER NORMAL, [NON-BREACH CONDITION].

7 APPROVAL FROM USFWS AND OTHER ENVIRONMENTAL AGENCIES FOR REGULAR, SCHEDULED, GROOMING OF IMPOUNDING BERM, IS THE ONLY MEANS OF RELIABLE FLOOD PREVENTION [OTHER THAN AN ALTERNATIVE OUTLET]. DID VCWPD APPLY FOR PERMIT TO INITIATE REGULAR, SCHEDULED GROOMING?

12-9

- * **RDEIR: Global Climate Change Evaluation [Appendix H]:**
WATER RESOURCES: Rising temperatures / decreases in precipitation.
- * VCWPD Public Meeting: October 26, 2011: Main source of flooding in beach areas is Oxnard Industrial Drain run-off. Expansion of OID to increase capacity of OID is precluded by cost of land purchases.
- * VCWPD verification of flood-water inundation of beach area is from lagoon backwater [downstream] – NOT from rainfall [upstream].
- * Necessity to address issue of flooding risk to SSIII resulting from OID backwater.

12-10

8 AS NEITHER INCREASE IN WIDTH AND DEPTH OF JSDP; NOR LAGOON OUTLET/ LOW-FLOW CHANNEL PROVIDE FLOOD PROTECTION DURING NORMAL CONDITIONS, THERE IS A NEED TO PREVENT FLOODING IN THE BEACH AREAS DURING NORMAL CONDITIONS. (BEMP PROCEDURES ARE INITIATED ONLY WITH A 72-HOUR STORM PREDICTION.)

J SDP: TECHNICAL INADEQUACY OF THE RDEIR

[page three]

B BEACH ELEVATION MANAGEMENT PLAN: PROVIDES FLOOD PROTECTION

- * RDEIR: Large-scale flood event on Jan. 18, 2010 prompts revision of EAP [Emergency Action Plan] to Proactive Grooming Plan [BEMP].
- * Three conditions occurring simultaneously are REQUIRED for activation of BEMP – to provide flood protection.
- * Possibility of failure to get 72-hour prediction of storm;
- * Possibility of failure to get someone on beach in time to “observe” berm elevation [WHO will observe at night; in rainstorm; on Holidays?]
- * Possibility of failure in BEMP procedures [mechanical; environmental; human errors]

12-11

9 WHAT WILL HAPPEN IF AN UNEXPECTED RAINFALL OCCURS WITHOUT A 72-HOUR PREDICTION?

12-12

10 WHAT WILL HAPPEN IF NO AUTHORIZED VCWPD STAFF IS ON THE BEACH TO OBSERVE THE BERM ELEVATION INCREASE TO ABOVE 6.5 FEET?

12-13

11 WHAT WILL HAPPEN IF THERE IS A FAILURE IN COMMUNICATION, OR TRAFFIC JAM, OR TRACTOR DOESN'T START, OR ANY OTHER PROBLEM THAT PREVENTS GROOMING TO BE COMPLETED IN TIME FOR NATURAL BREACH TO OCCUR AND PREVENT FLOODING AT SSIII?

12-14

12 THERE IS NO BACK-UP EMERGENCY PLAN IN PLACE. WHAT WILL HAPPEN IN THE EVENT THAT ALL THREE BEMP PROCEDURES DO NOT OCCUR SIMULTANEOUSLY?

12-15

- * RDEIR integrates BEMP grooming procedures into the JSDP maintenance program - but BEMP can fail for many reasons.

13 THE ENTIRE BEMP PROCESS IS AN “AS NEEDED” / PROACTIVE PRE-EMERGENCY PLAN – NOT A ROUTINE MAINTENANCE OPERATION. IF REGULAR GROOMING WON'T BE ALLOWED, THEN ANOTHER EMERGENCY ACTION PLAN NEEDS TO BE APPROVED FOR AN ACTUAL EMERGENCY SITUATION IF BEMP FAILS FOR ANY REASON.

12-16

J SDP: TECHNICAL INADEQUACY OF THE RDEIR

[page four]

C MOSQUITO STUDY: “NO SIGNIFICANT IMPACT...”

- * **Failure to “ Fully address mosquito-related potential public health impacts resulting from The JSD Project”**
- * THE J STREET DRAIN [and the JSDP] PROVIDE ALL THREE OF THE LISTED ELEMENTS OF SUITABLE HABITAT FOR MOSQUITO-BREEDING.
- * **No traps set in the SSIII community directly adjacent to the canal.**
- * **Light-traps used – instead of CO2 traps that attract mosquitoes.**
- * “Channel Design for Mosquito Control: Flowing water and open areas of water that allow for water surface disturbance from wind, waves, and fish” are all missing elements from the JSDP.
- * STEEP SIDES [VERTICAL WALLS] ARE A FEATURE OF ABANDONED SWIMMING POOLS
- * FAILURE OF VECTOR CONTROL TO CONTROL MOSQUITOES IN CANAL.
- * VECTOR CONTROL PROCEDURES ARE LIMITED BY EPA REGULATIONS – AND CONSTRAINED FROM USING EFFECTIVE MEANS OF MOSQUITO CONTROL..
- * **Numerous references in RDEIR to increased mosquito-breeding area.**
- * **PARLIAMENTATION LETTER VERIFYING 130 PETITIONS REGARDING MOSQUITO PROBLEMS.**
- * **SIMILAR MOSQUITO-BREEDING CONDITIONS AND CONSTRAINTS ON VECTOR CONTROL WITH JSD PROJECT, WILL ENSURE CONTINUATION OF PUBLIC HEALTH THREAT FROM MOSQUITO-BORNE ILLNESS AT SSIII.**

12-17

- 14 **NOTE: CONCERNS AND QUESTIONS REGARDING THE VCWPD MOSQUITO TECHNICAL STUDY AND THE VCWPD MOSQUITO TECHNICAL STUDY PRESENTATION , ARE ADDRESSED IN RESPONSE TO MOSQUITO STUDY AND RESPONSE TO MOSQUITO STUDY PRESENTATION.**

12-18

- 15 **VCWPD CONCLUSION THAT JSDP [EXPANDED DRAIN CONTAINING STAGNANT BACKWATER] WILL PROVIDE “POOR MOSQUITO HABITAT”, CONTRADICTS SCIENCE, LOGIC, AND DIRECT EXPERIENCE.**

12-19

- 16 **VCWPD CONCLUSION THAT JSDP WILL RESULT IN “NO SIGNIFICANT IMPACTS FROM THE PROJECT” IS POSSIBLE ONLY BECAUSE VCWPD FAILS TO ADDRESS ABOVE CONCERNS AND DIRECT EXPERIENCE OF SSIII RESIDENTS, PRESENTED IN “RESPONSE” DOCUMENTS.**

12-20

J SDP: TECHNICAL INADEQUACY OF THE RDEIR

[page five]

- * VCWPD Global Climate Change Evaluation [Appendix H] emphasizes increases in average temperature – particularly in warmer climates.
- * Evaluation states: “climate-sensitive diseases may increase , such as those spread by mosquitoes...”
- * Evaluation states “Continued global warming is likely to increase populations and types of pests [mosquitoes].

12-21

- 17 VCWPD STUDY CONTRADICTS GLOBAL CLIMATE CHANGE EVALUATION. STUDY DETERMINATION THAT PROPOSED ADDITIONAL SURFACE OF BACKWATER WITH ADDITIONAL MOSQUITO-BREEDING AREA - AND INCREASE IN HIGHER AVERAGE TEMPERATURE - WILL NOT RESULT IN MORE MOSQUITOES, CONTRADICTS SCIENTIFIC EVALUATION.

12-22

- 18 VCWPD STUDY DETERMINATION OF “NO IMPACT” FROM MOSQUITOES DISCOUNTS FAILURE OF CURRENT VECTOR CONTROL - AS WELL AS INCREASED THREAT OF CLIMATE-SENSITIVE DISEASE SPREAD BY MOSQUITOES AS A RESULT OF INCREASED TEMPERATURE DUE TO GLOBAL WARMING.

12-23

D ALTERNATIVES: CONTROLLED ELEVATION OUTLET / BEACH OUTLET

- * RDEIR: VCWPD rejection of all alternative beach outlets which would resolve backwater condition.
- * Meeting Notes: VCWPD; USFWS; HDR: Feb. 3, 2010 to discuss flooding event on Jan. 18, 2010: VCWPD rejection of all alternatives.
- * CEQA Sec. 15065 (4): Mandatory Findings of Significance is required when “the Environmental effects of a project will cause substantial adverse effects on human beings, either directly or indirectly”.
- * USFWS: Tidewater Goby 5 year Review (Sept. 2007): J Street Drain does not meet criteria for Primary Constituent Elements for Critical habitat of Goby.
- * RDEIR: Nesting Sites: Tern and Plover [2010]: East of Ormond Lagoon
- * Evaluation states “Continued global warming is likely to increase populations and types of pests” [mosquitoes].
- * Response to Mosquito Study and Response to Study Presentation.

12-24

J SDP: TECHNICAL INADEQUACY OF THE RDEIR

[page six]

VCWPD REJECTION OF ALTERNATIVE OUTLETS IS BASED ON:

- * USFWS designation of Ormond Lagoon as "Critical Habitat";
- * Meeting Notes: Input of freshwater into lagoon
- * VCWPD conclusion JSDP will result in "No Impact" [no adverse effects].

12-25

*** BENEFITS FROM ALTERNATIVE OUTLET:**

GOBIES: Downlisted from "endangered" to "threatened"

- # number of localities occupied by gobies has more than doubled;
- # goby is more resilient in drought than believed.
- # gene flow and metapopulation dynamics; genetic diversity.

12-26

TERNS and PLOVERS:

- # nests of birds are located east of lagoon.

- * FRESHWATER: OID primary input; JSD input is urban street run-off

19 J STREET DRAIN [MAN-MADE STRUCTURE] IS NOT CRITICAL HABITAT.

LAGOON AREA NEEDED FOR ALTERNATIVE OUTLET IS MINIMAL.

ALTERNATIVE OUTLET IMPACT ON CRITICAL HABITAT IS MINIMAL.

12-27

- * Conclusion of "No Impact from project" is NOT defensible. Data in VCWPD Mosquito Study is inaccurate; incomplete; and contradictory:

- * No CO2 traps; No traps in SSIII area
- * No mosquito problem [from lagoon] before backwater in canal;
- * Failure of current Vector Control [130 letters re: mosquito problem]
- * JSDP: Increase in mosquito-breeding area;
- * JSDP: Increase in mosquitoes due to temperature increase.

12-28

20 PUBLIC HEALTH: REASONABLE CONCERN THAT THE ENVIRONMENTAL EFFECTS OF THE JSDP WILL CAUSE SUBSTANTIAL ADVERSE EFFECTS [SEVERE MOSQUITO INFESTATION AND THREAT OF MOSQUITO-BORNE DISEASE] ON HUMAN BEINGS RESIDING IN SSIII COMMUNITY.

12-29

JSDP: VCWPD MOSQUITO STUDY AND PRESENTATION [12-11-10]

RESPONSE OF SSIII : JSDP COMMITTEE

[Page 1 of 3]

STUDY DATA

Data obtained by researchers that was obtained during the summer months of 2010 - the coolest summer on record in our area - does not represent normal weather conditions. [We have official USWS records showing record LOW "maximum-high" temperatures nearly every day during summer, 2010.]

If Study data was obtained during June, July, August, and September of 2010, the data collected might indicate that little or no mosquito larvae were found in the canal and few mosquitoes were present at SSIII during this period of unusual weather.

- * As mosquito-larvae hatch at warm temperatures, record-cool temperatures would not produce normal mosquito-breeding results.
- * In every case, when the local temperature increases to normal summer levels for several days, the mosquitoes return .
- * The mosquitoes involved are NOT attracted to light - only to CO2. CO2 traps require electricity – which was not available. CO2 traps were not used for collection of data regarding our particular mosquito situation.

THEREFORE, IF DATA USED IN THE STUDY WAS OBTAINED DURING SUMMER, 2010, THE DATA WOULD BE INVALID – as it would NOT reflect normal weather conditions. Also, appropriate traps were not used for sample-collection. .

12-30

BACKWATER

Wetlands at both Pt. Mugu and Ormond Beach - and their local mosquitoes - did not cause a problem before summer 2008. ONLY AFTER PUMP-STATION EXPANSION AND THE NEW CONDITION OF "PONDED" WATER [BACKWATER] IN THE CANAL, DID THE MOSQUITO PROBLEM OCCUR.

MOSQUITOS BECAME A PROBLEM SIMULTANEOUSLY WITH BACKWATER!.

JSDP PLANS/CANAL EXPANSION WILL INCREASE BACKWATER AND INCREASE MOSQUITO-BREEDING AREAS. [Vertical walls will not compensate.]

12-31

12-32

MOSQUITOES / MIGRATION

THE PARTICULAR TYPE OF MOSQUITOES CAUSING THE PROBLEM AT SSIII, ARE VERY SMALL, "SHY", AND AVOID ANY MOVING AIR. THEY CONGREGATE ONLY IN STILL, PROTECTED, AREAS – AND AVOID FLYING UNLESS DISTURBED.

- * These mosquitoes avoid moving air - which indicates they would NOT migrate from long distances away from our community;
- * They would have to fly AGAINST A PREVAILING WESTERLY WIND to get to SSIII from Pt Mugu or the Ormond Wetland.
- * They hide in still, protected areas- congregating in corners, under overhangs shelves, furniture, and in any enclosed places.
- * The highest concentration of mosquitoes are in the area directly along and adjacent to the J Street Drain - NOT in the areas closest to Pt.Mugu or the Wetlands.
- * AREAS AT THE LEAST DISTANCE FROM THE CANAL HAVE THE LARGEST NUMBER OF MOSQUITOES.

12-33

MOSQUITOES LIVING IN PT MUGU AND ORMOND BEACH WETLANDS AND THE BUBBLING SPRINGS CHANNEL, DID NOT MIGRATE TO SSIII BEFORE PONDING OF BACKWATER. The mosquito problem originated in summer 2008, after completion of the pump-station - and simultaneously with the stagnant backwater condition. THERE IS NO BASIS TO CONCLUDE THAT MIGRATION IS CAUSING THE PROBLEM.

SUMMARY:

DATA OBTAINED DURING RECORD COOL SUMMER IS INVALID.

LOGIC, LONG-TERM EXPERIENCE, AND DIRECT OBSERVATION INDICATE THAT THE MOSQUITO PROBLEM AT SSIII IS THE RESULT OF MOSQUITO-BREEDING IN THE CANAL – WHICH IS A CONSEQUENCE OF A CONSTANT CONDITION OF HIGH VOLUME, STAGNANT, PONDED BACKWATER.

12-34

JSDP PLANS INCREASE BACKWATER. From our experience over the past two years, NO permissible mitigation measures by Vector Control will eliminate the mosquitoes.

12-35

ONLY REMOVAL OF THE BACKWATER WILL RESOLVE THE MOSQUITO PROBLEM. (We are aware that federal regulations constrain use of pumps, outfall, ocean outlet, etc. - and request VCWPD cooperation and assistance in filing an Application to obtain a Waiver from Designation of the J Street Drain as Critical Habitat of the Tidewater Goby on the basis of a significant impact on threat to health of adjacent residents.)

12-36

MOSQUITO STUDY: QUESTIONS:

DATA:

- When and where was data in the Study collected?
- Was any "correction" made for the unusual weather conditions?
- Was any "correction" made for not using CO2 traps?
- What traps for samples were used? Where were they located?
- Were samples obtained / numbers counted. on patios along the canal?
- Were final conclusions regarding local mosquitoes and breeding conditions extrapolated from previous studies or general information?

12-37

MIGRATION:

Explain how it is possible that the bugs that bite us at SSIII are "Federal Mosquitoes" from the Pt.Mugu military base or "Fugitive Mosquitoes" from the Wetlands, when they did NOT migrate here before expansion of the Pump Station and ponding of stagnant backwater in the canal.

"Our" mosquitoes are very small, shy – and avoid moving air

- How would they fly AGAINST A PREVAILING WESTERLY WIND to get to SSIII from Pt Mugu or the Ormond Wetland?
- Why would the highest concentration of mosquitoes be in the area directly along and adjacent to the J Street Drain - NOT in the areas closest to Pt.Mugu or the Wetlands?
- Why would they "migrate past" areas closer to the Wetlands and congregate in the areas nearest to the canal?

12-38

JSDP / MITIGATION:

The original DEIR conceded the canal expansion will increase backwater, which will increase mosquito-breeding areas – but stated that effective Vector Control mitigation would ensure NO Environmental impact. Unfortunately, Vector Control measures have failed - even before the expansion – with significant impact on the health and well- being of residents in the SSIII community.

12-39

A MOSQUITO STUDY BASED ON COOL-WEATHER DATA AND NO SAMPLING FROM CO2 TRAPS LOCATED ADJACENT TO THE CANAL IS INVALID.

Therefore, we request that this Study be revised to integrate the foregoing information - before the Revised DEIR on the JSDP is issued.

12-40

Thank You for your Presentation.
 SURFSIDE III: JSDP COMMITTEE

Letter 12
Surfside III: JSDP Committee
November 2, 2011

- 12-1 This comment provides introductory remarks. This comment does not address the adequacy of the environmental document; therefore, no additional response is required.
- 12-2 This comment states the JSDP Committee's opposition to the project, and provides generalized statements regarding the adequacy of the EIR. Specific comments are responded to in the following responses to comments.
- 12-3 This comment questions the project purpose of reducing flooding by increasing the capacity of J Street Drain. Please see responses 8-5(a) and 8-5(b).

This comment also states that the Global Climate Change Evaluation (Appendix H of the RDEIR) emphasizes temperature increases and decreases in precipitation, and thus supports the existing FEMA 100-year floodplain. Global climate change refers to changes in average climatic conditions on Earth as a whole, including temperature, wind patterns, precipitation and storms. These changes may result in extreme conditions. According to the Global Climate Change Evaluation Report, "Rising sea levels, more intense coastal storms, and warmer water temperatures will increase the threat to the State's coastal regions." Although annual precipitation totals may decline, the severity of individual storms and related flooding may increase. One of the purposes of the J Street Drain project is to improve stormwater flow and reduce potential flooding in the cities of Oxnard and Port Hueneme. The project would therefore alleviate potential flooding impacts in the event that global climate change affects the severity of storms and runoff.

- 12-4 This comment states that backwater will reduce the capacity of the J Street Drain, even in the case of a wider and deeper channel. To ensure that sufficient capacity will be available during storm flows, the District has included a Beach Elevation Management Plan (BEMP) in the project description. Please see responses 8-3(a) and 8-3(d) and Section 3.7 of the RDEIR for further details.
- 12-5 This comment states that reduced capacity of the J Street Drain is due not to the existing 500 to 600 cubic feet per second (cfs) capacity but to the backwater condition, and that capacity with backwater present should be calculated. The hydrologic modeling that was conducted for the proposed project in 2008 includes the existing hydrologic conditions of the area, which includes existing backwater conditions. The capacity determination of the drain included the existing conditions. The Coastal Engineering Reports are included in Appendix C and discussed in Section 4.3 of the EIR. Please see response to comment 12-4 above for further discussion on backwater.
- 12-6 This comment states that OID contributes the greatest volume of floodwater to the lagoon, that the J Street Drain project will not alleviate flooding because the level of backwater in the drain is equal to the water level in the lagoon, and that only a breach condition will prevent flooding. The comment is correct to the extent that the J Street Drain project includes the BEMP, which requires beach grooming to facilitate natural breaching and prevent floods. This process will occur in concert with the proposed drain improvements in order to reduce the 100-year flood plain as identified in the EIR project description.

As described on page 4.3-9 and 4.3-10 of the EIR, the existing capacity of the J Street Drain is 500-600 cfs, which is less than the 50- and 100-year frequency flood flows of 1,649 and 2,059 cfs, respectively (URS 2005). This drain flow is composed entirely of urban runoff. The OID channel is currently rated by the District as having an approximate flow capacity of 2,900 cfs. Under current conditions, the lagoon receives inflow throughout the year from the Hueneme Drain (pumped to the J Street Drain), J Street Drain, and OID. The backwater issues in the OID may result in inland flooding near the paper plant during storm events. However, in the absence of a backwater condition (i.e., the lagoon has breached and the J Street Drain is empty), a storm generating more than 500 to 600 cfs of runoff (approximately the 10-year flood event) to the existing J Street Drain would cause flooding in the project area even if runoff to the OID is safely contained within that channel.

In addition to the drain capacity, the outlet of the drain is sometimes constrained by a sand berm that can reach over seven feet in height surrounding the Ormond Beach Lagoon. The sand berm hinders the direct flow path of the J Street Drain channel to the Pacific Ocean. The berm currently directs the water to the east, toward the OID. If the berm does not open during a storm event, then storm water ponds in the Lagoon and can fill the drain to capacity as far as Hueneme Road.

Natural breaching takes place after the lagoon water level exceeds the height of the sand berm. Due to the dynamic nature of the Lagoon and sand berm elevation, surface water elevation for natural breaching will likely vary. Therefore, if the sand berm elevation is very high, natural breaching at the lagoon may not occur during a minor flood event, in which case the project area would flood due to backwater effects. To prevent such flooding, the project includes the BEMP. The BEMP would allow grooming the beach sand elevation to 6.5 feet (NGVD 1929). However, the BEMP alone would not be sufficient in storms greater than the 10-year event (capacity of existing drain), as flows would overtop the existing undersized J Street Drain channel before they could reach the ocean. With implementation of the proposed project, including the BEMP, storms larger than the 10-year and up to the 100-year event would flow through the breach and into the ocean.

- 12-7 This comment restates that the proposed project cannot significantly reduce flooding under non-breach conditions. Please see response 12-6 above.
- 12-8 This comment restates that the proposed project provides adequate flood control only during the breach condition. As stated previously, the full project includes not only enlargement of the existing channel, but a BEMP. The channel modifications in combination with the BEMP provide adequate flood control. Please see responses 12-3 through 12-6 above.
- 12-9 This comment states that approval from regulatory agencies for regular, scheduled grooming of the beach sand berm is the only means of reliable flood prevention aside from an alternative outlet, and asks if the District has applied for a permit to initiate regular, scheduled grooming. The District has conducted ongoing consultation with the USFWS, USACE, and CDFG regarding the proposed project. Please refer to response to comment 8-3(c) for a list of regulatory approvals and permits required for the proposed project. The District is currently preparing the applications for submittal to the USFWS, USACE, CDFG and the CCC for regular beach grooming, and would obtain all necessary approvals from these agencies prior to initiating any construction on the project. Currently, beach grooming is conducted on a case-by-case, emergency basis. Application for routine, non-emergency grooming must be accompanied by a certified EIR or other document complying with the California Environmental Quality Act. If the Ventura County

Board of Supervisors certifies and adopts the J Street Drain EIR, it will be submitted as part of the permit applications. Please also see responses 12-3 through 12-8 regarding the need for both channel modifications and the BEMP to provide complete flood protection in the J Street Drain watershed.

12-10 This comment outlines bullet point areas of disagreement with the EIR as follows:

- Global Climate Change Evaluation indicates a decrease in precipitation.

Please see response 12-3 above.

- The District identified that the OID is the main source of flooding in the beach areas and expansion of OID is precluded by cost of land purchases.

Please see responses 12-3 through 12-6 above.

In addition, project funding and selection is discussed in Section 3.0 of the EIR. All projects with the District are evaluated through a rigorous CIP ranking and selection process. Where flood control facilities already exist, their current condition (e.g., concrete deterioration) is evaluated. Potential solutions to known flood threats, or CIPs, are developed through consideration of a range of alternatives. All proposed CIPs are assigned points out of 100 possible, then ranked and prioritized in relation to one another. The OID improvements would require the acquisition of land resulting in a significant increase in cost for the improvements, so this project is ranked lower than the J Street Drain project, but will nonetheless be addressed in the future.

- The District verified that the flood-water inundation of the beach area is from the backwater, not from rainfall.

The District acknowledges that one of the capacity issues with the J Street Drain that results in flooding is the existence of backwater. Section 4.3 of the EIR discusses the existing setting of the area, including backwater as a cause for the flooding issues. Removal of the backwater is not a feasible alternative due to the presence of endangered species and the potential impacts to those species, which would violate the Endangered Species Act. The proposed project in combination with the BEMP would increase the capacity of the drain and facilitate natural release of the lagoon water in response to storm water inflow before it backs up so far that it overtops the channel and floods adjacent residents and businesses. Please also refer to responses to comments 12-4 through 12-6 for further discussion regarding backwater.

- Surfside III residents request analysis of flooding risk to Surfside III from the OID.

Surfside III is located within the J Street Drain watershed, not the OID watershed, and is therefore vulnerable to flooding of the J Street Drain. Potential flooding caused by OID flows not being able to vacate the lagoon and backing up into the J Street Drain would be addressed by the proposed BEMP. Please also see response to comment 12-6 above.

- Concern that the proposed project, including the BEMP, does not provide flood protection during normal conditions (i.e., breach has not occurred), when a storm has not been predicted.

Under typical conditions, where a breach has not occurred and no rain is falling, there is no risk of flooding, as the water level in neither the J Street Drain nor the lagoon would rise. Please refer to response to comment 8-3(d) for a response to the concern about rain falling without having been predicted.

12-11 This comment outlines bullet point areas of disagreement with the EIR as follows:

BEMP:

- Possibility of failure to get 72-hour prediction of storm

Please see response to comment 8-3(d) above.

- Possibility of failure to get someone on the beach in time to “observe” the berm elevation (night, rainstorm, holidays)

Implementation of the BEMP would constitute a new maintenance activity associated with operation of the proposed project. Berm elevation monitoring will be factored into regularly scheduled maintenance activities to ensure adequate monitoring occurs. Please also see response to comment 8-3(d) above.

- Possibility of failure in BEMP procedures (mechanical, environmental, human error)

Implementation of the BEMP would constitute a new maintenance activity associated with operation of the proposed project. Regularly scheduled maintenance of equipment would occur as part of the routine operation and maintenance of the J Street Drain. Several staff would be trained to track site conditions and implement the BEMP, as this operation cannot be implemented by a single person. In the event action is required during the environmentally sensitive bird nesting season, which occurs toward the end of the rainy season, a procedure involving careful biological monitoring and avoidance of nests would be implemented with prior regulatory agency approval. Please also see response 8-3(d) above.

12-12 This comment asks what would happen if an unexpected rainfall occurs without a 72-hour prediction. Please refer to response to comment 8-3(d).

12-13 This comment asks what would happen if a VCWPD employee is not present to observe the beach elevation rise above 6.5 feet. Implementation of the BEMP would constitute a new maintenance activity associated with operation of the proposed project. Berm elevation monitoring will be factored into regularly scheduled maintenance activities to ensure adequate monitoring occurs.

12-14 This comment asks what will happen if an unforeseen circumstance preventing timely beach grooming? Implementation of the BEMP would constitute a new maintenance activity associated with operation of the proposed project. Regularly scheduled maintenance of equipment would occur as part of the routine operation and maintenance of the J Street Drain. The operations and maintenance Deputy Director in coordination with the District Director or his/her designee will be in charge of monitoring the BEMP procedures. Emergency procedures will be incorporated into the maintenance activities to ensure proper implementation of the BEMP. Please also refer to response to comment 8-3.

- 12-15 This comment asks what will happen if the three conditions that trigger BEMP implementation do not occur simultaneously. It is unlikely flooding would occur if the three criteria required to implement the BEMP are not met simultaneously since it would mean that the Ormond Beach Lagoon is not fully enclosed by the Ormond Beach sand berm, the Ormond Beach sand berm elevation adjacent to the lagoon is not above 6.5 NGVD (8.9 feet NAVD), or there is no predicted storm event within 72-hours. If the Ormond Beach Lagoon is not fully enclosed by the Ormond Beach sand berm and the Ormond Beach sand berm elevation adjacent to the lagoon is not above 6.5 feet NGVD (8.9 feet NAVD), then the berm is either breached or would breach naturally if storm runoff is sufficient to raise the lagoon water level above the 6.5 feet NGVD sand berm elevation. Regular maintenance activities on equipment will ensure that the equipment is functioning properly at the time needed. Standard procedures will be incorporated into the maintenance activities to ensure proper implementation of the BEMP. Please also refer to response to comment 8-3(d).
- 12-16. This comment states that the BEMP is a proactive pre-emergency plan, not a routine maintenance operation, and if regular grooming will not be allowed, an emergency action plan is needed to address potential BEMP failure. Standard procedures would routinely be implemented prior to each storm; therefore, the BEMP would not be a rare emergency procedure. If the lagoon is already breached, no action would be required. If it has not breached, the sand berm elevation would be observed. If it is higher than 6.5 feet NGVD, the berm would be groomed to this elevation. If the berm is lower than 6.5 feet NGVD, no grooming would be required because the lagoon would breach naturally before the flood stage (approximately 7.0 feet NGVD). If no rain is forecast, then storm runoff would not raise the lagoon water elevation, and there would be no risk of flooding. Please also refer to responses to comments 12-11 through 12-15 for responses to implementation procedures to the BEMP.
- 12-17. This comment outlines bullet point areas of disagreement with the mosquito study as follows:

- Failure to “fully address the mosquito-related potential public health impacts” resulting from the proposed project and notes that the existing drain and proposed project listed all three of the elements of suitable habitat for mosquitoes.

The J Street Drain Project Mosquito Technical Study (January 24, 2011) is included in Appendix I of the EIR and summarized in Section 4.11 of the EIR. The technical study provides an analysis of the mosquito production potential of the proposed project compared with the current J Street Drain and the proposed alternatives. The public health impacts and mosquito study are analyzed in Section 4.11 of the EIR (pages 4.11-12 through 4.11-16). While the proposed project would result in increased water surface area of standing water, the converted channel would provide less suitable habitat for mosquitoes due to deeper water capable of supporting larger populations of predators and less shallow edges. In addition, J Street Drain is more easily accessed for vector treatment compared to shallow vegetated wetlands to the east and southeast due to the presence of an adjacent access road along its entire length and the lack of dense vegetation that would interfere with larvicide application.

The mosquito technical study found no evidence to suggest that the current configurations of the J Street Drain, Hueneme Drain Pump Station, or Hueneme Drain provide high-quality habitat for, or produce large numbers of, mosquitoes. However, the evaluation of the greater J Street Drain area revealed that the OWWTP, the undeveloped floodplain of the Oxnard Industrial Drain, and urban areas may produce substantial

numbers of mosquitoes. The evaluation of the proposed J Street Drain project found the proposed channel configuration to have similar or less mosquito breeding potential than the current J Street Drain channel. The proposed changes would likely amplify the channel's negative effects on mosquito breeding and should have no significant impact on public health due to mosquito-transmitted diseases. The alternatives presented in the EIR, as well as the additional proposed alternative, would have similar or greater mosquito breeding potential, and therefore were considered to have similar or negative impact, as compared to the proposed project.

- No traps set in the Surfside III community directly adjacent to the canal.

As stated in the EIR (pages 4.11-4 through 4.11-9), during 2008-2010, citizen complaints from the Surfside III Condominium Complex, located in the area near the terminal end of the J Street Drain, led the Ventura County Vector Control Program (VCVCP) to increase their surveillance efforts in the immediate vicinity in an attempt to identify both the species present and their potential points of origin. As a result, more data were generated for this area during this two-year period than in previous years. It should also be noted that trap data are collected during the late spring through early fall. Mosquito production is generally low during the late fall and winter months, thus traps are typically not deployed at those times. A map of the locations for which trap data were collected in the J Street Drain area is presented in Figure 4.11-2. As shown on Figure 4.11-2 of the EIR, traps were located adjacent to the J Street Drain and the Surfside III community.

- Light-traps were used instead of CO₂ traps.

As stated in the EIR (page 4.11-4) the VCVCP uses adult mosquito traps as part of their comprehensive mosquito surveillance and control plan. The traps use carbon dioxide (CO₂) as an attractant and capture only female mosquitoes. However, it should be noted that traps, because they are deployed overnight, represent only a "snap shot" in time of the mosquito population in an area. Attempts are made to deploy traps during representative weather conditions. The VCVCP has limited resources available that must be used to protect the entire County. Adult mosquito traps are deployed in areas of greatest concern, usually triggered by evidence of local disease transmission in birds, humans, or other animals, but also in response to local nuisance complaints. For this reason, the number and location of traps deployed often varies seasonally and yearly.

- Channel design features such as flowing water and open areas of water that allow for water surface disturbance from wind, waves, and fish, are missing elements from the proposed project.

As stated in the EIR (page 4.11-12), the J Street Drain is currently a trapezoidal, concrete flood control channel approximately 20-30 feet wide with 1.5:1 sloped walls and an average depth near 4 feet. The J Street Drain discharges into Ormond Beach Lagoon, which usually does not have an outlet to the ocean. The effect of Ormond Beach Lagoon having no outlet is that water backs up into the J Street Drain nearly to Hueneme Road. While mosquito control BMPs largely advocate reducing or eliminating standing water in channels and drains as the primary strategy for mosquito control, the endangered species requirements in Ormond Lagoon prevent such practices.

The current J Street Drain has a concrete substrate and relatively steep sides, both of which inhibit emergent vegetation growth along the bottom and margins of the channel. Lack of vegetation can prevent mosquito production as no sheltered areas for mosquito larvae to use as refuge are provided. As described above, the current J Street Drain is 20-30 feet wide. Because of this wide, open surface, the lack of vegetative cover, and the location near the Pacific Ocean, the water surface in the drain experiences wind and wave action, especially near the beach. Even relatively minor wind and wave action on the surface of the water prevent the breathing siphons of mosquito larvae from maintaining a connection to the air, therefore effectively drowning the larvae. This makes the current J Street drain not ideal habitat for mosquito breeding. In addition, the depth of the J Street Drain allows it to support numerous fish of various sizes (Section 4.2, page 4.2-14 of the EIR) that will opportunistically prey on mosquito larvae. Recent inspections of the J Street Drain by California Department of Public Health, Vector-Borne Disease Section staff confirmed that the J Street Drain does not currently provide suitable habitat to support large mosquito populations (Larry Walker Associates 2011). Additionally, the open channel allows for safe and easy maintenance, monitoring, and treatment.

As identified in the EIR (pages 4.11-23 through 4.11-24), after reconstruction of the J Street Drain concrete lining, the channel invert would be about three feet lower than the existing invert in order to create the required channel capacity. As a result, the finished invert would need to be daylighted via an earthen ramp to the sand berm/lagoon at a 10:1 slope over a distance of approximately 40 feet from the end of the existing concrete. A ten-foot thick layer of four-ton rock riprap would be placed horizontally beneath the earthen ramp at the end of and at the same elevation as the concrete drain bottom to dissipate flow energy. It is anticipated that during the first few natural lagoon breaching events following Phase 1 construction, the movement of water (tidal and drain flow) would result in an equilibrium elevation within the channel transition area, between the end of the concrete channel and the Ormond Beach Lagoon annual breach location. When the lagoon has breached, there is a potential for temporary standing water to accumulate upstream of the earthen ramp before the new equilibrium elevation establishes at the end of the reconstructed J Street Drain. The lagoon typically breaches during the late fall and winter, when storm runoff increases the water surface elevation enough to overtop the beach sand berm. As described above, mosquito production decreases substantially in the cooler late fall and winter months. Therefore, temporary accumulation of standing water behind the earthen ramp is not expected to substantially increase mosquito production.

When the lagoon outlet is closed and the water surface elevation in Ormond Beach Lagoon is at 6.5 feet, the additional surface water acreage of the J Street Drain would be one additional acre at the completion of Phase I (north limit at Hueneme Road) and 2.6 additional acres at the completion of Phase II (north limit at Pleasant Valley Road). However, neither the changes in channel configuration nor the resulting additional back-up are expected to increase the suitability of the drain habitat for mosquito breeding.

- Steep sides (i.e. vertical walls) are a feature of abandoned swimming pools.

Swimming pools do contain steep sides; however, abandoned swimming pools also collect calm stagnant water since there is no outlet to open, exposed waters. Flowing waters or waters with surface disturbance from wind, waves, or animals are not suitable

habitat for mosquito breeding. Stagnant water in abandoned swimming pools lacks surface water disturbance from wind and waves and do not typically contain predators such as fish.

- Failure of vector control.

As discussed in Section 4.11 of the EIR, the Vector Control Program of the Ventura County Environmental Health Division monitors and controls mosquito breeding in flood control channels, drains, roadside ditches, catch basins, gutters, creeks, marshes, retention and detention basins, pools, and rain water depressions. The VCVCP staff constantly monitors and controls over 2,000 potential mosquito breeding sources, including the J Street Drain and surrounding locations, to prevent and minimize exposure of the public to mosquito borne diseases. The VCVCP staff also responds to reports of mosquitoes or potential mosquito breeding sources from the public. The mission of the program is to suppress the population of mosquitoes to minimize the potential transmission of disease and reduce annoyance caused by these insects. The VCVCP staff conducts continuous encephalitis virus surveillance, including West Nile virus, and monitors the County areas for plague, Lyme disease, and hantavirus to prevent and minimize the exposure of the public to these diseases.

Mosquito Abatement. Mosquitoes are generally controlled in the larval and pupal stages. Adult stages may also be controlled during periods of possible disease transmission. The type of control will need to be targeted to the stage of the mosquito that is present. The VCVCP consists of using physical, cultural, biological, or chemical measures to control mosquitoes. The VCVCP also stocks and supplies mosquito fish for the control of mosquito larva and pupa, which are generally used in man-made impounded water areas.

The Vector Control Program currently uses larvicides for mosquito abatement, including VectoLex G and VectoBac G, which are applied according to the manufacturer's label and meet all state and federal regulations. These larvicides contain biological insecticides, such as the microbial larvicides, *Bacillus sphaericus* and *Bacillus thuringiensis israelensis*, which are naturally occurring bacteria that produce toxins targeting various species of mosquitoes, fungus gnats, and blackflies. Only these species are susceptible to these bacteria – other aquatic invertebrates and non-target insects are unaffected. In addition, the EPA evaluates and registers (licenses) pesticides to ensure that they can be used safely by vector control programs. To evaluate any pesticide, EPA assesses a wide variety of tests to determine whether a pesticide has the potential to cause adverse effects on humans, wildlife, fish and plants, including endangered species and non-target organisms. Therefore, the larvicides used by the Ventura County Vector Control Program undergo extensive testing prior to registration and are virtually nontoxic to humans and do not pose risks to wildlife, non-target species, or the environment.¹

- Numerous references in EIR to increased mosquito breeding area.

The proposed J Street Drain project includes changing the existing open trapezoidal concrete channel into an open rectangular channel with vertical rather than sloped walls. The channel would be approximately four feet deeper and the existing sloped channel walls would be replaced with vertical walls. Conversion to vertical channel walls would

¹ <http://www.epa.gov/pesticides/health/mosquitoes/larvicides4mosquitoes.htm>

eliminate existing shallow water along the edges of the channel. The wider, deeper channel will increase the overall capacity of the channel and convey greater volumes of flood water to prevent the channel from over-topping and causing damage to property and vital facilities. The change in channel geometry would increase the depth, surface area, and length of backed up water. When the lagoon outlet is closed and the water surface elevation in Ormond Beach Lagoon is at 6.5 feet, the additional surface water acreage of the J Street Drain would be one additional acre at the completion of Phase I and 2.6 additional acres at the completion of Phase II. While the proposed project would result in increased water surface area of standing water, the converted channel would provide less suitable habitat for mosquitoes due to deeper water capable of supporting larger populations of predators and less shallow edges. The proposed changes in the channel geometry will likely amplify the design characteristics' negative effects on mosquito breeding. Vertical channel walls are considered the most desirable design choice to reduce potential for vegetative or other cover along the channel margins and present the best scenario for preventing refuge for immature mosquitoes. Additionally, the deeper channel will provide better habitat for predator fish while the wider channel will increase wind, wave, and animal disturbances of the water surface. The proposed channel geometry will not reduce the ease or safety of access for mosquito monitoring and treatment or channel maintenance.

- Petition letter verifying 130 petitions regarding mosquito problem.

The District acknowledged the petition letters received during the 2009 EIR public review period. The comments were addressed in the EIR in Appendix L. Please refer to Appendix L of the EIR for response to the comment letters and petitions received during the 2009 EIR public review period.

- Similar mosquito-breeding conditions and constraints on vector control with the proposed project will result in continuation of public health threat from mosquito borne illness at the Surfside III complex.

Please refer to the responses above for the mosquito discussion. The VCVCP staff conducts continuous encephalitis virus surveillance, including West Nile virus, and monitors the County areas for plague, Lyme disease, and hantavirus to prevent and minimize the exposure of the public to these diseases.

- 12-18 This comment notes additional concerns and questions regarding the mosquito study and presentation are addressed in the "Response to Mosquito Study and Response to Mosquito Study Presentation" attached to the comment letter. Please refer to responses to comments 30 through 40 below for responses to those concerns and questions.
- 12-19 This comment states the conclusion that the proposed channel will provide "poor mosquito habitat" contradicts science, logic, and direct experience. The mosquito technical study (EIR Appendix I) found no evidence to suggest that the current configurations of the J Street Drain, Hueneme Drain Pump Station, or Hueneme Drain provide high-quality habitat for, or produce large numbers of, mosquitoes. However, the evaluation of the greater J Street Drain area revealed that the OWWTP, the undeveloped floodplain of the OID, and urban areas may produce substantial numbers of mosquitoes. The mosquito study evaluation of the proposed J Street Drain project found the proposed channel configuration to have similar or less mosquito breeding potential than the current J Street Drain channel. The proposed changes would likely amplify the

channel's negative effects on mosquito breeding and should have no significant impact on public health due to mosquito-transmitted diseases. The alternatives presented in the EIR, as well as the additional proposed alternative, would have similar or greater mosquito breeding potential, and therefore were considered to have similar or negative impact, as compared to the proposed project.

- 12-20 This comment states that the conclusion of "no significant impacts from the project" fails to address the above concerns and direct experience of Surfside III residents. The EIR was prepared in compliance with CEQA Public Resources Code Section 21000 et seq., the CEQA Guidelines (Section 15000 et seq.) as promulgated by the California Resources Agency and the Governor's Office of Planning and Research, the Ventura County Initial Study Assessment Guidelines, and the County of Ventura Administrative Supplement to the State CEQA Guidelines. Since release of the 2009 EIR, the District conducted additional studies providing further technical background and updated impact analyses based on revisions to the Ventura County Initial Study Assessment Guidelines adopted by the Board of Supervisors on April 26, 2011. These studies and updated impact analyses were incorporated into the EIR. Additionally, all comments received during the 2009 EIR public review period were responded to and included in Appendix L of the EIR. The totality of technical data and impact analyses in Section 4.11, as summarized in responses to comments 12-17 and 12-19 above, support the conclusion of less than significant impact.
- 12-21 This comment quotes from the Global Climate Change Evaluation in Appendix H of the EIR. The comment does not specifically address the adequacy of the environmental document; therefore, no additional response is required.
- 12-22 This comment states that the Mosquito Study contradicts the Global Climate Change Evaluation. The Global Climate Change Evaluation summarized in Section 4.12 of the EIR and included in Appendix H of the EIR acknowledges that potential health effects from global climate change may arise from temperature increases, climate-sensitive diseases, extreme events, and air quality. Climate sensitive diseases may increase, such as those spread by mosquitoes and other disease-carrying insects (such as malaria, dengue fever, yellow fever, and encephalitis). This effect could occur in southern California in general and at the project site specifically, with or without implementation of the proposed project. This effect would be the result of cumulative impacts related to cumulative increases in greenhouse gas emission resulting in global climate change. The global climate change evaluation study did not state that additional backwater within the proposed project would result in additional mosquito breeding habitat, nor did the study determine that the proposed project would result in an increase in climate-sensitive diseases. In fact, the study determined that the proposed project would not result in a significant increase in greenhouse gases. The study determined that the project's impacts related to global climate change are less than significant.
- 12-23 The comment states that the "no impact" determination relating to mosquitoes discounts the failure of the VCVCP to control mosquitoes, as well as the increased threat of climate-sensitive disease as a result of temperature increases caused by global climate change. Please note that the comment is incorrect, as construction and operations impacts were found to have a less than significant impact, whereas BEMP implementation was concluded to have no impact for this issue. The mosquito technical study summarized in Section 4.11 and Appendix I of the EIR found no evidence to suggest that the current configurations of the J Street Drain, Hueneme Drain Pump Station, or Hueneme Drain provide high-quality habitat for, or produce large numbers of, mosquitoes. Additionally, the mosquito study evaluation found the proposed channel configuration to have similar or less mosquito breeding potential than the current J Street Drain

channel. The proposed changes would likely amplify the channel's negative effects on mosquito breeding and should have no significant impact on public health due to mosquito-transmitted diseases. Please refer to response to comment 12-22 regarding the Global Climate Change Evaluation prepared for the proposed project.

As discussed in Section 4.11 of the EIR, the Vector Control Program of the Ventura County Environmental Health Division monitors and controls mosquito breeding in flood control channels, drains, roadside ditches, catch basins, gutters, creeks, marshes, retention and detention basins, pools, and rain water depressions. Vector Control Program staff constantly monitor and control over 2,000 potential mosquito breeding sources to prevent and minimize exposure of the public to mosquito borne diseases. VCVCP staff also responds to reports of mosquitoes or potential mosquito breeding sources from the public. The VCVCP staff conducts continuous encephalitis virus surveillance, including West Nile virus, and monitors the County areas for plague, Lyme disease, and hantavirus to prevent and minimize the exposure of the public to these diseases.

12-24 This comment outlines bullet point areas of disagreement with the alternatives as follows:

- Refutes the District's rejection of all alternative beach outlets that would resolve the backwater condition.

The District consulted with Chris Dellith, Senior Fish and Wildlife Biologist with the USFWS who administers the ESA and Antal Szijj, Senior Project Manager with the USACE who administers the CWA, regarding the possibility of creating a permanent connection to the ocean or manually breaching the berm during the summer. Those two options would likely result in significant mortality of endangered tidewater gobies that are known to exist in the J Street Drain. If the permanent connection could "jeopardize" an endangered species, the USFWS would require the District to implement a "reasonable and prudent alternative" instead of the permanent connection. The USACE by law may only permit the "least environmentally damaging practicable alternative" (LEDPA), and given the adverse effect to threatened and endangered species, a permanent connection would likely not be considered the LEDPA when compared to the preferred alternative. Given the strong likelihood that the permanent connection may not be authorized under both the ESA and the CWA, the District chose the "reasonable and prudent alternative" and LEDPA.

Additionally, extending the channel to the ocean would not be an easy solution. The channel would continually be blocked by sand as the lagoon is now. Keeping it "open" would most likely require frequent attention from maintenance personnel with heavy equipment. Continual maintenance in areas occupied by threatened and endangered species using heavy equipment such as bulldozers would not be permitted by the regulatory agencies due to environmental concerns and restrictions.

- This comment references CEQA Guidelines Section 15065 (a)(4): Mandatory Findings of Significance.

CEQA Guidelines Section 15065 (a)(4) specifically states: "A lead agency shall find that a project may have a significant effect on the environment and thereby require an EIR to be prepared for the project where there is substantial evidence, in light of the whole record, that any of the following conditions may occur: the environmental effects of a

project will cause substantial adverse effects on human beings, either directly or indirectly.”

In compliance with Section 15065 (a)(4), the District prepared an Initial Study and Notice of Preparation to prepare an EIR for public review in 2008. The Initial Study included the Mandatory Findings of Significance determining that an EIR was required. The DEIR was circulated for public comment in November 2009 and subsequently recirculated (RDEIR) in September 2011. Appendix L of the EIR contains responses to all comment letters received on the November 2009 EIR.

The Final Environmental Impact Report (FEIR) will be prepared in accordance with CEQA, Public Resources Code Section 21000 et seq. and CEQA Guidelines (California Administrative Code Section 15000 et seq.)

According to CEQA Guidelines Section 15132, the FEIR shall consist of the following:

- a) The EIR or a revision of the Draft;
- b) Comments and recommendations received on the EIR, either verbatim or in summary;
- c) A list of persons, organizations, and public agencies commenting on the EIR;
- d) The responses of the Lead Agency to significant environmental points raised in the review and consultation process;
- e) Any other information added by the Lead Agency.

The FEIR will also include the Mitigation Monitoring and Reporting Program (MMRP) which identifies the mitigation measures, timing and responsibility for implementation of the measures.

- The J Street Drain does not meet the criteria for “Primary Constituent Elements for Critical Habitat of Goby.”

As stated in Section 4.2, page 4.2-20 of the EIR, the south end of the J Street Drain project area is currently designated as critical habitat for the tidewater goby. On October 19, 2011, the USFWS proposed to revise critical habitat for the tidewater goby under the ESA of 1973, as amended. The proposal includes expansion of critical habitat in J Street Drain – Ormond Lagoon from 45 to 121 acres. According to the Federal Register, “this unit allows for connectivity between tidewater goby source populations, and thereby supports gene flow and metapopulation dynamics in this region. On an intermittent basis, VEN-3 possesses a sandbar across the mouth of the lagoon or estuary during the late spring, summer, and fall that closes or partially closes the lagoon or estuary, and thereby provides relatively stable conditions.”²

Although the channel is not currently critical habitat, the tidewater goby that lives in the channel is protected under the ESA. An act that would result in the mortality or “take” of an endangered or threatened species as identified under the ESA, such as the tidewater

² <http://www.federalregister.gov/articles/2011/10/19/2011-26301/endangered-and-threatened-wildlife-and-plants-designation-of-revised-critical-habitat-for-the-goby>

goby, would be in violation of the ESA, regardless of whether it occurs within designated critical habitat.

- This bullet point notes nesting sites for the California least tern and plover are located east of the Ormond Lagoon.

This comment does not address the analysis in the EIR. The comment states that the locations of the nesting sites are east of Ormond Lagoon. However, this is incorrect. Figure 4.2-10 shows three California least tern (2009) and two snowy plover (2008 and 2009) nest sites south of the lagoon.

- This bullet point reiterates comments 12-22 and 12-23 above.

Please refer to the responses provided for comments 12-22 and 12-23 above.

12-25 This comment outlines bullet points summarizing the District's rejection of the alternative outlets as follows:

- USFWS' designation of Ormond Lagoon as "Critical Habitat."

Please refer to the first and third bullets in comment 12-24 for responses.

- Input of freshwater into lagoon.

Input of freshwater to the Ormond Lagoon is the result of both dry weather urban runoff and storm runoff originating from J Street, Hueneme and Oxnard Industrial Drains. Freshwater input is essential to tidewater goby survival in the Ormond Lagoon because this species cannot tolerate high salinity water for extended periods of time. Please refer to the first bullet point in comment 12-24 above for a discussion of an alternative outlet to the beach.

- The proposed project will result in no impact (no adverse effects).

Please refer to the first bullet in comment 12-24 above for a response to the alternative outlet.

The EIR was prepared in compliance with CEQA Public Resources Code Section 21000 et seq., the CEQA Guidelines (Section 15000 et seq.) as promulgated by the California Resources Agency and the Governor's Office of Planning and Research, the Ventura County Initial Study Assessment Guidelines, and the County of Ventura Administrative Supplement to the State CEQA Guidelines. Since release of the 2009 EIR, the District conducted additional studies providing further technical background and updated impact analyses based on revisions to the Ventura County Initial Study Assessment Guidelines adopted by the Board of Supervisors on April 26, 2011. These studies and updated impact analyses were incorporated into the EIR. The EIR identifies mitigation measures where required to reduce impacts to a less than significant level. Additional mitigation has been identified to further reduce noise impacts, visual impacts and geotechnical impacts. As stated previously the FEIR will be prepared in accordance with CEQA Guidelines Section 15132, and the FEIR will include an MMRP which identifies the mitigation measures, timing and responsibility for implementation of the measures.

Additionally, five channel and three outlet alternatives were considered and analyzed in the EIR. Alternative E consists of a soft (or earthen) bottom trapezoidal channel configuration. Alternatives A and D include box culverts, with landscaping or a low flow channel above the box culvert. The Alternative D low flow channel above the box culverts would function as a vegetated swale, providing a combination of habitat and boxed underground channel as requested in this comment. Alternatives A and D were determined to cost substantially more than the Preferred Alternative due to the increased construction, landscaping, and right-of-way costs. Alternative E would not meet project objectives regarding Ormond Beach Lagoon and tidewater goby since the greater project footprint and natural channel configuration have the potential to introduce greater quantities of polluted runoff, particularly turbid flows, into tidewater goby habitat and/or groundwater supply. Conversely, converting the existing concrete channel to an earthen channel could increase the area of potential breeding habitat for tidewater goby, as this species burrows into channel or lagoon sediments to deposit eggs. Alternative E would cost more than the Preferred Alternative due to the increased costs of construction and maintenance associated with removal of homes and maintaining the natural channel. Further, Alternative E would require substantially more rights-of-way and would eliminate a portion of J Street. The outlet alternatives included a dike system with permanent connection to the ocean (Alternative A), natural system with restoration project (Alternative B), and the preferred outlet (Alternative C). Outlet Alternatives A and B would have greater impacts to threatened and endangered species, and were thus rejected as infeasible. For a comparison of the Alternatives analyzed, please refer to Section 5.0 of the EIR.

12-26 This comment outlines bullet points describing “benefits from alternative outlet”.

- Gobies downlisted from endangered to threatened.

According to the USFWS, the official status for the tidewater goby is **endangered**. “The tidewater goby is federally listed under the ESA of 1973, as amended in California. Critical Habitat is designated for the species, and a new proposal for critical habitat is undergoing review. A recovery plan is in effect.” As stated previously, the USFWS has proposed the existing J Street Drain – Ormond Lagoon critical habitat for the tidewater goby be expanded from 45 to 121 acres. All proposed activities potentially impacting an endangered species such as tidewater goby or its critical habitat must comply with the ESA. Please refer to the first and third bullet points in comment 12-24 for a discussion of the alternative outlet to the beach and the status of the tidewater goby critical habitat.

- Terns and Plovers: nests are located east of the lagoon.

On October 7, 2010, discussions and a site visit with Reed Smith, the avian consultant to the CDFG, tasked with monitoring California least terns and western snowy plovers, confirmed the findings of the Davenport (2008) study. Least terns are on site during May through September. By October, they have migrated out of the area. They nest south of the project, near the Reliant Energy power plant in a loose colony numbering about 60 pair. They forage in the lagoon and offshore. Occasionally, three to five pair nest between the lagoon and the shore.

The snowy plovers nest in dune areas that are lightly vegetated. The main breeding area is over one-half mile south of the site near the power plant where about 30 pair regularly

nests. One to four nests are found each year in the dunes between the lagoon and the shoreline. Plovers nest from April to September. Unlike the terns, they also winter in the area. Throughout the year they forage by running along the beach above the waterline in search of insects.

- Freshwater – OID primary input; J Street Drain primary input is urban street runoff.

Input of freshwater to the Ormond Lagoon is the result of both dry weather urban runoff and storm runoff originating from J Street, Hueneme and Oxnard Industrial Drains. Freshwater input is essential to tidewater goby survival in the Ormond Lagoon because this species cannot tolerate high salinity water for extended periods of time.

12-27 This comment states the J Street Drain is not critical habitat, the amount of lagoon needed to create an ocean outlet is minimal, and the effect of an ocean outlet on critical habitat would be minimal. Although the J Street Drain is a man-made structure, tidewater goby utilize the drain; therefore, it has become a habitat for the goby. On October 19, 2011, the USFWS proposed to revise critical habitat for the tidewater goby under the ESA. Please refer to the first and third bullet points in comment 12-24 for the discussions regarding the alternative outlet and the tidewater goby critical habitat status.

12-28 This comment outlines bullet points refuting the findings of the mosquito study and determination of “no impact.”

- The conclusion of “no impact” is not defensible. The data in the mosquito study are “inaccurate, incomplete and contradictory.”

The mosquito technical study was prepared by Larry Walker Associates in collaboration with Marco Metzger, Ph.D., Public Health Biologist for the Vector-Borne Disease Section, California Department of Public Health, and the VCVCP. The study utilized data collected by VCVCP to recognize mosquito sources and compare relative abundance in areas surrounding the J Street Drain. The study found no evidence to suggest that the current configurations of the J Street Drain, Hueneme Drain Pump Station, or Hueneme Drain provide high-quality habitat for, or produce large numbers of mosquitoes. The evaluation also found the proposed channel configuration to have similar or less mosquito breeding potential than the current J Street Drain channel. The evaluation of the greater J Street Drain area did reveal that the OWWTP, the undeveloped floodplain of the OID, and urban areas may produce substantial numbers of mosquitoes. The conclusions made in the study are consistent with the data evaluated and VCVCP observations. Furthermore, the comment does not present any evidence to the contrary.

- No CO₂ traps used; no traps in the Surfside III area.

Please refer to comment 12-17 for response.

- No mosquito problem (from lagoon) before backwater in canal.

A review of archived aerial photography from October 2002, which pre-dates Hueneme Drain Pump Station reconstruction from April 2004 through April 2007, shows that backwater in J Street Drain extended to approximately Hueneme Road. The backwater condition has existed since the District was ordered to cease and desist maintaining an

open outlet from J Street Drain to the ocean in 1992. The backwater condition was not brought on by reconstruction of the pump station.

The relatively high number of adult mosquitoes captured in traps in September 2009 (Figure 12 of the mosquito study), combined with numerous complaints from residents of the Surfside III Condominium Complex, prompted the VCVCP to investigate the OWWTP as a possible source of increased mosquito production. The VCVCP routinely monitors several areas within the OWWTP, including the pond and inactive treatment cells, which would be likely mosquito breeding sources. In response to the resident complaints and increase in mosquitoes captured in traps, the VCVCP requested authorization to more broadly examine the OWWTP for new mosquito breeding sources and OWWTP staff cooperated with this request. The investigation led to the detection of a large belowground flooded basement that was actively producing mosquitoes. The flooded basement was considered a new mosquito source in the area. The VCVCP has since routinely addressed this source and other newly added smaller potential sources on the OWWTP property, in addition to the sites within the OWWTP previously monitored and treated. Trap data collected in 2010 showed far fewer mosquitoes in the greater J Street Drain area, reflecting the increased control efforts at new source locations by the VCVCP. Overall, these data suggest that mosquito production is widespread within the developed areas surrounding the J Street Drain, with no evidence of sharp rises in mosquito numbers in traps located near the J Street Drain that would implicate this conveyance channel as a major source of mosquitoes.

- Failure of Vector Control (130 petition letters regarding mosquito issue).

Please refer to response 12-28 bullet point three above regarding the likely reason for the noticeable increase in mosquitoes in the area during 2009. The VCVCP monitors and controls mosquito breeding in flood control channels, drains, roadside ditches, catch basins, gutters, creeks, marshes, retention and detention basins, pools, and rain water depressions. VCVCP Program staff constantly monitors and control over 2,000 potential mosquito breeding sources to prevent and minimize exposure of the public to mosquito borne diseases. Vector control staff also responds to reports of mosquitoes or potential mosquito breeding sources from the public. The mission of the program is to suppress the population of mosquitoes to minimize the potential transmission of disease and reduce annoyance caused by these insects. The Vector Control staff conducts continuous encephalitis virus surveillance, including West Nile virus, and monitors the County areas for plague, Lyme disease, and hantavirus to prevent and minimize the exposure of the public to these diseases.

- Increase in mosquito breeding area due to proposed project.

Please refer to responses in comment 12-17.

- Increase in mosquitoes due to temperature increase as a result of the proposed project

Please refer to responses to comments 12-22 and 12-23.

12-29 This comment refers to the residents' concerns regarding public health due to an adverse effect ("severe mosquito infestation") that could result in mosquito-borne disease.

As mentioned previously, while the proposed project would result in increased surface area of standing water, the converted channel would provide less suitable habitat for mosquitoes due to deeper water capable of supporting larger populations of predators and less shallow edges. The proposed changes in the channel geometry will likely amplify the design characteristics' negative effects on mosquito breeding. Please refer to responses to comment 12-17 for further discussion.

- 12-30 This comment states that data collected during 2010 does not represent normal weather conditions. The comment also states that CO₂ traps were not used for sample collection. Data collection for the mosquito technical study is summarized below per the study. As explained in the study, data collected between 1999 and 2010 were evaluated. The report was prepared in January 2011, therefore data for 2011 were not available at the time the report was prepared.

VCVCP deployed adult mosquito traps in nine locations in the greater J Street Drain area in 2005, 2008, 2009, and 2010 (Figure 5 of the mosquito study). Figure 9 through Figure 13 of the mosquito study illustrates the data collected in 2005, 2008, 2009, and 2010. Summer 2010 data were collected from six traps in the greater J Street Drain area (Figure 13). The data were collected at each of the six traps on June 23, July 29, and August 25, 2010. As shown in the figures, all deployed traps captured mosquitoes. The traps use CO₂ as an attractant and capture only female mosquitoes. However, it should be noted that traps, because they are deployed overnight, represent only a “snap shot” in time of the mosquito population in an area. Attempts are made to deploy traps during representative weather conditions. It is rare for CO₂-baited traps not to capture at least some mosquitoes in developed areas. As explained in the mosquito study, it is impossible to eradicate mosquitoes completely in the urban environment due to the ability of mosquitoes to exploit a multitude of urban water sources for reproduction, many of which are difficult to identify or locate. As identified, data from numerous years were analyzed and evaluated.

- 12-31 This comment mentions that mosquitoes were not a problem before 2008. Please refer to response 12-28, bullet point 3.
- 12-32 This comment restates the concern that the project would increase backwater and mosquito breeding, and that vertical channel walls will not compensate for this. Please refer to response in comment 12-17.
- 12-33 This comment outlines bullet points regarding mosquito migration.

- The type of mosquitoes causing the problems at Surfside III are “very small, shy, and avoid moving air”, congregating in still, protected areas. The common types of mosquitoes that occur in the J Street Drain area are discussed in Section 4.11 of the EIR and summarized below.

For a comparison of mosquito numbers captured in traps around the greater J Street Drain area, please see Figures 9 through 13 of the Mosquito Study. Three main species of biting mosquitoes are commonly found in the J Street Drain area: *Culex tarsalis*, *Culex quinquefasciatus*³, and *Culex erythrothorax*. All three species readily bite humans and can become a nuisance, thus they are primary targets of control efforts in Ventura County and throughout the state.

³ Synonymous with *Culex pipiens* in some locations.

Culex tarsalis are opportunistic and will breed in a variety of habitats including wetlands, birdbaths, neglected swimming pools, and almost any artificial container (Larry Walker Associates, 2010). *Culex tarsalis* larvae are known to occur in brackish marshes as long as the salt content does not exceed one percent. However, *Culex tarsalis* larvae are not tolerant of polluted waters (e.g., nutrient rich waters). Adult *Culex tarsalis* are known to disperse from their origins up to several kilometers (Larry Walker Associates 2011).

Culex quinquefasciatus prefer nutrient-rich waters containing high concentrations of organic matter and also have a strong affinity for underground areas such as storm drains. However, they are also opportunistic and will share many of the habitats used by *Culex tarsalis*, especially urban sources and nutrient-rich treatment wetlands. Adult *Culex quinquefasciatus* can travel up to 1.5 kilometers (0.9 miles) from their origin, but generally travel less than 1 kilometer (0.6 miles) (Larry Walker Associates 2011).

Culex erythrothorax are closely tied to wetlands, preferring swamps and marshes or the margins of water bodies that contain dense, emergent vegetation such as cattails (Larry Walker Associates 2011). This species is almost never found outside these habitats. Adult *Culex erythrothorax* are known to disperse from their origins up to approximately 1 kilometer (Larry Walker Associates 2011), but the majority of adults appear to remain relatively close to their preferred wetland habitats.

The more urban trap sites located to the north and west of Ormond Beach Lagoon, and the trap site located in the undeveloped floodplain of the Oxnard Industrial Drain, captured a substantial percentage of *Culex quinquefasciatus*. This species thrives in disturbed and nutrient-rich habitats, including belowground stormwater infrastructure (Larry Walker Associates 2011). Its opportunistic use of nearly any small source of urban water (e.g. neglected pools, ornamental ponds, clogged rain gutters, flower pots) as well as belowground sources for breeding make it challenging to control. These same traps also captured a large percentage of *Culex tarsalis*, which also thrives in urban areas, but almost never breeds belowground.

Without verification by Ventura County Vector Control Program staff, it is unclear whether the insects observed were mosquitoes. As stated in the mosquito study. “Midges are a diverse group of small, non-biting flies closely related to mosquitoes. Many species have a strong resemblance to mosquitoes in size and appearance...[see Figures 3 and 4 of the study], and they often share the same aquatic habitats. Midges cannot bite and are not vectors for disease. Midge larvae are usually found in wetlands and marshes, as well as wastewaters including wastewater treatment plant lagoons and urban runoff channels (Grodhaus 1975); however, unlike mosquitoes, midge larvae do not breathe atmospheric air and often live attached to surfaces or in sediments. As a result, midges do not have the same restrictions as mosquito larvae and are often very abundant in the bottom sediments of open bodies of water. Midges often hatch simultaneously in blooms during the spring or summer, resulting in large masses of midges grouped together near wetlands and marshes. Many species are strongly attracted to artificial light sources and also use structures as resting sites. Thus, they can become extreme nuisances seasonally by massing in and around residences and other structures. Midges have a shorter life span than mosquitoes that entails finding a mate in order to lay eggs before they die (Grodhaus 1975).”

- The mosquito issue at the Surfside III complex did not begin before the summer of 2008. The issue began after the pump station expansion and the backwater issue in the canal. Please refer to response to comment 12-28, bullet point three for response.
- 12-34 This comment states that data obtained from the record cool summer of 2010 are invalid, and the mosquitoes observed at Surfside III originate from the J Street Drain. Please refer to responses to comments 12-30 through 12-33 for responses.
- 12-35 This comment states that the project will increase backwater in J Street Drain, and that VCVCP actions cannot eliminate mosquitoes. Please refer to responses to comments 12-17 and 12-28.
- 12-36 This comment states that only removal of backwater can resolve mosquito issues, and requests the District to obtain a waiver from designation of the J Street Drain as critical habitat. The District will continue to coordinate with the residents of Surfside III to identify proper mitigation and alternatives in order to reduce impacts; however, the tidewater goby is protected under the ESA whether the channel is designated as critical habitat or not. Adverse impacts to the goby or the areas it occupies require authorization under the ESA. Waivers are not an option under either the ESA or the Clean Water Act. Please also see response 8-4(a).
- 12-37 This comment lists questions regarding the mosquito technical study as follows:
- When and where was the study data collected?
- VCVCP deployed adult mosquito traps in nine locations in the greater J Street Drain area in 2005, 2008, 2009, and 2010 (Figure 5 of the mosquito study (Appendix I of the EIR) shows the locations of the traps). The locations are also shown in Figure 4.11-2 of the EIR. As shown on Figure 4.11-2 of the EIR, traps were located adjacent to the J Street Drain and the Surfside III community. Figure 9 through Figure 13 of the mosquito study (Appendix I of the EIR) illustrates the data collected in 2005, 2008, 2009, and 2010. Please refer to the mosquito study in Appendix I and the analysis in Section 4.11 of the EIR for detailed discussion regarding the data.
- Was any “correction” made for the unusual weather conditions?
- As stated in the mosquito technical study included in Appendix I of the EIR, adult mosquito traps are deployed in areas of greatest concern, usually triggered by evidence of local disease transmission in birds, humans, or other animals, but also in response to local nuisance complaints. For this reason, the number and location of traps deployed often varies seasonally and yearly. As stated in the mosquito technical study in Appendix I of the EIR and on page 4.11-4 of the EIR, during 2008-2010, citizen complaints from the Surfside III Condominium Complex, located in the area near the terminal end of the J Street Drain, led VCVCP to increase their surveillance efforts in the immediate vicinity in an attempt to identify both the species present and their potential points of origin. As a result, more data were generated for this area during this two-year period than in previous years. It should also be noted that trap data are collected during the late spring through early fall. Mosquito production is generally low during the late fall and winter months, thus traps are typically not deployed at those times. Adult mosquito traps were deployed at two sites in the Ormond Beach Lagoon area: one at the south end of Perkins Road and the other at Hueneme Drain at J Street Drain, which is at the terminus of the J Street Drain. The Perkins Rd. site had been sampled periodically since 2002, whereas the J Street Drain site was a new site added in 2010, specifically in response to the citizen

complaints from the Surfside III Condominium Complex. The 2010 data were collected between June and October. The data were compared to relevant trap data collected between 1999 and 2010.

- Was any “correction” made for not using CO₂ traps?

As indicated in the mosquito study in Appendix I of the EIR and Section 4.11, page 4.11-4 of the EIR, CO₂ traps were used.

- What traps were used for samples?

Please see response 12-37 bullets one and three.

- Where were the traps located?

Figure 5 in Appendix I of the EIR (mosquito technical study) and Figure 4.11-2, page 4.11-7 of the EIR illustrate the locations of the traps deployed.

- Were samples/numbers counted on patios along the canals?

As stated in the mosquito technical study in Appendix I of the EIR, no data were collected from patios located on private property. Adult mosquito traps were deployed at two sites in the Ormond Beach Lagoon area: one at the south end of Perkins Road and the other at Hueneme Drain at J Street Drain, which is at the terminus of the J Street Drain. Data were collected from the South End of Perkins Road trap in 2002, 2008, 2009, and 2010. Data were collected from the Hueneme Drain at J Street Drain trap in 2010. Data were collected from the Hueneme Drain Section E trap, located at the southwest corner of the Surfside III property, in 2005, 2008, and 2009. Data were collected from the south end of Industrial Avenue trap in 2009 and 2010. Data in 2010 reflected samples collected from six different trap locations on the same three dates during the summer for easier comparison.

- Were final conclusions regarding local mosquitoes and breeding conditions extrapolated from previous studies or general information?

As stated on page i of the mosquito technical study in Appendix I of the EIR, the mosquito technical study was prepared by Larry Walker Associates in collaboration with Marco Metzger, Ph.D., Public Health Biologist for the Vector-Borne Disease Section, California Department of Public Health, and the VCVCP. The study utilized data between 1999 and 2010 collected by VCVCP to recognize mosquito sources and compare relative abundance in areas surrounding the J Street Drain.

12-38 This comment questions the source location of mosquitoes observed by Surfside III residents. Please refer to responses in comment 12-33.

12-39 This comment refers to the 2009 DEIR conclusion that the project would increase backwater and mosquito breeding areas, and that ongoing treatment by the VCVCP would address mosquitoes. Section 4.11 of the 2009 Draft EIR discussed vector control and mosquitoes. The 2009 Draft EIR noted that the proposed project would increase the surface area and amount of standing water in the drain. A Mosquito Technical Study was subsequently prepared (January 24, 2011) to further

analyze the project impacts related to mosquitoes. The technical study provides an analysis of the mosquito production potential of the proposed project compared with the current J Street Drain and the proposed alternatives. The full analysis is presented in Section 4.11 of the 2011 EIR. The complete report is included in Appendix I of the 2011 EIR. The proposed project would convert the existing trapezoidal concrete channel into an open rectangular channel. The channel would be approximately four feet deeper and the existing sloped channel walls would be replaced with vertical walls. Conversion to vertical channel walls would eliminate existing shallow water along the edges of the channel. While the proposed project would result in increased surface area of standing water, the converted channel would provide less suitable habitat for mosquitoes due to deeper water capable of supporting larger populations of predators and less shallow edges. In addition, J Street Drain is more easily accessed for vector treatment compared to shallow vegetated wetlands to the east and southeast due to the presence of an adjacent access road along its entire length and the lack of dense vegetation that would interfere with larvicide application.

- 12-40 This comment states that a mosquito study based on cool-weather data and no sampling from CO₂ traps is invalid and should be revised. The mosquito study was finalized in January 2011 and includes data collected between 1999 and 2010. The traps used to collect the data were CO₂ traps as identified on page 4.11-4 of the EIR. The full analysis is presented in Section 4.11 of the EIR. The complete technical study is included in Appendix I of the EIR.

11-02-2011

Ventura County Watershed Protection District Re: J st canal project

Angela Bonfiglio Allen

Frances Woolston
669 Lighthouse Way
Port Hueneme,
Ca 93041

I am sending my concerns regarding the J st canal project. I have lived here for 15 years and do not want to see these issues from this project affect and put at risk the safety ,health and quality of life for the homeowners at surfside 3.

13-1

Thank You,

Frances Woolston

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NOV 07 2011

WATERSHED PROTECTION DIST.

PROBLEMS AND SOLUTIONS

[10/20/11]

RDEIR: "NO SIGNIFICANT IMPACT"
[TO PUBLIC HEALTH AND SAFETY]

PS&R: SSIII Opposition to JSDP RDEIR
"Technical Inadequacy of JSDP RDEIR"

	PROBLEM	SOLUTION	
1 BACKWATER			
* Mosquitoes	Increased breeding in canal	Alternative Outlet	13-2
* Reduces capacity of JSDP	Water-level = lagoon level	"	
* Flooding at SSIII	Backwater from OID	"	
2 MOSQUITO STUDY			
* No traps at SSIII	Traps in remote locations	Alternative Outlet	13-3
* Lite Traps – not CO2	Mosquitoes attracted by CO2	"	
* Vector Control mitigation	Failed [130 letters!]	"	
3 BEMP			
* 72-hour prediction	Unpredicted rain	Alternative Outlet	13-4
* <u>observe</u> berm elevation	No reliable observation	Scheduled Breach	
* failure in procedures	Murphy's Law	Scheduled Grooming	
4 DAMAGE			
* Bldgs.6 and 7	Construction activities/ Wells	{ Soil Report AND Damage Ins.}	13-5
* Townhouses	Canal overflow	{ Flood Damage Agreement}	
5 PUBLIC HEALTH			
* Mosquitoes	Mosquito-borne illness	Alternative Outlet	13-6
* Overflow Contamination	Raw sewage [OWWTP]	"	
* HALACO	Groundwater Plume	Delay: pending EPA report	
6 NO ALTERNATIVE OUTLET			
* Failure to notify of meetings	No opportunity to participate	Meeting: VCWPD/USFWS	13-7
* VCWPD rejects alternative	USFWS Permitting	APPLICATION FOR WAIVER	
* USFWS: endangered species	Goby, Plover, Tern	Protection of SSIII health/property	
+ OUR CONCERNS HAVE <u>NOT</u> BEEN ADDRESSED IN THE MOSQUITO STUDY OR THE RDEIR. + INCREASED CAPACITY OF JSDP AND LOW-FLOW CHANNEL DO <u>NOT</u> PREVENT FLOODING. + BEMP IS SUBJECT TO MECHANICAL, ENVIRONMENTAL, HUMAN FAILURES. + <u>REQUEST FOR RE-CONSIDERATION OF BEACH OUTLET ALTERNATIVE.</u> [Waiver Application]			13-8

Letter 13
Frances Woolston
November 2, 2011

13.1 This comment states Ms. Woolston's general objections to the proposed project. This comment does not address the adequacy of the environmental document; therefore, no additional response is required.

13.2 This comment lists bullet points regarding backwater as the problem as follows, and requesting an alternative outlet:

RE: Mosquitoes – increased breeding in canal.

Please refer to Letter 8, response to comment 8-6 and Letter 12, response to comment 12-17 for responses regarding this issue.

RE: Reduces capacity of the proposed project – water level equals lagoon level.

Please refer to Letter 12, response to comment 12-6 for response.

RE: Flooding at Surfside III – Backwater from OID

Please refer to Letter 12, response to comments 12-6 and 12-10 for responses.

RE: Alternative Outlet is the solution.

Please refer to Letter 8, response to comment 8-4 and Letter 12, response to comment 12-24 for response.

13-3 This comment lists bullet points regarding the mosquito study as follows:

RE: No traps at Surfside III – traps in remote locations.

Please refer to Letter 12, response to comment 12-17, bullet point two for response.

RE: Light Traps – Not CO₂

Please refer to Letter 12, response to comment 12-17, bullet point three for response. The VCVCP uses adult mosquito traps as part of their comprehensive mosquito surveillance and control plan. The traps use carbon dioxide (CO₂) as an attractant and capture only female mosquitoes.

RE: Vector Control Mitigation – Failed (130 Petition Letters)

Please refer to Letter 12, response to comment 12-17, bullet points six and eight, and response to comment 12-28, bullet point three, for responses.

RE: Alternative Outlet is the solution.

Please refer to Letter 8, response to comment 8-4 and Letter 12, response to comment 12-24 for response.

13-4 This comment lists bullet points regarding the BEMP as follows:

RE: 72-hour prediction – unpredicted rain

Please refer to Letter 8, response to comment 8-3(d) and Letter 12, response to comment 12-11 for responses.

RE: Observe berm elevation – no reliable observation

Please refer to Letter 8, response to comment 8-3(d) and Letter 12, response to comment 12-11 for responses.

RE: Failure in procedures – Murphy’s Law

Please refer to Letter 8, response to comment 8-3(d) and Letter 12, response to comment 12-11 for responses.

RE: Solutions – Alternative outlet, scheduled breach, scheduled grooming

Please refer to Letter 8, response to comment 8-4 and Letter 12, response to comment 12-24 for response regarding the alternative outlet.

Prior to 1992, the sand berm at the Ormond Beach Lagoon was periodically breached by the District. Bulldozers were used to create a discharge path directly to the ocean and prevent water and silt buildup in the channel. However, this practice ceased in 1992 due to environmental concerns and restrictions. Section 3.0 of the EIR outlines the grooming procedure for the BEMP. The BEMP would allow grooming the beach sand elevation to 6.5 feet (NGVD 1929). This would ensure that water in the Ormond Beach Lagoon would overtop the sand berm during small storms (less than the 10-year event, which is the current capacity of J Street Drain), as it does currently under typical conditions. Overtopping of the beach would cause the lagoon to breach and release its water into the ocean. However, the BEMP alone would not be sufficient in storms greater than the 10-year event, as flows would overtop the existing undersized J Street Drain channel before they could reach the ocean. With implementation of the proposed project, storms larger than the 10-year and up to the 100-year event would flow through the breach and into the ocean.

Regularly scheduled grooming activities would constitute continual maintenance activities. As was analyzed in the EIR, continual maintenance using heavy equipment such as bulldozers would not be permitted by the regulatory agencies due to environmental concerns and restrictions, and would conflict with recreational use during the summer.

13-5 This comment outlines bullet points with regards to potential damage to Surfside III.

RE: Damage to buildings 6 and 7 – construction activities and wells.

Please refer to Letter 8, response to comment 8-7 regarding potential damage to Surfside III and Letter 6, response to comment 6-13 regarding noise vibration impacts.

RE: Townhouses – canal overflow. Requested solution is a Flood Damage Agreement.

The purpose of the proposed project is to resolve the current problem of overflows from the J Street Drain during floods greater than the 10-year event. The BEMP is included to provide protection from smaller flood events when the lagoon has not yet breached the beach sand berm. Because the project purpose is to prevent flood damage, a Flood Damage Agreement would not be required.

13-6 This comment outlines bullet points regarding public health.

RE: Mosquitoes – mosquito borne illnesses

Please refer to Letter 8, response to comment 8-6(a) and Letter 12, responses to comments 12-17 and 12-23 for responses.

RE: Overflow contamination – OWWTP sewage

This comment addresses an emergency situation unrelated to the proposed project or RDEIR. However, the following is offered for clarification: On January 18, 2010, the District breached the lagoon near its northwest corner under emergency regulatory authorizations from the U.S. Army Corps of Engineers (USACE), LARWQCB, U.S. Fish and Wildlife Service (USFWS), California Department of Fish and Game (CDFG), and California Coastal Commission (CCC). Breaching occurred in response to flooding and imminent electrical failure of the Oxnard Waste Water Treatment Plant (OWWTP). Electrical failure would have resulted in catastrophic release of untreated sewage to adjacent residential, commercial, and sensitive ecological areas (lagoon and Pacific Ocean). The International Paper Plant also sustained losses during this flood event, and Perkins Road was impassable. The BEMP has been developed in order to ensure natural breaching will occur during a major storm event.

RE: Halaco – groundwater plume

A groundwater modeling study was performed and measures are proposed to address the potential to move Halaco groundwater pollutants toward the J Street Drain. This study was conducted in close coordination with the U.S. Environmental Protection Agency (USEPA) Halaco Superfund Site Project Manager to ensure inclusion of the latest Halaco data and correlation with pending USEPA study results.

The Halaco site is approximately 1,500 feet east of the project site. The numerical model of the groundwater system beneath the J Street Drain area demonstrates that a groundwater sink, possibly the sewer line beneath McWane Blvd and Perkins Road, in combination with elevated surface water in the Ormond Beach Lagoon and the OID have significant effects on groundwater elevations and migration in the area. Groundwater

flows in the direction of the groundwater sink, possibly the sewer line. The simulations demonstrate that it is unlikely for dewatering to draw groundwater from beneath the Halaco Site toward the J Street Drain under current conditions.

However, the District will monitor a series of wells, three located on the Halaco site (MW-15, MW-21, and MW-22) and one located in the beach parking area off Perkins Road (MW-23) to track the status of the groundwater sink. Should this sink diminish, the dewatering effort may cause migration of potentially impacted groundwater from beneath the Halaco Site approximately 50 feet toward the J Street Drain. In this case, injection of water into the shallow aquifer through approximately five wells located in the beach parking area between the J Street Drain and the Halaco Site can be utilized to mitigate potential migration of groundwater from beneath the Halaco Site. Injection of between 10 and 14 gallons per minute per injection well would prevent migration of groundwater from the Halaco site. The monitoring of water levels within selected monitoring wells in the vicinity of the Halaco Site can be utilized to identify if migration of groundwater from the Halaco Site is occurring.

RE: Alternative Outlet is the solution.

Please refer to Letter 8, response to comment 8-4 and Letter 12, response to comment 12-24 for response.

13-7 This comment outlines bullet points regarding alternatives and noticing.

RE: No alternative outlet.

Please refer to Letter 8, response to comment 8-4 and Letter 12, response to comment 12-24 for response regarding alternative outlet.

RE: Failure to notify of meetings.

Please refer to Letter 8, response to comment 8-9 for response regarding public noticing of the EIR.

CEQA does not require public noticing and participation of consultation meetings between regulatory agencies such as the District, USFWS, and CDFG. The consultation history is summarized in Section 4.2 of the EIR.

RE: The District rejects alternative – USFWS permitting

Please refer to Letter 8, response to comment 8-4 and Letter 12, response to comment 12-24 for response regarding alternative outlet and consultation with USFWS and USACE regarding permitting the outlet.

RE: USFWS – endangered species (goby, plover, tern); protection of Surfside III health and property; request an application for “waiver” from USFWS.

Please refer to Letter 8, response to comment 8-4 for response regarding consultation with the USFWS. The District seeks to protect Surfside III residents’ health and property while at the same time balancing compliance with state and federal regulations such as

0.3 Response to Comments

the California and Federal Endangered Species Acts, the Clean Water Act, and the California Fish and Game Code.

- 13-8 This comment summarizes the concerns outlined in the bullet points above. No further response to these concerns is necessary. A new comment states that the increased capacity of the J Street Drain would not prevent flooding. Please see response 8-5 regarding the project and its relationship to flood protection.

November 2, 2011

Ventura County Watershed Protection District
C/O Angela Bonfiglio Allen
800 S. Victoria Ave.
Ventura, CA 93009-1600

AS A RESIDENT HOMEOWNER AT SURFSIDE III, I WISH TO INFORM YOU THAT THE FOLLOWING COMMENTS ADDRESS THE INADEQUACY OF THE RECIRCULATED DRAFT ENVIRONMENTAL IMPACT REPORT ANALYSIS.

14-1

The two following items are from the Introduction and Summary, questions section.

Item 1:

Question: Is there any federal or outside funding?

The VCWPD's answer in the RDEIR is that you are depending upon property taxes, benefit assessments, land development fees and additional funding from city governments. It is further stated that local agencies are not eligible for grants.

14-2

Concerns:

A. We are in difficult economic times and the housing and building industries have not yet recovered. Large numbers of existing homes are still being foreclosed. If a homeowner is unable to pay their mortgage, how can they be expected to pay their property taxes?

B. Most city governments and counties are financially struggling to meet their own expenses. How can they be depended upon to pay for the additional burden of this project?

C. Even if phase I of this project were eligible for grants, most are drying up or no longer available.

14-3

Item 2:

There is a question regarding Section 3.0. The question requests an explanation of why you are focused on the J Street Drain instead of the Oxnard Industrial Drain.

The VCWPD's answer is that it is a low priority because it would require the purchase of additional land.

14-4

Observation:

A. Real estate values are lower that they have been in several years. With all the potential damage to Surfside III because of the closeness of the project to Buildings 6 & 7 and replacing trees and plants (at Surfside III) it may be less expensive to purchase additional land to widen the Oxnard Industrial Drain.

14-5

Questions:

1. If there is a fear of a 100 year flood, why isn't the affected area on a FEMA 100 year flood map?

2. If there is a fear of a 100 year flood, why aren't other government agencies helping/permitting assistance with a permanent opening to the ocean, to avoid flooding during rain storms?

14-6

14-7


Michelle Hoffman
607 Lighthouse Way
Port Hueneme CA 93041
Lvtobike@yahoo.com

RECEIVED

NOV 04 2011

WATERSHED PROTECTION DIST.

Letter 14
Michelle Hoffman
November 2, 2011

- 14-1 This comment states Ms. Hoffman's general objection to the proposed project and EIR. This comment does not address the adequacy of the environmental document; therefore, no additional response is required.
- 14-2 This comment raises the question of available federal or other outside funding for the project. The funding sources of the project are discussed in Section 3.0 of the EIR (see pages 3-9 and 3-10). The District funds capital improvement projects from a combination of revenues, including its portion of the one percent property tax revenues collected by the County Treasurer-Tax Collector on all taxable parcels countywide, interest earnings on its fund balance on deposit with the County Pooled Investment Fund, land development fees, and whenever feasible, project specific grant fund revenues. The District will continue to research grant opportunities for additional funding. The EIR does not state that local agencies are not eligible for grants. In fact, local agencies may receive grants from government agencies, but they are ineligible for grants sponsored by private corporations.
- 14-3 This comment lists bullet points or concerns regarding project funding. These comments are acknowledged, and do not relate to the adequacy of the EIR; however, the following is offered in response:
- (a) Concern regarding the economic times and the housing market; property taxes may not be paid due to foreclosures.

Each year, the District assesses available property tax revenue and determines the amount to be allocated to projects ranked as the highest priority for each zone, as described in Section 3.3 of the EIR.
 - (b) Concern regarding fiscal burden of this project due to budget constraints of city and county governments

As described in Section 3.3 of the EIR, the District has planned carefully for this project, and is working to ensure that sufficient funds will be available to construct each phase when they are needed. The project has been divided into four separate phases, to be implemented over time as additional property tax revenues are collected.
 - (c) Grants may no longer be available.

Project implementation is not dependent on grant funding. The District has planned carefully to ensure sufficient property tax revenues will be available when needed, as described above. However, selection of the more costly box culvert alternative (Alternative A) in Phases 2 through 4 would require a supplemental funding source to make up the difference in cost. If supplemental funding cannot be identified, then the Preferred Project would be constructed (Alternative B).
- 14-4 This comment questions the focus on J Street Drain rather than Oxnard Industrial Drain. As described in the Chapter 3.0 of the RDEIR, all projects with the District are subject to a rigorous CIP ranking and selection process. Where flood control facilities already exist, their current

condition (e.g., concrete deterioration) is evaluated. Potential solutions to known flood threats, or CIPs, are developed through consideration of a range of alternatives. All proposed CIPs are assigned points out of 100 possible, then ranked and prioritized in relation to one another. The OID improvements would require the acquisition of land resulting in a significant increase in cost for the improvements. Furthermore, improvements to the OID would not solve the flooding problems with relation to J Street Drain and Surfside III, as these are located within a separate watershed. The issue of OID flows backing up in the lagoon and into J Street Drain is addressed by the BEMP project feature, which involves grooming the beach sand berm to facilitate natural breaching of the lagoon and thus release of OID flows to the ocean. However, with implementation of the BEMP alone, flooding in the J Street Drain watershed would still occur due to the inadequate capacity of the J Street Drain, not the OID.

- 14-5 This comment suggests that it may be less expensive to purchase additional land to improve the OID than mitigate for the potential damage to and landscaping of Surfside III. However, no evidence is presented to support this suggestion. Furthermore, improving OID would not resolve flooding within the J Street Drain watershed, which would remain vulnerable to flood damages, estimated at \$55.7 million (Section 3.1 of the EIR).
- 14-6 This comment questions why the J Street Drain watershed is not currently depicted on the FEMA 100-year digital flood insurance rate map (DFIRM). The current DFIRMs are based on pre-1984 hydrologic data and hydraulic analyses conducted over 25 years ago (FEMA 2010b). Since that time, Ventura County has experienced several years of record rainfall, including in 1995, 1998, and 2005 (VCWPD 2009). The DFIRMs are therefore based on data that do not reflect the trend of increasing rainfall since the 1980s. As a result, the District commissioned the 2005 URS study to proactively characterize current conditions and provide adequate flood protection before FEMA initiates a DFIRM update. Construction of the proposed project would be the first major step of a proactive effort to protect properties currently threatened with flooding from J Street Drain overflows, as shown on Figure 3.0-2a. Figure 3.0-2b depicts the Special Flood Hazards Area (SFHA), as mapped by FEMA¹. These SFHA are related to flooding from wave activity, not from outfall from J Street Drain. Specific SFHA depicted on Figure 3.0-2b includes coastal flooding due to wave action (Zone VE) and coastal flooding due to waves filling up the lagoon. Please also see response 8-5.
- 14-7 This comment questions why other agencies do not assist with permitting a permanent outlet to the ocean if there is the threat of a 100-year flood. The District has coordinated with other governmental agencies with jurisdiction over the project. While these agencies understand the purpose and need for the project, they are compelled to adhere to their own regulations (e.g. Clean Water Act Section 404 compliance). Please refer to Letter 12, response to comment 12-24 for response regarding alternative outlet. A permanent connection may not be authorized under the Endangered Species Act and the Clean Water Act, due to the potential impact to endangered species. Additionally, extending the channel to the ocean would not be an easy solution. The channel would continually be blocked by sand as the lagoon is now. Keeping it “open” would most likely require frequent attention from maintenance personnel with heavy equipment. Continual maintenance using heavy equipment such as bulldozers would not be permitted by the regulatory agencies due to environmental concerns and restrictions, and would interfere with recreational use of the beach.

¹ DFIRMs 06111C0914E, 06111C0916E, and 06111C0918E dated January 20, 2010.

**633 Lighthouse Way
Port Hueneme, CA 93041**

November 2, 2011

Ventura County Watershed Protection District
800 South Victoria Avenue
Ventura, CA 93009-1600

Attention: Angela Bonfiglio Allen

Dear Ms. Allen:

I am a resident of Surfside III and my residence is at the low point of Lighthouse Way where it turns from and east / west bearing to a north / south bearing. I am writing again to express my concerns about the J Street Drain Project and particularly the inadequacy of the Recirculated Draft Environmental Impact Report.

15-1

My concerns encompass two specific areas, neither of which are mitigated by the new proposals.

First, mosquitoes are a continuing problem. Whereas you are providing studies that indicate the mosquitoes are coming from ½ mile away to the east, empirical observation will show them rising in clouds from the canal on a warm day. They find air currents onerous and hide in wind protected doorways, alcoves and gardens. They do not fly against a prevailing westerly wind to reach us. Current treatment methods for the mosquitoes are inadequate and when we question the vector control individuals who apply abatement chemicals they admit the stuff does not work because if it did, it would also kill the fish and birds. The mosquito infestation began concurrently with the completion of the pumping station that regulates the flow of Bubbling Springs. From that day forward a higher level of water was present in the canal encouraging mosquito breeding. The answer is not to widen the canal but rather to remove the backwater that is adjacent to Surfside III.

15-2

Second, on January 18th, 2010 my property was nearly flooded as the canal overflowed its banks. It took 50 minutes for the water to rise from the bottom of the drainage spillway (top of the canal wall) at the turn in Lighthouse Way to within 18 inches of my garage door. What saved us was our own vigilance by observing the water rising and calling the police who then notified the county

15-3

NOV 07 2011

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personnel, just in time to artificially breach the berm. Had this event occurred at two in the morning we would certainly have been flooded. The new plan requires the simultaneous occurrence of three critical pre-conditions all of which create even more roadblocks to being able to protect our community than existed in January 2010. If we start with the premise that the backwater is too high and too far up the canal from the lagoon, we are creating conditions for a disaster because humans can only act so fast and there are multiple steps to go through to get approval to take mitigating actions. We are also subject to human error or bad judgment, to wit, while the canal was overflowing onto Surfside II in January 2010 water from Bubbling Springs was still being pumped into the canal, exacerbating an already dangerous situation. This, while Bubbling Springs had plenty of capacity to store additional water temporarily.

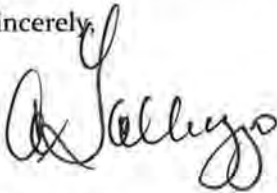
15-3
Cont.

I find it ironic that more concern is being exhibited for the goby and the plover, than for human beings. If their environment is endangered every agency is up in arms, but if our environment is endangered no one seems to care. A better way to handle the potential 100 year flood risk would simply be to construct a dam between the lagoon and the ocean that controls the water level year round. In such a way the water in the lagoon can be maintained at a level sufficient to promote an excellent environment for the native fish, plants and birds without having to back the water up the canal. Once the backwater is removed, we then revert to pre-pumping station conditions and the mosquito issue is abated. Finally, in the event of a major rain storm the dam can be opened mechanically to accommodate sufficient flow to the ocean to prevent inland flooding and to maintain a healthy level of water in the lagoon. This strategy would prevent the virtually complete draining of the lagoon, which certainly does occur when the berm is breached.

15-4

Further analysis of the RDEIR is attached.

Sincerely,



Al Galluzzo
805-271-0381

VCWPD FLOOD CONTROL MEASURES

1 INCREASED CAPACITY OF DRAIN

- * Water seeks it's own level: Lagoon backwater will fill JSDP to the same level [elevation] as in lagoon.
- * Increase in width and depth of JSDP [increased capacity] does not change level of water
- * **TOTAL CAPACITY OF JSDP IS REDUCED BY THE VOLUME OF BACKWATER THAT ALREADY FILLS THE DRAIN.**
- * VCWPD provides total capacity of JSDP [not actual capacity with backwater.]

INCREASED CAPACITY OF JSDP MAY PREVENT FLOODING **ALONG J STREET** DURING A FLOOD EVENT - ONLY IF THE CAPACITY OF THE CHANNEL - ABOVE THE LEVEL OF BACKWATER - PLUS PREVIOUSLY-ADDED STORMWATER IN THE CANAL - IS SUFFICIENT TO CONTAIN THE ADDITIONAL WATER FLOW.

INCREASED CAPACITY OF JSDP WILL NOT PREVENT FLOODING **IN BEACH AREAS** DURING ANY FLOOD EVENTS BECAUSE THE MAIN SOURCE OF MAJOR FLOODING IN THE BEACH AREA IS **INADEQUATE CAPACITY OF THE OXNARD INDUSTRIAL DRAIN [OID]** - AND NOT THE J STREET DRAIN.

15-5

2 OUTLET TO LAGOON: SEDIMENT TRANSPORT

- * Erosion of channel to equilibrium slope similar to JSDP slope.
- * Assumption of no additional erosion to fill in slope during non-breach periods. (Nature hates a vacuum.)
- * **Process ONLY DURING BEMP BREACH PERIODS.**
- * No change in berm re-formation

15-6

3 BEACH ELEVATION MANAGEMENT PLAN [BEMP]

- * ONLY upon SIMULTANEOUS occurrence of THREE CRITICAL PRE-CONDITIONS
- * **Dependence on multiple procedures: subject to unanticipated events; possible failure to prevent flood.**
[mechanical, environmental or human problems]
- * Jan. 18, 2010 flooding: Emergency Action Plan was in place!

15-7



AS NEITHER INCREASED CAPACITY OF JSDP NOR OUTLET MEASURES PROVIDE MITIGATION OF THE BACKWATER CONDITION, THIS EXPENSIVE "FLOOD CONTROL" PROJECT RELIES ON A MAN AND A TRACTOR MOVING SAND FOR FLOOD PREVENTION!!!

15-8

Letter 15
Al Galluzzo
November 2, 2011

- 15-1 This comment includes introductory remarks and general objection to the proposed project and EIR. This comment does not specifically address the adequacy of the analyses presented in the EIR, therefore no additional response is required.
- 15-2 This comment refers to concerns regarding the mosquito issue.

RE: Continuing problem. Observe “clouds” from canal on warm day.

Without verification by Ventura County Vector Control Program staff, it is unclear whether the insects observed were mosquitoes. As stated in the mosquito study, “Midges are a diverse group of small, non-biting flies closely related to mosquitoes. Many species have a strong resemblance to mosquitoes in size and appearance... [see Figures 3 and 4 of the study], and they often share the same aquatic habitats. Midges cannot bite and are not vectors for disease. Midge larvae are usually found in wetlands and marshes, as well as wastewaters including wastewater treatment plant lagoons and urban runoff channels (Grodhaus 1975); however, unlike mosquitoes, midge larvae do not breathe atmospheric air and often live attached to surfaces or in sediments. As a result, midges do not have the same restrictions as mosquito larvae and are often very abundant in the bottom sediments of open bodies of water. Midges often hatch simultaneously in blooms during the spring or summer, resulting in large masses of midges grouped together near wetlands and marshes. Many species are strongly attracted to artificial light sources and also use structures as resting sites. Thus, they can become extreme nuisances seasonally by massing in and around residences and other structures. Midges have a shorter life span than mosquitoes that entails finding a mate in order to lay eggs before they die (Grodhaus 1975).” Please refer to Letter 12, response to comment 12-33 for further response on mosquitoes.

RE: Current treatment is not working.

As discussed in Section 4.11 of the EIR, the Vector Control Program of the Ventura County Environmental Health Division monitors and controls mosquito breeding in flood control channels, drains, roadside ditches, catch basins, gutters, creeks, marshes, retention and detention basins, pools, and rain water depressions. The VCVCP staff continuously monitors and controls over 2,000 potential mosquito breeding sources to prevent and minimize exposure of the public to mosquito borne diseases. The VCVCP staff also responds to reports of mosquitoes or potential mosquito breeding sources from the public. The mission of the program is to suppress the population of mosquitoes to minimize the potential transmission of disease and reduce annoyance caused by these insects. The VCVCP staff conducts continuous encephalitis virus surveillance, including West Nile virus, and monitors the County areas for plague, Lyme disease, and hantavirus to prevent and minimize the exposure of the public to these diseases.

Please refer Letter 12, the first and sixth bullet point in response to comment 12-17 for response regarding vector control and mosquito abatement.

RE: Problem began with expansion of the pump station.

Please refer to Letter 12 response to comment 12-28, bullet point three for response.

RE: Remove backwater.

The District met with the USFWS on February 3, 2010 to discuss the feasibility of pumping water ponded in the J Street Drain during breach conditions. This approach would be difficult to authorize under the Endangered Species Act (ESA) because of the high potential for “take” of endangered tidewater goby, a fish that resides in the lagoon and the J Street Drain as far north as the Ventura County Railroad. Even if pump intakes are screened, gobies could become impinged on the screens and die. The pumping or continual removal of the backwater in the J Street Drain would not solve the original problem and impetus of the J Street Drain Project, which is the need for 100-year storm flow capacity. The dimensions of the current J Street Drain are not sufficient to contain the flow volume of a 100-year storm. The current J Street Drain would flood during a 100-year storm even if the outlet to the Pacific Ocean was open at the time and the channel was initially empty. Pumping water out of J Street Drain would reduce the size of Ormond Beach Lagoon, resulting in a reduction of foraging habitat for endangered California least terns and critical habitat for endangered tidewater goby. In addition, the act of pumping would cause tidewater gobies to become impinged on the pump screens, resulting in mortality of an endangered species, further violating the ESA.

Please refer to Letter 8, response to comment 8-3(d) for responses regarding implementation of the BEMP.

The main purpose and objective of the proposed project is the protection of property and the human environment from potential flooding during storm events. The increased capacity of the J Street Drain combined with the BEMP would minimize flooding risks during major storm events. For reasons stated previously in Letter 12, response to comment 12-24, pumping/removal of the backwater and construction of an alternative outlet that would require mechanical breaching would not be permitted under the Endangered Species Act.

- 15-3 RE: In a period of 50 minutes on January 18, 2010, flood water rose to within 18 inches of my garage door. Our vigilance saved our property, as the emergency was reported to the police, and the District responded by breaching the lagoon. If this had happened in the middle of the night, our property would have been flooded.

In 2009, the U.S. Army Corps of Engineers dredged 2,884,040 cubic yards of sand from the Channel Islands Harbor and Port Hueneme, more than half a million cubic yards more than the next largest dredging event in 1977 (2,370,000 cy). This sand was deposited on Hueneme Beach south of the southeast jetty. The combined processes of waves and currents create a longshore current that transports sand south along the shoreline. Heavy surf in December 2009 and January 2010 pushed this sand onto the Ormond Beach, building up the height of the berm in front of the lagoon such that runoff generated during a small (less than two-year event) storm could not overtop it. This condition had not been observed at any time since 1992, when the USFWS ordered the District to cease and desist maintaining an open outlet between the J Street Drain and the ocean. As a result of this new and unprecedented condition, the District developed the BEMP to monitor the height of the sand berm prior to predicted storms of any size, and groom the beach if the berm is observed to exceed a height of 6.5 feet NGVD. This would allow the lagoon to breach naturally in response to storm water inflow. Grooming would occur within 72 hours before storm onset to ensure proactive response to potential flooding.

RE: The new plan requires the simultaneous occurrence of three critical pre-conditions, increasing the potential for human error.

Please see responses 8-3(d) and 12-11 through 12-16.

- 15-4 Construct a dam between the lagoon and the ocean that controls the water level year round and preserves natural habitat.

Construction of a dam would not meet the project objective of increasing the capacity of J Street Drain. With a dam in place, the channel capacity would remain too small, and storm runoff greater than a 10-year event would overflow the channel walls and flood adjacent properties.

- 15-5 This comment outlines bullet points refuting the conclusions regarding the need to increase drain capacity.

RE: Water seeks its own level: Lagoon backwater will fill the drain to the same level (elevation) as in lagoon.

Please refer to Letter 12, response to comment 12-4 for response.

RE: Increase in width and depth of the drain will not change the level of water within the drain.

Please refer to Letter 12, response to comment 12-4 for response.

RE: The District provides total capacity of the drain (not actual capacity with backwater).

Please refer to Letter 12, response to comment 12-5 for response. The hydrologic modeling that was conducted for the proposed project in 2008 factored in the existing hydrologic conditions of the area, which includes existing backwater conditions. The capacity determination of the drain included the existing conditions.

RE: Increased capacity of the drain may prevent flooding along J Street only if the capacity of the channel (above the level of backwater plus the previously added storm water in the canal) is sufficient to contain additional water flow.

The hydrologic modeling that was conducted for the proposed project in 2008 includes the existing hydrologic conditions of the area, which includes existing backwater conditions. The capacity determination of the drain included the existing conditions. The Coastal Engineering Reports are include in Appendix C and discussed in Section 4.3 of the EIR. Please see Letter 12, response to comment 12-4 above for further discussion. The purpose of the proposed project is to increase the ability of the channel to contain additional storm water flow to prevent flooding. The BEMP is proposed as part of the project to maintain a safe elevation of the sand berm so that the berm will breach when the water in the lagoon reaches an elevation of 6.5 feet NGVD (flood stage is 7.0 feet NGVD). When the berm breaches, the water will flow to the ocean instead of backing up in the channel resulting in flooding.

RE: The main source of flooding is the OID in the beach areas and not the J Street Drain.

The existing capacity of the J Street Drain is 500-600 cfs, which is less than the 50- and 100-year frequency flood flows of 1,649 and 2,059 cfs, respectively (URS 2005). This drain flow is composed entirely of urban runoff. The OID channel is currently rated by the District as having an approximate flow capacity of 2,900 cfs. Under current conditions, the lagoon receives inflow throughout the year from the Hueneme Drain (pumped to the J Street Drain), J Street Drain, and OID. The backwater issues in the OID result in inland flooding near the paper plant during storm events, which is addressed by the BEMP. However, flooding in the project area (J Street Drain watershed) is due to the inadequate capacity of the J Street Drain, not the OID. Please refer to Letter 12, response to comment 12-6 for further discussion.

15-6 This comment outlines bullet points summarizing disagreement with the sediment transport study.

RE: Erosion of channel to equilibrium slope similar to drain slope.

Section 3.0 of the EIR describes the characteristics of the proposed project. The EIR states that because the concrete lined portion of the channel invert would be lowered about four feet to create the required capacity, excavation would continue a short distance downstream towards the ocean. The finished invert would be daylighted via an earthen ramp to the lagoon at a 10:1 slope over a distance of up to approximately 40 feet from the end of the existing concrete. A ten-foot-thick layer of four-ton rock riprap would be placed horizontally beneath the earthen ramp at the end of and at the same elevation as the concrete drain bottom to dissipate energy flow. It is anticipated that during the first few natural lagoon breaching events following Phase 1 construction, the movement of water (tidal and drain flow) would result in an equilibrium elevation within the channel transition area, between the end of the concrete channel and the Ormond Beach Lagoon annual breach location. Because the lagoon bottom elevation is approximately at the same elevation as the end of the existing concrete channel, there is the potential that water will be ponded at the point where the lowered channel meets the existing lagoon bottom elevation when the lagoon is breached during the first few storms. Please refer to Appendix C, J Street Drain Sediment Transport Study for Proposed Outlet at Ormond Beach Lagoon (dated August 2011), for a discussion regarding the sediment transport study and conclusions of the study.

RE: Assumption of no additional erosion to fill slope during non-breach periods.

The sediment transport study prepared for the proposed project discussed potential erosion and buildup of sediment in the channel. The sediment transport study is included in the EIR in Appendix C and summarized in Section 4.3 of the EIR. Based on the analysis, a total inflowing sediment load potential of 17 tons per year was calculated for the J Street Drain and Hueneme Drain. This load is minimal compared to the total load of 5,000 tons leaving the drains in two consecutive 2-year storm events. The proposed project would therefore not result in an increase in sediment deposition within the lagoon downstream of the end of the concrete channel. As sediment is brought in by the ocean it is also removed.

RE: The sediment transport process occurs only during BEMP breach periods.

Sediment transport occurs both during storm events and as a result of the natural tidal action as ocean waves enter the area and recede. Sediment transport does not occur to a significant degree while the lagoon is enclosed by the beach sand berm.

RE: No change in berm re-formation.

The natural action of the ocean waves results in the build up of a sand berm on the beach, enclosing the lagoon and disconnecting it from the ocean. This will not change with project implementation, as it is a natural beach process. The purpose of the BEMP is to monitor and groom the sand berm elevation when it exceeds a height of 6.5 feet NGVD, so that flooding can be prevented.

15-7 This comment outlines bullet points expressing concern over the BEMP.

RE: The BEMP will only occur when three critical conditions are met.

Please see response 15-3 above.

RE: Dependence on multiple procedures: subject to unanticipated events, possible failure to prevent flood.

Please see response 15-3 above.

RE: January 18, 2010 flooding: Emergency Action Plan was in place.

Please see response 15-3 above. Because the Emergency Action Plan would not have been activated by the conditions observed on January 18, 2010, this plan was replaced with the BEMP. The BEMP was designed to prepare for the reoccurrence of the combination of the outlet being closed, the sand berm elevation being above a high threshold level, and a storm being forecast.

15-8. As discussed previously, the removal of backwater is not practical due to endangered tidewater goby living in the channel. Before 1992, the District maintained an open outlet between the J Street Drain and the ocean. The USFWS ordered the District to cease and desist this practice in 1992. As noted in Letter 8, response to comment 8-5(b), the BEMP alone would not be sufficient in storms greater than the 10-year event even under breach conditions, as flows would overtop the existing undersized J Street Drain channel before they could reach the ocean. Therefore, the proposed changes to the drain in addition to the BEMP are necessary to prevent flooding during storms larger than the 10-year and up to the 100-year event. Implementation of the proposed project and BEMP would ensure water flow through the breach and into the ocean. The BEMP would be included as part of the routine maintenance activities for the J Street Drain.

November 3, 2011

Ventura County Watershed Protection District
Attn: Angela Bonfiglio Allen
800 South Victoria Ave.
Ventura, CA 93009-1600

Dear Ms. Allen:

We are residents of Surfside III Condominium Complex in Port Hueneme, located adjacent to the J Street drain. As residents, we feel compelled to express our deep concern that the Recirculated Draft Environmental Impact Report (RDEIR) still does not adequately address the potential flooding issue of our homes. We therefore respectfully submit the following attached comments regarding the inadequacy of your analysis.

16-1

We feel that if the current drain design is implemented, the County should seriously consider erecting some sort of small flood wall along the Surfside III property to prevent immediate flooding due to a delayed or ineffective human effort to timely groom the beach to an appropriate sand berm level allowing breeching. Relying 100% on human monitoring of the critical level does not provide a lot of comfort to any of the Surfside III homeowners.

16-2

Sincerely,



William & Michelle Shanks
966 Lighthouse Way
Port Hueneme, CA 93041
805.488.0113

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PROBLEMS WITH JSDP and BEMP

- * **WINTER WATER-LEVEL OF LAGOON IS AT APPROX. 4-6' [NGVD] ELEVATION. (Reported up to 7.6 [NGVD]). BACKWATER WILL FILL THE JSDP TO THAT LEVEL REGARDLESS OF DEPTH OR WIDTH OF THE CANAL.** 16-3
- * **TOTAL CAPACITY OF JSDP IS REDUCED BY THE VOLUME OF BACKWATER THAT ALREADY FILLS THE DRAIN DURING WINTER CONDITIONS.** 16-4
- * **INCREASED CAPACITY OF JSDP MAY PREVENT FLOODING ALONG J STREET DURING A FLOOD EVENT – IF THE CAPACITY OF THE CHANNEL - ABOVE THE LEVEL OF BACKWATER AND PREVIOUSLY-ADDED STORMWATER IN THE CANAL – IS SUFFICIENT TO CONTAIN THE ADDITIONAL WATER FLOW. IF NOT, FLOOD CONTROL WILL NOT BE PROVIDED AS A RESULT OF THE INCREASED CAPACITY, BUT **ONLY AS A RESULT OF THE INITIATION OF BEMP PROCEDURES.**** 16-5
- * **INCREASED CAPACITY OF JSDP WILL NOT PREVENT FLOODING IN BEACH AREAS DURING ANY FLOOD EVENTS BECAUSE [as VCWPD admitted at the public meeting] THE MAIN SOURCE OF MAJOR FLOODING IN THE BEACH AREA IS **INADEQUATE CAPACITY OF THE OXNARD INDUSTRIAL DRAIN [OID]** - AND NOT THE J STREET DRAIN. THIS OID FLOODING WILL ALSO BE PREVENTED **ONLY AS A RESULT OF BEMP PROCEDURES.**** 16-6
- * **BEMP INITIATION IS ALLOWED ONLY IF THREE CRITICAL CONDITIONS ARE MET; ALL THREE ARE REQUIRED SIMULTANEOUSLY:**
 - + Lagoon fully enclosed by sand berm
 - + Berm elevation is observed to be above 6.5 ft.NGVD [8.9 ft.NAVD]
 - + 72 hour prediction of major storm
16-7
- IN THE EVENT OF A FAILURE IN ANY PHASE OF THE BEMP PROCESS:**
 - * Unanticipated rain event [no 72-hr prediction of a major storm]
 - * Water-level in canal at maximum [previous rainfall]
 - * Malfunction in the ALERT system; Communication delay
 - * Equipment failure; Transport problems
 - * Environmental conditions
 - * Human errors
16-8
- SSIII and neighboring property WILL BE AT RISK OF FLOODING** as had occurred on Jan. 18, 2010 - with an emergency plan in place. 16-9
- JSDP WON'T PROVIDE RELIABLE FLOOD CONTROL BECAUSE OF BACKWATER, INADEQUATE CAPACITY OF OID, AND REASONABLE POSSIBILITY OF FAILURE OF ANY PRE-CONDITION OR PROCEDURE INVOLVED IN BEMP.** 16-10

Letter 16

William and Michele Shanks

November 3, 2011

- 16-1 This comment includes introductory remarks and general opposition to the proposed project. This comment does not specifically address the adequacy of the EIR; therefore, no further response is required.
- 16-2 This comment requests a floodwall along the Surfside III property boundary to address possible human error in implementing the BEMP. A floodwall along Surfside would not be feasible because it would block all the inlets to the drain draining from that side, resulting in additional flooding. Please refer to Letter 12, responses to comments 12-11 and 12-13 regarding berm elevation monitoring.
- 16-3 This comment states that backwater would fill the reconstructed channel regardless of its new depth or width. Please refer to Letter 12, response to comment 12-4 for response.
- 16-4 This comment states that the capacity of J Street Drain is reduced by the volume of backwater that already fills the drain during winter conditions. Please refer to Letter 12, response to comment 12-5 for response. The hydrologic modeling that was conducted for the proposed project in 2008 includes the existing hydrologic conditions of the area, which includes existing backwater conditions. The capacity determination of the drain included the existing conditions.
- 16-5 This comment states that flood control will be provided not by the increased channel capacity but by the BEMP implementation. The hydrologic modeling that was conducted for the proposed project in 2008 includes the existing hydrologic conditions of the area, which includes existing backwater conditions. The capacity determination of the drain included the existing conditions. The Coastal Engineering Reports are included in Appendix C and discussed in Section 4.3 of the EIR. Please see Letter 12, response to comment 12-4 above for further discussion. The purpose of the proposed project is to increase the ability of the channel to contain additional storm water flow to prevent flooding. The BEMP is proposed as part of the project to maintain a safe elevation of the sand berm so that the berm will breach when the water in the lagoon reaches an elevation of 6.5 feet NGVD (flood stage is 7.0 feet NGVD). When the berm breaches, the water will flow to the ocean instead of backing up in the channel, thus preventing flooding. Please also see response 8-5(a) for details about channel capacity.
- 16-6 This comment states that the main source of flooding is the OID in the beach areas, not the J Street Drain. Please refer to Letter 12, comment 12-6 for further discussion.
- 16-7 This comment summarizes the criteria for implementation of the BEMP. This comment does not specifically address the adequacy of the analysis presented in the EIR; therefore, no additional response is required.
- 16-8 This comment outlines bullet points refuting the ability of the BEMP to prevent flooding.
- Unanticipated rain event (no 72-hour warning)
 - Water level in canal is at maximum from previous rain fall
 - Malfunction in ALERT system. Communication delay
 - Equipment failure

- Environmental conditions
- Human error

Please see responses 8-3(d) and 12-11 through 12-16.

- 16-9. This comment states that Surfside III and neighboring properties will remain at risk of flooding, as it was on January 18, 2010. Please refer to Letter 15, response to comment 15-3 regarding emergency breaching of the berm on January 18, 2010.
- 16-9 This comment summarizes the concerns identified in comments 16-2 through 16-9 above. Please refer to the responses provided above. No further response is required.

November 5, 2011

Ventura County Watershed Protection Dist.
800 South Victoria Avenue
Ventura, Ca 93009-1610

Attn: Angela Bonfiglio Allen

Dear Ms. Bonfiglio Allen:

This is to inform you that my husband and I are against the proposed expansion of the J Street Canal.

17-1

I attended your presentation at Surfside III and did not walk away from that meeting convinced that this expansion is necessary. We do not understand the urgency to expand the canal, since the chances of a 100-year flood are slim to none at best and we believe the project will definitely affect homeowners at Surfside III adversely. Not only are you encroaching on our properties and removing many of our old trees, but we are in Building 6 and fear the pile driving during construction will damage our building, not to speak of the interruption of our quality of life for a year—or more. We recall the construction of the flood station which went on much longer than anticipated.

17-2

We believe the millions being spent on this project would be better utilized elsewhere.

17-3

Sincerely,



Patricia Dileski
828 Bluewater Way
Port Hueneme, CA 93041

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Letter 17
Patricia Dileski
November 5, 2011

- 17-1 This comment states general opposition to the proposed project. This comment does not specifically address the adequacy of the analysis presented in the EIR; therefore, no further response is required.
- 17-2 This comment states concerns regarding the necessity of the proposed project since the area is not in a 100-year flood plain and will result in potential damage to the Surfside III property and removal of trees.

Please refer to response to Letter 8, response to comment 8-5 regarding the need for the proposed project (re; the project area is located within a 100-year floodplain). Please refer to Letter 8, response to comment 8-7 regarding property damage.

As identified in Letter 21b, response 2 in Appendix L of the EIR, Mitigation Measure VIS-2 would require the replacement of the removed trees and large shrubs within the Surfside III property at a 1:1 ratio and would reduce the construction and operational impact to below a level of significance. Mitigation Measure VIS-3 would require temporary visual screening. Mitigation Measure VIS-4 has been added since the RDEIR was circulated. This measure will screen views of the Oxnard Waste Water Treatment Plant.

VIS-4 Prior to construction a 10- to 12-foot-tall fence with green vinyl screening will be installed along the portion of the District and Oxnard Wastewater Treatment Plant property line that is not currently fenced.

Replacement trees and shrubs would be the same species as those removed, or substitute species if requested by the Surfside III Homeowner's Association. Replacements would be planted on Surfside III property; vegetation currently within the District right-of-way would not be replaced. The table below lists trees identified for removal from the east edge of the Surfside III property boundary, their height as of March 2010, expected growth rate, the estimated number of growing seasons before replanted trees reach the original height (based on the expected growth rate), and the number of growing seasons before trees currently over 20 feet tall would reach a height of 20 feet after planting (based on the expected growth rate). A height of 20 feet is assumed to provide visual shielding for both one- and two-story units. As shown, it is expected that *Eucalyptus sideroxylon*, *E. camaldulensis*, *E. polyanthemos*, and *Pinus radiata* trees would gain a height of 20 feet after a maximum of 5.7 years, assuming they are three feet tall when planted. *Myoporum laetum* shrubs would require 5.7 to 8.5 years, depending on their growth rate (two versus three feet per growing season). Of the 54 trees and shrubs identified for removal, 15 are less than 20 feet tall and would require anywhere between one and nine years for the replacements to reach the original heights, assuming they are three feet tall when planted. Replacement of existing trees and shrubs on Surfside III property is expected to provide adequate mitigation for temporary construction impacts.

0.3 Response to Comments

Tree ID ¹	Species	Current Height (feet) ¹	Growth Rate ² (inches/season)	Seasons to Current Ht. ³	Seasons to 20 feet ⁴
2	<i>Myoporum laetum</i>	14	24 to 36	3.7 to 5.5	
4	<i>Myoporum laetum</i>	6	24 to 36	1 to 1.5	
5	<i>Myoporum laetum</i>	6	24 to 36	1 to 1.5	
6	<i>Trachycarpus fortunei</i>	8.5	24 to 36	1.8 to 2.75	
7	<i>Eucalyptus sideroxylon</i>	53	36+	Up to 16.7	Up to 5.7
8	<i>Eucalyptus camaldulensis</i>	53	36+	Up to 16.7	Up to 5.7
10	<i>Eucalyptus camaldulensis</i>	53	36+	Up to 16.7	Up to 5.7
11	<i>Eucalyptus camaldulensis</i>	53	36+	Up to 16.7	Up to 5.7
12	<i>Myoporum laetum</i>	14	24 to 36	3.7 to 5.5	
14	<i>Myoporum laetum</i>	14	24 to 36	3.7 to 5.5	
21	<i>Eucalyptus camaldulensis</i>	60	36+	Up to 19	Up to 5.7
23	<i>Eucalyptus camaldulensis</i>	60	36+	Up to 19	Up to 5.7
24	<i>Eucalyptus sideroxylon</i>	14 36+		Up to 3.7	
28	<i>Myoporum laetum</i>	9	24 to 36	2 to 3	
29	<i>Eucalyptus sideroxylon</i>	50	36+	Up to 15.7	Up to 5.7
30	<i>Eucalyptus camaldulensis</i>	60	36+	Up to 19	Up to 5.7
34	<i>Eucalyptus camaldulensis</i>	60	36+	Up to 19	Up to 5.7
36	<i>Eucalyptus polyanthemos</i>	38	36+	Up to 11.7	Up to 5.7
39	<i>Pinus radiata</i>	40	36+	Up to 12.3	Up to 5.7
41	<i>Eucalyptus camaldulensis</i>	45	36+	Up to 14	Up to 5.7
43	<i>Myoporum laetum</i>	25	24 to 36	7.3 to 11	5.7 to 8.5
44	<i>Myoporum laetum</i>	25	24 to 36	7.3 to 11	5.7 to 8.5
45	<i>Eucalyptus camaldulensis</i>	55	36+	Up to 17.3	Up to 5.7
46	<i>Myoporum laetum</i>	25	24 to 36	7.3 to 11	5.7 to 8.5
48	<i>Myoporum laetum</i>	25	24 to 36	8.3 to 12.5	5.7 to 8.5
49	<i>Myoporum laetum</i>	9	24 to 36	3 to 4.5	
50	<i>Myoporum laetum</i>	25	24 to 36	8.3 to 12.5	5.7 to 8.5
51	<i>Myoporum laetum</i>	30	24 to 36	10 to 15	5.7 to 8.5
52	<i>Myoporum laetum</i>	20	24 to 36	6.7 to 10	5.7 to 8.5
53	<i>Myoporum laetum</i>	20	24 to 36	6.7 to 10	5.7 to 8.5
54	<i>Myoporum laetum</i>	30	24 to 36	10 to 15	5.7 to 8.5
56	<i>Myoporum laetum</i>	23	24 to 36	7.7 to 11.5	5.7 to 8.5
57	<i>Myoporum laetum</i>	12	24 to 36	4 to 6	
64	<i>Myoporum laetum</i>	21	24 to 36	7 to 10.5	5.7 to 8.5
65	<i>Eucalyptus camaldulensis</i>	50	36+	Up to 16.7	Up to 5.7
66	<i>Myoporum laetum</i>	20	24 to 36	6.7 to 10	5.7 to 8.5
67	<i>Myoporum laetum</i>	20	24 to 36	6.7 to 10	5.7 to 8.5
70	<i>Myoporum laetum</i>	25	24 to 36	8.3 to 12.5	5.7 to 8.5
71	<i>Eucalyptus camaldulensis</i>	65	36+	Up to 21.7	Up to 5.7
74	<i>Eucalyptus camaldulensis</i>	12	36+	Up to 4	
77	<i>Myoporum laetum</i>	25	24 to 36	8.3 to 12.5	5.7 to 8.5
78	<i>Myoporum laetum</i>	30	24 to 36	10 to 15	5.7 to 8.5
79	<i>Myoporum laetum</i>	20	24 to 36	6.7 to 10	5.7 to 8.5
80	<i>Myoporum laetum</i>	18	24 to 36	6 to 9	
82	<i>Myoporum laetum</i>	18	24 to 36	6 to 9	
83	<i>Eucalyptus sideroxylon</i>	65	36+	Up to 21.7	Up to 5.7
85	<i>Myoporum laetum</i>	22	24 to 36	7.3 to 11	5.7 to 8.5
88	<i>Eucalyptus camaldulensis</i>	65	36+	Up to 21.7	Up to 5.7
89	<i>Myoporum laetum</i>	21	24 to 36	7 to 10.5	5.7 to 8.5
94	<i>Myoporum laetum</i>	20	24 to 36	6.7 to 10	5.7 to 8.5
95	<i>Myoporum laetum</i>	25	24 to 36	8.3 to 12.5	5.7 to 8.5
97	<i>Myoporum laetum</i>	10	24 to 36	3.3 to 5	

0.3 Response to Comments

Tree ID¹	Species	Current Height (feet)¹	Growth Rate² (inches/season)	Seasons to Current Ht.³	Seasons to 20 feet⁴
102	<i>Eucalyptus sideroxylon</i>	42	36+	Up to 14	Up to 5.7
103	<i>Myoporum laetum</i>	18	24 to 36	6 to 9	

1. *Tree Report: Ventura County Watershed Protection District: J Street Drain-South Surfside Drive* prepared by LAJohnny Consulting Arborist for Jordan, Gilbert and Bain Landscape Architects, Inc. March 1, 2010.
2. Urban Forest Tree Institute Online Tree Selection Guide: <http://selecttree.calpoly.edu>
3. Assumes plants are three feet tall when planted.
4. Years to 20 feet is provided for those trees currently at or above a height of 20 feet, which is the height assumed to shield views from both one- and two-story units.

17-3 This comment states that the money spent on this project would be “better utilized elsewhere.” This comment does not specifically address the adequacy of the EIR; therefore, no additional response is required. However, for information on the District’s project selection and funding process, please see Section 3.3 of the EIR.

0.3 Response to Comments

06/17/2007 19:55 8056485433

TERRY SMITH

PAGE 01/02

PLEASE CONFIRM RECEIPT

431 South Evergreen Drive
Ventura, Ca 93003
smithanterry@yahoo.com
November 6, 2011

Ventura County Watershed Protection District
Attention: Angela Bonfiglio Allen
800 South Victoria Avenue
Ventura, CA 93009-1610
JStreet_Drain_Comments@ventura.org
Fax 805- 654-3350

Subject: Public Comment for the RDEIR report regarding the J St. Drain Project

Dear Sir or Madam:

4.1-20-21 of the RDEIR states: "Mitigation measure VIS-2 would require the replacement of the removed trees and large shrubs within the Surfside III property at 1:1 ratio and would reduce the operational impact to below the level of significance."

THIS IS ABSOLUTELY NOT TRUE. Who determined this and how was it determined? Were the residents of Surfside III asked? How are you going to really mitigate the removal of mature landscape with expansive foliage that blocks the view of the water treatment plant? I see the 1:1 ratio replacement mitigation measure, but what are you going to replace a 52 foot, some even 65 feet, Eucalyptus tree with? I contend that you can't replace the present landscape so that the reason they are there is accomplished, which is to block the view of the water treatment plant. I take issue with the statement 4.1-20-21 that mitigation would reduce operational impact to below the level of significance. I expressed this before and am bringing it up again because you are stating a mistruth in the RDEIR report. Please tell it like it is. There will be a VERY significant impact for the homeowners and residents for many years to come.

18-1

In your report on page 4.1-6 you refer to picture 4.1-2. This does not show Surfside III's present tree lined J St Drain with the treatment plant not visible due to this foliage. This picture you refer to shows the J Street Drain at Redwood from Northbound J Street which is bare of foliage. I find this very deceptive not to show the beautiful trees and shrubs at Surfside III that the picture is supposed to be of. You need to have proper pictures so whomever is reviewing the report can see what you are talking about removing. Also you need to spell out OWWTP in this section so people know it is a water treatment plant you are talking about when reading your report. It is not something any one would want to look at. Not showing the pictures of the trees at Surfside III and referring readers to a picture of a bare J Street drain needs to be corrected.

18-2

In 4.3-9, Why did you strike out "Due to backwater effect resulting from the lagoon" when stating that the existing capacity of the J Street Drain is less than the 50-100 year frequency? Originally you stated that the backwater effects resulting from the lagoon reduced the capacity of the J Street Drain to 500-600 cfs. Wouldn't recognizing this effect and not deleting it from your report suggest other ways to solve the flooding problem, like deal with the backwash effect? If the berm did not restrict the flow of the drain water flowing out to the ocean wouldn't the flooding problem be solved without spending all this money widening the drain whose construction will probably damage Surfside III buildings due to the soil being subject to liquefaction, remove many of our trees significantly impacting our residents as described above, and add to the surface area of breeding grounds for mosquitoes which are plaguing Surfside III residents. Having to maintain a fish pond instead of allowing the J Street Drain to drain into the ocean with the resulting damage this project will do to Surfside III property is not right. The berm is breached naturally during storms and the fish find their way elsewhere. The Watershed Protection District needs to take issue with the Fish and Games Department. The Watershed Protection District keep telling us that they have to do the widening

18-3

18-4

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WATERSHED PROTECTION DIST

0.3 Response to Comments

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TERRY SMITH

PAGE 02/02

because of the fish. It doesn't make sense to have built a drain that collects all the water from Port Hueneme and Oxnard, and then not be able to let it drain into the ocean as it should be allowed and instead do a project that will damage our properties.

18-4
Cont.

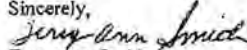
The fact that you claim that the primary source of mosquitoes is from the Ormond Beach Lagoon does not refute that fact that the mosquitoes from the J Street Drain are biting Surfside III residents and that a widened drain will provide more surface area for mosquitoes to breed. Also, there will be more standing water when there are low rainfall conditions. If you look at your picture of the drain 4.1-2 in your report there is standing water already. Furthermore, as stated on page 4.3-26 "Because the existing lagoon bottom elevation is approximately at the same level as the end of the existing concrete channel, there is potential that water will pond for varying period of time at the point where the lowered concrete channel meets the existing lagoon bottom elevation." This would exacerbate the mosquito problem.

18-5

I am especially concerned about your comments on ES15 under Noise and Vibration that according to Ventura County Noise Standard, "Daytime standards are not applicable to residential areas, as they are not defined as noise-sensitive receptors between 7:00 AM and 7PM." I personally know many people who live in Surfside III who are retired and are home during the day, and some sleep in until 10PM or after. And one doesn't have to be sleeping to be irritated by noise. It is deceptive again to have removed what was originally stated in the DEIR as follows: "Noise levels generated from the construction equipment expected to be used will likely exceed the 55 dBA Leq daytime City standard for residential areas. This noise would impact sensitive land uses in the vicinity of the J Street Drain, including the Surfside III Condominiums" And before you said the impact was "significant and unavoidable" and now you are saying "Less than significant with implementation of identified mitigation." Put the truth back into the EIR report that the noise would impact Surfside III significantly.

18-6

Sincerely,



Terry Ann Smith

Owner 769 Reef Circle, Surfside III
805-340-0343

Letter 18
Terry Ann Smith
November 6, 2011

- 18-1 This comment refutes the determination regarding implementation of Mitigation Measure VIS-2 and refers to the comment letter submitted previously on the 2009 EIR.

Please refer to Letter 17, response to comment 17-2 for response regarding implementation of Mitigation Measure VIS-2 and addition of VIS-4.

- 18-2 This comment expresses concern that Figure 4.1-2 referenced on page 4.1-6 does not show vegetation along the east boundary of the Surfside III property, which screens views of the Oxnard Waste Water Treatment Plant (OWWTP – please note this acronym is also defined in the Acronyms and Abbreviations section at the beginning of the EIR). Figure 4.1-2 is an aerial view of Surfside III, J Street Drain, and the OWWTP. On the aerial photo can be seen a line of landscaped vegetation between the Surfside III community and the OWWTP. This reference was intended to orient the reader geographically to the location of the landscaping in relation to residences and the OWWTP. Photograph 7 in Section 4.1 shows a ground view of the large trees along the east boundary of Surfside III, as seen from the lagoon.

A description of the existing setting is provided on page 4.1-6. As shown in Figure 4.1-2, a row of shrubs, mainly myoporum, and eucalyptus trees along the northeast boundary of the Surfside III property shields condominium residents on the east-facing sides of Buildings 15, 16, and 17 and users of the park immediately east of these buildings from views of the J Street Drain and the OWWTP east of the J Street Drain. Residents in Building 7, located nearest to the proposed project in the vicinity of the OWWTP, are shielded from the industrial view by a 100-foot-long section of approximately 14-foot-tall mesh-screen chain link fence on the west edge of the OWWTP property. This fence screens the view of the OWWTP maintenance yard. The remainder of the OWWTP south of the maintenance yard is screened by trees and shrubs along the plant's west property boundary. Sparser vegetation along the east boundary of the Surfside III property from Building 7 southward forms an inconsistent visual barrier, and residents in Buildings 6 and 7 are able to see the J Street Drain from their dwellings.

- 18-3 This comment questions text revisions in the RDEIR regarding channel capacity. The changes on page 4.3-9 were made to more accurately represent the existing conditions of the drain and provide more specific data regarding the capacity of the drain according to the *Final Report: J Street Drain Channel Improvement Study and Preliminary Design* prepared by URS in November 2005. The report takes into consideration the existing backwater effect. The capacity of the drain was not reduced to 500-600 cfs as a result of the backwater; rather, the drain's capacity is 500-600 cfs with and without the backwater effect.
- 18-4 This comment questions the need to enlarge the channel and urges the District to challenge the California Department of Fish and Game regarding endangered species protection. The comment also states that it does not make sense to have a flood control channel that cannot drain to the ocean. Please see responses 8-4(a) and 15-8.
- 18-5 This comment raises concerns about mosquitoes and ponding at the channel terminus during a breach condition. Please refer to Letter 8, response to comment 8-6 regarding the mosquito issue, and 15-6 regarding development of a new equilibrium elevation in the lagoon within the first few storms following construction completion. The backup relating to the elevation difference

between the reconstructed concrete channel and the lagoon would occur during the rainy season, when mosquito breeding is minimal.

- 18-6 This comment raises concerns about revisions to the noise and vibration thresholds. Please refer to Letter 6, response to comment 6-12 regarding the noise standards.

Nov 07 11:02:54p

marion kelemen

805-986-0303

p.1

TO: ANGELA BONFIGLIO-ALLEN

FAX: 654-3350

RE: INADEQUACY OF RDEIR
PROPOSED OUTLET AT ORMOND BEACH LAGOON

Draft Sedimentation Report: [March, 2008] states "... significant range of uncertainty (**plus or minus 100%**) associated with this result ..."

19-1

Draft Final Sediment Transport Study: Executive Summary: [August 2011]

* "... concern that water will be ponded for a long time where the lowered channel meets the existing lagoon bottom elevation."

* VCWPD "intends to maintain a berm elevation..."

* VCWPD "has maintained the berm recently at elevation 6.5 feet +..."

* **However, during the time that the berm is re-built ... the outlet of J Street will be inundated. In addition, the channel outlet will be inundated at least twice per day even after berm breaching and erosion of the bottom material in the lagoon."**

19-2

1 THIS IS AN ADMISSION THAT NEITHER THE JSDP - NOR THE OUTLET AND THE POSSIBLE FORMATION OF THE EQUILIBRIUM SLOPE; NOR "MAINTAINING" THE BERM (UNDER CURRENT BEMP CONDITIONS) WILL PREVENT INUNDATION OF THE OUTLET AND MITIGATION OF THE BACKWATER CONDITION.

19-3

Transport Study 3.4 Discussion:

* The probabilities of required floods to possibly form a slope are stated as 50%; 25%; 20%; and 50%. AND "When a berm is present, the channel is also likely to be inundated to some extent over a long period, from lagoon backwater."

19-4

2 THIS MEANS THAT THERE IS ONLY A POSSIBILITY OF SLOPE FORMATION TO DRAIN THE CHANNEL DURING BREACH CONDITION AND THE LIKELY STATE OF CHANNEL INUNDATION DURING NON-BREACH CONDITION - WHICH IS THE NORMAL CONDITION OF THE CANAL.

19-5

Transport Study 4.0 Conclusions

"In a maintained breach scenario (under BEMP requirements) and following either storm series .. the J Street outlet would likely only be inundated until the lagoon elevation exceeds elevation 6.0 feet ..."

19-6

3 THIS CONCLUSION VERIFIES THAT ONLY IF BEMP REQUIREMENTS ARE MET - INCLUDING BERM ELEVATION OBSERVED AT 6.5 + FEET ELEVATION ; AND ONLY IF THE REQUIRED STORM CONDITIONS OCCUR AND CREATE THE SLOPE; AND ONLY IF THE LAGOON ELEVATION EXCEEDS 6 FEET, WILL THE J STREET DRAIN OUTLET NOT BE INUNDATED. THIS IS AN ABSOLUTELY UNREASONABLE SET OF CONDITIONS ON WHICH TO BASE A PROJECT THAT IS BEING PRESENTED TO THE PUBLIC AS A FLOOD-CONTROL PROJECT!!!

19-7

Marion Kelemen
 962 Lighthouse Way
 Port Hueneme, CA 93041

Letter 19
Marion Kelemen
November 7, 2011

- 19-1 This comment reiterates a statement from the sediment transport study. This comment does not specifically address the adequacy of the analysis provided in the EIR; therefore no further response is required.
- 19-2 This comment summarizes the Executive Summary in the 2011 Draft Sediment Transport Study and states “this is an admission that neither the JSDP (proposed project), nor the outlet and the possible formation of neither the equilibrium slope, nor maintaining the berm will prevent inundation of the outlet and mitigation of the backwater condition.” However, this quote has been taken out of context in this comment.

The following is the excerpt from the Executive Summary quoted in the comment:

“Once the lagoon bottom elevation has been reduced to the elevation of the concrete channel outlet between the channel outlet and the designated berm breach location, it is not expected that it will fill in again because the sediment load from the J Street Drain watershed is very low. However, during the time that the berm is re-built by the natural action of the ocean waves, the outlet of J Street will be inundated. In addition, because the tidal cycle peaks twice each day and the peak tide exceeds the channel outlet elevation, the channel outlet will be inundated at least twice per day even after berm breaching and erosion of the bottom material in the lagoon.”

The Draft Sediment Transport Study concluded that the proposed improvements to J Street Drain will lower the existing channel outlet to an elevation of 0.5 feet NGVD 1929. The current Ormond Beach Lagoon bottom at the channel outlet is at elevation 3.0 feet ±. Without excavating a drainage outlet in the lagoon, the lagoon bottom will be higher than the channel outlet after project construction. This will create a condition where J Street Drain will not be able to completely drain through the lagoon. Sediment transport modeling illustrates that if a breached berm condition exists for Ormond Beach Lagoon, it is possible for a new low-flow channel to form in the lagoon. This new low-flow channel would effectively lower portions of the lagoon bottom and maintain positive drainage from the J Street Drain outfall to the Pacific Ocean. Both cases of either two consecutive 2-year storm series or a single 5-year storm series were found to create this low-flow channel. These results are based on a breached condition existing throughout the storm hydrograph. In a maintained breach scenario, and following either storm series just mentioned, the J Street Drain outlet would likely only be inundated until the lagoon elevation exceeds elevation 6.5 feet (the beach grooming elevation), during storm events, and twice a day during tidal action.

As responded to in Letter 12, response to comment 12-6, the BEMP alone would not be sufficient in storms greater than the 10-year event, as flows would overtop the existing undersized J Street Drain channel before they could reach the ocean. Therefore, the proposed changes to the drain in addition to the BEMP are necessary to prevent flooding during storms larger than the 10-year and up to the 100-year event. Implementation of the proposed project and BEMP would ensure water flow through the breach and into the ocean.

- 19-3 This comment states that information in the Sediment Transport Study admits that the proposed project will not prevent inundation of the outlet and mitigation of the backwater condition. The following is an excerpt from the Draft Sediment Transport Study:

“Sediment transport modeling identified two threshold conditions at which the lagoon bottom downstream of the proposed J Street Drain concrete channel outfall would erode to maintain positive drainage for the proposed improvements. Either two consecutive 2-year storm series or a single 5-year storm series would create a low-flow channel capable of maintaining positive drainage. The probability of a 2-year flood event in a given year is 50 percent. The probability of two consecutive 2-year storms occurring in any given year is approximately 25 percent. The probability of a 5-year storm occurring in a given year is 20 percent. The probability of a 5-year flood event occurring within a 3-year period is approximately 50 percent.”

The modeling assumed an initial berm breach condition. Without intervention, a breach condition is highly variable depending on flow conditions within the lagoon and the development of the beach berm by the ocean waves. A controlled breach location with a maintained beach grooming elevation will facilitate conditions similar to those used in the modeling. In a maintained breach scenario, and following either storm series just mentioned, the J Street Drain outlet would likely only be inundated until the lagoon elevation exceeds elevation 6.5 feet (i.e., the lagoon exceeds the groomed beach elevation), during storm events, and twice a day during tidal action.

As explained in Letter 12, response to comment 12-6, the BEMP alone would not be sufficient in storms greater than the 10-year event, as flows would overtop the existing undersized J Street Drain channel before they could reach the ocean. Therefore, the proposed changes to the drain in addition to the BEMP are necessary to prevent flooding during storms larger than the 10-year and up to the 100-year event. Implementation of the proposed project and BEMP would ensure water flow through the breach and into the ocean during storm conditions. It is not the purpose of the J Street Drain Project to eliminate backwater within J Street Drain during non-storm conditions.

- 19-4 This comment quotes from the Sediment Transport Study, but does not address the adequacy of the analysis in the EIR. Therefore, no response is required.
- 19-5 This comment states that there is only a possibility of a new equilibrium slope developing from the concrete channel to the ocean during a breach condition, and that it is likely that the channel will be inundated during the non-breach condition. Because it is impossible to predict at this time exactly when two-year and five-year storms will occur after project construction, the Sediment Transport Study relies on probabilities for its analysis. Two-year and five-year storms will occur, but it cannot be stated with certainty exactly when they will occur. As stated in response 19-3, it is not the purpose of the J Street Drain Project to eliminate backwater within J Street Drain during non-storm conditions.
- 19-6 This comment quotes from the Sediment Transport Study, but does not address the adequacy of the analysis in the EIR. Therefore, no response is required.
- 19-7 This comment states that it is unreasonable for a flood control project to be inundated. The project description includes a BEMP to ensure that storm runoff is able to leave the channel and lagoon. It is not the project purpose to evacuate water from the channel during non-storm conditions, as there is no flood threat at that time. Please see response 8-3(d) for further information about BEMP activation.

SLAUGHTER & REAGAN, LLP

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November 7, 2011

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PLEASE REFER TO:
149.1022

VIA REGISTERED MAIL AND ELECTRONIC MAIL

JStreetDrain.Comments@ventura.org

Ventura County Watershed Protection District
Attn: Angela Bonfiglio Allen
800 South Victoria Avenue
Ventura, CA 93009-1600

Re: ***Public Comments by Surfside III Condominium Owners Association to J
Street Recirculated Draft Environmental Impact Statement***

Surfside III Condominium Owners Association [hereafter "Surfside III"] submits the following public comments to the Recirculated Draft Environmental Impact Report, J Street Drain Project, Ventura County, California, September 2011, prepared for the Ventura County Watershed District ["District"] by HDR Engineering.

20-1

On January 15, 2010, Surfside III previously submitted comments and objections to the Draft Environmental Impact Report, J Street Drain Project. These comments and objections are hereby incorporated.

20-2

At a public meeting on October 22, 2011, the District agreed to provide documentation that the US Department of Fish and Wildlife did not agree to a waiver to implement the direct beach outlet alternative.

20-3

In response to public comments and a near flooding event which occurred on January 18, 2010, the District withdrew the Draft Environmental Impact Report. The District issued a Recirculated Draft Environmental Impact Report ["RDEIR"] in September 2011 for public comments. Upon reviewing the Recirculated Draft Environmental Impact Report, Surfside III, along with many homeowners, still has serious concerns about the direct and indirect impacts the contemplated J Street Drain project will have on Surfside III and whether the proposed mitigation measures are sufficient as to several aspects of the proposed project. Surfside III's comments to the revised sections of the Recirculated Draft Environmental Impact Report are as follows:

20-4

SLAUGHTER & REAGAN, LLP
Attorneys at Law

Re: *Public Comments by Surfside III Condominium Owners Association to J Street
Recirculated Draft Environmental Impact Statement*
November 7, 2011
Page 2

I. RDEIR: 3-30: Beach Elevation Management Plan

The Ormond Beach Lagoon inlet normally remains in a semi-closed condition due to sand accretion on Ormond Beach, but during winters it may breach naturally to allow free outflow during storms and some high tides. However, in a storm event on January 18, 2010, which was not a major storm, the lagoon did not breach naturally. This storm event caused flooding at the Oxnard Waste Water Treatment Plant ["OWWTP"], which was at risk of releasing untreated sewage, and threatened to flood Surfside III property. In response, the District replaced the Emergency Action Plan ["EAP"] in the Draft EIR with a Beach Elevation Management Plan ["BEMP"] in the Recirculated Draft Environmental Impact Report.

According to the RDEIR, the purpose of the BEMP is to protect the communities and industrial facilities along J Street Drain and Ormond Beach Lagoon by maintaining downstream water levels below a predetermined safe elevation, thereby lowering flood inundation elevations. The implementation of the BEMP would constitute a new maintenance activity associated with operation of the proposed project.

According to the RDEIR, the BEMP threshold conditions are:

1. The Ormond Beach Lagoon is fully enclosed by the Ormond Beach sand berm, and
2. The Ormond Beach Lagoon and berm elevation adjacent to the lagoon is observed to be above 6.5 NGVD or greater, and
3. A 72-hour prediction of a storm event affecting the watershed is received, which would likely cause the designed capacity of the J Street Drain to be exceeded if the lagoon water surface elevation cannot overtop the observed adjacent beach sand elevation. [RDEIR, p. 3-30.]

Any one of the above conditions alone may not trigger initiation of the BEMP. All three conditions must occur simultaneously to enact the BEMP. [RDEIR, p. 3-30.]

Surfside III generally approves the proposed change from an EAP to a BEMP since it is proactive. It potentially provides for better flood control by attempting to avoid an emergency event and does not depend on the prediction of a "major storm" event to trigger measures to lower the berm to allow the water in the lagoon to empty into the ocean.

Because the sand berm enclosing the lagoon is constantly shifting, Surfside III requests that the District include a plan in the Final EIR outlining that it will constantly observe the height

20-5

20-6

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of the sand berm during the 72 hour predicted storm event by camera and directly through District personnel to ensure that the height of the sand berm does not exceed 6.5 NGVD.

20-6
Cont.

Furthermore, condition number 3 is vague and ambiguous. From the proposed language, it is not clear who would or how it could determined whether or not a 72 hour prediction of a storm event "would likely cause the designed capacity of the J Street Drain to be exceeded if the lagoon water surface elevation cannot overtop the observed adjacent beach sand elevation." Storms often have higher or lower than predicted precipitation and timing. Some moving faster by almost a full day, some slow and stall totally voiding original predictions.

20-7

Furthermore, there was a minor rainstorm on October 5, 2010, which caused the water in the J Street drain to rise and threatened to cause water to flood Surfside III property. In particular, the backed up water in the canal rose to a level which entered into Surfside III side drains, located at the South corner of Building 6, the parking area between Buildings 6 and 7; and the drain between Buildings 7 and 17, preventing the drains' ability to discharge surface waters into the canal, thus threatening to flood the areas.

20-8

Therefore, the BEMP and resulting grooming procedure must be triggered *before any storm*, because it simply cannot be predicted with any certainty whether the designed capacity of the J Street Drain is to be exceeded if the lagoon water surface elevation cannot overtop the observed adjacent beach sand elevation. *Accordingly, the sand berm must be maintained from the first winter storm in October to May before any storm event so it will not exceed 6.5 NGVD at the permanent beach elevation sand markers.*

20-9

In addition, District representative stated at the public meeting on October 22, 2011, that a trash boom would be installed upstream from Surfside III to collect debris being washed down the canal. This will eliminate breeding opportunities for mosquitoes. Surfside III requests that this mitigation measure be included in the Final EIR.

20-10

II. Visual Resources/Removal of Trees, ¶ 4.1

Trenching near the Surfside III buildings during construction would result in the removal of approximately 110 trees and shrubs of various sizes and species, including 25 mature eucalyptus trees from both J Street Drain and Surfside III properties. Vertical shoring rather than trenching near the Surfside III property, as discussed in the RDEIR, would reduce the number of trees and shrubs to be removed from Surfside III and from District right-of-way. Though such a plan may require less removal of Surfside III trees and other property, it will cause a severe degradation of visual resources, as well as significantly more noise and vibration. As discussed in IV. below, vertical shoring will increase the risk of damage to Surfside III property.

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However, even if fewer trees are being removed, the removal of trees and shrubs will nevertheless substantially degrade visual resources. The removal of trees and shrubs will expose unsightly views of the water treatment plant and the J Street Drain to residents along the east side of Buildings 15, 16, and 17, and to people visiting the adjacent park.

20-12

The proposed mitigation measure, V-2, contemplates that any tree or large shrub removed from the Surfside III property would be replaced at a 1:1 ratio. However, the District has acknowledged that the replacement will not be kind. Instead, it simply means the supply of a small box tree. A small box tree will take many years to mature and does not provide any of the visual screening benefits that exist currently. Instead of seeing lush greenery, Surfside III residents will see only the Waste Treatment Plant and J Street Drain, along with the stagnant water and floating debris until such time as the small box trees grow to full maturity, if at all.

20-13

The impact will have a significant effect on the use and enjoyment of all Surfside III residents. The proposed mitigation measures are insufficient. Mature eucalyptus trees cannot be replaced. In particular, the owners of third story units will not have any visual screening from the OWWTP or the work site for many years to come. In addition to replacement of the trees with new box trees, Surfside III must be compensated for loss of its mature trees. Furthermore, additional privacy screening must be installed by the District during the years it will take for the replacement trees to mature and provide screening from the canal and the OWWTP.

20-14

The District proposes that during construction temporary privacy screening would be placed along the north-eastern boundary of the Surfside III to shield resident from views of the construction site and of the OWWTP. [RDEIR, p. ES – 7.] Again, the proposed mitigation measure is insufficient, because even if the temporary construction privacy screening was 12 feet high, it would not be sufficient to provide any privacy screening during construction for the second and third floor owners.

20-15

III. Water Resources and Hydraulics/Standing Water, ¶ 4.3-28

In its prior comments, Surfside III pointed out that the lower elevation of the proposed canal outlet would create a bathtub effect which would aggravate the problems of backed up and standing water in the J Street Drain.

In response, the District had a Sediment Transport Study for Proposed Outlet at Ormond Beach Lagoon prepared in August 2011. The purpose of the study was to evaluate what storm event (e.g., 2-year, 5-year) would allow a reduced elevation low-flow channel to form from the concrete channel outlet through the lagoon, preventing the “ponding” or “bath-tub” effect during breach conditions. Sediment transport modeling identified two threshold conditions at which the lagoon bottom downstream of the proposed J Street Drain concrete channel outfall would flow to

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maintain positive drainage for the proposed improvements: (1) two consecutive 2-year storm events (not necessarily within the same storm season); or (2) a single 5-year storm event. Either one of these scenarios would create a low-flow channel capable of maintaining positive drainage. The probability of a 2-year storm event in a given year is 50 percent. The probability of two consecutive 2-year storms occurring in any given year is approximately 25 percent. The probability of a 5-year storm occurring in a given year is 20 percent. The probability of a 5-year flood event occurring within a 3-year period is approximately 50 percent. [RDEIR, p. 4.3-28].

20-16
Cont.

Surfside III's proposed additional mitigation measure to be included in BEMP, see I., *supra*, to lower the sand berm outside the storm season to 6.5 NAVD, would increase the flow of water from the J Street into the lagoon and mitigate the bath tub effect during the time the sediments have not sufficiently moved to create a low flow channel in the lagoon. It would reduce the problem of standing water and back up water in the canal.

20-17

IV. Noise and Vibration/ Damages Surfside III Property, ¶ 4.6-22

Much of the Phase 1 of the J Street Drain Project ["JSDP"] is directly adjacent to the Surfside III property. At some points the J Street Drain Canal is only several feet from Surfside III residential buildings and improvements. Due to the close proximity, Surfside III is more directly affected by the JSDP than most, if not all, of the local community. Surfside III and its residents have grave concerns that the proposed project will cause damage to buildings and improvements at Surfside III.

20-18

The District proposed vertical shoring to construct the canal. The construction also requires lowering of the ground water level. Both will likely have negative impacts on Surfside III property. The RDEIR acknowledges that the proposed project has the potential to expose people and property to excessive ground borne vibration. The RDEIR acknowledged that effect is "significant." [RDEIR, p. ES-16.]

20-19

Due to the composition of the soil, which is sandy and granular and within a liquefaction zone, there is a high likelihood of damages to buildings within Surfside III, in particular to Building 6, 7 and 17, which are located closest to the J Street canal, through pile driving, vertical shoring and excavation. There is a significant risk of subsidence from the construction. In addition, the pile driving and shoring may cause damages to the Association's sewer and water lines.

20-20

Surfside III generally approves the proposed mitigation measure NOISE-3, which provides, that prior to construction, the District shall request property owners' permission to video record the condition of structures adjacent to the J Street Drain in the presence of the property owner. The recording shall be performed and stored by an independent third-party, with

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a copy given to the property owner. If vibration-induced damages occur as a result of construction, property owners would be invited to submit claims documenting such damages within one year following construction completion. The third-party would again enter the property to video record its post-construction condition, again providing a copy to the property owner. Both recordings would be compared, and the District would provide compensation to repair new damages observed in the post-construction recordings. Once both parties have agreed to the compensation, both pre- and post construction video recordings stored by the third-party would be given to the property owner. [RDEIR, p. ¶ 4.6-22.]

20-21
Cont.

At a public meeting on October 22, 2011, District representatives indicated that the following additional mitigation would be added to the Final EIR to address potential damages from construction activity:

- Contractor to prepare a work plan before construction may begin.
- Consider all available geotechnical information for vertical shoring areas.
- Plan must specify how contractor will install vertical shoring to minimize potential vibration damage to buildings.
- Place elevation monuments on adjacent buildings before construction.
- Monitor adjacent structures.
- Modify work plan to reduce potential damage if problems are observed.
- Phone number for reporting possible damage observations immediately.

20-22

However, *the proposed mitigation measures are insufficient to mitigate the potential damages to Association property and the property of the individual owners from the District's construction activity.*

20-23

Surfside III requires that in addition to recording the conditions of the property, the District shall include the *following additional mitigation measures* in the Final EIR:

1. The District shall require the contractors to apply construction techniques which do not cause damages. In particular, the contractors must be required to submit work plans prior to construction showing how to install and to prevent damages from shoring.

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2. In addition to pre and post construction recording, daily surveying and measurement of any subsidence or cracks in buildings must be performed by District representatives during construction to track any changes. Electronic monitors, new auger samplings with analysis, and elevation monuments to measure impact of soil movement are to be added. In particular, surveys have to be performed before and after shoring, dewatering, excavation and backfill.

3. The survey monuments must be kept in place for at least one year after the construction has been completed to track latent changes. The District will monitor these monuments monthly and notify Surfside III immediately if any changes are noticed.

4. Should the surveys or measurements notice any subsidence or cracks or other damage, construction must be halted and the District's contractors must submit plans how to prevent further subsidence and to fix the existing damages.

5. Surfside III and the owners of the affected building shall be notified immediately if the measurements and surveying reveal any subsidence, elevation changes or other damages.

6. The revised construction plans and measures to be implemented to prevent future damages and repair existing damages must be made available to Surfside III and the affected individual owners upon request.

7. The District shall indemnify Surfside III and individual owners for all damages due to construction activity performed by the District's contractors. Because the District has decided to pursue this project within feet of residential structures and common areas, it must be the District who is directly responsible for damages.

8. Surfside III and the individual owners shall have three years from the time they became aware to damages to their property from to submit a claim to the District for damages to their real property in accordance with the applicable statute of limitations for damages to real property. (Code of Civil Procedure section 338, subdivision (b); Government Code section 911.2, subdivision (a).)

9. Furthermore, Surfside III and the individual owners must be added as additional insured to the insurance policy of the District's contractors, including all subcontractors.

The District's position, as expressed in its response to the prior public comments by Surfside III; see Appendix L Response to Comments, p. 138-139, that any potential claims must be filed with the contractor's insurance company, contradicts the proposed mitigation measure of

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Cont.

20-25

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the RDEIR which provides that claims can be made against the District. The District's comment is also unacceptable because limiting liability for damages from the construction to the contractors' insurance carriers does not provide any mitigation. Since the District is proposing and implementing the project, it is unacceptable that it should be up to Surfside III or the individual residents to pursue, and possibly be forced to initiate litigation, against the contractors retained by District, to ensure damage is either repaired or paid for.

20-25
Cont.

V. Hazardous Materials 4.8-14

Groundwater contamination from the Halaco site is discussed in Section 4.8 of the RDEIR. The nearby Halaco Superfund Site, located approximately 1,500 feet east of the southern portion of the J Street Drain, is underlain by a groundwater plume impacted primarily by metals. The entrainment of metals in groundwater nearest the J Street Drain project area is considered potentially problematic, in that the contaminated plume could be encountered during construction activity, in which case treatment of the extracted groundwater would be required prior to discharge into the Perkins Drain.

20-26

The DEIR acknowledges that implementation of the proposed project may result in significant impacts to groundwater contaminants from the Halaco site as a result of dewatering. [RDEIR, p. ES-18.] Dewatering at the site would result in a temporary impact with regards to the potential migration of heavy metals within the ground water plume from the Halaco site. This is considered a significant impact and mitigation is required. [RDEIR, ¶ 4.8-14.]

20-27

The Recirculated DEIR includes as mitigation measure, that prior to dewatering activities between the Ventura County Railroad and the south project terminus, sheet piling shall be placed on the east side of the drain channel in order to prevent the migration of groundwater from the Halaco site. Should additional field testing that is being conducted show the need for sheet piling on the west side of the drain, sheet piling will be placed on both sides of the drain. [RDEIR, ¶ ES-18.]

20-28

As the RDEIR acknowledges, the mitigation proposal appears to resolve the problem with ground water migration, but it may potentially result in damages to SSIII buildings if vertical shoring is necessary on the west side of the canal.

Due to the fact that shoring may cause damages to SSIII, the District instead should install injection wells to achieve a groundwater barrier in order to prevent the Halaco plum from migrating and contaminating ground water.

20-29

At a public meeting on October 22, 2011 at Surfside III, representatives of the District indicated that the District will include groundwater injection wells as alternative mitigation

20-30

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measure. Surfside III reserves the right to submit further comments once the additional mitigation measures are included in the DEIR.

20-30
Cont.

VI. Conclusion

Based on the topics discussed in the Public Comment submitted on January 15, 2010 and this Public Comment, Surfside III asserts that the RDEIR is technically inadequate and several issues must be addressed and resolved in more detail before the EIR is issued and before the JSDP is allowed to go forward, if at all.

20-31

The RDEIR's conclusions that certain critical issues, such as Visual Resources [ES-7], Noise and Vibration [ES -16], Hazardous Material [ES-18] have "less than significant effect" with the proposed mitigation measures are factually and legally incorrect, and not supported by facts, evidence, or science. Furthermore, the Beach Elevation Management Plan is inadequate as presently proposed and will result in flooding danger to Surfside III. The RDEIR and the implementation of the JSDP as currently contemplated by the District are still insufficient.

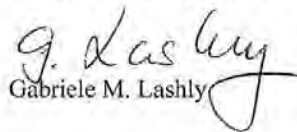
20-32

Surfside III requests the District to implement the additional mitigation measures proposed in this Public Comment to address the serious concerns described in the Previous Comment/Opposition and this Public Comment before the issuance of the Final EIR. If the issues are not adequately resolved, however, Surfside III reserves its right to initiate legal proceedings to protect itself against the environmental and other negative impacts that the proposed JSDP would cause if implemented as described in the RDEIR.

20-33

Very Truly Yours,

SLAUGHTER & REAGAN, LLP


Gabriele M. Lashly

GML/crc

cc: Surfside III Board of Directors

Letter 20
Slaughter & Reagan, LLP
November 7, 2011

- 20-1 This comment includes introductory remarks. This comment does not specifically address the adequacy of the analysis provided in the EIR; therefore, no further response is required.
- 20-2 This comment states that comments and objections to the 2009 EIR were previously submitted on January 15, 2010. This comment does not specifically address the adequacy of the analysis provided in the EIR; therefore, no further response is required.
- 20-3 This comment states that the District agreed to provide documentation that the U.S. Fish and Wildlife Service (USFWS) did not agree to a waiver to implement the direct beach outlet alternative. The District consulted with Chris Dellith, Senior Fish and Wildlife Biologist with the USFWS (who administers the Endangered Species Act) and Antal Szijj, Senior Project Manager with the USACE (who administers the Clean Water Act), regarding the possibility of creating a permanent connection to the ocean or manually breaching the berm during the summer via Email on November 10, 2011 and November 15, 2011, respectively. The Emails were provided to the Surfside III Homeowner's Association Board on November 16, 2011.
- 20-4 This comment summarizes the determination by the District to recirculate the EIR for public review and comment. This comment does not specifically address the adequacy of the analysis provided in the EIR; therefore, no further response is required.
- 20-5 This comment summarizes the EIR discussion regarding the replacement of the Emergency Action Plan (EAP) to the BEMP and summarizes the criteria thresholds for implementation of the BEMP. This comment also states Surfside III's general approval of the change from the EAP to a BEMP. This comment does not specifically address the adequacy of the analysis provided in the EIR; therefore, no further response is required.
- 20-6 This comment requests that the District include measures in the BEMP that will require constant video observation of the berm height during the 72 hour predicted storm event and directly through District personnel to ensure that the height of the berm does not exceed 6.5 NGVD. The District has installed a camera at the Hueneme Drain Pump Station that visually monitors the water level in the J Street Drain. In addition, the District has installed a stream gage in the J Street Drain directly across from the Hueneme Drain Pump Station that records the water level in the drain and notifies several District personnel via cellular phone if the level approaches the flood stage. District staff that receive this notification are required to respond immediately. J Street Drain stream gage data may be accessed via the internet at the following address: <http://www.vcwatershed.net/fws/VCAHPS/php/ahps.php?gage=793>. Furthermore, after BEMP implementation, District staff monitors the beach and lagoon elevation daily until the lagoon breaches.
- 20-7 This comment states that condition number 3 for BEMP activation is vague. The District's Operations and Maintenance (O&M) Deputy Director will be in charge of monitoring the berm and storm events to determine when the BEMP threshold criteria have been met. Once the BEMP thresholds have been met, the BEMP will be implemented by the O&M Deputy Director. As stated in Section 3.0 of the EIR, the lead role of the District in flood emergency avoidance is aided by the County's Flood Warning System and by its Automated Local Evaluation in Real Time (ALERT) system. The Flood Warning System provides advance weather forecasts. ALERT

is a hydrologic data collection and recording system that has been in operation since 1979. ALERT provides reliable rainfall and flow information for determination of storm magnitude. ALERT will be used as the primary source for rainfall and storm event data in the BEMP. The District water level gauge in the J Street Drain will be primarily used to monitor water surface elevation to help determine whether the lagoon is currently connected to the ocean (lagoon is empty) or closed off by the beach sand berm (lagoon is full). If a storm of any magnitude is predicted through the Flood Warning system and the other two BEMP threshold conditions are met (i.e. the Ormond Beach Lagoon is fully enclosed by the Ormond Beach sand berm and the Ormond Beach sand berm elevation adjacent to the lagoon is observed to be above 6.5 feet NGVD), the BEMP would be implemented. All three of the BEMP threshold conditions being met “would likely cause the designed capacity of the J Street Drain to be exceeded if the lagoon water surface elevation cannot over top the observed adjacent beach sand elevation.” As stated, all three conditions must occur simultaneously to enact the BEMP. Once the BEMP threshold criteria have been met, the bulldozer will be pre-positioned (72 hours prior to the predicted storm) at the south side parking lot of Port Hueneme Beach Park. As soon as the BEMP is enacted, the dozer operator accompanied by District environmental staff would move the dozer to the designated beach grooming location, and shave the sand berm down to the maximum safe beach elevation. This would ensure that the berm would breach in response to storm runoff, allowing the water to flow freely to the ocean, and preventing flooding. Condition 3 of the BEMP (page 3-30 of the EIR) will be modified to clarify that a storm of any magnitude may trigger its implementation.

20-8 This comment addresses the “minor rainstorm” on October 5, 2010, which caused the water to rise in the J Street Drain and threatened to flood Surfside III property. According to the comment, the Surfside III drains between Buildings 7 and 17 were unable to drain to the channel due to the back up of water. This information is known to the District and does not change the conclusions of the EIR, or the purpose and need for the project.

20-9 This comment requests that the BEMP be triggered by any storm between October and May. The BEMP would be implemented when conditions warrant as outlined in Section 3.0 of the EIR. One of the conditions is a 72-hour prediction of a storm event of any magnitude affecting the watershed. As stated above in response 20-7, this will be clarified in the EIR. The BEMP would be implemented, given all three conditions are met, before the predicted storm hits.

Regularly maintaining the sand berm from October to May would require the continual use of heavy equipment. Continual maintenance using heavy equipment such as bulldozers would not be permitted by the regulatory agencies due to environmental concerns and restrictions; therefore, the BEMP would only be implemented once all three criteria are met. The berm will be monitored per the operations and maintenance procedures outlined by the District. The BEMP realistically coordinates the grooming response with sensitivity to environmental resources.

20-10 This comment requests that trash boom installation be included as a mitigation measure in the EIR. The existence of trash in the J Street Drain is an existing condition. The proposed project would not cause an increase in trash and debris entering the drain; therefore, mitigation is not required under CEQA. The trash collection devices would be installed and maintained as part of the District’s compliance with its National Pollutant Discharge Elimination System (NPDES) Municipal Stormwater Permit (Permit CAS004002, Order No. R4-2010-0108) issued on July 8, 2010 (see page 4.3-11 and 12).

- 20-11 This comment states that despite the decision to use vertical shoring rather than trenching, visual resources would be degraded, noise and vibration would increase, and risk of damage to Surfside III property would increase. Vertical shoring rather than open cut trenching along the property line would reduce the number of trees and shrubs (110) to be removed from Surfside III and from District right-of-way by up to 44 individuals (or up to 40 percent of the trees and shrubs originally identified for removal), preserving more of the existing visual resources. Mitigation Measure VIS-2 would require the replacement of the removed trees and large shrubs within the Surfside III property at a 1:1 ratio and would reduce the construction and operational impact to below a level of significance. Mitigation Measure VIS-3 would require temporary visual screening. Mitigation Measure NOISE-2 requires a temporary noise barrier during construction.

To further minimize visual impacts, the District proposes an additional mitigation measure that would involve installing a 10- to 12-foot-tall fence with green vinyl screening along the portion of the District and Oxnard Wastewater Treatment Plant property line that is not currently fenced. Mitigation Measure VIS-4 has been added to Section 4.1 of the EIR.

VIS-4 Prior to construction a 10- to 12-foot-tall fence with green vinyl screening will be installed along the portion of the District and Oxnard Wastewater Treatment Plant property line that is not currently fenced.

To address residents' concerns regarding the potential for vibration impacts to affect structures along the J Street Drain, the Mitigation Measure NOISE-3 requiring video documentation of pre- and post-project condition was added to Section 4.6 of the RDEIR. To address concerns about potential movement of Surfside III residential structures nearest the J Street Drain, the District proposes the new Mitigation Measure GEO-3:

- a) A Licensed Surveyor shall plan and install a survey monument monitoring system on buildings within 25 feet of proposed vertical shoring to collect monthly baseline data for six months before construction. The monuments shall remain in place and be monitored monthly for one year after construction completion to track any latent changes. During construction, the Licensed Surveyor shall conduct surveys corresponding to major phases of work such as shoring installation, excavation, and backfill.
- b) Before Phase 1 construction may begin, the District shall require the Contractor to prepare a Work Plan, which would take into account all available geotechnical information for the areas where vertical shoring and sheet piles are to be installed. The Plan would specify the contractor's approach to installing vertical shoring and sheet piles in a manner that would avoid and minimize associated potential vibration damage to adjacent structures.
- c) The Work Plan shall require the Contractor to take daily measurements of the survey monuments on adjacent structures described in (a) above to track potential changes during construction.
- d) Should the surveys or measurements described in (a) and (c) above indicate subsidence or other damage due to construction activities, the Contractor shall modify the Work Plan to address the causes. Property owners within 25 feet of the proposed shoring shall be promptly notified of observed damage, and any Work Plan revisions shall be available to property owners upon request. For multi-unit structures, the District shall identify a single designated representative with whom to communicate.

- e) The District shall provide a construction contact telephone number to adjacent residents before work commences so that they may report possible observations of damage immediately to the District.
- 20-12 This comment states that construction will expose residences to unsightly views. As provided in the response to comment 20-11 above, the District proposes a new mitigation measure (Mitigation Measure VIS-4) that would involve installing a 10- to 12-foot-tall fence with green vinyl screening along the portion of the District and Oxnard Wastewater Treatment Plant property line that is not currently fenced.
- 20-13 This comment states that 1:1 replacement of landscaping with small boxed trees will not be in kind. Please refer to Letter 17, response to comment 17-2 for response regarding replacement of trees and landscaping.
- 20-14 This comment states that tree removal would have a significant effect on the use and enjoyment of the Surfside III property. Please refer to responses to comments 20-11 through 20-13 regarding visual impacts and new mitigation requiring additional privacy screening.
- 20-15 This comment states that installation of a 12-foot-high fence would insufficiently screen views from second- and third-floor units. As described in response to comment 20-11, to further minimize visual impacts, the District proposes an additional mitigation measure that would involve installing a 10- to 12-foot-tall fence with green vinyl screening along the portion of the District and Oxnard Wastewater Treatment Plant property line that is not currently fenced. Mitigation Measure VIS-4 has been added to Section 4.1 of the EIR. The combination of this mitigation measure, the decision to employ vertical shoring to preserve approximately 44 additional trees and shrubs, and replacement of removed trees and shrubs at a 1:1 ratio will reduce impacts to visual resources.
- 20-16 This comment summarizes the findings of the Sediment Transport Study. This comment does not specifically address the adequacy of the EIR. No further response is required.
- 20-17 This comment requests additional mitigation lowering the sand berm elevation to 6.5 feet elevation outside the storm season to increase the flow of water from the J Street Drain into the lagoon and mitigate the bath tub effect during the time that sediment transport has not yet occurred sufficiently to lower the lagoon bottom elevation. Outside the storm season, the J Street Drain water elevation naturally rests at approximately 6.0 to 6.5 feet NGVD, as storm water runoff is lacking and normal urban runoff entering the lagoon slowly percolates through the beach and into the ocean. Therefore, there is no need to groom the beach elevation to 6.5 feet NGVD outside the storm season, and this may cause unnecessary adverse impact to threatened and endangered shore birds. Please also refer to response to comment 20-9 for response.
- 20-18 This comment states concerns about damage to Surfside III structures. Please refer to the response to comment 20-11.
- 20-19 This comment states that dewatering and vertical shoring will have negative impacts on the Surfside III property. As stated in the response to comment 20-11, to address concerns about potential movement of Surfside III residential structures nearest the J Street Drain, the District proposes a new mitigation measure (Mitigation Measure GEO-3). Please refer to response to comment 20-11 for mitigation language.

0.3 Response to Comments

- 20-20 This comment reiterates the residents' concern regarding liquefaction and property damage. Please refer to responses to comments 20-19 and 20-11 above.
- 20-21 This comment concurs with Mitigation Measure Noise-3. No additional response is required.
- 20-22 This comment states a District commitment made during an October 22, 2011 meeting with the Surfside III community regarding additional mitigation for potential vibration impacts. As stated in response to comment 20-11, to address concerns about potential movement of Surfside III residential structures nearest the J Street Drain, the District proposes a new mitigation measure (Mitigation Measure GEO-3). Please refer to response to comment 20-11 for mitigation language. This measure was expanded following the October 22, 2011 meeting.
- 20-23. This comment suggests that the mitigation measures shared on October 22, 2011 are insufficient to mitigate the potential damage to the property. As noted, the District has proposed new mitigation to ensure impacts to the adjacent property are minimized to the greatest extent possible.
- 20-24 This comment requests the addition of more mitigation measures to address vibration impacts. As stated in responses to comments 20-11 and 20-22, to address concerns about potential movement of Surfside III residential structures nearest the J Street Drain, the District proposes a new mitigation measure (Mitigation Measure GEO-3), which was enhanced after the October 22, 2011 meeting. Please refer to response to comment 20-11 for mitigation language.

Regarding Item 7 on the list of additional requested mitigation measures, the District will require its contractor to exercise due care during construction, and will further require the contractor to repair or replace any damage to adjacent property resulting from construction activities. If any property owner sustains property damage as a result of the project, they may submit a claim for reimbursement to the District. Contractual indemnity is not necessary, as property owners are protected through the tort process.

Regarding Item 8 on the list of additional requested mitigation measures, the timeline for presenting claims is governed exclusively by Government Code Section 911.2, subdivision (a), which states that the time limit for presenting claims for property damage is one year from the accrual of the cause of action. The cited "applicable statute of limitations for damages to real property" refers to when a lawsuit must be filed, and does not apply to the presentation of claims. An additional two years to present a claim would be in conflict with the Government Code.

Regarding Item 9 on the list of additional requested mitigation measures, individual owners cannot be included as "additional insured" to the insurance policies of the District's contractors and subcontractors because the construction contract is between the public agency (in this case the District) and the contractor, not the contractor and the property owners. "Additional insured" must be one of the contracting parties.

- 20-25 This comment states that the District's response to a previous comment regarding filing claims with a contractor's insurance company contradicts one of the EIR mitigation measures. As stated in Appendix L, Letter 13, response to comment 20-12, "it is the responsibility of all contractors to obtain sufficient insurance to cover their construction activities. Any potential claims must therefore be filed with the contractor's insurance company. The District, however, will ensure proper documentation of private property conditions before and after project implementation to help ensure that any potential construction-related damages are compensated." A claim may also

be submitted to the District, but the District would then forward it to the contractor's insurance company. Mitigation Measure NOISE-3 requires the District to video document pre- and post-construction conditions and facilitates the submittal of claims for compensation. The claims would be processed through the contractor's insurance company.

- 20-26 This comment summarizes potential impacts related to groundwater dewatering. Please refer to Letter 13, response to comment 13-6 for response.
- 20-27 This comment summarizes the impact conclusion in Section 4.8 of the EIR regarding potential migration of heavy metals. This comment does not address the adequacy of the conclusion. No further response is required.
- 20-28 This comment acknowledges Mitigation Measure HAZ-1 and notes that the mitigation measure may result in damage to Surfside III due to vertical shoring. Additional mitigation has been added to respond to concerns regarding property damage. Please refer to response to comments 20-11, 20-22, and 20-24. In addition, the District has determined that mitigating through use of injection wells instead of sheetpiling is feasible, and is therefore modifying HAZ-1 accordingly.

HAZ-1 Prior to dewatering activities between the Ventura County Railroad and the south project terminus, ~~sheet piling shall be placed on the east side of the drain channel in order to prevent the migration of groundwater from the Halaco site~~ the District shall install or use existing monitoring wells in order to verify the direction of groundwater movement at the time of dewatering. If it is determined that there is a potential for groundwater migration at the site, the District shall install and operate five injection wells. Injection of water into the shallow aquifer at the beach parking area between the J Street Drain and the Halaco Site would minimize the migration of groundwater from beneath the Halaco Site. ~~Note that additional field testing is currently being conducted to provide a more representative value for hydraulic conductivity for the vicinity of the drain. In the event that the results show the need for sheet piling on both the west and east side of the drain, sheet piling will be placed on both sides of the drain.~~

- 20-29 This comment requests that injection wells be installed to achieve a groundwater barrier instead of sheet piling for mitigating the Halaco plume. Please see response 20-28 above.
- 20-30 This comment notes that at the public meeting, the District indicated that groundwater injection wells will be considered as an alternative mitigation. Surfside III residents' request the right to submit further comments on the new mitigation measures proposed in the Final EIR.

CEQA Guidelines Section 15089 states:

- (a) The Lead Agency shall prepare a final EIR before approving the project. The contents of a final EIR are specified in Section 15132 of these Guidelines.*
- (b) Lead Agencies may provide an opportunity for review of the final EIR by the public or by commenting agencies before approving the project. The review of a final EIR should focus on the responses to comments on the draft EIR.*

The District will hold a public hearing prior to certifying the Final EIR. The public will be allowed to comment at that time.

0.3 Response to Comments

- 20-31 This comment reiterates the disagreements outlined above and in the comment letter submitted on January 15, 2010 (see Letter 24). Please refer to responses to comments 20-5 through 20-30 above and Appendix L of the RDEIR for responses.
- 20-32 This comment refutes the conclusions in the EIR regarding Visual Resources, Noise and Vibration, and Hazardous Materials and states that the BEMP is inadequate as proposed. Please refer to responses to comments 20-6 through 20-15 and 20-22 through 20-29 above for responses.
- 20-33 This comment requests that the District implement the additional mitigation measures proposed by Surfside III as identified in comment 20-24. Please refer to response to comment 20-24 above.

Angela Bonfiglio - Robert Banfill comments on J Street Drain R-DEIR

From: "bob banfill" <bob_banfill@yahoo.com>
To: "JStreet_Drain.Comments@ventura.org" <JStreet_Drain.Comments@ventura.org>
Date: 11/7/2011 9:11 AM
Subject: Robert Banfill comments on J Street Drain R-DEIR
Attachments: BB input Letter Comments RDEIR.doc

Please see letter below, also attached.

Robert A. Banfill

607 Lighthouse Way, Port Hueneme, CA. 93041

Via Registered Mail, fax, hand delivered and
Email: JStreet.Drain.Comments@ventura.org

Ventura County Watershed Protection District
Attn: Angela Bonfiglio Allen
800 South Victoria Avenue
Ventura, CA 93009-1600

**Re: *Re-circulated Draft Environmental Impact Report for J Street Drain project:
Comment input during review period.***

As an owner of property in the J Street canal drainage area, a Ventura county tax payer and a resident of Surfside III, I hereby submit the following public comments to the Recirculated Draft Environmental Impact Report, J Street Drain Project, Ventura County, California, September 2011, prepared for the Ventura County Watershed District ["District"] by HDR Engineering.

Summary of Issues/Problems with the DEIR and R-DEIR for J Street Drain Project

1. Improper consideration of impact on the Ormond Beach and Ormond Beach Lagoon
2. Incomplete due diligence when exploring options to consider for better drainage
3. Premature development of projects while delaying existing flood risks.

21-1

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4. Increase of mosquito breeding areas with new J Street Design
5. Possible impact on SS III buildings, landscaping and potential flooding risks
6. Failure to include Oxnard 2020 Plans re: major housing developments in drainage areas
7. VCWPD good faith community interaction/review issues.

21-1
Cont.

For the above reasons, detailed in the following pages I request VCWPD reassess the priority and design of a J Street canal upgrade at this time and focus funds and assets towards existing higher flood risk areas.

21-2

Expanded detail of summarized items:

1. Improper consideration of impact on the Ormond Beach and Ormond Beach Lagoon
 - a. The proposed BEMP will increase number of lagoon drainages per year
 - b. The lowering of the J Street canal will scour the existing lagoon deeper changing topography, chemistry, possibly vegetation and aquatic life for several years.
 - c. No documented co-ordination of planning and approvals with US F&W, Sierra Club, Oxnard City Plan 2020 and other parties of interest.
2. Incomplete due diligence when exploring options to consider for better drainage
 - a. The VCWPD staff indicated they had never requested waivers in writing from USF&WS before considering plans and options on drainage canal design.
3. Premature development of projects while delaying existing flood risks.
 - a. The VCWPD has stated there is not now a FEMA or other required need for the J Street canal improvement and they are doing the project based on their study.
 - b. Existing flood risks in 2010 have been documented from the Oxnard Industrial Drain to the Oxnard Waste Water Treatment Plant and other industrial sites in the area. Only the BEMP and nothing in the J Street canal design reduces that flooding issue which is of critical interest and potentially high impact to Surfside III and to the city of Oxnard as a whole.

21-3

21-4

21-5

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4. Increase of mosquito breeding areas with new J Street Design
 - a. The new design of the canal will increase the depth of the 'standing water' in the SS III area but will greatly increase the **total square footage of surface water of all depths** up the J Street area thereby increasing standing water much of the year and indirectly increasing mosquito issues.
 - b. The new standing water in the J Street project, as it is proposed, between a large number of apartments and condominiums occupied by transient low income families with large numbers of children and possible poor vaccination and limited health care coverage could produce both an economic and health problem for Oxnard and Ventura County.

21-6
5. Possible impact on SS III buildings, landscaping and potential flooding risks
 - a. SS III has two 30+ unit three story condominiums within 10 feet of the proposed project at its maximum depth. These buildings are built over 30 years ago, on filled land, in a liquefaction zone, and neighboring a building that has already had a subsidence problem. The project includes ground water pumping, possibly ground water injection which has a potential for damages to the described buildings.
 - b. The proposed insurance is focused on individual contractors and probably requiring litigation by SS III to recover damages. It should be coverage from the VCWPD and/or Ventura County as the responsible financial risk party to SS III. If problems or faults existed with individual contractors that should **not** be a SS III issue to resolve or seek compensation.

21-7
6. Failure to include Oxnard 2020 Plans re: major housing developments in drainage areas
 - a. Since the original DEIR and the R-DEIR, the city of Oxnard has passed its 2020 plan which includes a major housing area in/near the drainage areas. These new developments should be integrated into the priority of drainage and flooding upgrades before any area projects are started.

21-8

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7. VCWPD good faith community interaction/review issues.

- a. Withdrawal of Initial DEIR with clearly announcing limitations on future R-DEIR comment areas. After design and flooding issues prompted the early withdrawal of the original DEIR for J Street the VCWPD **did not clearly notify** identified persons of interest of the dis-allowing comments on some DEIR sections and not making those areas public via internet during the R-DEIR review. This should not be allowed to happen.
- b. VCWPD communications and notifications to impacted home owners has been spotty and in many cases stated notification mailings have not been delivered and were routed through San Diego at the last possible notification date or possibly non-existent. A large population on the J Street Canal area is of Hispanic origin and there is a question about the adequate notification and education to those owners/residents.

21-9

Conclusion:

- A. The J Street Canal project is a premature effort to correct a relatively rare potential flood.
- B. The VCWPD and Ventura County Taxpayers have higher priority usage of the VCWPD skills and funds.
- C. The design raises significant issues for Surfside III COA and residents
- D. The VCWPD is not currently proposing adequate plans and insurance to fully mitigate and possibly compensate SS III for the impact to SS III.
- E. The proposed design impacts Ormond Lagoon and doesn't solve the protection of endangered species, possibly exacerbating those risks. Including adding larger amounts of runoff from streets with oil residue

21-10

and pesticide/fertilizer tainted agricultural run-off.

F. VCWPD does not appear to have conducted good faith and timely notification and inclusion of all potentially interested parties including Oxnard city planning, USF & WS, Sierra Club, Hispanic residents on J Street and timely/complete notification of documents and meetings to self-identified persons wishing to comment.

21-10
Cont.

Sincerely,

Robert A. Banfill

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Letter 21
Robert A. Banfill
November 7, 2011

This letter is identical to Letter 8. Please see responses to Letter 8 comments.

From: Pamela Evans [evanspd1@me.com]
Sent: Monday, November 07, 2011 9:58 PM
To: Elizabeth.Martinez@ventura.org
Subject: J Street Drain.

As a homeowner who lives adjacent to the drain, I do not think it should be expanded. My tenants are constantly complaining about Mosquitos which Ventura continues to tell Surfside HOA that there is no issue. Please put yourself in my tenant's place and reject this expansion. Our community should not take the brunt of your expansion, unless you can afford to provides us funds to make up for the loss in our property values.

22-1

Please find another way... please

Pamela Evans

Dilbeck Real Estate Real Living

(818) 216-0591

pamela.evans@dilbeck.com

file:///C:/pwworking/sac/d0319576/J Street Drain..htm[11/28/2011 3:40:18 PM]

Letter 22
Pamela Evans
November 7, 2011

22-1 This comment states general objection to the proposed project and specifically references the mosquito issue.

Please refer to Letter 12, responses to comments 12-17 through 12-19 and 12-28 through 12-40 for discussion regarding mosquitoes.

From: "Linda Kodman" <linda.kodman@live.com>
To: "JStreet_Drain.Comments@ventura.org" <JStreet_Drain.Comments@ventura.org...>
Date: 11/7/2011 6:44 PM
Subject: Mosquito problem at Surfside III

I wish to convey my impassioned request to make sure any plans for the J Street drain include appropriate mosquito abatement. I have been plagued by spider bites the past few years and recently learned from the pest control company that the increased population of spiders in my building (6) at Surfside III is shared by the other building along the canal and is due to the abundance of food...mosquitos.

Two years ago it got so bad that I had 19 bites on me at one time! Can you even imagine how miserable I have been? It has been so bad that I had to leave work to buy anti-itch medication and had to try prescription meds because nothing else seemed to work. It is mostly a seasonal problem, but a very long season. Our building often looks like a haunted house due to the cobwebs. The pest control company is prohibited by law to spray the railings, trees or other locations that would put their chemicals into the air. My options are very limited.

The ideal is to not have chemicals sprayed, but rather have a body of water that continuously flows adequately to prevent the mosquitos from breeding/hatching. Please help!

I would be happy to answer any questions you might have.

Linda Kodman
209-658-6884 cell
805-981-5270 work

23-1

23-2

Letter 23
Linda Kodman
November 7, 2011

- 23-1 This comment requests mosquito abatement to address an increased population of spiders at Building 6 (Surfside III), which are presumed to have caused several bites. Spiders feed on many types of insects. An increase in insect population within the lagoon and vicinity may result in an increase in spider population in the area. However, according to Vector Control, they have not received complaints from residents regarding spiders (Cary Svoboda, Personal Communication, January 4, 2012). Mr. Svoboda confirmed the findings in the EIR that the J Street Drain is not the source of the mosquito issue and also indicated that the adjacent lagoon is a source for numerous types of insects that would be a food source for spiders. Please refer to Letter 12, comment number 12-28, bullet point three for a discussion regarding the recent source of mosquito breeding in the area.

Spider bites are rare since spiders do not “feed” on humans. Additionally, not all species of spiders bite. There are many that do not bite and are not venomous. According to Mr. Richard S. Vetter with the Department of Entomology at the University of California, Riverside, a person would not have multiple bites from one or many spiders at any one time, as spiders bite humans only to defend themselves. Mr. Vetter also indicated that in general spider bites are extremely rare, and that the increased occurrence of spiders in an area could be due to a multitude of factors, as well as an increase in insect (not just mosquito) population (Personal Communication, January 5, 2012). Therefore, there is no correlation between either the existing J Street Drain or the proposed project and the spider population within the area.

- 23-2 The comment requests a body of water that continuously flows. While mosquito control best management practices (BMPs) largely advocate reducing or eliminating standing water in channels and drains as the primary strategy for mosquito control, the endangered species requirements in Ormond Lagoon prevent such practices.

The current J Street Drain has a concrete substrate and relatively steep sides, both of which inhibit emergent vegetation growth along the bottom and margins of the channel. Lack of vegetation can prevent mosquito production as no sheltered areas for mosquito larvae to use as refuge are provided. The current J Street Drain is 20-30 feet wide. Because of this wide, open surface, the lack of vegetative cover, and the location near the Pacific Ocean, the water surface in the drain experiences wind and wave action, especially near the beach. Even relatively minor wind and wave action on the surface of the water prevent the breathing siphons of mosquito larvae from maintaining a connection to the air, therefore effectively drowning the larvae. This makes the current J Street drain not ideal habitat for mosquito breeding. In addition, the depth of the J Street Drain allows it to support numerous fish of various sizes (Section 4.2, page 4.2-14 of the EIR) that will opportunistically prey on mosquito larvae. Recent inspections of the J Street Drain by California Department of Public Health, Vector-Borne Disease Section staff confirmed that the J Street Drain does not currently provide suitable habitat to support large mosquito populations (Larry Walker Associates 2011). Additionally, the open channel allows for safe and easy maintenance, monitoring, and treatment.

**PUBLIC COMMENT / OPPOSITION OF SURFSIDE III
CONDOMINIUM OWNERS' ASSOCIATION, INC. TO J STREET
DRAIN PROJECT DRAFT ENVIRONMENTAL IMPACT REPORT**

JANUARY 15, 2010



LOEWENTHAL, HILLSHAFFER & ROSEN LLP
DAVID A. LOEWENTHAL
KEVIN P. CARTER
15260 VENTURA BOULEVARD, SUITE 1400
SHERMAN OAKS, CA 91403
COUNSEL FOR SURFSIDE III
CONDOMINIUM OWNERS' ASSOCIATION

Surfside III Condominium Owners' Association, Inc. (hereafter "SSIII") hereby submits the following public comments and opposition regarding the *Draft Environmental Impact Report J Street Drain Project Ventura County, California* (hereafter "DEIR") prepared for the Ventura County Watershed Protection District (hereafter "VCWPD") by HDR Engineering, Inc.

I. INTRODUCTION.

SSIII is a not for profit common interest development duly organized and incorporated pursuant to the laws of the State of California for the purpose, among other things, of providing maintenance, repair and preservation of the residential condominium project (hereafter "SSIII Project") comprised of two hundred and fifty eight (258) condominiums and fifty one (51) townhomes completed in 1976 in Port Hueneme, Ventura County, California.



Much of the SSIII project is directly adjacent to the J Street Drain Project (hereafter "JSDP") - at some points the Drain Canal is only several feet from SSIII residential buildings and improvements. Due to the close proximity, SSIII is likely more

24-1

1 directly affected by the JSDP than most, if not all, of the local community. The
2 diagrams above, prepared for the DEIR, illustrates the proximity. (Yellow dotted line
3 depicts the J Street Drain.)

4 The actual proximity of SSIII structures to the J Street Drain is depicted in the
5 photo below:



16 Being the closest residential project to the JSDP, SSIII is also the most directly
17 affected by the multiple problems and issues that will be created and exacerbated if the
18 JSDP is implemented in its current state as described in the DEIR.

20 II. SUMMARY OF ISSUES.

21 The SSIII Association, along with the majority of SSIII homeowners, has serious
22 concerns about the direct and indirect impacts that the contemplated JSDP will have
23 on the SSIII community as well as the local community in general. These issues
24 include, but are not limited to, the following:

- 25 • Public Health – Worsening of already intolerable mosquito infestation;
- 26 • Public Health and Water Resources – Stagnant Water / Backwater
27 Effect / Permanent 4 foot “bathtub” in the J Street canal;

24-1
Cont.

24-2

- 1 ▪ Public Health / Hazards and Hazardous Materials – Proximity to
- 2 Halaco Superfund Toxic Site;
- 3 ▪ Noise and Vibration;
- 4 ▪ Visual Resources – Removal and non-replacement of mature trees
- 5 ▪ Damage to SSIII Property.

24-2
Cont.

6 **III. STANDARD FOR DETERMINING TECHNICAL ADEQUACY OF DEIR**

7 The standard for adequacy of an EIR or DEIR are described in CEQA Guideline
8 Section 15151 as follows:

9 “An EIR should be prepared with a sufficient level of analysis to provide
10 decision-makers with information which enables them to make a decision which
11 intelligently takes account of environmental consequences. An evaluation of the
12 environmental effect of a proposed project need not be exhaustive, but sufficiency of
13 an EIR is to be reviewed in the light of what is reasonably feasible. Disagreement
14 among experts does not make an EIR inadequate, but the EIR should summarize the
15 main points of disagreement among the experts. The courts have not looked for
16 perfection but for adequacy, completeness, and good faith effort at full disclosure”.

24-3

17 Thus, the important element is a complete, good faith effort at full disclosure. As
18 shown below, there are several areas in the DEIR that do not meet this standard and
19 must be expanded with more facts and alternatives to be deemed adequate.
20 Regarding several important issues, the DEIR simply glosses over the associated
21 problems and comes to an unsupported conclusion that any impact will be “less than
22 significant”. As it stands, SSIII asserts that the DEIR is technically and factually
23 inadequate.

IV. PUBLIC HEALTH - THE INCREASE OF STANDING AND STAGNANT WATER IN THE JSDP ADJACENT TO SSIII WILL SIGNIFICANTLY EXACERBATE THE ALREADY INTOLERABLE AND DANGEROUS MOSQUITO INFESTATION.

The Ventura County Environmental Health Services Website states the following relating to mosquitoes:

"Mosquitoes are blood sucking insects that develop in the water in their early stages and hatch out as adults often seeking a blood meal. They may transmit many diseases"

"Many of these have specific habitats, for example; some may prefer creeks or marshes, others prefer gutters or catch basins . . . not all mosquitoes bite man."

"All mosquitoes require water in which to pass their early life stages (eggs, larva and pupal stages); this usually takes from 7 to 10 days. Most mosquitoes lay their eggs in standing water, where they hatch in a day or two. . . **Any location where water stands for over two weeks may become suitable for mosquito breeding.**" (Emphasis added.)

"The female mosquito may need blood meals for their egg development. This is when potential diseases are transmitted".

(See County of Ventura Environmental Health Information, attached as Exhibit "A" to Declaration of Kevin P. Carter.)

The DEIR also describes mosquitoes as follows:

"An organism, such as a mosquito or tick that carries disease-causing microorganisms from one host to another is known as a disease vector.

Mosquitoes are of particular concern because of their breeding habits.

The mosquito's water requirement during breeding makes areas with quantities of standing water breeding grounds for mosquitoes. Areas with natural and induced standing water are susceptible. . . Mosquitoes are

24-4

1 potential vectors of organisms that can cause disease to pets, domestic
 2 animals, wildlife, or humans. Although 12 mosquito-borne viruses are
 3 known to occur in California, only West Nile virus, western equine
 4 encephalomyelitis virus, and St. Louis encephalitis virus are significant
 5 causes of human disease in California. Mosquito-borne diseases that are
 6 of concern in Ventura County are St. Louis encephalitis (SLE), western
 7 equine encephalitis (WEE), West Nile virus (WNV) and malaria." (DEIR,
 8 p. 4.10-1, Section 4.11.1.)

24-4
Cont.

9 **A. THE DEIR IGNORES THE INCREASED MOSQUITO BREEDING AND**
 10 **THE PERMANENT "BATHTUB" EFFECT THAT WILL RESULT FROM**
 11 **THE CONTEMPLATED DRAIN EXPANSION.**

12 The DEIR acknowledges that the large quantities of standing water in the
 13 current configuration of the Drain creates mosquito breeding sites. (DEIR, 4.11.1) As
 14 acknowledged in the DEIR: "The expected maximum water level is regulated by the
 15 lowest beach crest elevation or the height of the sand berm, above which a breach in
 16 the lagoon would take place (in the absence of manual breaching) and water from the
 17 lagoon would discharge into the Pacific Ocean. When the lagoon closes off to the
 18 ocean, there are times when the backed up, or 'ponded' water, extends from the
 19 lagoon to just upstream of Hueneme Road in the drain . . . Because of the dynamic
 20 nature of the project area, the level of water at the lagoon and drain varies throughout
 21 the year. Because the water level is typically higher prior to breaching, the water
 22 ponds further upstream in the drain. At that time, the water level may reach 6.5 feet,
 23 covering about 41.6 acres of the lagoon and the drain and extending just north of
 24 Hueneme Road." (DEIR, Page 4.10-2, Section 4.11.1.)

24-5

25 Currently, standing water in the portion of the drain adjacent to SSIII is allowed
 26 to drain on occasion when there is a natural breach of the sand berm. This happened
 27 most recently during the month of December 2009. After the breach, virtually no water
 28 was left in the portion of the drain adjacent to SSIII.

1 However, the DEIR completely ignores
 2 the fact that by deepening the drain by
 3 approximately four feet, a "dam" will be created
 4 just south of SSIII at the end of the J Street
 5 Drain and a "bathtub" of four foot standing
 6 water will be created adjacent to SSIII that
 7 cannot drain whatsoever under any
 8 circumstance, including breach of the sand
 9 berm. It is undisputed that throughout the
 10 summer months, there will always be at least
 11 four feet of stagnant water in the drain adjacent
 12 to SSIII. At the end of the drain, just past SSIII,
 13 the "dam effect" will exist where the deepened
 14 drain meets the four foot higher beach condition near the Pump Station and Ormond
 15 Beach Lagoon. The photo above depicts where the deepened canal ends (near
 16 residential structure) and where the "dam" holding at least four feet of water in the drain
 17 canal will occur.



24-5
 Cont.

18 Thus, the deeper and wider area of increased standing water will be, in
 19 essence, permanently stagnant, especially during the summer months. This omission
 20 in the DEIR is discussed below in Section IV(C) as well. For purposes of this Section,
 21 it is critical to note that the DEIR fails to acknowledge the "dam" or "bathtub" effect and
 22 permanent four feet of stagnant water that will be in Phase I of the JSDP directly
 23 alongside and within feet of the Surfside Project. It is a clear fact that mosquito
 24 breeding will significantly increase if JSDP proceeds as currently intended.

25 Notwithstanding the failure to acknowledge the obvious "bathtub" effect that will
 26 perpetuate at least four feet of standing water, the DEIR concedes that mosquito
 27 breeding will likely increase if the project is implemented:

1 "As a result, the proposed project would increase the surface area and amount
2 of standing water in the drain. As shown in Figure 4.11.1, under both conditions, the
3 Phase I (end of the drain to north side of Hueneme Road [3,430 linear feet]) portion of
4 the drain would result in an increase of one acre of water surface area at a water
5 surface level of 6.5 feet due to the increased channel width. . . **Therefore, the**
6 **proposed project would result in increased standing water for potential mosquito**
7 **breeding sites and additional vector sources within the project site."** (Emphasis
8 added.) (DEIR, p. 4.10-7, Section 4.11.4.)

9 It is very surprising, then, that the DEIR next states "[h]owever, the Ventura
10 County Vector Control Program would continue to conduct mosquito surveillance and
11 abatement activities within the project area during operations. In addition, the products
12 the Vector Control Program uses to control both adult and larval mosquitoes are
13 environmentally safe and approved by the EPA. **This impact is considered less than**
14 **significant.**" (DEIR, page 4.10-7, section 4.11.4.) Finally, the DEIR does not
15 contemplate any mitigation efforts whatsoever to combat the increased mosquito
16 breeding and associated problems: "No significant impacts were identified, therefore
17 no mitigation is required". (DEIR, page 4.10-8, Section 4.11.6.)

18 **B. VECTOR CONTROL HAS BEEN COMPLETELY UNABLE TO**
19 **CONTROL THE ALREADY EXISTING MOSQUITO INFESTATION**
20 **ALONG THE J STREET DRAIN AND ADJACENT TO SSIII.**

21 It cannot be disputed that where there is standing water, mosquitoes will breed.
22 Since the expansion of the Hueneme Pump Station, the J Street Drain has caused an
23 extremely severe mosquito problem for Surfside III and its residents. The impact of the
24 mosquito infestation and risk of disease transmission cannot be deemed "less than
25 significant". The DEIR dismisses the increase in severity of these issues by simply
26 stating that the Department of Health Services (Vector Control) will continue its current
27 task of monitoring and attempting to lessen the problem.
28

24-5
Cont.

24-6

1 The significance of the mosquito related public health problem must be
2 determined on a case by case basis and is related to project type, location and other
3 environmental factors. If it is determined that project-related impacts are significant
4 and can be mitigated through minor project redesign or adoption of standard
5 conditions, then project specific mitigation shall be identified. (DEIR, 4.11.3.)

6 Below are excerpts from the handful of attached declarations from concerned
7 SSIII homeowners who have had the use and enjoyment of their homes significantly
8 interfered with and reduced by the mosquito problem caused by the expansion of the
9 Pump Station, notwithstanding the larger problem that will be certain to occur if the
10 JSDP is allowed to go forward as in its present incarnation:

- 11 • "It was also during this time, last summer, that I began using Deet-containing
12 mosquito repellants on a daily basis, in order to watch television peacefully
13 inside my own home. Despite the constant application of the repellant,
14 however, I was still being bitten repeatedly and would wake in the night to apply
15 anti-itching lotions and creams. I have never needed to use anti-itch lotions and
16 creams in the middle of the night before." (Marion Kelemen Declaration, SSIII
17 Owner.)
- 18 • "On two different occasions last summer I complained to men I saw on the
19 canal, who said they worked for Vector Control. Both times they told me that
20 they were constrained by the EPA rules from using more effective measures to
21 combat the mosquito problem. I also called Vector Control and they informed
22 me that the mosquitoes had never been a problem before because the water in
23 the lagoon had previously been at a low level, but the high level of water was
24 now creating a 'backwater effect in the canal'". (Marion Kelemen Declaration,
25 SSIII Owner.)
- 26 • "On several occasions this summer I personally observed hoards of mosquitoes
27 hovering directly above, and very close to, the J Street Canal." (Marion
28 Kelemen Declaration, SSIII Owner.)

24-6
Cont.

- 1 • "Beginning in June 2009, we have been unable to use our patio because there
- 2 were so many mosquitoes. Additionally, beginning in June 2009, we were
- 3 unable to leave any doors open as there were so many mosquitoes on the patio
- 4 and outside. If I left the door open for even a moment, mosquitoes would enter
- 5 our home." (Inna Fischer Declaration, SSIII Owner.)
- 6 • "In addition, every night before going to bed, we would run the vacuum cleaner
- 7 along the ceiling in an effort to catch as many mosquitoes as possible to avoid
- 8 nighttime bites. Before this summer, I never needed to do this." (Inna Fischer
- 9 Declaration, SSIII Owner.)
- 10 • "During the summer 2009 months of June, July, August and September I had an
- 11 obnoxious mosquito problem that did not exist in 2008. I purchased this property
- 12 in March 2008." (Robert Banfill Declaration, SSIII Owner.)
- 13 • "On at least 60 occasions I had to remove, swat out and cause to fly away a
- 14 dozen or more mosquitoes that had taken up residence in my dog's house on
- 15 the back patio." (Robert Banfill Declaration, SSIII Owner.)
- 16 • "For the past five years we were able to freely use our patio, as well as the
- 17 Lighthouse Way Park [SSIII common area], with no mosquitoes bothering us in
- 18 our day-to-day lives. However, over the past two years I have noticed that a
- 19 mosquito problem has developed. This past summer, beginning in June 2008,
- 20 and continuing through September 2009, we were unable to open any of the
- 21 doors, front or rear, to our home without mosquitoes entering." Since June 2008
- 22 we have been unable to use either our patio or the Lighthouse Way Park (SSIII
- 23 common area) without being bothered by mosquitoes." (Louis Perry
- 24 Declaration, SSIII Owner.)
- 25 • "Since June 2008, the mosquitoes have become so prevalent in our home that
- 26 the buzzing has kept me up at night." (Louis Perry Declaration, SSIII Owner.)
- 27 • "In June 2009, though, the mosquito problem became much worse. Every time I
- 28 opened either the front or back door, dozens of mosquitoes would fly into our

24-6
Cont.

- 1 home, which we were unable to eliminate. There were so many mosquitoes in
2 our home that my husband and I were forced to sleep under a sheet in an
3 attempt to cut down on the number of bites we suffered every night. The
4 mosquito repellants which we used on a daily basis were ineffective against the
5 mosquitoes in our home." (Amy Segawa Declaration, SSIII Owner.)
- 6 • "Beginning at that same time, in June 2009, we were unable to use our patio, as
7 there were so many mosquitoes." (Amy Segawa Declaration, SSIII Owner.)
 - 8 • "While my husband and I experienced the impact of the mosquitoes acutely, it
9 was our son Michael who was the most affected. Because he was not even a
10 year old this summer we were unable to use any repellants on him. One
11 morning in this summer, the mosquitoes had become so aggressive that our
12 baby woke up covered in bites [see attached photos] . . . The mosquito situation
13 has caused my husband and me severe anxiety. Watching the effect they have
14 had on our young son has been extremely worrisome." (Amy Segawa
15 Declaration, SSIII Owner.)
 - 16 • "However, beginning in June 2009, it became impossible to either sit outside on
17 our patio or visit Lighthouse Way Park [SSIII common area] without being
18 repeatedly bitten by mosquitoes." (Cornelia Ortiz Declaration, SSIII Owner.)
 - 19 • "In addition to being bitten while outside, we were continuously bitten throughout
20 the night by mosquitoes that made their way into our home, despite the fact that
21 we kept our doors and screen doors closed and used mosquito repelling blue
22 lights at both the front and back entrances to our home." (Cornelia Ortiz
23 Declaration, SSIII Owner.)
 - 24 • "I noticed at different times this past summer that the mosquitoes were coming
25 to our home from the J Street Canal where they seemed to reside." (Cornelia
26 Ortiz Declaration, SSIII Owner.)
 - 27 • "Because there were so many mosquitoes, and I was concerned about the
28 viruses which the mosquitoes carried, I called Vector Control to see if they could

24-6
Cont.

do anything about the problem. Vector Control informed me that they were aware of the problem, that they were researching the issues, that they were trying to determine what they could do, but that in the meantime, they were doing everything they could do.” (Cornelia Ortiz Declaration, SSIII Owner.)

The DEIR takes the position that Vector Control has the current mosquito condition well under control and that there will not be any increase in mosquito related or public health issues due to the tremendous increase of permanent standing water contemplated by the JSDP. The above excerpts and complete homeowner declarations submitted concurrently with this Surfside III Public Comment clearly evidence the fact that Vector Control has been totally unable to manage the serious problem as it currently exists. It is axiomatic that the dramatic increase in stagnant surface water that will be created by the drain expansion will seriously exacerbate the condition. As various homeowners and committees at Surfside III have repeatedly made VCWPD and Vector Control aware of the severity of the existing problem, it is disingenuous, at best, for the DEIR to conclude that the impact of the expansion on the mosquito problem and public health “is considered less than significant”.

Not only are many SSIII residences within a few feet to the J Street Drain Canal, but several important common area amenities are adjacent or near as well, including, but not limited to, common area parks and picnic areas available for use by all SSIII residents and their guests. Besides the obvious significant problem of disease communication, SSIII residents are literally attacked by the hordes of existing mosquitoes, especially during the summer months.

24-6
Cont.

The photos below and to the right, for example, were taken during the summer of 2009 and after the expansion of the Port Hueneme Pumping Station, when resident Amy Segawa's son,



Michael, was repeatedly bitten by mosquitoes near the J Street drain. (See Declaration of Amy Segawa submitted concurrently.) The photos are illustrative of the fact that, contrary to the representations and conclusions contained in the DEIR, the mosquito problem is not being adequately mitigated by Ventura County Vector

Control. An increase in mosquito breeding due to the increased stagnant water contemplated by the JSDP will not be "less than significant" to SS III residents, their families, and their guests. The DEIR's statements to the contrary are nothing short of fanciful. The mosquito / public health issues are very significant to SSIII owners. Moreover, expansion of the drain canal and increase in stagnant water poses a very real significant public health issue (disease transmission) to SSIII residents and the local community as a whole. SSIII residents should not have to fear for their health and well being while on their patios, in bed, or strolling through common areas. The DEIR completely fails to acknowledge this problem and fails to propose effective methods of mitigation.

24-6
Cont.

**C. THE DEIR FAILS TO PROPOSE METHODS OF MITIGATING THE
PUBLIC HEALTH AND OTHER MOSQUITO RELATED PROBLEMS
THAT WILL BE CAUSED BY THE JSDP.**

As discussed above, the "dam" effect at the end of the four foot deepened J Street drain canal will basically cause permanent stagnant water of at least four feet deep. It is intuitive, and the DEIR has conceded, that this will increase mosquito breeding in the drain adjacent to the border of SSIII. Along with the obvious problems of disease transmission, mosquito bites and annoyance, this will increase odors, floating debris, and other issues that will significantly lessen the use enjoyment of ownership for SSIII owners and the Association. Notwithstanding these facts, the DEIR fails to propose any method of mitigating the serious effects of increased stagnant water and the backwater effect.

The DEIR states that the primary goal of the JSDP is to increase the capacity of the drain canal to provide capacity for a 100 year flood, should one ever occur in the local community. The simplest way to achieve this goal without negative effects on SSIII and the entire local community would be to pump out, or remove, the stagnant water that is currently in the drain canal during most of the year. By removing the water on a regular basis, the capacity of the existing drain would increase significantly and the drain would not have to be deepened and widened. The DEIR does not address the idea of a pumping system or any other method of draining or removing the stagnant water.

If the VCWPD has a legitimate basis for rejecting the proposal stated in the previous paragraph, there are other "common sense" forms of mitigation. One such method would be the installation of a pump system to periodically clear the deepened "bathtub" (drain canal) of the stagnant water that cannot escape due to the dam effect described above. As an alternative, a form of pump system could be used to keep the water circulating (in a non stagnant state) could be implemented to mitigate the problem. In its current state, water escapes the drain canal at various times, including

24-7

1 when a natural breach of the sand berm occurs. If the JSDP is implemented, the
2 bottom four feet of water in the canal can never clear or escape without the help of a
3 pump system. This cannot be considered acceptable and the DEIR simply ignores the
4 issue.

5 At a recent meeting with various VCWPD representatives, SSIII proposed that
6 the VCWPD include a pump system, along the lines of that described above, or any
7 method of removing / circulating the stagnant water. At that time, VCWPD represented
8 that they would investigate the idea. On or about January 7, 2010, VCWPD
9 communicated that they were not pursuing the idea of a pump system, inflatable dam,
10 or other method to remove / circulate the stagnant water.

11 As a pump or similar system would potentially alleviate SSIII's concerns
12 regarding public health and mosquitoes at a relatively minimal cost, SSIII is not aware
13 of any reason such a system should not be incorporated into the JSDP. The public
14 health and other effects of the contemplated increase in stagnant water require
15 something more than a mere dismissal and unjustified conclusion that the effects will
16 be "less than significant".

17 **V. THE JSDP WILL CAUSE UNACCEPTABLE NOISE LEVELS THAT WILL**
18 **SIGNIFICANTLY AFFECT THE USE, ENJOYMENT, AND HEALTH OF SSIII**
19 **RESIDENTS.**

20 The DEIR acknowledges that the very high noise levels associated with the
21 Project will impact SSIII. "Buildings 6 and 7 of the Surfside III condominiums, located
22 immediately north of the Pump Station, are noise sensitive receptors approximately five
23 feet from the temporary work area's west boundary." (DEIR, page 4.6-1, section
24 4.6.1.2.) SSIII asserts that many important common areas of the Association, as well
25 as other residential buildings and townhomes will suffer from the extreme noise levels
26 as well.

27 The DEIR states that loud equipment including, but not limited to, wheel loaders,
28 track dozers, scrapers, excavators with hydraulic hammers, pile drivers, motor graders,

24-7
Cont.

24-8

1 concrete pumps, concrete tucks, dump trucks, concrete mixers, portable generators
2 will be utilized during the JSDP. Table 4.6-5 of the DEIR describes the noise level of
3 such equipment from a 50 foot distance.

4 According to Table 4.6-1 of the DEIR, noise levels of above 60 db are "normally
5 unacceptable" and levels of 75 db and above are "clearly unacceptable". In its
6 definition of "clearly unacceptable," the DEIR's *Land Use Noise Compatibility*
7 *Guidelines* state that "new construction or development should generally not be
8 undertaken". (DEIR, page 4.6-2, Table 4.6-1.) At fifty feet, virtually all of the
9 construction equipment described above that will be used during construction will be
10 either "normally unacceptable" or "clearly unacceptable". SSIII buildings and common
11 areas, in many cases, are much closer than 50 feet. The DEIR makes no attempt to
12 identify the noise levels from such equipment at any distance closer than 50 feet which
13 is misleading because SSIII residential structures and common areas are much closer
14 to the project.

15 The City of Oxnard and County of Ventura do not allow exterior sound levels of
16 more than 55 db (DEIR, Table 4.6-3) and the City of Port Hueneme does not allow
17 noise levels in residential developments of greater than 65 db. (DEIR, page 4.6-6,
18 Section 4.6.2.)

19 The DEIR states that many planned construction activities will exceed allowable
20 noise levels, including, but not limited to, compactors, generators, graders, pile drivers,
21 and tractors. Each of these items, at a fifty foot distance, produce noise levels far in
22 excess of 55 db. (DEIR, Table 4.6-5.) As an example, pile drivers alone produce a fifty
23 foot noise level of up to 107db which nearly doubles the required maximum levels.
24 (DEIR, Table 4.6-5.) Though the DEIR only states 50 foot noise levels, several SSIII
25 residential buildings are only 5-10 feet from the proposed Project and construction.

26 The DEIR states that "construction activities have the potential to result in noise
27 levels above the Ventura County outdoor noise thresholds. Temporary increases in
28 ambient noise would be significant." (DEIR, page 4.6-13, section 4.6.4.)

24-8
Cont.

The only mitigation proposed by the VCWPD is "a temporary noise control barrier shall be installed and maintained between the temporary work area and Buildings 6 and 7 in the Surfside III community during periods when heavy equipment is operating within 500 feet of these residences or when heavy-duty trucks are regularly using the access road adjacent to the drain". (DEIR, page 4.6-17, Section 4.6.6.

The installation of the noise barrier will not significantly lessen the direct impact on SSIII. "Implementation of the identified mitigation measures would not reduce the noise impacts associated with the construction of proposed project to a level below significant. Impacts are significant and unavoidable." (DEIR, page 4.6-19, section 4.6.7.)

The proximity of the construction is so close to the SSIII residences and common area amenities that the extreme noise levels are very significant indeed. To be acceptable, much more comprehensive mitigation measures must be taken to ensure less of a disruption to the community.

On or about January 7, 2010, the VCWPD informed SSIII that it had completely changed its plan and now intends to use vertical shoring for the entirety of the Project adjacent to SSIII. Besides causing significantly more noise, vibration, and damage to SSIII property, the "new" vertical shoring plan will still cause a severe degradation of visual resources as well as impairment of the use and enjoyment of SSIII residents.

A. GROUND BORNE VIBRATION AND GROUND BORNE NOISE LEVELS.

The DEIR states that "vertical shoring at Surfside III may be placed with a vibratory technique instead of driving or pounding, therefore, ground-borne vibration and ground-borne noise impacts are potentially significant". (DEIR, page 4.6-12, section 4.6.4.) Moreover, VCWPD has recently informed SSIII that, in contrast to the intent stated in the DEIR, it intends to use vertical shoring along the entire SSIII border.

24-8
Cont.

1 The DEIR proposes no mitigation to avoid the obvious problems associated with
2 the significant ground-borne vibration. Property and other damage will almost certainly
3 occur and this cannot be acceptable to SSIII and its residents who live in such close
4 proximity to the contemplated construction project.

5 Until January 7, 2010, the VCWPD represented that it intended to use vertical
6 shoring only where absolutely necessary along the SSIII property line. On or about
7 January 7, VCWPD changed its position and stated its intention to perform all
8 construction near SSIII using a vertical shoring method.

9 Unfortunately, the VCWPD has acknowledged that use of the vertical shoring
10 method would result in more damage, noise, and ground based vibration to SSIII
11 property.

12 "Trench shoring must occur along Building 7 of the Surfside III
13 Condominiums, but is not required for the remainder of this residential
14 community. If trench shoring is not used along the remainder of the
15 condominium complex, the excavation area would need to be wider,
16 necessitating temporary removal of some private landscaping. In addition,
17 the current fence, which does not coincide with the property boundary, will
18 be removed during construction and relocated to the property line at the
19 end of the project. **These incursions into private property would allow**
20 **the project to proceed without the need for extensive shoring of the**
21 **excavations, therefore reducing the potential for noise and vibration**
22 **impacts to the adjacent areas.**" (DEIR, page 3-9, section 3.4.)

23 (Emphasis added.)

24 Thus, the use of vertical shoring along the SSIII boundary will increase noise,
25 ground vibration, and damage to SSIII. The VCWPD is attempting to purposely choose
26 a construction technique that it knows will cause damage to SSIII with full knowledge
27 that reasonable alternatives exist that will cause significantly less damage. Additional
28 forms of mitigation are required before such a plan can be allowed to proceed.

24-8
Cont.

VI. VISUAL RESOURCES.

"Land uses generally considered to be sensitive in terms of view include homes, recreational areas, and designated scenic roads." (DEIR, page. 4.1-1, section 4.1.1.1)

The DEIR states the following relating to the visual impact on SSIII: "As shown in Figure 4.1-2, a row of shrubs, mainly myoporum, and eucalyptus trees along the northeast boundary of the Surfside III property shields condominium residents on the east facing sides of Buildings 15, 16, and 17 and users of the park immediately east of these buildings from views of the J Street Drain and the Oxnard Waste Water Treatment Plant ("OWWTP") east of the J Street Drain. Residents in Building 7, located nearest to the proposed project in the vicinity of the OWWTP, are shielded from the industrial view by a 100 foot long section of approximately 14 foot tall mesh screen chain link fence on the west edge of the OWWTP property. This fence screens the view of the OWWTP maintenance yard. The remainder of the OWWTP south of the maintenance yard is screened by trees and shrubs along the plant's west property boundary. Sparser vegetation along the east boundary of the Surfside III property from Building 7 southward forms an inconsistent visual barrier, and residents in Buildings 6 and 7 are able to see the J Street Drain from their dwellings." (DEIR, page 4.1-6, section 4.1.1.1.)

Though the DEIR is not "inaccurate," it is misleading. Trees and bushes, including many mature, large Eucalyptus trees, shield SSIII from the Drain canal and the ("OWWTP"), both of which are very unsightly.

The DEIR acknowledges that there will be substantial degradation of the existing visual character or quality of the site and surroundings relating to SSIII. Specifically, the DEIR states that "Trenching near the Surfside III buildings during construction would result in the removal of approximately 110 trees and shrubs of various sizes and species (including 25 eucalyptus trees with a diameter at breast height (DBH) of at least 12 inches) from both the J Street Drain and Surfside III properties. (DEIR, page 4.1-14, section 4.1.4.) "Loss of vegetation along the

24-9

1 Surfside III property during construction would also cause continued visual impacts
2 during operations. Therefore, implementation of the J Street Drain project would result
3 in degradation of the existing visual character and quality at the project area. The
4 impact is significant." (DEIR, page 4.1-15, section 4.1.4.)

5 As to mitigation, the DEIR suggests that "Any tree or large shrub removed from
6 the Surfside III property during construction would be replaced at a 1:1 ratio." (DEIR,
7 page 4.1-17, section 4.1.6.) "Mitigation measure VIS-2 would require the replacement
8 of the removed trees and large shrubs within the Surfside III property at 1:1 ratio and
9 would reduce the construction and operational impact to below a level of significance."
10 Upon further questioning, VCWPD acknowledged that replacement at a 1:1 ratio does
11 not mean replacing a mature, large eucalyptus tree with another mature, large tree.
12 Instead, it simply means the supply of a small box tree. A small box tree will take many
13 years to mature and not provide any of the visual screening benefits that exist
14 currently. Instead of seeing lush greenery, SSIII residents will see only the Waste
15 Treatment Plant and J Street Drain, along with the stagnant water and floating debris
16 until such time as the small box trees grow to full maturity, if at all.

17 SSIII completely disagrees with the DEIR's conclusion that the construction and
18 operational impact will be "below a level of significance". In fact, the impact will have a
19 significant effect on the use and enjoyment of all SSIII residents.

20 On or about January 7, 2010, the VCWPD informed SSIII that it had completely
21 changed its plan and now intends to use vertical shoring for the entirety of the Project
22 adjacent to SSIII. Though such a plan may require less removal of SSIII trees and
23 other property, it will cause a severe degradation of visual resources, as well as
24 significantly more noise, vibration, and damage to SSIII property.

24-9
Cont.

VII. HAZARDOUS MATERIALS AND WASTES, PUBLIC HEALTH – PROXIMITY TO HALACO SUPERFUND SITE.

Less than ¼ mile to the east of the southern end of the J Street Drain is the Halaco facility which has been designated a Superfund site by the Environmental Protection Agency. The site includes an 11 acre parcel containing a formal smelter and an adjacent 26 acre waste management area where dangerous and toxic wastes were deposited. The primary wastes were metal oxides, metal salts, and other materials skimmed off the top of the molten metal or that settled to the bottom during the smelting process (i.e. slag or dross).

The DEIR concedes that sampling conducted by the State of California and the EPA have repeatedly found contamination. Moreover, a surface impoundment and waste disposal pile contain over 500,000 cubic yards of waste. The contaminants include, but are not limited to, aluminum, arsenic, barium, beryllium, cadmium, chromium, copper, lead, magnesium, nickel, and many others. Similar toxics were found on adjacent properties, including a nature preserve, wetlands, and public beach. (DEIR, page 4.8-1, section 4.8.1.1.) The EPA also found radioactive materials buried at the site.

The DEIR states that the associated hazard risk relating to the Halaco Superfund site is “Unsubstantial because currently undergoing remediation with EPA”. (DEIR, page 4.8-5, Table 4.8-1.) This conclusion is not satisfactory and somewhat misleading because the DEIR does not state anything regarding the EPA remediation plan or timetable other than: “In July of 2006, the U.S. EPA reached an agreement with site owners to conduct a ‘time critical removal action’ to remove drums and other hazardous substances, fence the waste pile, and install a silt curtain and straw wattles.



24-10

1 In February of 2007, the EPA began working to stabilize and secure the site and limit
2 offsite migration of contaminated wastes." (DEIR, page 4.8-2, section 4.8.1.1.)

3 The DEIR fails to state whether the actual remediation has been started, when it
4 will be completed, or how comprehensive or successful the remediation will be. The
5 simple fact that the EPA is investigating remediation does not solve the hazardous
6 material/waste and public health issues. The Halaco issue is simply ignored by the
7 VCWPD and the DEIR.

8 Sierra Club representatives are of the scientific opinion that the Halaco slag
9 heap already comes in contact with water sources that comingle with water from the J
10 Street Drain. Moreover, in 2001, the Los Angeles County Water Quality Control Board
11 found evidence that ammonia and other toxic chemicals were leaking from Halaco's
12 property into nearby wetlands. (*Los Angeles Times* November 14, 2001.)

13 This is a very serious public health concern. Expansion of the J Street Drain, as
14 contemplated by the JSDP, will only increase the risks of contamination from the
15 nearby Superfund site.

16 Much more information is needed before an intelligent analysis can be made
17 regarding this potentially dangerous condition. Simply stating that there is no problem
18 because the EPA may be beginning remediation procedures is far from the full
19 disclosure required under CEQA. The DEIR's representations and conclusions
20 regarding the Halaco Superfund issue is technically and practically inadequate.

21 **VIII. THERE HAS NEVER BEEN A 100-YEAR FLOOD IN THE COMMUNITY AND**
22 **FEMA HAS NOT DESIGNATED THE AREA AS A HIGH FLOOD RISK.**

23 The DEIR states the goal of the JSDP as follows: "The proposed project
24 involves increasing the capacity of the existing J Street Drain to accommodate the 100-
25 year flood flow and to reduce potential flooding in the surrounding area during a
26 moderate rain event." (DEIR, page 1-4, Section 1.5.3.)

27 While this may sound like a noble goal, the DEIR concedes that "there has not
28 been a 100-year flood on record in Oxnard or the project area". (DEIR, page 1-9, 1.5-

24-10
Cont.

24-11

1 1.) Moreover, VCWPD representatives recently conceded that the JSDP is not within a
2 FEMA designated flood zone or high flood risk area. A review of the new flood maps
3 released by FEMA in January 2010 confirms that SSIII and the JSDP is not within a
4 FEMA designated flood zone.

24-11
Cont.

5 While the goals of the project may sound noble, the DEIR does not explain why
6 it is necessary or appropriate to spend significant public monies and cause negative
7 environmental impacts and damage to residents of the community, if the area has
8 never suffered a 100 year flood and is not a high flood risk area.

9 **IX. IT IS NOT EQUITABLE TO FORCE SSIII TO SUE CONTRACTORS**
10 **RETAINED BY VCWPD FOR DAMAGE CAUSED TO SSIII PROPERTY.**

11 As described above, the JSDP contemplates significant ground borne vibration
12 and massive construction directly adjacent to SSIII. In addition, VCWPD intends to
13 remove and possibly reconstruct / replace planters, carports, trees, walls, and other
14 SSIII property. SSIII has no involvement with the selection or retention of the
15 contractors who will perform this work.

16 VCWPD representatives have informed SSIII that, when the inevitable
17 construction related damage occurs to SSIII property, it will be up to SSIII to pursue,
18 and possibly be forced to initiate litigation, against the contractors retained by VCWPD,
19 to ensure damage is either repaired or paid for. This is not appropriate and cannot be
20 acceptable. Damage is even more likely if the VCWPD is allowed to proceed using
21 vertical shoring along the entire SSIII boundary. This new intent to utilize vertical for
22 the entirety of the SSIII boundary was only communicated to SSIII on or about January
23 7, 2010.

24-12

24 Moreover, SSIII will not be privy to any of the construction contracts and has no
25 information regarding contractor insurance coverage and coverage exclusions.
26 Because VCWPD has decided to pursue this project within feet of residential structures
27 and common areas, it must be VCWPD who is directly responsible for damages.
28 Moreover, it is simply not fair or equitable to require SSIII to expend additional time and

1 money (including, potentially, legal and expert fees) to repair what will be damaged by
 2 the VCWPD project. Thus, VCWPD must be directly responsible for all damage to
 3 SSIII and its owners as a result of the massive construction work to be performed.

24-12
Cont.

4 **X. THE SERIOUS CONCERNS DESCRIBED IN THIS PUBLIC COMMENT ARE**
 5 **ECHOED BY THE MAJORITY OF OWNERS IN THE SSIII COMMUNITY.**

6 Through the many written communications previously sent by SSIII committees
 7 and owners, the VCWPD has been aware of the serious concerns held by the local
 8 community regarding the JSDP. It is not simply the Association's Board of Directors or
 9 a few homeowners that share these very important concerns. Approximately 130
 10 community response letters have been executed by SSIII Owners and compiled by a
 11 parliamentarian for review by the VCWPD. True and correct copies of the
 12 Parliamentarian's Certification and an unsigned exemplar of the community response
 13 letters is attached hereto as Exhibit "B" to the Declaration of Kevin P. Carter, submitted
 14 concurrently herein. The environmental impact of the contemplated JSDP is a very
 15 serious issue to a large number of people in the local community and these issues
 16 should not simply be dismissed as "less than significant".

24-13

17 **XI. CONCLUSION.**

18 Based on the topics discussed above in this Public Comment, SSIII asserts that
 19 the DEIR is technically inadequate and several issues must be addressed and resolved
 20 in more detail before the EIR is issued and before the JSDP is allowed to go forward, if
 21 at all.

22 The DEIR's conclusions that certain critical issues, such as public health, have a
 23 "less than significant effect" are factually and legally incorrect. The DEIR's conclusions
 24 must be supported by facts, evidence, or science. Regarding the issues contained
 25 above, the DEIR does not meet the required standard of adequacy, completeness, and
 26 good faith effort at full disclosure. Until and unless the DEIR fully discloses all known
 27 facts and arrives at good faith reasonable conclusions, SSIII opposes the contents of
 28

24-14

the DEIR and the implementation of the JSDP as currently contemplated by the VCWPD.

It is SSIII's hope that the VCWPD will take measures to address the serious concerns described in this Public Comment / Opposition before the issuance of the Final EIR. If the issues are not adequately resolved, however, SSIII reserves its right to initiate legal proceedings to protect itself against the environmental and other negative impacts that the JSDP would cause if implemented as described in the DEIR.

24-14
Cont.

DATED: January 14, 2010

LOEWENTHAL, HILLSHAFFER & ROSEN, LLP



Kevin P. Carter,
General Counsel for Surfside III
Condominium Owners' Association, Inc.

DECLARATION OF KEVIN P. CARTER

1. I am an attorney licensed to practice before all courts of the State of California. I am a partner with Loewenthal, Hillshafer & Rosen, LLP, general counsel for the Surfside III Condominium Owners' Association, Inc. (hereafter "SSIII"). I have personal knowledge of the following facts, and if called to testify, I could and would competently do so.

2. On or about December 14, 2009, I attended a meeting along with the SSIII Board of Directors, representatives of the Ventura County Watershed Protection District, Ventura County Department of Health Services, and others. During this meeting, SSIII suggested the inclusion of a pump or similar system that would periodically pump out the stagnant water within the J Street Drain. The inclusion of such a pump system would alleviate the severe stagnant water / mosquito problem that the Association faces should the JSDP be implemented, thus allowing for further capacity in the event of a 100 year storm. During the December 14 meeting, the VCWPD representatives stated that they would investigate such an idea and communicate their conclusion to SSIII. On or about January 7, Kirk Norman of the VCWPD informed me that the VCWPD is not likely to include such a pump or other system to alleviate the stagnant water / mosquito problem. To date, the VCWPD has not proposed any form of lessening the increased stagnant water that will exist if the JSDP is implemented in its current incarnation.

3. Moreover, at the December 14, 2009 meeting, the VCWPD representatives stated it intended to use only vertical shoring where absolutely necessary along the SSIII boundary line because the vertical shoring technique could cause more ground based vibration, noise, and damage to SSIII. On or about January 7, Kirk Norman informed me that the VCWPD now intends to use vertical shoring along the entire SSIII boundary.

4. Attached hereto as Exhibit "A" is a true and correct copy of the excerpt obtained from the Ventura County Environmental Health Services website which

24-15

Loewenthal, Hillshafer & Rosen
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DECLARATION OF KEVIN P. CARTER

Letter 24

Loewenthal, Hillshaffer and Rosen LLP

Re-submittal of Letter Submitted January 15, 2010 on the EIR

The comments provided in this letter were responded to in Appendix L of the EIR. Please refer to Letter 13, responses to comments 13-1 through 13-14 in Appendix L for responses to comments.

0.4 MITIGATION MONITORING AND REPORTING PROGRAM

0.4.1 INTRODUCTION AND SUMMARY

Pursuant to Section 21081.6 of the Public Resources Code and the *California Environmental Quality Act* (CEQA) *Guidelines* Section 15097, public agencies are required to adopt a monitoring or reporting program to assure that the mitigation measures and revisions identified in the Environmental Impact Report (EIR) are implemented. As stated in Section 21081.6 of the Public Resources Code:

“...the public agency shall adopt a reporting or monitoring program for the changes made to the project or conditions of project approval, adopted in order to mitigate or avoid significant effects on the environment.”

Pursuant to Section 21081(a) of the Public Resources Code, findings must be adopted by the decision-maker coincidental to certification of the EIR. The Mitigation Monitoring and Reporting Program (MMRP) must be adopted when making the findings (at the time of approval of the project).

As defined in the *CEQA Guidelines*, Section 15097, “reporting” is suited to projects that have readily measurable or quantitative measures or which already involve regular review. “Monitoring” is suited to projects with complex mitigation measures, such as wetland restoration or archaeological protection, which may exceed the expertise of the local agency to oversee, are expected to be implemented over a period of time, or require careful implementation to assure compliance. Both reporting and monitoring would be applicable to the proposed project.

The EIR prepared for the J Street Drain project (SCH No. 2008041057) provided an analysis of the environmental effects resulting from construction and operation of the project. A thorough scientific and engineering evaluation of each alternative was undertaken in compliance with CEQA, including the identification of measures designed to avoid or substantially reduce the potential adverse effects of each alternative.

0.4.2 MITIGATION MATRIX

To sufficiently track and document the status of mitigation measures, a mitigation matrix has been prepared and includes the following components:

- Mitigation measure (text)
- Type
- Monitor
- Schedule

Mitigation measure timing of verification has been apportioned into several specific timing increments. Of these, the most common are:

1. During construction of the project
2. During operation of the J Street Drain
3. During Beach Elevation Management Plan Implementation

The mitigation matrix is included in Table 0.4-1.

0.4 Mitigation Monitoring and Reporting Program

Table 0.4-1. Mitigation Monitoring and Reporting Program Checklist

Mitigation Measure		Type	Monitor	Schedule
<i>Visual Resources</i>				
VIS-1	<p><u>The District shall provide landscaping to replace the oleander bushes removed along J Street Drain between Hueneme Road and Redwood Street by agreement with the City of Oxnard. Landscaping shall be replaced incrementally, within six months of completion of each project phase.</u></p> <p>The District shall provide landscaping to replace the oleander bushes removed along J Street Drain between Hueneme Road and Redwood Street by agreement with the City of Oxnard. Landscaping shall be replaced incrementally, within six months of completion of each project phase.</p>	Operation Monitoring (OM)	District Water and Environmental Resources and Design and Construction Divisions (WERD and DCD)	Within 6 months post construction of each phase.
VIS-2	Any tree or large shrub removed from the Surfside III property during construction would be replaced at a 1:1 ratio.	Construction Monitoring (CM)	District WERD and DCD	During Phase 1 construction.
VIS-3	During construction, temporary privacy screening would be placed along the northeast boundary of the Surfside III property to shield residents from views of the construction site and of the Oxnard Wastewater Treatment Plant (OWWTP).	CM	District WERD and DCD	During Phase 1 construction.
VIS-4	<u>Prior to construction a 10- to 12-foot-tall fence with green vinyl screening will be installed along the portion of the District and Oxnard Wastewater Treatment Plant property line that is not currently fenced.</u>	CM	District WERD and DCD	Prior to Phase 1 construction.
VIS-5	<u>Although night construction is not anticipated, in the event that it becomes necessary, all lighting shall be shielded to prevent illumination of residences.</u>	CM	District WERD and DCD	During construction of each phase.
<i>Biological Resources</i>				
BIO-1	During construction, the sensitive vegetation communities adjacent to the project alignment shall be flagged as Environmentally Sensitive Areas (ESA) and construction fencing shall be installed to avoid indirect impacts to these areas. Staging areas shall be identified during construction for lay down areas, equipment storage, etc., to avoid indirect impacts to the ESA. Biological monitoring shall occur during construction activities to prevent indirect impacts. Temporarily disturbed OW habitat, which falls under CDFG, USACE, and RWQCB jurisdiction, would be restored at a 1:1 ratio upon completion of construction. OW habitat restoration shall include replacement on the lagoon bottom of the top 12 inches of original soil to ensure suitable conditions for tidewater gobies and benthic fauna.	CM	District WERD and DCD	Prior to and during Phase 1 construction.
BIO-2	To prevent a decrease in the foraging success of California least terns, temporary construction fencing ("snow fencing") shall be installed surrounding the project site to delineate the construction footprint.	CM	District WERD and DCD	Prior to Phase 1 construction activities.

0.4 Mitigation Monitoring and Reporting Program

Mitigation Measure	Type	Monitor	Schedule
BIO-3 To prevent a decrease in the nesting and foraging success of the California least tern and western snowy plover, phase 1 construction activities adjacent to California least tern and western snowy plover habitat shall occur outside of the breeding season (March to September) to the extent feasible. If construction activities must occur during the breeding season, phase 1 project initiation through coffer dam installation shall be completed before May 1 to avoid direct impacts to foraging terns. In addition, a preemptive nesting bird survey shall be conducted by a qualified biologist to determine if any nesting terns or plovers are located near proposed activities. If nesting birds are found, all construction activities shall be prohibited within a 300-foot buffer area surrounding the nest location during the breeding season until the young have fledged. The qualified biologist shall ensure that the buffer area is appropriately defined with flagging and/or other means of suitable identification. The District shall consult with USFWS and CDFG in the event that nesting California least terns or western snowy plover are observed within 500 feet of the project area. If no nesting birds are found, construction activities could be conducted during the breeding season without restriction.	CM	District WERD and DCD	Prior to and during Phase 1 construction activities.
BIO-4 To prevent a decrease in the foraging success of California least terns and tidewater goby, silt fencing shall be installed prior to project construction between the project area and waters of Ormond Lagoon. For project activities within waters of Ormond Lagoon, dual silt fencing shall be installed around each work area to prevent/decrease the clouding of water within the lagoon as a result of potential runoff.	CM	District WERD and DCD	Prior to and during Phase 1 construction.
BIO-5 To avoid impacts to tidewater goby eggs, Phase 1 project initiation through coffer dam installation shall be completed before May 1, as the peak breeding season for this species extends from late spring through early summer, and again in late summer through early fall. Prior to the installation of the temporary cofferdam, a Section 10 (a)(1) (a) permitted tidewater goby biologist shall capture and relocate gobies to appropriate habitat located outside of the project area. The temporary cofferdam shall remain in place throughout construction activities south of Hueneme Road to prevent tidewater goby from entering the construction area from the lagoon. The biologist shall also be present during and after dewatering to ensure all gobies and other native fish are relocated to the lagoon prior to construction. A suitable number of biologists working under the supervision of the permitted biologist shall be present during and immediately after the dewatering phase to ensure that all gobies are detected. In addition, the surface water pumps installed for the dewatering of the work area shall be screened (less than five mm mesh size). A permitted tidewater goby biologist shall also be required to relocate any tidewater goby that may enter the work area from upstream.	CM	District WERD and DCD	Prior to Phase 1 project initiation and during construction.
BIO-6 Although night construction is not anticipated, in the event that it becomes necessary, all lighting will be shielded to prevent illumination of the beach.	CM	District WERD and DCD	During construction.

0.4 Mitigation Monitoring and Reporting Program

Mitigation Measure	Type	Monitor	Schedule
BIO-7 In order to avoid conflicts with the federal MBTA, if construction is proposed during the migratory bird nesting season, a preconstruction survey shall be conducted by a qualified biologist for the eucalyptus woodland located within the project footprint. The breeding season is defined as February 15 to September 15. If nesting birds/raptors are found, all construction activities shall be prohibited within a 300-foot impact avoidance buffer area surrounding the nest location during the breeding season. In consultation with CDFG and/or USFWS, the buffer area may be reduced in the case of bird species/individuals accustomed to urban disturbance. The qualified biologist shall ensure that the avoidance buffer area is appropriately defined with flagging and/or other means of suitable identification. If no nesting birds/raptors are found, construction could be conducted during the breeding season. Trees may be removed outside of the breeding season without restriction.	CM	District WERD and DCD	Prior to and during construction.
Water Resources and Hydraulic Hazards			
<i>Stormwater Pollution Prevention Plan</i>			
The District shall submit a completed Notice of Intent (NOI) and obtain a waste discharge identification number to obtain coverage under the NPDES General Permit for Discharges Associated with Construction Activity issued by the California State Water Resources Control Board (SWRCB). The applicant/contractor shall submit to the County a Stormwater Pollution Prevention Plan (SWPPP) and monitoring program consistent with SWRCB rules for the construction phase of the project prior to initiating construction.			
The SWPPP shall contain the following specific mitigation measures designed to reduce or eliminate construction site runoff pollution:			
WQ-1 Construction Site Planning BMPs, including but not limited to: <ul style="list-style-type: none"> • The amount of cuts and fills shall be minimized; and • Temporary and permanent roads and driveways shall be aligned along slope contours. Grading operations shall be phased to reduce the extent of disturbed areas and length of exposure. 	CM	District WERD and DCD	Prior to and during construction.
WQ -2 BMPs to Minimize Soil Movement including but not limited to: <ul style="list-style-type: none"> • Soil stockpiles shall be contained; • Stabilized access roads and entrances shall be constructed in the initial phase of construction; • Tire wash stations, gravel beds, and/or rumble plates shall be installed at site entrance and exit points to prevent sediment from being tracked onto adjacent roadways; • Sediments and construction materials shall be dry-swept from finished streets the same day they are deposited; and • Site runoff control structures, such as earth berms, drainage swales, and ditches that convey surface runoff during construction into temporary or permanent sediment detention basins shall be installed and made operational in the initial phase of construction, as necessary. 	CM	District WERD and DCD	Prior to and during construction.

0.4 Mitigation Monitoring and Reporting Program

Mitigation Measure	Type	Monitor	Schedule
<p>WQ -3 BMPs to capture sediment including but not limited to:</p> <ul style="list-style-type: none"> Storm drain inlets shall be protected from sediment-laden runoff with inlet protection devices such as gravel bag barriers, filter fabric fences, block and gravel filters, excavated inlet sediment traps, sand bag barriers, and/or other devices; and Sediment shall be removed from dewatering discharge with portable settling and filtration methods, such as Baker tanks or other devices. 	CM	District WERD and DCD	Prior to and during construction.
<p>WQ -4 Good housekeeping BMPs, including but not limited to the following requirements:</p> <ul style="list-style-type: none"> All storm drains, drainage patterns, and creeks located near the construction site prior to construction shall be identified to ensure that all subcontractors know their location to prevent pollutants from entering them; Washing of concrete trucks, paint, equipment, or similar activities shall occur only in areas where polluted water and materials can be contained for subsequent removal from the site; wash water shall not be discharged to the storm drains, street, drainage ditches, creeks, or wetlands; areas designated for washing functions shall be at least 100 feet from any storm drain, waterbody or sensitive biological resources to the extent feasible; the location(s) of the washout area(s) shall be clearly noted at the construction site with signs; the applicant shall designate a washout area; the wash-out areas shall be shown on the construction and/or grading and building plans and shall be in place and maintained throughout construction; All leaks, spills, and drips shall be immediately cleaned up and disposed of properly; Vehicles and heavy equipment that are leaking fuel, oil, hydraulic fluid or other pollutants shall be immediately contained and either repaired immediately or removed from the site; One or more emergency spill containment kits shall be placed onsite in easily visible locations. Personnel will be trained in proper use and disposal methods; Vehicles and heavy equipment shall be refueled and serviced in one designated site located at least 100 feet from the drain to the extent feasible; Temporary storage of construction equipment shall be limited to an area approved by the City of Oxnard, and shall be located at least 100 feet from any water bodies to the extent feasible; Dry clean-up methods shall be used whenever possible; Exposed stockpiles of soil and other erosive materials shall be covered or contained during the rainy season; Trash cans shall be placed liberally around the site and properly maintained; 	CM	District WERD and DCD	Prior to and during construction.

0.4 Mitigation Monitoring and Reporting Program

Mitigation Measure		Type	Monitor	Schedule
<ul style="list-style-type: none"> All subcontractors and laborers shall be educated about proper site maintenance and stormwater pollution control measures through periodic "tailgate" meetings; Roadwork or pavement construction, concrete, asphalt, and seal coat shall be applied during dry weather only; and Storm drains and manholes within the construction area shall be covered when paving or applying seal coat, slurry, fog seal, etc. 				
<i>Air Quality</i>				
AQ-1	<p>VCAPCD recommends the following measures to mitigate ozone precursor emissions from construction motor vehicles:</p> <ol style="list-style-type: none"> Minimize equipment idling time. Maintain equipment engines in good condition and in proper tune as per manufacturers' specifications. Lengthen the construction period during smog season (May through October), to minimize the number of vehicles and equipment operating at the same time. Use alternatively fueled construction equipment, such as compressed natural gas (CNG), liquefied natural gas (LNG), or electric, if feasible. 	CM	District WERD and DCD	During construction.
AQ-2	<ol style="list-style-type: none"> The area disturbed by clearing, grading, earth moving, or excavation operations shall be minimized to prevent excessive amounts of dust. Pre-grading/excavation activities shall include watering the area to be graded or excavated before commencement of grading or excavation operations. Application of water (preferably reclaimed, if available) should penetrate sufficiently to minimize fugitive dust during grading activities. All trucks shall be required to cover their loads as required by California Vehicle Code Section 23114. All graded and excavated material, exposed soil areas, and active portions of the construction site, including unpaved on site roadways, shall be treated to prevent fugitive dust. Treatment shall include, but not necessarily be limited to periodic watering, application of environmentally-safe soil stabilization materials, and/or roll compaction as appropriate. Watering shall be done as often as necessary and reclaimed water shall be used whenever possible. Graded and/or excavated inactive areas of the construction site shall be monitored at least weekly for dust stabilization. Soil stabilization methods, such as water and roll-compaction, and environmentally-safe dust control materials, shall be periodically applied to portions of the construction site that are inactive for over four days. If no further grading or excavation operations are planned for the area, the area shall be permanently stabilized or periodically treated to prevent excessive fugitive dust. 	CM	District WERD and DCD	Prior to and during construction.

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Mitigation Measure		Type	Monitor	Schedule
6.	Signs shall be posted on site limiting traffic on unpaved areas to 15 miles per hour or less.			
	7. During periods of high winds (i.e., wind speed sufficient to cause fugitive dust to impact adjacent properties), all clearing, grading, earth moving, and excavation operations shall be curtailed to the degree necessary to prevent fugitive dust created by on site activities and operations from being a nuisance or hazard, either off site or on site. The site superintendent/supervisor shall use his/her discretion in conjunction with the APCD in determining when winds are excessive.			
	8. Adjacent streets and roads shall be swept at least once per day, preferably at the end of the day, if visible soil material is carried over to adjacent streets and roads.			
	9. Personnel involved in grading operations, including contractors and subcontractors, shall be advised to wear respiratory protection in accordance with California Division of Occupational Safety and Health regulations.			
	10. Material stockpiles shall be enclosed, covered, stabilized, or otherwise treated as needed to prevent blowing fugitive dust off site.			
AQ-3	All project construction and site preparation operations shall be conducted in compliance with all applicable VCAPCD Rules and Regulations with emphasis on Rule 50 (Opacity), Rule 51 (Nuisance), and Rule 55 (Fugitive Dust), as well as Rule 10 (Permit Required).	CM	District WERD and DCD	During construction.
<i>Transportation and Circulation</i>				
TR-1	The District shall prepare a construction worksite traffic control plan and submit it to the County, cities, <u>Gold Coast Transit</u> , <u>Oxnard School District</u> , <u>Oxnard Union High School District</u> , and <u>Hueneme School District</u> for review and approval prior to soliciting bids for the construction contract. This plan shall include such elements as the location of any lane closures, restricted hours during which lane closures would not be allowed, local traffic detours, protective devices and traffic controls (such as barricades, cones, flagmen, lights, warning beacons, temporary traffic signals, warning signs), access to abutting properties, provisions for pedestrians and bicycles, and provisions to maintain emergency access through construction work areas. The contractor shall comply with this plan.	CM	District WERD and DCD	Prior to and during construction.
TR-2	The Contractor shall coordinate with emergency service providers (police, fire, ambulance and paramedic services) to provide advance notice of any lane closures, construction hours and changes to local access and to identify alternative routes where appropriate.	CM	District WERD and DCD	Prior to and during construction.
TR-3	To preserve parking for residents during phase 1 construction, the District shall employ vertical shoring techniques along the Surfside III property where open trenching would result in the temporary removal of off-street parking spaces.	CM	District WERD and DCD	During construction.

0.4 Mitigation Monitoring and Reporting Program

Mitigation Measure	Type	Monitor	Schedule
<i>Noise and Vibration</i>			
<p>NOISE-1 Equipment Noise Reduction</p> <ol style="list-style-type: none"> 1. Minimize the use of impact devices, such as jackhammers, pavement breakers, and hoe rams. Where possible, use concrete crushers or pavement saws rather than hoe rams for tasks such as concrete or asphalt demolition and removal. 2. Pneumatic impact tools and equipment used at the construction site shall have intake and exhaust mufflers recommended by the manufacturers thereof, to meet relevant noise limitations. 3. Provide impact noise reducing equipment; i.e., jackhammers and pavement breaker(s), with noise attenuating shields, shrouds or portable barriers or enclosures, to reduce operating noise. 4. Provide upgraded mufflers, acoustical lining or acoustical paneling for other noisy equipment, including internal combustion engines. 5. Avoid blasting and impact-type pile driving. 6. Use alternative procedures of construction and select a combination of techniques that generate the least overall noise and vibration. Such alternative procedures could include the following: <ol style="list-style-type: none"> a. Use electric welders powered by remote generators. b. Mix concrete at non-sensitive off-site locations, instead of on-site. c. Erect prefabricated structures instead of constructing buildings on-site. 7. Use construction equipment manufactured or modified to reduce noise and vibration emissions, such as: <ol style="list-style-type: none"> a. Electric instead of diesel-powered equipment. b. Hydraulic tools instead of pneumatic tools. c. Electric saws instead of air- or gasoline-driven saws. 8. Turn off idling equipment when not in use for periods longer than 30 minutes. 	CM	District WERD and DCD	During construction.
<p>NOISE-2 A temporary noise control barrier shall be installed and maintained between the temporary work area and Buildings 6 and 7 in the Surfside III community during periods when heavy equipment is operating within 500 feet of these residences or when heavy-duty trucks are regularly using the access road adjacent to the drain. <u>Additionally, temporary noise control barriers shall be installed and maintained in residential and commercial areas along Phases 2-4 to the extent that they do not affect traffic sight lines (e.g., noise barriers would not be installed at intersections).</u> The noise barrier shall be composed of noise control blankets 10 feet tall with a sound transmission class of at least STC-25. <u>In addition to placement of noise control blankets along the construction area adjacent to the Shoreline Care Facility, located at 5225 South J Street, and if needed, Our Saviour's Evangelical Lutheran Church</u></p>	CM	District WERD and DCD	Prior to and during construction

0.4 Mitigation Monitoring and Reporting Program

Mitigation Measure	Type	Monitor	Schedule
<p>at 905 Redwood Street, to further reduce noise levels below 68 dB(A) L_{eq}, additional noise control barriers shall be installed. To ensure sufficient noise barriers are deployed, construction noise levels shall be monitored ten feet from the exterior of the nursing home and church at the start of work activities within 500 feet of these two locations. Barriers would be installed to reduce noise levels generated by the loudest equipment when construction activities are closest to the nursing home and church. Monitoring would occur at the nursing home during construction Phases 2 and 3 and at the church during construction Phase 4. Construction noise levels would be monitored weekly thereafter to ensure proper function of the barriers throughout work and that the desired noise attenuation at these locations is achieved.</p> <p>This noise control barrier will also provide visual screening for all residents along the work area, eastern boundary of including the Surfside III property to shield residents from views of the J Street Drain during construction. If the Surfside III Condominium Owners' Association does not grant a temporary work area to enable installation of temporary noise barriers at Buildings 6 and 7, the District will provide funds for the Association to arrange the barrier installation on their property. Sound barriers would not be installed where encircling block walls already exist (e.g., newer condo/townhome complex west of J St Drain in Phase 1).</p>			
<p>NOISE-3 Prior to construction, the District shall request property owner permission to video record the condition of structures adjacent to the J Street Drain in the presence of the property owner. The recording shall be performed and stored by an independent third-party, with a copy given to the property owner. If vibration-induced damages occur as a result of construction, property owners would be invited to submit claims documenting such damages within one year following construction completion. The third-party would again enter the property to video record its post-construction condition, again providing a copy to the property owner. Both recordings would be compared, and the District would provide compensation to repair new damages observed in the post-construction recordings. Once both parties have agreed to the compensation, both pre- and post-construction video recordings stored by the third-party would be given to the property owner.</p>	CM and OM	District WERD and DCD	Prior to construction and upon project completion.
<i>Geologic and Seismic Hazards</i>			
<p>GEO-1 Erosion and Sediment Control</p> <p>In order to mitigate potential soil erosion and loss of topsoil from excavation, the construction SWPPP shall incorporate, but not be limited to, the following measures, as appropriate, to minimize erosion:</p> <ul style="list-style-type: none"> Excavation and grading shall be restricted to the dry season (April 15th to October 15th) unless an erosion control plan is in place and all measures therein are in effect. 	CM	District WERD and DCD	Prior to and during construction.

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Mitigation Measure	Type	Monitor	Schedule
<ul style="list-style-type: none"> Best Management Practices (BMPs) will be employed to control erosion, including temporary siltation protection devices such as silt fencing, straw bales, and sand bags. These shall be placed at the base of all cut and fill slopes and soil stockpile areas where potential erosion may occur. <p>Refer to Section 4.3, Water Resources and Hydraulic Hazards, for additional requirements related to stormwater and non-stormwater pollution prevention and control.</p>			
<p>GEO-2 Seismic Related Ground Failure and Expansive Soils</p> <p>The proposed project shall comply with all recommendations set forth in the Preliminary Geologic Geotechnical Investigation (Appendix F) to reduce the risk of hazards associated with seismic-related ground failure, liquefaction and expansive soils along the J Street Drain. These recommendations address the following:</p> <ul style="list-style-type: none"> Site preparation Excavation – stabilization measures, dewatering procedure, and shoring Fill Material and General Fill Placement Channel Foundation Design 	CM	District WERD and DCD	During construction.
<p>GEO-3</p> <p>a) <u>A Licensed Surveyor shall plan and install a survey monument monitoring system on buildings within 25 feet of proposed vertical shoring to collect monthly baseline data for six months before construction. The monuments shall remain in place and be monitored monthly for one year after construction completion to track any latent changes. During construction, the Licensed Surveyor shall conduct surveys corresponding to major phases of work such as shoring installation, excavation, and backfill.</u></p> <p>b) <u>Before Phase 1 construction may begin, the District shall require the Contractor to prepare a Work Plan, which would take into account all available geotechnical information for the areas where vertical shoring and sheet piles are to be installed. The Plan would specify the contractor's approach to installing vertical shoring and sheet piles in a manner that would avoid and minimize associated potential vibration damage to adjacent structures.</u></p> <p>c) <u>The Work Plan shall require the Contractor to take daily measurements of the survey monuments on adjacent structures described in (a) above to track potential changes during construction.</u></p> <p>d) <u>Should the surveys or measurements described in (a) and (c) above indicate subsidence or other damage due to construction activities, the Contractor shall modify the Work Plan to address the causes. Property owners within 25 feet of the proposed shoring shall be promptly notified of observed damage, and any Work Plan revisions shall be available to</u></p>	CM	District WERD and DCD	Six months prior to, during, and for one year after project construction.

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Mitigation Measure		Type	Monitor	Schedule
<p><u>property owners upon request. For multi-unit structures, the District shall identify a single designated representative with whom to communicate.</u></p> <p>e) <u>The District shall provide a construction contact telephone number to adjacent residents before work commences so that they may report possible observations of damage immediately to the District.</u></p>				
Hazardous Materials				
HAZ-1	Prior to dewatering activities between the Ventura County Railroad and the south project terminus, the District shall install or use existing monitoring wells in order to verify the direction of groundwater movement at the time of dewatering. If it is determined that there is a potential for groundwater migration at the site, the District shall install and operate five injection wells. Injection of water into the shallow aquifer at the beach parking area between the J Street Drain and the Halaco Site would minimize the migration of groundwater from beneath the Halaco Site.	CM	District WERD and DCD	Prior to dewatering activities and during construction.
Cultural Resources				
CULT-1	In the event that archaeological resources are exposed during project construction, all earth disturbing work within the vicinity of the find shall be temporarily suspended or redirected until a qualified archaeologist has evaluated the nature and significance of the find. After the find has been appropriately mitigated, work in the area may resume.	CM	District WERD and DCD	During construction.
CULT-2	If the resource is determined to be potentially significant, a cultural resources treatment plan shall be developed to provide appropriate mitigation measures. These measures may include archaeological testing and data recovery excavation. The treatment plan shall also include a detailed description of associated reporting requirements, curation requirements for any cultural materials collected during treatment, and the qualifications for archaeologists involved in treatment activities.	CM	District WERD and DCD	During construction.
CULT-3	If human remains are encountered, California Health and Safety Code Section 7050.5 states that no further disturbance shall occur until the Ventura County Coroner has made the necessary findings as to origin. Further, pursuant to California Public Resources Code Section 5097.98(b) remains shall be left in place and free from disturbance until a final decision as to the treatment and disposition has been made. If the Ventura County Coroner determines the remains to be Native American, the NAHC shall be contacted within a reasonable timeframe. Subsequently, the NAHC shall identify the "most likely descendant." The most likely descendant shall then make recommendations, and engage in consultations concerning the treatment of the remains as provided in Public Resources Code 5097.98.	CM	District WERD and DCD	During construction.

0.4.3 PROJECT OPERATION CONSIDERATIONS

The project incorporates several best management practices (BMPs) contained in the Final Program EIR for the Environmental Protection Measures for the Ongoing Routine Operations and Maintenance Program, previously adopted by the Ventura County Board of Supervisors in May 2008. These BMPs minimize the project's operational impacts. These BMPs are currently implemented at all existing District facilities, including the J Street Drain, and would continue to be implemented after construction of the proposed J Street Drain improvements. Specifically, operational BMPs are provided for aesthetics, air quality, biological resources, geology and soils, hydrology/water quality, land use, noise, public services, traffic, and utilities. A complete list of the design considerations for the project is presented in Table 0.4-2.

Table 0.4-2. Project Design Features

Biological Resources	
BMP-2	Prevent Discharge of Silt-Laden Water During Concrete Channel Cleaning. The removal of sediments, vegetation, algae, and trash from fully lined improved channels for purposes of NPDES storm water permit compliance shall include measures to prevent the discharge of silt-laden water or pollutants to downstream unimproved channels with soft bottoms (Board Order No. 00-108; NPDES Permit No. CAS004002, adopted on July 27, 2000). These measures may include temporary downstream silt barriers (sand bags, straw bales, in-channel materials), silt fences, upstream diversion, etc. Per Section 401 Water Quality Certification requirements, a Water Diversion Plan would be needed for water diversion activities
BMP-3	Location of Temporary Stockpiles. Temporary stockpiles outside the channels or debris basins shall be stabilized by compacting or other measures if present at the work site from 1 December to 1 April. Silt fences, berms, or other methods shall be used to prevent sediments from being eroded from the temporary stockpile into the adjacent drainage. Temporary stockpiles may be placed in channel bottoms or debris basins if they are located on barren soil or areas with non-native weeds, and are not placed in such a manner that they would be exposed to flowing water. No temporary stockpiles shall be placed on the channel bed or banks during the period of 1 December to 1 April for more than the duration of the sediment removal work. Permanent stockpiles shall be located landward of the 100-year floodplain to the maximum extent feasible.
BMP-4	<p>Survey for Habitat Prior to Routine Maintenance Work. Prior to routine maintenance and repair activities performed within or adjacent to an earthen or earthen bottom channel or in-channel structure during the period 1 March to 1 August, a District biologist or consulting biologist shall determine if suitable habitat is present for riparian-dependent breeding birds in or within 400 feet of the work area. Suitable habitat is generally defined as dense or moderately dense willow or mulefat scrub or woodland with sufficient density and vegetative structure to support nesting and foraging.</p> <p>Prior to routine maintenance and repair activities performed within or adjacent to an earthen or earthen bottom channel or in-channel structure that would disrupt foraging or nesting of raptors during the period 1 February to 1 August, a District biologist or consulting biologist shall survey the 400 feet radius around the project site for raptor nest initiation or occupation.</p> <p>Channel cleanout shall be postponed to 1 August if such habitat is present in the work area or within 200 feet of the work area, or until nestlings have fledged if the District determines that riparian bird or raptor nesting is occurring in the habitat area. This restriction does not apply if the nesting birds are house sparrows, house finches, crows, cowbirds, or other common upland species or introduced species. If any federally or state listed birds are found nesting within the 200 or 400 feet survey radius, the District shall consult with CDFG for the applicability of this restriction.</p>
BMP-8	Avoid Disturbance to Native Beach or Wetland Species. The District shall avoid areas of beach dune vegetation when accessing storm drain outlets at the beach with vehicles for routine maintenance. The removal of native beach or wetland plants that are located at or near the beach outlet shall be minimized. Prior to the removal of obstructive sand or vegetation from a beach outlet, qualified District personnel shall determine if suitable habitat (i.e., a brackish waterbody) is present at the outlet for tidewater gobies, and if the species is present. In addition,

0.4 Mitigation Monitoring and Reporting Program

	qualified District personnel shall determine if suitable habitat is present along the vehicle access route across the beach for foraging or nesting snowy plovers and California least terns. If any of these sensitive species are present at the storm drain outlet or along the access route, the District will either postpone the routine maintenance work until these species are no longer present, or follow avoidance and/or relocation procedures approved by U.S. Fish and Wildlife Service (USFWS). This BMP shall not apply if there is a threat of a storm and the outlet is plugged. The District shall contact CDFG and USFWS when California least terns, snowy plover, or tidewater gobies are observed during the pre-project surveys for consultation.
BMP-9	Aquatic Pesticide BMPs. The District shall follow the most up-to-date BMPs and the monitoring and reporting requirements in the District's NPDES Stormwater Quality Management Plan (Board Order No. 00-108; NPDES Permit No. CAS004002, adopted on July 27, 2000, available at http://vcstormwater.org/documents/workproducts/stormwater_quality_mangement_plan.pdf) when applying herbicides to channels and basins. The District shall also follow BMPs in the Ventura County Application Protocol for Pesticides, Fertilizers, and Herbicides (included in Appendix I).
BMP-11	Leave Patches of Vegetation in Channel Bottom. The District shall minimize vegetation removal or reduction from earthen or earthen bottom channels to the least amount necessary to achieve the specific maintenance objectives for the reach. Vegetation removal in the channel bottom shall be conducted in a non-continuous manner, allowing small patches of in-channel vegetation to persist provided it will not adversely affect conveyance capacity.
BMP-12	Leave Herbaceous Wetland Vegetation in Channel Bottom. Consistent with the maintenance objectives, the District shall avoid removal or reduction of emergent herbaceous wetland vegetation on the channel bottom that is rooted in or adjacent to the low flow channel or a pond in order to provide cover for aquatic wildlife. This same type of vegetation shall be protected during the removal of taller obstructive woody vegetation on the channel bottom.
BMP-14	Avoid Road Base Discharge. The District shall implement measures to prevent the discharge of road base, fill, sediments, and asphalt beyond a previously established road bed when working adjacent to channels and basin bottoms.
BMP-15	Mitigate/Replace Temporary Impacts to Habitat. For repair of in-channel structures and features that results in the temporary disturbance of native wetland or riparian vegetation adjacent to the facility, the District shall restore native wetland or riparian vegetation in the affected work areas after the repair or reconstruction work. Restoration shall include planting or seeding native plants that were present prior to the work and/or are compatible with existing riparian vegetation near the work area. The District shall prepare a restoration plan for each repair project that specifies the limits of restoration, planting mix and densities, performance criteria for survival and growth, and at least a three-year maintenance and monitoring procedures. Restoration sites shall be located outside the limits of the repaired structure. If no suitable restoration site is available near the work area or the creation of a restoration area near the work area would conflict with flood control needs, the District shall select another location on District right-of-way in close proximity. If suitable restoration sites are not available, the District shall provide funds to a third party (public agency or non-profit organization) to implement the required mitigation in the same watershed as the impact. Habitat restoration under this BMP shall only occur if the affected areas support native wetland or riparian vegetation; no restoration is required for barren areas or areas dominated by non-native plants. The District shall submit all habitat restoration plans to CDFG prior to implementation.
BMP-17	Concrete Wash-Out Protocols. The District shall implement appropriate waste management practices during on site concrete repair operations. Waste management practices will be applied to the stockpiling of concrete, curing and finishing of concrete as well as to concrete wash-out operations. Waste management practices shall be adequate to ensure that fluids associated with the curing, finishing and wash-out of concrete shall not be discharged to the channel or basin. Concrete wastes shall be stockpiled separately from sediment and protected by erosion control measures so that concrete dust and debris are not discharged to the channel or basin. The District shall determine the appropriate waste management practices based on considerations of flow velocities, site conditions, availability of erosion control materials and construction costs.
BMP-18	Water Diversion Guide. Water diversion activities undertaken as part of routine repair and maintenance operations in improved and unimproved channels as well as debris basins shall follow the BMP guidance established as the Water Diversion Guide incorporated into the Final Program EIR addressing Environmental Protection Measures for the Ongoing Routine Operations and Maintenance Program, adopted by the District in May 2008.

0.4 Mitigation Monitoring and Reporting Program

BMP-20	Implementation of Integrated Pest Management. The District shall inspect its critical and non-critical facilities regularly to document and identify the presence or absence of ground squirrels. The District shall develop and implement an Integrated Pest Management (IPM) program that identifies tolerance level, control thresholds and approved rodent control methods and/or combinations of methods at each District facility. Rodent control methods implemented at each facility shall be applied as needed and as appropriate for site conditions and the season. Methods implemented shall minimize potential primary and secondary hazards to non-target species. The District shall maintain a preventative IPM program with zero tolerance for ground squirrels for its critical facilities where failure would impact public safety. When rodent control becomes necessary at non-critical facilities, the District shall choose applicable, cost-effective treatment method(s) from the District's IPM program. Treatment options considered for each site shall include: trapping, habitat modification, alternative construction methods and materials, use of raptors, clean and rodenticide-treated bait stations, broadcast diphacinone and zinc phosphide with or without carcass collection, and other methods. As part of an ongoing monitoring program to determine the effectiveness of the squirrel control program, the District shall maintain uniform inspection records for each facility and all control efforts. The District shall conduct a staff training program that covers the IPM program including rodent issues, inspection and monitoring requirements, and treatment options.
BMP-21	Avoid Spills and Leaks. The District shall ensure that all equipment operating in and near a watercourse, or in a basin, is in good working condition and free of leaks. No equipment maintenance or refueling shall occur in a channel or basin bottom. Spill containment materials must be on site or readily available for any equipment maintenance or refueling that occurs adjacent to a watercourse. In addition, all maintenance crews working with heavy equipment shall be trained in spill containment and response.
BMP-22	Biological Surveys in Appropriate Habitat Prior to Vegetation Maintenance. Prior to any sediment removal, vegetation control (by herbicide application, mowing, or discing), or repair work in earthen or earthen bottom channels and basins that contain native aquatic, riparian, or wetland habitats suitable for sensitive fish and wildlife species, the District shall conduct appropriate field investigations to determine if any threatened, endangered, or sensitive species are present. If such species are determined to be present in or in close proximity to the work areas, the District shall reschedule the work when the species are not present. If it is necessary to conduct the work while the species are present or in proximity to the work areas, the District shall develop other avoidance or relocation measures in consultation with the CDFG, USFWS, or National Oceanic and Atmospheric Administration (NOAA) Fisheries prior to conducting the work. If the work could affect state or federally listed species or their habitat, the District would employ avoidance or relocation measures approved by USFWS, NOAA Fisheries, or CDFG, as appropriate, for the maintenance program. This measure includes protection for the following threatened, endangered, or sensitive species that could occur at maintenance sites: tidewater goby, southern steelhead, trout, unarmored threespine stickleback, California redlegged frog, arroyo toad, least Bell's vireo, southwestern willow flycatcher, arroyo chub, southwestern pond turtle, two-striped garter snake, Cooper's hawk, sharp-shinned hawk, yellow warbler, yellow breasted chat, purple marlin, tri-colored blackbird, and long-eared owl
Water Resources and Hydraulic Hazards	
BMP 1	Avoid Channel Work During the Rainy Season. Routine maintenance and repair activities in earthen channels and in channels with soft bottoms and bank protection shall not occur during the rainy season 1 December to 1 April to avoid work when water could be present in the drainage due to runoff. Routine maintenance and repair activities may occur during this period if water is absent from the drainage because of low runoff conditions, or activities can be performed without working in flowing water. Work in flowing water during this period may proceed if there are no feasible alternatives and completion of the maintenance work during this time period is critical. Work in flowing water shall be conducted according to the BMPs established in the Water Diversion Guide attached as Appendix E to this EIR.
BMP 2	Prevent Discharge of Silt-Laden Water During Concrete Channel Cleaning. The removal of sediments, vegetation, algae, and trash from fully lined improved channels for purposes of NPDES storm water permit compliance shall include measures to prevent the discharge of silt-laden water or pollutants to downstream unimproved channels with soft bottoms (Board Order No. 00-108; NPDES Permit No. CAS004002, adopted on July 27, 2000). These measures may include temporary downstream silt barriers (sand bags, straw bales, in-channel materials), silt fences, upstream diversion, etc. Per Section 401 Water Quality Certification requirements, a Water Diversion Plan would be needed for water diversion activities.

0.4 Mitigation Monitoring and Reporting Program

BMP 3	Location of Temporary Stockpiles. Temporary stockpiles outside the channels or debris basins shall be stabilized by compacting or other measures if present at the work site from 1 December to 1 April. Silt fences, berms, or other methods shall be used to prevent sediments from being eroded from the temporary stockpile into the adjacent drainage. Temporary stockpiles may be placed in channel bottoms or debris basins if they are located on barren soil or areas with non-native weeds, and are not placed in such a manner that they would be exposed to flowing water. No temporary stockpiles shall be placed on the channel bed or banks during the period of 1 December to 1 April for more than the duration of the sediment removal work. Permanent stockpiles shall be located landward of the 100-year floodplain to the maximum extent feasible.
BMP 14	Avoid Road Base Discharge. The District shall implement measures to prevent the discharge of road base, fill, sediments, and asphalt beyond a previously established road bed when working adjacent to channels and basin bottoms.
BMP 17	Concrete Wash-Out Protocols. The District shall implement appropriate waste management practices during on site concrete repair operations. Waste management practices will be applied to the stockpiling of concrete, curing and finishing of concrete as well as to concrete wash-out operations. Waste management practices shall be adequate to ensure that fluids associated with the curing, finishing and wash-out of concrete shall not be discharged to the channel or basin. Concrete wastes shall be stockpiled separately from sediment and protected by erosion control measures so that concrete dust and debris are not discharged to the channel or basin. The District shall determine the appropriate waste management practices based on considerations of flow velocities, site conditions, availability of erosion control materials and construction costs.
BMP 21	Avoid Spills and Leaks. The District shall ensure that all equipment operating in and near a watercourse, or in a basin, is in good working condition and free of leaks. No equipment maintenance or refueling shall occur in a channel or basin bottom. Spill containment materials must be on site or readily available for any equipment maintenance or refueling that occurs adjacent to a watercourse. In addition, all maintenance crews.
Air Quality	
<p>The following measures are part of the APCD's Model Fugitive Dust Mitigation Plan and shall be incorporated to maintenance activities as needed to further reduce the District's fugitive dust emissions during grading, excavation, and construction activities.</p> <ul style="list-style-type: none">• The areas disturbed at any one time by clearing, grading, earth moving, or excavation operations shall be minimized to prevent excessive amounts of dust.• Pre-grading/excavation activities shall include watering the area to be graded or excavated before commencement of grading or excavation operations. Application of water (preferably reclaimed, if available) should penetrate sufficiently to minimize fugitive dust during earthmoving, grading, and excavation activities.• All trucks shall be required to cover their loads as required by California Vehicle Code §23114.• All graded and excavated material, exposed soil areas, including unpaved parking and staging areas, and other active portions of the construction site, including unpaved on site roadways, shall be treated to prevent fugitive dust. Treatment shall include, but not necessarily be limited to, periodic watering, application of environmentally safe soil stabilization materials, and/or roll-compaction as appropriate. Watering shall be done as often as necessary and reclaimed water shall be used whenever possible.• Graded and/or excavated inactive areas of the construction site shall be monitored by the District's operation and maintenance staff at least weekly for dust stabilization. Soil stabilization methods, such as water and roll-compaction, and environmentally safe dust control materials, shall be periodically applied to portions of the construction site that are inactive for over four days. If no further grading or excavation operations are planned for the area, the area should be periodically treated with environmentally-safe dust suppressants.• During periods of high winds (i.e., wind speed sufficient to cause fugitive dust to impact adjacent properties), all clearing, grading, earth moving, and excavation operations shall be curtailed to the degree necessary to prevent fugitive dust created by on site activities and operations from being a nuisance or hazard, either on site or off site. The District staff shall use his/her discretion in conjunction with the APCD in determining when winds are excessive.• Rumble strips or track out devices shall be installed where vehicles enter and exit unpaved roads onto paved road, or wash off trucks and any other equipment leaving the site.• All on site construction roads that have a daily traffic volume of more than 50 daily trips shall be stabilized as to minimize transport of earthen material from the site.	

0.4 Mitigation Monitoring and Reporting Program

- Open material stockpiles shall be roller compacted, periodically watered, or treated with appropriate dust suppressants.
- There shall be at least one qualified District staff on site each work day to monitor the provisions of the Fugitive Dust Mitigation Plan and any other applicable fugitive dust rules, ordinances, or conditions.
- Personnel involved in grading operations shall be advised to wear respiratory protection in accordance with California Division of Occupational Safety and Health Regulations.

All project construction operations shall be conducted in compliance with all applicable APCD Rules and Regulations with emphasis on Rule 50 (Opacity) and Rule 51 (Nuisance).

Transportation and Circulation

- If maintenance activities would result in substantial vehicle trips on a roadway with unacceptable LOS at peak hours, maintenance staff should either choose an alternate route or conduct vehicle trips off peak hours. In addition, District staff shall avoid stacking of maintenance trucks on public roads during maintenance activities. The minimum acceptable LOS for road segments and intersections within the County Regional Road Network and Local Road Network shall be as follows:
 - LOS D for all County thoroughfares and federal highways and state highways in the unincorporated area of the County, except as otherwise provided below;
 - LOS E for SR-33 between the northerly end of the Ojai Freeway and the City of Ojai, Santa Rosa Road, Moorpark Road north of Santa Rosa Road, and SR-34 north of the City of Camarillo;
 - LOS C for all County-maintained local roads; and
 - The LOS prescribed by the applicable city for all federal highways, state highways, city thoroughfares and city-maintained local roads located within that city, if the city has formally adopted General Plan policies, ordinances, or a reciprocal agreement with the County respecting development in the city that would individually or cumulatively affect the LOS of federal highways, state highways, County thoroughfares and County-maintained local roads in the unincorporated area of the County.

Noise and Vibration

- Construction Noise BMPs. Noise-generating construction activities shall be restricted to the daytime (i.e., 7:00 AM to 7:00 PM, Monday through Friday), during which noise levels shall not exceed:
 - 75 dB(A) Leq(h) at noise sensitive locations when construction work duration would last up to 3 days;
 - Ventura County Watershed Protection District 2-64 Final Program EIR – May 2008
 - 70 dB(A) Leq(h) at noise sensitive locations when construction work would last from 4 to 7 days;
 - 65 dB(A) Leq(h) at noise sensitive locations when construction work would last from 1 to 2 weeks;
 - 60 dB(A) Leq(h) at noise sensitive locations when construction work would last from 2 to 8 weeks, or
 - 55 dB(A) Leq(h) at noise sensitive locations when construction work duration would exceed 8 weeks.
- If these thresholds are exceeded at noise sensitive locations, noise abatement measures shall be implemented to reduce noise levels. Noise abatement measures shall include, but are not limited to, the construction equipment source noise reduction methods and construction noise propagation path reduction methods provided in the County of Ventura Construction Noise Threshold Criteria and Control Plan. As defined by the County of Ventura Construction Noise Threshold Criteria (2005), daytime noise-sensitive receptors include hospital, nursing homes (quasi-residential), schools, churches, and libraries (when in use). Single-family, multi-family dwellings, hotels, and motels are considered evening and nighttime noise-sensitive receptors. Since noise-generating construction activities would not occur during the evening or night hours, no noise mitigation for single-family dwellings, multi-family dwellings, hotels or motels is necessary.

Geology and Seismic Hazards

- BMP 1** Avoid Channel Work During the Rainy Season. Routine maintenance and repair activities in earthen channels and in channels with soft bottoms and bank protection shall not occur during the rainy season 1 December to 1 April to avoid work when water could be present in the drainage due to runoff. Routine maintenance and repair activities may occur during this period if water is absent from the drainage because of low runoff conditions, or activities can be performed without working in flowing water. Work in flowing water during this period may proceed if there are no feasible alternatives and completion of the maintenance work during this time period is critical. Work in flowing water shall be conducted according to the BMPs established in the Water Diversion Guide attached as Appendix E to this EIR.

0.4 Mitigation Monitoring and Reporting Program

BMP 3	Location of Temporary Stockpiles. Temporary stockpiles outside the channels or debris basins shall be stabilized by compacting or other measures if present at the work site from 1 December to 1 April. Silt fences, berms, or other methods shall be used to prevent sediments from being eroded from the temporary stockpile into the adjacent drainage. Temporary stockpiles may be placed in channel bottoms or debris basins if they are located on barren soil or areas with non-native weeds, and are not placed in such a manner that they would be exposed to flowing water. No temporary stockpiles shall be placed on the channel bed or banks during the period of 1 December to 1 April for more than the duration of the sediment removal work. Permanent stockpiles shall be located landward of the 100-year floodplain to the maximum extent feasible.
BMP 14	Avoid Road Base Discharge. The District shall implement measures to prevent the discharge of road base, fill, sediments, and asphalt beyond a previously established road bed when working adjacent to channels and basin bottoms.
BMP 17	Concrete Wash-Out Protocols. The District shall implement appropriate waste management practices during on site concrete repair operations. Waste management practices will be applied to the stockpiling of concrete, curing and finishing of concrete as well as to concrete wash-out operations. Waste management practices shall be adequate to ensure that fluids associated with the curing, finishing and wash-out of concrete shall not be discharged to the channel or basin. Concrete wastes shall be stockpiled separately from sediment and protected by erosion control measures so that concrete dust and debris are not discharged to the channel or basin. The District shall determine the appropriate waste management practices based on considerations of flow velocities, site conditions, availability of erosion control materials and construction costs.
Public Health	
BMP-9	Aquatic Pesticide BMPs. The District shall follow the most up-to-date BMPs and the monitoring and reporting requirements in the District's NPDES Stormwater Quality Management Plan (Board Order No. 00-108; NPDES Permit No. CAS004002, adopted on July 27, 2000, available at: http://vcstormwater.org/documents/workproducts/stormwater_quality_mangement_plan.pdf) when applying herbicides to channels and basins. The District shall also follow BMPs in the Ventura County Application Protocol for Pesticides, Fertilizers, and Herbicides (included in Appendix I).

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ES.0 EXECUTIVE SUMMARY

This ~~Final Environmental Impact Report (FEIR)~~ ~~Recirculated Draft Environmental Impact Report (RDEIR)~~ has been prepared in accordance with the California Environmental Quality Act (CEQA) of 1970 (Public Resources Code, Section 21000 et seq.) and the *CEQA Guidelines* (California Code of Regulations (CCR), Section 15000 et seq.) to analyze the potential significant impacts associated with the J Street Drain Project.

ES.1 THE PROJECT

The proposed project would involve increasing the capacity of the existing channel to reduce potential flooding in residential and commercial areas within the Cities of Oxnard and Port Hueneme. The existing concrete-lined channel has a varying depth of four feet at the northern end to almost four feet at the southern end, with a bottom width varying from 20 to 30 feet and 1:1 side slopes. In order to increase the capacity of the channel and maintain an appropriate drainage slope, the channel needs to be deeper and wider. Operation and maintenance of the proposed channel would be conducted in accordance with the Ventura County Watershed Protection District's routine operation and maintenance protocols, as identified in the Final EIR for the Environmental Protection Measures for the Ongoing Routine Operations and Maintenance Program (May 2008).

The proposed project involves converting the existing trapezoidal concrete channel into an open rectangular channel with a bottom up to four feet deeper than the existing channel bottom. The existing box culverts under the street crossings and railroad crossing would be replaced by larger structures to improve flow conveyance. The existing concrete lining ends approximately 50 feet south of the Hueneme Drain Pump Station. Because the concrete lined portion of the channel invert would be lowered about 2.5 to 4 feet to create the required capacity, the excavation would continue south beyond the concrete-lined channel. The finished invert would be daylighted via an earthen ramp to the lagoon at a 10:1 slope at a distance of up to 40 feet from the end of the existing concrete. A ten-foot-thick layer of four-ton rock riprap would be placed on horizontally beneath the earthen ramp at the end of and at the same elevation as the concrete drain bottom to dissipate flow energy. It anticipated that during the first few natural lagoon breaching events following Phase 1 construction, the movement of water (tidal and drain flow) and sediment would ultimately create an equilibrium elevation within the channel transition area, between the end of the concrete channel and the Ormond Beach Lagoon annual breach location ~~and the rock lining would be covered by sediment.~~

ES.2 PROJECT OBJECTIVES

The District's primary project objectives include:

- Flood control protection – increase drain size to provide capacity for 100-year flood flow;
- Maintain the existing functional characteristics of the Ormond Beach Lagoon;
- Ensure project compatibility with future Ormond Beach Lagoon restoration plans;
- Minimize the disturbance to tidewater goby habitat downstream of the J Street Drain lined channel as well as snowy plover and California least tern nesting areas on Ormond Beach;
- Minimize operation and maintenance requirements, especially during storms; and
- Minimize effects on water quality of the lagoon.

ES.3 LOCATION AND EXISTING CONDITIONS

The project site is located along J Street, within the City of Oxnard and near the City of Port Hueneme in Ventura County. It extends approximately 12,100 feet from the Ormond Beach Lagoon to Redwood Street in the City of Oxnard (Figure 4.1-1). The existing J Street Drain is a concrete-lined trapezoidal channel from Redwood Street to approximately 50 feet south of the Hueneme Drain Pump Station where it discharges into Ormond Beach Lagoon (Figure 4.2-1). The proposed concrete-lined channel would end at the same location as the existing concrete lining.

The J Street Drain comprises four reaches:

1. Ormond Beach Lagoon outlet to Hueneme Road;
2. Hueneme Road to Pleasant Valley Road;
3. Pleasant Valley Road to Yucca Street; and
4. Yucca Street to Redwood Avenue

Reach 1 contains approximately 2,900 linear feet of channel improvements and two crossings, one at Hueneme Road and the other at the Ventura County Railroad. The channel is located within a 70.5-foot-wide easement. The District owns the northern approximately 2,300 linear feet. The southern 600 feet is a District easement on land owned by the City of Oxnard. The boundary between the cities of Oxnard and Port Hueneme occurs along the western property line. High density residential and commercial storage exists on the west side of the channel. A wastewater treatment plant and industrial manufacturing occur east of the channel. A service road provides maintenance access along the east side of the channel. At the south end of this reach, the existing concrete-lined channel outlets into the Ormond Beach Lagoon.

Reach 2 contains approximately 2,600 linear feet of channel improvements and two crossings, one at Pleasant Valley Road and the other at Clara Street. The channel runs along the center of the street, dividing the northbound and southbound lanes of traffic. Residential dwellings of varying densities front both sides of the street. The southern approximately 1,300 linear feet of J Street is 132 feet wide. The J Street Drain is contained within a 52-foot-wide easement centered within the roadway. The northern approximately 1,300 linear feet of J Street is 122 feet wide. The District's 52-foot-wide J Street Drain easement is roughly centered within this area, with 40 feet of land owned by the City of Oxnard to the east and 30 feet to the west.

Reach 3 contains approximately 4,000 linear feet of channel improvements and two crossings, one at Bard Road and the other at Yucca Street. Single family homes front both sides of the street except for the Bubbling Springs Community Park, owned by the City of Port Hueneme, located on the southwest corner of Bard Road. The total J Street easement is 122 feet from Pleasant Valley Road northward approximately 250 feet to Sonoma Way. The J Street easement is 118 feet from Sonoma Way to Bard Road, and 114 feet from Bard Road to Yucca Street. The J Street Drain is maintained within a 40-foot wide easement roughly centered within the road easement.

Reach 4 contains approximately 2,600 linear feet of channel improvements and one crossing at Teakwood Street. Single family homes front both sides of the street. The J Street easement is 114 feet wide, and the J Street Drain is 40 feet wide. The District owns the northern portion of the channel, between Redwood Street and the west side of Teakwood Street. In the southern portion of this reach, from the west side of Teakwood Street to Yucca Street, the District maintains a channel easement.

ES.4 ENVIRONMENTAL IMPACTS

The original DEIR (SCH 2008041057) was circulated for public review from November 2, 2009 to January 19, 2010. All interested persons and organizations had an opportunity during this time to submit their written comments on the DEIR to the Ventura County Watershed Protection District (District). These comments along with their responses are located in Appendix L ~~in this~~ of the September 2011 Recirculated (RDEIR). ~~The original DEIR addressed increasing the capacity of the J Street Drain channel to reduce potential flooding in residential and commercial areas of the Cities of Oxnard and Port Hueneme. The RDEIR was prepared as a result of the January 18, 2010 flood emergency north of Ormond Beach Lagoon, the release of new information concerning the Halaco Superfund site in 2010 and 2011, revisions to Ventura County significance thresholds adopted in 2011, and issues raised during the DEIR process. The RDEIR was circulated for a 45-day public review from September 23, 2011 through November 7, 2011. All interested persons and organizations had an opportunity during that time to submit their written comments on the RDEIR to the District. A public meeting was held on September 23, 2011 to discuss the changes made to the original DEIR. Twenty-four comment letters were received during the RDEIR public review period. These comments along with their responses are located in Section 0.3 of this Final EIR.~~

~~As the result of comments on the original DEIR along with the District's responses to those comments, the occurrence of a flood emergency north of Ormond Beach Lagoon on January 18, 2010, the release of new information concerning the Halaco Superfund site in 2010 and 2011, and revisions to Ventura County significance thresholds adopted in 2011, the District determined that the DEIR for the J Street Drain project should be recirculated for public review and comment. A summary of environmental impacts, mitigation measures, and a level of impact remaining after mitigation is presented in Table ES-1 at the end of this Executive Summary.~~

The analysis contained in this ~~FEIR~~ RDEIR uses words “significant” and “less than significant” in the discussion of impact. These words specifically define the degree of impact and parallel language used in *CEQA Guidelines*. As required by CEQA, mitigation measures have been identified in this RDEIR to avoid or substantially reduce the level of potentially significant impacts to the greatest extent possible. Certain significant impacts, even with the inclusion of mitigation measures, cannot be reduced to a level below significance. Such impacts are identified as “unavoidable significant impacts.”

ES.5 UNAVOIDABLE SIGNIFICANT IMPACTS

The *CEQA Guidelines* define a significant impact on the environment as “a substantial, or potentially substantial, adverse change in any of the physical conditions within an area affected by the project, including land, air, water, flora, fauna, ambient noise, and objects of historic or aesthetic significance” (Section 15382). In order to approve a project with unavoidable significant impacts, the lead agency must adopt a Statement of Overriding Considerations. In adopting such a statement, the lead agency finds that it has reviewed the EIR, has balanced the benefits of the project against its unavoidable significant effects, and has concluded that the benefits of the project outweigh the unavoidable adverse environmental effects, and thus, the adverse environmental effects may be considered “acceptable” (*CEQA Guidelines*, Section 15093[a]). No unavoidable significant impacts resulting from the J Street Drain Project have been identified in the RDEIR.

ES.6 POTENTIALLY SIGNIFICANT IMPACTS THAT CAN BE MITIGATED

The EIR analysis identified the following potentially significant impacts associated with the proposed project that can be mitigated to less than significant levels:

- Biological Resources
- Water Resources and Hydraulic Hazards
- Transportation and Circulation
- Noise and Vibration
- Geologic and Seismic Hazard
- Cultural and Paleontological Resources
- Visual Resources
- Hazardous Materials and Waste

ES.7 IMPACTS CONSIDERED AND FOUND TO BE LESS THAN SIGNIFICANT

The analysis contained in the ~~R~~DEIR indicates that the project will not result in a significant impact with respect to the following:

- General Plan Environmental Goals and Policies
- Coastal Beaches and Sand Dunes
- Recreation
- Waste Treatment/Disposal
- Public Health

Pursuant to CEQA and the *CEQA Guidelines*, an Initial Study was prepared for this project (refer to Appendix A). The Initial Study concluded that the J Street Drain Project will result in either no impact or a less than significant impact with regards to:

- Agricultural Resources (including soils, water, air quality/microclimate, pests/diseases, land use incompatibility)
- Visual Resources (including scenic highway)
- Land Use (including community character, housing, and growth inducement)
- Mineral Resources (including aggregate and petroleum)
- Energy Resources
- Aviation Hazards
- Fire Hazards
- Glare
- Public Health
- Transportation/Circulation (including safety/design and tactical analysis [fire] on public and private roads, bus transit, railroads, airports, harbors, and pipelines)
- Water Supply (including quality, quantity, and fire flow)
- Flood Control/Drainage (including District and non-District flood control/drainage facilities)
- Utilities (including electric, gas, and communication)

- Law Enforcement and Emergency Services (including personnel/equipment and facilities)
- Fire Protection (including distance/response time and personnel/equipment/facilities)
- Education (including schools and libraries)

ES.8 BENEFICIAL EFFECTS

This ~~RE~~DEIR identifies the following effects of the proposed project that are beneficial:

- Flood control and drainage
- Minimize operation and maintenance requirements, especially during storms

ES.9 ALTERNATIVES TO THE PROJECT

Several alternatives to the proposed project were considered, and are described in the following sections.

ES.9.1 Channel Alternatives

Alternative A: Buried Box Culverts that Would Allow for Planting on Top

Alternative B: Preferred Channel Alternative

Alternative C: Open Rectangular Channel with Step

Alternative D: Two Separated Buried Box Culverts

Alternative E: Natural Channel

Alternative F: No Project

ES.9.2 Beach Outlet Alternatives

Outlet Alternative A: Dike System

Outlet Alternative B: Natural System with the Restoration Project

Outlet Alternative C: Preferred Outlet Alternative

Outlet Alternative D: No Project

ES.10 ISSUES IDENTIFIED DURING THE NOP PROCESS

No areas of controversy were identified during the Notice of Preparation (NOP) process. In response to the NOP, certain issues were raised by public agencies and individuals and these issues are addressed in the EIR as follows:

- Biological Resources (addressed in Section 4.2)
- Water Resources and Hydraulic Hazards (addressed in Section 4.3)
- Noise and Vibration (addressed in Section 4.6)
- Hazardous Materials/Waste (addressed in Section 4.8)
- Public Health (addressed in Section 4.11)

ES.11 MITIGATION MONITORING PROGRAM

In accordance with CEQA Section 21081.6, a mitigation monitoring program will be adopted by the District upon approval of the J Street Drain Project. The mitigation monitoring program is included as

Section 0.4 of this Final EIR will be prepared as a separate document and designed to ensure compliance with the adopted mitigation measures contained in the Final EIR. The program will be available for public review prior to the District taking action on the proposed project.

ES.12 SUMMARY OF IMPACTS

Table ES-1 summarizes the environmental effects associated with implementation of the proposed project, the mitigation measures required to avoid or minimize impact, and the level of impact remaining after full implementation of identified mitigation measures. Changes to the EIR were made in response to comments received on the RDEIR. Overall, the new information clarifies information and analysis presented in the RDEIR, or revises mitigation measures as requested by commenters on the RDEIR. Text that has been added to the document appears in an underline format. Text that has been deleted appears with ~~strikeout~~.

~~All new information in the RDEIR is presented in an underlined format. Removed language is shown in a ~~strikeout~~ format.~~

The Ventura County Board of Supervisors adopted the District's Final Program Environmental Impact Report for Environmental Protection Measures for the Ongoing Routine Operations and Maintenance Program Project No. 80030 in May 2008. The final document includes Best Management Practices (BMPs) that will be added to the District's Maintenance Activity Guidelines. The Operation and Maintenance Division staff will be responsible for ensuring the proper implementation of the BMPs on a routine, year-round basis. The Division staff will also be responsible for ensuring compliance with all permit conditions, conducting or employing qualified personnel for any required pre-project site surveys or inspections, updating the Activity Guidelines sheets, instructing crews on BMPs, overseeing certain BMP implementation, documenting the implementation of the BMPs, and conducting any agency coordination.

The District currently maintains the existing J Street Drain. The proposed J Street Drain Project would not result in new operational maintenance activities associated with the drain. After the construction of the proposed Drain, maintenance activities are expected to be similar to the existing maintenance activities. ~~Therefore, the proposed project would create only construction impacts. Nevertheless, the environmental discussion of this RDEIR will assume that the operational maintenance for the proposed project is similar to the existing activities and therefore similar impacts associated with them. The BMPs outlined from the District's Ongoing Routine Operations and Maintenance Program are supplied for informational purposes and to gain a complete understanding of the project.~~

Table ES-1. Summary of Environmental Impacts and Mitigation Measures

Environmental Impact	Significance Before Mitigation	Mitigation Measures		Significance After Mitigation
Visual Resources				
Removal of oleander bushes and eucalyptus woodland along the J Street Drain fence line would substantially degrade visual resources by altering the views of residents and travelers along J Street.	Significant	VIS-1	<u>The District shall provide landscaping to replace the oleander bushes removed along J Street Drain between Hueneme Road and Redwood Street by agreement with the City of Oxnard. Landscaping shall be replaced incrementally, within six months of completion of each project phase.</u> Within six months of project completion, the District shall provide landscaping to replace the oleander bushes removed along J Street Drain between Hueneme Road and Redwood Street by agreement with the City of Oxnard.	Less than significant with implementation of identified mitigation
		VIS-2	Any tree or large shrub removed from the Surfside III property during construction would be replaced at a 1:1 ratio.	
		VIS-3	During construction, temporary privacy screening would be placed along the northeast boundary of the Surfside III property to shield residents from views of the construction site and of the OWWTP.	
		VIS-4	<u>Prior to construction a 10- to 12-foot-tall fence with green vinyl screening will be installed along the portion of the District and Oxnard Wastewater Treatment Plant property line that is not currently fenced.</u>	
		VIS-5	<u>Although night construction is not anticipated, in the event that it becomes necessary, all lighting shall be shielded to prevent illumination of residences.</u>	
Biological Resources				
Implementation of the proposed project would result in temporary direct impacts to Open Water (OW) habitat. The project also has the potential to cause temporary indirect impacts to adjacent Coastal Brackish Marsh (CBM), Southern Coastal Salt Marsh (SCSM), and Southern Foredune (SFD) sensitive habitats.	Significant	BIO-1	During construction, the sensitive vegetation communities adjacent to the project alignment shall be flagged as Environmentally Sensitive Areas (ESA) and construction fencing shall be installed to avoid indirect impacts to these areas. Staging areas shall be identified during construction for lay down areas, equipment storage, etc., to avoid indirect impacts to the ESA. Biological monitoring shall occur during construction activities to prevent indirect impacts. Temporarily disturbed OW habitat, which falls under CDFG, USACE, and RWQCB jurisdiction, would be restored at a 1:1 ratio upon completion of construction. OW habitat restoration shall include replacement on the lagoon bottom of the top 12 inches of original soil to ensure suitable conditions for tidewater gobies and benthic fauna.	Less than significant with implementation of identified mitigation

Environmental Impact	Significance Before Mitigation	Mitigation Measures	Significance After Mitigation
<p>Implementation of the proposed project would result in the following:</p> <p><i>California Least Tern</i> Although the California least tern has not been observed within the proposed work area, construction would affect potential tern nesting and foraging habitat.</p> <p><i>Tidewater Goby</i> Construction of the proposed project would involve temporarily draining natural sand substrates that are used by tidewater goby for burrowing during breeding. Therefore, project construction would result in significant impacts to 0.57 acres of tidewater goby critical habitat.</p>	Significant	<p>BIO-2 To prevent a decrease in the foraging success of California least terns, temporary construction fencing ("snow fencing") shall be installed surrounding the project site to delineate the construction footprint.</p> <p>BIO-3 To prevent a decrease in the nesting and foraging success of the California least tern and western snowy plover, phase 1 construction activities adjacent to California least tern and western snowy plover habitat shall occur outside of the breeding season (March to September) to the extent feasible. If construction activities must occur during the breeding season, phase 1 project initiation through coffer dam installation shall be completed before May 1 to avoid direct impacts to foraging terns. In addition, a preemptive nesting bird survey shall be conducted by a qualified biologist to determine if any nesting terns or plovers are located near proposed activities. If nesting birds are found, all construction activities shall be prohibited within a 300-foot buffer area surrounding the nest location during the breeding season until the young have fledged. The qualified biologist shall ensure that the buffer area is appropriately defined with flagging and/or other means of suitable identification. The District shall consult with USFWS and CDFG in the event that nesting California least terns or western snowy plover are observed within 500 feet of the project area. If no nesting birds are found, construction activities could be conducted during the breeding season without restriction.</p> <p>BIO-4 To prevent a decrease in the foraging success of California least terns and tidewater goby, silt fencing shall be installed prior to project construction between the project area and waters of Ormond Lagoon. For project activities within waters of Ormond Lagoon, dual silt fencing shall be installed around each work area to prevent/decrease the clouding of water within the lagoon as a result of potential runoff.</p> <p>BIO-5 To avoid impacts to tidewater goby eggs, Phase 1 project initiation through coffer dam installation shall be completed before May 1, as the peak breeding season for this species extends from late spring through early summer, and again in late summer through early fall. Prior to the installation of the temporary cofferdam, a Section 10 (a)(1) (a) permitted tidewater goby biologist shall capture and relocate gobies to appropriate habitat located outside of the project area. The temporary cofferdam shall remain in place throughout construction activities south of Hueneme Road to prevent tidewater goby from entering the construction area from the lagoon. The</p>	Less than significant with implementation of identified mitigation

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Environmental Impact	Significance Before Mitigation	Mitigation Measures	Significance After Mitigation
		<p>biologist shall also be present during and after dewatering to ensure all gobies and other native fish are relocated to the lagoon prior to construction. A suitable number of biologists working under the supervision of the permitted biologist shall be present during and immediately after the dewatering phase to ensure that all gobies are detected. In addition, the surface water pumps installed for the dewatering of the work area shall be screened (less than five mm mesh size). A permitted tidewater goby biologist shall also be required to relocate any tidewater goby that may enter the work area from upstream.</p> <p>BIO-6 Although night construction is not anticipated, in the event that it becomes necessary, all lighting will be shielded to prevent illumination of the beach.</p>	
Implementation of the proposed project would result in removal of potential migratory bird nesting habitat (e.g., eucalyptus trees) and noise generated from construction activities and may have an indirect impact to nesting migratory birds.	Significant	<p>BIO-7 In order to avoid conflicts with the federal MBTA, if construction is proposed during the migratory bird nesting season, a preconstruction survey shall be conducted by a qualified biologist for the eucalyptus woodland located within the project footprint. The breeding season is defined as February 15 to September 15. If nesting birds/raptors are found, all construction activities shall be prohibited within a 300-foot impact avoidance buffer area surrounding the nest location during the breeding season. In consultation with CDFG and/or USFWS, the buffer area may be reduced in the case of bird species/individuals accustomed to urban disturbance. The qualified biologist shall ensure that the avoidance buffer area is appropriately defined with flagging and/or other means of suitable identification. If no nesting birds/raptors are found, construction could be conducted during the breeding season. Trees may be removed outside of the breeding season without restriction.</p>	Less than significant with implementation of identified mitigation
Implementation of the proposed project would result in temporary impacts to jurisdictional waters.	Significant	Temporary direct impacts to Waters of the U.S. and Waters of the State would be mitigated through BIO-1, which would restore OW habitat upon completion of construction.	Less than significant with implementation of identified mitigation
Implementation of the proposed project would result in temporary impacts to wetlands.	Significant	Temporary indirect impacts to waters and wetlands would be mitigated through measures that protect water quality, including BIO-4 and WQ-1 through WQ-4.	Less than significant with implementation of identified mitigation

Environmental Impact	Significance Before Mitigation	Mitigation Measures	Significance After Mitigation
<i>Water Resources and Hydraulic Hazards</i>			
Implementation of the proposed project would potentially violate water quality standards or waste discharge requirements.	Significant	<p><i>Stormwater Pollution Prevention Plan</i></p> <p>The District shall submit a completed Notice of Intent (NOI) and obtain a waste discharge identification number to obtain coverage under the NPDES General Permit for Discharges Associated with Construction Activity issued by the California State Water Resources Control Board (SWRCB). The applicant/contractor shall submit to the County a Stormwater Pollution Prevention Plan (SWPPP) and monitoring program consistent with SWRCB rules for the construction phase of the project prior to initiating construction.</p> <p>The SWPPP shall contain the following specific mitigation measures designed to reduce or eliminate construction site runoff pollution:</p> <p>WQ-1 Construction Site Planning BMPs, including but not limited to:</p> <ul style="list-style-type: none"> • The amount of cuts and fills shall be minimized; and • Temporary and permanent roads and driveways shall be aligned along slope contours. Grading operations shall be phased to reduce the extent of disturbed areas and length of exposure. <p>WQ -2 BMPs to Minimize Soil Movement including but not limited to:</p> <ul style="list-style-type: none"> • Soil stockpiles shall be contained; • Stabilized access roads and entrances shall be constructed in the initial phase of construction; • Tire wash stations, gravel beds, and/or rumble plates shall be installed at site entrance and exit points to prevent sediment from being tracked onto adjacent roadways; • Sediments and construction materials shall be dry-swept from finished streets the same day they are deposited; and • Site runoff control structures, such as earth berms, drainage swales, and ditches that convey surface runoff during construction into temporary or permanent sediment detention basins shall be installed and made operational in the initial phase of construction, as necessary. <p>WQ -3 BMPs to capture sediment including but not limited to:</p> <ul style="list-style-type: none"> • Storm drain inlets shall be protected from sediment-laden runoff with inlet protection devices such as gravel bag barriers, filter fabric 	Less than significant with implementation of identified mitigation

Environmental Impact	Significance Before Mitigation	Mitigation Measures	Significance After Mitigation
		<p>fences, block and gravel filters, excavated inlet sediment traps, sand bag barriers, and/or other devices; and</p> <ul style="list-style-type: none"> Sediment shall be removed from dewatering discharge with portable settling and filtration methods, such as Baker tanks or other devices. <p>WQ -4 Good housekeeping BMPs, including but not limited to the following requirements:</p> <ul style="list-style-type: none"> All storm drains, drainage patterns, and creeks located near the construction site prior to construction shall be identified to ensure that all subcontractors know their location to prevent pollutants from entering them; Washing of concrete trucks, paint, equipment, or similar activities shall occur only in areas where polluted water and materials can be contained for subsequent removal from the site; wash water shall not be discharged to the storm drains, street, drainage ditches, creeks, or wetlands; areas designated for washing functions shall be at least 100 feet from any storm drain, waterbody or sensitive biological resources to the extent feasible; the location(s) of the washout area(s) shall be clearly noted at the construction site with signs; the applicant shall designate a washout area; the wash-out areas shall be shown on the construction and/or grading and building plans and shall be in place and maintained throughout construction; All leaks, spills, and drips shall be immediately cleaned up and disposed of properly; Vehicles and heavy equipment that are leaking fuel, oil, hydraulic fluid or other pollutants shall be immediately contained and either repaired immediately or removed from the site; One or more emergency spill containment kits shall be placed onsite in easily visible locations. Personnel will be trained in proper use and disposal methods; Vehicles and heavy equipment shall be refueled and serviced in one designated site located at least 100 feet from the drain to the extent feasible; Temporary storage of construction equipment shall be limited to an area approved by the City of Oxnard, and shall be located at least 100 feet from any water bodies to the extent feasible; 	

Environmental Impact	Significance Before Mitigation	Mitigation Measures	Significance After Mitigation
		<ul style="list-style-type: none"> • Dry clean-up methods shall be used whenever possible; • Exposed stockpiles of soil and other erosive materials shall be covered or contained during the rainy season; • Trash cans shall be placed liberally around the site and properly maintained; • All subcontractors and laborers shall be educated about proper site maintenance and stormwater pollution control measures through periodic "tailgate" meetings; • Roadwork or pavement construction, concrete, asphalt, and seal coat shall be applied during dry weather only; and • Storm drains and manholes within the construction area shall be covered when paving or applying seal coat, slurry, fog seal, etc. 	
Air Quality			
The construction of the proposed drain would result in short-term generation of fugitive dust, construction equipment exhaust, employee trip emissions, and other construction-related emissions. Construction emissions during the phases of the J Street Drain project would exceed the VCAPCD threshold for NO _x emissions. NO _x emissions are mainly the result of haul truck trips.	<u>Less Than Significant</u>	<p>AQ-1 VCAPCD recommends the following measures to mitigate ozone precursor emissions from construction motor vehicles:</p> <ol style="list-style-type: none"> 1. Minimize equipment idling time. 2. Maintain equipment engines in good condition and in proper tune as per manufacturers' specifications. 3. Lengthen the construction period during smog season (May through October), to minimize the number of vehicles and equipment operating at the same time. 4. Use alternatively fueled construction equipment, such as compressed natural gas (CNG), liquefied natural gas (LNG), or electric, if feasible. <p>AQ-2</p> <ol style="list-style-type: none"> 1. The area disturbed by clearing, grading, earth moving, or excavation operations shall be minimized to prevent excessive amounts of dust. 2. Pre-grading/excavation activities shall include watering the area to be graded or excavated before commencement of grading or excavation operations. Application of water (preferably reclaimed, if available) should penetrate sufficiently to minimize fugitive dust during grading activities. 3. All trucks shall be required to cover their loads as required by California Vehicle Code Section 23114. 4. All graded and excavated material, exposed soil areas, and active portions of the construction site, including unpaved on site 	Less than significant with implementation of identified mitigation

Environmental Impact	Significance Before Mitigation	Mitigation Measures	Significance After Mitigation
		<p>roadways, shall be treated to prevent fugitive dust. Treatment shall include, but not necessarily be limited to periodic watering, application of environmentally-safe soil stabilization materials, and/or roll compaction as appropriate. Watering shall be done as often as necessary and reclaimed water shall be used whenever possible.</p> <ol style="list-style-type: none"> Graded and/or excavated inactive areas of the construction site shall be monitored at least weekly for dust stabilization. Soil stabilization methods, such as water and roll-compaction, and environmentally-safe dust control materials, shall be periodically applied to portions of the construction site that are inactive for over four days. If no further grading or excavation operations are planned for the area, the area shall be permanently stabilized or periodically treated to prevent excessive fugitive dust. Signs shall be posted on site limiting traffic on unpaved areas to 15 miles per hour or less. During periods of high winds (i.e., wind speed sufficient to cause fugitive dust to impact adjacent properties), all clearing, grading, earth moving, and excavation operations shall be curtailed to the degree necessary to prevent fugitive dust created by on site activities and operations from being a nuisance or hazard, either off site or on site. The site superintendent/supervisor shall use his/her discretion in conjunction with the APCD in determining when winds are excessive. Adjacent streets and roads shall be swept at least once per day, preferably at the end of the day, if visible soil material is carried over to adjacent streets and roads. Personnel involved in grading operations, including contractors and subcontractors, shall be advised to wear respiratory protection in accordance with California Division of Occupational Safety and Health regulations. Material stockpiles shall be enclosed, covered, stabilized, or otherwise treated as needed to prevent blowing fugitive dust off site. <p>AQ-3 All project construction and site preparation operations shall be conducted in compliance with all applicable VCAPCD Rules and Regulations with emphasis on Rule 50 (Opacity), Rule 51 (Nuisance), and Rule 55 (Fugitive Dust), as well as Rule 10 (Permit Required).</p>	

Environmental Impact	Significance Before Mitigation	Mitigation Measures	Significance After Mitigation
<i>Transportation and Circulation</i>			
<p>Implementation of the proposed project would cause a temporary increase in traffic, which is substantial in relation to the existing traffic load and capacity of the street system (i.e., result in a substantial increase in either the number of vehicle trips, the volume to capacity ratio on roads, or congestion at intersections).</p> <p>Traffic impacts from the construction phase of the proposed project would be relatively short-term and intermittent involving road closures and detours which would impact motorists (delay and inconvenience), impacts on businesses (other uses) along the corridor, and impacts on emergency response operations.</p> <p>During construction, no more than three haul trucks would be on site for loading and approximately 45 trips per day are expected to occur. The haul truck trips are expected to result in delays and congestion at the project intersections. The intermittent road closures and haul truck trips during construction may disrupt traffic flow and cause delays, increasing traffic congestion. A significant impact is identified for this issue.</p>	Significant	<p>TR-1 The District shall prepare a construction worksite traffic control plan and submit it to the County, and, cities, <u>Gold Coast Transit, Oxnard School District, Oxnard Union High School District, and Hueneme School District</u> for review and approval prior to soliciting bids for the construction contract. This plan shall include such elements as the location of any lane closures, restricted hours during which lane closures would not be allowed, local traffic detours, protective devices and traffic controls (such as barricades, cones, flagmen, lights, warning beacons, temporary traffic signals, warning signs), access to abutting properties, provisions for pedestrians and bicycles, and provisions to maintain emergency access through construction work areas. The contractor shall comply with this plan.</p> <p>TR-2 The Contractor shall coordinate with emergency service providers (police, fire, ambulance and paramedic services) to provide advance notice of any lane closures, construction hours and changes to local access and to identify alternative routes where appropriate.</p> <p>TR-3 To preserve parking for residents during phase 1 construction, the District shall employ vertical shoring techniques along the Surfside III property where open trenching would result in the temporary removal of off-street parking spaces.</p>	Less than significant with implementation of identified mitigation
<p>Traffic impacts from the construction phase of the proposed project would be relatively short-term and intermittent involving road/lane closures and detours which would impact motorists (delay and inconvenience), impacts on businesses (other uses) along the corridor, and impacts on emergency response operations. J Street, Pleasant Valley Road, and Hueneme Road would remain open during all construction phases with intermittent lane closures. While project</p>	Significant	See mitigation measures TR-1 through TR-3.	Less than significant with implementation of identified mitigation

Environmental Impact	Significance Before Mitigation	Mitigation Measures	Significance After Mitigation
construction impacts would be temporary, traffic impacts have the potential to contribute to the exceedance of the level of service standard established by county congestion management agency at the project intersections. Impact is significant.			
Construction activities would require detours and road and land closures that would temporarily result in transportation hazards.	Significant	See mitigation measures TR-1 through TR-3.	Less than significant with implementation of identified mitigation
Implementation of the proposed project would result in inadequate emergency access due to road closures and detours during the construction phase. This impact is potentially significant.	Significant	See mitigation measures TR-1 through TR-3.	Less than significant with implementation of identified mitigation
Noise and Vibration			
<p>The project site is located in a predominantly residential location. Allowable exterior sound level from 7:00 p.m. to 10:00 p.m. is 50 dBA Leq and from 10:00 p.m. to 7:00 a.m. is 45 dBA Leq, according to the Ventura County Noise Standards. Daytime <u>Ventura County</u> standards are not applicable to residential areas, as they are not defined as noise-sensitive receptors between 7:00 a.m. and 7:00 p.m., <u>but they do apply to hospitals, nursing homes, schools, churches, and libraries at the level of 68 dB(A) (Ambient Leq(h) + 3 dB).</u></p> <p>Existing sensitive land uses along J Street Drain range from 50 5 to 500 feet from the project alignment. These uses would not be affected during evening or night hours.</p>	Significant	<p>NOISE-1 Equipment Noise Reduction</p> <ol style="list-style-type: none"> 1. Minimize the use of impact devices, such as jackhammers, pavement breakers, and hoe rams. Where possible, use concrete crushers or pavement saws rather than hoe rams for tasks such as concrete or asphalt demolition and removal. 2. Pneumatic impact tools and equipment used at the construction site shall have intake and exhaust mufflers recommended by the manufacturers thereof, to meet relevant noise limitations. 3. Provide impact noise reducing equipment; i.e., jackhammers and pavement breaker(s), with noise attenuating shields, shrouds or portable barriers or enclosures, to reduce operating noise. 4. Provide upgraded mufflers, acoustical lining or acoustical paneling for other noisy equipment, including internal combustion engines. 5. Avoid blasting and impact-type pile driving. 6. Use alternative procedures of construction and select a combination of techniques that generate the least overall noise and vibration. Such alternative procedures could include the following: 	Less than Significant with implementation of identified mitigation

Environmental Impact	Significance Before Mitigation	Mitigation Measures	Significance After Mitigation
		<ul style="list-style-type: none"> a. Use electric welders powered by remote generators. b. Mix concrete at non-sensitive off-site locations, instead of on-site. c. Erect prefabricated structures instead of constructing buildings on-site. <p>7. Use construction equipment manufactured or modified to reduce noise and vibration emissions, such as:</p> <ul style="list-style-type: none"> a. Electric instead of diesel-powered equipment. b. Hydraulic tools instead of pneumatic tools. c. Electric saws instead of air- or gasoline-driven saws. <p>8. Turn off idling equipment when not in use for periods longer than 30 minutes.</p> <p>NOISE-2 A temporary noise control barrier shall be installed and maintained between the temporary work area and Buildings 6 and 7 in the Surfside III community during periods when heavy equipment is operating within 500 feet of these residences or when heavy-duty trucks are regularly using the access road adjacent to the drain. Additionally, temporary noise control barriers shall be installed and maintained in residential and commercial areas along Phases 2-4 to the extent that they do not affect traffic sight lines (e.g., noise barriers would not be installed at intersections). The noise barrier shall be composed of noise control blankets 10 feet tall with a sound transmission class of at least STC-25. In addition to placement of noise control blankets along the construction area adjacent to the Shoreline Care Facility, located at 5225 South J Street, and if needed, Our Saviour's Evangelical Lutheran Church at 905 Redwood Street, to further reduce noise levels below 68 dB(A) L_{eq}, additional noise control barriers shall be installed. To ensure sufficient noise barriers are deployed, construction noise levels shall be monitored ten feet from the exterior of the nursing home and church at the start of work activities within 500 feet of these two locations. Barriers would be installed to reduce noise levels generated by the loudest equipment when construction activities are closest to the nursing home and church. Monitoring would occur at the nursing home during construction Phases 2 and 3 and at the church during construction Phase 4. Construction noise levels would be monitored weekly thereafter to ensure proper function of the barriers throughout work and that the desired noise attenuation at these locations is achieved.</p>	

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Environmental Impact	Significance Before Mitigation	Mitigation Measures	Significance After Mitigation
		This noise control barrier will also provide visual screening for all residents along the work area, eastern boundary of including the Surfside III property to shield residents from views of the J Street Drain during construction. If the Surfside III Condominium Owners' Association does not grant a temporary work area to enable installation of temporary noise barriers at Buildings 6 and 7, the District will provide funds for the Association to arrange the barrier installation on their property. <u>Sound barriers would not be installed where encircling block walls already exist (e.g., newer condo/townhome complex west of J St Drain in Phase 1).</u>	
The proposed project has the potential to expose people to or generate excessive groundborne vibration or groundborne noise levels because pile driving may be required for construction.	Significant	<p>NOISE-3 Prior to construction, the District shall request property owner permission to video record the condition of structures adjacent to the J Street Drain in the presence of the property owner. The recording shall be performed and stored by an independent third-party, with a copy given to the property owner. If vibration-induced damages occur as a result of construction, property owners would be invited to submit claims documenting such damages within one year following construction completion. The third-party would again enter the property to video record its post-construction condition, again providing a copy to the property owner. Both recordings would be compared, and the District would provide compensation to repair new damages observed in the post-construction recordings. Once both parties have agreed to the compensation, both pre- and post-construction video recordings stored by the third-party would be given to the property owner.</p> <p>Please refer to mitigation measure GEO-3.</p>	Less than significant with implementation of identified mitigation
J Street Drain Project is proposed to be constructed in four phases with the first phase scheduled to begin in spring 2010 and lasting for 10 months. Temporary noise generated by construction equipment, including trucks, graders, bulldozers, concrete mixers and portable generators has the potential to reach high levels as evident from Table 4.6-12.	Significant	See above mitigation measures.	Less than significant with implementation of identified mitigation

Environmental Impact	Significance Before Mitigation	Mitigation Measures	Significance After Mitigation
<i>Geologic and Seismic Hazards</i>			
<p>Construction of the proposed project will require excavation of the existing drain which would result in disturbance of the soils and subsequent exposure to wind and water erosion. Proposed development will require the groundwater dewatering, demolition of existing concrete lining, removal and stockpiling of soils onsite, and the construction of the new, higher capacity drain. Project excavation will expose areas of soil to erosion by wind or water during construction processes prior to the replacement of concrete lining. Additionally, construction of the proposed drain may result in erosion or sedimentation due to exposed soils and sediment removal and dewatering discharges may cause erosion at the discharge point.</p> <p>Impacts associated with short-term exposure of graded soils and sedimentation is considered significant.</p>	Significant	<p>GEO-1 Erosion and Sediment Control</p> <p>In order to mitigate potential soil erosion and loss of topsoil from excavation, the construction SWPPP shall incorporate, but not be limited to, the following measures, as appropriate, to minimize erosion:</p> <ul style="list-style-type: none"> Excavation and grading shall be restricted to the dry season (April 15th to October 15th) unless an erosion control plan is in place and all measures therein are in effect. Best Management Practices (BMPs) will be employed to control erosion, including temporary siltation protection devices such as silt fencing, straw bales, and sand bags. These shall be placed at the base of all cut and fill slopes and soil stockpile areas where potential erosion may occur. Refer to Section 4.3, Water Resources and Hydraulic Hazards, for additional requirements related to stormwater and non-stormwater pollution prevention and control. 	Less than significant with implementation of identified mitigation
<p>Implementation of the proposed project would potentially result in seismic-related ground failure. Additionally, expansive soils associated with the project site have the potential to substantially damage the proposed drain.</p>	Potentially Significant	<p>GEO-2 Seismic Related Ground Failure and Expansive Soils</p> <p>The proposed project shall comply with all recommendations set forth in the Preliminary Geologic Geotechnical Investigation (Appendix F) to reduce the risk of hazards associated with seismic-related ground failure, liquefaction and expansive soils along the J Street Drain. These recommendations address the following:</p> <ul style="list-style-type: none"> Site preparation Excavation – stabilization measures, dewatering procedure, and shoring Fill Material and General Fill Placement Channel Foundation Design <p>GEO-3 a) <u>A Licensed Surveyor shall plan and install a survey monument monitoring system on buildings within 25 feet of proposed vertical shoring to collect monthly baseline data for six months before</u></p>	Less than significant with implementation of identified mitigation

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Environmental Impact	Significance Before Mitigation	Mitigation Measures	Significance After Mitigation
		<p>construction. The monuments shall remain in place and be monitored monthly for one year after construction completion to track any latent changes. During construction, the Licensed Surveyor shall conduct surveys corresponding to major phases of work such as shoring installation, excavation, and backfill.</p> <p>b) Before Phase 1 construction may begin, the District shall require the Contractor to prepare a Work Plan, which would take into account all available geotechnical information for the areas where vertical shoring and sheet piles are to be installed. The Plan would specify the contractor's approach to installing vertical shoring and sheet piles in a manner that would avoid and minimize associated potential vibration damage to adjacent structures.</p> <p>c) The Work Plan shall require the Contractor to take daily measurements of the survey monuments on adjacent structures described in (a) above to track potential changes during construction.</p> <p>d) Should the surveys or measurements described in (a) and (c) above indicate subsidence or other damage due to construction activities, the Contractor shall modify the Work Plan to address the causes. Property owners within 25 feet of the proposed shoring shall be promptly notified of observed damage, and any Work Plan revisions shall be available to property owners upon request. For multi-unit structures, the District shall identify a single designated representative with whom to communicate.</p> <p>e) The District shall provide a construction contact telephone number to adjacent residents before work commences so that they may report possible observations of damage immediately to the District.</p>	
Implementation of the proposed project would potentially result in on- or off-site subsidence, liquefaction or collapse. Based on the existing soils at the proposed project site, it is likely that unstable soils exist. A potentially significant impact is identified and mitigation is required.	Significant	See Seismic Failure and Expansive Soils mitigation measure.	Less than significant with implementation of identified mitigation
Hazardous Materials			
Implementation of the proposed project may result in significant impacts to groundwater contaminants from the Halaco site as a result of dewatering.	Significant	HAZ-1 Prior to dewatering activities between the Ventura County Railroad and the south project terminus, sheet piling shall be placed on the east side of the drain channel in order to prevent the migration of groundwater from the	Less than significant with implementation

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		Halaco site the District shall install or use existing monitoring wells in order to verify the direction of groundwater movement at the time of dewatering. If it is determined that there is a potential for groundwater migration at the site, the District shall install and operate five injection wells. Injection of water into the shallow aquifer at the beach parking area between the J Street Drain and the Halaco Site would minimize the migration of groundwater from beneath the Halaco Site. Note that additional field testing is currently being conducted to provide a more representative value for hydraulic conductivity for the vicinity of the drain. In the event that the results show the need for sheet piling on both the west and east side of the drain, sheet piling will be placed on both sides of the drain.	of identified mitigation
<i>Cultural Resources</i>			
Implementation of the proposed project would potentially disturb and/or damage undiscovered archaeological resources.	Significant	<p>CULT-1 In the event that archaeological resources are exposed during project construction, all earth disturbing work within the vicinity of the find shall be temporarily suspended or redirected until a qualified archaeologist has evaluated the nature and significance of the find. After the find has been appropriately mitigated, work in the area may resume.</p> <p>CULT-2 If the resource is determined to be potentially significant, a cultural resources treatment plan shall be developed to provide appropriate mitigation measures. These measures may include archaeological testing and data recovery excavation. The treatment plan shall also include a detailed description of associated reporting requirements, curation requirements for any cultural materials collected during treatment, and the qualifications for archaeologists involved in treatment activities.</p>	Less than significant with implementation of identified mitigation
Implementation of the proposed project would potentially disturb and/or damage undiscovered human remains.	Significant	CULT-3 If human remains are encountered, California Health and Safety Code Section 7050.5 states that no further disturbance shall occur until the Ventura County Coroner has made the necessary findings as to origin. Further, pursuant to California Public Resources Code Section 5097.98(b) remains shall be left in place and free from disturbance until a final decision as to the treatment and disposition has been made. If the Ventura County Coroner determines the remains to be Native American, the NAHC shall be contacted within a reasonable timeframe. Subsequently, the NAHC shall identify the "most likely descendant." The most likely descendant shall then make recommendations, and engage in consultations concerning the treatment of the remains as provided in Public Resources Code 5097.98.	Less than significant with implementation of identified mitigation

Environmental Impact	Significance Before Mitigation	Mitigation Measures	Significance After Mitigation
<i>Waste Treatment/Disposal</i>			
Implementation of the proposed project would not result in significant impacts to waste treatment/disposal.	Less than significant	Impacts related to waste treatment/disposal were less than significant; therefore, mitigation measures are not required.	Less than significant
<i>Public Health</i>			
Implementation of the proposed project would not result in significant impacts to public health.	Less than significant	Impacts related to public health were less than significant; therefore, mitigation measures are not required.	Less than significant
<i>Greenhouse Gas Emissions</i>			
Implementation of the proposed project would not result in significant impacts related to greenhouse gas emissions.	Less than significant	Impacts related to greenhouse gas emission were less than significant; therefore, mitigation measures are not required.	Less than significant

Table ES-2. Summary of Ventura County Watershed Protection District Best Management Practices during Operations and Maintenance Activities¹

Operational Maintenance Environmental Impact	Best Management Practices (BMPs)
Biological Resources	<p>BMP-2. Prevent Discharge of Silt-Laden Water During Concrete Channel Cleaning. The removal of sediments, vegetation, algae, and trash from fully lined improved channels for purposes of NPDES storm water permit compliance shall include measures to prevent the discharge of silt-laden water or pollutants to downstream unimproved channels with soft bottoms (Board Order No. 00-108; NPDES Permit No. CAS004002, adopted on July 27, 2000). These measures may include temporary downstream silt barriers (sand bags, straw bales, in-channel materials), silt fences, upstream diversion, etc. Per Section 401 Water Quality Certification requirements, a Water Diversion Plan would be needed for water diversion activities.</p> <p>BMP-3. Location of Temporary Stockpiles. Temporary stockpiles outside the channels or debris basins shall be stabilized by compacting or other measures if present at the work site from 1 December to 1 April. Silt fences, berms, or other methods shall be used to prevent sediments from being eroded from the temporary stockpile into the adjacent drainage. Temporary stockpiles may be placed in channel bottoms or debris basins if they are located on barren soil or areas with non-native weeds, and are not placed in such a manner that they would be exposed to flowing water. No temporary stockpiles shall be placed on the channel bed or banks during the period of 1 December to 1 April for more than the duration of the sediment removal work. Permanent stockpiles shall be located landward of the 100-year floodplain to the maximum extent feasible.</p> <p>BMP-4. Survey for Habitat Prior to Routine Maintenance Work. Prior to routine maintenance and repair activities performed within or adjacent to an earthen or earthen bottom channel or in-channel structure during the period 1 March to 1 August, a District biologist or consulting biologist shall determine if suitable habitat is present for riparian-dependent breeding birds in or within 400 feet of the work area. Suitable habitat is generally defined as dense or moderately dense willow or mulefat scrub or woodland with sufficient density and vegetative structure to support nesting and foraging.</p> <p>Prior to routine maintenance and repair activities performed within or adjacent to an earthen or earthen bottom channel or in-channel structure that would disrupt foraging or nesting of raptors during the period 1 February to 1 August, a District biologist or consulting biologist shall survey the 400 feet radius around the project site for raptor nest initiation or occupation.</p> <p>Channel cleanout shall be postponed to 1 August if such habitat is present in the work area or within 200 feet of the work area, or until nestlings have fledged if the District determines that riparian bird or raptor nesting is occurring in the habitat area. This restriction does not apply if the nesting birds are house sparrows, house finches, crows, cowbirds, or other common upland species or introduced species. If any federally or state listed birds are found nesting within the 200 or 400 feet survey radius, the District shall consult with CDFG for the applicability of this restriction.</p>

¹ From the Final Program EIR for the Environmental Protection Measures for the Ongoing Routine Operations and Maintenance Program. Adopted by the District in May 2008.

Operational Maintenance Environmental Impact	Best Management Practices (BMPs)
	<p>BMP-8. Avoid Disturbance to Native Beach or Wetland Species. The District shall avoid areas of beach dune vegetation when accessing storm drain outlets at the beach with vehicles for routine maintenance. The removal of native beach or wetland plants that are located at or near the beach outlet shall be minimized. Prior to the removal of obstructive sand or vegetation from a beach outlet, qualified District personnel shall determine if suitable habitat (i.e., a brackish waterbody) is present at the outlet for tidewater gobies, and if the species is present. In addition, qualified District personnel shall determine if suitable habitat is present along the vehicle access route across the beach for foraging or nesting snowy plovers and California least terns. If any of these sensitive species are present at the storm drain outlet or along the access route, the District will either postpone the routine maintenance work until these species are no longer present, or follow avoidance and/or relocation procedures approved by U.S. Fish and Wildlife Service (USFWS). This BMP shall not apply if there is a threat of a storm and the outlet is plugged. The District shall contact CDFG and USFWS when California least terns, snowy plover, or tidewater gobies are observed during the pre-project surveys for consultation.</p> <p>BMP-9. Aquatic Pesticide BMPs. The District shall follow the most up-to-date BMPs and the monitoring and reporting requirements in the District's NPDES Stormwater Quality Management Plan (Board Order No. 00-108; NPDES Permit No. CAS004002, adopted on July 27, 2000, available at http://vcstormwater.org/documents/workproducts/stormwater_quality_mangement_plan.pdf) when applying herbicides to channels and basins. The District shall also follow BMPs in the Ventura County Application Protocol for Pesticides, Fertilizers, and Herbicides (included in Appendix I).</p> <p>BMP-11. Leave Patches of Vegetation in Channel Bottom. The District shall minimize vegetation removal or reduction from earthen or earthen bottom channels to the least amount necessary to achieve the specific maintenance objectives for the reach. Vegetation removal in the channel bottom shall be conducted in a non-continuous manner, allowing small patches of in-channel vegetation to persist provided it will not adversely affect conveyance capacity.</p> <p>BMP-12. Leave Herbaceous Wetland Vegetation in Channel Bottom. Consistent with the maintenance objectives, the District shall avoid removal or reduction of emergent herbaceous wetland vegetation on the channel bottom that is rooted in or adjacent to the low flow channel or a pond in order to provide cover for aquatic wildlife. This same type of vegetation shall be protected during the removal of taller obstructive woody vegetation on the channel bottom.</p> <p>BMP-14. Avoid Road Base Discharge. The District shall implement measures to prevent the discharge of road base, fill, sediments, and asphalt beyond a previously established road bed when working adjacent to channels and basin bottoms.</p> <p>BMP-15. Mitigate/Replace Temporary Impacts to Habitat. For repair of in-channel structures and features that results in the temporary disturbance of native wetland or riparian vegetation adjacent to the facility, the District shall restore native wetland or riparian vegetation in the affected work areas after the repair or reconstruction work. Restoration shall include planting or seeding native plants that were present prior to the work and/or are compatible with existing riparian vegetation near the work area. The District shall prepare a restoration plan for each repair project that specifies the limits of restoration, planting mix and densities, performance criteria for survival and growth, and at least a three-year</p>

Operational Maintenance Environmental Impact	Best Management Practices (BMPs)
	<p>maintenance and monitoring procedures. Restoration sites shall be located outside the limits of the repaired structure. If no suitable restoration site is available near the work area or the creation of a restoration area near the work area would conflict with flood control needs, the District shall select another location on District right-of-way in close proximity. If suitable restoration sites are not available, the District shall provide funds to a third party (public agency or non-profit organization) to implement the required mitigation in the same watershed as the impact. Habitat restoration under this BMP shall only occur if the affected areas support native wetland or riparian vegetation; no restoration is required for barren areas or areas dominated by non-native plants. The District shall submit all habitat restoration plans to CDFG prior to implementation.</p> <p>BMP-17. Concrete Wash-Out Protocols. The District shall implement appropriate waste management practices during on site concrete repair operations. Waste management practices will be applied to the stockpiling of concrete, curing and finishing of concrete as well as to concrete wash-out operations. Waste management practices shall be adequate to ensure that fluids associated with the curing, finishing and wash-out of concrete shall not be discharged to the channel or basin. Concrete wastes shall be stockpiled separately from sediment and protected by erosion control measures so that concrete dust and debris are not discharged to the channel or basin. The District shall determine the appropriate waste management practices based on considerations of flow velocities, site conditions, availability of erosion control materials and construction costs.</p> <p>BMP-18. Water Diversion Guide. Water diversion activities undertaken as part of routine repair and maintenance operations in improved and unimproved channels as well as debris basins shall follow the BMP guidance established as the Water Diversion Guide incorporated into the Final Program EIR addressing Environmental Protection Measures for the Ongoing Routine Operations and Maintenance Program, adopted by the District in May 2008.</p> <p>BMP-20. Implementation of Integrated Pest Management. The District shall inspect its critical and non-critical facilities regularly to document and identify the presence or absence of ground squirrels. The District shall develop and implement an Integrated Pest Management (IPM) program that identifies tolerance level, control thresholds and approved rodent control methods and/or combinations of methods at each District facility. Rodent control methods implemented at each facility shall be applied as needed and as appropriate for site conditions and the season. Methods implemented shall minimize potential primary and secondary hazards to non-target species. The District shall maintain a preventative IPM program with zero tolerance for ground squirrels for its critical facilities where failure would impact public safety. When rodent control becomes necessary at non-critical facilities, the District shall choose applicable, cost-effective treatment method(s) from the District's IPM program. Treatment options considered for each site shall include: trapping, habitat modification, alternative construction methods and materials, use of raptors, clean and rodenticide-treated bait stations, broadcast diphacinone and zinc phosphide with or without carcass collection, and other methods. As part of an ongoing monitoring program to determine the effectiveness of the squirrel control program, the District shall maintain uniform inspection records for each facility and all control efforts. The District shall conduct a staff training program that covers the IPM program including rodent issues, inspection and monitoring requirements, and treatment options.</p>

Operational Maintenance Environmental Impact	Best Management Practices (BMPs)
	<p>BMP-21. Avoid Spills and Leaks. The District shall ensure that all equipment operating in and near a watercourse, or in a basin, is in good working condition and free of leaks. No equipment maintenance or refueling shall occur in a channel or basin bottom. Spill containment materials must be on site or readily available for any equipment maintenance or refueling that occurs adjacent to a watercourse. In addition, all maintenance crews working with heavy equipment shall be trained in spill containment and response.</p> <p>BMP-22. Biological Surveys in Appropriate Habitat Prior to Vegetation Maintenance. Prior to any sediment removal, vegetation control (by herbicide application, mowing, or discing), or repair work in earthen or earthen bottom channels and basins that contain native aquatic, riparian, or wetland habitats suitable for sensitive fish and wildlife species, the District shall conduct appropriate field investigations to determine if any threatened, endangered, or sensitive species are present. If such species are determined to be present in or in close proximity to the work areas, the District shall reschedule the work when the species are not present. If it is necessary to conduct the work while the species are present or in proximity to the work areas, the District shall develop other avoidance or relocation measures in consultation with the CDFG, USFWS, or National Oceanic and Atmospheric Administration (NOAA) Fisheries prior to conducting the work. If the work could affect state or federally listed species or their habitat, the District would employ avoidance or relocation measures approved by USFWS, NOAA Fisheries, or CDFG, as appropriate, for the maintenance program. This measure includes protection for the following threatened, endangered, or sensitive species that could occur at maintenance sites: tidewater goby, southern steelhead, trout, unarmored threespine stickleback, California redlegged frog, arroyo toad, least Bell's vireo, southwestern willow flycatcher, arroyo chub, southwestern pond turtle, two-striped garter snake, Cooper's hawk, sharp-shinned hawk, yellow warbler, yellow breasted chat, purple marlin, tri-colored blackbird, and long-eared owl.</p>
Water Resources and Hydraulic Hazards	<p>BMP 1. Avoid Channel Work During the Rainy Season. Routine maintenance and repair activities in earthen channels and in channels with soft bottoms and bank protection shall not occur during the rainy season 1 December to 1 April to avoid work when water could be present in the drainage due to runoff. Routine maintenance and repair activities may occur during this period if water is absent from the drainage because of low runoff conditions, or activities can be performed without working in flowing water. Work in flowing water during this period may proceed if there are no feasible alternatives and completion of the maintenance work during this time period is critical. Work in flowing water shall be conducted according to the BMPs established in the Water Diversion Guide attached as Appendix E to this EIR.</p> <p>BMP 2. Prevent Discharge of Silt-Laden Water During Concrete Channel Cleaning. The removal of sediments, vegetation, algae, and trash from fully lined improved channels for purposes of NPDES storm water permit compliance shall include measures to prevent the discharge of silt-laden water or pollutants to downstream unimproved channels with soft bottoms (Board Order No. 00-108; NPDES Permit No. CAS004002, adopted on July 27, 2000). These measures may include temporary downstream silt barriers (sand bags, straw bales, in-channel materials), silt fences, upstream diversion, etc. Per Section 401 Water Quality Certification requirements, a Water Diversion Plan would be needed for water diversion activities.</p> <p>BMP 3. Location of Temporary Stockpiles. Temporary stockpiles outside the channels or debris basins shall be stabilized by compacting or other measures if present at the work site from 1 December to 1 April. Silt fences, berms, or other</p>

Operational Maintenance Environmental Impact	Best Management Practices (BMPs)
	<p>methods shall be used to prevent sediments from being eroded from the temporary stockpile into the adjacent drainage. Temporary stockpiles may be placed in channel bottoms or debris basins if they are located on barren soil or areas with non-native weeds, and are not placed in such a manner that they would be exposed to flowing water. No temporary stockpiles shall be placed on the channel bed or banks during the period of 1 December to 1 April for more than the duration of the sediment removal work. Permanent stockpiles shall be located landward of the 100-year floodplain to the maximum extent feasible.</p> <p>BMP 14. Avoid Road Base Discharge. The District shall implement measures to prevent the discharge of road base, fill, sediments, and asphalt beyond a previously established road bed when working adjacent to channels and basin bottoms.</p> <p>BMP 17. Concrete Wash-Out Protocols. The District shall implement appropriate waste management practices during on site concrete repair operations. Waste management practices will be applied to the stockpiling of concrete, curing and finishing of concrete as well as to concrete wash-out operations. Waste management practices shall be adequate to ensure that fluids associated with the curing, finishing and wash-out of concrete shall not be discharged to the channel or basin. Concrete wastes shall be stockpiled separately from sediment and protected by erosion control measures so that concrete dust and debris are not discharged to the channel or basin. The District shall determine the appropriate waste management practices based on considerations of flow velocities, site conditions, availability of erosion control materials and construction costs.</p> <p>BMP 21. Avoid Spills and Leaks. The District shall ensure that all equipment operating in and near a watercourse, or in a basin, is in good working condition and free of leaks. No equipment maintenance or refueling shall occur in a channel or basin bottom. Spill containment materials must be on site or readily available for any equipment maintenance or refueling that occurs adjacent to a watercourse. In addition, all maintenance crews.</p>
Air Quality	<p>The following measures are part of the APCD's Model Fugitive Dust Mitigation Plan and shall be incorporated to maintenance activities as needed to further reduce the District's fugitive dust emissions during grading, excavation, and construction activities.</p> <ul style="list-style-type: none"> • The areas disturbed at any one time by clearing, grading, earth moving, or excavation operations shall be minimized to prevent excessive amounts of dust. • Pre-grading/excavation activities shall include watering the area to be graded or excavated before commencement of grading or excavation operations. Application of water (preferably reclaimed, if available) should penetrate sufficiently to minimize fugitive dust during earthmoving, grading, and excavation activities. • All trucks shall be required to cover their loads as required by California Vehicle Code §23114. • All graded and excavated material, exposed soil areas, including unpaved parking and staging areas, and other active portions of the construction site, including unpaved on site roadways, shall be treated to prevent fugitive dust. Treatment shall include, but not necessarily be limited to, periodic watering, application of environmentally safe soil stabilization materials, and/or roll-compaction as appropriate. Watering shall be done as often as necessary and reclaimed water shall be used whenever possible.

Operational Maintenance Environmental Impact	Best Management Practices (BMPs)
	<ul style="list-style-type: none"> • Graded and/or excavated inactive areas of the construction site shall be monitored by the District's operation and maintenance staff at least weekly for dust stabilization. Soil stabilization methods, such as water and roll-compaction, and environmentally safe dust control materials, shall be periodically applied to portions of the construction site that are inactive for over four days. If no further grading or excavation operations are planned for the area, the area should be periodically treated with environmentally-safe dust suppressants. • During periods of high winds (i.e., wind speed sufficient to cause fugitive dust to impact adjacent properties), all clearing, grading, earth moving, and excavation operations shall be curtailed to the degree necessary to prevent fugitive dust created by on site activities and operations from being a nuisance or hazard, either on site or off site. The District staff shall use his/her discretion in conjunction with the APCD in determining when winds are excessive. • Rumble strips or track out devices shall be installed where vehicles enter and exit unpaved roads onto paved road, or wash off trucks and any other equipment leaving the site. • All on site construction roads that have a daily traffic volume of more than 50 daily trips shall be stabilized as to minimize transport of earthen material from the site. • Open material stockpiles shall be roller compacted, periodically watered, or treated with appropriate dust suppressants. • There shall be at least one qualified District staff on site each work day to monitor the provisions of the Fugitive Dust Mitigation Plan and any other applicable fugitive dust rules, ordinances, or conditions. • Personnel involved in grading operations shall be advised to wear respiratory protection in accordance with California Division of Occupational Safety and Health Regulations. • All project construction operations shall be conducted in compliance with all applicable APCD Rules and Regulations with emphasis on Rule 50 (Opacity) and Rule 51 (Nuisance).
Transportation and Circulation	<ul style="list-style-type: none"> • If maintenance activities would result in substantial vehicle trips on a roadway with unacceptable LOS at peak hours, maintenance staff should either choose an alternate route or conduct vehicle trips off peak hours. In addition, District staff shall avoid stacking of maintenance trucks on public roads during maintenance activities. The minimum acceptable LOS for road segments and intersections within the County Regional Road Network and Local Road Network shall be as follows: <ul style="list-style-type: none"> – LOS D for all County thoroughfares and federal highways and state highways in the unincorporated area of the County, except as otherwise provided below; – LOS E for SR-33 between the northerly end of the Ojai Freeway and the City of Ojai, Santa Rosa Road, Moorpark Road north of Santa Rosa Road, and SR-34 north of the City of Camarillo; – LOS C for all County-maintained local roads; and – The LOS prescribed by the applicable city for all federal highways, state highways, city thoroughfares and city-maintained local roads located within that city, if the city has formally adopted General Plan policies, ordinances, or a reciprocal agreement with the County respecting development in the city that would individually or cumulatively affect the LOS of federal highways, state highways, County thoroughfares and County-maintained local roads in the unincorporated area of the County.

Operational Maintenance Environmental Impact	Best Management Practices (BMPs)
Noise and Vibration	<ul style="list-style-type: none"> • Construction Noise BMPs. Noise-generating construction activities shall be restricted to the daytime (i.e., 7:00 AM to 7:00 PM, Monday through Friday), during which noise levels shall not exceed: • 75 dB(A) Leq(h) at noise sensitive locations when construction work duration would last up to 3 days; • Ventura County Watershed Protection District 2-64 Final Program EIR – May 2008 • 70 dB(A) Leq(h) at noise sensitive locations when construction work would last from 4 to 7 days; • 65 dB(A) Leq(h) at noise sensitive locations when construction work would last from 1 to 2 weeks; • 60 dB(A) Leq(h) at noise sensitive locations when construction work would last from 2 to 8 weeks, or • 55 dB(A) Leq(h) at noise sensitive locations when construction work duration would exceed 8 weeks. <p>If these thresholds are exceeded at noise sensitive locations, noise abatement measures shall be implemented to reduce noise levels. Noise abatement measures shall include, but are not limited to, the construction equipment source noise reduction methods and construction noise propagation path reduction methods provided in the County of Ventura Construction Noise Threshold Criteria and Control Plan. As defined by the County of Ventura Construction Noise Threshold Criteria (2005), daytime noise-sensitive receptors include hospital, nursing homes (quasi-residential), schools, churches, and libraries (when in use). Single-family, multi-family dwellings, hotels, and motels are considered evening and nighttime noise-sensitive receptors. Since noise-generating construction activities would not occur during the evening or night hours, no noise mitigation for single-family dwellings, multi-family dwellings, hotels or motels is necessary.</p>
Geology and Seismic Hazards	<p>BMP 1. Avoid Channel Work During the Rainy Season. Routine maintenance and repair activities in earthen channels and in channels with soft bottoms and bank protection shall not occur during the rainy season 1 December to 1 April to avoid work when water could be present in the drainage due to runoff. Routine maintenance and repair activities may occur during this period if water is absent from the drainage because of low runoff conditions, or activities can be performed without working in flowing water. Work in flowing water during this period may proceed if there are no feasible alternatives and completion of the maintenance work during this time period is critical. Work in flowing water shall be conducted according to the BMPs established in the Water Diversion Guide attached as Appendix E to this EIR.</p> <p>BMP 3. Location of Temporary Stockpiles. Temporary stockpiles outside the channels or debris basins shall be stabilized by compacting or other measures if present at the work site from 1 December to 1 April. Silt fences, berms, or other methods shall be used to prevent sediments from being eroded from the temporary stockpile into the adjacent drainage. Temporary stockpiles may be placed in channel bottoms or debris basins if they are located on barren soil or areas with non-native weeds, and are not placed in such a manner that they would be exposed to flowing water. No temporary stockpiles shall be placed on the channel bed or banks during the period of 1 December to 1 April for more than the duration of the sediment removal work. Permanent stockpiles shall be located landward of the 100-year floodplain to the maximum extent feasible.</p> <p>BMP 14. Avoid Road Base Discharge. The District shall implement measures to prevent the discharge of road base, fill, sediments, and asphalt beyond a previously established road bed when working adjacent to channels and basin bottoms.</p>

Operational Maintenance Environmental Impact	Best Management Practices (BMPs)
	<p>BMP 17. Concrete Wash-Out Protocols. The District shall implement appropriate waste management practices during on site concrete repair operations. Waste management practices will be applied to the stockpiling of concrete, curing and finishing of concrete as well as to concrete wash-out operations. Waste management practices shall be adequate to ensure that fluids associated with the curing, finishing and wash-out of concrete shall not be discharged to the channel or basin. Concrete wastes shall be stockpiled separately from sediment and protected by erosion control measures so that concrete dust and debris are not discharged to the channel or basin. The District shall determine the appropriate waste management practices based on considerations of flow velocities, site conditions, availability of erosion control materials and construction costs.</p>
Public Health	<p>BMP-9. Aquatic Pesticide BMPs. The District shall follow the most up-to-date BMPs and the monitoring and reporting requirements in the District's NPDES Stormwater Quality Management Plan (Board Order No. 00-108; NPDES Permit No. CAS004002, adopted on July 27, 2000, available at: http://vcstormwater.org/documents/workproducts/stormwater_quality_mangement_plan.pdf) when applying herbicides to channels and basins. The District shall also follow BMPs in the Ventura County Application Protocol for Pesticides, Fertilizers, and Herbicides (included in Appendix I).</p>

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1.0 INTRODUCTION AND SUMMARY

1.1 INTRODUCTION

This Final Environmental Impact Report (FEIR) has been prepared in compliance with the California Environmental Quality Act (CEQA) Public Resources Code Section 21000 et seq., the *CEQA Guidelines* (Section 15000 et seq.) as promulgated by the California Resources Agency and the Governor's Office of Planning and Research, and the County of Ventura *Initial Study Assessment Guidelines*. The original Draft EIR (DEIR) (SCH 2008041057) was circulated for public review from November 2, 2009 to January 19, 2010. All interested persons and organizations had an opportunity during this time to submit their written comments on the November 2009 DEIR to the Ventura County Watershed Protection District (District). These comments along with their responses were provided in Appendix L of the September 2011 Recirculated DEIR (RDEIR). The September 2011 RDEIR has been incorporated into the FEIR, with new revisions resulting from public comments received on the RDEIR. The responses to the public comments are included as Section 0.3 of this FEIR.

The District's proposed J Street Drain Project (project) involves increasing the capacity of the existing J Street Drain channel to reduce potential flooding in residential and commercial areas of the Cities of Oxnard and Port Hueneme. The J Street Drain is located in the City of Oxnard adjacent to the City of Port Hueneme. From the northern limit of the proposed project just north of Redwood Street to Hueneme Road, the J Street Drain lies between the north and south bound lanes of J Street. The J Street Drain continues beyond the terminus of J Street at Hueneme Road to its southern limit just south of the Hueneme Pump Station, which is located at Ormond Beach Lagoon. The area from Hueneme Road to the Ormond Beach Lagoon is within the Coastal Zone. The existing J Street Drain was created to convey stormwater flows away from the developed areas into the Pacific Ocean. Currently, the District is responsible for the existing J Street Drain operation and maintenance.

Pursuant to CEQA, a Notice of Preparation (NOP) was prepared by the District in April 2008. Based on the conclusions that implementation of the J Street Drain Project could result in significant environmental impacts, District staff directed preparation of a DEIR. The NOP was submitted for public review to the State Clearinghouse and the District's distribution list. The NOP and distribution list are included in Appendix A. See Section 1.5 for a discussion of the NOP comment letters.

1.2 PURPOSE OF AN EIR

The purpose of an EIR is to analyze the potential environmental impacts associated with a project. CEQA (Section 15002) states that the purpose of an EIR is to: (1) inform the public and decision-makers of the potential environmental impacts of a project; (2) identify methods that could reduce the magnitude of a potentially significant impact of a project, and (3) identify alternatives that could reduce the magnitude of environmental impacts or propose more effective uses of the project site. The principal use of this DEIR is to evaluate and disclose potential environmental impacts associated with the implementation of the J Street Drain Project. An EIR is an informational document and is not intended to determine the merits or recommend approval or disapproval of a project. Ultimately, District decision-makers, in this case the Ventura County Board of Supervisors, must weigh the environmental effects of a project among other considerations, including planning, economic, and social concerns.

1.3 EIR ADEQUACY

Information presented in the EIR is to be factual, adequate, and complete. The standards of adequacy of an EIR, defined by Section 15151 of the *CEQA Guidelines*, are as follows:

“An EIR should be prepared with a sufficient level of analysis to provide decision-makers with information which enables them to make a decision which intelligently takes account of environmental consequences. An evaluation of the environmental effect of a proposed project need not be exhaustive, but sufficiency of an EIR is to be reviewed in the light of what is reasonably feasible. Disagreement among experts does not make an EIR inadequate, but the EIR should summarize the main points of disagreement among the experts. The courts have not looked for perfection but for adequacy, completeness, and good faith effort at full disclosure.”

1.4 ORGANIZATION OF THE EIR DOCUMENT

The content and format of this ~~R~~EIR has been prepared in accordance with the California Environmental Quality Act (CEQA) as amended (Public Resources Code Section 21000 et seq.), and CEQA Guidelines (California Administrative Code Section 15000 et seq.). This ~~R~~EIR is organized into the following chapters so the reader can easily obtain information about the proposed project and its specific issues. All new information in the ~~R~~EIR is presented in an underlined format. Removed language is shown in a ~~strikeout~~ format.

Section 0.1 – Introduction to Final EIR. This section describes CEQA requirements and content of this FEIR.

Section 0.2 – Corrections and Additions. This section provides a list of those revisions made to the EIR text and figures as a result of comments received and/or clarifications subsequent to release of the Revised Draft EIR for public review.

Section 0.3 – Responses to Comment Letters Received on the Revised Draft EIR. This section provides copies of the comment letters received and individual responses to written comments. In accordance with Public Resources Code 21092.5, copies of the written proposed responses to public agencies will be forwarded to the agencies at least 10 days prior to certifying an EIR. The responses will conform to the legal standards established for response to comments on EIRs.

Section 0.4 – Mitigation Monitoring and Reporting Program. This section includes the Mitigation Monitoring and Reporting Program (MMRP) which identifies the mitigation measures, timing and responsibility for implementation of the measures.

Section 1.0 – Introduction and Summary: provides a summary of the potential impacts, mitigation measures of the J Street Drain Project and impact conclusion. This section also describes the project history, project components, purpose and use of the ~~R~~EIR, and the organization of the ~~R~~EIR.

Section 2.0 – General Environmental Setting: summarizes the regulatory and environmental setting for the project and also identifies the cumulative projects that are considered in this ~~R~~EIR.

Section 3.0 – Project Description: describes the project site, outlines the overall objectives for the project, purpose and need of the project, and summarizes the project components.

Section 4.0 – Environmental Impact Analysis: presents, for each environmental issue, the existing environmental setting or conditions before project implementation; methods and assumptions used in impact analysis; thresholds of significance; impacts that would result from the J Street Drain Project; applicable County conditions and mitigation measures that would eliminate or reduce significant impacts; and cumulative impacts.

Section 5.0 – Project Alternatives: evaluates the environmental effects of the project alternatives, including Channel Alternatives and Beach Outlet Alternatives. This chapter also identifies an environmentally superior alternative.

Section 6.0 –Other Environmental Considerations: discusses other environmental considerations required per CEQA, including growth-inducing impacts, an inventory of significant unavoidable impacts, and a discussion of significant irreversible changes.

Section 7.0 – Persons and Organizations Consulted: lists the individuals involved in preparing this DEIR and the organizations and persons consulted in preparing this ~~R~~DEIR.

Section 8.0 – References: lists the documents (printed references) and individuals (personal communications) consulted in preparing this ~~R~~DEIR.

Appendices – presents data supporting the analysis or contents of this ~~R~~DEIR, including the responses to comments received during the original circulation period. These are included in Appendix L. All technical appendices are provided electronically on a CD at the end of this document. In addition, copies of these reports are on file at the Ventura County Watershed Protection District, 800 South Victoria Avenue, Ventura, California.

1.5 EIR BACKGROUND AND CONTENT

Development of the J Street Drain Project is subject to the requirements of CEQA because it is an action that has the potential to result in a physical change in the environment subject to discretionary approval by a public agency (in this case, the Ventura County Watershed Protection District). In accordance with *CEQA Guidelines*, the District completed an NOP, including a project description and the preliminary site plan (Appendix A).

The District, as lead agency, prepared an Initial Study (IS) for the proposed project in April of 2008 and determined that implementation of the proposed project would likely result in significant environmental impacts and that an EIR should be prepared to determine the extent of the impacts and whether any of the impacts can be mitigated. On April 9, 2008, a NOP was prepared and circulated for review and comment by responsible, trustee, and local agencies and the general public. The NOP served as a chance for interested members of the public, non-governmental agencies, and government agencies to solicit input on the scope, focus, and content of the EIR. A copy of the Initial Study, NOP, and written NOP comments are included in Appendix A of this EIR. The State Clearinghouse number for the proposed project is 2008041057. The NOP was circulated beginning April 10, 2008 and ending on May 9, 2008. Three informational meetings were held to present the project and accept input from interested parties prior to a formal scoping meeting. The formal CEQA scoping meeting was held on February 25, 2008 at the City of Oxnard Recycling Center, 111 South Del Norte Boulevard, Oxnard, CA.

As mentioned previously, the original DEIR (SCH 2008041057) was circulated for a ~~45~~ 79-day public review from November 2, 2009 to January 19, 2010. All interested persons and organizations had an opportunity during this time to submit their written comments on the DEIR to the District. As the result of comments on the original DEIR along with the District's responses to those comments, the occurrence of a flood emergency north of Ormond Beach Lagoon on January 18, 2010, the release of new information concerning the Halaco Superfund site in 2010 and 2011, and revisions to Ventura County significance thresholds adopted in 2011, the District determined that the DEIR for the J Street Drain project should be recirculated for public review and comment.

The Recirculated DEIR (SCH 2008041057) was circulated for a 45-day public review from September 23, 2011 through November 7, 2011. All interested persons and organizations had an opportunity during that time to submit their written comments on the Recirculated DEIR to the District. A public meeting was held on September 23, 2011 to discuss the changes made to the original DEIR. Twenty-four comment letters were received during the public review period. These comments along with their responses are located in Section 0.3 of this Final EIR.

1.5.1 Environmental Topics Addressed

Based on the analysis presented in the Initial Study and the information provided in the comments to the NOP, the following environmental topics are analyzed in this EIR.

- Visual Resources
- Biological Resources
- Water Resources and Hydraulic Hazards
- Air Quality
- Transportation and Circulation
- Public Health
- Noise and Vibration
- Geologic and Seismic Hazards
- Hazardous Materials and Wastes
- Cultural and Paleontological Resources
- Waste Treatment/Disposal
- Greenhouse Gas Emissions

1.5.2 Environmental Topics Found to be Less than Significant During the Initial Study Process

As identified in the Initial Study, included as Appendix A of this ~~RD~~DEIR, the following environmental topics were found to be less than significant during the Initial Study process and, with the exception of Public Health, are not discussed in this EIR:

- Agricultural Resources (including soils, water, air quality/microclimate, pests/diseases, land use incompatibility)
- Visual Resources (including scenic highway)
- Land Use (including community character, housing, and growth inducement)
- Mineral Resources (including aggregate and petroleum)
- Energy Resources
- Aviation Hazards
- Fire Hazards
- Glare
- Public Health
- Transportation/Circulation (including safety/design and tactical analysis [fire] on public and private roads, bus transit, railroads, airports, harbors, and pipelines)
- Water Supply (including quality, quantity, and fire flow)
- Flood Control/Drainage (including District and non-District flood control/drainage facilities)
- Utilities (including electric, gas, and communication)
- Law Enforcement and Emergency Services (including personnel/equipment and facilities)

- Fire Protection (including distance/response time and personnel/equipment/facilities)
- Education (including schools and libraries)

1.5.3 Environmental Topics Found to be Less than Significant During the EIR Process

The following environmental topics were found to be less than significant, but were identified in the Initial Study as issues that would be discussed in the EIR.

General Plan Environmental Goals and Policies

General Plan Goals and Policies

The proposed project involves increasing the capacity of the existing J Street Drain to accommodate the 100-year flood flow and to reduce potential flooding in the surrounding area during a moderate rain event. The proposed project would contribute to minimizing the risk of loss of life, injury, damage to property, and economic and social dislocations resulting from flood hazards. Therefore, the proposed project would be consistent with the Ventura County General Plan goals, policies, and programs, including goals and policies identified in Section 2.10 Flood Hazards, Section 4.6 Flood Control and Drainage Facilities, and the Coastal Area Plan. Additionally, the project would be consistent with environmental policies identified in the City of Oxnard and City of Hueneme General Plan environmental policies; specifically, goals regarding minimizing the impact of flooding to private and public development. Therefore, the proposed project would not result in significant impacts related to General Plan goals and policies. A less than significant impact is identified.

Local Coastal Plan Goals and Policies

The Local Coastal Plans for the cities of Oxnard and Port Hueneme are contained within each city's General Plan. Construction of the J Street Drain is not anticipated to conflict with any goals and policies of these Local Coastal Plans because a site-specific Stormwater Pollution Prevention Plan (SWPPP) and Best Management Practices (BMPs) would be implemented during construction activities. A site-specific SWPPP and BMPs would prevent degradation of water quality or habitat damage that may result during construction activities. Operation of the J Street Drain is not anticipated to conflict with any goals and policies of the Local Coastal Plans since the J Street Drain would operate as it does under existing conditions, but with an expanded capacity. Any potential impacts resulting from surface water flow velocity would be avoided because approximately 0.07 acres of rock riprap would dissipate energy from surface water flows. Therefore, it is not anticipated that surface water velocity would adversely impact Ormond Beach Lagoon. Further, although implementation of the Beach Elevation Management Plan (BEMP) has the potential to adversely impact coastal habitat, which is inconsistent with the Local Coastal Plan, the BEMP would only be implemented periodically to groom the berm to a pre-determined height prior to forecasted large storm events. The BEMP would ensure natural opening of the Ormond Beach Lagoon outlet during a storm event to prevent flooding of developed properties.

BEMP implementation would occur predominantly outside the endangered California least tern and threatened western snowy plover breeding season and be supervised by a biologist to ensure sensitive coastal habitats and biological resources are avoided. The District would obtain permits in advance to groom a small area of beach sand from the California Coastal Commission (CCC), California Department of Fish and Game (CDFG), Los Angeles Regional Water Quality Control Board (LARWQCB), U.S. Army Corps of Engineers (USACE), and U.S. Fish and Wildlife Service (USFWS). The ultimate effects

of the BEMP are anticipated to be less than significant. Therefore, the proposed project would not significantly impact Local Coastal Plan goals and policies and a less than significant impact is identified.

Coastal Beaches and Sand Dunes

According to the 2011 Ventura County *Initial Study Assessment Guidelines*, a significant impact to coastal beaches and sand dunes would result if a project would conflict with the Ventura County General Plan (Section 1.10) and/or Local Coastal Program (LCP) (Area Plan and Ordinance). As identified above, the proposed project would involve increasing the capacity of the existing J Street Drain to minimize the risk of loss of life, injury, damage to property, and economic and social dislocation that may result from flood hazards. Therefore, the project would be consistent with the general goals, policies, and programs identified in Section 1.10 of the Ventura County General Plan. Additionally, as discussed above, although implementation of the BEMP has the potential to impact coastal habitat, including beaches and sand dunes, the BEMP would be permitted in advance by the CCC, CDFG, LARWQCB, USACE, and USFWS and be supervised by a biologist to ensure avoidance of sensitive biological resources. The resulting effects of the BEMP are anticipated to be less than significant. Therefore, the proposed project would not result in a conflict with the Ventura County General Plan or LCP and impacts would be less than significant.

Recreation

According to the 2011 Ventura County *Initial Study Assessment Guidelines*, a significant impact to recreation would result if a project would cause an increase in demand for recreational facilities. Bubbling Spring Community Park, South Winds Park, Moranda Park, Port Hueneme Beach Park, and the public beach are recreational facilities located in the project vicinity. The proposed project would increase the capacity of the existing J Street Drain. Increase in drain capacity would not result in an increased demand for recreational facilities. Additionally, the use of these recreational facilities would not be impacted by the proposed project. Therefore, impacts to recreation resulting from implementation of the proposed project would be less than significant.

1.5.4 Comments to the NOP

As identified above, on April 9, 2008, the NOP was circulated from April 10 to May 9, 2008 to accept input from interested parties regarding the proposed project. Table 1.5-1 contains a summary of the comments received during this comment period and a brief response to the comment. Individual sections in the ~~Draft~~ EIR also contain responses to NOP comments.

1.5.5 Lead, Responsible and Trustee Agencies

Per §15367 of the State *CEQA Guidelines*, a Lead Agency is defined as “the public agency which has the principal responsibility of carrying out or approving a project.” The Lead Agency for the proposed project is the Ventura County Watershed Protection District. A Responsible Agency is a public agency, other than the Lead Agency, that has a legal responsibility for also carrying out or approving a project. Additionally, State law requires that all EIRs be reviewed by Trustee Agencies. A Trustee Agency is defined in §15386 of the State *CEQA Guidelines* as “a state agency having jurisdiction by law over natural resources affected by a project that are held in trust for the people of the State of California.”

Table 1.5-1. Summary of NOP Comment Letters

Issue Raised	Response
<i>Office of Planning and Research State Clearinghouse and Planning Unit – April 10, 2008.</i>	
This letter provides dates of review for the NOP.	No environmental issues were raised.
<i>Edmund Pert, Regional Manager, California Department of Fish and Game – May 9, 2008</i>	
Project should develop a hydraulic model to analyze project impacts on the Ormond Beach Lagoon. An assessment of flora and fauna should be performed to analyze and minimize impacts on biological resources, evaluate a range of alternatives, obtain CESA permit for the potential of a “taking,” and recommends minimum natural buffer of 100 feet from outside edge of riparian zone on each side of drain.	A Coastal Resources Report, Inland Flooding Report, Sediment Transport Study for Proposed Outlet at Ormond Beach Lagoon, Ormond Beach Lagoon Sand Berm Management Technical Memo, and a Biological Technical Report were prepared for the project describing the coastal processes, lagoon breaching, the existing habitat, potential project impacts, and appropriate mitigation measures for impacts. These reports are included as appendices to this RDEIR (Appendix C and D). Section 4.2, Biological Resources, addresses these issues. Additionally, Section 4.3, Water Resources and Hydraulic Hazards, addresses the hydraulic and hydrology impacts of the project.
<i>Rita Graham, Ventura County Agricultural Commissioner’s office – April 16, 2008(email)</i>	
The Agricultural Commissioner’s office concurs with the Agricultural Resources findings in the Initial Study.	No environmental issues were raised.
<i>Don Occhiline, Ventura County Airports Department – April 21, 2008(email)</i>	
The letter states the proposed project will not cause a hazard to aviation or affect Federal Regulation 49 CFR Part 77 surfaces during construction or after completion.	No environmental issues were raised.
<i>Katrina Rice Schmidt, City Planner, City of Ojai – April 23, 2008(email)</i>	
The proposed project is outside of the City of Ojai sphere of influence and areas of interest.	No environmental issues were raised.
<i>Christopher Williamson, Senior Planner, City of Oxnard - August 27,2008</i>	
This memorandum indicated six points that the City expressed concern over, including; construction impacts to the current bike path and potential creation of a Class I bike path as part of this project; construction impacts to J Street as well as intersecting streets; circulation impacts resulting from the project; improve aesthetic appearance; work with lagoon restoration group; conduct public meetings and a study session with the City Planning Commission.	There are no anticipated impacts to the existing bike lane during construction, and a project alternative is being considered that would cover the culvert and allow an overlying bike path. Section 4.5, Transportation and Circulation, discusses construction impacts to traffic. There is ongoing coordination with the Ormond Beach Task Force and several presentations have taken place and more are planned. The City of Oxnard may replace landscaping along the J Street Drain. Section 4.1, Visual Resources, discusses the aesthetic impacts of the project and proposes mitigation measures.
<i>Alicia Stratton, Ventura County Air Pollution Control District – April 23, 2008</i>	
The VCAPCD agrees with the Initial Study and the determination that air quality impacts will be short-term and not significant. The project should include conditions to minimize fugitive dust and particulate matter from construction.	Section 4.4, Air Quality, addresses air quality issues and the best management practices and mitigation measures for all phases of the project, particularly construction. Project activities will be consistent with SB 656, and VCAPCD Rule 55 Fugitive Dust guidelines, Rule 50 for Opacity, and Rule 51 for Nuisance emissions.
<i>Reed Smith, Science Chair, Ventura Audubon Society, Inc. – April 28, 2008</i>	
The letter requests clarification of the proposed project Alternatives B and C and to include a discussion of California Least Terns and Western Snowy Plover, and Belding’s savannah sparrow in EIR.	Section 5.0, Alternatives, presents the potential alternatives and analysis of impacts per alternative. Additionally, Section 4.2, Biological Resources, includes a discussion and the potential impacts and mitigation for the California Least Terns, Western Snowy Plover, and

1.0 Introduction and Summary

Issue Raised	Response
	Belding's savannah sparrow. Also, A Biological Technical Report was prepared for the project and is contained in Appendix D of this document.
<i>Nazir Lalani, Deputy Director, Public Works Agency – Transportation Department, April 25, 2008</i>	
The transportation/circulation discussion should include a construction truck route, potential impacts and proper precautions.	Section 4.5, Transportation and Circulation, addresses the use of a construction truck route, the potential impacts to the project area traffic and circulation system, and appropriate mitigation. A Traffic Control Plan will be developed and implemented as part of the project and will identify precautionary actions to reduce traffic impacts and protect motorists traveling through the project area.
<i>Peter Brand, Project Manager, State Coastal Conservancy – May 9, 2008(email)</i>	
This letter indicated concern over the proposed outlet alternatives and the potential effects on sensitive biological resources including tidewater goby, and bird species. Additional concerns raised include: project boundaries, appropriate permitting, as well as potential water quality impacts.	Section 4.2, Biological Resources addresses the presence / absence of sensitive species, potential impacts, and appropriate mitigation measures. The section also identifies the survey areas and necessary permitting. Section 4.3, Water Resources and Hydraulic Hazards, addresses the water quality impacts of the project and identifies appropriate mitigation measures. The Biological Technical Report (Appendix D), an Inland Flooding Report, Sediment Transport Study for Proposed Outlet at Ormond Beach Lagoon, the Ormond Beach Lagoon Sand Berm Management Technical Memo at Ormond Beach Lagoon, Ormond Beach Lagoon Sand Berm Management Technical Memo and a Coastal Processes Report (Appendix C) prepared for the project are contained in the appendices of this document.
<i>Melinda Talent, County of Ventura, Resource Management Agency – April 28, 2008</i>	
Hazardous material/waste impacts related to construction and demolition debris.	Section 4.8 of the RDEIR addresses impacts related to hazardous materials. As discussed, the proposed project would not result in significant impacts related to hazardous construction and demolition materials.
<i>Katy Sanchez, Program Analyst, Native American Heritage Commission – April 16, 2008</i>	
This response requests specific archeological resource evaluation as well as specific requirements for a Sacred Lands File Check and Native American consultation for the project area.	RDEIR Section 4.9 addresses potential cultural resource impacts and identifies the Native American contacts that were initiated. The Cultural Resource Report is included as an appendix to the EIR (Appendix E).
<i>Bruce Smith, Manager General Plan Section, County of Ventura, Resource Management Agency, Planning Division – April 24, 2008</i>	
Identified mitigation measures that reduce impacts to less than significant should be explained in EIR. Alternative E and removal of housing should be discussed. Biological resources should be analyzed.	Section 5.0 of the RDEIR contains analysis of project alternatives. Section 4.2 addresses biological resources issues. All sections include discussion of impacts, mitigation measures, and level of significance determinations.
<i>Frank Kiesler, County of Ventura Integrated Waste Management Division – April 24, 2008</i>	
Letter recommends compliance with Ventura County Ordinances #4308 and #4357 and contract specifications regarding recycling and reuse.	RDEIR Section 4.10 Waste Treatment/Disposal includes construction waste analysis.
<i>Brian Trushinski, County of Ventura, Public Works Agency, Water Resources and Engineering Department – April 24, 2008</i>	
This letter requests that each seismic and geologic hazard identified in the Initial Study be evaluated in the EIR.	Section 4.7 of the RDEIR evaluates geologic and seismic hazards. A geotechnical evaluation for the project was prepared and included in the RDEIR as Appendix F.

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Issue Raised	Response
<i>Scoping Meeting Comments – February 25, 2008</i>	
There is lots of trash in the channel. Can it be filtered out before it goes to the ocean?	The District is responsible for flood protection improvements related to the proposed drain. The City of Oxnard is responsible for capturing trash that is generated in the City before it reaches the J Street Drain. Under a separate action, the District is coordinating with the Cities of Oxnard and Port Hueneme on a trash collection device in J Street Drain in compliance with the Countywide Municipal Stormwater Permit (see Section 4.3 Water Resources and Hydraulic Hazards).
What will be done with the construction demolition waste? Will it be recycled?	Section 4.10 Waste Treatment/Disposal includes construction waste analysis. Construction demolition waste will be recycled to the maximum extent feasible.
Area hydrology needs to be better understood.	A J Street Drain /Ormond Beach Lagoon Coastal Engineering Report, Inland Flooding Study, Sediment Transport Study for Proposed Outlet at Ormond Beach Lagoon, and Ormond Beach Lagoon Sand Berm Management Technical Memo were prepared and included as an appendix (Appendix C). The report includes a review of other reports related to hydrologic, hydraulic, and coastal processes at the project site
There is a problem with this project being fragmented from the Oxnard Industrial Drain (OID) project and from plans that others (Calleguas MWD) have to discharge water (i.e., take it out of the Oxnard treatment plant process).	The project is planned to increase the capacity of the J Street Drain. This is an existing storm drain, and the OID is a separate flood control facility. Both the J Street Drain and the OID empty into Ormond Beach Lagoon, and this interaction of flows is discussed within the Coastal Engineering report and the Inland Flooding Report prepared for the project (Appendix C).
The mouth of the lagoon moves up and down coast, it's not static and worthy of study for this project.	The entire lagoon system, including the mouth (or breach location), is dynamic and expected to vary naturally in the future, as described in the J Street Drain /Ormond Beach Lagoon Coastal Engineering Report, included as an appendix. Prior to the January 18, 2010 flood emergency, hydraulic analysis indicated that the preferred breaching location was near Oxnard Industrial Drain. The design considered multiple lagoon mouth locations and the dynamic nature of the lagoon. As a result of emergency response in 2010 and known threatened and endangered bird breeding sites, the preferred beach grooming site is located near the northwest portion of the lagoon.
Sand deposited from dredging of Port Hueneme contributes to the littoral process.	Sand bypassing from Port of Port Hueneme contributed to the formation of the lagoon, as discussed in the J Street Drain /Ormond Beach Lagoon Coastal Engineering Report, included as an appendix. The Ormond Beach Lagoon Sand Berm Management Technical Memo also discusses this issue and appears in Appendix C of this RDEIR. Changes in future maintenance at the Port would affect the future location of the beach and littoral processes, which are beyond the control of project design.
The beach may be receding due to less sand from the Port.	Ormond beach has been relatively stable in recent times due to sand bypassing the Port. Natural recession of the beach will likely occur in the future due to sea level rise. The project design is flexible and can accommodate future change to the beach and lagoon.
The Coastal Conservancy plans for lagoon restoration are not ripe and should not be used.	The Coastal Conservancy restoration plans were reviewed during analysis and design for information only. These were not used or applied for design of the project. The proposed project is not intended to restrict or promote lagoon restoration plans, but rather to alleviate flooding and minimize adverse impacts to the lagoon.

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Issue Raised	Response
We should figure out how to move water over/around the Reliant Energy plant.	Reliant Energy is located at 6635 South Edison Drive, which is approximately 1.5 miles southeast of the J Street Drain outlet. Moving water around the Plant is outside the scope of the J Street Drain project. Therefore, no environmental issues related to the proposed project were raised.
We need to check on the limits of the conservation easement over Hueneme Beach west of the J Street outlet to the beach. It was recorded in the 1990s (?).	The J Street Drain project is anticipated to be contained within the existing District easement. The BEMP access route would traverse the Resource Conservation Zone Overlay defined in Figure 3 of the City of Port Hueneme Local Coastal Plan, requiring a Coastal Development Permit. A conservation easement was not discovered on Hueneme Beach property. The District would obtain all necessary regulatory permits prior to initiating work on the J Street Drain Project.
We need to study the tide and 100 year flood. Observations show the lagoon breaches well before 100-year flood water accumulates in the J Street Drain. The additive effects of the 100-year flood and tide won't likely materialize.	A J Street Drain /Ormond Beach Lagoon Coastal Engineering Report, Inland Flooding Report, and Ormond Beach Lagoon Sand Berm Management Technical Memo were prepared and are included as an appendix (Appendix C). The Coastal Engineering Report includes a review of other reports related to hydrologic, hydraulic, and coastal processes at the project site. The Report discusses the dynamic nature of the Lagoon and height of the sand berm. While evidence of Lagoon breaching before the 100-year flood exists, potential flooding may still occur during a 100 year flood even if the J Street Drain and Lagoon are initially empty. Section 3.0 of the RDEIR discusses the project background as well as purpose and need.
How does the 550 acre subdivision project north of Hueneme Road affect our project? That project currently proposes to drain water to Oxnard Drain No. 2 but if that doesn't work, then water may come to OID.	Each Section of Chapter 4 of the RDEIR includes a cumulative impact discussion and Section 2.0 includes a related projects list. The Ormond Beach Specific Plan is approximately 900 acres and is included as a related project. The OBSP is located outside the J Street Drain watershed, would not discharge directly to the J Street Drain, and would thus not affect flooding in this facility.
The City of Oxnard Utility Task Force is a forum for residents to get involved w/ local issues.	The City Utility Task Force has the opportunity to become involved with the project. The project NOP and IS was sent to City Departments, a website was created for the Project, and public meetings have been held.
Is Prop 1E funding available? It may be available for protection of homes from flooding.	The District's ongoing activities are funded through property taxes, benefit assessments, and land development fees. Additional funding may be available through grant programs such as Prop. 1E, if project details meet grant requirements. However, such funding would be unlikely to significantly offset project costs.
Is there any federal or other outside funding?	The District's ongoing activities are funded through property taxes, benefit assessments, and land development fees. Additional funding for a potentially more costly but more locally desirable alternative might be obtained from city governments, if available, or potentially through federal or state grant programs, if project details meet grant requirements. However, federal or state grant funding would be unlikely to significantly offset project costs. Local agencies and governments are not eligible for grant funding sponsored by private foundations, but 501(c)(e) organizations may receive such funding if they meet program requirements. Private foundations may offer larger grant awards that could significantly offset project costs.

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Issue Raised	Response
Check with EPA to see if they would oppose new culverts under McWane. It should be noted that McWane Road is located in the OID watershed and not the J Street Drain's watershed.	No environmental issues related to the proposed project were raised.
EPA has been asked to evaluate fill on McWane because it likely came from the Halaco slag pile.	The proposed project site would not result in impacts to the Halaco Superfund site, which is located approximately 0.3 miles southeast from the project site. No environmental issues related to the proposed project were raised.
Putting fresh water on the floodplain would be beneficial reuse of water which would transition into saline lagoon system. Brackish marsh habitat is missing.	The entire floodplain between Redwood Street and Hueneme Road is developed and therefore is not suitable for receiving flood flows. Between Hueneme Road to Ormond Beach, the west floodplain is entirely developed and the east floodplain is developed from the channel eastward at least 640 feet. Therefore, permitting overflow from the J Street Drain onto the adjacent floodplain is infeasible. For much of the year, fresh water originating from J Street Drain resides within the Ormond Beach Lagoon.
Please discuss the potential for a permanent opening of J Street Drain.	A J Street Drain/Ormond Beach Lagoon Coastal Engineering Report was prepared and is included as an appendix. The report includes a review of other reports related to hydrologic, hydraulic, and coastal processes at the project site. The Report discusses the dynamic nature of the Lagoon and the coastal process. A beach outlet alternative involving a permanent connection between J Street Drain and the ocean is discussed in Chapter 5.0 Alternatives. This alternative was not selected due to significant impacts to threatened and endangered fish and birds.
Please study the effects of opening old drains and enlarging culverts as suggested by the Sierra Club rep (Al Sanders).	The project design of the culverts is underway and will include culvert enlarging. This is part of the proposed project and is analyzed in the RDEIR. However, Mr. Sanders was referring to old drains that do not connect with J Street Drain and therefore would not alleviate flooding along the facility.
When was the last 100-year flood in Oxnard?	There has not been a 100-year flood on record in Oxnard or the project area.
A covered channel would provide a safe corridor for kids on bikes going to/from school.	Section 5.0 of the RDEIR contains analysis of project alternatives. One of the alternatives proposes a covered channel.
There is a concern about graffiti, trash, vermin etc, in open channel alternatives.	The District is responsible for flood protection improvement related to the proposed drain. As part of on-going maintenance the channel is regularly maintained by removing trash and sediment, and covering any graffiti. Any improvements to the street inlets into the drain, including capturing trash generated in developed areas, are the responsibility of the City of Oxnard. Additionally, the landscaping currently outside the District safety fencing is the responsibility of the City.
Can taxes be assessed to help pay for a particular alternative or features thereof that residents want? How can residents facilitate this?	The District's ongoing activities are funded through property taxes, benefit assessments, and land development fees. Additional funding for a potentially more costly but more locally desirable alternative might be obtained from city governments, if available, or potentially through grant programs, if project details meet grant requirements. No environmental issues related to the proposed project were raised.

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Issue Raised	Response
How much input do residents have to select an alternative?	The CEQA process allows the public to comment and offer input to the proposed project during public meetings, public document circulation, and comment periods.
Who recommends preferred alternatives and who decides on the project that gets built?	Section 5.0 of the RDEIR contains analysis of project alternatives. Alternatives are developed through coordination between the District and consultant. The approval of the project is at the discretion of the Ventura County Board of Supervisors.
Will a direct outlet from J Street to the ocean increase the reach of the tide in J Street?	Section 3.0 of the RDEIR discusses the project background as well as purpose and need. Additionally, the J Street Drain/Ormond Beach Lagoon Coastal Engineering Report was prepared and is included as Appendix C. The report includes a review of other reports related to hydrologic, hydraulic, and coastal processes at the project site. The Ormond Beach Lagoon berm impounds freshwater that flows from J Street Drain, Hueneme Drain, and Oxnard Industrial Drain in the lagoon. This causes the backwater effect in J Street Drain, not tidal influence. A direct and permanent connection to the ocean may increase the reach of the tide in J Street Drain.
We need to explain why we are focused on the J Street project instead of OID. OID fills almost to the bridge soffit on Hueneme Road during high tides. More full than J Street on same tide.	Section 3.0 of the RDEIR discusses the purpose and need for the J Street Drain project. The OID improvements project was given lower priority than the J Street Drain project because it would require the purchase of additional land.
We need to study the potential for reestablishing flow in the old blocked channel along the Halaco slag pile (immediately south of it) and of putting a culvert into McWane to get water from OID to the beach.	The areas mentioned are not located near the J Street Drain project and therefore not included in the project analysis.
We need to explain what prompted the J Street project.	Section 3.0 of the RDEIR discusses the purpose and need for the J Street Drain project.
We need to include the Coastal Conservancy scenarios and historical aerial photos that show changes in the lagoon in the EIR.	The Coastal Conservancy restoration plans were reviewed during analysis and design for information only. These were not used or applied for design of the project. The proposed project is not intended to restrict or promote lagoon restoration plans, but rather to alleviate flooding and minimize adverse impacts to the lagoon. The J Street Drain /Ormond Beach Lagoon Coastal Engineering Report was prepared and is included as Appendix C. The report includes a review of other reports related to hydrologic, hydraulic, and coastal processes at the project site. The report also includes historical aerial photos.
<i>Marion Keleman, JSDP Committee Chair, Surfside III Condominiums resident – June 27, 2009 and July 6, 2009</i>	
The two letters indicated concerns from the Surfside III property residents regarding removal of trees and bushes during construction and temporary work easement within their property.	<p>In the response from the District dated July 30, 2009, the following issues were clarified:</p> <ul style="list-style-type: none"> • The proposed 8-foot wide temporary work easement beyond the District's ROW would entail the removal of existing trees, shrubbery, walkways and planters. • Where retaining walls, walkways, and planters/vegetation would be removed within the temporary work easement, they would be replaced as part of the construction project to be administered and paid for by the District, once a replacement plan is agreed to.

1.0 Introduction and Summary

Issue Raised	Response
<i>Marion Keleman, JSDP Committee Chair, Surfside III Condominiums resident – July 15, 2009</i>	
This letter requests reconsideration of the “flood-condition sand-berm removal alternative,” the relocation of 8-foot work easement within Surfside III property, and the District’s cooperation with the residents to design a Restoration Plan.	<p>In the response from the District dated July 30, 2009, the following issues were clarified:</p> <ul style="list-style-type: none"> • The “Flood-condition sand-berm alternative” is not feasible due to regulatory prohibitions imposed by the U.S. Fish and Wildlife Service concerning endangered tidewater gobies in the Ormond Beach Lagoon. See Section 5.0 Alternatives for the list and discussion of alternatives considered. • The District plans to obtain a temporary work easement from the Oxnard Wastewater Treatment Facility across the channel from J Street Drain. However due to confined work area, access is needed on both sides of the channel. • An estimate detailing the landscape and hardscape replacement costs resulting from the temporary work easement will be developed in coordination with the Surfside III Landscaping committee. The replacement costs would be borne by the District. Where retaining walls, walkways, and planters would be removed within the temporary work easement, they we be replaced in kind as part of the construction project to be administered by the District.
<i>JSDP Committee Concerns, Surfside III Condominiums– July 24, 2009</i>	
On July 24, 2009, the District’s design engineer met with representatives from Surfside III to discuss preliminary project design and ways to minimize impacts to the Surfside III property. The following questions were from this meeting:	The new permanent fence would be 3 to 4 feet closer to Surfside III property; the current fence is located 3 to 4 feet east of the District/Surfside III property boundary. Open cut trenching would require the placement of a temporary construction fence eight feet west of the property boundary. Vertical shoring would require placement of a temporary construction fence approximately one or two feet west of the property boundary.
How far from the existing fence will the construction work-area fence be located?	
How many large trees will have to be removed?	Please see Section 4.1 Visual Resources; the District can meet with Surfside III Landscaping Committee to document all plants and structures that would be replaced.
Will construction equipment be using our streets?	The proposed construction discussion can be found in Section 3.0 Project Description, subheading Section 3.4 Construction, and Section 4.5 Transportation and Circulation
How long will the construction go on?	The proposed construction discussion can be found in Section 3.0 Project Description, subheading Section 3.4 Construction. The project will be constructed in four phases and Phase 1 is anticipated to begin in early 2013. Each phase will take approximately 12 months to complete.
How much money is in your budget for replacement of our trees and repair of structures damaged by this project?	An estimate detailing the landscape and hardscape replacement costs resulting from the temporary work easement will be developed in coordination with the Surfside III Landscaping committee. The replacement costs would be borne by the District. Where retaining walls, walkways, and planters would be removed within the temporary work easement, they we be replaced in kind as part of the construction project to be administered by the District.

1.0 Introduction and Summary

Issue Raised	Response
Your plans do not address electrical, sewer, water lines, and/or parking spaces that may be affected. Also, residents of Bldg 7 in the apartments nearest to the canal will be only a few feet away from the construction work. Was this environmental cost considered?	The Real Estate Services Division will contact the Homeowner's Association Board to negotiate an agreement regarding plant replacement between the District and Surfside III Landscape Committee. In addition, property damage, if any, would be rectified by the contractor's insurance company as provided for in 7-4 of the Ventura County Standard Specification (VCSS).
Why was this project not designed with construction work done from the other side of the canal?	The District plans to obtain a temporary work easement from the Oxnard Wastewater Treatment Facility across the channel from the J Street Drain. However due to confined work area, access is needed on both sides of the channel.
If you were involved in consideration of the alternative plans, why isn't the alternative of removing the sand-berm when necessary chosen?	<p>The "Flood-condition sand-berm alternative" is not feasible due to regulatory prohibitions imposed by the U.S. Fish and Wildlife Service concerning endangered tidewater gobies in the Ormond Beach Lagoon. Furthermore, removal of the sand berm would not increase the capacity of the existing channel, which is only large enough to convey the 10-year storm. Even when initially empty, the drain would overflow upstream of the coast during a storm larger than the 10-year event.</p> <p>See Section 5.0 Alternatives for the list and discussion of alternatives considered.</p>
<i>Marion Keleman, JSDP Committee Chair, Surfside III Condominiums resident – August 15, 2009</i>	
<p>This letter included questions regarding the following issues:</p> <ul style="list-style-type: none"> Surfside III residents were not notified of the project Existing stagnant water backup in the project area Legal agreement for temporary work easement Restoration/replacement language Compensation for damage 	<p>In the response from the District dated September 1, 2009, the following issues were clarified:</p> <ul style="list-style-type: none"> HDR has records of public notification for Surfside III residents; however, the NOP letters were not delivered. Public comments from the residents on the project have been accepted after official NOP period and additional coordination with the residents has occurred. The project impacts to existing stagnant water backup and potential mosquito issues are discussed in Section 4.11 Public Health. A legal agreement associated with the temporary work easement for the work on Surfside III property will be crafted by the District's Real Estate Services Division with input from both parties. The phrase "in kind" used in the July 30, 2009 letter applicable to hardscape and landscape replacement was explained; however, it is most efficient to negotiate an agreement regarding plant replacement between the District and Surfside III Landscape Committee. Property damage, if any, would be rectified by the contractor's insurance company as provided for in 7-4 of the Ventura County Standard Specification (VCSS).

1.5.5.1 Responsible Agencies

City of Oxnard

- Coastal Development Permit, road encroachment permits

City of Port Hueneme

- Coastal Development Permit, road encroachment permits

California Coastal Commission

The CCC was established by voter initiative in 1972 (Proposition 20) and later made permanent by the Legislature through adoption of the California Coastal Act of 1976. The CCC is an independent, quasi-judicial state agency. The Commission, in partnership with coastal cities and counties, plans and regulates the use of land and water in the coastal zone. Development activities, which are broadly defined by the Coastal Act to include construction of buildings, divisions of land, and activities that change the intensity of use of land or public access to coastal waters, generally require a coastal permit from either the CCC or the local government.

Implementation of Coastal Act policies is accomplished primarily through the preparation of LCPs that are required to be completed by each of the 15 counties and 59 cities located in whole or in part in the coastal zone. The City of Oxnard, the City of Port Hueneme, and the County of Ventura all have approved LCPs. The CCC has the responsibility for issuing coastal development permits for the area below the mean high tide line, which includes the proposed outlet. In addition, the Cities of Oxnard and Port Hueneme may elect to transfer their Coastal Development Permit authority to the CCC to streamline the permit process. In that event, a single Coastal Development Permit would be issued by the CCC, rather than the two cities issuing separate permits. The CCC, acting under the authority of the California Coastal Act, is not subject to the provisions of CEQA, but is required to prepare a “functional equivalent” to the documentation that would otherwise be required under CEQA.

Los Angeles Regional Water Quality Control Board

The LARWQCB is one of nine regional boards under the California “State Water Resources Control Board” (SWRCB). Under the direction of the SWRCB, the RWQCB exercises authority under the federal Clean Water Act (CWA) and the state Porter-Cologne Water Quality Act that regulate the discharge of “fill” into waters of the United States or waters of the State within its Los Angeles region of influence. Regulation is either through a Section 401 Water Quality Certification or through Waste Discharge Requirements. Issuance of a Section 401 Certification or Waste Discharge Requirements is based on a finding that the proposed project would comply with all pertinent water quality standards as established by the RWQCB.

California Department of Fish & Game

The California Endangered Species Act (CESA) (California Fish and Game Code §2050, et seq.) generally parallels the main provisions of the Federal Endangered Species Act (FESA) and is administered by the CDFG. Its intent is to prohibit the unauthorized “take” and protect state listed endangered and threatened species of fish, wildlife, and plants. Unlike its federal counterpart, CESA also applies the take prohibitions to species petitioned for listing (state candidates).

The CDFG also has the authority to reach an agreement with an agency or private party proposing to affect intermittent or permanent wetlands or riparian habitat, pursuant to Sections 1601-1616 of the State Fish and Game Code. A Streambed Alteration Agreement would be required by the project for any alteration to a streambed or riparian area.

United States Army Corps of Engineers

The USACE has jurisdiction over development pursuant to the CWA, as amended. Projects that include potential discharge of dredge or fill impacts to the “waters of the U.S.” (including wetlands) are subject to Section 404 of the CWA and require a permit.

United States Fish & Wildlife Service

The USFWS is responsible for enforcing FESA, and reviews and comments on applications for Section 404 CWA permits submitted to the USACE under the Fish & Game Coordination Act (16 U.S.C. §661 et seq.). If the proposed project is determined to have an adverse effect on a species that is federally listed as threatened or endangered, consultation with the USFWS would be required. If the proposed project may result in a “take” of a federally listed species, an incidental take permit would be required. “Take” is defined in the ESA as “to harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect, or attempt to engage any such conduct.” A Section 7 or 10(a) take authorization would be required.

1.5.5.2 Trustee Agencies

California Department of Fish & Game

Because the CDFG is a state agency that has jurisdiction over natural resources affected by the proposed project, it is also identified as a trustee agency.

California State Lands Commission

The Land Management Division (LMD) has primary responsibility for the surface management of all sovereign and school lands in California. This responsibility includes the identification, location, and evaluation of the State’s interest in these lands and its leasing and management. Public and private entities may apply to the Commission for leases or permits on state lands for many purposes including marinas, industrial wharves, dredging, sand mining, tanker anchorages, grazing, right-of-ways, bank protection, recreational uses, etc. Applications for use of any of these lands can be made to the SLC.

In California, tidelands are those lands that lie between the mean high tide and the mean low tide while submerged lands are those lands that lie between the mean low tide and the three-mile seaward extent of the state's jurisdictional limit. The LMD of the California SLC has primary responsibility for the leasing of California’s sovereign tidelands and submerged lands. The SLC may grant leases on tidelands and submerged lands for any public trust purpose. Leases generally fall into the following categories: recreational, commercial, industrial, right-of-way, or salvage; however, leases have also been given for wetlands and habitat management projects.

1.6 PROJECT APPROVALS AND PERMITS

The District would require the following:

Certification of the EIR

Per §15090 of the State *CEQA Guidelines*, prior to approving a project, the District, acting as lead agency, shall certify that: (1) the final EIR has been completed in compliance with CEQA; (2) the final EIR was presented to the decision-making body of the lead agency and that the decision-making body reviewed and considered the information contained in the final EIR prior to approving the project; and (3) the final EIR reflects the lead agency's independent judgment and analysis.

Regulatory Approvals

The J Street Drain project would require the following regulatory approvals prior to implementation:

- Consolidated Coastal Development Permit (CDP) from the CCC (providing for a single CDP to be issued by the Commission rather than separate permits by the two cities and another permit by the CCC for its jurisdictional area) pursuant to the provisions of the California Coastal Act;
- A USACE Individual Permit pursuant to Section 404 of the federal CWA (1990, as amended), and/or qualification under a Nationwide Permit pursuant to Section 404 of the CWA;
- Clean Water Certification in compliance with the California Porter-Cologne Water Quality Control Act as defined by the state RWQCB or CWA Section 401 Certification requirements. Additionally, Waste Discharge Requirements would be required for groundwater discharge activities;
- A Section 1600-Series Streambed Alteration Agreement (SAA) with the CDFG in compliance with the CDFG Code and a Section 2081 Take Permit for potential impacts to state threatened and endangered species in compliance with the CESA; and
- Section 7 Consultation with the USFWS for potential impacts to federal threatened and endangered species in compliance with the FESA.

1.7 DRAFT EIR REVIEW PROCESS

The original DEIR (SCH 2008041057) for the J Street Drain project was circulated for a ~~45~~ 79-day public review period (November 2, 2009 to January 19, 2010). All interested persons and organizations had an opportunity during that time to submit their written comments on the DEIR to the District. These comments along with their responses are located in Appendix L in this Final EIR.

The Recirculated DEIR (SCH 2008041057) was circulated for a 45-day public review from September 23, 2011 through November 7, 2011. All interested persons and organizations had an opportunity during that time to submit their written comments on the Recirculated DEIR to the District. These comments along with their responses are located in Section 0.3 of this Final EIR. The Final EIR is available for review at the following address:

Contact

Kirk Norman, P.E., Project Manager
Ventura County Watershed Protection District
800 South Victoria Avenue
Ventura, California 93009-1600

1.8 SUMMARY OF IMPACTS AND MITIGATION MEASURES

A detailed discussion of existing environmental conditions, environmental impacts, and recommended mitigation measures is included in Section 4.0, Environmental Impact Analysis. Table 1.8-1 summarizes the environmental impacts, mitigation measures, and level of significance after mitigation associated with the J Street Drain project.

1.9 SUMMARY OF BEST MANAGEMENT PRACTICES

The Ventura County Board of Supervisors adopted the District's Final Program Environmental Impact Report for Environmental Protection Measures for the Ongoing Routine Operations and Maintenance Program Project No. 80030 in May 2008. The final document includes BMPs that will be added to the District's Maintenance Activity Guidelines. The Operation and Maintenance Division staff will be responsible for ensuring the proper implementation of the BMPs on a routine, year-round basis. The Division staff will also be responsible for ensuring compliance with all permit conditions, conducting or employing qualified personnel for any required pre-project site surveys or inspections, updating the Activity Guidelines sheets, instructing crews on BMPs, overseeing certain BMP implementation, documenting the implementation of the BMPs, and conducting any agency coordination.

The District currently maintains the existing J Street Drain. The proposed J Street Drain Project would not result in new operational maintenance activities associated with the drain. After the construction of the proposed drain, maintenance activities are expected to be similar to the existing maintenance activities. Therefore, the proposed project would create only construction impacts. Nevertheless, the environmental discussion of this EIR will assume that the operational maintenance for the proposed project is similar to the existing activities and therefore similar impacts associated with them. The BMPs outlined from the District's Ongoing Routine Operations and Maintenance Program are supplied in Table 1.9-1 for informational purposes and to gain a complete understanding of the project.

Table 1.8-1. Summary of Impacts and Mitigation Measures

Environmental Impact	Significance Before Mitigation	Mitigation Measures		Significance After Mitigation
<i>Visual Resources</i>				
Removal of oleander bushes and eucalyptus woodland along the J Street Drain fence line would substantially degrade visual resources by altering the views of residents and travelers along J Street.	Significant	VIS-1	<u>The District shall provide landscaping to replace the oleander bushes removed along J Street Drain between Hueneme Road and Redwood Street by agreement with the City of Oxnard. Landscaping shall be replaced incrementally, within six months of completion of each project phase.</u> Within six months of project completion, the District shall provide landscaping to replace the oleander bushes removed along J Street Drain between Hueneme Road and Redwood Street by agreement with the City of Oxnard.	Less than significant with implementation of identified mitigation
		VIS-2	Any tree or large shrub removed from the Surfside III property during construction would be replaced at a 1:1 ratio.	
		VIS-3	During construction, temporary privacy screening would be placed along the northeast boundary of the Surfside III property to shield residents from views of the construction site and of the OWWTP.	
		<u>VIS-4</u>	<u>Prior to construction a 10- to 12-foot-tall fence with green vinyl screening will be installed along the portion of the District and Oxnard Wastewater Treatment Plant property line that is not currently fenced.</u>	
		<u>VIS-5</u>	<u>Although night construction is not anticipated, in the event that it becomes necessary, all lighting shall be shielded to prevent illumination of residences.</u>	
<i>Biological Resources</i>				
Implementation of the proposed project would result in temporary direct impacts to Open Water (OW) habitat. The project also has the potential to cause temporary indirect impacts to adjacent Coastal Brackish Marsh (CBM), Southern Coastal Salt Marsh (SCSM), and Southern Foredune (SFD) sensitive habitats.	Significant	BIO-1	During construction, the sensitive vegetation communities adjacent to the project alignment shall be flagged as Environmentally Sensitive Areas (ESA) and construction fencing shall be installed to avoid indirect impacts to these areas. Staging areas shall be identified during construction for lay down areas, equipment storage, etc., to avoid indirect impacts to the ESA. Biological monitoring shall occur during construction activities to prevent indirect impacts. Temporarily disturbed OW habitat, which falls under CDFG, USACE, and RWQCB jurisdiction, would be restored at a 1:1 ratio upon completion of construction. OW habitat restoration shall include replacement on the lagoon bottom of the top 12 inches of original soil to ensure suitable conditions for tidewater gobies and benthic fauna.	Less than significant with implementation of identified mitigation

1.0 Introduction and Summary

Environmental Impact	Significance Before Mitigation	Mitigation Measures	Significance After Mitigation
<p>Implementation of the proposed project would result in the following:</p> <p><i>California Least Tern</i> Although the California least tern has not been observed within the proposed work area, construction would affect potential tern nesting and foraging habitat.</p> <p><i>Tidewater Goby</i> Construction of the proposed project would involve temporarily draining natural sand substrates that are used by tidewater goby for burrowing during breeding. Therefore, project construction would result in significant impacts to 0.57 acres of tidewater goby critical habitat.</p>	Significant	<p>BIO-2 To prevent a decrease in the foraging success of California least terns, temporary construction fencing ("snow fencing") shall be installed surrounding the project site to delineate the construction footprint. .</p> <p>BIO-3 To prevent a decrease in the nesting and foraging success of the California least tern and western snowy plover, phase 1 construction activities adjacent to California least tern and western snowy plover habitat shall occur outside of the breeding season (March to September) to the extent feasible. If construction activities must occur during the breeding season, Phase 1 project initiation through coffer dam installation shall be completed before May 1 to avoid direct impacts to foraging terns. In addition, a preemptive nesting bird survey shall be conducted by a qualified biologist to determine if any nesting terns or plovers are located near proposed activities. If nesting birds are found, all construction activities shall be prohibited within a 300-foot buffer area surrounding the nest location during the breeding season until the young have fledged. The qualified biologist shall ensure that the buffer area is appropriately defined with flagging and/or other means of suitable identification. The District shall consult with <u>USFWS and CDFG</u> in the event that nesting California least terns or western snowy plover are observed within 500 feet of the project area. If no nesting birds are found, construction activities could be conducted during the breeding season without restriction.</p> <p>BIO-4 To prevent a decrease in the foraging success of California least terns and tidewater goby, silt fencing shall be installed prior to project construction between the project area and waters of Ormond Lagoon. For project activities within waters of Ormond Lagoon, dual silt fencing shall be installed around each work area to prevent/decrease the clouding of water within the lagoon as a result of potential runoff.</p> <p>BIO-5 To avoid impacts to tidewater goby eggs, Phase 1 project initiation through coffer dam installation shall be completed before May 1, as the peak breeding season for this species extends from late spring through early summer, and again in late summer through early fall. Prior to the installation of the temporary cofferdam, a Section 10 (a)(1) (a) permitted tidewater goby biologist shall capture and relocate gobies to appropriate habitat located outside of the project area. The temporary cofferdam shall remain in place throughout construction activities south of Hueneme Road to prevent tidewater goby from entering the construction area from the lagoon. The</p>	Less than significant with implementation of identified mitigation

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Environmental Impact	Significance Before Mitigation	Mitigation Measures	Significance After Mitigation
		<p>biologist shall also be present during and after dewatering to ensure all gobies and other native fish are relocated to the lagoon prior to construction. A suitable number of biologists working under the supervision of the permitted biologist shall be present during and immediately after the dewatering phase to ensure that all gobies are detected. In addition, the surface water pumps installed for the dewatering of the work area shall be screened (less than five mm mesh size). A permitted tidewater goby biologist shall also be required to relocate any tidewater goby that may enter the work area from upstream.</p> <p>BIO-6 Although night construction is not anticipated, in the event that it becomes necessary, all lighting will be shielded to prevent illumination of the beach.</p>	
Implementation of the proposed project would result in removal of potential migratory bird nesting habitat (e.g., eucalyptus trees) and noise generated from construction activities and may have an indirect impact to nesting migratory birds.	Significant	<p>BIO-7 In order to avoid conflicts with the federal MBTA, if construction is proposed during the migratory bird nesting season, a preconstruction survey shall be conducted by a qualified biologist for the eucalyptus woodland located within the project footprint. The breeding season is defined as February 15 to September 15. If nesting birds/raptors are found, all construction activities shall be prohibited within a 300-foot impact avoidance buffer area surrounding the nest location during the breeding season. In consultation with CDFG and/or USFWS, the buffer area may be reduced in the case of bird species/individuals accustomed to urban disturbance. The qualified biologist shall ensure that the avoidance buffer area is appropriately defined with flagging and/or other means of suitable identification. If no nesting birds/raptors are found, construction could be conducted during the breeding season. Trees may be removed outside of the breeding season without restriction.</p>	Less than significant with implementation of identified mitigation
Implementation of the proposed project would result in temporary impacts to jurisdictional waters.	Significant	Temporary direct impacts to impacts to Waters of the U.S. and Waters of the State would be mitigated through BIO-1, which would restore OW habitat upon completion of construction	Less than significant with implementation of identified mitigation
Implementation of the proposed project would result in temporary impacts to wetlands.	Significant	Temporary indirect impacts to waters and wetlands would be mitigated through measures that protect water quality, including BIO-4 and WQ-1 through WQ-4.	Less than significant with implementation of identified mitigation

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Environmental Impact	Significance Before Mitigation	Mitigation Measures	Significance After Mitigation
<i>Water Resources and Hydraulic Hazards</i>			
Implementation of the proposed project would potentially violate water quality standards or waste discharge requirements.	Significant	<p><i>Stormwater Pollution Prevention Plan</i></p> <p>The District shall submit a completed Notice of Intent (NOI) and obtain a waste discharge identification number to obtain coverage under the NPDES General Permit for Discharges Associated with Construction Activity issued by the California State Water Resources Control Board (SWRCB). The applicant/contractor shall submit to the County a Stormwater Pollution Prevention Plan (SWPPP) and monitoring program consistent with SWRCB rules for the construction phase of the project prior to initiating construction.</p> <p>The SWPPP shall contain the following specific mitigation measures designed to reduce or eliminate construction site runoff pollution.</p> <p>WQ-1 Construction Site Planning BMPs, including but not limited to:</p> <ul style="list-style-type: none"> • The amount of cuts and fills shall be minimized; and • Temporary and permanent roads and driveways shall be aligned along slope contours. Grading operations shall be phased to reduce the extent of disturbed areas and length of exposure. <p>WQ -2 BMPs to Minimize Soil Movement including but not limited to:</p> <ul style="list-style-type: none"> • Soil stockpiles shall be contained; • Stabilized access roads and entrances shall be constructed in the initial phase of construction; • Tire wash stations, gravel beds, and/or rumble plates shall be installed at site entrance and exit points to prevent sediment from being tracked onto adjacent roadways; • Sediments and construction materials shall be dry-swept from finished streets the same day they are deposited; and • Site runoff control structures, such as earth berms, drainage swales, and ditches that convey surface runoff during construction into temporary or permanent sediment detention basins shall be installed and made operational in the initial phase of construction, as necessary. <p>WQ -3 BMPs to capture sediment including but not limited to:</p> <ul style="list-style-type: none"> • Storm drain inlets shall be protected from sediment-laden runoff with inlet protection devices such as gravel bag barriers, filter fabric 	Less than significant with implementation of identified mitigation

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Environmental Impact	Significance Before Mitigation	Mitigation Measures	Significance After Mitigation
		<p>fences, block and gravel filters, excavated inlet sediment traps, sand bag barriers, and/or other devices; and</p> <ul style="list-style-type: none"> Sediment shall be removed from dewatering discharge with portable settling and filtration methods, such as Baker tanks or other devices. <p>WQ -4 Good housekeeping BMPs, including but not limited to the following requirements:</p> <ul style="list-style-type: none"> All storm drains, drainage patterns, and creeks located near the construction site prior to construction shall be identified to ensure that all subcontractors know their location to prevent pollutants from entering them; Washing of concrete trucks, paint, equipment, or similar activities shall occur only in areas where polluted water and materials can be contained for subsequent removal from the site; wash water shall not be discharged to the storm drains, street, drainage ditches, creeks, or wetlands; areas designated for washing functions shall be at least 100 feet from any storm drain, waterbody or sensitive biological resources to the extent feasible; the location(s) of the washout area(s) shall be clearly noted at the construction site with signs; the applicant shall designate a washout area; the wash-out areas shall be shown on the construction and/or grading and building plans and shall be in place and maintained throughout construction; All leaks, spills, and drips shall be immediately cleaned up and disposed of properly; Vehicles and heavy equipment that are leaking fuel, oil, hydraulic fluid or other pollutants shall be immediately contained and either repaired immediately or removed from the site; One or more emergency spill containment kits shall be placed onsite in easily visible locations. Personnel will be trained in proper use and disposal methods; Vehicles and heavy equipment shall be refueled and serviced in one designated site located at least 100 feet from the drain to the extent feasible; Temporary storage of construction equipment shall be limited to an area approved by the City of Oxnard, and shall be located at least 100 feet from any water bodies to the extent feasible; 	

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Environmental Impact	Significance Before Mitigation	Mitigation Measures	Significance After Mitigation
		<ul style="list-style-type: none"> • Dry clean-up methods shall be used whenever possible; • Exposed stockpiles of soil and other erosive materials shall be covered or contained during the rainy season; • Trash cans shall be placed liberally around the site and properly maintained; • All subcontractors and laborers shall be educated about proper site maintenance and stormwater pollution control measures through periodic "tailgate" meetings; • Roadwork or pavement construction, concrete, asphalt, and seal coat shall be applied during dry weather only; and • Storm drains and manholes within the construction area shall be covered when paving or applying seal coat, slurry, fog seal, etc. 	
Air Quality			
The construction of the proposed drain would result in short-term generation of fugitive dust, construction equipment exhaust, employee trip emissions, and other construction-related emissions. Construction emissions during the phases of the J Street Drain project would exceed the VCAPCD's threshold for NO _x emissions. NO _x emissions are mainly the result of haul truck trips.	<u>Less Than Significant</u>	<p>AQ-1 VCAPCD recommends the following measures to mitigate ozone precursor emissions from construction motor vehicles:</p> <ol style="list-style-type: none"> 1. Minimize equipment idling time. 2. Maintain equipment engines in good condition and in proper tune as per manufacturers' specifications. 3. Lengthen the construction period during smog season (May through October), to minimize the number of vehicles and equipment operating at the same time. 4. Use alternatively fueled construction equipment, such as compressed natural gas (CNG), liquefied natural gas (LNG), or electric, if feasible. <p>AQ-2</p> <ol style="list-style-type: none"> 1. The area disturbed by clearing, grading, earth moving, or excavation operations shall be minimized to prevent excessive amounts of dust. 2. Pre-grading/excavation activities shall include watering the area to be graded or excavated before commencement of grading or excavation operations. Application of water (preferably reclaimed, if available) should penetrate sufficiently to minimize fugitive dust during grading activities. 3. All trucks shall be required to cover their loads as required by California Vehicle Code Section 23114. 	Less than significant with implementation of identified mitigation

1.0 Introduction and Summary

Environmental Impact	Significance Before Mitigation	Mitigation Measures	Significance After Mitigation
		<ol style="list-style-type: none"> 4. All graded and excavated material, exposed soil areas, and active portions of the construction site, including unpaved on site roadways, shall be treated to prevent fugitive dust. Treatment shall include, but not necessarily be limited to periodic watering, application of environmentally-safe soil stabilization materials, and/or roll compaction as appropriate. Watering shall be done as often as necessary and reclaimed water shall be used whenever possible. 5. Graded and/or excavated inactive areas of the construction site shall be monitored at least weekly for dust stabilization. Soil stabilization methods, such as water and roll-compaction, and environmentally-safe dust control materials, shall be periodically applied to portions of the construction site that are inactive for over four days. If no further grading or excavation operations are planned for the area, the area shall be permanently stabilized or periodically treated to prevent excessive fugitive dust. 6. Signs shall be posted on site limiting traffic on unpaved areas to 15 miles per hour or less. 7. During periods of high winds (i.e., wind speed sufficient to cause fugitive dust to impact adjacent properties), all clearing, grading, earth moving, and excavation operations shall be curtailed to the degree necessary to prevent fugitive dust created by on site activities and operations from being a nuisance or hazard, either off site or on site. The site superintendent/supervisor shall use his/her discretion in conjunction with the APCD in determining when winds are excessive. 8. Adjacent streets and roads shall be swept at least once per day, preferably at the end of the day, if visible soil material is carried over to adjacent streets and roads. 9. Personnel involved in grading operations, including contractors and subcontractors, shall be advised to wear respiratory protection in accordance with California Division of Occupational Safety and Health regulations. 10. Material stockpiles shall be enclosed, covered, stabilized, or otherwise treated as needed to prevent blowing fugitive dust off site. <p>AQ-3 All project construction and site preparation operations shall be conducted in compliance with all applicable VCAPCD Rules and Regulations with</p>	

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Environmental Impact	Significance Before Mitigation	Mitigation Measures	Significance After Mitigation
		emphasis on Rule 50 (Opacity), Rule 51 (Nuisance), and Rule 55 (Fugitive Dust), as well as Rule 10 (Permit Required).	
<i>Transportation and Circulation</i>			
<p>Implementation of the proposed project would cause a temporary increase in traffic, which is substantial in relation to the existing traffic load and capacity of the street system (i.e., result in a substantial increase in either the number of vehicle trips, the volume to capacity ratio on roads, or congestion at intersections).</p> <p>Traffic impacts from the construction phase of the proposed project would be relatively short-term and intermittent involving road closures and detours which would impact motorists (delay and inconvenience), impacts on businesses (other uses) along the corridor, and impacts on emergency response operations.</p> <p>During construction, no more than three haul trucks would be on site for loading and approximately 45 trips per day are expected to occur. The haul truck trips are expected to result in delays and congestion at the project intersections. The intermittent road closures and haul truck trips during construction may disrupt traffic flow and cause delays, increasing traffic congestion. A potentially significant impact is identified for this issue.</p>	Significant	<p>TR-1 The District shall prepare a construction worksite traffic control plan and submit it to the County, and, cities, <u>Gold Coast Transit, Oxnard School District, Oxnard Union High School District, and Hueneme School District</u> for review and approval prior to soliciting bids for the construction contract. This plan shall include such elements as the location of any lane closures, restricted hours during which lane closures would not be allowed, local traffic detours, protective devices and traffic controls (such as barricades, cones, flagmen, lights, warning beacons, temporary traffic signals, warning signs), access to abutting properties, provisions for pedestrians and bicycles, and provisions to maintain emergency access through construction work areas. The contractor shall comply with this plan.</p> <p>TR-2 The Contractor shall coordinate with emergency service providers (police, fire, ambulance and paramedic services) to provide advance notice of any lane closures, construction hours and changes to local access and to identify alternative routes where appropriate.</p> <p>TR-3 To preserve parking for residents during phase 1 construction, the District shall employ vertical shoring techniques along the Surfside III property where open trenching would result in the temporary removal of off-street parking spaces.</p>	Less than significant with implementation of identified mitigation
<p>Traffic impacts from the construction phase of the proposed project would be relatively short-term and intermittent involving road/lane closures and detours which would impact motorists (delay and inconvenience), impacts on businesses (other uses) along the corridor, and impacts on emergency response operations. J Street, Pleasant Valley Road, and Hueneme Road would</p>	Significant	See mitigation measures TR-1 through TR-3.	Less than significant with implementation of identified mitigation

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Environmental Impact	Significance Before Mitigation	Mitigation Measures	Significance After Mitigation
remain open during all construction phases with intermittent lane closures. While project construction impacts would be temporary, traffic impacts have the potential to contribute to the exceedance of the level of service standard established by county congestion management agency at the project intersections. Impact is potentially significant.			
Construction activities would require detours and road and land closures that would temporarily result in transportation hazards.	Significant	See mitigation measures TR-1 through TR-3.	Less than significant with implementation of identified mitigation
Implementation of the proposed project would result in inadequate emergency access due to road closures and detours during the construction phase. This impact is potentially significant.	Significant	See mitigation measures TR-1 through TR-3.	Less than significant with implementation of identified mitigation
Noise			
The project site is located in a predominantly residential location. Allowable exterior sound level from 7:00 p.m. to 10:00 p.m. is 50 dBA Leq and from 10:00 p.m. to 7:00 a.m. is 45 dBA Leq, according to the Ventura County Noise Standards. Daytime <u>Ventura County</u> standards are not applicable to residential areas, as they are not defined as noise-sensitive receptors between 7:00 a.m. and 7:00 p.m., but they do apply to hospitals, nursing homes, schools, churches, and libraries at the level of 68 dB(A) (Ambient Leq(h) + 3 dB). Existing sensitive land uses along J Street Drain range from 50 <u>5</u> to 500 feet from the project alignment. These uses would not be affected during evening or night hours.	Significant	NOISE-1 Equipment Noise Reduction <ol style="list-style-type: none"> 1. Minimize the use of impact devices, such as jackhammers, pavement breakers, and hoe rams. Where possible, use concrete crushers or pavement saws rather than hoe rams for tasks such as concrete or asphalt demolition and removal. 2. Pneumatic impact tools and equipment used at the construction site shall have intake and exhaust mufflers recommended by the manufacturers thereof, to meet relevant noise limitations. 3. Provide impact noise reducing equipment; i.e., jackhammers and pavement breaker(s), with noise attenuating shields, shrouds or portable barriers or enclosures, to reduce operating noise. 4. Provide upgraded mufflers, acoustical lining or acoustical paneling for other noisy equipment, including internal combustion engines. 5. Avoid blasting and impact-type pile driving. 6. Use alternative procedures of construction and select a combination 	Less than significant with implementation of identified mitigation

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Environmental Impact	Significance Before Mitigation	Mitigation Measures	Significance After Mitigation
		<p>of techniques that generate the least overall noise and vibration. Such alternative procedures could include the following:</p> <ul style="list-style-type: none"> a. Use electric welders powered by remote generators. b. Mix concrete at non-sensitive off-site locations, instead of on-site. c. Erect prefabricated structures instead of constructing buildings on-site. <p>7. Use construction equipment manufactured or modified to reduce noise and vibration emissions, such as:</p> <ul style="list-style-type: none"> a. Electric instead of diesel-powered equipment. b. Hydraulic tools instead of pneumatic tools. c. Electric saws instead of air- or gasoline-driven saws. <p>8. Turn off idling equipment when not in use for periods longer than 30 minutes.</p> <p>NOISE-2 A temporary noise control barrier shall be installed and maintained between the temporary work area and Buildings 6 and 7 in the Surfside III community during periods when heavy equipment is operating within 500 feet of these residences or when heavy-duty trucks are regularly using the access road adjacent to the drain. <u>Additionally, temporary noise control barriers shall be installed and maintained in residential and commercial areas along Phases 2 - 4 to the extent that they do not affect traffic sight lines (e.g., noise barriers would not be installed at intersections).</u> The noise barrier shall be composed of noise control blankets 10 feet tall with a sound transmission class of at least STC-25. In addition to placement of noise control blankets along the construction area adjacent to the Shoreline Care Facility, located at 5225 South J Street, and if needed, Our Saviour's Evangelical Lutheran Church at 905 Redwood Street, to further reduce noise levels below 68 dB(A) L_{eq}, additional noise control barriers shall be installed. To ensure sufficient noise barriers are deployed, construction noise levels shall be monitored ten feet from the exterior of the nursing home and church at the start of work activities within 500 feet of these two locations. Barriers would be installed to reduce noise levels generated by the loudest equipment when construction activities are closest to the nursing home and church. Monitoring would occur at the nursing home during construction Phases 2 and 3 and at the church during construction Phase 4. Construction noise</p>	

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Environmental Impact	Significance Before Mitigation	Mitigation Measures	Significance After Mitigation
		<p>levels would be monitored weekly thereafter to ensure proper function of the barriers throughout work and that the desired noise attenuation at these locations is achieved.</p> <p>This noise control barrier will also provide visual screening for all residents along the work area, eastern boundary of including the Surfside III property to shield residents from views of the J Street Drain during construction. If the Surfside III Condominium Owners' Association does not grant a temporary work area to enable installation of temporary noise barriers at Buildings 6 and 7, the District will provide funds for the Association to arrange the barrier installation on their property. <u>Sound barriers would not be installed where encircling block walls already exist (e.g., newer condo/townhome complex west of J St Drain in Phase 1).</u></p>	
The proposed project has the potential to expose people to or generate excessive groundborne vibration or groundborne noise levels because pile driving may be required for construction.	Significant	<p>NOISE-3 Prior to construction, the District shall request property owner permission to video record the condition of structures adjacent to the J Street Drain in the presence of the property owner. The recording shall be performed and stored by an independent third-party, with a copy given to the property owner. If vibration-induced damages occur as a result of construction, property owners would be invited to submit claims documenting such damages within one year following construction completion. The third-party would again enter the property to video record its post-construction condition, again providing a copy to the property owner. Both recordings would be compared, and the District would provide compensation to repair new damages observed in the post-construction recordings. Once both parties have agreed to the compensation, both pre- and post-construction video recordings stored by the third-party would be given to the property owner.</p>	Less than significant with implementation of identified mitigation
J Street Drain Project is proposed to be constructed in into four phases with the first phase scheduled to begin in spring 2010 and lasting for 10 months. Temporary noise generated by construction equipment, including trucks, graders, bulldozers, concrete mixers and portable generators has the potential to reach high levels as evident from Table 4.6-12.	Significant	See above mitigation measures.	Less than significant with implementation of identified mitigation
<i>Geologic and Seismic Hazards</i>			

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Environmental Impact	Significance Before Mitigation	Mitigation Measures	Significance After Mitigation
<p>Construction of the proposed project will require excavation of the existing drain which would result in disturbance of the soils and subsequent exposure to wind and water erosion. Proposed development will require the groundwater dewatering, demolition of existing concrete lining, removal and stockpiling of soils onsite, and the construction of the new, higher capacity drain. Project excavation will expose areas of soil to erosion by wind or water during construction processes prior to the replacement of concrete lining. Additionally, construction of the proposed drain may result in erosion or sedimentation due to exposed soils and sediment removal and dewatering discharges may cause erosion at the discharge point.</p> <p>Impacts associated with short-term exposure of graded soils and sedimentation is considered significant.</p>	Significant	<p>GEO-1 Erosion and Sediment Control</p> <p>In order to mitigate potential soil erosion and loss of topsoil from excavation, the construction SWPPP shall incorporate, but not be limited to, the following measures, as appropriate, to minimize erosion:</p> <ul style="list-style-type: none"> Excavation and grading shall be restricted to the dry season (April 15th to October 15th) unless an erosion control plan is in place and all measures therein are in effect. Best Management Practices (BMPs) will be employed to control erosion, including temporary siltation protection devices such as silt fencing, straw bales, and sand bags. These shall be placed at the base of all cut and fill slopes and soil stockpile areas where potential erosion may occur. Refer to Section 4.3, Water Resources and Hydraulic Hazards, for additional requirements related to stormwater and non-stormwater pollution prevention and control. 	Less than significant with implementation of identified mitigation
<p>Implementation of the proposed project would potentially result in seismic related ground failure. Additionally, expansive soils associated with the project site have the potential to substantially damage the proposed drain.</p>	Significant	<p>GEO-2 Seismic Related Ground Failure and Expansive Soils</p> <p>The proposed project shall comply with pertinent recommendations set forth in the Preliminary Geologic Geotechnical Investigation (Appendix F) to reduce the risk of hazards associated with seismic-related ground failure, liquefaction and expansive soils along the J Street Drain. These recommendations address the following:</p> <ul style="list-style-type: none"> Site preparation Excavation – stabilization measures, dewatering procedure, and shoring Fill Material and General Fill Placement Channel Foundation Design <p>GEO-3 a) <u>A Licensed Surveyor shall plan and install a survey monument monitoring system on buildings within 25 feet of proposed vertical shoring to collect monthly baseline data for six months before construction. The monuments shall remain in place and be monitored</u></p>	Less than significant with implementation of identified mitigation

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Environmental Impact	Significance Before Mitigation	Mitigation Measures	Significance After Mitigation
		<p><u>monthly for one year after construction completion to track any latent changes. During construction, the Licensed Surveyor shall conduct surveys corresponding to major phases of work such as shoring installation, excavation, and backfill.</u></p> <p>b) <u>Before Phase 1 construction may begin, the District shall require the Contractor to prepare a Work Plan, which would take into account all available geotechnical information for the areas where vertical shoring and sheet piles are to be installed. The Plan would specify the contractor's approach to installing vertical shoring and sheet piles in a manner that would avoid and minimize associated potential vibration damage to adjacent structures.</u></p> <p>c) <u>The Work Plan shall require the Contractor to take daily measurements of the survey monuments on adjacent structures described in (a) above to track potential changes during construction.</u></p> <p>d) <u>Should the surveys or measurements described in (a) and (c) above indicate subsidence or other damage due to construction activities, the Contractor shall modify the Work Plan to address the causes. Property owners within 25 feet of the proposed shoring shall be promptly notified of observed damage, and any Work Plan revisions shall be available to property owners upon request. For multi-unit structures, the District shall identify a single designated representative with whom to communicate.</u></p> <p>e) <u>The District shall provide a construction contact telephone number to adjacent residents before work commences so that they may report possible observations of damage immediately to the District.</u></p>	
Implementation of the proposed project would potentially result in on- or off-site subsidence, liquefaction or collapse. Based on the existing soils at the proposed project site, it is likely that unstable soils exist. A potentially significant impact is identified and mitigation is required.	Significant	See Seismic Failure and Expansive Soils mitigation measure.	Less than significant with implementation of identified mitigation
<i>Hazardous Materials and Public Health</i>			
Implementation of the proposed project may result in significant impacts to groundwater contaminants from the Halaco site as a result of dewatering.	Significant	HAZ-1 Prior to dewatering activities between the Ventura County Railroad and the south project terminus, sheet piling shall be placed on the east side of the drain channel in order to prevent the migration of groundwater from the	Less than significant with implementation

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Environmental Impact	Significance Before Mitigation	Mitigation Measures	Significance After Mitigation
		Halaco site the District shall install or use existing monitoring wells in order to verify the direction of groundwater movement at the time of dewatering. If it is determined that there is a potential for groundwater migration at the site, the District shall install and operate five injection wells. Injection of water into the shallow aquifer at the beach parking area between the J Street Drain and the Halaco Site would minimize the migration of groundwater from beneath the Halaco Site. Note that additional field testing is currently being conducted to provide a more representative value for hydraulic conductivity for the vicinity of the drain. In the event that the results show the need for sheet piling on both the west and east side of the drain, sheet piling will be placed on both sides of the drain.	of identified mitigation
<i>Cultural Resources</i>			
Implementation of the proposed project would potentially disturb and/or damage undiscovered archaeological resources.	Significant	<p>CULT-1 In the event that archaeological resources are exposed during project construction, all earth disturbing work within the vicinity of the find shall be temporarily suspended or redirected until a qualified archaeologist has evaluated the nature and significance of the find. After the find has been appropriately mitigated, work in the area may resume.</p> <p>CULT-2 If the resource is determined to be potentially significant, a cultural resources treatment plan shall be developed to provide appropriate mitigation measures. These measures may include archaeological testing and data recovery excavation. The treatment plan shall also include a detailed description of associated reporting requirements, curation requirements for any cultural materials collected during treatment, and the qualifications for archaeologists involved in treatment activities.</p>	Less than significant with implementation of identified mitigation
Implementation of the proposed project would potentially disturb and/or damage undiscovered human remains.	Significant	CULT-3 If human remains are encountered, California Health and Safety Code Section 7050.5 states that no further disturbance shall occur until the Ventura County Coroner has made the necessary findings as to origin. Further, pursuant to California Public Resources Code Section 5097.98(b) remains shall be left in place and free from disturbance until a final decision as to the treatment and disposition has been made. If the Ventura County Coroner determines the remains to be Native American, the NAHC shall be contacted within a reasonable timeframe. Subsequently, the NAHC shall identify the "most likely descendant." The most likely descendant shall then make recommendations, and engage in consultations concerning the treatment of the remains as provided in Public Resources Code 5097.98.	Less than significant with implementation of identified mitigation
<i>Waste Treatment/Disposal</i>			

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Environmental Impact	Significance Before Mitigation	Mitigation Measures	Significance After Mitigation
Implementation of the proposed project would not result in significant impacts to waste treatment/disposal.	Less than significant	Impacts related to waste treatment/disposal were less than significant; therefore, mitigation measures are not required.	Less than significant
<i>Public Health</i>			
Implementation of the proposed project would not result in significant impacts to public health.	Less than significant	Impacts related to public health were less than significant; therefore, mitigation measures are not required.	Less than significant
<i>Greenhouse Gas Emissions</i>			
Implementation of the proposed project would not result in significant impacts related to greenhouse gas emissions.	Less than significant	Impacts related to greenhouse gas emission were less than significant; therefore, mitigation measures are not required.	Less than significant

Table 1.9-1. Summary of Ventura County Watershed Protection District Best Management Practices During Operations and Maintenance Activities¹

Operational Maintenance Environmental Impact	Best Management Practices (BMPs)
Biological Resources	<p>BMP-2 Prevent Discharge of Silt-Laden Water During Concrete Channel Cleaning. The removal of sediments, vegetation, algae, and trash from fully lined improved channels for purposes of NPDES storm water permit compliance shall include measures to prevent the discharge of silt-laden water or pollutants to downstream unimproved channels with soft bottoms (Board Order No. 00-108; NPDES Permit No. CAS004002, adopted on July 27, 2000). These measures may include temporary downstream silt barriers (sand bags, straw bales, in-channel materials), silt fences, upstream diversion, etc. Per Section 401 Water Quality Certification requirements, a Water Diversion Plan would be needed for water diversion activities.</p>
	<p>BMP-3 Location of Temporary Stockpiles. Temporary stockpiles outside the channels or debris basins shall be stabilized by compacting or other measures if present at the work site from 1 December to 1 April. Silt fences, berms, or other methods shall be used to prevent sediments from being eroded from the temporary stockpile into the adjacent drainage. Temporary stockpiles may be placed in channel bottoms or debris basins if they are located on barren soil or areas with non-native weeds, and are not placed in such a manner that they would be exposed to flowing water. No temporary stockpiles shall be placed on the channel bed or banks during the period of 1 December to 1 April for more than the duration of the sediment removal work. Permanent stockpiles shall be located landward of the 100-year floodplain to the maximum extent feasible.</p>
	<p>BMP-4 Survey for Habitat Prior to Routine Maintenance Work. Prior to routine maintenance and repair activities performed within or adjacent to an earthen or earthen bottom channel or in-channel structure during the period 1 March to 1 August, a District biologist or consulting biologist shall determine if suitable habitat is present for riparian-dependent breeding birds in or within 400 feet of the work area. Suitable habitat is generally defined as dense or moderately dense willow or mulefat scrub or woodland with sufficient density and vegetative structure to support nesting and foraging.</p> <p>Prior to routine maintenance and repair activities performed within or adjacent to an earthen or earthen bottom channel or in-channel structure that would disrupt foraging or nesting of raptors during the period 1 February to 1 August, a District biologist or consulting biologist shall survey the 400 feet radius around the project site for raptor nest initiation or occupation.</p> <p>Channel cleanout shall be postponed to 1 August if such habitat is present in the work area or within 200 feet of the work area, or until nestlings have fledged if the District determines that riparian bird or raptor nesting is occurring in the habitat area. This restriction does not apply if the nesting birds are house sparrows, house finches, crows, cowbirds, or other common upland species or introduced species. If any federally or state listed birds are found nesting within the 200 or 400 feet survey radius, the District shall consult with CDFG for the applicability of this restriction.</p>
	<p>BMP-8 Avoid Disturbance to Native Beach or Wetland Species. The District shall avoid areas of beach dune vegetation when accessing storm drain outlets at the beach with vehicles for routine maintenance. The removal of native beach or wetland</p>

¹ From the Final Program EIR for the Environmental Protection Measures for the Ongoing Routine Operations and Maintenance Program. Adopted by the District in May 2008.

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Operational Maintenance Environmental Impact	Best Management Practices (BMPs)
	<p>plants that are located at or near the beach outlet shall be minimized. Prior to the removal of obstructive sand or vegetation from a beach outlet, qualified District personnel shall determine if suitable habitat (i.e., a brackish waterbody) is present at the outlet for tidewater gobies, and if the species is present. In addition, qualified District personnel shall determine if suitable habitat is present along the vehicle access route across the beach for foraging or nesting snowy plovers and California least terns. If any of these sensitive species are present at the storm drain outlet or along the access route, the District will either postpone the routine maintenance work until these species are no longer present, or follow avoidance and/or relocation procedures approved by U.S. Fish and Wildlife Service (USFWS). This BMP shall not apply if there is a threat of a storm and the outlet is plugged. The District shall contact CDFG and USFWS when California least terns, snowy plover, or tidewater gobies are observed during the pre-project surveys for consultation.</p> <p>BMP-9 Aquatic Pesticide BMPs. The District shall follow the most up-to-date Best Management Practices (BMPs) and the monitoring and reporting requirements in the District's NPDES Stormwater Quality Management Plan (Board Order No. 00-108; NPDES Permit No. CAS004002, adopted on July 27, 2000, available at http://vcstormwater.org/documents/workproducts/stormwater_quality_mangement_plan.pdf) when applying herbicides to channels and basins. The District shall also follow BMPs in the Ventura County Application Protocol for Pesticides, Fertilizers, and Herbicides (included in Appendix I).</p> <p>BMP-11 Leave Patches of Vegetation in Channel Bottom. The District shall minimize vegetation removal or reduction from earthen or earthen bottom channels to the least amount necessary to achieve the specific maintenance objectives for the reach. Vegetation removal in the channel bottom shall be conducted in a non-continuous manner, allowing small patches of in-channel vegetation to persist provided it will not adversely affect conveyance capacity.</p> <p>BMP-12 Leave Herbaceous Wetland Vegetation in Channel Bottom. Consistent with the maintenance objectives, the District shall avoid removal or reduction of emergent herbaceous wetland vegetation on the channel bottom that is rooted in or adjacent to the low flow channel or a pond in order to provide cover for aquatic wildlife. This same type of vegetation shall be protected during the removal of taller obstructive woody vegetation on the channel bottom.</p> <p>BMP-14 Avoid Road Base Discharge. The District shall implement measures to prevent the discharge of road base, fill, sediments, and asphalt beyond a previously established road bed when working adjacent to channels and basin bottoms.</p> <p>BMP-15 Mitigate/Replace Temporary Impacts to Habitat. For repair of in-channel structures and features that results in the temporary disturbance of native wetland or riparian vegetation adjacent to the facility, the District shall restore native wetland or riparian vegetation in the affected work areas after the repair or reconstruction work. Restoration shall include planting or seeding native plants that were present prior to the work and/or are compatible with existing riparian vegetation near the work area. The District shall prepare a restoration plan for each repair project that specifies the limits of restoration, planting mix and densities, performance criteria for survival and growth, and at least a three-year maintenance and monitoring procedures. Restoration sites shall be located outside the limits of the repaired structure. If no suitable restoration site is available near the work area or the creation of a restoration area near the work area would conflict with flood control needs, the District shall select another location on District right-of-way in close proximity. If</p>

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Operational Maintenance Environmental Impact	Best Management Practices (BMPs)
	<p>suitable restoration sites are not available, the District shall provide funds to a third party (public agency or non-profit organization) to implement the required mitigation in the same watershed as the impact. Habitat restoration under this BMP shall only occur if the affected areas support native wetland or riparian vegetation; no restoration is required for barren areas or areas dominated by non-native plants. The District shall submit all habitat restoration plans to CDFG prior to implementation.</p> <p>BMP-17 Concrete Wash-Out Protocols. The District shall implement appropriate waste management practices during on site concrete repair operations. Waste management practices will be applied to the stockpiling of concrete, curing and finishing of concrete as well as to concrete wash-out operations. Waste management practices shall be adequate to ensure that fluids associated with the curing, finishing and wash-out of concrete shall not be discharged to the channel or basin. Concrete wastes shall be stockpiled separately from sediment and protected by erosion control measures so that concrete dust and debris are not discharged to the channel or basin. The District shall determine the appropriate waste management practices based on considerations of flow velocities, site conditions, availability of erosion control materials and construction costs.</p> <p>BMP-18 Water Diversion Guide. Water diversion activities undertaken as part of routine repair and maintenance operations in improved and unimproved channels as well as debris basins shall follow the BMP guidance established as the Water Diversion Guide incorporated into the Final Program EIR addressing Environmental Protection Measures for the Ongoing Routine Operations and Maintenance Program, adopted by the District in May 2008.</p> <p>BMP-20 Implementation of Integrated Pest Management. The District shall inspect its critical and non-critical facilities regularly to document and identify the presence or absence of ground squirrels. The District shall develop and implement an Integrated Pest Management (IPM) program that identifies tolerance level, control thresholds and approved rodent control methods and/or combinations of methods at each District facility. Rodent control methods implemented at each facility shall be applied as needed and as appropriate for site conditions and the season. Methods implemented shall minimize potential primary and secondary hazards to non-target species. The District shall maintain a preventative IPM program with zero tolerance for ground squirrels for its critical facilities where failure would impact public safety. When rodent control becomes necessary at non-critical facilities, the District shall choose applicable, cost-effective treatment method(s) from the District's IPM program. Treatment options considered for each site shall include: trapping, habitat modification, alternative construction methods and materials, use of raptors, clean and rodenticide-treated bait stations, broadcast diphacinone and zinc phosphide with or without carcass collection, and other methods. As part of an ongoing monitoring program to determine the effectiveness of the squirrel control program, the District shall maintain uniform inspection records for each facility and all control efforts. The District shall conduct a staff training program that covers the IPM program including rodent issues, inspection and monitoring requirements, and treatment options.</p> <p>BMP-21 Avoid Spills and Leaks. The District shall ensure that all equipment operating in and near a watercourse, or in a basin, is in good working condition and free of leaks. No equipment maintenance or refueling shall occur in a channel or basin bottom. Spill containment materials must be on site or readily available for any equipment maintenance or refueling that occurs adjacent to a watercourse. In addition, all</p>

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Operational Maintenance Environmental Impact	Best Management Practices (BMPs)
	<p>maintenance crews working with heavy equipment shall be trained in spill containment and response.</p> <p>BMP-22 Biological Surveys in Appropriate Habitat Prior to Vegetation Maintenance. Prior to any sediment removal, vegetation control (by herbicide application, mowing, or discing), or repair work in earthen or earthen bottom channels and basins that contain native aquatic, riparian, or wetland habitats suitable for sensitive fish and wildlife species, the District shall conduct appropriate field investigations to determine if any threatened, endangered, or sensitive species are present. If such species are determined to be present in or in close proximity to the work areas, the District shall reschedule the work when the species are not present. If it is necessary to conduct the work while the species are present or in proximity to the work areas, the District shall develop other avoidance or relocation measures in consultation with the CDFG, USFWS, or NOAA Fisheries prior to conducting the work. If the work could affect state or federally listed species or their habitat, the District would employ avoidance or relocation measures approved by USFWS, NOAA Fisheries, or CDFG, as appropriate, for the maintenance program. This measure includes protection for the following threatened, endangered, or sensitive species that could occur at maintenance sites: tidewater goby, southern steelhead, trout, unarmored threespine stickleback, California redlegged frog, arroyo toad, least Bell's vireo, southwestern willow flycatcher, arroyo chub, southwestern pond turtle, two-striped garter snake, Cooper's hawk, sharp-shinned hawk, yellow warbler, yellow breasted chat, purple marlin, tri-colored blackbird, and long-eared owl.</p>
Water Resources and Hydraulic Hazards	<p>BMP-1 Avoid Channel Work During the Rainy Season. Routine maintenance and repair activities in earthen channels and in channels with soft bottoms and bank protection shall not occur during the rainy season 1 December to 1 April to avoid work when water could be present in the drainage due to runoff. Routine maintenance and repair activities may occur during this period if water is absent from the drainage because of low runoff conditions, or activities can be performed without working in flowing water. Work in flowing water during this period may proceed if there are no feasible alternatives and completion of the maintenance work during this time period is critical. Work in flowing water shall be conducted according to the BMPs established in the Water Diversion Guide attached as Appendix E to this EIR.</p> <p>BMP-2 Prevent Discharge of Silt-Laden Water During Concrete Channel Cleaning. The removal of sediments, vegetation, algae, and trash from fully lined improved channels for purposes of NPDES storm water permit compliance shall include measures to prevent the discharge of silt-laden water or pollutants to downstream unimproved channels with soft bottoms (Board Order No. 00-108; NPDES Permit No. CAS004002, adopted on July 27, 2000). These measures may include temporary downstream silt barriers (sand bags, straw bales, in-channel materials), silt fences, upstream diversion, etc. Per Section 401 Water Quality Certification requirements, a Water Diversion Plan would be needed for water diversion activities.</p> <p>BMP-3 Location of Temporary Stockpiles. Temporary stockpiles outside the channels or debris basins shall be stabilized by compacting or other measures if present at the work site from 1 December to 1 April. Silt fences, berms, or other methods shall be used to prevent sediments from being eroded from the temporary stockpile into the adjacent drainage. Temporary stockpiles may be placed in channel bottoms or debris basins if they are located on barren soil or areas with non-native weeds, and are not placed in such a manner that they would be exposed to flowing water. No</p>

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	<p>temporary stockpiles shall be placed on the channel bed or banks during the period of 1 December to 1 April for more than the duration of the sediment removal work. Permanent stockpiles shall be located landward of the 100-year floodplain to the maximum extent feasible.</p> <p>BMP-14 Avoid Road Base Discharge. The District shall implement measures to prevent the discharge of road base, fill, sediments, and asphalt beyond a previously established road bed when working adjacent to channels and basin bottoms.</p> <p>BMP-17 Concrete Wash-Out Protocols. The District shall implement appropriate waste management practices during on site concrete repair operations. Waste management practices will be applied to the stockpiling of concrete, curing and finishing of concrete as well as to concrete wash-out operations. Waste management practices shall be adequate to ensure that fluids associated with the curing, finishing and wash-out of concrete shall not be discharged to the channel or basin. Concrete wastes shall be stockpiled separately from sediment and protected by erosion control measures so that concrete dust and debris are not discharged to the channel or basin. The District shall determine the appropriate waste management practices based on considerations of flow velocities, site conditions, availability of erosion control materials and construction costs.</p> <p>BMP-21 Avoid Spills and Leaks. The District shall ensure that all equipment operating in and near a watercourse, or in a basin, is in good working condition and free of leaks. No equipment maintenance or refueling shall occur in a channel or basin bottom. Spill containment materials must be on site or readily available for any equipment maintenance or refueling that occurs adjacent to a watercourse. In addition, all maintenance crews</p>
Air Quality	<p>The following measures are part of the APCD's Model Fugitive Dust Mitigation Plan and shall be incorporated to maintenance activities as needed to further reduce the District's fugitive dust emissions during grading, excavation, and construction activities.</p> <ul style="list-style-type: none"> • The areas disturbed at any one time by clearing, grading, earth moving, or excavation operations shall be minimized to prevent excessive amounts of dust. • Pre-grading/excavation activities shall include watering the area to be graded or excavated before commencement of grading or excavation operations. Application of water (preferably reclaimed, if available) should penetrate sufficiently to minimize fugitive dust during earthmoving, grading, and excavation activities. • All trucks shall be required to cover their loads as required by California Vehicle Code §23114. • All graded and excavated material, exposed soil areas, including unpaved parking and staging areas, and other active portions of the construction site, including unpaved on site roadways, shall be treated to prevent fugitive dust. Treatment shall include, but not necessarily be limited to, periodic watering, application of environmentally safe soil stabilization materials, and/or roll-compaction as appropriate. Watering shall be done as often as necessary and reclaimed water shall be used whenever possible. • Graded and/or excavated inactive areas of the construction site shall be monitored by the District's operation and maintenance staff at least weekly for dust stabilization. Soil stabilization methods, such as water and roll-compaction, and environmentally safe dust control materials, shall be periodically applied to portions of the construction site that are inactive for over four days. If no further grading or

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Operational Maintenance Environmental Impact	Best Management Practices (BMPs)
	<p>excavation operations are planned for the area, the area should be periodically treated with environmentally-safe dust suppressants.</p> <ul style="list-style-type: none"> • During periods of high winds (i.e., wind speed sufficient to cause fugitive dust to impact adjacent properties), all clearing, grading, earth moving, and excavation operations shall be curtailed to the degree necessary to prevent fugitive dust created by on site activities and operations from being a nuisance or hazard, either on site or off site. The District staff shall use his/her discretion in conjunction with the APCD in determining when winds are excessive. • Rumble strips or track out devices shall be installed where vehicles enter and exit unpaved roads onto paved road, or wash off trucks and any other equipment leaving the site. • All on site construction roads that have a daily traffic volume of more than 50 daily trips shall be stabilized as to minimize transport of earthen material from the site. • Open material stockpiles shall be roller compacted, periodically watered, or treated with appropriate dust suppressants. • There shall be at least one qualified District staff on site each work day to monitor the provisions of the Fugitive Dust Mitigation Plan and any other applicable fugitive dust rules, ordinances, or conditions. • Personnel involved in grading operations shall be advised to wear respiratory protection in accordance with California Division of Occupational Safety and Health Regulations. • All project construction operations shall be conducted in compliance with all applicable APCD Rules and Regulations with emphasis on Rule 50 (Opacity) and Rule 51 (Nuisance).
Transportation and Circulation	<ul style="list-style-type: none"> • If maintenance activities would result in substantial vehicle trips on a roadway with unacceptable LOS at peak hours, maintenance staff should either choose an alternate route or conduct vehicle trips off peak hours. In addition, District staff shall avoid stacking of maintenance trucks on public roads during maintenance activities. The minimum acceptable LOS for road segments and intersections within the County Regional Road Network and Local Road Network shall be as follows: <ul style="list-style-type: none"> – LOS D for all County thoroughfares and federal highways and state highways in the unincorporated area of the County, except as otherwise provided below; – LOS E for SR-33 between the northerly end of the Ojai Freeway and the City of Ojai, Santa Rosa Road, Moorpark Road north of Santa Rosa Road, and SR-34 north of the City of Camarillo; – LOS C for all County-maintained local roads; and – The LOS prescribed by the applicable city for all federal highways, state highways, city thoroughfares and city-maintained local roads located within that city, if the city has formally adopted General Plan policies, ordinances, or a reciprocal agreement with the County respecting development in the city that would individually or cumulatively affect the LOS of federal highways, state highways, County thoroughfares and County-maintained local roads in the unincorporated area of the County.

1.0 Introduction and Summary

Operational Maintenance Environmental Impact	Best Management Practices (BMPs)
Noise and Vibration	<ul style="list-style-type: none"> • Construction Noise BMPs. Noise-generating construction activities shall be restricted to the daytime (i.e., 7:00 AM to 7:00 PM, Monday through Friday), during which noise levels shall not exceed: • 75 dB(A) Leq(h) at noise sensitive locations when construction work duration would last up to 3 days; • Ventura County Watershed Protection District 2-64 Final Program EIR – May 2008 • 70 dB(A) Leq(h) at noise sensitive locations when construction work would last from 4 to 7 days; • 65 dB(A) Leq(h) at noise sensitive locations when construction work would last from 1 to 2 weeks; • 60 dB(A) Leq(h) at noise sensitive locations when construction work would last from 2 to 8 weeks, or • 55 dB(A) Leq(h) at noise sensitive locations when construction work duration would exceed 8 weeks. <p>If these thresholds are exceeded at noise sensitive locations, noise abatement measures shall be implemented to reduce noise levels. Noise abatement measures shall include, but are not limited to, the construction equipment source noise reduction methods and construction noise propagation path reduction methods provided in the County of Ventura Construction Noise Threshold Criteria and Control Plan. As defined by the County of Ventura Construction Noise Threshold Criteria (2005), daytime noise-sensitive receptors include hospital, nursing homes (quasi-residential), schools, churches, and libraries (when in use). Single-family, multi-family dwellings, hotels, and motels are considered evening and nighttime noise-sensitive receptors. Since noise-generating construction activities would not occur during the evening or night hours, no noise mitigation for single-family dwellings, multi-family dwellings, hotels or motels is necessary.</p>
Geology and Seismic Hazards	<p>BMP-1 Avoid Channel Work During the Rainy Season. Routine maintenance and repair activities in earthen channels and in channels with soft bottoms and bank protection shall not occur during the rainy season 1 December to 1 April to avoid work when water could be present in the drainage due to runoff. Routine maintenance and repair activities may occur during this period if water is absent from the drainage because of low runoff conditions, or activities can be performed without working in flowing water. Work in flowing water during this period may proceed if there are no feasible alternatives and completion of the maintenance work during this time period is critical. Work in flowing water shall be conducted according to the BMPs established in the Water Diversion Guide attached as Appendix E to this EIR.</p> <p>BMP-3 Location of Temporary Stockpiles. Temporary stockpiles outside the channels or debris basins shall be stabilized by compacting or other measures if present at the work site from 1 December to 1 April. Silt fences, berms, or other methods shall be used to prevent sediments from being eroded from the temporary stockpile into the adjacent drainage. Temporary stockpiles may be placed in channel bottoms or debris basins if they are located on barren soil or areas with non-native weeds, and are not placed in such a manner that they would be exposed to flowing water. No temporary stockpiles shall be placed on the channel bed or banks during the period of 1 December to 1 April for more than the duration of the sediment removal work. Permanent stockpiles shall be located landward of the 100-year floodplain to the maximum extent feasible.</p>

1.0 Introduction and Summary

Operational Maintenance Environmental Impact	Best Management Practices (BMPs)
	<p>BMP-14 Avoid Road Base Discharge. The District shall implement measures to prevent the discharge of road base, fill, sediments, and asphalt beyond a previously established road bed when working adjacent to channels and basin bottoms.</p> <p>BMP-17 Concrete Wash-Out Protocols. The District shall implement appropriate waste management practices during on site concrete repair operations. Waste management practices will be applied to the stockpiling of concrete, curing and finishing of concrete as well as to concrete wash-out operations. Waste management practices shall be adequate to ensure that fluids associated with the curing, finishing and wash-out of concrete shall not be discharged to the channel or basin. Concrete wastes shall be stockpiled separately from sediment and protected by erosion control measures so that concrete dust and debris are not discharged to the channel or basin. The District shall determine the appropriate waste management practices based on considerations of flow velocities, site conditions, availability of erosion control materials and construction costs.</p>
Public Health	<p>BMP-9 Aquatic Pesticide BMPs. The District shall follow the most up-to-date BMPs and the monitoring and reporting requirements in the District's NPDES Stormwater Quality Management Plan (Board Order No. 00-108; NPDES Permit No. CAS004002, adopted on July 27, 2000, available at http://vcstormwater.org/documents/workproducts/stormwater_quality_mangement_plan.pdf) when applying herbicides to channels and basins. The District shall also follow BMPs in the Ventura County Application Protocol for Pesticides, Fertilizers, and Herbicides (included in Appendix I).</p>

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2.0 ENVIRONMENTAL SETTING

2.1 PROJECT LOCATION

The proposed project is located in the City of Oxnard, adjacent to the border of the City of Port Hueneme in the County of Ventura (Figure 2.0-1). The County of Ventura is located in southern California and is bordered by the County of Santa Barbara to the north and the County of Los Angeles to the south and east. Regional access to the area is provided by the Ventura Freeway (US-101), which is the principal east-west route through the County of Ventura. The Santa Paula Freeway (SR-126) runs from US-101 in Ventura to Interstate 5 (I-5) in Santa Clarita, which is also an east-west route. These freeways are located north and northeast of the project site. Pacific Coast Highway, or State Route 1 (SR-1), is known locally as Oxnard Boulevard in the City of Oxnard, and extends in a northwesterly fashion from the County of Los Angeles. At Wooley Road, the direction of SR-1 changes from northwest to north and joins US-101 in Oxnard approximately five miles inland from the coast.

The J Street Drain is an existing stormwater drain that is located within the City of Oxnard and adjacent to the City of Port Hueneme. The drain extends approximately 2.2 miles from north of Redwood Street, southward into the Ormond Beach Lagoon. The existing J Street Drain is a trapezoidal concrete-lined channel for the entire length. From approximately Redwood Street downstream to Hueneme Road, the drain lies between the north- and southbound lanes of J Street. The downstream end of the concrete channel is approximately 50 feet south of the Hueneme Drain Pump Station.

2.2 PROJECT SETTING

The general topographic character of the project area is flat and ranges in elevation from approximately 24 feet above mean seal level (AMSL) at the northern end of the project boundary to three feet AMSL at the southern end within the Ormond Beach Lagoon. The lagoon is approximately eight feet AMSL with a depth of surrounding water from four to six feet. Beach elevation ranges from approximately eight feet AMSL along the north to sea level at the south.

The surrounding land uses along J Street north of Hueneme Road consist mainly of residential development of varying densities and includes the Bubbling Springs Community Park at Bard Road and J Street. The project vicinity in the downstream portion of J Street Drain contains mixed land uses, including the Surfside III Condominiums, commercial uses, and wastewater treatment infrastructure. The recently designated Halaco Superfund Site is located approximately one-quarter mile east of the J Street Drain (Figure 2.0-2).

Ormond Beach and the Ormond Beach Lagoon are located at the terminus of the existing and proposed drain. The Lagoon is defined in the Los Angeles Regional Water Quality Control Board (LARWQCB) Basin Plan as local surface water resources/freshwater and saltwater marshes and was formed as a result of man-made drainage improvements involving the Oxnard Industrial Drain (OID), Hueneme Drain, and J Street Drain. The following describes the relationship between the Lagoon and relevant drainages in the project vicinity.

J Street Drain, Lower Channel and Ormond Lagoon

The J Street Drain is a fully-lined concrete channel that ends approximately 50 feet south of the Hueneme Drain Pump Station. This is the end of the improved channel, and the end of where drain maintenance takes place. Because the lagoon closes off to the ocean, there are times when the backed up, or “ponded”

water, extends over this area and can reach as far north as Hueneme Road. Because of the cycle of lagoon closing and breaching, this is a transitional area for habitat from salt marsh/coastal lagoon, to concrete channel. These habitats support tidewater goby, California least terns, and other migrating birds.

Ormond Beach Lagoon

The Ormond Beach Lagoon consists of a dynamic array of wetland, freshwater, estuarine, and marine habitats. Prior to the 1960s, the OID and J Street Drain discharged directly to the ocean, and Hueneme Drain flows were conveyed southeastward to Mugu Lagoon. Historically, a smaller lagoon, formed through natural hydraulic and tidal actions, existed at the current location of the OID outlet prior to its channelization. Man-made drainage improvements involving the OID, Hueneme Drain, and J Street Drain caused a second small lagoon to develop near the end of the J Street Drain. Eventually, the two small lagoons became hydraulically connected and grew to the current configuration (HDR 2008).

Oxnard Industrial Drain (OID)

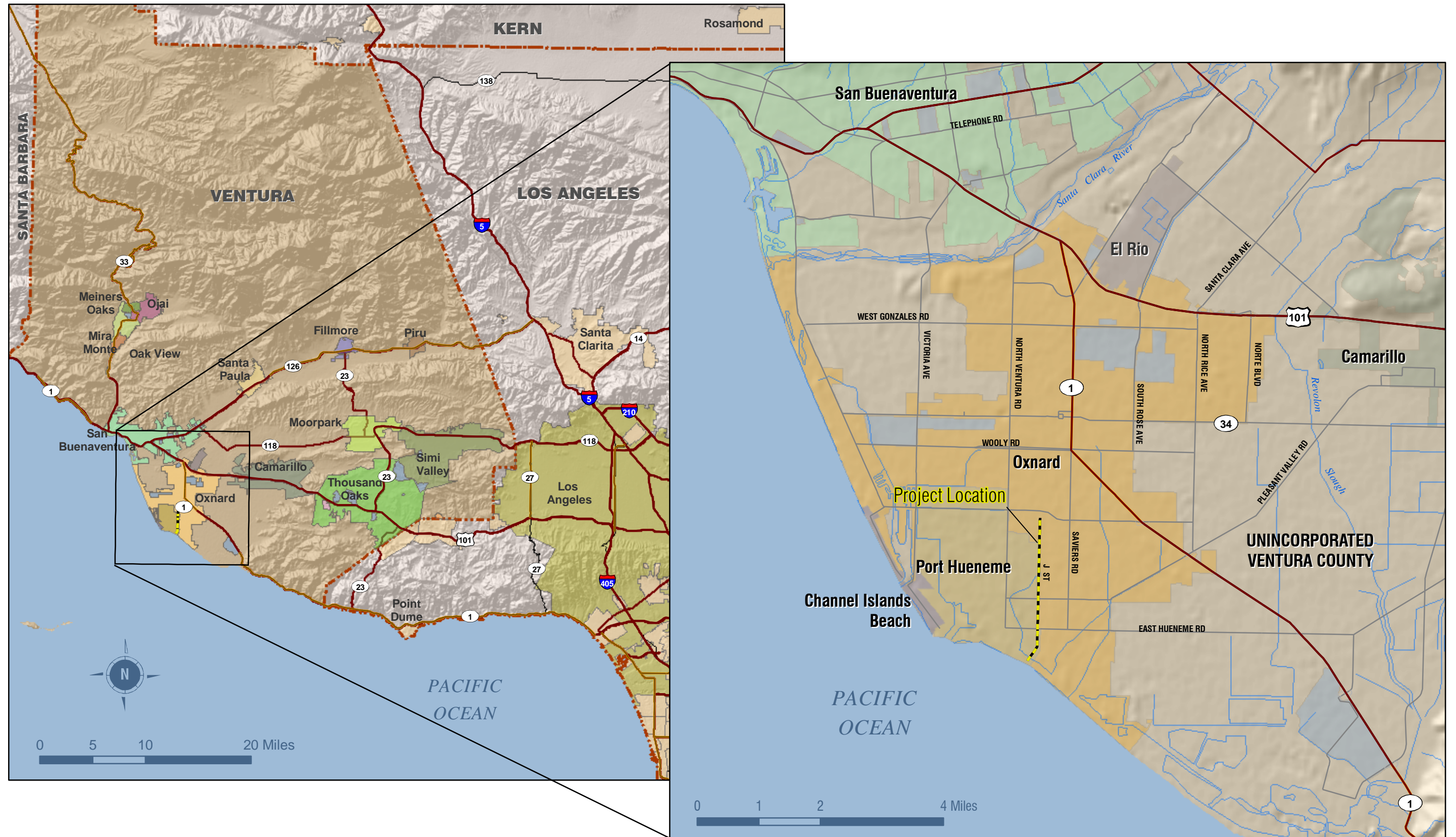
The OID is a manmade, earthen trapezoidal (at the downstream end) and rectangular concrete channel that extends several miles northeast of the Ormond Beach Lagoon through the City of Oxnard. One other major stormwater channel, the Rice Drain, is a tributary to the OID. Current inputs to the OID consist of urban and agricultural runoff with some groundwater seepage near the coast where the channel bottom lies below the water table. The District maintains and regulates discharges to the OID. The OID watershed totals approximately 5,935 acres.

Hueneme Drain

The Hueneme Drain, also known as the Bubbling Springs Drain, extends from Richard Bard Bubbling Springs Park and forms the center of the Bubbling Springs Recreation corridor in the City of Port Hueneme. The Hueneme Drain is located west of the J Street Drain. From Bubbling Springs Park, it extends south towards the Pacific Ocean and bends east to run parallel to the coastline as the drain nears the Hueneme Drain Pump Station. Hueneme Drain is a perennial watercourse, supplied by springs and impounded by the sand berm at the Ormond Beach Lagoon that was created when the J Street Drain was built over the Hueneme Drain. The District's Hueneme Drain Pump Station (about 1,000 feet downstream of Surfside Drive) periodically pumps the impounded water into the J Street Drain. Prior to construction of the pump station in the 1960s, the Hueneme Drain (then known as the Oxnard Drain or Hueneme Canal) conveyed flows approximately three miles southeast along the coast to Mugu Lagoon.

Hueneme Drain is a man-made earthen channel with a trapezoidal shape. The channel is about 75 feet across from top of bank to top of bank near the pump station. The banks and tops of the banks are landscaped and maintained as part of the Bubbling Springs Recreation Corridor. Water levels in the drain are regulated by the pump station. In the summer, the water is maintained at one- to two-foot depths. Emergent wetlands are present sporadically in the channel in the form of native cattails and other herbaceous plants.

Source: ESRI, 2007 | \\G:\Projects\75217 - J Street\map_docs\mxd\ER\Regional_Vicinity_1st.mxd | Last Updated : 09-24-08



Project Regional & Vicinity Map
FIGURE 2.0-1

Source: ESRI, 2006; Coastal Zone Commission, 2008 | \\G:\Projects\75217 J Street\map_docs\map\ER\LandUseFeature.mxd | Last Updated: 12-24-08



Land Use Features
FIGURE 2.0-2

Perkins Drain

Perkins Drain represents that portion of the historic Oxnard Drain or Hueneme Canal that exists downstream of the Hueneme Drain Pump Station. That portion of this historic drain that exists upstream of the pump station is currently known as the Hueneme Drain. Perkins Drain previously conveyed perennial flows from Bubbling Springs southeast along the coast to Mugu Lagoon. These perennial flows are currently pumped into both J Street Drain and Perkins Drain. Perkins Drain now exists as an isolated channel between J Street Drain and OID, and is no longer hydrologically connected to Mugu Lagoon. A flap gate in a remnant portion of the Perkins Drain east of the OID allows runoff from the Ormond Lagoon to flow down the coast and ultimately to a wetland area east of the Halaco site.

2.3 RELATED PROJECTS FOR CUMULATIVE ANALYSIS

The *California Environmental Quality Act (CEQA) Guidelines* (Section 15355) define a cumulative impact as “two or more individual effects which, when considered together, are considerable or which compound or increase other environmental impacts.” The *CEQA Guidelines* [Section 15130(a)(1)] further state that “an Environmental Impact Report (EIR) should not discuss impacts which do not result in part from the project.”

Section 15130(a) of the *CEQA Guidelines* provides that “[A]n EIR shall discuss cumulative impacts of a project when the project’s incremental effect is cumulatively considerable...” Cumulatively considerable, as defined in Section 15065(a)(3), “means that the incremental effects of an individual project are significant when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects.”

An adequate discussion of significant cumulative impacts requires either: (1) “a list of past, present, and probable future projects producing related or cumulative impacts, including, if necessary, those projects outside the control of the agency, or (2) “a summary of projections contained in an adopted general plan or related planning document, or in a prior environmental document which has been adopted or certified, which described or evaluated regional or area-wide conditions contributing to the cumulative impact.” The cumulative effects discussion for the J Street Drain project will be based on a list of related projects within the project vicinity (Figure 2.0-3 and Table 2.0-1). The list of projects is based on information supplied from both the City of Oxnard and the City of Port Hueneme.

The *CEQA Guidelines* recognize that cumulative impacts may require mitigation, such as new rules and regulations that go beyond project-by-project measures. An EIR may also determine that a project’s contribution to a significant cumulative impact will be rendered less than cumulatively considerable and thus is not significant. A project’s contribution is less than cumulatively considerable if the project is required to implement or fund its fair share of a mitigation measure or measures designed to alleviate the cumulative impact. The Lead Agency must identify facts and analysis supporting its conclusion that the contribution will be rendered less than cumulatively considerable [*CEQA Guidelines*, Section 15130(a)(3)].

Table 2.0-1. Cumulative Projects

Map Number ⁽¹⁾	Project ⁽²⁾	Description	Address	Project Status*
<i>City of Oxnard</i>				
1	DAL-Villa San Lorenzo	16 Condominiums. SWC Saviers Road and Pleasant Valley Road	130 W. Pleasant Valley Road	Withdrawn
2	Centerpoint Mall buildings	Demolish and replace commercial building	2801 Saviers Road	City's status is "Plan Check"
3	Home Depot Store	Demolish existing commercial building and construct home improvement with garden center	1355 Channel Islands Road	Withdrawn
4	Saviers/Laurel	Commercial/retail mixed use	2330 Saviers Road	Completed
5	Victory Outreach Church	Church in existing building	232 W. Pleasant Valley Road	City's status is "Plan Check"
6	Emerald Professional Building	Two-story commercial building, veterinarian and general office on northwest corner	5577 Saviers Road	Approved
7	Advanced Purification Facility	Construction of advanced water treatment facility in southern part of Oxnard	NEC of Perkins Road and Magelian Avenue	Under Construction
8	Ormond Beach Specific Plan	1,283 residential dwelling units, two schools, parks, lake, mix-use commercial, light industrial, open space, and business park on 900 acres	Boundaries: E. Pleasant Valley Drive, Pacific Ocean, Old Road, and Arnold Road, and Edison Drive	EIR is certified—construction to begin summer 2011
9	Water Pipeline I	A recycled water pipeline that will run down Hueneme Road under the J Street Drain from the Oxnard Wastewater Treatment Plant		Under Construction
10	Industrial Condo Conversion	Conversion of 36,480 sf of warehouse into 3 industrial condo units	2311 Statham Parkway	Approved
11	Baptist Church	Construction of 5,765 sf church	NW Corner Raiders Way and Rose Avenue	Approved
12	Lions Gate Annex	Self storage and RV storage	2751 Statham Blvd.	Approved
13	Emerald Professional Building	2-story commercial building. Veterinarian and General Office NWC Saviers Road and Hueneme Road	5777 Saviers Road	Approved
14	Paseo Nuevo	Planned Development permit for 12 two-story structures, total of 72 affordable apartments, on-site amenities, Density Bonus, and Zone Change to R-2-PD on a 5-acre property	5637-5727 Cypress Road	Proposed
15	Cuesta Del Mar Affordable Housing	Construct a 3-story 6,080 sf multifamily building with 7 apartments	610 Cuesta Del Mar	Approved

2.0 Environmental Setting

Map Number ⁽¹⁾	Project ⁽²⁾	Description	Address	Project Status*
16	Rose/Pleasant Valley	98 condos/12 live work spaces	474 S. Rose Avenue (Rose and Pleasant Valley)	Proposed
<i>City of Port Hueneme</i>				
17	Water Pipeline II	Calleguas Municipal Water District has approvals to build its treated water pipeline (48-inch diameter) that will run under the existing J Street drain to a proposed ocean outfall off Port Hueneme Beach Park		Construction to begin March 2012
18	J Station Elimination Project	Approximately 670 linear feet of gravity sewer line following the Ventura County Railroad	Boundaries: immediately west of the J Street Drain to Perkins Road	Completed

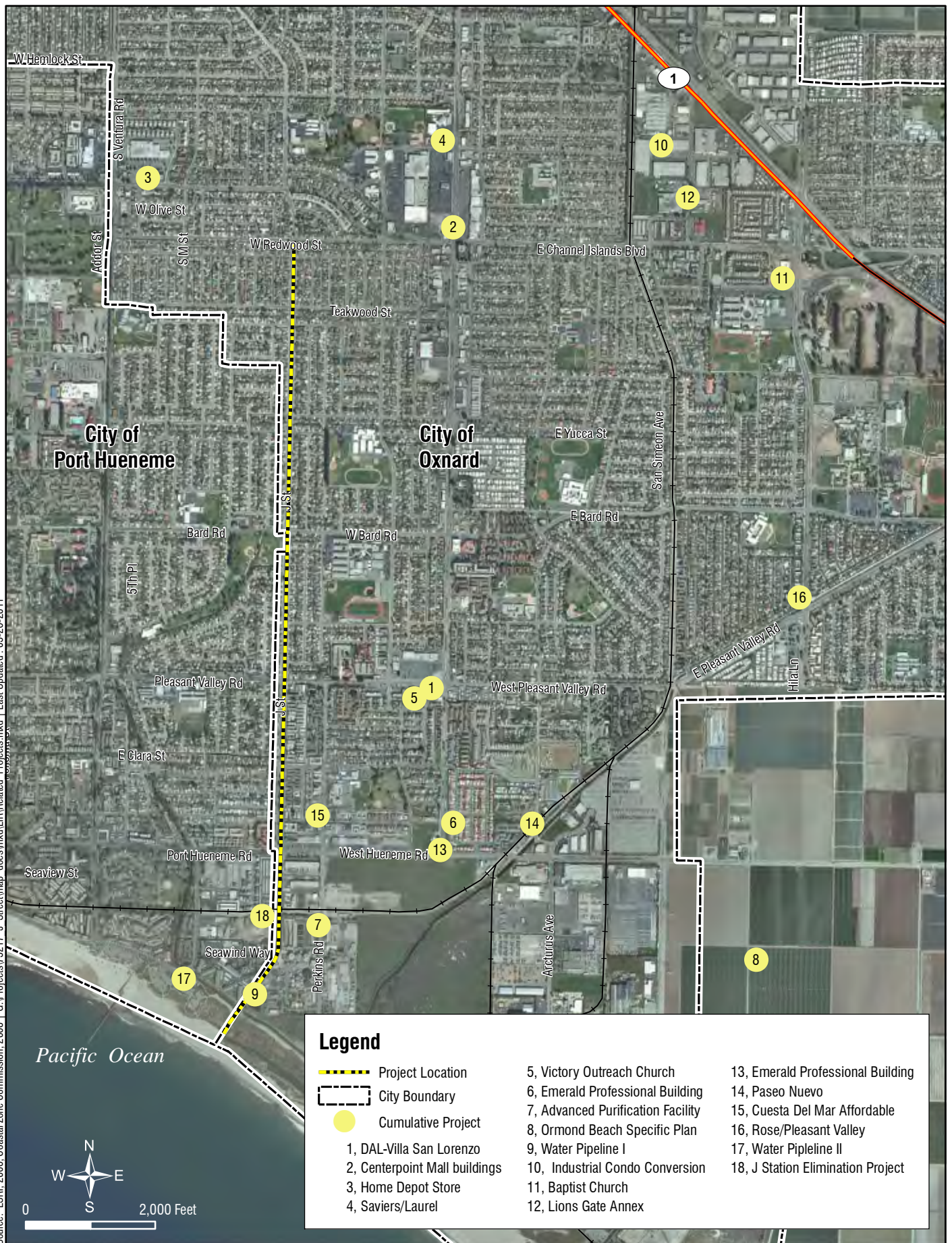
*Notes: (1) See Figure 2.0-3

(2) Due to passage of time, the cumulative project list was updated in May 2011 to reflect current status and add any new projects that would be within the cumulative project analysis area.

Source: City of Oxnard and City of Port Hueneme, May 2011.

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Source: ESR1, 2006; Coastal Zone Commission, 2008 | G:\Projects\75217_J_Street\map_docs\mxd\EIR\Related_Projects.mxd | Last Updated: 05-26-2011



Related Projects

FIGURE 2.0-3

J Street Drain | Ventura County Watershed Protection District | EIR

3.0 PROJECT DESCRIPTION

The Ventura County Watershed Protection District (District) proposes the J Street Drain Project to increase the flow capacity of the existing J Street Drain within the existing facility right-of-way to accommodate runoff from a 100-year storm event, and reduce potential flooding in residential and commercial areas of the Cities of Oxnard and Port Hueneme. J Street Drain is located within a Ventura County easement which includes the concrete channel, some box culverts under the roadways, and south of Hueneme Road, an adjacent access road (Figure 3.0-1). The drain itself is located near the border between City of Oxnard and City of Port Hueneme. The proposed construction of the J Street Drain could potentially impact the land uses and roadways of both cities during construction activities.

3.1 BACKGROUND

The J Street Drain was identified in the District's Fiscal Year 2005 Integrated Watershed Protection Plan (IWPP) as a project in District Zone 2, which roughly includes the Santa Clara River Watershed and coastal drainages in the cities of San Buenaventura, Port Hueneme, and Oxnard. According to studies sponsored by the District, the area surrounding the J Street Drain is anticipated to flood during a moderate rain event (Figures 3.0-2a and 3.0-2b). The J Street Drain Channel Improvement Study and Preliminary Design (URS 2005) estimates the capacity of the J Street Drain to be 500-600 cubic feet per second (cfs), which could be exceeded during a ten-year flood event. Flood damages were estimated using the depth of flooding in the residential and commercial areas along J Street, the structural value data obtained from the District, and the 1975 revised depth-damage curves for residential and small business structures calculated by the Federal Insurance Administration (FIA). A benefit cost analysis (BCA) was conducted using estimated pre-project flood damages and losses to calculate benefits. Based on these calculations a total of \$55.7 million was estimated as the damage that would result from a 100-year flood in the J Street Drain Channel.

The flood extent shown in Figure 3.0-2a is not currently depicted within Federal Emergency Management Agency (FEMA) Flood Zone A, or the one percent annual chance (previously known as the 100-year) flood zone. The one percent annual chance flood has a one percent chance of being equaled or exceeded each year. Thus, the 100-year flood could occur more than once in a relatively short period of time or even within the same month. The 100-year flood has a 26 percent chance of occurring during a 30-year period, the length of many mortgages¹.

Flood zones appear on Digital Flood Insurance Rate Maps (DFIRMs). Property owners within Flood Zone A are federally mandated to purchase flood insurance. The current DFIRMs are based on pre-1984 hydrologic data and hydraulic analyses conducted over 25 years ago (FEMA Flood Insurance Study 06111CV001A for Ventura County, California and Incorporated Areas, Volume 1 of 3). Since that time, Ventura County has experienced several years of record rainfall, including 1995, 1998, and 2005 (VCWPD 2009). The DFIRMs are therefore based on data that do not reflect the trend of increasing rainfall since the 1980s. As a result, the District commissioned the 2005 URS study to proactively characterize current conditions and provide adequate flood protection before FEMA initiates a DFIRM update. Construction of the proposed project would be the first major step of a proactive effort to protect properties currently threatened with flooding from J Street Drain overflow, as shown on Figure 3.0-2a. Figure 3.0-2b depicts the Special Flood Hazards Area (SFHA), as mapped by FEMA². These SFHA are related to flooding from wave activity, not from outfall from J Street Drain. Specific SFHA depicted on

¹ <http://www.vcfloodinfo.com/index.php/flood-maps-flood-insurance-studies-a-map-changes/digital-flood-insurance-rate-maps-dfirm>

² DFIRMs 06111C0914E, 06111C0916E, and 06111C0918E dated January 20, 2010.

Figure 3.0-2b includes coastal flooding due to wave action (Zone VE) and coastal flooding due to waves filling up the lagoon.

In addition to the drain capacity, the outlet of the drain is sometimes constrained by a sand berm that can reach over seven feet in height surrounding the Ormond Beach Lagoon. The sand berm hinders the direct flow path of the J Street Drain channel to the Pacific Ocean. The berm currently directs the water to the east, toward the Oxnard Industrial Drain (OID). If the berm does not open during a storm event, then storm water ponds in the lagoon and can fill the drain to capacity as far as Hueneme Road, posing a flood risk to the Oxnard Wastewater Treatment Plant (OWWTP), residential, and commercial property during even minor storms.

Prior to 1992, the sand berm at the Ormond Beach Lagoon was periodically breached by the District. Bulldozers were used to create a discharge path directly to the ocean and prevent water and silt buildup in the channel. However, this practice ceased in 1992 due to environmental concerns and restrictions. Due to constant wind and wave action, the elevation across the sand berm is not uniform in space or constant in time and its maximum elevation is approximately 11.6 feet National Geodetic Vertical Datum of 1929 (NGVD) (14 feet North American Vertical Datum of 1988 [NAVD])³. Under existing conditions, natural breaching typically occurs when the surface water in the lagoon reaches an elevation of 5.1 to 5.6 feet NGVD (7.5 to 8 feet NAVD) above mean sea level (AMSL). However, the expected maximum water level in the lagoon is regulated by the lowest beach crest elevation (the height of the sand berm). Natural breaching takes place after the lagoon water level exceeds the height of the sand berm. Due to the dynamic nature of the lagoon and sand berm elevation, surface water elevation for natural breaching will likely vary. Therefore, natural breaching at the lagoon may not occur during a ten-year flood event (capacity of existing drain), in which case the project area would flood due to backwater effects.

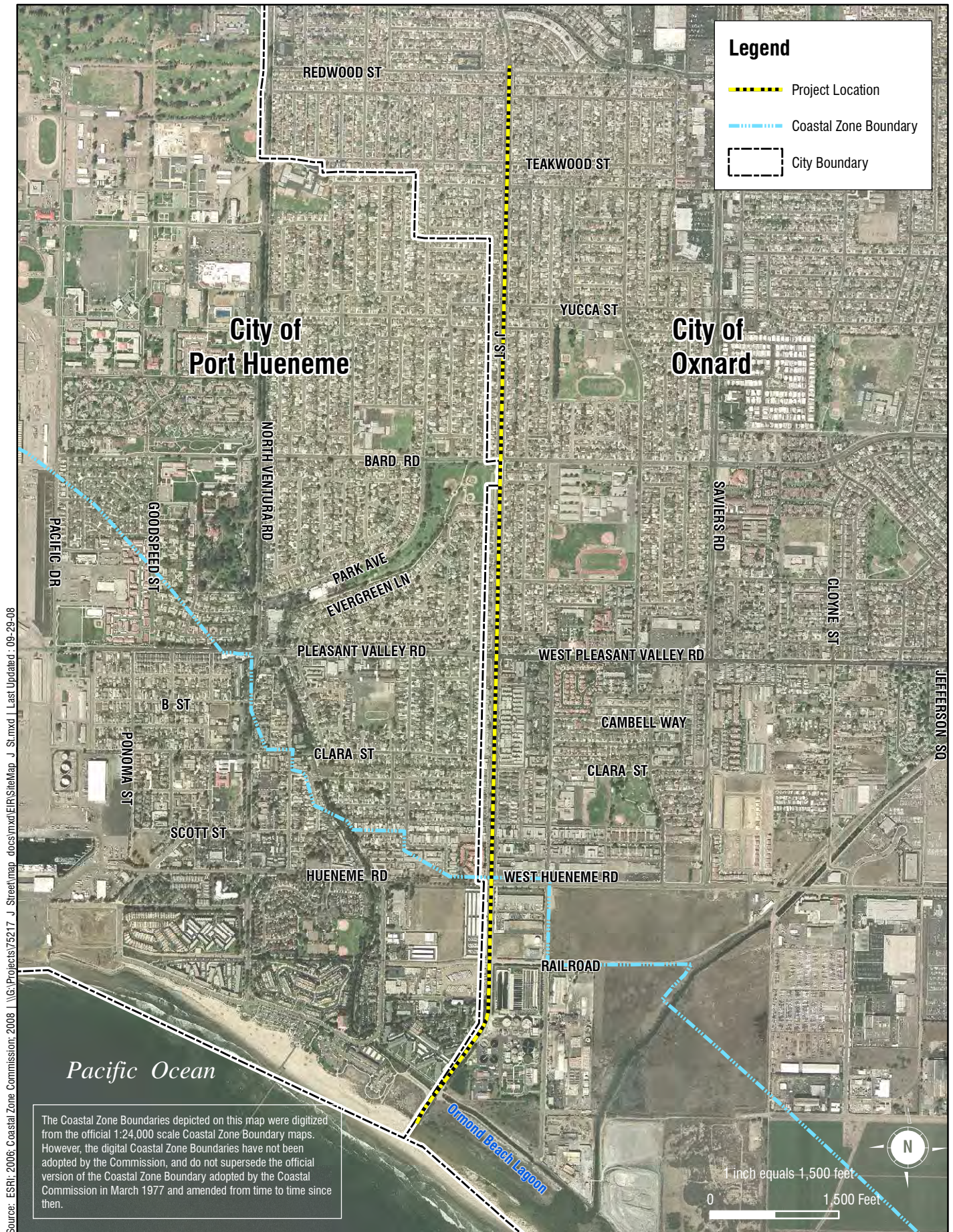
3.2 PURPOSE, NEED AND PROJECT OBJECTIVES

Project Purpose and Need

The purpose of the proposed project is to provide flood protection to the 100-year flood level for the area surrounding J Street Drain. Protection from a 100-year flood is the standard set by FEMA under the National Flood Insurance Program (NFIP). The need for such protection is evidenced by the studies that show the existing drain has the capacity to handle only a ten-year flood event without overtopping the channel. Without the increase in flood protection the local area would continue to be susceptible to flooding, as well as federal requirements to purchase flood insurance for properties within the 100-year flood zone after FEMA remaps the project area in the future.

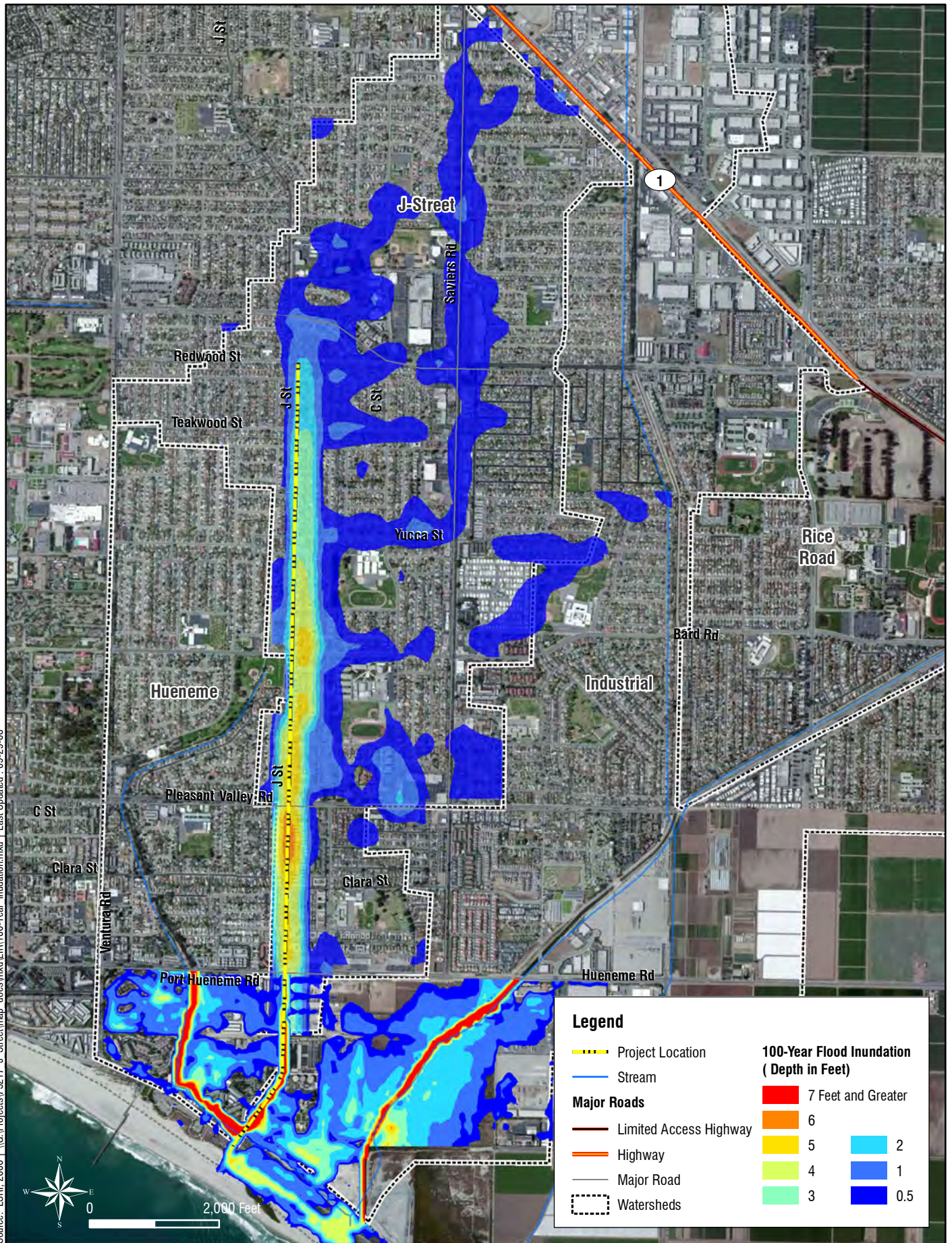
Along with the proposed increase in drain capacity, the proposed project also includes a Beach Elevation Management Plan (BEMP). The BEMP identifies a set of threshold environmental conditions that together activate the need for reducing the height of the sand berm. Once these threshold conditions are observed, a predetermined list of actions would be implemented to ensure the opening of the lagoon outlet if the water level exceeds a target safe elevation and thereby prevent flooding of developed properties.

³ Note that at the lagoon location, 0 feet NGVD 1929 = 2.42 feet NAVD 1988.



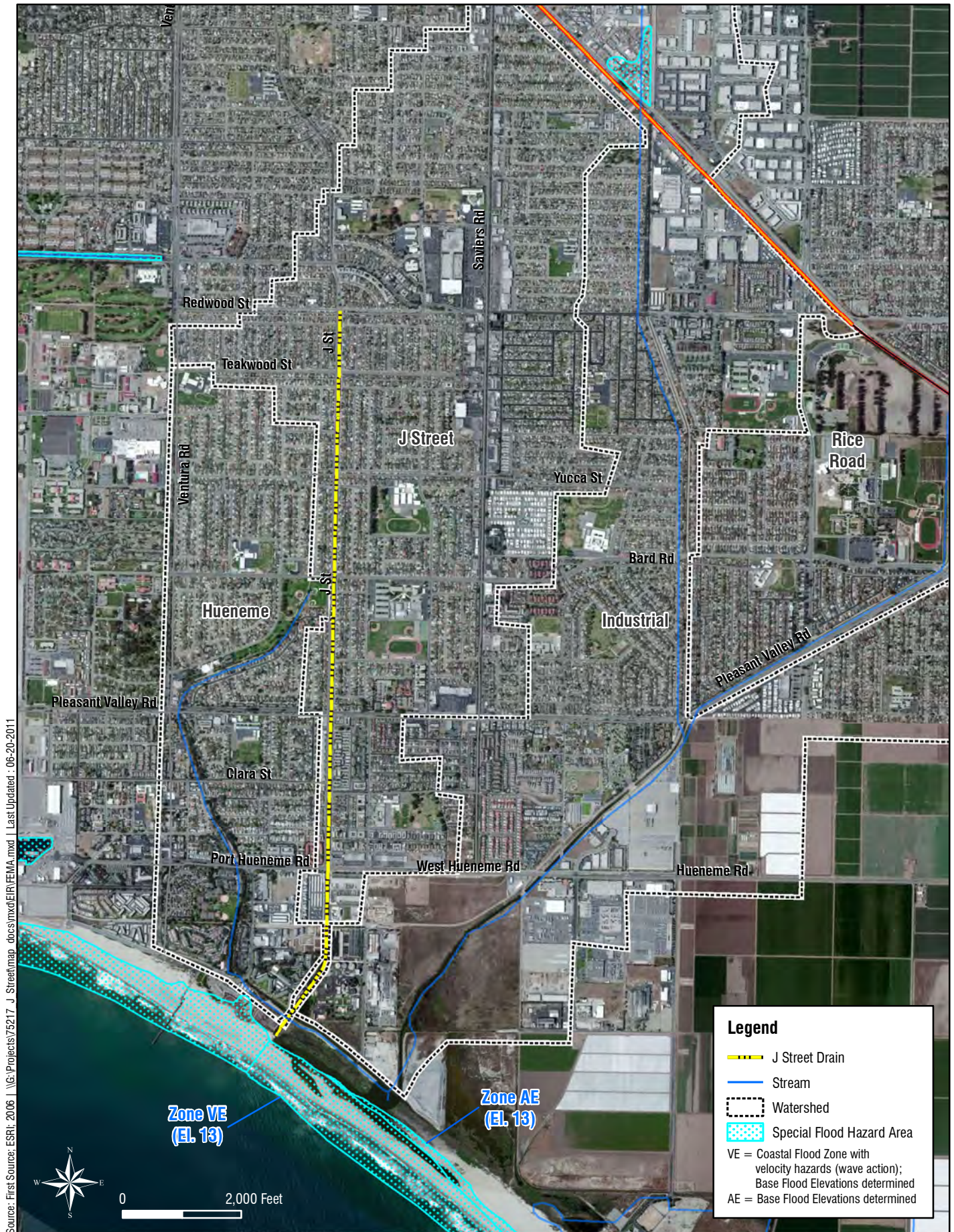
Project Site
FIGURE 3.0-1

Source: ESRI, 2006 | \\G:\Projects\75217_J Street\map_docs\mxd\EIR\100-Year_inundation.mxd | Last Updated: 09-29-08



100-Year Flood Inundation (Depth in Feet)

FIGURE 3.0-2a



FEMA Special Flood Hazard Areas

FIGURE 3.0-2b



ONE COMPANY | Many Solutions™

J Street Drain | Ventura County Watershed Protection District | EIR

Project Objectives

The District's primary project objectives include:

- Provide flood control protection by increasing the drain size to provide capacity for 100-year flood flow;
- Maintain the existing functional characteristics of the Ormond Beach Lagoon;
- Ensure project compatibility with future Ormond Beach Lagoon restoration plans;
- Minimize the disturbance to tidewater goby habitat downstream of the J Street Drain lined channel, as well as snowy plover and California least tern nesting areas on Ormond Beach;
- Minimize operation and maintenance requirements, especially during storms; and
- Minimize effects on water quality of the lagoon.

3.3 PROJECT FUNDING AND SELECTION

The District has planned carefully for this project, and is working to ensure that sufficient funds will be available to construct each phase, when they are needed.

The District funds capital improvement projects from a combination of revenues, including its portion of the 1 percent property tax revenues collected by the County Treasurer-Tax Collector on all taxable parcels countywide, interest earnings on its fund balance on deposit with the County Pooled Investment Fund, land development fees, and whenever feasible, project specific grant fund revenues.

The District's revenues are divided by four geographical zones, Zones 1 through 4. The boundaries of the first three zones roughly correspond to the boundaries of the Ventura River (Zone 1), Santa Clara River (Zone 2), and Calleguas Creek (Zone 3) watersheds. Zone 4 includes the extreme northwest and southeast portions of Ventura County (Figure 3.0-3).

Zone revenues are sequestered for use only in the zone from which they were collected. As stated above, the J Street Drain Project is located within Zone 2. As of July 27, 2010, approximately \$66.8 million of revenue was projected to be available to fund District expenditures in Zone 2 between fiscal year (FY) 2010-11 and 2015-16. Of this amount, \$12.7 million would be available to construct Phase 1 of the Project, which is scheduled to be constructed during this period. The remaining three phases, totaling approximately \$23.0 million, would be constructed after FY 2015-16. Each phase would be implemented individually as funding becomes available.

The J Street Drain Project went through the District's rigorous capital improvement project (CIP) ranking and selection process. The process begins with identifying flood threats to residential, commercial, industrial, and agricultural lands throughout Ventura County. Where flood control facilities already exist, their current condition (e.g., concrete deterioration) is evaluated. Potential solutions to known flood threats, or CIPs, are developed through consideration of a range of alternatives.

All proposed CIPs are assigned points out of 100 possible, then ranked and prioritized in relation to one another. Points are distributed according to four categories (Table 3.0-1). Fiscal year 2010-11 CIP ranking and funding data for projects in all zones was presented to the District Board of Supervisors (Board) as Agenda Item No. 28 on July 27, 2010⁴.

⁴ <http://bosagenda.countyofventura.org/sirepub/agdocs.aspx?doctype=agenda&itemid=34367>

Table 3.0-1. District Project Ranking Categories and Maximum Point Assignments

Public Health and Safety (34%) <ul style="list-style-type: none"> Flooding Extent and Magnitude (10 points) Flooding Frequency (10 points) Existing Facility Repair (14 points) 	Community Components (16%) <ul style="list-style-type: none"> Recreation Potential (3 points) Socio-Economic Impacts (3 points) Stakeholder Acceptance (10 points)
Environmental (25%) <ul style="list-style-type: none"> Water Supply (5 points) Water Quality (5 points) Ecosystem Restoration (5 points) Regulatory/Environmental Review (CEQA) (10 points) 	Economics (25%) <ul style="list-style-type: none"> Benefit/Cost Ratio (7 points) Sustainability of the Project (7 points) Cost Sharing/Grant Funding/Leveraging (5 points) Construction/Technical Feasibility (3 points) Property Acquisition (3 points)

These data are updated and presented to the Board annually in July to reflect projects completed, added, deleted, and re-ranked. As of July 27, 2010, Phase 1 of the J Street Drain Project was ranked 13th and Phases 2-4 were ranked 15th within Zone 2. As described above, these rankings may change annually due to new conditions.

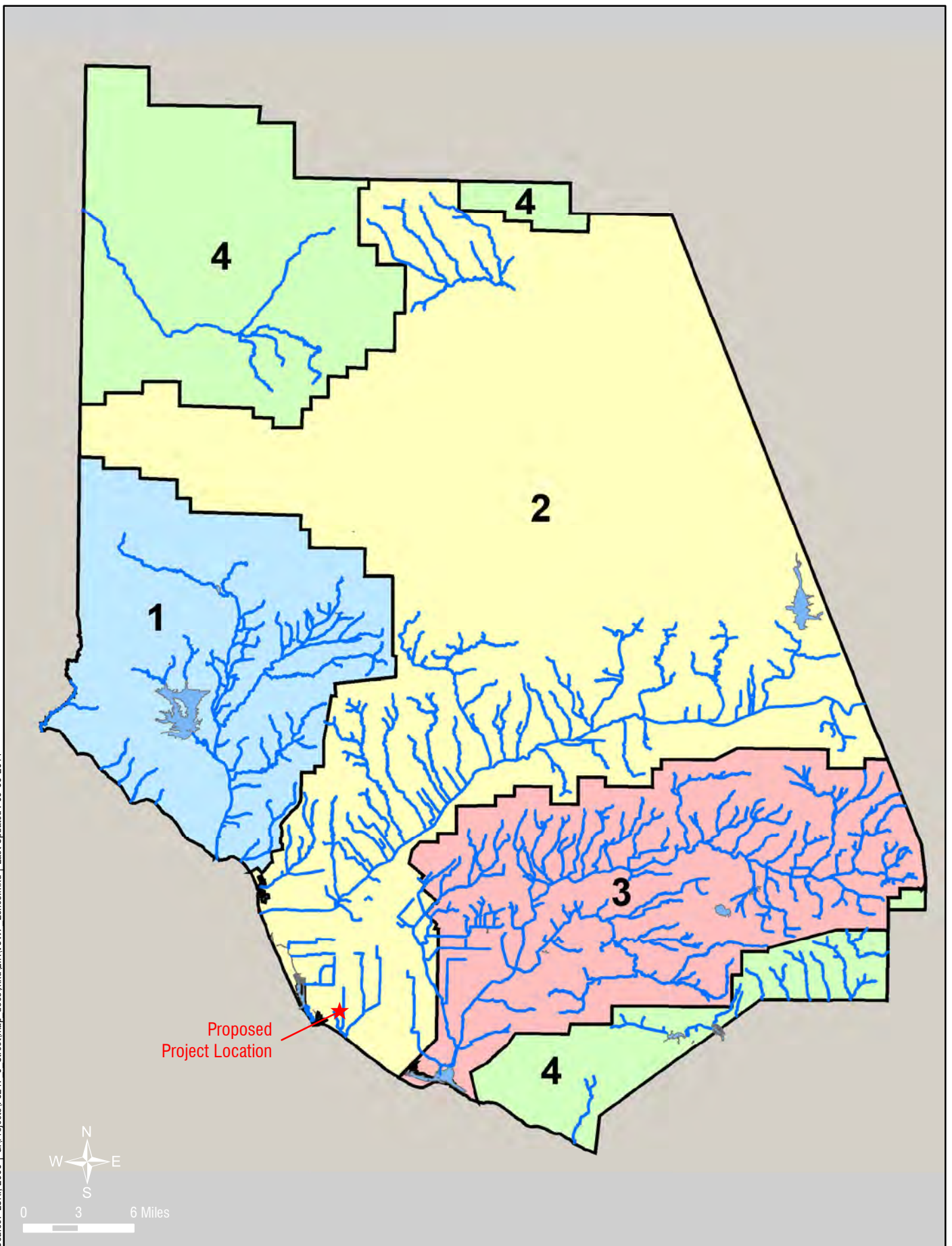
3.4 PROJECT CHARACTERISTICS

The proposed project involves converting the existing trapezoidal concrete channel into an open rectangular channel with a bottom approximately four feet deeper than the existing channel bottom. The existing trapezoidal channel would be widened and deepened to increase the capacity; the channel walls would be vertical with the top being an open channel (Figure 3.0-4). The existing box culverts under the street crossings and railroad crossing would be replaced by larger structures to improve flow conveyance. The existing concrete lining ends approximately 50 feet south of the Hueneme Drain Pump Station. Because the concrete lined portion of the channel invert would be lowered about four feet to create the required capacity, excavation would continue downstream towards the ocean. The finished invert would be daylighted via an earthen ramp to the lagoon at a 10:1 slope over a distance of up to 40 feet from the end of the existing concrete. A ten-foot-thick layer of four-ton rock riprap would be placed ~~on~~ horizontally beneath the earthen ramp at the end of and at the same elevation as the concrete drain bottom to dissipate flow energy ~~flow~~. It is anticipated that during the first few natural lagoon breaching events following Phase 1 construction, the movement of water (tidal and drain flow) and sediment would result in an equilibrium elevation within the channel transition area, between the end of the concrete channel and the Ormond Beach Lagoon annual breach location.

3.5 CONSTRUCTION

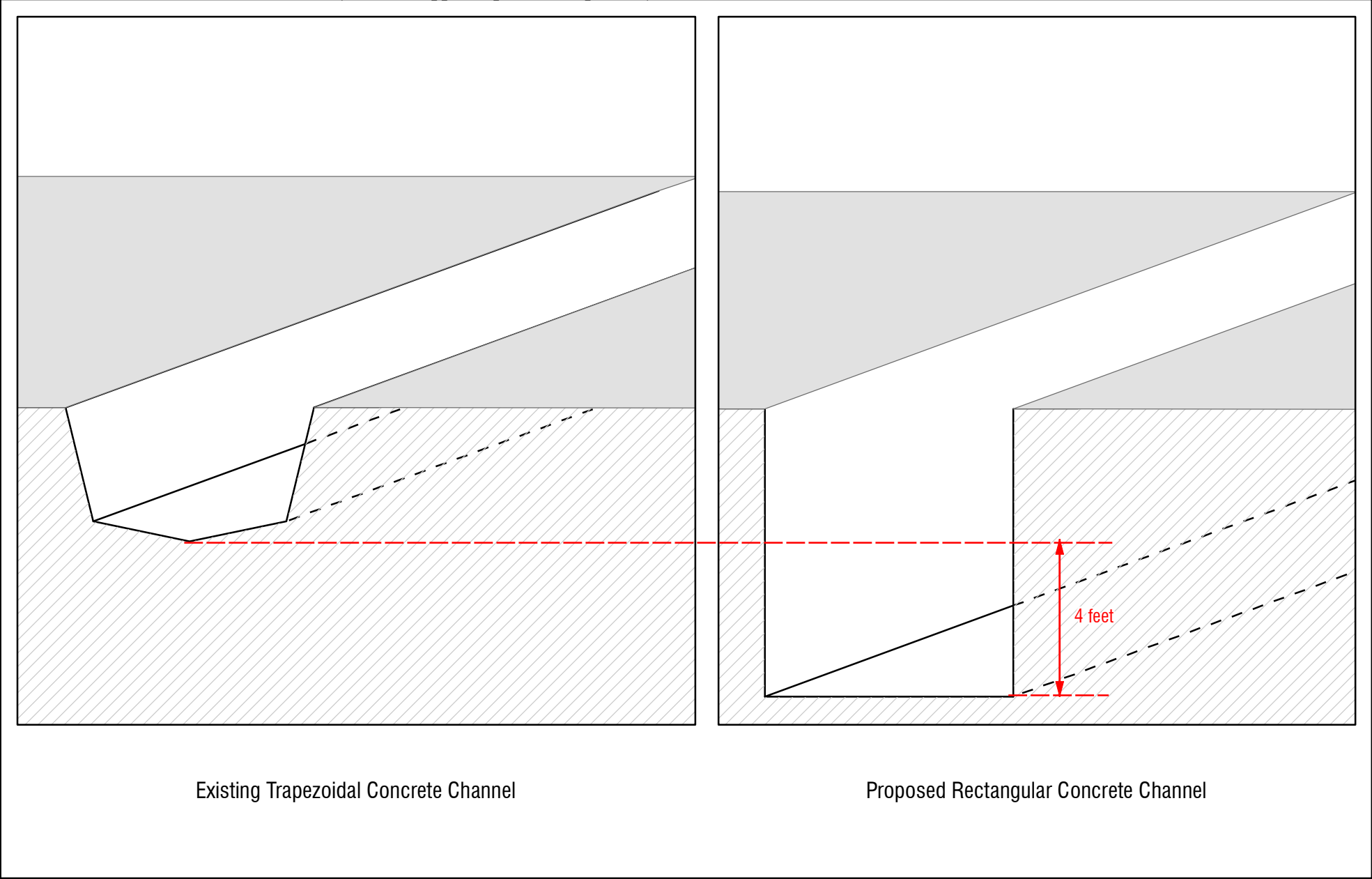
The demolition of the existing drain and construction of the new, higher capacity drain would take place in phases. It is anticipated that the demolition and construction would start at the southern end of the drain, south of Hueneme Road and move northward in phases. The construction phases are anticipated as: Phase I–Downstream end of the drain to north side of Hueneme Road (3430 lineal feet); Phase II–Hueneme Road to Pleasant Valley Road (2620 lineal feet); Phase III–Pleasant Valley Road to Yucca Street (4100 lineal feet); and Phase IV–Yucca Street to just north of Redwood Street (2680 lineal feet). Each of these phases would occur independently rather than concurrently. Additionally, during each of these phases, culverts under existing facilities will be replaced. The culverts to be replaced include: the Ventura County Railroad (VCRR) crossing, Hueneme Road, Clara Street, Pleasant Valley Road, Bard Road, Yucca Street, Teakwood Street, and Redwood Street. During the work on these culvert crossings vehicle access would be maintained for Hueneme Road and Pleasant Valley Road. The other crossings

Source: ESRI, 2006 | G:\Projects\75217 J Street\map_docs\mxd\EIR\VCWP_Zones.mxd | Last Updated: 06-09-2011



Ventura County Watershed Protection District Geographic Zones

FIGURE 3.0-3



Orthogonal Views of J Street Drain

FIGURE 3.0-4

3.0 Project Description

would be closed during construction and local traffic detoured around the construction area. Local access for residents would be maintained throughout the project, even if the nearest channel crossing is closed for construction.

It should be noted that construction will take place from within the District's easement with the potential of the work area extending beyond the easement in the southern area near the lagoon. Figure 3.0-5 shows the proposed construction staging areas for the southern end of the drain construction. The staging areas located northeast of Perkins Road and west of the downstream terminus of J Street Drain are currently vacant, and were previously disturbed. Vertical shoring will occur along the west side, adjacent to the Surfside III Condominiums. In addition, the current fence, which does not coincide with the property boundary, will be removed during construction and relocated west to the property line at the end of the project. Incursions into private property would allow the project to proceed without the need for extensive shoring of the excavations, therefore reducing the potential for noise and vibration impacts to the adjacent areas. Any disruptions to private property are required to be repaired and/or replaced at the end of the project under agreement between the District and the property owner.

The initial construction activities include installation of groundwater dewatering wells, a coffer dam, and channel flow bypass. The groundwater dewatering wells are expected to be approximately 15 to 20 feet deep, and placed along the work area of the J Street Drain. These wells would be installed and removed as construction moves upstream. Once installed, these wells would be attached to temporary pumps to extract groundwater for discharge into the Perkins Drain. The groundwater will be tested in accordance with the requirements of the Regional Water Quality Control Board (RWQCB) prior to placement into Perkins Drain. If the pumped groundwater is determined to be acceptable, it would then be allowed to be discharged. This will ensure that no surface water contamination would result from dewatering.

The electric power to run these pumps could be supplied from the existing Hueneme Drain Pump Station during Phase 1 construction. The rate of groundwater pumping would be at the discretion of the project contractor, though it is recommended that the groundwater level should be two feet below the construction work area.

A coffer dam will be placed across the channel at the south end of the construction area. The coffer dam will block tidal flow into the work area. Figures 3.0-6 through 3.0-9 illustrate the proposed coffer dam. Fish seining will take place to capture and relocate the endangered tidewater goby, as well as any additional native fish, first outside the proposed coffer dam work area and later, after the coffer dam is in place, to areas directly downstream of the coffer dam. Block nets would be installed immediately upstream and downstream of the proposed coffer dam site to isolate it, and all native fish relocated beyond the downstream net before coffer dam installation begins. This work will be conducted by approved, qualified biologists who will verify that all fish have been removed from the work area prior to the start of further construction.

The channel flow bypass will be a diversion installed to allow for any channel flow to bypass the construction area and enter the Perkins Drain. In addition, the Hueneme Drain Pump Station could pump water from the Hueneme Drain across the J Street Drain to the Perkins Drain during construction at the south end of Phase I.

Once the initial construction activities of installation of groundwater wells, coffer dam, and channel bypass are completed, fish remaining within the channel section upstream of the coffer dam can be relocated and demolition can begin. Demolition will initially start with adjacent fencing removal and landscape removal if necessary. After the permanent fencing is removed, temporary fencing will be installed along adjacent properties to limit access to the work area and ensure public safety. Demolition will consist of utilizing heavy equipment to break up and remove the concrete from the existing drain.

Access to the area south of Hueneme Road will be from Hueneme Road via the District maintenance road on the east side of the drain. The contractor may decide to use the drain itself as an access way after entering the District right-of-way at Hueneme Road. The concrete will be broken on site for transport and either trucked to a concrete recycling facility at this point or taken to one of the staging areas (Figure 3.0-5) to grind the concrete further before it is transferred to the recycling facility (as required by Ventura County ordinances).

After the concrete is removed, existing soil will be excavated to the appropriate dimensions for safe shoring (if necessary) and proper installation of subdrains and forms for the new drain. The excavated material will be removed by the contractor and hauled away from the site via a City-approved haul route (which is dependant on the ultimate location secured by the contractor). Some soils may remain on site for backfilling once the new drain is installed. Materials, including subdrain materials, reinforcing bar, and the concrete for the new drain will be delivered to the site via the approved access route from Hueneme Road. The work will only occur during hours approved by the City of Oxnard, which are anticipated to be from 7 am to 7 pm on weekdays.

Once each phase of the new drain is complete, the permanent perimeter fencing will be reinstalled. Any landscaping damaged outside of District easement on private property, will be replaced. Where the adjacent property is owned by the City, the landscaping will be replaced by the City under agreement with the District. Maintenance of the adjacent landscaping is the responsibility of the local jurisdiction once the materials are installed.

3.6 MAINTENANCE

It is anticipated that maintenance of the reconstructed drain will be similar to the existing maintenance activities. In order to programmatically address District maintenance activities, a Final Program Environmental Impact Report (EIR) for Environmental Protection Measures for the Ongoing Routine Operations and Maintenance Program was certified in May 2008. The Environmental Protection Measures for the Ongoing Routine Operations and Maintenance (O&M) Program proposed by the District aim to reduce the current administrative process to comply with agreements and permits necessary for the maintenance activities at the District's facilities. Currently, many of the District's facility maintenance activities occur in drainages, watercourses, creeks, basins, and water bodies where such activities are regulated by several state and federal agencies. Typical maintenance activities include sediment removal and vegetation control to maintain capacity within the facility. The modification to the bed, bank, and/or vegetation in a natural drainage (and certain man-made drainages) is regulated by the California Department of Fish and Game (CDFG) under Section 1600 et seq. of the Fish and Game Code.

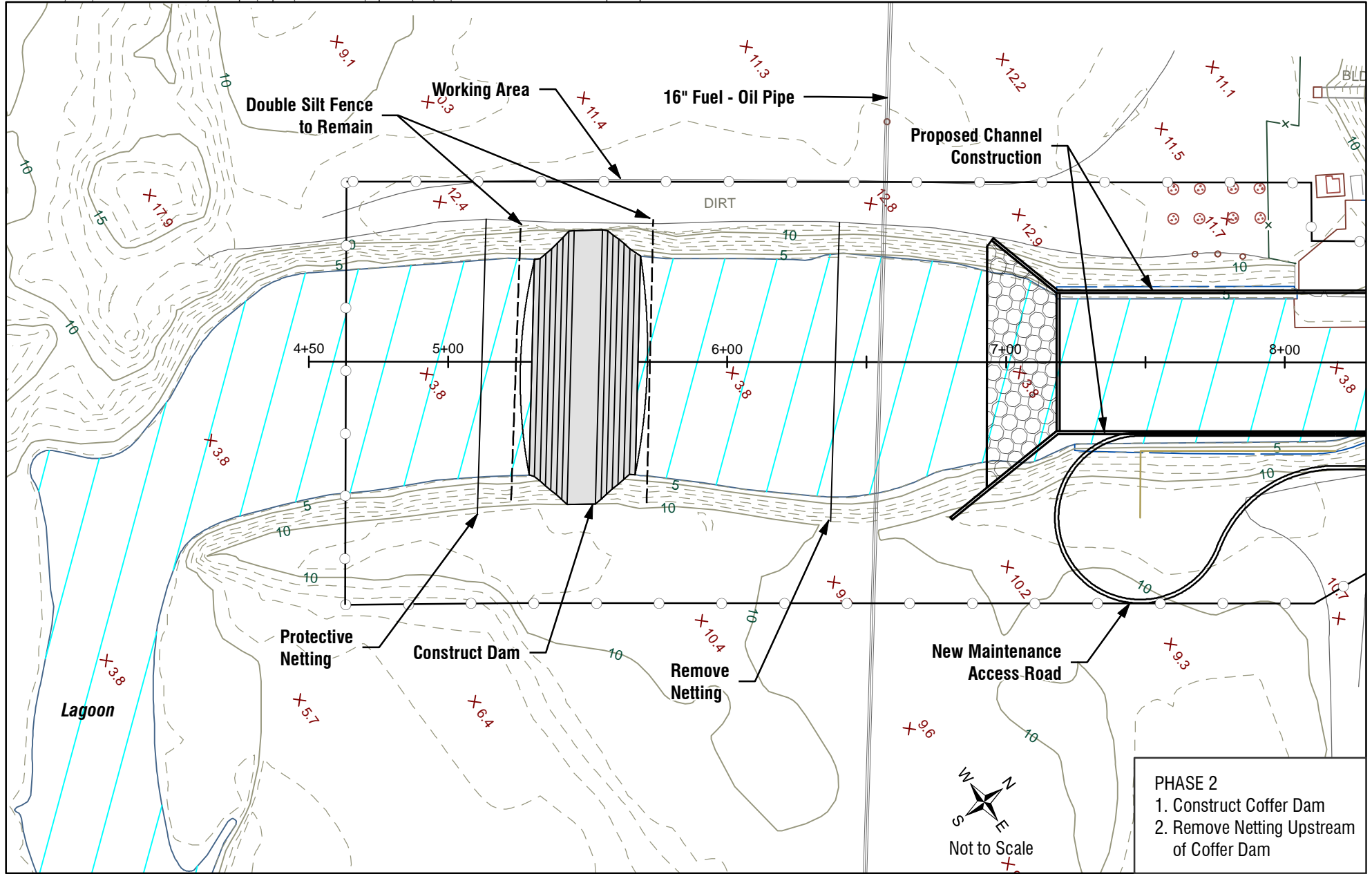
Such modifications require a Streambed Alteration Agreement. Activities that result in the discharge of dredged or fill material in watercourses (such as bank stabilization and excavation) are also regulated by the U.S. Army Corps of Engineers (USACE) under Section 404 of the Clean Water Act (CWA). Issuance of a 404 permit also requires a 401 Water Quality Certification by the RWQCB.

Prior to this EIR and the subsequent permits required for this project, the District acquired the above agreements and permits on an as-needed basis for individual maintenance activities and facilities. With the O & M program, the District seeks authorization for the entire maintenance program, reducing District and permitting agency administrative efforts, and providing a more comprehensive and effective basis for protecting environmental resources. Consequently, utilizing the results of the environmental analyses in that Program EIR, the District requested and obtained long-term permits and approvals with durations of five years or more that would include all regulated activities, include a streamlined administrative approval process, and provide predictability and certainty on environmental protection measures.

Source: ESRI, 2006 | \\G:\Projects\75217 J Street\map_docs\mxd\EIR\Staging_Area.mxd | Last Updated : 10-28-09

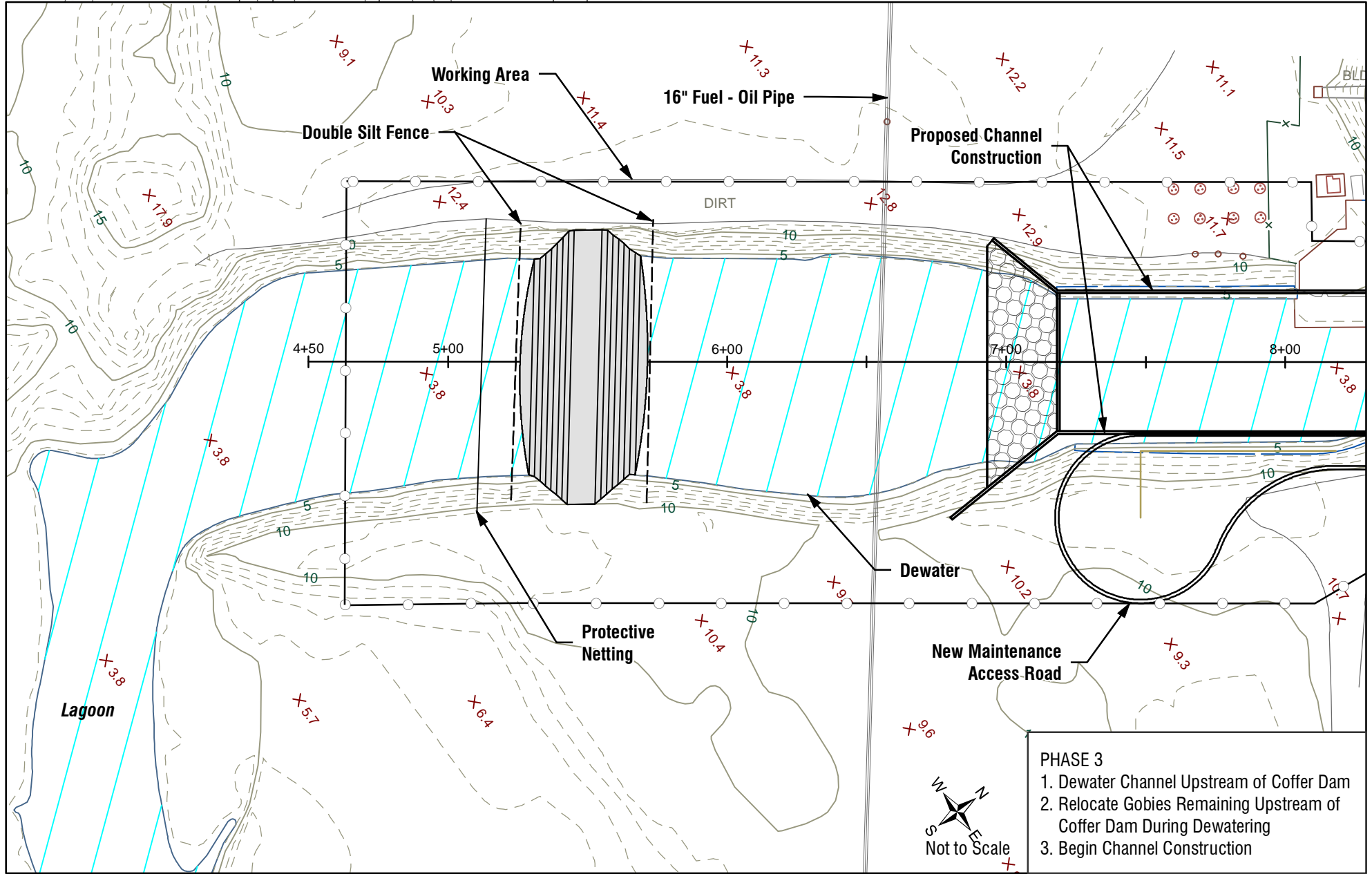


Potential Construction Staging Area
FIGURE 3.0-5



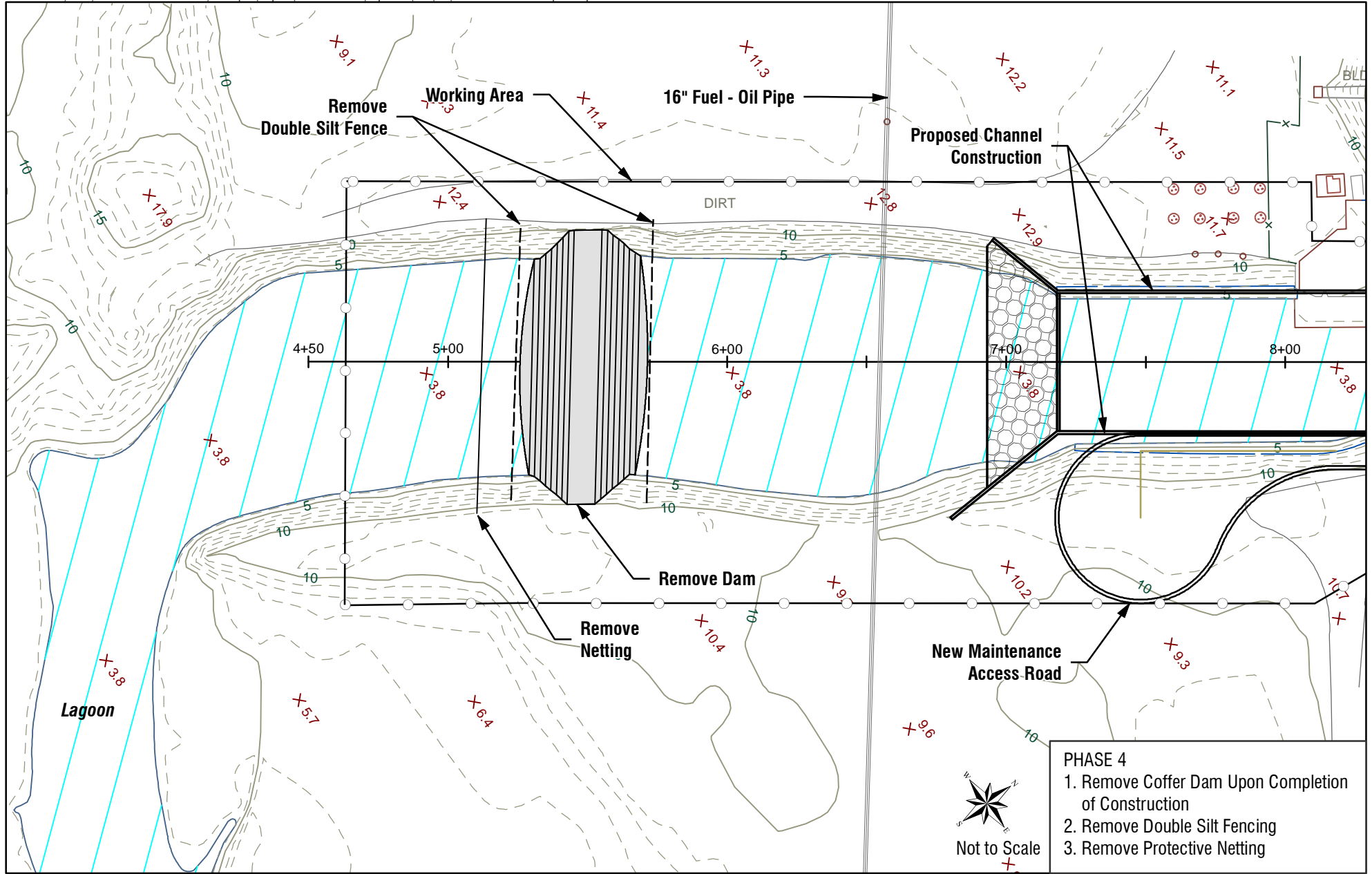
Coffer Dam Construction - Phase 2

FIGURE 3.0-7



Coffer Dam Construction - Phase 3

FIGURE 3.0-8



Coffer Dam Construction - Phase 4

FIGURE 3.0-9

In order to acquire long-term permits, the District has committed to incorporating various environmental protection measures into its ongoing maintenance program that would reduce incidental effects of the maintenance program on the environment and meet the requirements of the state and federal permitting agencies. The environment protection measures are called environmental Best Management Practices (BMPs). These BMPs have been carried forward in to this EIR.

The Program EIR evaluated the impacts of the proposed environmental BMPs on water resources, biological resources, and hydraulic hazards. In addition, the EIR identified the cumulative environmental impacts of the proposed project. The information on cumulative impacts was considered by the District Board of Directors when taking action on the proposed environmental BMPs. The ongoing maintenance program is an activity that is statutorily and categorically exempt from environmental review under the California Environmental Quality Act (CEQA). Incorporation of the BMPs into the current ongoing routine maintenance program represents a discretionary action by the District, and as such, is subject to the environmental review requirements of CEQA.

The District submitted applications to the USACE, CDFG, and RWQCB for long-term agreements and permits. The Draft Program EIR was used by the state and federal permitting agencies in their consideration of issuing long-term permits to the District. The Streambed Alteration Agreement and 401 Water Quality Certification were issued (the 404 permit is still pending) subsequent to the certification of the Final Program EIR and the Board of Directors' approval of the environmental BMPs.

Relation to J Street Drain Project

J Street Drain is classified as a District linear facility with open channel, outlet, and box culverts. The drain with its concrete lining is defined as improved channel. The Program EIR details the existing maintenance activities in place for linear facilities and improved channels. Maintenance activities associated with the proposed J Street Drain would be similar to the activities currently taking place for the existing drain maintenance, and would include the following:

Category A: Channel and Debris Basin Activities

During the operation of J Street Drain, channel maintenance activities would include physical removal or “cleanout” of sediments, vegetation, rock, and trash that accumulate in the channel and culverts. These activities maintain the proper operation of flood control facilities as sediment and debris accumulation reduces conveyance capacity and increases the risk of overbank flooding. The District’s maintenance supervisors make a case-by-case determination considering the amount of material relative to the channel cross section, the risk of accumulated sediment or debris creating a blockage, and the ability of future flows to mobilize and remove the sediment naturally. These maintenance activities are conducted by the Operations and Maintenance Division of the District using loaders, truck cranes, dump trucks, excavators, and hand crews. The method of channel cleanout varies depending upon the type of channel, the nature and amount of material to be removed, and access to the channel. At most sites, sediments are removed from the channel bottom using an excavator or a truck crane (with clamshell or drag line) working from the top of the bank. Maintenance also includes cleaning all concrete lined channels at least once a year prior to the winter season to remove all sediment, algae, undesirable vegetation, and trash in accordance with the provisions of the NPDES Stormwater Permit issued to the District by the RWQCB (Board Order No. R4-2010-0108; NPDES Permit No. CAS004002, adopted on July 8, 2010, by the RWQCB, Los Angeles Region, pursuant to Division 7 of the California Water Code).

The upstream portion of J Street Drain is lined with concrete and cleanout of sediments occurs throughout the year on an as-needed basis. However, the NPDES permit (Ventura County Municipal Stormwater

NPDES Permit No. CAS004002; Board Order No. R4-2010-0108) restricts these activities to the period April 15 to October 1. For the downstream inundated portion of the concrete drain, cleanout occurs after the lagoon breaches in the fall, winter, and spring months, October 1 to April 1, or as required. No cleanouts are performed in the earthen portion of the drain.

Category C: Access Road Work Activities

The District maintains access roads associated with facilities on an as-needed basis. Most of the access roads have a compacted gravel surface that needs periodic resurfacing due to normal deterioration from use and from erosion. There is currently an access road from Hueneme Road that may require repair during the operation of the proposed project.

Category D: Facilities Maintenance & Reconstruction Activities

This maintenance category includes a wide variety of work that occurs throughout the year on an as needed basis. After the construction of J Street Drain, future facility repairs may be necessary to maintain the channel. Facilities deteriorate over time and may require repair or reconstruction, particularly after a winter with high flood flows. In general, the same types of materials are used for the repair or replacement, and the footprint of the repairs is similar to the original condition. Various types of heavy equipment are used, including loaders, excavators, concrete trucks, cranes, and dump trucks. Work is typically conducted from both the top of the banks and the channel, depending upon the site conditions. The amount of earthwork depends on the extent of the required repair and depth of erosion.

Repair work under this category does not include expansion of the facilities, which would constitute a new capital project that would be planned and designed independently of the maintenance program.

Category E: Storm Related Activity

During the winter season, District personnel are continually monitoring flow conditions in channels and inspecting facilities. The activities in this category include inspections and identification of problems. Work conducted during storm events is usually not routine maintenance, but instead, is considered emergency activity. The nature, scope, and extent of emergency actions cannot be predicted but could range from minor actions (clearing a storm drain outlet) to major (repair of eroded bank threatening a road or structure under flood flow conditions). Emergency projects are authorized separately.

Maintenance activities associated with the proposed J Street Drain would be similar to the activities currently taking place for the existing drain maintenance. Therefore, no new impacts would result from the proposed drain maintenance activities during project operation. As the Program EIR BMPs would apply to the existing District maintenance activities, the same BMPs would apply to the operation/maintenance activities of the proposed project. Nevertheless, the environmental discussion of this EIR will include operational maintenance discussion and associated BMPs per the District's Ongoing Routine Operations and Maintenance Program for informational purposes.

3.7 BEACH ELEVATION MANAGEMENT PLAN

The Ormond Beach Lagoon inlet normally remains in a semi-closed condition due to sand accretion on Ormond Beach, but during most winters it breaches naturally to allow free outflow during storms and some high tides. These events do not drain the lagoon entirely, as urban runoff and high tides contribute fresh and salt water flows. To date, there has been one instance of the inlet remaining closed during a

minor storm event and causing upstream flooding; this took place on January 18, 2010. This event flooded the OWWTP, which was at risk of releasing untreated sewage effluent into the surrounding waterways, roads, and residential properties due to electrical failure of inundated equipment. To prepare for the reoccurrence of the combination of the outlet being closed, the lagoon water surface ~~being~~ potentially rising above a high threshold level, and a storm being forecast, a BEMP has been developed as part of the proposed J Street Drain project. The BEMP defines a maximum safe beach height, and provides for a coordinated response to groom the sand berm at a pre-specified location ~~immediately~~ within three days prior to a predicted storm event. The purpose of the BEMP is to protect the lives and well-being of the communities and industrial facilities along J Street Drain and Ormond Beach Lagoon by maintaining downstream water levels below a predetermined safe elevation.

The BEMP is a guideline to assist the District in responding to the potential flood threat caused by persistence of the sand berm during potentially damaging storm events of varying magnitudes. It should be noted that the BEMP would be implemented when conditions warrant, which may be more than once annually, to avoid an emergency. Therefore, implementation of the BEMP would constitute a new maintenance activity associated with operation of the proposed project.

The lead role of the District in flood emergency avoidance is aided by the County's Flood Warning System and by its Automated Local Evaluation in Real Time (ALERT) system. The Flood Warning System provides advance weather forecasts. ALERT is a ~~flood warning~~ hydrologic data collection and recording system for Ventura County developed by the National Weather Service (NWS) of the National Oceanic and Atmospheric Administration (NOAA) that has been in operation since 1979. ALERT provides reliable rainfall and flow information for determination of storm magnitude. ALERT will be used as the primary source for rainfall and storm event data in the BEMP. The District water level gauge(s) in the J Street Drain will be primarily used to monitor water surface elevation to help determine whether the lagoon is currently connected to the ocean (lagoon is empty) or closed off by the beach sand berm (lagoon is full).

Grooming Criteria

Normal Ormond Beach Lagoon conditions result in a natural breaching of the sand berm before the lagoon water elevation reaches its highest recorded elevation of about 7.5 feet NGVD (9.9 feet NAVD). This has resulted in the sand berm naturally breaching each year, typically in the early months of the fall rainy season. The sand berm naturally breaches during this time because increased drainage from seasonal storm water raises the lagoon water level sufficiently above sea level prompting a breach. The breach closes as sand blows and washes in, and freshwater drainage diminishes. The condition that would initiate the BEMP is a combination of the following three threshold conditions. The BEMP realistically coordinates the grooming response with sensitivity to environmental resources.

The BEMP threshold conditions are:

1. The Ormond Beach Lagoon is fully enclosed by the Ormond Beach sand berm (i.e., the berm has not breached, and the lagoon is full), and
2. The Ormond Beach sand berm elevation adjacent to the lagoon is observed to be above 6.5 NGVD (8.9 feet NAVD) , and
3. A 72-hour prediction of a storm event of any magnitude affecting the watershed is received, which would likely cause the designed capacity of the J Street Drain to be exceeded if the lagoon water surface elevation cannot overtop the observed adjacent beach sand elevation.

Any one of the above conditions alone may not trigger initiation of the BEMP. All three conditions must occur simultaneously to enact the BEMP.

Grooming Procedure

The grooming would be performed by a tracked dozer designated by the O&M Deputy Director in coordination with the District Director or his/her designee. Once the O&M Deputy Director determines that the BEMP threshold criteria have been met, the dozer shall be pre-positioned at the south side parking lot of Port Hueneme Beach Park. As soon as the BEMP is enacted, the dozer operator accompanied by District environmental staff would move the dozer to the designated beach grooming location, and shave the sand berm down to the maximum safe beach elevation. The dozer access path to the groom location would be the same as the one currently used by lifeguards from Port Hueneme Beach Park. Access to the beach from this point would avoid the nesting sites used by California least terns and western snowy plovers in 2008 (Davenport 2008). The grooming width would measure approximately 100 feet parallel to the coastline. The removed sands would be placed on the beach adjacent to the groomed area. The grooming procedure would be completed within several hours, including removal of equipment from the beach. The designated grooming area would be permanently marked with rods driven deep into the sand. Elevation markings would be depicted on the rods. The grooming location would be coordinated with USFWS to limit potential impact to habitat areas.

During the grooming operation, the work site would be secured by the District to prevent interruption by or injury of the general public. Members of the Ventura County Sheriff Department or lifeguards, as well as their designees, may assume responsibility for the protective duty.

4.1 VISUAL RESOURCES

This section focuses on impacts to scenic areas and features. During the course of the Initial Study process, it was determined that the project would not have an impact on a scenic highway. Therefore, this specific issue area within the topic of visual resources is not analyzed further in the Environmental Impact Report (EIR). The Initial Study is included in Appendix A of the EIR.

4.1.1 Environmental Setting

4.1.1.1 *Existing Conditions*

Regional Setting

The County of Ventura is located in Southern California, and is bordered by the County of Santa Barbara to the north and County of Los Angeles to the south and east. Topography is relatively flat in the Oxnard Plains, bounded by the Santa Monica Mountains, the Santa Susana Mountains, and Oak Ridge to the east, the Topatopa Mountains and Camarillo Hills to the north, the Santa Clara River Valley to the northeast and the Pacific Ocean to the south and west.

Regional access to the area is provided by the Ventura Freeway (US-101), which is the principal east-west route through the County of Ventura. The Santa Paula Freeway (SR-126) runs from US-101 in Ventura to Interstate 5 (I-5) in Santa Clarita, which is also an east-west route. These freeways are located north and northeast of the project site. Pacific Coast Highway, or State Route 1 (SR-1), is known locally as Oxnard Boulevard in the City of Oxnard and extends in a northwesterly fashion from the County of Los Angeles. At Wooley Road, the direction of SR-1 changes from northwest to north and joins US-101 in Oxnard approximately five miles inland from the coast.

Local Setting

The J Street Drain is an existing concrete lined, trapezoidal, stormwater drain comprised of an area of approximately 328,000 square feet and ranges from 55 feet wide below Hueneme Road and 20 feet wide below Redwood Street. The northern portion of the drain (9,400 feet) is located between the north and southbound lanes of J Street within the City of Oxnard and near the City of Port Hueneme. The extent of the drain is from north of Redwood Street, to south beyond Hueneme Road, and into the Ormond Beach Lagoon. Major features of the area include the Ormond Beach and the Ormond Beach Lagoon. Prominent visual resources in the project area include hillsides and ridgelines from mountains and the Pacific Ocean.

Surrounding land uses, shown on Figure 4.1-1, along J Street north of Hueneme Road consist mainly of residential development of varying densities and Bubbling Springs Community Park at Bard Road and J Street. The land use features located in the downstream area (south of Hueneme Road) include Surfside III Condominiums, Channel Islands Self Storage, Hueneme Drain Pump Station, Oxnard Wastewater Treatment Plant (OWWTP), and Ormond Beach Lagoon.

Viewsheds

Land uses generally considered to be sensitive in terms of views include homes, recreational areas, and designated scenic roads. The following description identifies sensitive viewers in proximity to the J Street Drain project area. Viewer responses to visual changes were inferred from a variety of factors including

viewer exposures, type of viewer, number of viewers, duration of view, and viewer activities. Viewer exposure includes distance and viewing angle. The project area has three primary viewsheds.

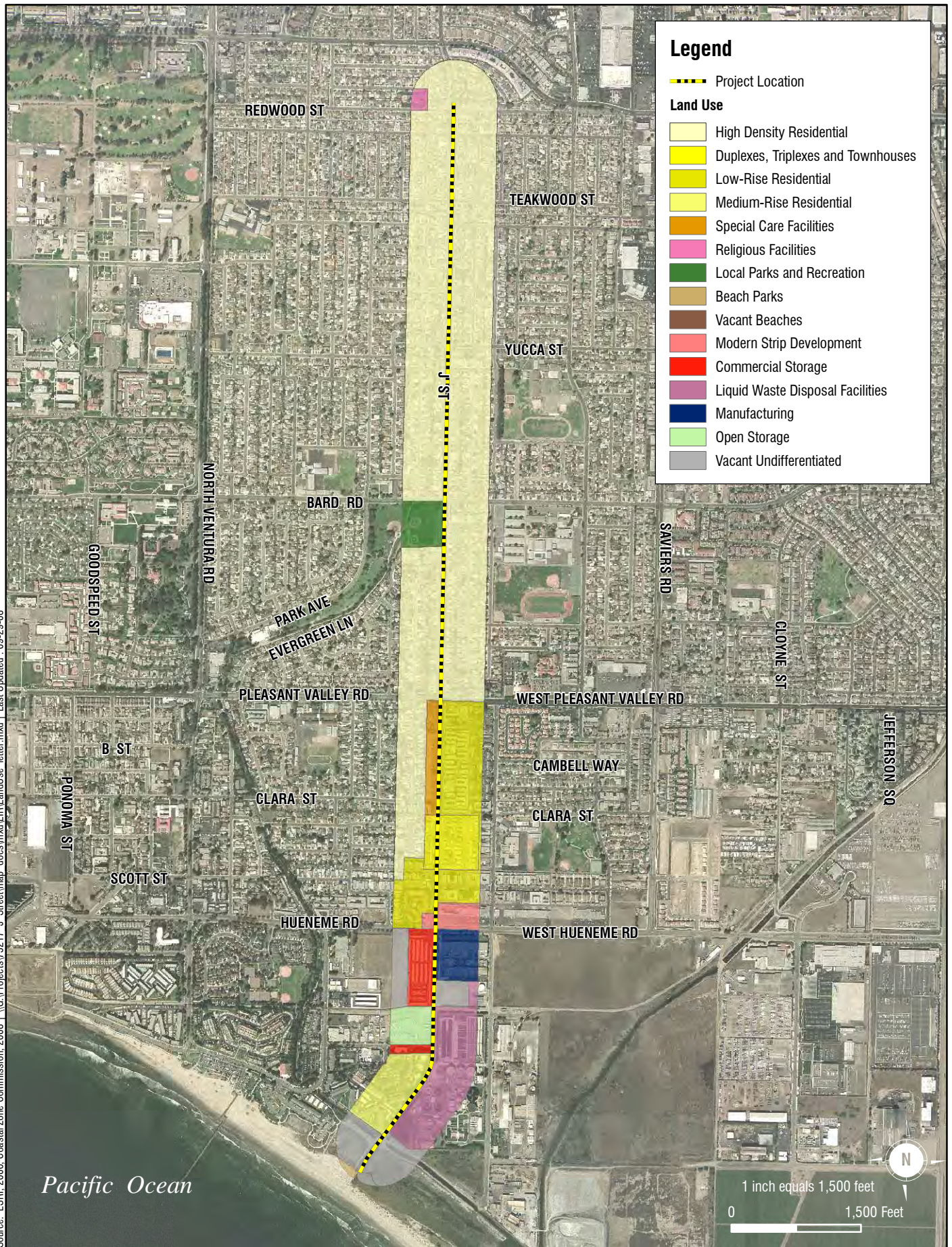
J Street and Redwood Street

The J Street Drain begins just north of the Redwood Street crossing. At this location, there is chain link fencing along both sides of the drain that is clearly visible to surrounding land uses as depicted in Photograph 1. South of the street crossing, the open drain is contained by a six-foot fence with a maintenance gate at the northbound side of J Street. At J Street and Redwood Street, the views available to the residents and motorists include distant mountains and other residences to the north, J Street and other residences to the south, and fencing fronted with oleander bushes, to the east/west or facing J Street Drain.



Photograph 1 – Views into J Street Drain at Redwood Street from northbound J Street

Source: ESRI, 2006; Coastal Zone Commission, 2008 | \\G:\Projects\75217 J Street\map_docs\mxd\EIR\and use letter.mxd | Last Updated : 09-29-08



Land Use
FIGURE 4.1-1

J Street and Yucca Street, J Street and Bard Road, J Street and Clara Street

Views along the J Street Drain south of Redwood Street would be very similar as the area to the north. The area is relatively flat with no prominent visual features. Photographs 2, 3, and 4 are typical for the area. Views include distant mountains and other residences to the north, J Street and other residences to the south, and fencing fronted with oleander bushes with intermittent trees planted along the drain to the east/west, or facing J Street Drain. The trees include ash, Brazilian peppertree, eucalyptus, and Mexican fan palm.



Photograph 2 – View to the south near Yucca Street and southbound J Street



Photograph 3 – View to the north near Bard Road and southbound J Street



Photograph 4 – View to the south near Bard Road and southbound J Street

J Street and Hueneme Road

At the intersection of J Street and Hueneme Road, both northbound and southbound lanes end. To the south of the Hueneme Road intersection, the District maintenance road and the drain are fenced off, as shown in Photographs 5 and 6. In this area, south of Hueneme Road, the drain is bordered by residential developments to the east and Channel Island Storage to the west extending to the Ventura County Railroad (VCRR) crossing. Past the railroad crossing, J Street Drain is bordered by OWWTP to the east and Surfside III condominiums and Hueneme Drain Pump Station to the west. Residents near Hueneme Road have views of J Street, J Street Drain fencing, and distant mountains to the north, to the east/west or facing J Street Drain, the open drain and minimal vegetation and trees, and to the south, downstream views of open channel and trees, as seen in Photograph 6.

For the residents at Surfside III Condominiums, views include Ormond Beach to the south and the Pacific Ocean to the south and southwest in the distance. Ormond Beach Lagoon is not visible from many residences due to the Hueneme Drain Pump Station, OWWTP, and the orientation of some condominiums which block the views immediately to the southeast. Figure 4.1-2 shows an aerial photograph of the J Street Drain and surrounding area. As shown in Figure 4.1-2, a row of shrubs, mainly myoporum, and eucalyptus trees along the northeast boundary of the Surfside III property shields condominium residents on the east-facing sides of Buildings 15, 16, and 17 and users of the park immediately east of these buildings from views of the J Street Drain and the OWWTP east of the J Street Drain. Residents in Building 7, located nearest to the proposed project in the vicinity of the OWWTP, are shielded from the industrial view by a 100-foot-long section of approximately 14-foot-tall mesh-screen chain link fence on the west edge of the OWWTP property. This fence screens the view of the OWWTP maintenance yard. The remainder of the OWWTP south of the maintenance yard is screened by trees and shrubs along the plant's west property boundary. Sparser vegetation along the east boundary of the Surfside III property from Building 7 southward forms an inconsistent visual barrier, and residents in Buildings 6 and 7 are able to see the J Street Drain from their dwellings.

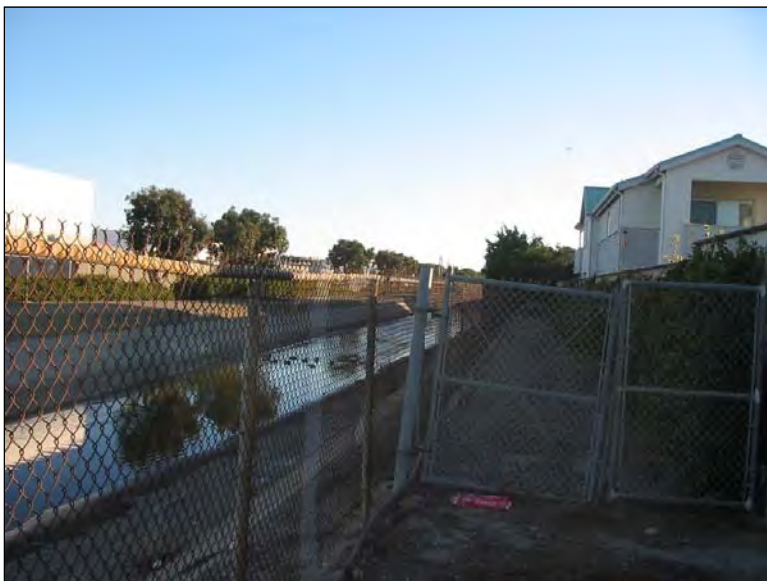
Source: SCAG 2005; ESRI, 2006; Coastal Zone Commission, 2008 | \\G:\Projects\75217 - J Street\map docs\mxd\ER\Figure4_1_2_SurfsideIII.mxd | Last Updated : 08-05-09



Surfside III Property
FIGURE 4.1-2



Photograph 5 – View of Drain at Hueneme Road



Photograph 6 – View to the south at Hueneme Road and J Street



Photograph 7 – View of Ormond Beach Lagoon near Hueneme Drain Pump Station

Scenic Areas and/or Features

The County of Ventura defines a Scenic Resource as a natural physical feature that is aesthetically pleasing (Ventura County 2011). There are no County-designated Scenic Resource Areas in the project area.

4.1.2 Regulatory Setting

Ventura County General Plan

Resources Chapter

Scenic Resources

The scenic resources of Ventura County, especially the coastline, within the viewshed of the County's lakes, and along designated State and County Scenic Highways, are of considerable value both in providing a pleasurable environment for local citizens and in stimulating tourism. Coastline resources are discussed in the Coastal Area Plan.

Conservation of scenic resources is most critical where the resources will be frequently and readily viewed, as from a highway, or where the resource is particularly unique. Ventura County has identified the viewsheds of lakes and other scenic areas as may be identified by an area plan, as being worthy of special protection via identification as Scenic Resource Areas.

The goals, policies and programs which apply to scenic resources, with the exception of Policy 1.7.2-2 addressing Scenic Resource Areas, include:

- Goals
 1. Preserve and protect the significant open views and visual resources of the County.
 2. Protect the visual resources within the viewshed of State and County designated scenic highways, lakes and other scenic areas as may be identified by an area plan.
- Policies
 1. Discretionary development which would significantly degrade visual resources or significantly alter or obscure public views of visual resources shall be prohibited unless no feasible mitigation measures are available and the decision-making body determines there are overriding considerations.

City of Oxnard General Plan

Local Coastal Program (LCP)

The City has an adopted Local Coastal Program (LCP) consisting of a Coastal Land Use Plan and Coastal Zoning Regulations and Maps. The Coastal Zone boundary extends generally 1,000 yards inland from the sea and is shown on the Jurisdictional Boundaries Map (Figure 3.0-1).

The Coastal Zone has been divided into four planning areas: McGrath/Mandalay Beach, Oxnard Shores, Channel Islands and Ormond Beach. Recreational uses are predominant in the McGrath/Mandalay area; urban residential uses are concentrated in the Oxnard Shores area. The Channel Islands area contains the Channel Islands Harbor. The Ormond Beach area is separated from the rest of the City's Coastal Zone by the City of Port Hueneme. Any amendment to the Coastal Land Use Plan would require approval by the Coastal Commission.

Local Coastal Policies

All new development in the coastal zone shall be designed to minimize impacts on visual resources of the area. Particular care should be taken in areas of special quality, such as those identified in the LCP.

Height Restriction as defined in the City Zoning Ordinance shall be used to avoid blocking views.

Conservation Element Policies

Scenic Resources

The beaches and coastline are recognized as Oxnard's primary natural scenic resources. Good views to the offshore Channel Islands also exist. The sand dunes south of Fifth Street and south of Wooley Road, the lower dunes in the Mandalay Beach State Park north of Fifth Street, and the Ormond Beach dunes and wetlands are all recognized as scenic visual resources. The Coastal Mountains behind the City provide scenic views from areas within the City.

City of Port Hueneme General Plan

Local Coastal Program

The City of Port Hueneme's LCP exists as an amendment to the existing General Plan and discusses the allowable land uses and applicable coastal resource issues for the planning areas within the City's coastal zone. The LCP continues to be implemented as the primary planning document for the coastal zone. Consistent with the coastal act's basic goal to "protect, maintain, and, where feasible, enhance and restore" the coastal zone, the Port Hueneme LCP identifies attainable goals and objectives specifically related to local conditions. The current LCP acts as the baseline for the revised program included as part of this General Plan Update.

The land use goals in the LCP are the same as those stated in the General Plan which is the basis upon which the City's LCP has been developed.

To these fundamental General Plan goals, the LCP adds the following objectives as shown below:

- To maximize public opportunities for coastal access and recreation in a manner which protects natural resource areas from overuse, maintains public safety needs and respects the rights of private property owners.
- To protect, encourage and, where feasible, provide for increased recreational opportunities, including low and moderate cost facilities, within and adjacent to beach and harbor areas through both public and private development.

Coastal Subarea: Area A Hueneme Beach Park

The proposed project is located within the City's Coastal Subarea of Area A, Hueneme Beach Park , which contains specific development policies as well as land uses consistent with such policies.

LCP Land Use: The Beach Master Plan establishes long-term priorities and design guidelines with respect to the programming of capital improvements over an unspecified time frame. Accordingly, the Hueneme Beach Master Plan is hereby incorporated by reference into this LCP and shall heretofore serve as the City's formal policy framework within which all future actions in Area A must be consistent.

Within this context, the following specific development policy shall apply:

- Because the viewshed at Hueneme Beach Park is an important public resource, improvements to the park shall not interfere with public enjoyment of views of the beach and ocean.

Applicable State Coastal Zone Policy within Area A

Coastal Visual Resources and Special Communities

Coastal Act Section 30251

The scenic and visual qualities of coastal areas shall be considered and protected as a resource of public importance. Permitted development shall be sited and designed to protect views to and along the ocean and scenic coastal areas, to minimize the alteration of natural land forms, to be visually compatible with the character of surrounding areas, and, where feasible, to restore and enhance visual quality in visually

degraded areas. New development in highly scenic areas, such as those designated in the California Coastline Preservation and Recreation Plan prepared by the Department of Parks and Recreation and by local government, shall be subordinate to the character of its setting.

4.1.3 Significance Thresholds

Significance thresholds are addressed according to the thresholds set forth by the County of Ventura Initial Study Assessment Guidelines (adopted April 26, 2011), County of Ventura Administrative Supplement to the State *CEQA Guidelines*, County of Ventura General Plan (last amended April 6, 2010), and the State *CEQA Guidelines*.

According to the County of Ventura Threshold Criteria, implementation of the proposed project would result in a significant impact upon visual resources if the project would cause any of the following to occur:

- Is located within an area that has a *scenic resource* that is visible from a public viewing location; and,
- Would physically alter the *scenic resource* either individually or cumulatively when combined with recently approved, current, and reasonably foreseeable future projects; or
- Would substantially obstruct, degrade, or obscure the *scenic vista*, either individually or cumulatively when combined with recently approved, current, and reasonably foreseeable future projects. A *scenic vista* is a *viewshed* that includes *scenic resources*. A *viewshed* is the area that is visible from a *public viewing location*.
- Any project that is inconsistent with any of the above policies of the Ventura County General Plan *Goals, Policies and Programs* or policies of the applicable Area Plan.

Additionally, implementation of the proposed project would result in a significant impact upon aesthetics and visual resources, as defined in Appendix G of the *CEQA Guidelines*, if the project causes any of the following:

- Substantial adverse effects on a scenic vista; and/or
- Substantial degradation of the existing visual character or quality of the site and its surroundings.

4.1.4 Project-Level Impact Analysis

Located Adjacent to a Publicly Viewed Scenic Resource and Physically Alter the Scenic Resource

Construction

Scenic resources available at the project site include views of the Ormond Beach Lagoon and the Pacific Ocean from Ormond Beach and the Port Hueneme Beach Park and Pier. Construction of the project would temporarily change the visual environment due to the placement of construction equipment and traffic signs in the project area and construction staging area. Also, a temporary noise control barrier shall be installed and maintained between the temporary work area and Buildings 6 and 7 in the Surfside III community (see mitigation measure Noise-2 in Section 4.6). The noise barrier shall be composed of noise control blankets 10 feet tall with a sound transmission class of at least STC-30. While the construction equipment, traffic signs, and noise control barrier would be a visual distraction for a temporary period, it would not be characterized as degrading a visual resource. Additionally, the equipment and noise control

barrier would not significantly alter or obscure views from public locations, as Ormond Beach and Port Hueneme Beach Park would remain completely accessible to the public throughout construction, equipment and noise barriers would not be placed on the beaches, and views of the Pacific Ocean and the Lagoon would not be completely blocked during construction. A 40-foot-long portion of the lagoon, a scenic resource, would be graded to form an earthen ramp transitioning from the deepened concrete channel to the existing lagoon bottom elevation. Rock riprap protection would be placed horizontally on beneath the earthen ramp at the end of and at the same elevation as the concrete drain bottom ~~would be covered with earth~~. Upon completion of construction, this ramp would be under water most of the year, except when the lagoon water breaches the sand berm. When the lagoon is empty, this ramp would appear as a gradual four-foot change in bed elevation to viewers standing on the adjacent banks. This minor change in bottom elevation would not be a substantial physical alteration to the scenic value of the lagoon. It is anticipated that during the first few natural lagoon breaching events following Phase 1 construction, the movement of water (tidal and drain flow) and sediment would create an equilibrium elevation with the channel transition area, between the end of the concrete channel and the Ormond Beach Lagoon annual breach location. When this occurs, the rock riprap may become visible when the lagoon is empty. This would not be a substantial physical alteration to the scenic value of the lagoon. Therefore, impacts are less than significant.

Operations

The proposed project does not include project features along the length of the drain or at the drain outlet that would degrade visual resources or significantly alter or obscure public views. Future maintenance activities would be similar to and would occur with the same frequency as existing maintenance. Therefore, implementation of the J Street Drain project would not result in substantial adverse effects to visual resources or public views and impacts would be less than significant.

Beach Elevation Management Plan

The Beach Elevation Management Plan (BEMP) would be implemented periodically and would only have equipment on the beach for a few hours at a time, during each management event. The few hours are all that is necessary to groom the berm to maintain the appropriate elevation to allow for natural breaching of the berm during storm events. The sand removed from the grooming location would be smoothed over the adjacent beach in a manner that would avoid creating a tall berm. The relocated sand would be quickly reconfigured by wave and wind action. Because it is a short and temporary time period, and a scenic resource such as the beach would not be substantially altered, impacts would be less than significant.

Substantially Obstruct, Degrade, or Obscure a Scenic Vista?

Construction

Construction of the project would result in temporary visual change due to construction equipment and traffic signage associated with construction activities. However, the construction equipment, noise barriers, and traffic signs would not be placed on the beaches and would not completely block ocean or lagoon views from public viewing areas but would be a visual distraction for the short period of construction. Therefore, impacts would be less than significant.

Operations

Scenic vistas available from public locations at or near the project site include views of the Ormond Beach Lagoon and the Pacific Ocean from Ormond Beach, Port Hueneme Beach Park, and Port Hueneme Pier. The proposed project does not include project features along the length of the drain or at the drain outlet that would interfere with views of these scenic vistas from public locations. Future maintenance activities would be similar to and would occur with the same frequency as existing maintenance. Therefore, implementation of the J Street Drain project would not result in substantial adverse effects to a scenic vista and a less than significant impact has been identified.

Beach Elevation Management Plan

The BEMP would be implemented periodically and would only have equipment on the beach for a few hours. The few hours are all that is necessary to groom the berm to maintain the appropriate elevation to allow for natural breaching of the berm during storm events. The sand removed from the grooming location would be smoothed over the adjacent beach in a manner that would avoid creating a tall berm. The relocated sand would be quickly reconfigured by wave and wind action. Because it is a short and temporary time period, and a scenic vista would not be substantially obstructed, degraded, or obscured, there is a less than significant impact for this issue area.

Substantial Adverse Effects on a Scenic Vista and Substantial Degradation of the Existing Visual Character or Quality of the Site and its Surroundings?

Construction

Construction of the project would result in temporary visual change due to construction activities. However, the construction equipment, noise barriers, and traffic signs would not completely block ocean or lagoon views but would be a visual distraction for the short period of construction. Therefore, impacts to a scenic vista would be less than significant.

The proposed project would include the removal of existing fencing and oleander bushes between Hueneme Road and Redwood Street during construction. The fencing would be replaced; however, the oleander bushes would not be replaced by the District. Any replacement of oleander bushes along J Street Drain would be the responsibility of the City of Oxnard. This replacement is pending an agreement with the City. The existing oleander bushes provide screening of the chain linked fence along the drain for the residences on both sides of J Street. Additionally, for the pedestrians, cyclists and motorists along this portion of J Street, the oleander bushes provide a visual buffer for the fence and the drain itself. Without replanting the bushes, existing visual character and quality along the drain would be degraded.

Vertical shoring would occur near the Surfside III property, therefore, large shrubs and overhanging tree limbs within the district right-of-way would be removed, but vegetation on Surfside III property would remain in place except for plants whose root systems would be compromised during the process. Such vegetation would need to be removed for the safety of workers and residents. Trees and shrubs along the east boundary of J Street Drain property would remain in place, as construction would affect an existing maintenance road that is devoid of vegetation. Removal of trees and shrubs would expose views of the OWWTP and the J Street Drain to residents along the east side of Buildings 15, 16, and 17 and people visiting the adjacent park (see Figure 4.1-2). The J Street Drain would become more visible to residents in Buildings 6 and 7, however this would not create a substantial change as the drain is currently visible due to sparser vegetation along the eastern property boundary in these areas. The above impacts would be greater if the trenching method is used. Vertical shoring would require less vegetation removal, thus

resulting in a lesser impact. Nonetheless, either method would result in degradation of the existing visual character and quality at the project area, resulting in a significant impact. Mitigation measure Noise-2 requires a temporary noise control barrier to be installed and maintained between the temporary work area and Buildings 6 and 7 in the Surfside III community during construction. This noise control barrier will also provide visual screening along the eastern boundary of the Surfside III property to shield Building 6 and seven residents from views of the J Street Drain during construction. Mitigation Measure VIS-4 would require installation of a permanent 10- to 12-foot-tall fence with vinyl screening along the OWWTP and District property boundary to shield Surfside III residents from views of the OWWTP. With ~~this~~ these mitigation measures, this impact would be less than significant.

Operations

Scenic vistas available at the project site include views of the Ormond Beach Lagoon and the Pacific Ocean. The proposed project does not include project features along the length of the drain or at the drain outlet that would interfere with views of these scenic vistas. Views of these scenic vistas are not available to residents north of Hueneme Road. Additionally, direct views of these scenic vistas are also not available to residents south of Hueneme Road. Only viewers on or adjacent to Ormond Beach would have unobstructed views of both Ormond Beach Lagoon and the Pacific Ocean. Future maintenance activities would be similar to and would occur with the same frequency as existing maintenance. The impact to a scenic vista is less than significant.

The proposed project would include the removal of existing fencing and oleander bushes between Hueneme Road and Redwood Street during construction. The fencing would be replaced; however, the oleander bushes would not be replaced by the District. Any replacement of oleander bushes along J Street Drain would be the responsibility of the City of Oxnard. This replacement is pending an agreement with the City. The existing oleander bushes provide screening of the chain linked fence along the drain for the residences on both sides of J Street. Additionally, for the pedestrians, cyclists and motorists along this portion of J Street, the oleander bushes provide a visual buffer for the fence and the drain itself. Without replanting the bushes, existing visual character and quality along the drain would be degraded. Loss of vegetation along the Surfside III property during construction would also cause continued visual impacts during operations. Therefore, implementation of the J Street Drain project would result in degradation of the existing visual character and quality at the project area. This impact is significant.

Beach Elevation Management Plan

The BEMP would be implemented periodically and would only have equipment on the beach for a few hours. The few hours are all that is necessary to groom the berm to maintain the appropriate elevation to allow for natural breaching of the berm during storm events. The sand removed from the grooming location would be smoothed over the adjacent beach in a manner that would avoid creating a tall berm. The relocated sand would be quickly reconfigured by wave and wind action. Beach grooming would not result in substantial adverse effects to a scenic vista or in substantial degradation of the existing visual character or quality of the site and its surroundings and impacts are less than significant.

Consistency with Ventura County General Plan Goals, Policies and Programs

Construction

As mentioned above, construction of the proposed project would include the removal of existing fencing and oleander bushes between Hueneme Road and Redwood Street during construction. The fencing would be replaced; however, the oleander bushes would not be replaced by the District. Any replacement

of oleander bushes along J Street Drain would be the responsibility of the City of Oxnard. This replacement is pending an agreement with the City.

~~In addition, trenching~~ Trenching near the Surfside III buildings during construction would result in the removal of approximately 110 trees and shrubs of various sizes and species (including 25 eucalyptus trees with a diameter at breast height (DBH) of at least 12 inches) from both J Street Drain and Surfside III properties. ~~If the District has instead opted for vertical shoring rather than trenching near the Surfside III property, with the result that large shrubs and overhanging tree limbs within the district right-of-way would be removed, but vegetation on Surfside III property would remain in place except for plants whose root systems would be compromised during the process. Such vegetation would need to be removed for the safety of workers and residents. Trees and shrubs along the east boundary of J Street Drain property would remain in place, as construction would affect an existing maintenance road that is devoid of vegetation. Removal of trees and shrubs would expose views of the OWWTP and the J Street Drain to residents along the east side of Buildings 15, 16, and 17 and people visiting the adjacent park (see Figure 4.1-2). The J Street Drain would become more visible to residents in Buildings 6 and 7; however, this would not create a substantial change as the drain is currently visible due to sparser vegetation along the eastern property boundary in these areas. The above impacts would be greater if the trenching method is used. Vertical shoring would require less vegetation removal, thus resulting in a lesser impact. Nonetheless, either method would result in degradation of the existing visual character and quality at the project area.~~

Construction of the project would be inconsistent with the scenic resources' goals, policies and programs in the Ventura County General Plan. However, construction impacts would be temporary and mitigation measure Noise-2 requires a temporary noise control barrier to be installed and maintained between the temporary work area and Buildings 6 and 7 in the Surfside III community during construction. This noise control barrier will also provide visual screening along the eastern boundary of the Surfside III property to shield Building 6 and seven residents from views of the J Street Drain during construction. In addition, Mitigation Measure VIS-4 would require installation of a permanent 10- to 12-foot-tall fence with vinyl screening along the OWWTP and District property boundary to shield Surfside III residents from views of the OWWTP. With ~~this~~ these mitigation measures, this impact would be less than significant.

Operations

The proposed project would include the removal of existing fencing and oleander bushes between Hueneme Road and Redwood Street during construction. The fencing would be replaced; however, the oleander bushes would not be replaced by the District. Any replacement of oleander bushes along J Street Drain would be the responsibility of the City of Oxnard. This replacement is pending an agreement with the City. The existing oleander bushes provide screening of the chain linked fence along the drain for the residences on both sides of J Street. Additionally, for the pedestrians, cyclists and motorists along this portion of J Street, the oleander bushes provide a visual buffer for the fence and the drain itself. Without replanting the bushes, existing visual character and quality along the drain would be degraded. Loss of vegetation along the Surfside III property during construction would also cause continued visual impacts during operations. Therefore, implementation of the J Street Drain project would result in degradation of the existing visual character and quality at the project area. The project would also be inconsistent with the scenic resources' goals, policies and programs in the Ventura County General Plan; therefore, this impact is significant.

Beach Elevation Management Plan

The BEMP would be implemented periodically and would only have equipment on the beach for a few hours. The few hours are all that is necessary to groom the berm to maintain the appropriate elevation to allow for natural breaching of the berm during storm events. The sand removed from the grooming location would be smoothed over the adjacent beach in a manner that would avoid creating a tall berm. The relocated sand would be quickly reconfigured by wave and wind action. Beach grooming would not result in substantial degradation of the existing visual character or quality of the site and its surroundings. Implementation of the BEMP would not conflict with the scenic resources' goals, policies and programs in the Ventura County General Plan. Impacts are less than significant.

4.1.5 Cumulative-Level Impact Analysis

No significant project level impacts were identified for the BEMP phase of the project. Therefore, the cumulative impact analysis focuses on the construction and operational phases of the project, which would have the potential to contribute to a cumulative impact. The BEMP phase of the project would not contribute to a cumulative impact.

Located Adjacent to a Publicly Viewed Scenic Resource and Physically Alter the Scenic Resource

Construction

Construction of the proposed project would not result in alteration or degradation of scenic resources or significantly alter or obscure public views. When construction of the proposed project is considered with the cumulative projects, no cumulative impact is identified for this issue area. As shown on Figure 2.0-3, the majority of the cumulative projects are not located within the same viewshed as the project. The only projects adjacent to the proposed project are the Cuesta Del Mar affordable housing, J Station Elimination, Water Pipeline 1, and Water Pipeline 2 projects. The J Station Elimination, Water Pipeline 1, and Water Pipeline 2 projects would not be characterized as substantially blocking or obscuring a view as they would be underground pipelines. The Cuesta Del Mar affordable housing project is planned as a three-story, 6,080-square-foot multifamily building with seven apartments. The affordable housing project is located in an existing residential area north of Hueneme Road and would not obstruct the significant scenic resources in the project area, which include the Pacific Ocean and Ormond Beach Lagoon. Therefore, no cumulative impacts are identified for this issue area.

Operations

No significant project level impact was identified for this project. Therefore, no cumulative impacts would occur.

Substantially Obstruct, Degrade, or Obscure a Scenic Vista?

Construction

It is anticipated that there would be temporary visual change due to the placement of equipment, noise barriers, and traffic signage associated with project construction. Four of the cumulative projects, Cuesta Del Mar affordable housing, J Station Elimination, Water Pipeline I, and Water Pipeline 2, share the same viewshed as the project. However, these projects are either completed, currently under construction, scheduled to begin construction in March 2012, or approved, and it is unlikely that construction of those

projects and the proposed project would be simultaneous. In addition, three are underground pipeline projects that would not have adverse effects on a scenic vista, as they would not have above-ground components. The Cuesta Del Mar affordable housing project is planned as a three-story, 6,080-square-foot multifamily building with seven apartments. The affordable housing project is located in an existing residential area north of Hueneme Road and would not obstruct the significant scenic vista in the project area, which includes the Pacific Ocean and Ormond Beach Lagoon. Therefore, no cumulative impact is identified.

Operations

No significant project level impact was identified for this project. Therefore, no cumulative impacts would occur.

Substantial Adverse Effects on a Scenic Vista and Substantial Degradation of the Existing Visual Character or Quality of the Site and its Surroundings?

Construction

The project would result in temporary visual change due to construction activities. However, the construction equipment, noise barriers, and traffic signs would not completely block ocean or lagoon views but would be a visual distraction for the short period of construction. The project would degrade the existing visual character of the project site surroundings due to the loss of mature oleander bushes, large shrubs, and eucalyptus trees which provide a visual buffer. In review of the cumulative projects considered in this analysis, only four, the Cuesta Del Mar affordable housing, J Station Elimination, Water Pipeline 1, and Water Pipeline 2 projects, are located adjacent to the drain and would have the potential to add to a cumulative contribution. These projects are either completed, currently under construction, scheduled to begin construction in March 2012, or approved and it is unlikely that construction would be concurrent with the proposed project. Therefore, no cumulative impact is identified for these issue areas.

Operations

The proposed project would degrade the existing visual character of the project site surroundings due to the loss of mature oleander bushes, large shrubs, and eucalyptus trees which provide a visual buffer. In review of the cumulative projects considered in this analysis, only three, the J Station Elimination, Water Pipeline 1, and Water Pipeline 2 projects, intersect the drain and would have the potential to add to a cumulative contribution. However, the pipeline projects would be constructed below ground within the Ventura County Railroad or Hueneme Road right-of-ways, which are not vegetated. Therefore, no cumulative impacts would occur.

Consistency with Ventura County General Plan Goals, Policies and Programs

Construction

Construction of the proposed project would not result in degradation of visual resources or significantly alter or obscure public views. When construction of the proposed project is considered with the cumulative projects, no cumulative impact is identified for this issue area. As shown on Figure 2.0-3, the majority of the cumulative projects are not located within the same viewshed as the project. The only projects adjacent to the proposed project are the Cuesta Del Mar affordable housing, J Station Elimination, Water Pipeline 1, and Water Pipeline 2 projects. The J Station Elimination, Water Pipeline 1,

and Water Pipeline 2 projects would not be characterized as substantially blocking or obscuring a view as they would be underground pipelines. The Cuesta Del Mar affordable housing project is planned as a three-story, 6,080 square-foot multifamily building with seven apartments. The affordable housing project is located in an existing residential area north of Hueneme Road and would not obstruct any significant viewshed such as the Pacific Ocean or Ormond Beach Lagoon. Therefore, no cumulative impacts are identified for this issue area.

Operations

Implementation of the J Street Drain project would result in degradation of the existing visual character and quality at the project area, due to the removal of the oleander bushes and fence. As shown on Figure 2.0-3, the majority of the cumulative projects are not located within the same viewshed as the project. The only projects adjacent to the proposed project are the Cuesta Del Mar affordable housing, J Station Elimination, Water Pipeline 1, and Water Pipeline 2 projects. The J Station Elimination, Water Pipeline 1, and Water Pipeline 2 projects would not be characterized as substantially blocking or obscuring a view as they would be underground pipelines. The Cuesta Del Mar affordable housing project is planned as a three-story, 6,080-square-foot multifamily building with seven apartments. The affordable housing project is located in an existing residential area north of Hueneme Road and would not obstruct any significant viewshed such as the Pacific Ocean or Ormond Beach Lagoon. Therefore, no cumulative impacts are identified for this issue area. The project would also be inconsistent with the scenic resources' goals, policies and programs in the Ventura County General Plan; therefore, a significant impact is identified.

4.1.6 Mitigation Measures

- VIS-1** The District shall provide landscaping to replace the oleander bushes removed along J Street Drain between Hueneme Road and Redwood Street by agreement with the City of Oxnard. Landscaping shall be replaced incrementally, within six months of completion of each project phase.
- ~~Within six months of project completion, the District shall provide landscaping to replace the oleander bushes removed along J Street Drain between Hueneme Road and Redwood Street by agreement with the City of Oxnard.~~
- VIS-2** Any tree or large shrub removed from the Surfside III property during construction would be replaced at a 1:1 ratio.
- VIS-3** During construction, temporary privacy screening would be placed along the northeast boundary of the Surfside III property to shield residents from views of the construction site and of the OWWTP.
- VIS-4** Prior to construction a 10- to 12-foot-tall fence with green vinyl screening will be installed along the portion of the District and Oxnard Wastewater Treatment Plant property line that is not currently fenced.
- VIS-5** Although night construction is not anticipated, in the event that it becomes necessary, all lighting shall be shielded to prevent illumination of residences.

4.1.7 Significance After Mitigation

Implementation of the proposed project would result in less than significant project-level and cumulative-level impacts for all aesthetic issue areas with the exception of the substantial degradation of the existing visual character or quality of the site and surroundings. The removal of oleander bushes along the drain and the potential removal of several trees and large shrubs due to trenching or vertical shoring would result in substantial project-level visual change. Mitigation measure VIS-1, which will be required as a condition of project approval, will require replacement of the removed oleander bushes with suitable replacement landscaping. As this landscaping matures, it will replace the existing visual buffer that the oleander bushes provide and would reduce the operational impact to below a level of significance. Mitigation measure VIS-2 would require the replacement of the removed trees and large shrubs within the Surfside III property at 1:1 ratio and would reduce the operational impact to below a level of significance. Mitigation measure VIS-3 would require temporary visual screening and would reduce construction phase impacts below a level of significance. Mitigation Measure VIS-4 would require permanent visual screening and would further reduce construction phase impacts below a level of significance.

4.1.8 Response to Notice of Preparation Comments

During the Notice of Preparation (NOP) comment period, the City of Oxnard sent a letter that suggested that the drain design include mitigation options to improve the aesthetic appearance of the drain from the pedestrian level. As identified above in Section 4.1.6, mitigation measure VIS-1 is proposed to replace oleander bushes along J Street Drain. This would improve the aesthetic appearance of the drain since pedestrians would have views of oleander bushes rather than a concrete-channel. During the DEIR preparation phase, a Surfside III resident expressed concern about loss of vegetation that currently screens views of the OWWTP. Mitigation measures VIS-2 and VIS-3 are proposed to replace the existing Surfside III vegetation removed by the project and to provide temporary screening of construction site and OWWTP views during construction.

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4.2 BIOLOGICAL RESOURCES

The following documents were used in the preparation of this section and are located in Appendix D of this Environmental Impact Report (EIR):

Biological Technical Report: J Street Drain Project. Ventura County, California.
Prepared by HDR Engineering, Inc. July 2008 (Revised September 2011).

Jurisdictional Wetland Delineation Report: J Street Drain Project. Ventura County, California. Prepared by HDR Engineering, Inc. July 2008 (Revised September 2011).

Light-Footed Clapper Rail, Western Snowy Plover, and California Least Tern Surveys: J Street Drain Project, Ventura County, California. Prepared by Davenport Biological Services. August 2008.

Western Snowy Plover Breeding Survey, Ormond Beach, California: 2009 Season.
Prepared by Cynthia Hartley for the California Department of Fish and Game. September 2009.

California Least Tern Breeding Survey, Ormond Beach, Ventura County: 2009 Season.
Prepared by Reed V. Smith for the California Department of Fish and Game. September 2009.

Western Snowy Plover Breeding Survey, Ormond Beach, California: 2010 Season.
Prepared by Cynthia Hartley for the California Department of Fish and Game. September 2010.

California Least Tern Breeding Survey, Ormond Beach, Ventura County: 2010 Season.
Prepared by Reed V. Smith for the California Department of Fish and Game. September 2010.

4.2.1 Environmental Setting

A baseline biological field survey of the project site was conducted by HDR Senior Biologist Shannon Allen and HDR Assistant Biologist Allegra Simmons on April 28, 2008, between the hours of 0830 to 1700, and on April 29, 2008 between the hours of 0830 to 1750. All accessible areas of the property were directly examined in the field. The purpose of the survey was to identify and delineate existing and adjacent vegetation communities, potential wildlife habitats, and locate and map (if detected), any sensitive biological resources. All vascular plants and vertebrate animals encountered during this field effort were documented. Vegetation communities were mapped in situ using an aerial photograph and direct observation. Due to the size and orientation of the project area, it was necessary to divide the project into northern and southern survey areas. The northern survey area consists primarily of the existing J Street Drain, which is a concrete-lined channel, beginning at Redwood Street and continuing south to Hueneme Road. The southern survey area includes everything within the project area south of Hueneme Road.

A California Natural Diversity Database (CNDDDB) search was conducted as part of the background research for the parcels that intersect the proposed alignment. Several sensitive wildlife species are known to occur within the project area, including the California least tern, snowy plover, and tidewater goby. The CNDDDB search did not identify any sensitive botanical species as occurring within the project area;

4.2 Biological Resources

however, several are known to occur within the general vicinity of the site. These include Ventura marsh milk-vetch and salt marsh bird's-beak.

HDR conducted a jurisdictional wetland delineation within the boundaries of the project site. The jurisdictional wetland delineation meets the requirements of the following regulatory agencies: U.S. Army Corps of Engineers (USACE) (including the Unified Federal Method for Wetland Delineation (1987) and Arid West Supplement), California Department of Fish and Game (CDFG), Regional Water Quality Control Board (RWQCB), and California Coastal Commission (CCC). The purpose of the jurisdictional wetland delineation is to determine areas that may be subject to federal and state wetland regulation and permitting.

Should project construction result in measurable impacts to resources determined to be within the jurisdiction of the USACE, RWQCB, and/or CDFG, one or more of the following permitting documents may be required:

- A USACE Individual Permit pursuant to Section 404 of the federal Clean Water Act (CWA) (1990, as amended), or qualification under a Nationwide Permit pursuant to Section 404 of the CWA;
- Clean Water Certification in compliance with the California Porter-Cologne Water Quality Control Act as defined by the state RWQCB or federal CWA Section 401 Certification requirements;
- A Section 1600-Series Streambed Alteration Agreement (SAA) from the CDFG in compliance with CDFG Fish and Game Code; and/or,
- Coastal Zone Management Act, Coastal Development Permit.
- A Section 7 Biological Opinion and Take Permit from the U.S. Fish and Wildlife Service (USFWS) in compliance with the Federal Endangered Species Act. Consultation with the USFWS would be initiated by USACE, the federal nexus agency.
- A Section 2081 Incidental Take Permit from the CDFG in compliance with the California Endangered Species Act.

In order to assess and delineate the onsite wetland resources, Shannon Allen and Allegra Simmons (Certified Wetland Delineators) examined habitats to determine drainage features and wetlands connectivity. All potential wetland areas were measured in terms of presence/absence of hydrology, hydrophytic vegetation, and indicators for hydric soil. Transects and test pits were established in accordance with the Unified Federal Method for Wetland Delineation (USACE 1987) to measure and assess these wetland indicators. The delineation followed protocol requiring the use of the recently instated *Regional Supplement to the USACE Wetland Delineation Manual: Arid West*.

Within the survey area, four transects were conducted to delineate jurisdictional boundaries. For each transect, three to four test pits were dug and analyzed using the supplemental arid west form to establish jurisdiction of potential wetlands onsite. In addition, soil cores were used to identify changes in soil composition, which helped to establish wetland boundaries between soil pits.

The project site ranges in elevation from approximately 24 feet above mean sea level (AMSL) at the northern end of the project boundary to three feet AMSL at the southern end within the Ormond Beach Lagoon (Figure 4.2-1). Sandy portions of the lagoon are approximately eight feet AMSL, with the



Project Survey Area
FIGURE 4.2-1

surrounding lagoon channel ranging from four to six feet deep. Beach elevation ranges from approximately eight feet AMSL along the north to sea level at the south.

The project proposes an access route onto the beach to allow periodic grooming of the sand berm blocking the lagoon outlet before potential storm events. The location of the access would follow the same pathway that lifeguards and beach maintenance vehicles currently use on a daily basis to reach the groomed portion of the beach. Although the route is disturbed from daily use, it occurs adjacent to potentially sensitive habitat. As outlined in the Project Description, Section 3.0 of this EIR, any implementation of the Beach Elevation Management Plan (BEMP) would include monitoring of nearby sensitive habitats by a qualified biologist. The biologist would ensure that direct impacts to sensitive habitats are avoided to the maximum extent practicable. In addition, a biological resource assessment would be conducted following grooming activity in order to determine the extent of direct impacts, if any, to biological resources. If direct impacts are identified, appropriate mitigation would be prescribed and presented to the applicable resource agencies for concurrence, if necessary. Coordination with agencies and implementation of any proposed mitigation are stipulations of the BEMP and are considered project design features.

4.2.1.1 Existing Conditions

Vegetation Communities

Vegetation types or plant communities are assemblages of plant species that usually coexist in the same area. The classification of vegetation communities is based upon the life form of the dominant species within that community and the associated flora. Currently, the project site supports 53 plant species within the following seven vegetation communities: coastal brackish marsh (CBM), southern coastal salt marsh (SCSM), open water (OW), southern foredunes (SFD), eucalyptus woodland (EW), disturbed habitat (DH), and urban developed (UD) (Figures 4.2-2 and 4.2-3). Table 4.2-1 summarizes vegetation community acreages.

**Table 4.2-1. Summary of Vegetation Communities
Within the Survey Area**

Habitat Type	Existing Acreage
Coastal Brackish Marsh	2.98
Disturbed Habitat	6.76
Urban/Developed	32.44
Eucalyptus Woodland	1.18
Open Water	2.27
Southern Coastal Salt Marsh	8.26
Southern Foredune	2.6
Total	56.49

Coastal Brackish Marsh (Holland Code #52200)

CBM is generally located at the interior edges of coastal bays, estuaries, lagoons, and adjacent to salt marshes. CBM areas are dominated by dense coverage of perennial, emergent, herbaceous monocots up to six feet tall. Within the project survey area, CBM is restricted to the Ormond Beach Lagoon. The dominant indicators in this area include cattails, saltgrass, and American tule. The marsh supports large stands of cattails and tules with pockets of open water. The habitat is considered medium to high quality; however, the area is frequently used by pedestrians and dogs, and shows evidence of homeless encampments.

Southern Coastal Salt Marsh (Holland Code #52120)

SCSM is a highly productive, salt-tolerant vegetation community that forms a low density herbaceous cover. A majority of the species in the community are active in the summer and dormant in the winter. This vegetation community is found along sheltered inland margins of bays, lagoons, and estuaries, which are subject to regular tidal inundation by salt water.

The northern survey area is developed and has no SCSM. The southern survey area is predominantly SCSM with indicators that include saltgrass, alkali heath, and beach bur. The vegetation community is considered medium to high quality.

Open Water (Holland Code #13100)

OW is usually associated with areas such as bays, lagoons, salt marsh, freshwater marsh, and areas that receive high amounts of moisture. These areas generally lack emergent vegetation.

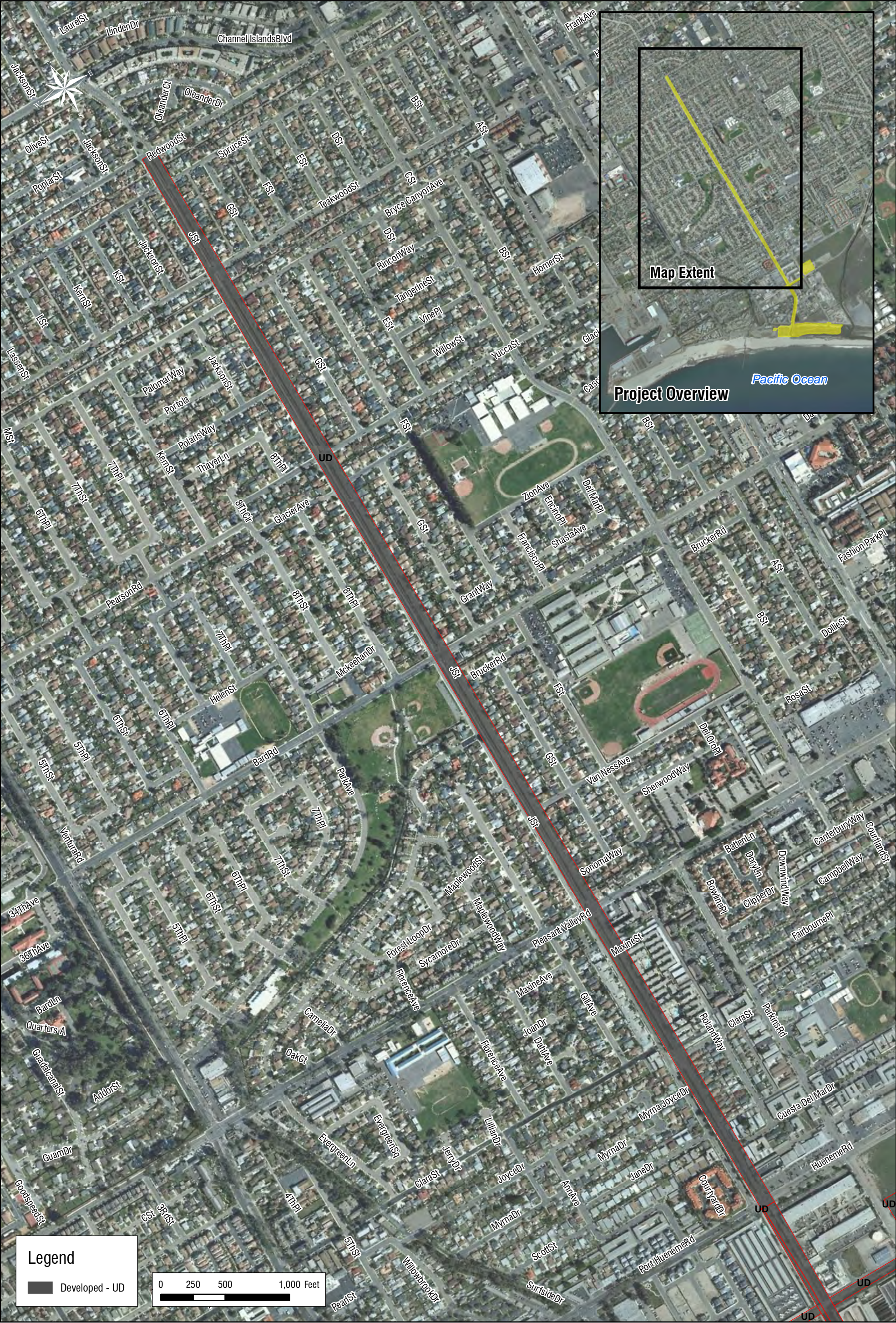
The northern survey area does not contain OW. The southern survey area has several large areas of OW. These are generally located within the southern portion of the J Street channel and Ormond Beach Lagoon. OW is also associated with a manmade canal located along the northern and northwestern boundary of the lagoon. OW also occurs within the central portion of the CBM. The OW is medium quality habitat.

Southern Foredune (Holland Code #21230)

Similar to active coastal dunes, SFD have relatively favorable conditions that allow for the establishment of plants, which reduce the amount of blow sand and partially stabilize the dunes. Groundwater is generally more available for SFD than for active coastal dunes, which allows support of vegetative cover.

The northern survey area does not contain SFD. In the southern survey area, several patches of vegetation qualify as SFD. These are specifically located along the northern and northwestern boundaries of the Ormond Beach Lagoon, southwest of the J Street Drain terminus. Indicators in this community include beach bur, beach suncup and in some areas, salt grass and non-native Indian sweet clover. The northwestern SFD is high quality while the northern patches are of a more disturbed nature as a result of frequent foot traffic and would be considered medium quality.

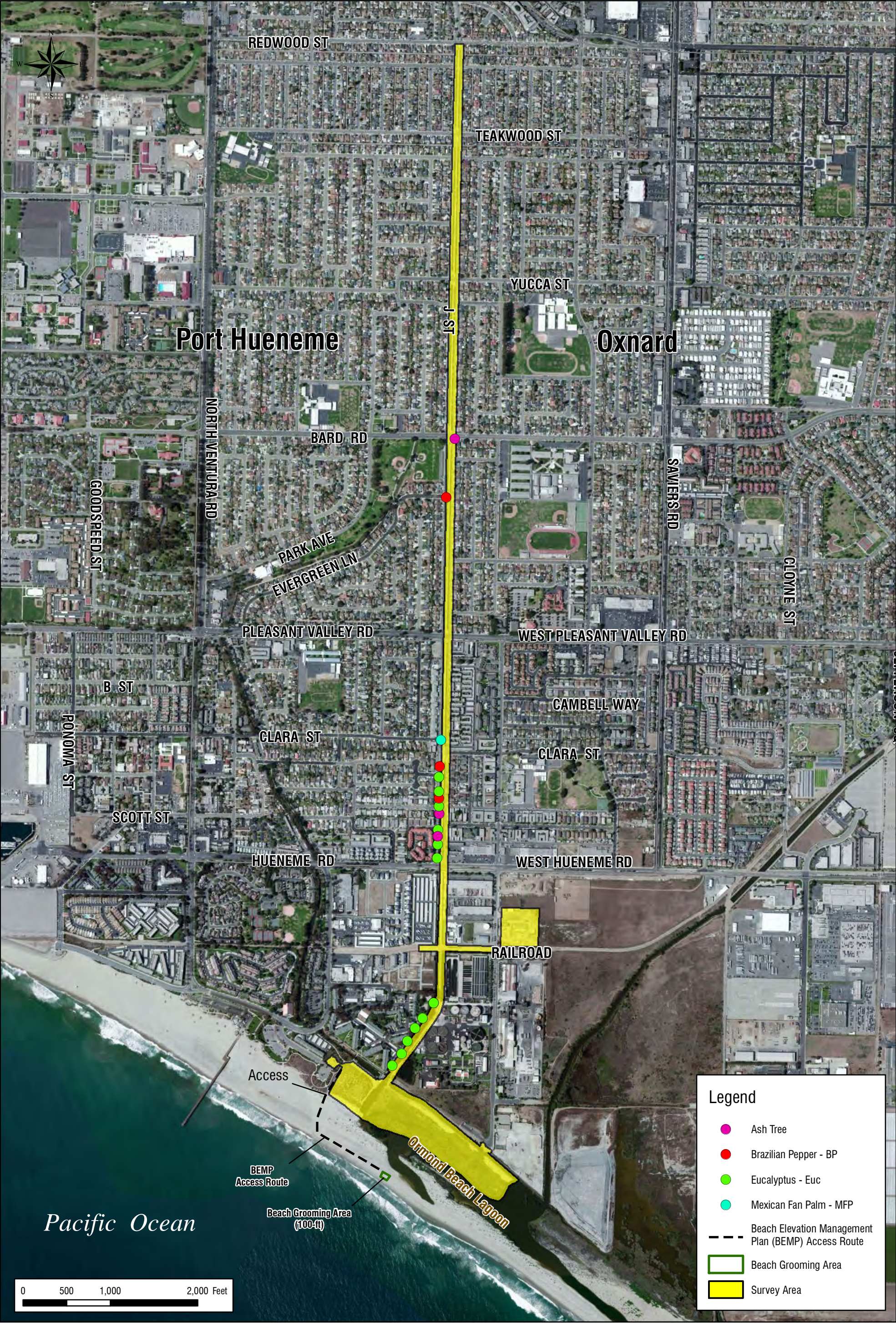
Based upon aerial photographs, it appears that SFD may occur near the BEMP access route. However, vegetation in this area was not mapped during the biological surveys conducted for the proposed project. Biological field surveys conducted for the proposed project focused on potential impacts to biological resources within the proposed alignment for the J Street Drain.



Northern Survey Area - Vegetation
FIGURE 4.2-2



Southern Survey Area - Vegetation
FIGURE 4.2-3



Tree Locations
FIGURE 4.2-4

Eucalyptus Woodland (Holland Code #11100)

EW is usually associated with landscaped areas around homes or roadways. The primary indicator in EW is eucalyptus, which is a nonnative tree species from Australia. The understory is sparse and mostly dominated by leaf litter and weedy species including brome grasses and tocalote.

The northern survey area has several large eucalyptus trees which line the concrete channel. However, these single individuals do not qualify as woodland and are not mapped as such. Instead, these are identified on the tree map (Figure 4.2-4). Within the southern survey area, two relatively small patches of EW line the existing J Street channel. These EW patches occur on the east and west sides of the J Street Drain south of Hueneme Road. EW is considered medium quality vegetation as it provides potential roosting and nesting habitat for raptors despite its non-native origin.

Disturbed Habitat (Holland Code #11300)

DH is defined as areas of native vegetation that have been impacted by grading, dumping, or any other human related impact that disturbs the vegetation. DH occurs primarily along the eastern border and in the southwestern portion of the southern survey area. This area has been disturbed primarily by the use of motor vehicles, which has promoted the growth of invasive weedy species such as brome grasses, hottentot fig, and Mediterranean mustard. Disturbance in portions of these areas has resulted in compaction of the soils. Past dredging efforts within the canal in the Ormond Lagoon have resulted in the disposal of fill dirt in the northwestern portion of the lagoon. This accumulation of fill dirt has raised the elevation of the site, thereby changing the access to groundwater for native marsh plant species. Consequently, this area has been replaced by weedy species such as Mediterranean mustard, and Indian sweet clover. This vegetation is considered low quality.

Urban/Developed (Holland Code #12000)

The entire northern survey area is located amongst UD land uses, including streets, residences, and businesses. The project alignment located within the northern survey area consists of a concrete lined channel, also considered UD. Within the southern survey area, UD occurs as the continuation of J Street channel. This habitat generally consists of weedy and ornamental plant species, such as bromes and oleander. UD does not occur within the lagoon portion of the survey area. These UD areas have no biological resource value.

Botanical Species

Fifty-three vascular plant species were observed during the survey. The plants detected are representative of CBM, SCSM, SFD, and DH, and are relatively common in this area. Sensitive plant species were not observed within the project area during the general biological survey and are not expected to occur on the site. A list of the plant species observed during the survey is included as Appendix B of the Biological Technical Report (Appendix D of this document).

Wildlife Species

Twenty-six wildlife species were observed during the survey, either directly or as a result of signs of occupancy (tracks, scats, etc.). The fauna observed on site are representative of CBM, SCSM, SFD, and DH. Protocol surveys were conducted for sensitive species, including the California least tern, western snowy plover, and light-footed clapper rail. Sensitive species detected on or adjacent to the site are discussed below.

The Project Completion Report (2007) prepared for the Hueneme Pump Station Reconstruction Project identified several fish species known to inhabit the Ormond Beach Lagoon and J Street Drain. These species include: tidewater goby, topsmelt, sailfin molly, California killifish, staghorn sculpin, striped mullet, common carp, western mosquitofish, goldfish, green sunfish, long-jawed mudsucker, rainwater killifish, and crayfish. The tidewater goby is the only sensitive fish species known to occur within or in the vicinity of J Street Drain. During the HDR general biological survey, no fish species were identified.

Several species of migratory birds were observed during the general biological survey, specifically within the southern survey area. However, during the general biological survey, nesting and foraging raptors were not observed. Within the lagoon portion of the project area, open space provides foraging habitat for raptors. Along the project alignment, larger individual trees would provide nesting habitat for raptors.

Sensitive Vegetation Communities

Vegetation communities (habitats) are generally considered “sensitive” if: (a) they are considered rare within the region by various agencies including USFWS, CDFG, and other local agencies; (b) if they are known to support sensitive animal or plant species; and/or (c) they are known to serve as important wildlife corridors. Sensitive habitats are typically depleted throughout their known ranges, or are highly localized, and/or fragmented. The project survey area contains four sensitive vegetation communities: CBM, SCSM, OW, and SFD in accordance with definitions (a) through (c) discussed above.

Sensitive Botanical Species

Sensitive plants include any and all those listed by USFWS and CDFG, candidates for listing by the USFWS and CDFG, and those considered sensitive by the CDFG and/or the California Native Plant Society (CNPS). Sensitive plants also include the categories of rare and narrow endemic. A summary of the potential sensitive species that could occur in the survey areas are provided in Appendix D. During the general biological survey no sensitive plant species were identified on the project site; however, potential habitat occurs on site for both the Ventura marsh milk vetch and salt marsh bird’s beak. These two plant species are found in coastal dunes, marshes, and swamps and require well drained soils in areas with high water tables. The well drained sandy soils of the lagoon area and adjacent sand dunes combined with the high water table provide potential habitat for both species.

Within Ventura County, several tree species are considered sensitive and are protected by the Ventura County Tree Ordinance. Although the City of Oxnard does not have a specific tree protection ordinance, a general tree survey was conducted to identify and map individual trees occurring within/adjacent to the project area (Figure 4.2-4). Four tree species were identified within/adjacent to the project area and include ash, Brazilian peppertree, various eucalyptus, and Mexican fan palm (Appendix D), none of which are native to the project area.

Sensitive Wildlife Species

Sensitive animals are species or subspecies listed as threatened, endangered, or being evaluated (proposed) for listing by the USFWS and by the CDFG, and/or are considered sensitive by the CDFG. A sensitive designation includes those listed as rare or of “Special Concern,” and includes a number of migratory bird species protected under the Migratory Bird Treaty Act (MBTA). A CNDDDB search identified the following sensitive wildlife species with the potential to occur within the J Street Drain area: California least tern, snowy plover, light-footed clapper rail, and tidewater goby. In addition, over

60 brown pelicans were observed using the lagoon during the general survey. These species are also discussed in Appendix D.

Belding's Savannah Sparrow

Federal Status: Candidate

State Status: Endangered

Belding's savannah sparrow is a year-round species that occurs within the SCSM of Southern California from Goleta in Santa Barbara County south to El Rosario, Baja California, Mexico. SCSM dominated by pickleweed (*Salicornia* sp.) characterize Belding's savannah sparrow nesting habitat. Belding's savannah sparrow forages on the succulent buds of pickleweed, females use the twigs for nest building, and males use the plant as song perches. Tidal influence is required to maintain salt marsh vegetation and hydrology in order to keep upland plants and birds from replacing Belding's savannah sparrow and its habitat. Breeding territories can be very small and nesting birds may be clumped together in a near colonial fashion due to the limited availability of suitable pickleweed stands.

Given the number and timing of survey activities, Belding's savannah sparrow should have been detected if it was breeding within the survey area. However, Belding's savannah sparrow was not identified within the project area during any of the biological field surveys conducted for the proposed project. Therefore, this species is not expected to occur within the project area.

California Brown Pelican

Federal Status: Formerly Endangered, Delisted December 17, 2009

State Status: Formerly Endangered, Delisted June 3, 2009

The California brown pelican is a warm weather species that thrives near coasts and on islands. They generally use the rocky islands along the California coast for their nest sites. These islands typically feature steep, rocky slopes with little vegetation, and they must be without terrestrial predators or human disturbances. Nearby high quality marine habitat is also essential. Roosting and resting, or "loafing," sites where brown pelicans can dry their feathers and rest without disturbance are also important. Brown pelicans build large, bulky nests on the ground or in bushes.

Brown pelicans were commonly observed bathing in the lagoon and roosting on the sand spit that separates Ormond Lagoon from the Pacific Ocean. In May, three to five brown pelicans were observed in this area. By mid June, the number of brown pelicans had grown to more than 60 birds. Given the location of this site near Anacapa Island (a major nesting area for this species), the number of brown pelicans using this area should be anticipated to increase.

California Least Tern

Federal Status: Endangered

State Status: Endangered

Between San Francisco Bay and San Diego Bay, the California least tern is anticipated to occur throughout the coastal zone of California. California least terns commonly forage in coastal wetlands, bays, and near the surf zone. Additionally, the species has been observed foraging in fresh water along southern California rivers such as the Santa Margarita and San Luis Rey. This species nests on coastal sandy bare areas (e.g., beaches, sand bars, and salt flats).

A focused California least tern survey was conducted in the southern survey area (Appendix D). During the survey, California least terns were not observed nesting within the project survey area. Due to the existing heavy disturbance occurring within the project survey area (i.e., pedestrian traffic, domestic animals), it is unlikely that California least terns would attempt to nest there. However, California least terns were identified using the dune habitat located south of the project survey area and across the lagoon (Figure 4.2-5). Nests with un-hatched eggs were observed within the dune habitat adjacent to the project survey area. The entire lagoon, including the project survey area, is heavily used by foraging California least terns that are feeding nestlings and fledglings. California least terns that nest at Ormond Beach typically arrive in early to mid-May, and all summer residents and migrating terns leave the area by late August to mid-September. California least terns forage over Ormond Beach Lagoon and the ocean immediately offshore during their seasonal migrations and during breeding. CDFG-sponsored breeding surveys in 2009 and 2010 (Appendix D) documented successful nesting southeast of the Ormond Beach Lagoon. The nearest nests were south of the lagoon, approximately 600 feet southeast of the J Street Drain. In 2009, 44 nests were initiated and 33 of these hatched. In 2010, 48 nests were documented, of which 35 hatched.

Western Snowy Plover

Federal Status: Threatened

State Status: None

The western snowy plover breeds along the west coast from Washington to Baja California, Mexico, including some inland localities. Western snowy plovers inhabit sandy beaches, mud flats, and salt pans. They nest in the upper reaches of beaches, flats, and pans above the ordinary high water mark. Western snowy plovers are year-round residents along the coasts, though they may exhibit both migratory and non-migratory characteristics.

Based on information in the CNDDDB, nesting western snowy plovers have been documented adjacent to Ormond Lagoon. A general nesting area of western snowy plovers is located approximately 1.5 miles southwest of Port Hueneme. Other nesting western snowy plovers have been documented just north of the inlet to the Channel Island Harbor, four miles southwest of Oxnard. Breeding season surveys of Ormond Beach were conducted in 2009 and 2010 (Appendix D). In 2009, 33 nests were recorded, of which 18 successfully hatched. All of the nests, except one, were located east of the lagoon. The nearest nest was approximately 1,800 feet southeast of the J Street Drain. In 2010, 27 nests were recorded, of which 19 successfully hatched. All of these nests were located east of the lagoon in the vicinity of the Reliant power plant. Ten nests were located northwest of the plant, 12 nests were on the southeast side, and five nests were found in the salt panne east of the plant.

Suitable habitat for western snowy plover occurs within and adjacent to the southern survey area. In 2005, the USFWS designated critical habitat for the plover at Ormond Beach (CA-19B subunit). Ormond Beach is located west and adjacent to the project survey area. However, in 2005 USFWS removed a portion of Ormond Beach from the critical habitat designation for the plover. Specifically, the area removed from critical habitat extends from the J Street Drain north to the southern jetty of Port Hueneme due to the heavily disturbed nature of the area (Figure 4.2-5). Western snowy plovers are known to use Ormond Beach to breed and forage generally from Arnold Road to the Perkins Road estuary, which is adjacent to the eastern project survey boundary. A focused survey was conducted for this species on the project site by Davenport Biological Consulting in 2008 and none were identified within the project survey area. The absence of nesting plover within the project survey area is likely due to heavy disturbance occurring within the lagoon area (i.e., pedestrian traffic, domestic animals). Nesting plovers were observed adjacent to the project survey area on the southeast side of the Ormond Beach Lagoon.



Critical Habitat and Observed Sensitive Wildlife Species

FIGURE 4.2-5

Light-footed Clapper Rail

Federal Status: Endangered

State Status: Endangered

Suitable habitat for the rail occurs within most of the coastal fresh and saltwater marshes of central to southern California, including the project site. Although most records of this species occur within chord grass and pickleweed dominated marshes, this species also uses cattail and bulrush dominated freshwater and brackish marshes.

The migratory behavior of clapper rails is poorly known; most populations of clapper rails are considered non-migratory. However, populations located in the northeast are largely migratory. The light-footed clapper rail is apparently a non-migratory resident of coastal salt and freshwater marshes. Still, dispersal movements of up to 21 kilometers have been documented. Therefore, some flexibility in mobility should be anticipated for the light-footed clapper rail. Flexibility in movement between suitable sites is also supported by the presence of just one subspecies of clapper rail from Santa Barbara County, California to San Quintine Bay, Baja California, Mexico.

The Ormond Beach Lagoon has never been monitored for this species. The closest monitored population of light-footed clapper rails occurs at Point Mugu. From 2000 to 2007, the population of rails at Point Mugu has ranged between seven and 17 individuals. Pair status remains unknown at Point Mugu. A protocol survey for the light-footed clapper rail was conducted within the southern survey area between April 2008 and June 2008. Although suitable nesting and foraging habitat for the species occurs within the project survey area (Figure 4.2-6), none were observed during the protocol survey.

Tidewater Goby

Federal Status: Endangered (Recommended for down-listing to threatened in *Tidewater Goby* (*Eucyclogobius newberryi*) 5-Year Review: Summary and Evaluation, prepared by USFWS, September 2007)

State Status: Species of Special Concern

The tidewater goby is endemic to California and is typically found in coastal lagoons, estuaries, freshwater tributaries, and marshes with relatively low salinities. The areas occupied by tidewater gobies “are dynamic environments that are subject to considerable fluctuations on a seasonal and annual basis,” exhibiting sediment accumulation, sediment scour, and variable water levels within a single season (USFWS 2008). Its habitat is characterized by brackish shallow lagoons (one to two meters) and lower stream reaches where the water is fairly still but not stagnant. Tidewater gobies enter marine environments if sandbars are breached during storm events. The species’ tolerance of high salinities likely enables it to withstand the marine environment, allowing it to colonize or reestablish in lagoons and estuaries following flood events.

Historically, the tidewater goby occurred in at least 110 California coastal lagoons from Tillas Slough near the Oregon border to Agua Hedionda Lagoon in northern San Diego County. The southern extent of its distribution has been reduced by approximately eight miles. The species is currently known to occur in about 85 locations, although the number of sites fluctuates with climatic conditions. Today, the most stable populations are in lagoons and estuaries of intermediate sizes (two to 50 hectares) that have remained relatively unaffected by human activities. The decline of the tidewater goby can be attributed primarily to urban, agricultural, and industrial development in and surrounding the coastal wetlands and alteration of habitats from seasonally closed lagoons to tidal bays and harbors. Some extirpations are

believed to be related to pollution, upstream water diversions, and the introduction of exotic fish species, most notably sunfishes and black basses. These threats continue to affect some of the remaining populations of tidewater gobies. Tidewater gobies have recently been observed in Mugu Lagoon, Ventura County, from which this species was previously presumed extirpated due to degraded water quality. Stable tidewater goby populations have persisted over time in other waterbodies (e.g., Santa Clara River, Ventura County).

The Ormond Beach Lagoon is designated as critical habitat for the tidewater goby. The USFWS recovery plan for tidewater goby identifies that the species has occupied this area as recently as 2004. The southernmost portion of the project, located at the outlet of J Street Drain to the lagoon, occurs within the critical habitat (Figures 4.2-5 and 4.2-9). This species was observed in J Street Drain, adjacent to the Hueneme Drain Pump Station, during reconstruction of the pump station in 2005 and 2006.

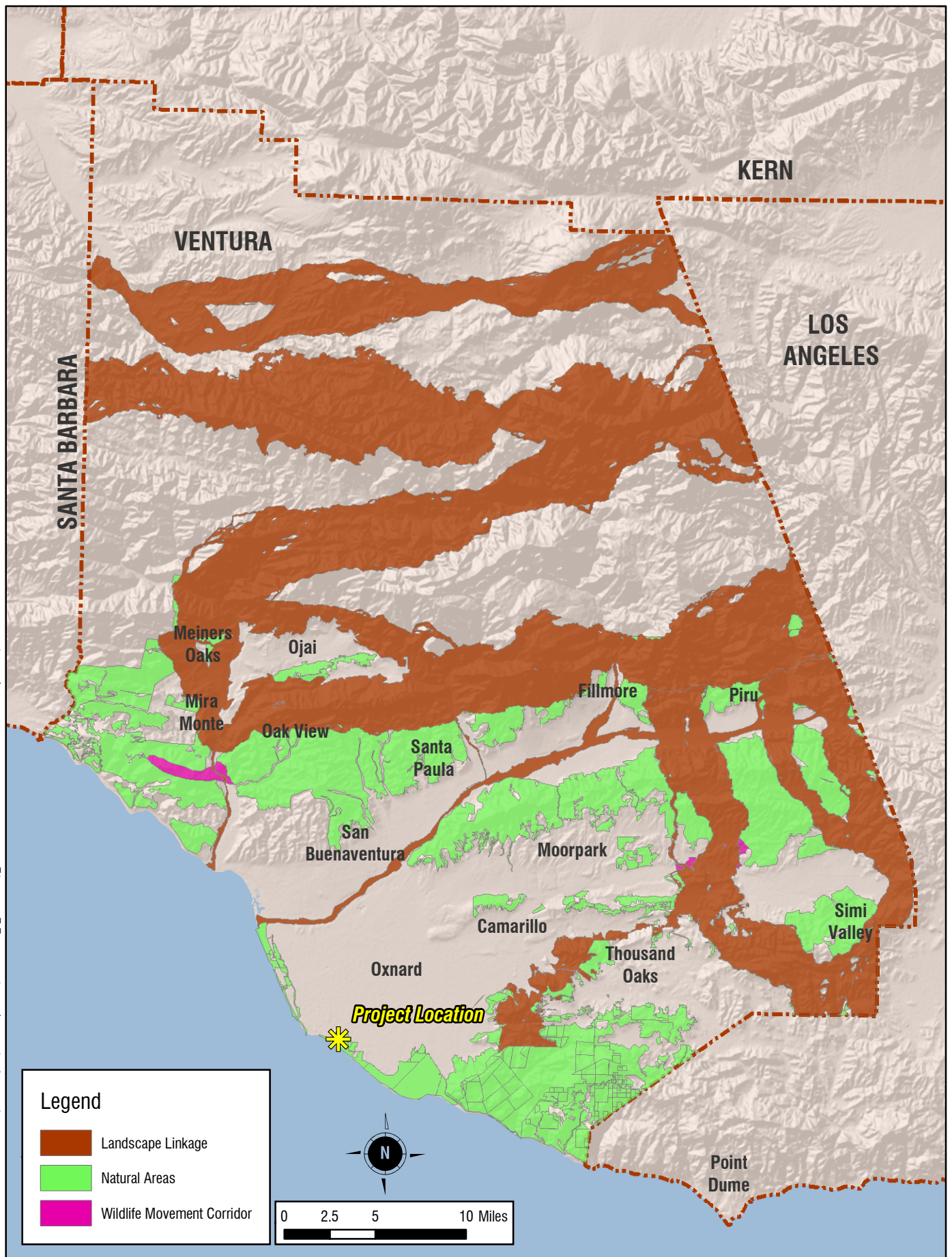
Although the concrete substrate of J Street Drain is not suitable for spawning, gobies appear to use the downstream portion of the channel to forage. Spawning would occur in the lagoon adjacent to the existing concrete channel, where tidewater gobies could burrow into deep sands (Entrix 2007). Reproduction for this species peaks in late May to July and again in late summer through early fall (Chris Dellith, USFWS, meeting on August 2, 2011), however spawning has been observed throughout the year with the exception of December (USFWS 2008).

Jurisdictional Waters and Wetlands

According to the Jurisdictional Wetland Delineation Report prepared for the proposed project, the northern survey area does not support the appropriate indicators to be considered a federal or state jurisdictional wetland. The area consists primarily of a concrete-lined drain that did not support any water flows at the time of survey. Additionally, the northern survey area is not within the CCC Coastal Zone and, therefore, would not fall under CCC jurisdiction. Because the northern survey area consists of a dry concrete-lined drain outside of the CCC Coastal Zone, a wetland delineation was not performed for this area. However, because the northern survey area connects to traditional navigable waters (the Pacific Ocean), this portion of the J Street Drain potentially qualifies as waters of the U.S. under the federal Clean Water Act. Additionally, due to the less restrictive nature of the CDFG and CCC requirements, more areas generally qualify as state jurisdictional areas and federal jurisdictional areas are also considered state jurisdictional areas. Therefore, the channel portion of the northern survey area may also qualify as state waters.

The southern survey area, identified as the area from Hueneme Road south to the Pacific Ocean, consists of an existing concrete-lined drain and a portion of the Ormond Beach Lagoon. Within Ormond Beach Lagoon, the dominant vegetation community consists of SCSM and smaller amounts of CBM. Water was identified in the concrete-lined drain within the southern survey area at the time of survey. Because these flows periodically connect to traditional navigable waters (the Pacific Ocean), this portion of the J Street Drain is identified as waters of the U.S. by the federal Clean Water Act. Additionally, the results of transect and test pit analysis indicated that federal jurisdictional wetlands are located within the southern survey area (Figure 4.2-7); however, these areas are outside of the project boundaries. Table 4.2-2 shows the total acreage of federal wetlands and waters of the U.S. within the survey area. Further, Table 4.2-3 shows the total acreage of state jurisdictional areas within the survey area.

Source: First Source: Ventura County Planning Department | G:\Projects\75217_J_Street\map_docs\mxd\EIR\BTR\WildlifeMovements.mxd | Last Updated : 12-29-08



Wildlife Movement Areas

FIGURE 4.2-6



Southern Survey Area - Jurisdictional Wetlands

FIGURE 4.2-7

Table 4.2-2. USACE Jurisdictional Areas

	Jurisdictional Area
Waters of the U.S. (acres) - Concrete Channel	7.90
Waters of the U.S. (acres) - Natural Substrate	2.73
Wetlands (acres)	6.83
Total Jurisdictional Areas	17.46

Source: Jurisdictional Wetland Delineation Report, HDR 2009.

Table 4.2-3. CDFG and CCC Jurisdictional Areas

	Jurisdictional Area
Waters of the State – Concrete Channel	7.90
Waters of the State – Natural Substrate	2.73
CDFG Wetlands	10.92
CCC Jurisdictional Areas ¹ (acres) 15.73	
Total State Jurisdictional Areas (acres)	21.55

Source: Jurisdictional Wetland Delineation Report, HDR 2009.

¹ CDFG and CCC jurisdictional area totals include USACE wetland and waters of the U.S. acreages. Also, the CCC jurisdictional area is contained within the CDFG wetlands and waters of the State.

It should be noted that a small area west of the drain outlet was superficially surveyed for any potential indicators of wetlands. This area is not part of the Ormond Beach Lagoon nor would it be affected by the proposed project. Due to the disturbed nature of this area, no potential indicators were present and, therefore, this area was not included within the wetland delineation. However, vegetation communities have been identified to disclose the condition of the area.

Wildlife Dispersal Corridor or Linkages

No regional biological corridors or linkages were identified within the project alignment (Figure 4.2-6). Therefore, no identified corridors or linkages would be impacted by project implementation. However, the lagoon portion of the project area is considered a natural area by the Ventura County General Plan. This natural area, consisting of coastal wetlands and lagoons, provides shelter, foraging, and nesting areas for birds, fish, mollusks, crabs, seals, and other marine organisms and plants (Ventura County General Plan, Section 1.5). The Ormond Beach Lagoon and adjacent dune/beach area is a staging area for migratory birds, such as the California least tern, killdeer, and black-necked stilt. In addition, the Lagoon could provide a potential local corridor for tidewater goby as they are known to disperse to other lagoons during major storm events if their current lagoon is breached. Therefore, a small amount of wildlife dispersal corridor/linkage could be impacted by project implementation.

4.2.2 Regulatory Setting

The following is a description of federal, state, and local environmental laws and policies that are relevant to the California Environmental Quality Act (CEQA) review process.

Federal Endangered Species Act (16 USC §1531-1544)

The federal Endangered Species Act (ESA) provides protection for endangered and threatened species and requires conservation of designated species' critical habitats. An "endangered" species is a species in danger of extinction throughout all or a significant portion of its range. A "threatened" species is one that is likely to become "endangered" in the foreseeable future without further protection. Other special-status species include "proposed," "candidate," and "species of concern." Proposed species are those that have been officially proposed in the Federal Register for listing as threatened or endangered. Candidate species are those for which sufficient information is available to propose listing as endangered or threatened. "Species of concern" are species for which not enough scientific information has been gathered to support a listing proposal, but which still may be appropriate for listing in the future after further study. A "delisted" species is one whose population has reached its recovery goal and is no longer in jeopardy.

The federal ESA is administered by the USFWS and National Marine Fisheries Service (NMFS). Under the ESA, it is prohibited to take, harm, or harass species listed as threatened or endangered by the USFWS. A permit for taking a federally listed threatened or endangered species may be obtained either through Section 7 consultation (where the proposed action requires approval of a federal agency) or Section 10(a) (i.e., where the proposed non-federal action requires development of a Habitat Conservation Plan [HCP]). Both cases require consultation with the USFWS and/or NMFS, which ultimately issues a final opinion determining whether the federally listed species will be adversely impacted by a proposed project.

Fish and Wildlife Coordination Act (16 USC §661-667E)

The Fish and Wildlife Coordination Act of March 10, 1934, authorized the Secretaries of Agriculture and Commerce to assist and cooperate with federal and state agencies to protect, rear, stock, and increase the supply of game and fur-bearing animals, and to study the effects of domestic sewage, trade wastes, and other polluting substances on wildlife. Amendments to the Act require consultation with the USFWS, NMFS, and state agencies responsible for fish and wildlife resources for all proposed federal undertakings and non-federal actions needing a federal permit or license that would impound, divert, deepen, or otherwise control or modify a stream or water body, and to make mitigation and enhancement recommendations to the involved federal agency.

Migratory Bird Treaty Act (16 USC §703-712)

The MBTA provides special protection for migratory families of birds (i.e., those avian species that winter south of the U.S. but breed within the U.S.) by regulating hunting or trade. The Act prohibits anyone to take, possess, buy, sell, purchase, or barter any migratory bird listed in 50 Code of Federal Regulations (CFR) 10, including feathers or other parts nests, eggs, or products, except as allowed by implementing regulations (50 CFR 21). "Take" includes any disturbance that causes nest abandonment and/or loss of reproductive effort (e.g., killing or abandonment of eggs or young). Such activity is potentially punishable by fines and/or imprisonment. The use of families as opposed to individual species within the Act means that numerous non-migratory birds are extended protection under the MBTA. Most nesting birds are covered by the MBTA.

Executive Order 13112: Invasive Species

The purpose of this Executive Order is to prevent the introduction and control the spread of invasive plant and animal species. This law prohibits the federal government from authorizing or funding actions that

may cause or promote the introduction and/or spread of invasive species unless the agency has determined that the action's benefits clearly outweigh potential harm caused by invasive species; and that all feasible and prudent measures will be taken to minimize risk of harm. This Executive Order also requires federal agencies to consult with the Invasive Species Council, consistent with the Invasive Species Management Plan.

Executive Order 11990: Protection of Wetlands

Executive Order 11990 directs that federal agencies will provide leadership and will take action to minimize destruction, loss, or degradation of wetlands associated with: (1) acquisition, management, and disposition of federal land and facilities; (2) federally funded or assisted construction and improvement; and, (3) federal activities and programs affecting land use, including but not limited to water and related land resources planning, regulating, and licensing activities.

Clean Water Act (33 USC §1251-1376)

The CWA provides guidance for the restoration and maintenance of the chemical, physical, and biological integrity of the nation's waters. Section 401 requires that an applicant for a federal license or permit that allows activities resulting in a discharge to jurisdictional waters (including wetland/riparian areas) of the United States must obtain a state water quality certification that the discharge complies with other provisions of CWA. The RWQCBs administer the certification program in California.

Section 402 is regulated by the U.S. Environmental Protection Agency (USEPA) and establishes a permitting system for the discharge of any pollutant (except dredge or fill material) into waters of the United States. It establishes a framework for regulating municipal and industrial storm water discharges under the National Pollutant Discharge Elimination System (NPDES) program. The RWQCBs also administer the NPDES permits for construction activities and operations.

Section 404 establishes a permit program administered by the USACE regulating the discharge of dredge or fill material into waters of the United States, including wetlands, and jurisdictional non-wetland waters. The USACE has permit authority derived from Section 404 of the CWA (33 CFR Parts 320-330). The permit review process includes an assessment of potential adverse impacts to wetlands and streambed habitats and determination of any required mitigation measures. As a condition of the 404 permitting process, a 401 Water Quality Certification or waiver is required from the RWQCB. Where federally listed species may be affected, a Section 7 consultation with the USFWS under the federal ESA is required. Compliance with Section 106 of the National Historic Preservation Act must also be met through coordination with the State Historic Preservation Officer (SHPO), the Advisory Council on Historic Preservation (ACHP), and other interested parties.

California Endangered Species Act

The California Endangered Species Act (CESA) generally parallels the main provisions of the federal ESA and is administered by the CDFG. State lead agencies are required to consult with CDFG to ensure that any action it undertakes is not likely to jeopardize the continued existence of any state listed endangered, threatened, or candidate plant and animal species. The take of a state endangered species is approved in a manner similar to that of the federal act, with a take permit being granted through Section 2081 of the CESA. Early consultation is emphasized to avoid potential impacts to sensitive species and to develop appropriate mitigation planning to offset project caused losses of listed species populations and their essential habitats. In addition to listed species, the CDFG also maintains a list of "Species of Special Concern," including species whose breeding populations in California may face local extirpation. To

avoid future listing of these Species of Special Concern as endangered or threatened, the CDFG recommends consideration of these species (although they do not as yet carry legal status) during analysis of the impacts of proposed projects.

California Fish and Game Code, §1600 et. seq.

The CDFG Code §1600 requires any person, state or local government agency or public utility proposing a project that may impact a river, stream or lake to notify the CDFG. In addition, to protect state listed species under the CESA, the CDFG also has surface water jurisdiction to protect wildlife values and native plant resources associated with waters of the State. CDFG requires a Section 1601 SAA for work that may impact waters of the State. Required conditions within the SAA are intended to address potentially significant adverse impacts within CDFG jurisdictional limits.

Ventura County General Plan

The following goal and policies included in the Ventura County General Plan are applicable to biological resources associated with the proposed project site:

Goal

Preserve and protect significant biological resources in Ventura County from incompatible land uses and development. Significant biological resources include endangered, threatened, or rare species and their habitats, wetland habitats, coastal habitats, wildlife migration corridors, and locally important species/communities.

Policies

1. Discretionary development which could potentially impact biological resources shall be evaluated by a qualified biologist to assess impacts and, if necessary, develop mitigation measures.
2. Discretionary development shall be sited and designed to incorporate all feasible measures to mitigate any significant impacts to biological resources. If the impacts cannot be reduced to a less than significant level, findings of overriding considerations must be made by the decision-making body.
3. Discretionary development that is proposed to be located within 300 feet of a marsh, small wash, intermittent lake, intermittent stream, spring, or perennial stream (as identified on the latest USGS 7 minute quad map), shall be evaluated by a County approved biologist for potential impacts on wetland habitats. Discretionary development that would have a significant impact on significant wetland habitats shall be prohibited, unless mitigation measures are adopted that would reduce the impact to a less than significant level; or for lands designated "Urban" or "Existing Community", a statement of overriding considerations is adopted by the decision-making body.
5. The California Department of Fish and Game, the U.S. Fish and Wildlife Service, National Audubon Society and the California Native Plant Society shall be consulted when discretionary development may affect significant biological resources. The National Park Service shall also be consulted regarding discretionary development within the Santa Monica Mountains or Oak Park Area.
6. Based on the review and recommendation of a qualified biologist, the design of road and floodplain improvements shall incorporate all feasible measures to accommodate wildlife passage.

Ventura County General Plan Coastal Area Plan

As a component of its General Plan, Ventura County has prepared and adopted a Coastal Area Plan to guide development actions near coastal resources. The following policies are applicable to biological resources associated with the proposed project site:

7. §30231 – The biological productivity and the quality of coastal waters, streams, wetlands, estuaries, and lakes appropriate to maintain optimum populations of marine organisms and for the protection of human health shall be maintained and, where feasible, restored through, among other means, minimizing adverse effects of wastewater discharges and entrainment, controlling runoff, preventing depletion of groundwater supplies and substantial interference of ground water flow, encouraging waste water reclamation, maintaining natural vegetation buffer areas that protect riparian habitats, and minimizing alteration of natural streams.
8. §30233 (a) – The diking, filling, or dredging of open coastal waters, wetlands, estuaries, and lakes shall be permitted in accordance with other applicable provisions of this division, where there is no feasible less environmentally damaging alternative, and where feasible mitigation measures have been provided to minimize adverse environmental effects and shall be limited to the following:
 - Maintaining existing, or restoring previously dredged, depths in existing navigational channels, turning basins, vessel berthing and mooring areas, and boat launching ramps.
9. §30240 (a) – Environmentally sensitive habitat areas shall be protected against any significant disruption of habitat values, and only uses dependent on such resources shall be allowed within such areas.

City of Oxnard General Plan

The following policies included in the City of Oxnard General Plan Open Space/Conservation Element are applicable to biological resources associated with the proposed project site:

10. The City should encourage the preservation and enhancement of the wetlands in the Ormond Beach and Mugu Lagoon.
11. Sensitive habitat areas are to be designated as permanent open space on the Land Use Map.
12. The City should limit the recreational activities in open space areas with sensitive habitats to those activities that have minimal impact on sensitive habitats.
13. The City should consider setting aside nature preserves that encompass sensitive habitat areas and provide areas for educational and research purposes.

City of Oxnard Local Coastal Program

The City has an adopted Local Coastal Program consisting of a Coastal Land Use Plan and Coastal Zoning Regulations and Maps. The Coastal Zone boundary extends generally 1,000 yards inland from the sea. The Coastal Zone has been divided into four planning areas: McGrath/Mandalay Beach, Oxnard Shores, Channel Islands and Ormond Beach. Recreational uses are predominant in the McGrath/Mandalay area; urban residential uses are concentrated in the Oxnard Shores area. The Channel Islands area contains the Channel Islands Harbor. The Ormond Beach area is separated from the rest of the City's Coastal Zone by the City of Port Hueneme, and is currently an industrial area. Further details and existing land use designations and policies are contained in the Coastal Land Use Plan.

City of Port Hueneme General Plan

The following policy included in the City of Port Hueneme General Plan Conservation/Open Space/Environmental Resources Element is applicable to biological resources associated with the proposed project site:

Policy 1-2: Consider marine resources in coordination with state and federal agencies.

City of Port Hueneme Local Coastal Plan

The California Coastal Act is intended to protect the natural and scenic qualities of the California coastal zone. The coastal zone includes both Coastal Program land and water area. Approximately one-half of Port Hueneme's land area lies within the California coastal zone. Over half of the City area within the zone is part of the U.S. Naval Construction Battalion Center (USNCBC). Except for USNCBC property, the area within the coastal zone is subject to the California Coastal Act.

Port Hueneme's current Local Coastal Plan (LCP) was certified by the CCC in 1998. The LCP exists as an amendment to the existing General Plan and discusses the allowable land uses and applicable coastal resource issues for the planning areas within the City's coastal zone. The LCP continues to be implemented as the primary planning document for the coastal zone. Consistent with the coastal act's basic goal to "protect, maintain, and, where feasible, enhance and restore" the coastal zone, the Port Hueneme LCP identifies attainable goals and objectives specifically related to local conditions. The current LCP acts as the baseline for the revised program included as part of this General Plan Update.

4.2.3 Significance Thresholds

Significance thresholds are addressed according to the thresholds set forth by the County of Ventura 2011 Initial Study Assessment Guidelines, County of Ventura *Administrative Supplement to the State CEQA Guidelines*, County of Ventura General Plan, and the state *CEQA Guidelines*.

According to the County of Ventura Threshold Criteria and *CEQA Guidelines*, implementation of the proposed project would result in a significant impact upon biological resources if the project causes any of the following:

- Directly or indirectly reduce a species' population, reduce a species' habitat, increase habitat fragmentation, reduce or degrade a sensitive plant community, or restrict reproductive capacity of a species;
- Result in the direct reduction of or a substantial indirect impact to waters or wetland habitat. All waters and wetlands are considered important resources to Ventura County. Potentially significant impacts include vegetation removal, grading, flow obstruction/diversion, change in velocity/siltation/flow volume/runoff rate, fill placement, structure placement, road crossing construction, culvert/ underground pipe placement, disruptions to wetland/riparian plant communities, and interference with the hydrologic regime;
- In accordance with the State Coastal Act and the County's Local Coastal Program, virtually any direct reduction of, or indirect impact to, a coastal habitat, including riparian habitats, coastal dunes, beaches, or other sensitive natural communities, could be considered significant;
- Substantially interfere with the use of a migration corridor by fish or wildlife. This could occur through elimination of native vegetation, erection of physical barriers, habitat isolation, or

intimidation of fish or wildlife via introduction of noise, light, development, or increased human presence;

- Determination by a qualified biologist on a case-by-base basis that locally important species/communities are significantly impacted;
- Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance; or
- Conflict with the provisions of an adopted HCP, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan.

Ventura County *Initial Study Assessment Guidelines* were updated in April 2011. The thresholds of significance for biological resources were amended to provide for more detailed explanation for determining project impact significance; however, the general thresholds as outlined above are still applicable. The update to the thresholds does not change the project-level impact analysis below.

4.2.4 Project-Level Impact Analysis

Impacts assessed to biological resources from the project include direct and indirect impacts. Direct impacts are those that affect the biological resources such that those resources are not expected to recover to their pre-impacted state (e.g., permanent development of a site through grading and building of structures). Direct impacts may be considered temporary or permanent (e.g., the installation of a pipeline is considered a direct and temporary impact, whereas the construction of a building is considered a direct and permanent impact). Indirect impacts occur secondary to the project's direct impacts, such as changes in general plant composition due to loss of substrate or other factors that may affect resources such as noise, dust, and lighting. Indirect impacts may be considered temporary or permanent depending upon the situation; for example, the dust or noise levels associated with the construction of the new building is considered an indirect and temporary impact, whereas the support functions of a structure (such as the parking lot), would have indirect and permanent impacts such as lighting and storm water runoff.

Directly or indirectly reduce species population, reduce species habitat, increase habitat fragmentation, reduce or degrade a sensitive plant community, or restrict reproductive capacity of a species?

Construction

Vegetation Communities/Habitats

The majority of the proposed J Street Drain project consists of urban developed land (UD). Within the northern survey area, the J Street Drain is a concrete lined channel with surrounding residential and commercial development. Project construction within the northern survey area would occur entirely within the concrete-lined channel, which is developed (Figure 4.2-8). Therefore, no impacts to sensitive vegetation communities within the northern survey area would occur during construction. However, the southern survey area supports four sensitive vegetation communities: CBM; SCSM; OW; and SFD. One sensitive vegetation community, OW, would be temporarily, directly impacted by project construction (Figure 4.2-9 and Table 4.2-4).

Table 4.2-4. Project Impacts to Vegetation Communities

Habitat Type	Existing Acreage Within the Survey Area	Project Impacts (acres)
Coastal Brackish Marsh (CBM)	2.98	0.0
Disturbed Habitat (DH)	6.76	0.54
Urban/Developed (UD)	32.44	6.73
Eucalyptus Woodland (EW)	1.18	0.13
Open Water (OW)	2.27	1.80
Southern Coastal Salt Marsh (SCSM)	8.26	0.0
Southern Foredune (SFD)	2.6	0.0
Total	56.49	9.20

Construction activities associated with the proposed project would block tidal flow into the J Street Drain as the drain is deconstructed, excavated, and re-lined with concrete. This would essentially temporarily eliminate the OW habitat within the J Street Drain since the area would have to be dry during construction activities. EW located on the west side of the J Street Drain and within the southern survey area would be removed during construction activities. EW located on the eastern side of the J Street Drain would not be impacted by the proposed project. The impacted area of EW is located within the City of Port Hueneme. Impacts to EW are not considered significant since the habitat is nonnative and is not considered sensitive, threatened, or endangered by the CDFG or the USFWS. Construction activities located within the lagoon portion of the project area would result in an impact to OW. Impacts to OW habitat would be considered significant and require mitigation. Disturbed habitat (DH) areas are not considered sensitive; therefore, impacts to this vegetation community would be less than significant. However, since construction activities would occur within and immediately adjacent to sensitive habitat, indirect impacts to OW, CBM, SFD, and SCSM would occur. Indirect impacts include disturbance associated with significant noise levels and increased intrusion of workers/equipment. These indirect impacts are considered significant and mitigation is required.

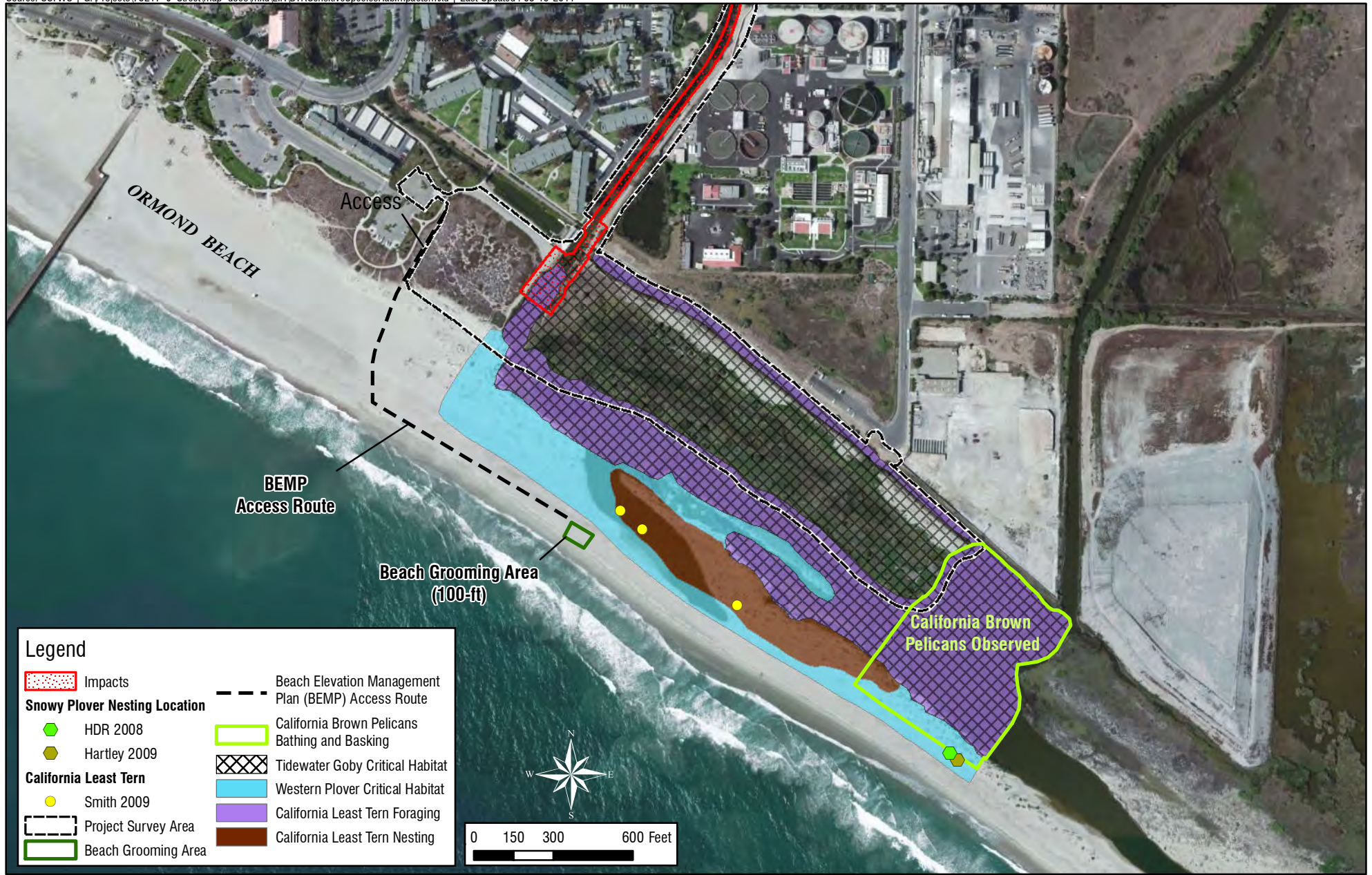
Sensitive Botanical Species

Two sensitive botanical species have the potential to occur on site: Ventura marsh milkvetch and saltmarsh bird's beak. Appropriate habitat occurs within the southern survey area of the project site within the SFD located along the northeastern boundary of the lagoon and in the northwestern corner of the project survey area. Construction of the proposed project would not impact SFD within the project survey area. In addition, during the general biology survey (conducted during the growing season), these species were not observed on site. The Ventura marsh milkvetch is a perennial species and would have been detected at the time of the survey. There were no species of saltmarsh bird's beak observed during the survey. Therefore, construction of the proposed project would not result in an impact to sensitive plant species and no mitigation is required.



Project Impacts - Southern Vegetation Communities

FIGURE 4.2-9



Project Impacts to Critical Habitat and Observed Sensitive Wildlife Species

FIGURE 4.2-10

Sensitive Wildlife Species

Belding's Savannah Sparrow

Despite the presence of SCSM, no Belding's savannah sparrows were observed within the project area during any of the biological field surveys conducted for the proposed project. Given the number and timing of survey activities, Belding's savannah sparrow should have been detected if it was breeding within the survey area. Since no Belding's savannah sparrows were identified during the survey, the proposed project is not anticipated to substantially affect the species. Impacts would be less than significant.

California Brown Pelican

During the general biological survey, the California brown pelican was observed foraging, basking, and bathing within the general vicinity of the southern survey area of the project site. However, suitable nesting habitat for the species does not occur within the project area. Therefore, impacts to nesting brown pelicans would not occur and impacts to this species would be considered less than significant.

California Least Tern

A focused California least tern survey was conducted within the southern survey area by Davenport Biological Services (August 2008), and CDFG sponsored breeding surveys of the Ormond Beach Area were conducted in 2009 and 2010. Potential nesting and foraging habitat for the California least tern occurs on site. However, the proposed project would not impact potential tern nesting habitat due to the distance between the potential nesting habitat and the project impact area (Figure 4.2-10). Additionally, although suitable habitat for this species occurs within the southern survey area, the species was not observed nesting on site during the protocol survey. Therefore, direct impacts to potential tern habitat would be less than significant.

Foraging habitat for the California least tern occurs within the project survey area. Should construction occur within the breeding season, indirect impacts (i.e., construction noise, lighting, etc.) to the species may occur. Approximately 0.31 acres of foraging habitat for the California least tern occurs within the project area. Dewatering of the work area upstream of the coffer dam during the breeding season would temporarily remove a small portion of the total foraging habitat during Phase I construction (Figure 4.2-10). In addition, sediment eroded as a result of construction activities may enter the lagoon and potentially increase the turbidity of the water. This would significantly impact the ability of California least terns to forage in the lagoon. Therefore, impacts to the California least tern foraging habitat would be considered significant and require mitigation.

Western Snowy Plover

Suitable habitat for the western snowy plover occurs within the southern survey area, as determined during focused surveys for the species conducted by Davenport Biological Services (August 2008), and breeding surveys sponsored by CDFG in 2009 and 2010. Construction of the proposed project would not impact SFD located on site, which is considered potential plover nesting habitat. In addition, a focused survey was conducted for the species and none were observed on site or within the project survey area. The absence of plover within the project survey area, and specifically within onsite SFD, may be attributed to the frequency of human disturbance. Therefore, direct impacts to potential plover habitat would be less than significant. However, nesting plovers were observed adjacent to the survey area to the

east and project construction could result in temporary indirect impacts to the species. These impacts are considered significant and, therefore, mitigation is required.

Light-footed Clapper Rail

Suitable habitat for the light-footed clapper rail occurs within the southern survey area. However, the species was not observed within or adjacent to the project survey area during protocol surveys conducted by Davenport Biological Services (August 2008). Impacts to the light-footed clapper rail would not occur due to project construction.

In addition, a large population of California ground squirrels (*Spermophilus beecheyi*) inhabits the southern tip of the project site. California ground squirrels may prey on the eggs and chicks of ground nesting birds such as light-footed clapper rails. The suitable nesting area is also degraded due to the presence of exotic invasive plants (e.g., sweet clover, crab grass, and ice-plant). These influences have reduced the size of suitable habitat for the light-footed clapper rail within the project survey area. Therefore, although suitable habitat for the light-footed clapper rail occurs in the project survey area, due to low quality of this habitat and the potential for predation, it is not anticipated that the light-footed clapper rail would utilize this habitat.

Tidewater Goby

Suitable tidewater goby habitat occurs within the southern survey area at the outlet of J Street Drain to the lagoon. The Ormond Beach Lagoon has been designated as critical habitat for the federally endangered tidewater goby. The northern survey area consists of a concrete channel and does not qualify as suitable goby habitat. In the southern survey area, the project proposes to install a cofferdam within the lagoon. This area would be drained and used in the construction of the southern portion of the drain, the 40-foot sand ramp, and for the construction work area. The ramp would begin at the terminus of the concrete drain and would serve as a transition between the newly constructed drain and the natural substrate of the lagoon. Natural sand substrates are used by gobies for burrowing during breeding. The drained portion of the lagoon, including the 40-foot ramp, would occur within potential burrowing habitat for the tidewater goby and, therefore, would directly impact designated critical habitat for the species (Table 4.2-5 and Figure 4.2-10). In addition, tidewater gobies have been observed in J Street Drain adjacent to the Hueneme Drain Pump Station. Although this area, which is concrete-lined, does not support reproduction, the species can forage there.

Table 4.2-5. Project Impacts to Tidewater Goby Critical Habitat

Tidewater Goby Critical Habitat	Existing Acres in Survey Area	Project Impacts
On site	18.1	0.57 ¹

¹ Impacts to tidewater goby habitat would be temporary.

The project could directly impact tidewater gobies as a result of construction in areas where the species is known to occur. Impacts to goby critical habitat would be temporary within the confines of the cofferdam (including the sand ramp) and would eventually return to a more natural state as influenced by tidal movement and other lagoon conditions. Temporary loss of foraging areas within the existing concrete-lined channel (not designated as critical habitat) would also occur during construction. Erosion of soils or other materials into the lagoon during construction may increase water turbidity, which would result in an impact to goby foraging. If coffer dam construction and site dewatering occurs during the peak breeding

periods of late spring/early summer and late summer/early fall, the project could adversely affect active burrows and eggs. Any impacts to tidewater goby and its habitat, including foraging and critical habitat, are considered significant. Therefore, project construction would result in significant impacts and mitigation is required.

Raptor Habitat, Nesting, and Foraging

Although nesting or foraging raptors were not observed during the general biological survey, potential nesting and foraging habitat occur within the project area (e.g., EW). A portion of EW is located along the west side of the existing drain in the southern survey area. This woodland would be removed during construction activities. Should migratory birds, including raptors, occupy or nest in the EW during construction, a significant impact would result. In addition, several species of migratory birds were observed nesting and foraging within the lagoon portion of the project survey area. Although the impact associated with the removal of the trees is less than significant because EW is not a native or sensitive habitat, the consequential impacts to migratory birds, including raptors, would be considered significant. Thus, mitigation is required to reduce impacts to migratory birds to below a level of significance. Additionally, noise generated from construction activities due to project implementation could exceed acceptable noise levels set by the USFWS and may result in an indirect impact to nesting migratory birds. Therefore, indirect impacts to nesting migratory birds, including raptors, would be considered significant and mitigation is required.

Operation

Vegetation Communities/Habitats

Operation of the proposed project entails the functioning of the J Street Drain with increased capacity and some maintenance activities. Therefore, operational activities are not anticipated to impact vegetation communities or habitats because the drain, a concrete-lined channel, would generally function as it does under existing conditions and no new impacts would result from the increased drain capacity. Some maintenance activities, such as sediment removal and vegetation control, have the potential to result in operational impacts to the OW habitat found in the southern survey area. However, best management practices (BMPs) established in the District's Final Program EIR for Environmental Protection Measures for the Ongoing Routine Operations and Maintenance Program would be implemented to avoid significant impacts. Specifically, BMP-2, as described in Table 1.9-1 in Section 1.0 of this DEIR, requires measures to prevent downstream water quality impacts (e.g., to open water habitat) during concrete channel cleaning. BMP-3 requires stabilization of temporary stockpiles during channel cleanouts to prevent migration of sediments into the channel. BMP-15 requires the District to mitigate/replace native wetland or riparian vegetation removed from areas adjacent to the facility. Implementation of BMP-2, BMP-3, and BMP-15 would preclude significant impacts to vegetation communities/habitats associated with maintenance activities.

Furthermore, the modification of the bed, bank, and/or vegetation in a natural drainage (and certain man-made drainages) is regulated by the CDFG under Section 1600 et seq. of the Fish and Game Code. Such modifications require an SAA, which would preclude impacts to vegetation communities without appropriate mitigation. Additionally, activities that result in the discharge of dredged or fill material in watercourses (such as bank stabilization and excavation) are also regulated by the USACE under Section 404 of the CWA. Issuance of a 404 permit also requires a 401 Water Quality Certification by the RWQCB. Approval and issuance of a 404 permit and 401 Water Quality Certification would ensure that vegetation communities/habitats are not significantly impacted by the function of the J Street Drain. The CDFG, USACE, and RWQCB are public agencies committed to protecting and preserving natural

resources. The proposed project is required from a regulatory standpoint to coordinate and comply with the regulations and policies of these agencies. Therefore, by coordinating with the CDFG, USACE, and RWQCB and complying with applicable regulations and District Operations and Maintenance BMPs, operational impacts to vegetation communities/habitats would be less than significant.

Sensitive Botanical Species

Although two sensitive botanical species, the Ventura marsh milkvetch and saltmarsh bird's beak, have the potential to occur within the SFD habitat on site, these species were not observed at the time of the general biological survey. Therefore, it is not anticipated that operation of the proposed project would impact sensitive botanical species.

Sensitive Wildlife Species

Belding's Savannah Sparrow

No Belding's savannah sparrows were observed in the project area during any of the biological field surveys conducted for the proposed project. Therefore, no operational impacts are anticipated. Impacts would be less than significant.

California Brown Pelican

Suitable nesting habitat for the California Brown Pelican does not occur within the project area. Therefore, it is not anticipated that function of the drain or associated maintenance activities would impact this species. Operational impacts would be less than significant.

California Least Tern

Due to the distance between the J Street Drain and the potential California least tern nesting habitat, it is not anticipated that operation of the proposed project would impact nesting California least terns (Figure 4.2-10). However, maintenance activities such as sediment removal and vegetation control have the potential to occur within California least tern foraging habitat. These maintenance activities may indirectly impact California least tern by creating noise, light, and disturbance resulting from human presence. However, BMPs have been proposed in the Final Program EIR for the Environmental Protection Measures for the Ongoing Routine Operations and Maintenance Program adopted by the District in May 2008. Specifically, BMP-4, as described in Table 1.9-1 in Section 1.0 of this DEIR, requires that a qualified biologist conduct nesting bird surveys prior to maintenance activities near riparian habitat. BMP-8 and BMP-22 further require surveys before maintenance activities, along with implementation of avoidance measures, and relocation as needed. These measures also require the District to consult with CDFG and USFWS on appropriate avoidance and relocation measures if California least terns are observed in or near the work area during pre-maintenance surveys. Consultation shall occur prior to conducting any work that would affect this species. Implementation of BMP-4, BMP-8, and BMP-22 would preclude indirect impacts associated with maintenance activities. Therefore, indirect impacts are considered less than significant.

Western Snowy Plover

Although suitable habitat for the western snowy plover occurs in the vicinity of the project impact area, no plovers were observed during the time of survey on site or within the project survey area. The absence

4.2 Biological Resources

of plover may be attributed to the frequency of human disturbance. Therefore, because no western snowy plovers were observed on site, operational impacts would be less than significant.

Light-footed Clapper Rail

No light-footed clapper rails were observed on site at the time of survey. The potential habitat within the project survey area is of low quality and puts nesting birds, such as the light-footed clapper rail, at risk of predation by California ground squirrel. Therefore, light-footed clapper rail is not anticipated to occur in the project area. Operational impacts would be less than significant.

Tidewater Goby

Suitable habitat for the tidewater goby occurs within the project area. Upon completion of construction activities, it is not anticipated that any other impacts to tidewater goby would occur. It should be noted that the deepening of the channel (by approximately four feet) would change the existing water levels in the lagoon. However, the lagoon is a dynamic system where the water levels fluctuate. The natural sandy substrate of the lagoon bottom would be replaced on the dewatered earthen lagoon bottom, including the transition ramp, upon completion of construction, restoring tidewater goby breeding habitat prior to operations. Similar to existing conditions, maintenance activities such as sediment removal and vegetation control have the potential to impact tidewater gobies and their foraging habitat at the south end of J Street Drain. However, BMPs have been proposed in the Final Program EIR for the Environmental Protection Measures for the Ongoing Routine Operations and Maintenance Program adopted by the District in May 2008 that would be implemented in the J Street project. Specifically, BMP-8 and BMP-22, as described in Table 1.9-1 in Section 1.0 of this DEIR, require surveys before maintenance activities, along with implementation of avoidance measures, and relocation as needed. These measures also require the District to consult with CDFG and USFWS on appropriate avoidance and relocation measures if tidewater gobies are observed in or near the work area during pre-maintenance surveys. Consultation shall occur prior to conducting any work that would affect this species. Implementation of BMP-8 and BMP-22 would preclude direct and indirect impacts associated with maintenance activities. Therefore, operational impacts to tidewater goby are anticipated to be less than significant.

Raptor Habitat, Nesting, and Foraging

Several species of migratory birds were observed nesting and foraging within the lagoon portion of the project survey area. Indirect impacts such as noise, light, and the presence of humans resulting from maintenance activities may disturb migratory birds. However, BMPs have been proposed in the Final Program EIR for the Environmental Protection Measures for the Ongoing Routine Operations and Maintenance Program adopted by the District in May 2008. Specifically, BMP-4, as described in Table 1.9-1 in Section 1.0 of this DEIR, requires that a qualified biologist conduct nesting raptor surveys prior to maintenance activities near riparian habitat. Implementation of BMP-4 would preclude indirect impacts associated with maintenance activities. Therefore, indirect impacts are considered less than significant.

Beach Elevation Management Plan

Vegetation Communities/Habitats

The access route to, and on, the beach for periodic sand berm grooming activities would follow the same pathway that lifeguards and beach maintenance vehicles use on a daily basis to reach the beach. It should be noted that the BEMP access route and grooming location would only be used periodically to groom the

sand berm to a specific maximum height in advance of a storm event, as specifically defined in Section 3.6 of the EIR. While BEMP access is anticipated to follow the established route used daily by lifeguard patrol vehicles, this route occurs adjacent to potentially sensitive habitat. Should grooming activities occur within the established route, it is anticipated that potentially significant impacts may occur to sensitive vegetation communities. However, in the event that the BEMP is implemented, a qualified biologist would be on site to monitor activities and avoid impacts to sensitive vegetation communities to the greatest extent feasible. Vegetation communities located within the grooming location were not mapped during the general biological survey; however, the selected location would coincide with that established during an emergency grooming event conducted in October 2010. This location consisted of open sandy beach, as did the access route (Figure 4.2-10). By following past practice, sensitive dune habitat would be avoided. Grooming would require advance coordination and potential permitting with the CCC, CDFG, Los Angeles RWQCB, USACE, and USFWS. BMPs established in the District's Final Program EIR for Environmental Protection Measures for the Ongoing Routine Operations and Maintenance Program (see discussion of Operations Impacts above) to protect biological resources, including sensitive plant communities, would be implemented during the BEMP as they are during existing operations and maintenance activities. Therefore, impacts to sensitive vegetation communities would be less than significant.

Sensitive Botanical Species

The potential for sensitive plant species to occur along the BEMP access route and grooming location is low due to the frequent disturbance in the area. Should grooming activities occur within the established route, it is anticipated that less than significant impacts would occur to sensitive botanical species. If the BEMP were to be implemented, a qualified biologist would be on site to monitor activities and direct workers around potential sensitive botanical species to the greatest extent feasible. Direct impacts would be unlikely, as the access route and grooming location would coincide with open sandy beach. Grooming would require advance coordination and potential permitting with the CCC, CDFG, Los Angeles RWQCB, USACE, and USFWS. BMPs established in the District's Final Program EIR for Environmental Protection Measures for the Ongoing Routine Operations and Maintenance Program (see discussion of Operations impacts above) to protect biological resources, including sensitive plants, would be implemented during the BEMP as they are during existing operations and maintenance activities. Therefore, impacts to sensitive botanical species would be less than significant.

Sensitive Wildlife Species

Belding's Savannah Sparrow

The access route to the grooming location would follow the same pathway that the lifeguards and beach maintenance vehicles use on a daily basis to reach the beach. During the general biological survey conducted by HDR, the BEMP access area was not surveyed as it is outside of the project survey area. However, observations of portions of this area were made opportunistically during the focused California least tern and western snowy plover survey (Appendix D) conducted for the project. No Belding's savanna sparrows were identified during the surveys. Nonetheless, in the event the BEMP would be activated, a qualified biologist would be on site to monitor activities and avoid impacts to habitat that could support Belding's savannah sparrow to the greatest extent feasible. Therefore, implementation of the BEMP is not anticipated to affect Belding's savannah sparrow. Impacts would be less than significant.

California Brown Pelican

The BEMP access route and grooming location occur adjacent to known basking habitat for the California brown pelican. Therefore, potentially significant impacts to the California brown pelican would occur as a result of BEMP implementation. If the BEMP were to be activated, impacts would occur over a brief period of time, as work near the basking habitat would be completed and equipment removed within a few hours. In addition, a qualified biologist would be on site to monitor activities and avoid impacts to potential brown pelicans to the greatest extent feasible. Any direct impacts to the species would require assessment after the grooming, as detailed in the BEMP. This includes coordination and potential permitting with the CCC, CDFG, Los Angeles RWQCB, USACE, and USFWS. Grooming would require advance coordination and permitting. BMPs established in the District's Final Program EIR for Environmental Protection Measures for the Ongoing Routine Operations and Maintenance Program (see discussion of Operations impacts above) to protect biological resources, including brown pelicans and their habitat, would be implemented during the BEMP as they are during existing operations and maintenance activities. Therefore, impacts to California brown pelican would be less than significant.

California Least Tern

The BEMP access route and grooming location occur adjacent to nesting and foraging habitat for the California least tern. Therefore, potential impacts to the California least tern habitat would occur as a result of BEMP implementation. California least terns nest south of the project, near the Reliant power plant, in a loose colony numbering about 60 pair. They forage in the lagoon and offshore. Occasionally, three to five pair nest between the lagoon and the shore. In the event of BEMP implementation, work would occur in the fall or winter, during the storm season. California least tern would not be directly impacted because this species is absent from the project area between mid-September and early May. By October, they have migrated out of the area. A qualified biologist would be on site to monitor activities and avoid impacts to potential California least tern nesting habitat. Grooming would require advance coordination and potential permitting with the CCC, CDFG, Los Angeles RWQCB, USACE, and USFWS. BMPs established in the District's Final Program EIR for Environmental Protection Measures for the Ongoing Routine Operations and Maintenance Program (see discussion of operations impacts above) to protect biological resources, including least terns and their habitat, would be implemented during the BEMP as they are during existing operations and maintenance activities. Therefore, impacts to California least tern would be less than significant.

Western Snowy Plover

The BEMP access route and grooming location occur within designated critical habitat for the western snowy plover. However, this route and grooming location will avoid all nesting sites used by the western snowy plover in 2008, 2009, and 2010. The snowy plovers nest in dune areas that are lightly vegetated. The main breeding area is near the Reliant power plant where about 30 pair regularly nest. One to four nests are found each year in the dunes between the lagoon and the shoreline. Plovers nest from April to September. Unlike the terns, they also winter in the area. Throughout the year they forage by running along the beach above the waterline in search of insects. The BEMP would be implemented during the rainy season and is not likely to overlap with the WSP breeding season. Therefore, direct impacts to the WSP nests are not anticipated as a result of BEMP implementation. In the event the BEMP would need to be activated, impacts would occur over a brief period of time, as work in or near suitable habitat would be completed and equipment removed within a few hours. A qualified biologist would be on site to monitor activities and avoid impacts to western snowy plovers to the greatest extent feasible. Impacts to potential nest sites (lightly vegetated dunes) would be avoided by ensuring that grooming occurs exclusively on

4.2 Biological Resources

open sandy beach. Grooming would require advance coordination and potential permitting with the CCC, CDFG, Los Angeles RWQCB, USACE, and USFWS. BMPs established in the District's Final Program EIR for Environmental Protection Measures for the Ongoing Routine Operations and Maintenance Program (see discussion of Operations impacts above) to protect biological resources, including western snowy plovers, would be implemented during the BEMP as they are during existing operations and maintenance activities. Therefore, impacts to western snowy plover would be less than significant.

Light-footed Clapper Rail

The BEMP access route and grooming location would occur within beach habitat. These areas are not located within potential nesting and foraging habitat for the light-footed clapper rail. Therefore, no impacts to the light-footed clapper rail would occur as a result of BEMP implementation.

Tidewater Goby

The Ormond Lagoon is designated critical habitat for the tidewater goby; the surrounding beach habitat is not critical habitat. Natural breaching of the lagoon into the Pacific Ocean occurs during winter storm events when the lagoon level rises and heavy surf combine to overtop the beach sand between them. Although gobies may be washed into the ocean, the main population persists in the lagoon. Mechanical breaching of the lagoon under non-winter storm conditions is considered "take" of tidewater gobies by USFWS and would be a significant impact under CEQA.

In January 2010, the beach berm rose to an elevation such that water in the lagoon did not overtop the berm and instead flowed northward flooding the upstream residential and commercial/industrial properties, including the OWWTP. To avoid this public health and safety problem in the future, the BEMP was developed. Periodic grooming (grading via mechanical equipment) to reduce the elevation of the sand berm would occur when the sand berm height exceeds a target safe elevation above which flooding of the properties to the north would occur. Beach grooming was selected instead of lagoon breaching to mimic natural conditions and avoid direct impacts to tidewater gobies. Under a grooming regime, the lagoon would breach under natural conditions when storm water runoff and heavy surf cause the lagoon water surface elevation to exceed the groomed berm height.

To avoid direct impacts to tidewater gobies and their habitat, the BEMP access route and beach grooming activities would occur within beach habitat. A qualified biologist would be on site to monitor activities and ensure potential impacts to tidewater gobies are avoided to the greatest extent feasible by directing equipment away from the lagoon edge and monitoring the height of the berm. In addition, BMPs established in the District's Final Program EIR for Environmental Protection Measures for the Ongoing Routine Operations and Maintenance Program (see discussion of Operations impacts above) to protect biological resources, including tidewater gobies, would be implemented during the BEMP as they are during existing operations and maintenance activities.

Implementation of the BEMP would avoid take of tidewater gobies, resulting in a less than significant impact under CEQA. BEMP approval by the CCC, CDFG, Los Angeles RWQCB, USACE, and USFWS would occur concurrent with or subsequent to approval of this EIR, and followed by appropriate permitting.

USFWS Consultation

On February 3, 2010, the District met with Chris Dellith of the USFWS. Aspects of the project affecting tidewater goby were discussed. It was determined that breaching the lagoon would be disruptive to

nesting birds and could cause take of gobies. Instead, an emergency response plan that would manage the sand berm height but avoid breaching directly was preferable. Such an event should only occur during the winter rains which are outside of the avian breeding season.

Coordination with agencies and implementation of BMPs established in the District's Final Program EIR for Environmental Protection Measures for the Ongoing Routine Operations and Maintenance Program are stipulations of the BEMP and are considered project design features. Therefore, when considered in combination with the avoidance of direct lagoon breaching, impacts to tidewater goby would be less than significant.

Raptor Habitat, Nesting, and Foraging

The BEMP access route and grooming location would occur within beach habitat. Work would be limited to a few hours duration on a single day for each grooming event. This area has little to no vegetation or trees that would support migratory birds, including raptors. The access route is anticipated to use the established lifeguard patrol route, which is used daily by lifeguard patrol vehicles. Daily use of the patrol route would make the area unlikely to support any nesting or foraging migratory birds. Therefore, implementation of the BEMP would result in less than significant impacts to migratory birds, including raptors.

Result in the direct reduction of, or a substantial indirect impact to, waters or wetland habitat?

Construction

The wetland delineation performed for the proposed project identified USACE wetlands east of, but not within, the project impact area (Figure 4.2-11). During project construction, there is potential for temporary indirect water quality impacts to occur to wetlands downstream of the project site. This impact is considered potentially significant and mitigation is required.

The proposed improvements to the J Street Drain would impact state/federal jurisdictional areas, including waters of the U.S. (Table 4.2-6 and Figure 4.2-11). These areas do not exhibit the characteristics of wetland habitat, as defined by the Ventura County Initial Study Assessment Guidelines and the federal Clean Water Act; however, because the CDFG, CCC, and USACE take jurisdiction over these areas, impacts are discussed in conjunction with wetlands. Improvements to the J Street Drain would include removing the existing concrete channel, lowering the elevation of the drain, modifying the contour of the drain to a rectangular configuration, and replacing existing concrete lining and rock riprap. As a result of these improvements, temporary construction-related impacts would occur to federal waters of the U.S and waters of the state. Specifically, reconstruction of the existing concrete channel would impact 7.90 acres of federal and state jurisdictional areas; however, because the channel is concrete-lined under existing conditions, impacts within the existing channel are considered less than significant. Additionally, construction activities would temporarily impact the natural substrate of the lagoon (0.29 acre) through the installation of a cofferdam within the lagoon and the subsequent pumping/draining of ground and lagoon water from the construction/work area. Impacts to the natural substrate of the lagoon are considered significant and require mitigation.

Impacts to federal wetlands and/or waters of the U.S. would require consultation with USACE to obtain a Section 404 Permit and associated Section 401 Water Quality Certification via the RWQCB. Impacts to state jurisdictional areas would also trigger the need for a 1600-series SAA with CDFG and Clean Water Certification pursuant to the Porter-Cologne Act or CWA. Similarly, any impacts to CCC jurisdictional areas would require a Coastal Zone Development Permit from the CCC under the Local Coastal Program.

Table 4.2-6. Project Impact to Federal/State Jurisdictional Areas

Federal/State Jurisdictional Areas	Existing Acres (Project Survey Area)	Temporary Project Impacts ²
Federal Wetlands	6.83	0.0
Federal waters of the U.S. and waters of the State – Concrete Channel	7.90 7.90	
Federal waters of the U.S. and waters of the State – Natural Substrate	2.73 0.29	
CDFG Wetlands ¹	10.92 0.0	
CCC Jurisdictional Areas ¹	15.73 4.81	¹
Total	n/a	8.19³

¹ CDFG and CCC jurisdictional area totals include USACE wetland and waters of the U.S. acreages.

² Project impacts to state and federal jurisdictional areas would be temporary.

³ Mitigation for project impacts to jurisdictional areas would be satisfied through 1:1 restoration of temporarily impacted waters.

Operation

Upon completion of construction activities, the J Street Drain would function generally as it does under existing conditions, but with greater capacity. As identified above, the new channel would effectively replace the existing channel with the same habitat functions and values. Maintenance activities would occur as they do under existing conditions and would not result in new impacts. In addition, BMPs established in the District's Final Program EIR for Environmental Protection Measures for the Ongoing Routine Operations and Maintenance Program would be implemented to avoid significant impacts to wetland habitat. Specifically, BMP-2, as described in Table 1.9-1 in Section 1.0 of this DEIR, requires measures to prevent downstream water quality impacts during concrete channel cleaning. BMP-3 requires stabilization of temporary stockpiles during channel cleanouts to prevent migration of sediments into the channel and downstream wetlands. BMP-15 requires the District to mitigate/replace native wetland or riparian vegetation removed from areas adjacent to the facility. Implementation of BMP-2, BMP-3, and BMP-15 would preclude significant impacts to wetland habitats associated with maintenance activities. Therefore, operation of the proposed project is anticipated to result in a less than significant operational impact to wetland habitat.

Beach Elevation Management Plan

The BEMP access route would occur within the existing lifeguard patrol route which is used daily. A wetland delineation was not conducted in this area. In the event of BEMP activation, a qualified biologist would be on site to monitor activities and ensure impacts to wetlands are avoided by limiting all work to open sandy beach areas. Therefore, impacts to wetlands resulting from implementation of the BEMP would be less than significant.



Project Impacts - Federal/State Jurisdictional Areas

FIGURE 4.2-11

In accordance with the State Coastal Act and the County's Local Coastal Program, virtually any direct reduction of, or indirect impact to, a coastal habitat, including riparian habitats or other sensitive natural communities, could be considered significant?

Construction

As discussed above in the analysis regarding impacts to wetlands, construction of the proposed project would result in temporary impacts to federal waters of the U.S. and state jurisdictional areas within the Coastal Zone. However, neither reconstruction of the existing concrete-lined channel nor the creation of a temporary transition ramp and replacement of 0.05 acres of rock riprap would permanently reduce the extent of existing coastal riparian habitat. Indirect impacts to adjacent coastal habitats may occur during construction through degradation of water quality (e.g., erosion leading to increased turbidity). This impact is considered significant and mitigation is required.

Operation

Operation of the proposed project would occur in generally the same manner as under existing conditions, but with a greater drain capacity. Additionally, maintenance activities would occur as they do under existing conditions and would not result in a new impact. In addition, BMPs established in the District's Final Program EIR for Environmental Protection Measures for the Ongoing Routine Operations and Maintenance Program would be implemented to avoid significant impacts to coastal habitat. Specifically, BMP-2, as described in Table 1.9-1 in Section 1.0 of this DEIR, requires measures to prevent downstream water quality impacts (e.g., to open water habitat) during concrete channel cleaning. BMP-3 requires stabilization of temporary stockpiles during channel cleanouts to prevent migration of sediments into the channel and downstream wetlands. BMP-15 requires the District to mitigate/replace native wetland or riparian vegetation removed from areas adjacent to the facility. Implementation of BMP-2, BMP-3, and BMP-15 would preclude significant impacts to coastal habitats associated with maintenance activities. Therefore, operation of the proposed project would result in a less than significant impact to coastal habitat.

Beach Elevation Management Plan

The BEMP access route and grooming location are located within coastal habitat. In the event of BEMP activation, a qualified biologist would be on site to monitor activities and avoid impacts to coastal habitat by limiting all work to open sandy beach areas. Sands removed from the grooming location would be smoothed evenly over adjacent sandy beach, outside of the surf zone, in a manner that would blend with adjacent topography. In addition, BMPs established in the District's Final Program EIR for Environmental Protection Measures for the Ongoing Routine Operations and Maintenance Program would be implemented to avoid impacts to coastal habitat. Therefore, impacts to coastal habitat resulting from implementation of the BEMP would be less than significant.

Substantially interfere with the use of a migration corridor by fish or wildlife. This could occur through elimination of native vegetation, erection of physical barriers, or intimidation of fish or wildlife via introduction of noise, light, development, or increased human presence?

Construction

No regional biological corridors or linkages were identified within the project alignment. Therefore, no identified corridors or linkages would be impacted by construction of the proposed project. However, the Ormond Beach Lagoon and adjacent dune/beach area may be a staging area for migratory birds.

4.2 Biological Resources

Additionally, the Lagoon could provide a potential local corridor for tidewater goby. Therefore, construction of the proposed project would potentially impact the movement of these species. Impacts are considered significant and mitigation is required.

Operation

Operation of the J Street Drain upon completion of construction activities is anticipated to occur as it does under existing conditions, with the same habitat functions and values. Therefore, operation of the drain is not anticipated to interfere with the use of a migration corridor by fish or wildlife. However, maintenance activities associated with the operation of the proposed project have the potential to temporarily impact migratory birds that may be using Ormond Beach Lagoon as a staging area as well as tidewater goby. BMPs established in the District's Final Program EIR for Environmental Protection Measures for the Ongoing Routine Operations and Maintenance Program would be implemented to avoid significant impacts to a migration corridor. These impacts are considered less than significant.

Beach Elevation Management Plan

The BEMP access route would occur within coastal habitat, which is not considered a migration corridor or linkage. Movement of existing tidewater gobies into the Pacific Ocean is known to occur naturally when lagoon water is released to the Pacific Ocean, permitting transfer of individuals between Ormond Lagoon, Mugu Lagoon, Santa Clara River estuary, Ventura River estuary, and other coastal water bodies. This transfer encourages greater genetic diversity within the species and provides opportunities for recolonization of suitable but unoccupied habitats. This has occurred recently at Mugu Lagoon, where tidewater gobies were previously known to be extirpated (Personal Communication, Chris Dellith, July 27, 2011). Therefore, because the BEMP access route and Ormond Beach Lagoon are not considered migration corridors or linkages, and BEMP grooming would facilitate natural breaching and tidewater goby movement during periods of storm water inflow, implementation of the BEMP and grooming of the lagoon would not adversely impact fish and wildlife movement. Impacts would be less than significant.

Determination by a qualified biologist on a case-by-base basis that locally important species/communities are significantly impacted?

Construction

Please see the analysis above regarding direct and indirect impacts related to reduction in species population, reduction in species habitat, and restriction of reproductive capacity of species. No other locally important species or communities would be significantly impacted by construction of the proposed project.

Operation

Please see the analysis above regarding direct and indirect impacts related to reduction in species population, reduction in species habitat, and restriction of reproductive capacity of species. No other locally important species or communities would be significantly impacted by operation of the proposed project.

Beach Elevation Management Plan

Please see the analysis above regarding direct and indirect impacts related to reduction in species population, reduction in species habitat, and restriction of reproductive capacity of species. No other locally important species or communities would be significantly impacted by implementation of the BEMP.

Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?

Construction

The cities of Oxnard and Port Hueneme do not have local policies or ordinances protecting biological resources. Although some EW habitat would be removed during construction activities, these trees are not protected under any local ordinance or policy. Therefore, construction of the proposed project would not conflict with a local policy or ordinance. No impact would result.

Operation

Operation of the proposed project would not conflict with any local policy or ordinance protecting biological resources because none exist. Biological resources in the City of Oxnard are protected by the City of Oxnard General Plan and Local Coastal Program. The proposed project would be consistent with both the General Plan and Local Coastal Program. No impact is identified.

Beach Elevation Management Plan

Implementation of the BEMP would not result in any conflicts with a local policy or ordinance protecting biological resources because none exist. Biological resources in the City of Oxnard are protected by the City of Oxnard General Plan and Local Coastal Program. The proposed project would be consistent with both the General Plan and Local Coastal Program. No impact is identified.

Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?

Construction

The cities of Oxnard and Port Hueneme have not adopted individual habitat conservation plans. Habitat conservation in these cities is regulated by the respective General Plans and any state requirements, such as the California Coastal Act, which requires cities to prepare Local Coastal Programs/Plans. By coordinating construction activities to the satisfaction of the CDFG, USACE, and RQWCB, and by obtaining a Section 404 Permit and associated Section 401 Water Quality Certification, construction of the proposed project would not conflict with the City of Ventura County General Plan Coastal Area Plan, the City of Oxnard General Plan, the City of Oxnard Local Coastal Program, the City of Port Hueneme General Plan, or the City of Port Hueneme LCP. Impacts would be less than significant.

Operation

Upon completion of construction activities, operation of the proposed project would occur as it does under existing conditions, with the same habitat values and functions. Additionally, maintenance activities would occur as they do under existing conditions and would not result in new impacts.

Therefore, operation of the proposed project would not conflict with any General Plan or LCP applicable to the project site. No impact would result.

Beach Elevation Management Plan

The BEMP access route and grooming location occur within coastal habitat. However, this area is used daily by lifeguards and beach maintenance vehicles. Implementation of the BEMP is not anticipated to conflict with any plans that protect the coastal habitat. The BEMP is intended to prevent significant impacts associated with flooding and may work with the General Plans and LCPs applicable to the project site. No adverse impacts to the applicable plans are anticipated with implementation of the BEMP. Impacts would be less than significant.

4.2.5 Cumulative-Level Impact Analysis

Directly or indirectly reduce species population, reduce species habitat, or restrict reproductive capacity of a species?

Construction

Vegetation Communities/Habitats

Construction of the proposed project would result in significant project-level impacts to OW habitat. Additionally, significant indirect impacts would occur to CBM, SFD, and SCSM. These impacts, in conjunction with cumulative projects, have the potential to result in a cumulative construction impact to vegetation communities/habitats as cumulative projects are constructed concurrent with the proposed project. Since these vegetation communities only occur within coastal habitat, only cumulative projects within the coastal zone have the potential to contribute to a cumulative impact to vegetation communities/habitats. Projects in the coastal zone, as defined by the CCC, are subject to stringent development regulations, including the City of Oxnard Local Coastal Program and the City of Port Hueneme LCP. These plans are certified by the CCC to protect resources in the coastal zone, including OW, CBM, SFD, and SCSM. Development projects in the coastal zone are required to comply with these programs and cannot be carried forward without this requirement. Additionally, during construction, cumulative projects are subject to implementing a Stormwater Pollution Prevention Plan (SWPPP) to prevent polluted runoff from entering storm drains and ultimately the Pacific Ocean. Therefore, cumulative projects are not anticipated to substantially impact OW during construction. Therefore, by maintaining consistency with the City of Oxnard Local Coastal Program and the City of Port Hueneme LCP, and by implementing project-specific SWPPPs, cumulative impacts to OW would be less than significant.

Sensitive Botanical Species

No sensitive botanical species were identified on the project site at the time of survey. Therefore, project-level impacts would be less than significant. Because no sensitive botanical species were identified on site, despite the presence of suitable habitat, the proposed project would not substantially contribute to a cumulative impact. Cumulative impacts to sensitive botanical species are considered less than significant.

Sensitive Wildlife Species

California Brown Pelican

Suitable nesting habitat for the California brown pelican does not occur within the project area. Therefore, the proposed project would not contribute to a cumulative impact to the California brown pelican. Cumulative impacts would be less than significant.

California Least Tern

The proposed project, in conjunction with cumulative projects, has the potential to substantially degrade California least tern nesting habitat during construction activities. However, project-level impacts associated with the proposed project would be temporary and would not substantially affect the California least tern in the long-term. Additionally, California least tern was not observed nesting within the proposed project boundaries at the time of survey. The construction of cumulative projects is not anticipated to impact the California least tern because none are located within the coastal zone, with the exception of the Advanced Purification Facility and a portion of Water Pipeline 2. However, these projects are either currently or soon to be under construction, and therefore would not coincide with construction of the proposed project. The J Station Elimination project is within the coastal zone, but was completed before the J Street Drain project and did not affect least tern habitat. Therefore, cumulative construction-related impacts to the California least tern would be less than significant.

Western Snowy Plover

Suitable habitat for the western snowy plover occurs within the project area; however, no individuals were observed at the time of survey. Nesting plovers were observed adjacent to the project area and indirect project-level impacts were considered significant. If construction of cumulative projects occurs concurrent with construction of the proposed project, there is potential for cumulative construction-related impacts to western snowy plover to occur. However, due to the distance between the proposed project and cumulative projects, the proposed project would not substantially contribute to an indirect, construction-related cumulative impact. Cumulative impacts would be less than significant.

Light-footed Clapper Rail

No light-footed clapper rails were observed on site at the time of survey despite the presence of suitable habitat. Therefore, the proposed project is not anticipated to contribute to a significant cumulative construction-related impact. Cumulative impacts would be less than significant.

Tidewater Goby

Cumulative construction-related impacts to tidewater goby are not anticipated due to the distance between cumulative projects and the lagoon. Additionally, implementation of site-specific SWPPPs would prevent construction-related runoff from cumulative projects from impacting the proposed project site. Therefore, cumulative construction-related impacts to tidewater goby would be less than significant.

Raptor Habitat, Nesting, and Foraging

Implementation of the proposed project, in conjunction with cumulative projects, is not anticipated to result in significant construction-related cumulative impacts to migratory birds, including raptors. Although the proposed project would result in project-level impacts to potential migratory bird and raptor

nesting habitat (EW), this impact would not contribute to a significant cumulative impact since cumulative projects are not expected to impact nesting habitat. If cumulative projects would impact potential migratory bird habitat, avoidance measures would be implemented per the MBTA and a substantial cumulative impact would be avoided. Therefore, since the proposed project would not contribute to a significant cumulative level impact, construction-related cumulative impacts would be less than significant.

Operation

Vegetation Communities/Habitats

Operation of the proposed project, in conjunction with operation of cumulative projects, is not anticipated to result in a significant cumulative impact to vegetation communities/habitats due to the distance between the proposed project and cumulative projects. Any runoff from cumulative projects would be regulated by an NPDES permit, which would preclude the potential for cumulative projects to impact OW habitat associated with the proposed project. In addition, future maintenance activities would essentially be identical to current activities. Cumulative operational impacts would be less than significant.

Sensitive Botanical Species

Operation of the proposed project would not impact sensitive botanical species since the function of the drain would remain the same and maintenance activities would not result in new impacts. Also, no sensitive botanical species were identified on site during surveys. Therefore, the proposed project would not contribute to a cumulative impact to sensitive botanical species and impacts would be less than significant.

Sensitive Wildlife Species

California Brown Pelican

Operation of the proposed project, in conjunction with cumulative projects, is not anticipated to result in a cumulative impact to the California brown pelican. The drain would function as it does under existing conditions, but with greater capacity, and maintenance activities would not result in new impacts. Therefore, cumulative impacts would be less than significant.

California Least Tern

Operation of the proposed project, in conjunction with cumulative projects, is not anticipated to result in a cumulative impact to the California least tern. The drain would function as it does under existing conditions, but with greater capacity, and maintenance activities would not result in new impacts. Therefore, cumulative impacts would be less than significant.

Western Snowy Plover

No western snowy plovers were observed in or near the J Street Drain at the time of survey despite the presence of suitable habitat. Also, maintenance activities would be the same as existing practice and would not result in new impacts. Therefore, the proposed project would not contribute to a significant cumulative operational impact to western snowy plover. Cumulative impacts would be less than significant.

Light-footed Clapper Rail

No light-footed clapper rails were observed on the project site at the time of survey. Therefore, the proposed project would not contribute to a cumulative operational impact to the light-footed clapper rail. Cumulative impacts to the light-footed clapper rail would be less than significant.

Tidewater Goby

The proposed project, in conjunction with cumulative projects, is not anticipated to result in a significant cumulative operational impact to the tidewater goby. Any runoff from cumulative projects, all of which are located upstream of areas occupied by tidewater gobies, would be regulated by an NPDES permit and this would preclude substantial volumes of polluted runoff from impacting tidewater goby habitat. Cumulative impacts would be less than significant.

Raptor Habitat, Nesting, and Foraging

Operation of the proposed project and cumulative projects is not anticipated to result in significant impact to migratory birds, including raptors, since the drain would function as it does under existing conditions and maintenance activities would not result in new impacts. Therefore, cumulative operational impacts would be less than significant.

Beach Elevation Management Plan

Vegetation Communities/Habitats

The BEMP is anticipated to be used periodically and equipment would be located on site for only a few hours. In addition, the BEMP route would follow that used daily during lifeguard patrols. The grooming area would be located on open sandy beach. The limited time frame is all that is necessary to groom the beach to a safe elevation. Since this impact would be a very short and temporary period of time, and sensitive habitat would be avoided, a less than significant cumulative impact to vegetation communities/habitats is identified.

Sensitive Botanical Species

No sensitive botanical species occur within the BEMP access route or the grooming location. Therefore, the proposed project would not contribute to a significant cumulative impact. No cumulative impact is identified for implementation of the BEMP.

Sensitive Wildlife Species

The BEMP is anticipated to be used periodically and equipment would be located on site for only a few hours. The limited time frame is all that is necessary groom the beach to a safe elevation. Additionally, the grooming area would be located on open sandy beach and none of the cumulative projects would occur within habitat used by sensitive wildlife species. Since this impact would occur over a very short and temporary period of time, would avoid sensitive habitat, and would occur outside the breeding season, a less than significant cumulative impact to sensitive wildlife species is identified.

Result in the direct reduction of, or a substantial indirect impact to, waters or wetland habitat.

Construction

Due to the distance between the proposed project and cumulative projects, it is not anticipated that a significant cumulative impact to waters or wetlands would result during construction. No cumulative projects would be constructed at Ormond Beach Lagoon or are expected to substantially affect other waters or wetlands and, therefore, cumulative construction-related impacts would be less than significant.

Operation

Due to the distance between the proposed project and cumulative projects, it is not anticipated that a significant cumulative impact to waters or wetlands would result during operation, as the project level impact is less than significant and other projects are not expected to cause adverse operational effects to waters or wetlands. Also, no cumulative projects are located at Ormond Beach Lagoon. Therefore, cumulative operation-related impacts would be less than significant.

Beach Elevation Management Plan

The BEMP is anticipated to be used periodically and equipment would be located on site for only a few hours. The limited time frame is all that is necessary to groom the beach to a safe elevation. In addition, this activity would encourage the natural breaching that occurs annually during the storm season. Since this impact would be a very short and temporary period of time, and would not adversely affect existing waters or wetlands, a less than significant cumulative impact to wetlands is identified.

In accordance with the State Coastal Act and the County's Local Coastal Program, virtually any direct reduction of, or indirect impact to, a coastal habitat, including riparian habitats or other sensitive natural communities, could be considered significant?

Construction

Due to the distance between the proposed project and cumulative projects, it is not anticipated that a significant cumulative impact to coastal habitat would result during construction. No cumulative projects would be constructed within the coastal zone concurrent with the proposed project. Therefore, cumulative construction-related impacts would be less than significant.

Operation

No cumulative projects are located within coastal habitat. Therefore, no cumulative operational impacts to coastal habitat would occur.

Beach Elevation Management Plan

The BEMP is anticipated to be used periodically and equipment would be located on site for only a few hours. The limited time frame is all that is necessary to groom the beach to a safe elevation, encouraging natural seasonal breaching in response to storm flow. Since this impact would be a very short and temporary period of time, a less than significant cumulative impact to coastal habitat is identified.

Substantially interfere with the use of a migration corridor by fish or wildlife. This could occur through elimination of native vegetation, erection of physical barriers, or intimidation of fish or wildlife via introduction of noise, light, development, or increased human presence?

Construction

The proposed project and cumulative projects are not anticipated to result in a significant cumulative impact to the use of a migration corridor during construction. No cumulative projects would impact Ormond Beach Lagoon and, therefore, the movement of tidewater goby and migratory birds would not be affected. Cumulative construction-related impacts would be less than significant.

Operation

Operation of cumulative projects would not impact Ormond Beach Lagoon. Therefore, the proposed project would not contribute to a significant cumulative operational impact to wildlife movement. Cumulative impacts would be less than significant.

Beach Elevation Management Plan

The BEMP is anticipated to be used periodically and equipment would be located on site for only a few hours outside the breeding season. The limited time frame is all that is necessary to groom the beach to a safe elevation, encouraging natural seasonal breaching in response to storm flow. Natural breaching would allow movement of tidewater gobies from Ormond Lagoon to other coastal waterbodies. Since this impact would be a very short and temporary period of time, would ultimately facilitate natural tidewater goby movement, and would not interfere with least tern migration, a less than significant cumulative impact to migration corridors is identified.

Determination by a qualified biologist on a case-by-base basis that locally important species/communities are significantly impacted?

Construction

As identified above, cumulative impacts to vegetation communities, sensitive botanical species, and sensitive wildlife species would be less than significant. No other locally important species or communities would be affected and cumulative construction-related impacts would be less than significant.

Operation

As identified above, cumulative impacts to vegetation communities, sensitive botanical species, and sensitive wildlife species would be less than significant. No other locally important species or communities would be affected and cumulative operational impacts would be less than significant.

Beach Elevation Management Plan

As identified above, cumulative impacts to vegetation communities, sensitive botanical species, and sensitive wildlife species would be less than significant. No other locally important species or communities would be affected and cumulative impacts from the BEMP would be less than significant.

Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?

Construction

The cities of Oxnard and Port Hueneme do not have local policies or ordinances protecting biological resources. Therefore, cumulative construction-related impacts would be less than significant.

Operation

The cities of Oxnard and Port Hueneme do not have local policies or ordinances protecting biological resources. Therefore, cumulative operational impacts would be less than significant.

Beach Elevation Management Plan

The cities of Oxnard and Port Hueneme do not have local policies or ordinances protecting biological resources. Therefore, cumulative impacts resulting from the BEMP would be less than significant.

Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?

Construction

Construction of the proposed project would not conflict with any local, regional, or state habitat conservation plan or any land use plan intended to preserve habitat. Therefore, the proposed project would not contribute to a cumulative impact. Cumulative construction-related impacts would be less than significant.

Operation

Operation of the proposed project would not conflict with any local, regional, or state habitat conservation plan or any land use plan intended to preserve habitat. Therefore, the proposed project would not contribute to a cumulative impact. Cumulative operational impacts would be less than significant.

Beach Elevation Management Plan

Implementation of the BEMP would not conflict with any local, regional, or state habitat conservation plan or any land use plan intended to preserve habitat. Therefore, implementation of the BEMP would not contribute to a cumulative impact. Cumulative impacts would be less than significant.

4.2.6 Mitigation Measures

Vegetation Communities/Habitat

To mitigate for direct and indirect impacts to sensitive vegetation communities, the proposed project shall implement the following mitigation measure:

- BIO-1** During construction, the sensitive vegetation communities adjacent to the project alignment shall be flagged as Environmentally Sensitive Areas (ESA) and construction fencing shall be

installed to avoid indirect impacts to these areas. Staging areas shall be identified during construction for lay down areas, equipment storage, etc., to avoid indirect impacts to the ESA. Biological monitoring shall occur during construction activities to prevent indirect impacts. Temporarily disturbed OW habitat, which falls under CDFG, USACE, and RWQCB jurisdiction, would be restored at a 1:1 ratio upon completion of construction. OW habitat restoration shall include replacement on the lagoon bottom of the top 12 inches of original soil to ensure suitable conditions for tidewater gobies and benthic fauna.

Botanical Species

Implementation of the project would not result in impacts to sensitive botanical species. Therefore, no mitigation is recommended.

Wildlife Species

BIO-2 To prevent a decrease in the foraging success of California least terns, temporary construction fencing (“snow fencing”) shall be installed surrounding the project site to delineate the construction footprint.

BIO-3 To prevent a decrease in the nesting and foraging success of the California least tern and western snowy plover, phase 1 construction activities adjacent to California least tern and western snowy plover habitat shall occur outside of the breeding season (March to September) to the extent feasible. If construction activities must occur during the breeding season, Phase 1 project initiation through coffer dam installation shall be completed before May 1 to avoid direct impacts to foraging terns. In addition, a preemptive nesting bird survey shall be conducted by a qualified biologist to determine if any nesting terns or plovers are located near proposed activities. If nesting birds are found, all construction activities shall be prohibited within a 300-foot buffer area surrounding the nest location during the breeding season until the young have fledged. The qualified biologist shall ensure that the buffer area is appropriately defined with flagging and/or other means of suitable identification. The District shall consult with USFWS and CDFG in the event that nesting California least terns or western snowy plover are observed within 500 feet of the project area. If no nesting birds are found, construction activities could be conducted during the breeding season without restriction.

BIO-4 To prevent a decrease in the foraging success of California least terns and tidewater goby, silt fencing shall be installed prior to project construction between the project area and waters of Ormond Lagoon. For project activities within waters of Ormond Lagoon, dual silt fencing shall be installed around each work area to prevent/decrease the clouding of water within the lagoon as a result of potential runoff.

BIO-5 To avoid impacts to tidewater goby eggs, Phase 1 project initiation through coffer dam installation shall be completed before May 1, as the peak breeding season for this species extends from late spring through early summer, and again in late summer through early fall. Prior to the installation of the temporary cofferdam, a Section 10 (a)(1) (a) permitted tidewater goby biologist shall capture and relocate gobies to appropriate habitat located outside of the project area. The temporary cofferdam shall remain in place throughout construction activities south of Hueneme Road to prevent tidewater goby from entering the construction area from the lagoon. The biologist shall also be present during and after dewatering to ensure all gobies and other native fish are relocated to the lagoon prior to

construction. A suitable number of biologists working under the supervision of the permitted biologist shall be present during and immediately after the dewatering phase to ensure that all gobies are detected. In addition, the surface water pumps installed for the dewatering of the work area shall be screened (less than five mm mesh size). A permitted tidewater goby biologist shall also be required to relocate any tidewater goby that may enter the work area from upstream.

- BIO-6** Although night construction is not anticipated, in the event that it becomes necessary, all lighting will be shielded to prevent illumination of the beach.

Raptor Habitat, Nesting, and Foraging

Although compliance with MBTA does not require compensation for the removal of nesting trees during construction, the implementation of VIS-2 requires replacement of all trees removed during shoring. This consists of those eucalyptus trees and large shrubs removed along the Surfside III property at the south end of the project site. The following measure is also proposed to protect nesting birds/raptors:

- BIO-7** In order to avoid conflicts with the federal MBTA, if construction is proposed during the migratory bird nesting season, a preconstruction survey shall be conducted by a qualified biologist for the eucalyptus woodland and Ormond Beach Lagoon/marsh area located within the project footprint. The breeding season is defined as February 15 to September 15. If nesting birds/raptors are found, all construction activities shall be prohibited within a 300-foot impact avoidance buffer area surrounding the nest location during the breeding season. In consultation with CDFG and/or USFWS, the buffer area may be reduced in the case of bird species/individuals accustomed to urban disturbance. The qualified biologist shall ensure that the avoidance buffer area is appropriately defined with flagging and/or other means of suitable identification. If no nesting birds/raptors are found, construction (including tree removal) could be conducted during the breeding season. Trees may be removed outside of the breeding season without restriction.

Wetlands

Temporary indirect impacts to waters and wetlands would be mitigated through measures that protect water quality, including BIO-4 and WQ-1 through WQ-4.

Jurisdictional areas

Temporary direct impacts to impacts to Waters of the U.S. and Waters of the State would be mitigated through BIO-1, which would restore OW habitat upon completion of construction.

4.2.6.1 Ventura County Watershed Protection District Best Management Practices

The Ventura County Board of Supervisors adopted the Ventura County Watershed Protection District (District) Final Program EIR for Environmental Protection Measures for the Ongoing Routine Operations and Maintenance Program Project No. 80030 in May 2008. The final document includes Best Management Practices (BMPs) that will be added to the District's Maintenance Activity Guidelines. The Operation and Maintenance Division staff will be responsible for ensuring the proper implementation of the BMPs on a routine, year-round basis. The Division staff will also be responsible for ensuring compliance with all permit conditions, conducting or employing qualified personnel for any required pre-

project site surveys or inspections, updating the Activity Guidelines sheets, instructing crews on BMPs, overseeing certain BMP implementation, documenting the implementation of the BMPs, and conducting any agency coordination.

The following BMPs will be implemented to minimize impacts during operation:

- *Prevent Discharge of Silt-Laden Water During Concrete Channel Cleaning.* The removal of sediments, vegetation, algae, and trash from fully lined improved channels for purposes of NPDES storm water permit compliance shall include measures to prevent the discharge of silt-laden water or pollutants to downstream unimproved channels with soft bottoms (Board Order No. 00-108; NPDES Permit No. CAS004002, adopted on July 27, 2000). These measures may include temporary downstream silt barriers (sand bags, straw bales, in-channel materials), silt fences, upstream diversion, etc. Per Section 401 Water Quality Certification requirements, a Water Diversion Plan would be needed for water diversion activities.
- *Location of Temporary Stockpiles.* Temporary stockpiles outside the channels or debris basins shall be stabilized by compacting or other measures if present at the work site from 1 December to 1 April. Silt fences, berms, or other methods shall be used to prevent sediments from being eroded from the temporary stockpile into the adjacent drainage. Temporary stockpiles may be placed in channel bottoms or debris basins if they are located on barren soil or areas with non-native weeds, and are not placed in such a manner that they would be exposed to flowing water. No temporary stockpiles shall be placed on the channel bed or banks during the period of 1 December to 1 April for more than the duration of the sediment removal work. Permanent stockpiles shall be located landward of the 100-year floodplain to the maximum extent feasible.
- *Survey for Habitat Prior to Routine Maintenance Work.* Prior to routine maintenance and repair activities performed within or adjacent to an earthen or earthen bottom channel or in-channel structure during the period 1 March to 1 August, a District biologist or consulting biologist shall determine if suitable habitat is present for riparian-dependent breeding birds in or within 400 feet of the work area. Suitable habitat is generally defined as dense or moderately dense willow or mulefat scrub or woodland with sufficient density and vegetative structure to support nesting and foraging.
 - Prior to routine maintenance and repair activities performed within or adjacent to an earthen or earthen bottom channel or in-channel structure that would disrupt foraging or nesting of raptors during the period 1 February to 1 August, a District biologist or consulting biologist shall survey the 400 foot radius around the project site for raptor nest initiation or occupation.
 - Channel cleanout shall be postponed to 1 August if such habitat is present in the work area or within 200 feet of the work area, or until nestlings have fledged if the District determines that riparian bird or raptor nesting is occurring in the habitat area. This restriction does not apply if the nesting birds are house sparrows, house finches, crows, cowbirds, or other common upland species or introduced species. If any federally or state listed birds are found nesting within the 200 or 400 foot survey radius, the District shall consult with CDFG for the applicability of this restriction.
- *Avoid Disturbance to Native Beach or Wetland Species.* The District shall avoid areas of beach dune vegetation when accessing storm drain outlets at the beach with vehicles for routine maintenance. The removal of native beach or wetland plants that are located at or near the beach outlet shall be minimized. Prior to the removal of obstructive sand or vegetation from a beach outlet, qualified District personnel shall determine if suitable habitat (i.e., a brackish waterbody)

is present at the outlet for tidewater gobies, and if the species is present. In addition, qualified District personnel shall determine if suitable habitat is present along the vehicle access route across the beach for foraging or nesting snowy plovers and California least terns. If any of these sensitive species are present at the storm drain outlet or along the access route, the District will either postpone the routine maintenance work until these species are no longer present, or follow avoidance and/or relocation procedures approved by U.S. Fish and Wildlife Service (USFWS). This BMP shall not apply if there is a threat of a storm and the outlet is plugged. The District shall contact CDFG and USFWS when California least terns, snowy plover, or tidewater gobies are observed during the pre-project surveys for consultation.

- *Aquatic Pesticide BMPs.* The District shall follow the most up-to-date BMPs and the monitoring and reporting requirements in the District's NPDES Stormwater Quality Management Plan (Board Order No. 00-108; NPDES Permit No. CAS004002, adopted on July 27, 2000, available at http://vcstormwater.org/documents/workproducts/stormwater_quality_mangement_plan.pdf) when applying herbicides to channels and basins. The District shall also follow BMPs in the Ventura County Application Protocol for Pesticides, Fertilizers, and Herbicides (included in Appendix I).
- *Leave Patches of Vegetation in Channel Bottom.* The District shall minimize vegetation removal or reduction from earthen or earthen bottom channels to the least amount necessary to achieve the specific maintenance objectives for the reach. Vegetation removal in the channel bottom shall be conducted in a non-continuous manner, allowing small patches of in-channel vegetation to persist provided it will not adversely affect conveyance capacity.
- *Leave Herbaceous Wetland Vegetation in Channel Bottom.* Consistent with the maintenance objectives, the District shall avoid removal or reduction of emergent herbaceous wetland vegetation on the channel bottom that is rooted in or adjacent to the low flow channel or a pond in order to provide cover for aquatic wildlife. This same type of vegetation shall be protected during the removal of taller obstructive woody vegetation on the channel bottom.
- *Avoid Road Base Discharge.* The District shall implement measures to prevent the discharge of road base, fill, sediments, and asphalt beyond a previously established road bed when working adjacent to channels and basin bottoms.
- *Mitigate/Replace Temporary Impacts to Habitat.* For repair of in-channel structures and features that results in the temporary disturbance of native wetland or riparian vegetation adjacent to the facility, the District shall restore native wetland or riparian vegetation in the affected work areas after the repair or reconstruction work. Restoration shall include planting or seeding native plants that were present prior to the work and/or are compatible with existing riparian vegetation near the work area. The District shall prepare a restoration plan for each repair project that specifies the limits of restoration, planting mix and densities, performance criteria for survival and growth, and at least a three-year maintenance and monitoring procedures. Restoration sites shall be located outside the limits of the repaired structure. If no suitable restoration site is available near the work area or the creation of a restoration area near the work area would conflict with flood control needs, the District shall select another location on District right-of-way in close proximity. If suitable restoration sites are not available, the District shall provide funds to a third party (public agency or non-profit organization) to implement the required mitigation in the same watershed as the impact. Habitat restoration under this BMP shall only occur if the affected areas support native wetland or riparian vegetation; no restoration is required for barren areas or areas dominated by non-native plants. The District shall submit all habitat restoration plans to CDFG prior to implementation.

- *Concrete Wash-Out Protocols.* The District shall implement appropriate waste management practices during on site concrete repair operations. Waste management practices will be applied to the stockpiling of concrete, curing and finishing of concrete as well as to concrete wash-out operations. Waste management practices shall be adequate to ensure that fluids associated with the curing, finishing and wash-out of concrete shall not be discharged to the channel or basin. Concrete wastes shall be stockpiled separately from sediment and protected by erosion control measures so that concrete dust and debris are not discharged to the channel or basin. The District shall determine the appropriate waste management practices based on considerations of flow velocities, site conditions, availability of erosion control materials and construction costs.
- *Water Diversion Guide.* Water diversion activities undertaken as part of routine repair and maintenance operations in improved and unimproved channels as well as debris basins shall follow the BMP guidance established as the Water Diversion Guide incorporated into the Final Program EIR addressing Environmental Protection Measures for the Ongoing Routine Operations and Maintenance Program, adopted by the District in May 2008.
- *Implementation of Integrated Pest Management.* The District shall inspect its critical and non-critical facilities regularly to document and identify the presence or absence of ground squirrels. The District shall develop and implement an Integrated Pest Management (IPM) program that identifies tolerance level, control thresholds and approved rodent control methods and/or combinations of methods at each District facility. Rodent control methods implemented at each facility shall be applied as needed and as appropriate for site conditions and the season. Methods implemented shall minimize potential primary and secondary hazards to non-target species. The District shall maintain a preventative IPM program with zero tolerance for ground squirrels for its critical facilities where failure would impact public safety. When rodent control becomes necessary at non-critical facilities, the District shall choose applicable, cost-effective treatment method(s) from the District's IPM program. Treatment options considered for each site shall include: trapping, habitat modification, alternative construction methods and materials, use of raptors, clean and rodenticide-treated bait stations, broadcast diphacinone and zinc phosphide with or without carcass collection, and other methods. As part of an ongoing monitoring program to determine the effectiveness of the squirrel control program, the District shall maintain uniform inspection records for each facility and all control efforts. The District shall conduct a staff training program that covers the IPM program including rodent issues, inspection and monitoring requirements, and treatment options.
- *Avoid Spills and Leaks.* The District shall ensure that all equipment operating in and near a watercourse, or in a basin, is in good working condition and free of leaks. No equipment maintenance or refueling shall occur in a channel or basin bottom. Spill containment materials must be on site or readily available for any equipment maintenance or refueling that occurs adjacent to a watercourse. In addition, all maintenance crews working with heavy equipment shall be trained in spill containment and response.
- *Biological Surveys in Appropriate Habitat Prior to Vegetation Maintenance.* Prior to any sediment removal, vegetation control (by herbicide application, mowing, or disking), or repair work in earthen or earthen bottom channels and basins that contain native aquatic, riparian, or wetland habitats suitable for sensitive fish and wildlife species, the District shall conduct appropriate field investigations to determine if any threatened, endangered, or sensitive species are present. If such species are determined to be present in or in close proximity to the work areas, the District shall reschedule the work when the species are not present. If it is necessary to conduct the work while the species are present or in proximity to the work areas, the District shall develop other avoidance or relocation measures in consultation with the CDFG, USFWS, or

National Oceanic and Atmospheric Administration (NOAA) Fisheries prior to conducting the work. If the work could affect state or federally listed species or their habitat, the District would employ avoidance or relocation measures approved by USFWS, NOAA Fisheries, or CDFG, as appropriate, for the maintenance program. This measure includes protection for the following threatened, endangered, or sensitive species that could occur at maintenance sites: tidewater goby, southern steelhead, trout, unarmored threespine stickleback, California redlegged frog, arroyo toad, least Bell's vireo, southwestern willow flycatcher, arroyo chub, southwestern pond turtle, two-striped garter snake, Cooper's hawk, sharp-shinned hawk, yellow warbler, yellow breasted chat, purple marlin, tri-colored blackbird, and long-eared owl.

4.2.7 Significance After Mitigation

Incorporation of the identified mitigation measures would reduce all potentially significant impacts to OW and other sensitive habitats, sensitive wildlife species, wetlands, jurisdictional areas, and nesting birds/raptors to below a level of significance. Specifically, mitigation measure BIO-1 would ensure that construction fencing is installed and sensitive vegetation communities are flagged to avoid direct and indirect impacts. By delineating sensitive areas, construction activities would be located and staged to avoid potential impacts. Similarly, implementation of mitigation measure BIO-2 would delineate adjacent California least tern foraging habitat to ensure it is not impacted by construction activities. Additionally, by implementing mitigation measure BIO-3, California least terns and western snowy plovers that may be foraging or nesting on or near the project site during the breeding season would be avoided during construction and maintenance activities. This would prevent any decline in foraging or nesting success for these species. Further, implementation of BIO-4 would result in the installation of silt fencing to prevent sediment and silt from degrading California least tern and tidewater goby habitat and impairing foraging success. BIO-4 in combination with WQ-1 through WQ-4 would also prevent indirect impacts to wetlands downstream of the project site by preventing degradation of their water quality. To further avoid impacts to tidewater goby, implementation of BIO-5 would install a temporary cofferdam and relocate any gobies that may be within the construction area. By constructing a coffer dam and relocating individuals, the tidewater goby population would be maintained to the greatest extent feasible. Although night construction is not anticipated, in the event that it becomes necessary, mitigation measure BIO-6 would ensure that all lighting will be shielded to prevent illumination of the beach. Additionally potential impacts to raptor and migratory bird nesting habitat would be avoided by implementing mitigation measure BIO-7 and conducting preconstruction surveys within EW habitat. By determining the presence/absence of migratory birds prior to construction activities, active nests can be avoided during construction and the nesting success of migratory birds would not be impacted. VIS-2 also ensures replacement of nesting trees removed during construction. Impacts to the natural substrate within federal and state jurisdictional areas would be reduced through implementation of mitigation measure BIO-1. Mitigation measure BIO-1 requires restoration of OW habitat upon completion of construction. Therefore, implementation of mitigation measures BIO-1 through BIO-7 would reduce impacts to biological resources to below a level of significance.

4.2.8 Response to Notice of Preparation Comments

During the Notice of Preparation (NOP) comment period, the CDFG sent a comment letter identifying stressors within the project area and requesting that a hydraulic model of the Ormond Beach Lagoon be prepared to assess potential biological impacts resulting from the proposed project. Additionally, the comment letter requests that the EIR include a full assessment of potential impacts to flora and fauna in the project area, a range of alternatives to the proposed project, and appropriate mitigation measures. The CDFG identified that a CESA permit and SAA may be required and recommended a 100-foot buffer be

4.2 Biological Resources

established between the outside edge of the riparian zone and each side of the J Street Drain. In response, a Biological Technical Report, Jurisdictional Wetland Delineation Report, and a focused bird survey report were prepared for the proposed project to assess impacts to biological resources. These reports are included as Appendix D of the EIR. As discussed in this section, the proposed project would result in potentially significant impacts to OW habitat, the California least tern, western snowy plover, tidewater goby, migratory birds, wetlands, and federal and state jurisdictional areas. However, with incorporation of mitigation measures BIO-1 through BIO-7, WQ-1 through WQ-4, and VIS-2, potentially significant impacts would be reduced to below a level of significance. Additionally, Section 5.0 of the EIR discusses a range of alternatives to the proposed project. This includes alternatives to the design of the channel and beach outlet. As discussed in Section 5.0, the range of alternatives would result in a similar level of impacts to biological resources as the currently-proposed project, with the exception of the No Project alternatives which would not impact biological resources. In compliance with the CDFG, the project applicant would apply for an SAA, in addition to a USACE Individual Permit, a Clean Water Certification, and a Coastal Development Permit, to regulate activities associated with the proposed project. With implementation of mitigation measure BIO-4, the proposed project is not anticipated to result in the take of any species protected under the CESA. Therefore, a CESA permit would not be required for the proposed project. No riparian habitat occurs within 100 feet of the project impact area; therefore, the existing conditions of the project area act as a natural buffer.

Also during the NOP comment period, the Ventura Audubon Society sent a letter requesting that the EIR include clarification regarding the Dike System Alternative and the Natural System Alternative and an analysis of impacts to California least tern, western snowy plover, and Belding's savannah sparrow. In response, the Dike System Alternative and the Natural System Alternative are discussed in detail in Section 5.0 of the EIR. Additionally, this section includes a discussion of potential impacts to California least tern, western snowy plover, and Belding's savannah sparrow. As discussed, the proposed project would result in potentially significant impacts to California least tern and western snowy plover. These impacts would be reduced to below a level of significance through implementation of mitigation measures BIO-1 through BIO-4. The proposed project would not result in significant impacts to Belding's savannah sparrow.

The State Coastal Conservancy also sent a comment letter during the NOP comment period expressing concern over potential impacts to tidewater goby and sensitive bird species resulting from project alternatives. In response, Section 5.0 of the EIR discusses potential impacts to tidewater goby resulting from project alternatives.

The County of Ventura Resource Management Agency requested during the NOP comment period that the EIR discuss potential impacts to special status species, wetland habitat, and coastal habitat. As discussed in this section, the proposed project would result in potentially significant impacts to special status species, including California least tern, western snowy plover, tidewater goby, and migratory birds. These impacts would be reduced to below a level of significance through implementation of mitigation measures BIO-1 through BIO-7. Additionally, this section identifies that the proposed project would result in temporary significant impacts to OW habitat. These impacts would be reduced through implementation of mitigation measure BIO-1. Temporary indirect impacts to wetlands would be reduced through implementation of BIO-4 and WQ-1 through WQ-4. No other sensitive habitats would be significantly impacted by the proposed project.

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4.3 WATER RESOURCES AND HYDRAULIC HAZARDS

This section addresses the relationship of regional and local watersheds/drainage, coastal processes, hydrology, and water quality within the project area. In particular, the relationship of the Ormond Beach Lagoon and potential project impacts is addressed. Additionally, the following documents were used in the preparation of this section and are included as technical appendices to this Environmental Impact Report (EIR):

Coastal Processes Assessment at Ormond Lagoon and Beach Memo. Prepared by HDR Engineering, Inc. March 2008 (Appendix C).

J Street Drain/Ormond Beach Lagoon Coastal Engineering Report. Prepared by HDR Engineering, Inc. November 2008 (Appendix C).

Sedimentation Study for the J Street Drain and Oxnard Industrial Drain Report. Prepared by HDR Engineering, Inc. March 2008 (Appendix C).

J Street Drain Sediment Transport Study for Proposed Outlet at Ormond Beach Lagoon. Prepared by HDR Engineering, Inc. August 2011 (Appendix C).

Ormond Beach Lagoon Sand Berm Management Technical Memo. Prepared by HDR Engineering, Inc. August 2011 (Appendix C).

Inland Flooding Study. Prepared by HDR Engineering, Inc. August 2011 (Appendix C).

~~*Groundwater Modeling Summary for the J Street Drainage Improvement Project, Oxnard, California*~~ *Hydrogeology Study Summary: J Street Drainage Improvement Project, Oxnard, California.* MU Hydrogeological and Environmental Services. ~~August~~ December 2011 (Appendix K).

4.3.1 Environmental Setting

4.3.1.1 Existing Conditions

Climate

The climate of the project area is mild during summer when high temperatures tend to be around 60° Fahrenheit (F) and cool during winter when temperatures tend to be around 50°F. The warmest month of the year is August with an average maximum temperature of 73.9°F, while the coldest month of the year is December with an average minimum temperature of 45.3°F. Average annual rainfall in the project area is 15.6 inches per year. Rainfall is concentrated during the winter months. The wettest month of the year is February with an average rainfall of 3.9 inches.

Hydrologic Setting

The Ventura County Watershed Protection District (District) is divided into six separate watersheds: Ventura River, Santa Clara River, Calleguas Creek, Malibu Creek, Cuyama River, and Coastal Creeks. The project area is located south of the Santa Clara River within the Santa Clara River Watershed and west of the Calleguas Creek Watershed (Figure 4.3-1). According to the Los Angeles Regional Water

4.3 Water Resources and Hydraulic Hazards

Quality Control Board (LARWQCB) Basin Plan, the project area is located in the Oxnard Hydrologic Subarea, which is part of the Oxnard Plain Hydrologic Area of the Santa Clara-Calleguas Hydrologic Unit.

Generally, surface water resources in the project vicinity include the Santa Clara River, Mugu Lagoon, Port Hueneme, the Channel Islands Harbor, the Mandalay Bay Canal System, McGrath Lake, and the Ormond Beach Lagoon.

Ormond Beach Lagoon

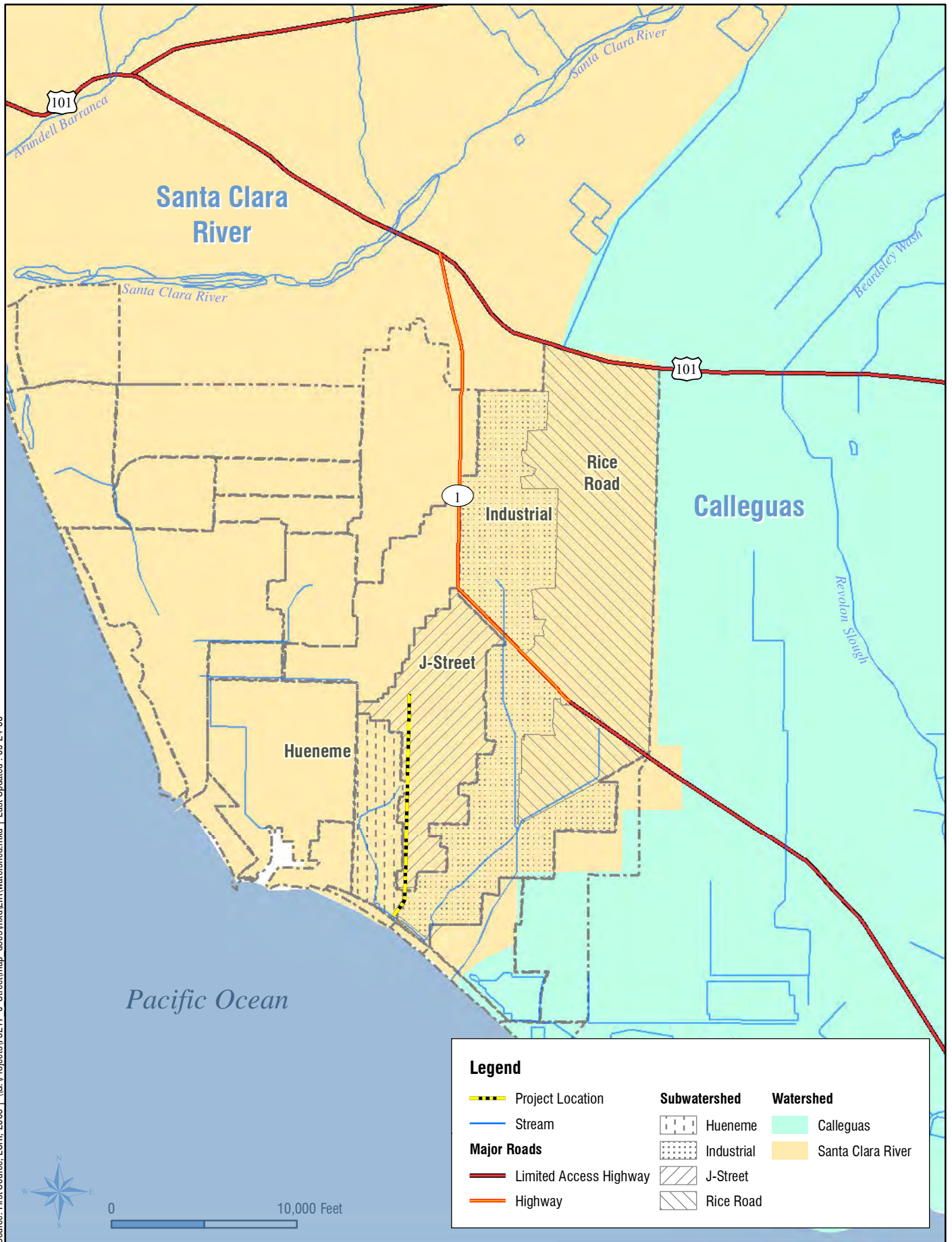
The Ormond Beach Lagoon is a complex collection of wetland, freshwater, estuarine, and marine habitats. The Basin Plan for the LARWQCB lists the beneficial uses of waterways in the region. Beneficial uses designated for Ormond Beach include: Industrial, Naval, Power, Recreation, Marine, Wildlife, Migratory/Endangered Species, and Shellfish. The Ormond Beach Lagoon beneficial uses are: Recreation, Estuary, Wildlife, Migratory/Endangered species, and Wetlands. Man-made drainage improvements of the nearby OID, Hueneme Drain, and J Street Drain caused a second small lagoon to develop near the end of the J Street Drain. Eventually, the two small lagoons became hydraulically connected and grew to the current configuration.

Under current conditions, the lagoon receives inflow throughout the year from the Hueneme Drain (pumped to the J Street Drain), J Street Drain, and OID. Water levels in the lagoon rise during the winter, and the sand berm on the beach that formed the lagoon may be breached due to the combined hydraulic head from stormwater flows and the erosion of the upper beach sand dunes from winter wave action. During the summer, wave actions do not erode the sand dunes, and as such, the lagoon remains impounded. Water levels in the lagoon during the summer and fall are controlled by a combination of base flows from Hueneme Drain and OID, evaporation, and seepage to and from the ocean through the beach sand.

Prior to 1992, the District mechanically breached the sand berm of the lagoon to lower water levels in the lagoon that caused backwater flooding in the J Street Drain and the OID. The District continued these practices on an as needed basis to drain the Ormond Lagoon and maintain a safe water level in the respective drains. District maintenance staff recall breaching the sand barrier up to a dozen times during the spring and summer seasons, but normally, mechanical breaching occurred four to six times per year. However, regulatory agencies were concerned that breaching of the sand berm and draining the lagoon was adversely affecting fish populations and degrading foraging habitat for sea and shorebirds. Further, several sensitive species of birds, including the California Least tern and snowy plover, nest at the sparsely vegetated dunes at Ormond Beach and utilize the aquatic fauna (mostly fish and invertebrates) present in the drains and lagoon area as a primary food source.

In response to agency concerns, in 1992 the District agreed to cease the mechanical breaching of the sand barrier to prevent potential harm to sensitive species and habitat. Cessation of this action resulted in the expansion of the lagoon and created a deep water condition in the J Street Drain and OID. At this time, the water levels in the lagoon are not actively managed. However, on January 18, 2010, the District breached the lagoon near its northwest corner under emergency regulatory authorizations from the U.S. Army Corps of Engineers (USACE), LARWQCB, U.S. Fish and Wildlife Service (USFWS), California Department of Fish and Game (CDFG), and California Coastal Commission (CCC). Breaching occurred in response to flooding and imminent electrical failure of the Oxnard Waste Water Treatment Plant (OWWTP). Electrical failure would have resulted in catastrophic release of untreated sewage to adjacent residential, commercial, and sensitive ecological areas (lagoon and Pacific Ocean). The International Paper Plant also sustained losses during this flood event, and Perkins Road was impassable.

Source: First Source: ESRI, 2006 | \\G:\Projects\75217 J Street\map_docs\mxd\EIR\watershed.mxd | Last Updated : 09-24-08



Watershed Area Map

FIGURE 4.3-1



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4.3 Water Resources and Hydraulic Hazards

In October 2010, the District obtained emergency authorizations to reduce the height of the beach sand berm because the lagoon water surface elevation was observed to be high, some flooding had been reported in the Surfside III community parking areas nearest the J Street Drain, and an impending storm had been forecast. The District groomed the sand berm to 6 inches above the lagoon water surface elevation on October 18, 2010. The grooming occurred on open sandy beach near the January 2010 breach location, but closer to the ocean. The storm did not generate sufficient runoff to naturally overtop the sand berm. The lagoon breached naturally on October 30, 2010 in response to a subsequent storm event. During the intervening dry period, the lagoon water surface elevation declined slightly as a result of underground seepage through the sand berm.

Lagoon Morphology and Breaching Process

Coastal processes including tidal, wave, and aeolian (wind) sediment transport play an important role in the nature and function of the Ormond Lagoon system, in particular, where the lagoon breaches the beach and opens an outlet to the Pacific Ocean.

Lagoon Geography and Morphology

Historic aerial photography, surveys, and maps reveal that the lagoon is naturally dynamic and that flows from OID, J Street and Hueneme Drains continue to shape the lagoon. Human modifications to upstream hydrology and beach sediment transport have contributed to the formation of the existing lagoon. Lagoon morphology is forced by upstream inflow, waves, tides, aeolian transport, and anthropogenic factors. A lagoon appears to have been historically present as part of the natural drainage system of the now channelized OID. That lagoon did not extend to the limits of the current lagoon between J Street and OID. Before the 2010 emergency breaching and grooming events, the cessation of mechanical breaching after 1992 had contributed to tendency of the lagoon to breach at one location. The breach had tended to form near OID, where the largest volume of flow originates.

Breaching at Ormond Beach Lagoon: Seaward and Landward

Breaching at the Ormond Beach Lagoon is caused by buildup of freshwater originating from J Street, Hueneme and Oxnard Industrial Drains and can be characterized as seaward breaching. The breaching process of coastal lagoon barriers is due to overflow induced by heavy runoff. Once the breach is established and upland discharge has significantly decreased, tidal exchange between the lagoon and ocean acts to maintain the breach. Waves transport sediment onshore and alongshore and the varying tide and wave run-up distribute the sediment along the shoreface. As tidal flow and freshwater runoff in the inlet become insufficient to remove all of the sand being transported by the waves, the breach will begin to close.

Water levels in the lagoon during rain storms are a function of the initial water level, beach conditions (elevation, width), and freshwater inflow. The expected maximum water level in the lagoon is regulated by the lowest beach crest elevation or the height of the sand berm. Though elevation across the sand berms is not uniform in space or constant in time, survey data suggest that the berm reaches its maximum elevation of approximately 11.6 feet National Geodetic Vertical Datum (NGVD) (14 feet North American Vertical Datum [NAVD]) in isolated dunes. Based on aerial surveys and other available data and under typical conditions, a representative elevation for the beach prior to breaching is approximately 7.6 feet NGVD (10 feet NAVD). The VCWPD maintained the berm during a recent emergency at elevation 6.5 feet \pm NGVD 1929, 6 inches above the water surface elevation in the lagoon.

4.3 Water Resources and Hydraulic Hazards

A water level gauge was installed by the District near the Hueneme Drain Pump Station in J Street Drain and operated from 2002 to 2005. A gauge was reinstalled in 2011. The data qualitatively indicate that the lagoon water levels generally rise and remain elevated above tidal levels during the summer months from May to September, and then rapidly decrease by 2 to 3 feet following breaches in early fall through the spring.

Water level data indicate that the breaches may form multiple times each year, by stormwater flows or by gradual water level rise. Where the drains meet the lagoon, a water level spike of about 1 foot has been observed just prior to breaching for moderate storm events. During recent breaches, water levels exceeded approximately 9.0 feet (NAVD) before breaching commenced and water level crests during breaching lasted from 30 minutes to a few hours.

Landward breaching at the lagoon is controlled by the ocean tide and wave conditions. Except at the existing breach area, the water level along the beach must exceed about 7.6 feet NGVD (10 feet NAVD) before landward breaching is likely to occur. This type of breaching would not be affected by the proposed project. There is no record of the tide level exceeding this elevation since the Santa Barbara gauge was installed in 1933. In addition, the highest tide recorded at the Santa Barbara gauge is 7.3 feet NAVD.

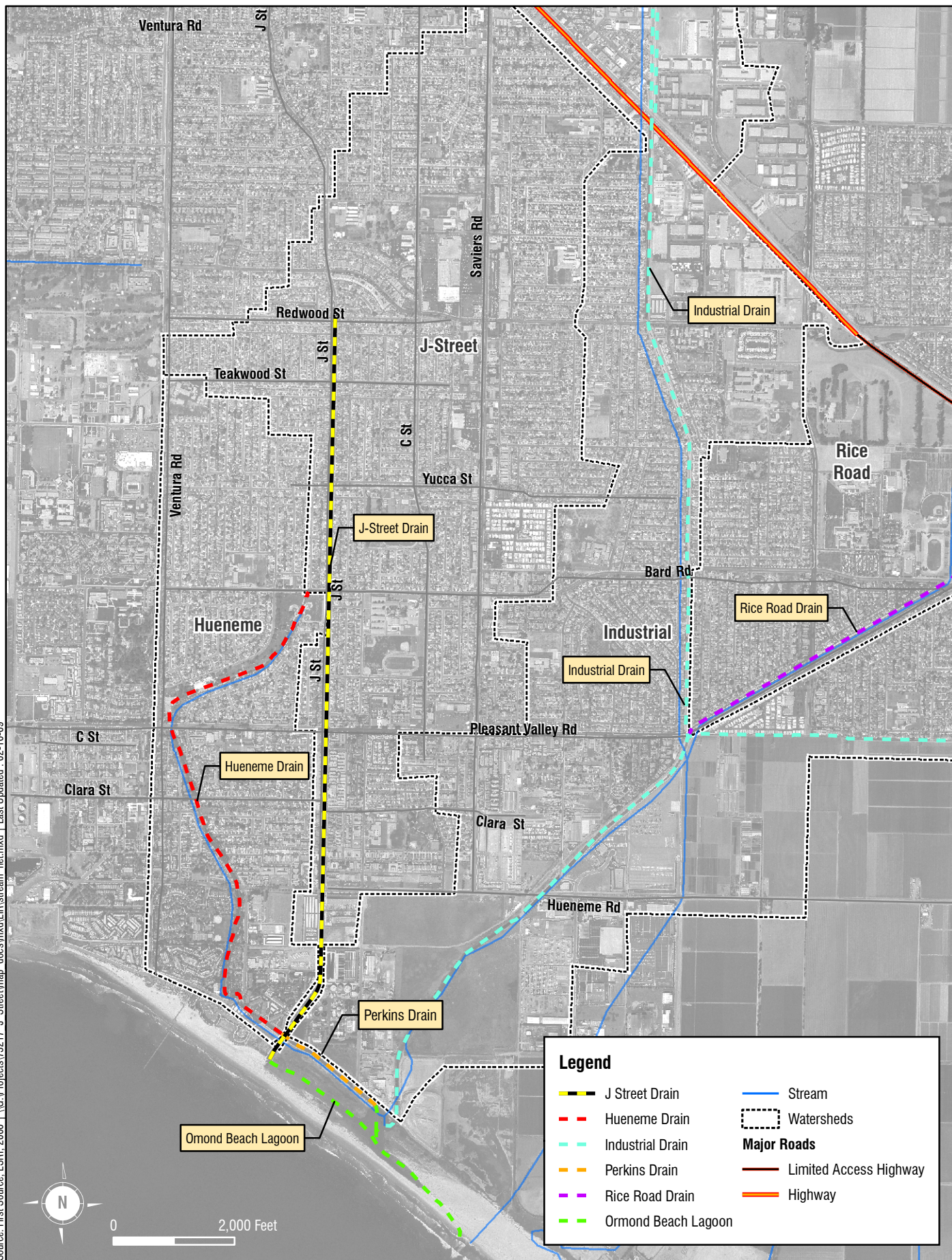
Stormwater Drainage

Stormwater runoff occurs when precipitation flows over the ground. Impervious surfaces such as driveways, parking lots, and streets prevent stormwater runoff from naturally soaking into the ground. Stormwater flows over both impermeable and permeable surfaces, collecting and transporting pollutants including pesticides, fertilizers, automobile fluids, yard waste, and soil, into streams, rivers, ponds, wetlands, and along the California coast, ultimately into the Pacific Ocean. These pollutants may cause serious deterioration and degradation of natural resources and habitats.

The City of Oxnard currently uses various storm drain facilities, which are maintained by the Public Works Department and the District flood control channels to handle larger stormwater runoff. In 1979, the City adopted a Master Plan of Drainage “to assist in making prudent decisions regarding flood protection needs.” The plan provides for the following needs: inventory existing facilities, define areas with deficiencies, plan needed facilities, and prepare a strategy for financing recommended works of improvement. The existing storm drain network does not have the capacity to accommodate increased runoff produced by full build-out of the 2020 General Plan. Therefore, while developers are required to convey drainage to the storm drain system and pay appropriate fees, storm drain capacity in the main lines may not be adequate. The Master Plan of Drainage provides for the analysis and control of future project-specific drainage, but policies and requirements should be added to ensure that the need for additional system-wide drainage infrastructure will be adequately assessed at the time of each development.

Review of the City of Oxnard Master Plan of Drainage indicates that the City is divided into 17 major watersheds for purposes of hydrologic analysis. Drainage throughout Ventura County is generally to the southwest toward the Pacific Ocean. Primary drainages that transport surface runoff near the project area include the OID, the J Street Drain and the Hueneme Drain (Figure 4.3-2). The OID and J Street Drain watersheds are the primary contributors of runoff to the project area.

Source: First Source; ESRI, 2006 | \\G:\Projects\75217 J Street\map_docs\mxd\ER\stream_net.mxd | Last Updated: 02-10-09



Stream Network/Drainage Facilities

FIGURE 4.3-2

J Street Drain | Ventura County Watershed Protection District | EIR



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4.3 Water Resources and Hydraulic Hazards

Hueneme Drain

The Hueneme Drain, also known as the Bubbling Springs Drain, extends through Richard Bard Bubbling Springs Park and forms the center of the Bubbling Springs Recreation corridor in the City of Port Hueneme. The Hueneme Drain is located west of the J Street Drain. From Bubbling Springs Park, it extends south towards the Pacific Ocean and bends east to run parallel to the coastline as the drain nears the ocean. Hueneme Drain is a man-made earthen trapezoidal channel. The banks of the channel are landscaped and maintained as part of the Bubbling Springs Recreation Corridor.

Hueneme Drain is a perennial watercourse, supplied by springs and impounded at the District's Hueneme Drain Pump Station, which periodically pumps the impounded water into the J Street Drain. Water levels in the Hueneme Drain are regulated by the Hueneme Drain Pump Station situated at the terminus of the drain. In the summer, the water is maintained at 1- to 2-foot depths. The pump station has the capacity to convey the 100 year frequency flood flow of 437 cubic feet per second (cfs).

J Street Drain Lower Channel

The J Street Drain is a fully lined concrete channel that ends approximately 50 feet south of the Hueneme Drain Pump Station. The J Street Drain was constructed in the 1950s and lined with concrete in the early 1960s to channel urban runoff into the ocean. The watershed of the J Street Drain totals 1,339 acres (approximately 2 square miles) within Oxnard and Port Hueneme. The average dimensions of the drain in the project area are 40 feet from top-of-bank to top-of-bank, 30 feet across the channel bottom, and four feet in depth. When constructed, the J Street Drain discharged water directly to the ocean by mechanical breaching. Presently, due to beach expansion and the formation of the beach previously described, this drain flows into the Ormond Lagoon. The existing capacity of the J Street Drain is 500-600 cfs, which is less than the 50- and 100-year frequency flood flows of 1,649 and 2,059 cfs, respectively (URS 2005). This drain flow is composed entirely of urban runoff.

Oxnard Industrial Drain (OID)

The OID is a manmade, trapezoidal (at the downstream end) and rectangular concrete channel that extends several miles northeast of the Ormond Beach Lagoon through the City of Oxnard. One other major stormwater channel, the Rice Drain, is a tributary to the OID. The OID was originally built by the Oxnard brothers to drain industrial effluent and sewage. Current inputs to the OID consist of urban and agricultural runoff with some groundwater seepage near the coast where the channel bottom lies below the water table. The VCWPD maintains and regulates discharges to the OID. The OID watershed totals approximately 5,935 acres. In the 1970s, the District began channel improvements, largely the concrete lining upstream of Pleasant Valley Road. Downstream of Pleasant Valley Road, the channel is concrete lined for 4,100 feet and then is unimproved with soft banks and bottom. Presently, the capacity of the OID has been reduced to 2,900 cfs, which is less than the 50- or 100-year frequency flood flows of 4,115 and 4,759 cfs, respectively.

The OID channel is currently rated by the District as having an approximate flow capacity of 2,900 cfs. There are no flow gauges on the OID to provide historic flow data, although in 2004 the District conducted a hydrologic study of existing flow conditions in the OID using the modified rational method (VCRAT). The VCRAT was used to estimate the flowrates based on the area of the OID watershed, runoff characteristics, and historic rainfall.

4.3 Water Resources and Hydraulic Hazards

Perkins Drain

Perkins Drain represents that portion of the historic Oxnard Drain or Hueneme Canal that exists downstream of the Hueneme Drain Pump Station. That portion of this historic drain that exists upstream of the pump station is currently known as the Hueneme Drain. Perkins Drain previously conveyed perennial flows from Bubbling Springs southeast along the coast to Mugu Lagoon. These perennial flows are currently pumped into both J Street Drain and Perkins Drain. Perkins Drain is hydrologically connected to Mugu Lagoon via the wetland area east of the Halaco dump site and a series of agricultural ditches and overland flow.

Flooding

The flood extent shown in Figure 3.0-2a is not currently depicted within Federal Emergency Management Agency (FEMA) Flood Zone A, or the one percent annual chance (previously known as the 100-year) flood zone. The one percent annual chance flood has a one percent chance of being equaled or exceeded each year. Thus, the 100-year flood could occur more than once in a relatively short period of time or even within the same month. The 100-year flood has a 26 percent chance of occurring during a 30-year period, the length of many mortgages¹.

Flood zones appear on Digital Flood Insurance Rate Maps (DFIRMs). Property owners within Flood Zone A are federally mandated to purchase flood insurance. The current DFIRMs are based on pre-1984 hydrologic data and hydraulic analyses conducted over 25 years ago (FEMA Flood Insurance Study 06111CV001A for Ventura County, California and Incorporated Areas, Volume 1 of 3, January 20, 2010). Since that time, Ventura County has experienced several years of record rainfall, including 1995, 1998, and 2005 (VCWPD 2009). The DFIRMs are therefore based on data that do not reflect the trend of increasing rainfall since the 1980s. As a result, the District commissioned the 2005 URS study to proactively characterize current conditions and provide adequate flood protection before FEMA initiates a DFIRM update. With the construction of the proposed project would be the first major step of a proactive effort to protect properties currently threatened with flooding from J Street Drain overflow, as shown on Figure 3.0-2a. would be removed from the 100-year flood plain in time to avoid the need to buy flood insurance. Figure 3.0-2b depicts the Special Flood Hazards Area (SFHA), as mapped by FEMA². These SFHA are related to flooding from wave activity, not from outfall from J Street Drain. Specific SFHA depicted on Figure 3.0-2b includes coastal flooding due to wave action (Zone VE) and coastal flooding due to waves filling up the lagoon.

According to the existing FEMA DFIRMs, the J Street Drain is best defined as an area subject to 100-year flooding with average depths of less than one foot (Zone X). However, as shown in Figure 3.0-2a, the existing J Street Drain's limited capacity along with the backwater effects at the street crossings along the drain may result in flooding at the project area greater than one foot deep during a moderate rain storm larger than a 10-year flood event.

Surface Water Quality

The State Water Resources Control Board (SWRCB), in cooperation with the federal Environmental Protection Agency (EPA) have designated "impaired waters" of the state, which are those water bodies that exhibit evidence of impaired beneficial uses due to pollution. The SWRCB 303(d) Listing Policy sets

¹ <http://www.vcfloodinfo.com/index.php/flood-maps-flood-insurance-studies-a-map-changes/digital-flood-insurance-rate-maps-dfirm>

² DFIRMs 06111C0914E, 06111C0916E, and 06111C0918E dated January 20, 2010.

4.3 Water Resources and Hydraulic Hazards

the rules to identify which waters do not meet water quality standards. These are waters that are too polluted or otherwise degraded to meet the water quality standards outlined in the regional Basin Plan. The law requires that these jurisdictions establish priority rankings for waters on the list and develop Total Maximum Daily Loads (TMDL) for these waters. A TMDL is a calculation of the maximum amount of a pollutant that a waterbody can receive and still safely meet water quality standards.

With regard to surface water quality, various agricultural, urban and industrial pollutants are discharged into the local watersheds near the project site. Ormond Beach is on the 2006 303(d) list for indicator bacteria, with an estimated affected area extending along approximately 1.6 miles of the beach, which includes the area of Ormond Beach at J Street, OID, and Arnold Road. Currently, a TMDL for bacteria is being developed for Ormond Beach by the LARWQCB, SWRCB, and EPA.

The federal National Pollutant Discharge Elimination System (NPDES) program requires that municipalities and counties with certain population sizes acquire permits for discharges of stormwater from public stormwater systems, and develop a program to reduce stormwater pollution to the “maximum extent practicable.” The District, in cooperation with the County of Ventura, the cities of Camarillo, Fillmore, Moorpark, Ojai, Oxnard, Port Hueneme, San Buenaventura, Santa Paula, Simi Valley, and Thousand Oaks acquired a NPDES municipal stormwater permit in 1994 (Permit CAS063339, Order No. 94-082), which was re-issued in 2000 (Permit CAS004002, Order No. 00-108), and most recently on July 8, 2010 (Permit CAS004002, Order No. R4-2010-0108). Pursuant to the permit, the District has developed a County-wide Stormwater Quality Management Plan that includes programs and Best Management Practices (BMPs) to reduce the discharge of pollutants from the public stormwater system to the maximum extent practicable.

The NPDES municipal stormwater permit requires that trash and debris be removed from open channel storm drains, such as the J Street Drain, “a minimum of once per year before the wet season.” The District currently schedules the trash removal from J Street Drain in May of each year, however trash collection downstream of the Ventura County Railroad can only occur as needed after a seasonal breach event (typically sometime between October and February) due to the backup of water from the lagoon. Trash, sediment, and grease in Hueneme Drain, a tributary of J Street Drain, is automatically collected at Hueneme Drain Pump Station and properly disposed off site. The City of Oxnard also manages ongoing trash collection and abatement programs, including a monthly Oxnard City Corps effort at Ormond Beach and the Perkins Road parking lot located north of Ormond Beach Lagoon.

In addition, the new NPDES permit requires installation of trash excluders or similar devices at “catch basins or outfalls to prevent the discharge of trash to the storm drain system or receiving water...in areas defined as Priority A” by mid-2011. Although neither the City of Oxnard nor the City of Port Hueneme have designated J Street drain as Priority A (catch basins consistently generating the highest volumes of trash), some of its tributary storm drains within the City of Oxnard fall into this category. The District and Cities of Oxnard and Port Hueneme have begun planning an approach to capturing trash and debris before it reaches Ormond Beach Lagoon and the Pacific Ocean. This effort is concurrent with but separate from the J Street Drain capacity improvement project.

Groundwater

The Oxnard Plain Groundwater Basin underlies the majority of this region. This basin has approximately 7,800,000 acre-feet of storage and is mostly confined (i.e., covered by an impermeable clay layer). The result is that rain or surface water cannot percolate into the basin. Therefore, groundwater recharge takes place at the margins of the basin where the restricting clay layer is absent.

4.3 Water Resources and Hydraulic Hazards

According to the *Hydrogeology Study Summary: J Street Drainage Improvement Project*, ~~*Groundwater Modeling Summary for the J Street Drainage Improvement Project*~~, groundwater that is in an unconfined condition near J Street Drain is found to have elevations ranging from less than 2 feet below mean sea level (msl) to approximately 17.5 feet below msl at the northern extent of the channel. Groundwater flows generally from north and east (i.e., inland and upland areas) toward the southwest and west (i.e., toward the coast), but in the vicinity of Perkins Road, McWane Boulevard, and the portion of J Street Drain between the Ventura County Railroad and Ormond Beach, groundwater has been observed to flow northward due to an existing drain effect north of the Halaco Site.

There are only a few streams in the Oxnard Plain and most flow only during wet periods and after storms. The Santa Clara River lies to the north of the study area. Annual precipitation over the Oxnard area is approximately 15.6 inches with most of this (nearly 13 inches annually, on average) falling during the four-month period between December and March.

The Oxnard Plain Groundwater Basin consists of five major aquifers. Of these, the Oxnard aquifer is the shallowest and is a major source of domestic and agricultural water in the region. Due to this use, it has been determined that the Oxnard aquifer is being overdrafted at a rate of approximately 12,400 acre-feet per year, and this overdraft has resulted in more than 22 square miles of the aquifer being intruded by seawater. This seawater intrusion area encompasses the entire project site, and where seawater has intruded, the water is not considered suitable for agriculture.

A program has been established to reduce saltwater intrusion into the Oxnard aquifer. As part of this program, Ventura County would pump water from the Fox Canyon aquifer and divert water from the Santa Clara River to recharge ponds located in the Oxnard Forebay Recharge Basin. This method would increase freshwater flows and limit the impact of saltwater intrusion to this groundwater basin.

In addition to the impact of saltwater intrusion, the Oxnard aquifer is also impacted by the percolation of agricultural water. This percolation has increased mineral concentrations, nitrate levels, and levels of total dissolved solids in this groundwater basin. Additional impact potential occurs from urban and industrial uses, improperly abandoned water wells and fuel tanks, and other underground storage tanks. The potential for groundwater contamination is higher in the recharge areas, where the restricting clay cap is absent.

The nearby Halaco superfund site is located approximately 1,500 feet east of the southern portion of the J Street Drain. The Halaco site overlies a groundwater plume that is impacted primarily from past processing of metals at the site. The western portion of the Halaco site is a smelter and the eastern portion is a waste pile. The ~~natural-current~~ direction of the groundwater movement beneath the western portion of the Halaco site (i.e., closest to the J Street Drain) is northward toward the shoreline (i.e., southwest) with ultimate discharge into the Pacific Ocean. The Halaco superfund site is discussed in greater detail in Section 4.8 of this EIR.

4.3.2 Regulatory Setting

Federal Regulations

Section 404 of the Clean Water Act

Under Section 10 of the Rivers and Harbors Act, the USACE is authorized to regulate the construction of structures and excavation/deposition of material into navigable waters. Under section 404 of the Clean

4.3 Water Resources and Hydraulic Hazards

Water Act (CWA), the USACE is authorized to permit the discharge of dredged or fill materials to “Waters of the U.S.” “Waters of the U.S.” under Section 404 includes both wetland and non-wetland aquatic habitats with the jurisdictional extent of rivers and streams defined by the ordinary high water mark (OHWM). Section 404 permits can be issued as individual, general or nationwide permits. The proposed project requires a USACE Individual Permit pursuant to Section 404 of the federal CWA (1990, as amended), and/or qualification under a Nationwide Permit pursuant to Section 404 of the CWA.

National Flood Insurance Program

FEMA administers the National Flood Insurance Program (NFIP). In 1985, FEMA completed a flood insurance rate map (FIRM) for Ventura County which identified Special Flood Hazard Areas including the extent of the floodways for the 100-year flood. DFIRMs were issued in 2010, but were based on pre-1984 hydrologic data. To comply with the NFIP, communities must adopt a floodplain management ordinance addressing construction and habitation in flood zones. In California, the California Department of Water Resources provides and encourages communities to adopt the California Model Floodplain Management Ordinance.

State Regulations

Section 401 of the Clean Water Act

Section 401 of the CWA requires Water Quality Certification for activities that may result in discharge into jurisdictional waters (including wetland/riparian areas) of the United States. Water Quality Certification would ensure that discharge complies with the provisions of the CWA. The LARWQCB would administer the certification program for the J Street Drain project.

Sections 301 and 402 of the Clean Water Act

Sections 301 and 402 of the CWA prohibit the discharge of pollutants to “Waters of the U.S.”, unless authorized under a NPDES permit. The federal NPDES program was delegated to the State of California on May 14, 1973. Responsibility for implementing the NPDES program rests with the State Water Resources Control Board and the nine RWQCBs. Most individual NPDES permits are issued by the applicable RWQCBs. The stormwater permitting program was developed to address the discharge of pollutants from non-point discharges of stormwater. The State Board and Regional Boards have issued two types of stormwater permits: municipal stormwater permits for urban areas of greater than 100,000 people and statewide general permits applicable to industrial activities and construction. Waste Discharge Requirements are also issued for discharges of groundwater during construction activities.

Section 303 of the CWA

Section 303 of the CWA requires States to make a list of “impaired” waters. Section 303 requires the development of total maximum daily loads (TMDL) for pollutants identified as contributing to impairment of a waterbody. Facilities discharging to Section 303 waters or tributaries may be required to additionally limit discharges of pollutants contributing to the listed impairment. The J Street Drain is tributary to Ormond Beach and Lagoon which are listed as “impaired” for bacteria.

Streambed Alteration Agreements

Sections 1600-1616 of the California Fish and Game Code (effective January 1, 2004) provide the statutes and guidance for the regulation and permitting of impacts to identified categories of State waters under

4.3 Water Resources and Hydraulic Hazards

the Lake and Streambed Alteration Program administered by the California Department of Fish and Game.

Categories of State waters and the types of regulated activities are described in Section 1602 of the Code. In general, the streambed alteration agreement is intended to protect fish and wildlife resources associated with riparian wetland habitat. A permit fee is assessed for each project and is tied to total project costs.

RWQCB - Ventura County Stormwater Permit and Management Plan

The Ventura Countywide Stormwater Quality Management Program (VCSQMP) was established in 1994 to satisfy the requirements of Section 402 of the CWA. Implementation of the VCSQMP was established under the Ventura County Municipal Stormwater permit (NPDES Permit No. CASOO4002 issued July 27, 2000, and reissued July 8, 2010). The VCWPD serves as the Principal Co-Permittee for the permit and coordinates countywide permit activities; the development of materials; and the planning and implementation of plans, including conducting water quality sampling, analysis, and data evaluation on behalf of all of the co-permittees. Other co-permittees include the other 10 incorporated cities within Ventura County, including the City of Oxnard.

The Ventura County Stormwater Management Plan (SMP) represents and defines the requirements of the Ventura Countywide SQMP. The SMP contains nine programs for the management of stormwater. Programs applicable to the proposed project include; Section 3, Industrial Commercial Businesses, Section 4, Land Development, and Section 5, Construction Sites. The proposed project would implement BMPs from the SMP to minimize impacts during construction.

Ventura County

Ventura County Stormwater Ordinance

The Ventura County Stormwater Ordinance (Ordinance No. 4142) prohibits the discharge of non-stormwater discharges into County stormwater facilities and seeks to reduce pollutants in stormwater to the maximum extent practicable.

Stormwater Ordinance Requirements for Construction. This ordinance requires owners to comply with the State construction general stormwater permit prior to being issued a grading permit for construction activity. The construction general stormwater permit will require the preparation of a Stormwater Pollution Prevention Plan (SWPPP).

Ventura County Floodplain Management Ordinance

The Ventura County Board of Supervisors adopted the Ventura County Flood Plain Management Ordinance (Ordinance 3741) on September 3, 1985. That ordinance was amended, then repealed and replaced with the current Floodplain Management Ordinance (Ordinance 3841) on February 2, 1988. Ordinance 3481 was subsequently amended on March 21, 1989 (Ordinance 3890), June 27, 1989 (Ordinance 3902), and October 9, 1990 (Ordinance 3954).

The District implements the Flood Plain Management Ordinance on behalf of Ventura County to ensure compliance with NFIP. The ordinance addresses the risks of development within the floodplain and includes a list of prohibited discharges, exemption procedures and requirements for construction and permitting.

4.3 Water Resources and Hydraulic Hazards

Encroachment Permit

The District authority over jurisdictional channels is established by Watershed Protection Ordinance No. WP-1, adopted January 12, 2010. Ordinance WP-1 repeals Ventura County Flood Control District Ordinance Nos. FC-1, FC-3, FC-15, FC-18, FC-20, FC-21, FC-22, FC-23, FC-26, FC-27, FC-29, and FC 3937. Additional policies have adopted the District Hydrology and Design manuals which designate the requirements for flood control facility design. The purpose of Ordinance WP-1 is “to protect life and property from flood and storm waters within or overflowing the banks of watercourses under District control.”

Laterals and side-drains contributing runoff to the jurisdictional channels (redline channels) are under the jurisdiction of the appropriate city. However, the agency having jurisdiction over the affected lateral or side-drain connections to jurisdictional channels must obtain a District Encroachment and/or Watercourse Permit (encroachment permit) and provide sufficient information and engineering studies to show that the connection does not negatively impact the conveyance capacity of the jurisdictional channel. It is not anticipated that this project would include any new connections, only the existing ones reconnected.

Fox Canyon Groundwater Management Agency (FCGMA)

The FCGMA manages and protects both confined and unconfined aquifers within several groundwater basins underlying the southern portion of Ventura County. The FCGMA is an independent special district, separate from the County of Ventura or any City government. It was created by the California Legislature in 1983 to oversee Ventura County’s groundwater resources. The FCGMA has jurisdiction over the Fox Canyon Aquifer which covers an area of approximately 185 square miles and includes the Oxnard Plain Forebay and the Oxnard Plain Pressure Basins that underlie most of the City of Oxnard. The Fox Canyon aquifer supplies more than half of the water needs for 0.7 million residents in the cities of Ventura, Oxnard, Port Hueneme, Camarillo, and Moorpark, plus the unincorporated communities of Saticoy, El Rio, Somis, Moorpark Home Acres, Nyeland Acres, Leisure Village, Point Mugu and Montalvo. The proposed project would involve dewatering and discharge of groundwater.

City of Oxnard

The City of Oxnard guidelines will govern specific development concerns such as storm sewers and drainage. The City of Oxnard also retains responsibility for the following:

- Maintains storm drain system with channel capacities less than 500 cfs
- Collects water quality data
- Provides potable water to inhabitants
- Provides wastewater services to inhabitants
- Acts as floodplain manager for areas inside City boundaries

Master Plan of Drainage

To mitigate flood hazards, the City of Oxnard in 1979 adopted a Master Plan of Drainage and became a member of the NFIP. Chapter 35 of the Oxnard City Code contains the Floodplain Management Ordinance for the City of Oxnard. The Floodplain Management Ordinance states the requirements for development in areas subject to flooding. Any new development is required, through conditions of approval, to eliminate flooding problems as identified by the NFIP.

4.3 Water Resources and Hydraulic Hazards

The City of Oxnard Department of Public Works is responsible for developing the City of Oxnard Master Plan of Drainage. The original Master Plan of Drainage was developed and implemented in 1979. The Oxnard Master Plan of Drainage was revised and re-issued in October 2003. The Oxnard Master Plan of Drainage contains criteria for street drainage and construction. Storm drain systems must be designed with adequate capacity to convey a 10- year 24-hour frequency storm. Sumps must be designed for a 50-year 24-hour storm event and provided with an emergency overflow escape path. Building finish elevations must be above the 100-year flood level. The proposed project would increase J Street Drain capacity to accommodate 100-year flood flow.

City of Oxnard 2020 General Plan

Open Space/Conservation Element

The City of Oxnard General Plan Open Space/Conservation Element contains the following policies applicable to stormwater and groundwater resources in Section C — Natural Resources:

- The City shall support updating the “208” Wastewater Control Plan to control urban and non-urban runoff.
- The City should endeavor to maintain a minimal dependence on Basin 4A groundwater and support the policies of the local groundwater management agency (FCGMA) to protect, enhance, and replenish the aquifers underlying the Oxnard Plain.

Safety Element City of Oxnard

General Plan Safety Element contains the following policies applicable to flood hazards in Section C, Flooding:

- As a condition of approval, the City shall continue to require any new development to mitigate flooding problems identified by the National Flood Insurance Program.
- The Flood Control District should require subdividers to dispose of drainage water originating within their subdivisions and all drainage water originating above their subdivisions that is concentrated by the construction of the subdivision by: 1) conducting the water to the natural water course draining the subdivision; or 2) discharging the water at the edge of their subdivisions and obtaining easements from downstream owners of the land over which the water will flow to the water course. Subdividers are required to construct the above works and such other works as will protect their subdivisions from damage by water and dedicate them to the County of Ventura Flood Control District (now known as the Ventura County Watershed Protection District) for red line channels.
- The City shall continue to provide information to the Federal Emergency Management Agency to ensure that Flood Insurance Rate Maps which cover Oxnard are updated periodically to address changing flood conditions brought about by urban developments.

Public Facilities Element

The Public Facilities Element of the City of Oxnard 2020 General Plan includes the Goals, Objectives, and Policies necessary to provide public facilities and services adequate to serve existing and future development within the City’s Urban Service Area. The following objectives are stated as part of this Element:

4.3 Water Resources and Hydraulic Hazards

- Ensure adequate sanitary sewer and wastewater treatment plant capacity to accommodate existing and future development.
- Provide adequately sized storm drain systems to accommodate existing and future needs.

City of Port Hueneme

The City of Port Hueneme General Plan Conservation/Open Space/Environmental Resource element includes the following goals and policies for water resources:

- Preserve existing water resources.
- Coordinate with the Fox Canyon Ground Water Management Agency to preserve groundwater supplies.
- Protect and enhance natural qualities of riparian habitat (i.e. Bubbling Springs Creek).

Ventura County

Surface and Groundwater Quantity and Quality Goals

1. Inventory and monitor the quantity and quality of the County's water resources.
2. Effectively manage the water resources of the County by adequately planning for the development, conservation and protection of water resources for present and future generations.
3. Maintain and, where feasible, restore the chemical, physical and biological integrity of surface and groundwater resources.
4. Ensure that the demand for water does not exceed available water resources.
6. Promote reclamation and reuse of wastewater for recreation, irrigation and to recharge aquifers.

Surface and Groundwater Quantity and Quality Policies

1. Discretionary development which is inconsistent with the goals and policies of the County's Water Management Plan (WMP) shall be prohibited, unless overriding considerations are cited by the decision-making body.
2. Discretionary development shall comply with all applicable County and State water regulations.
3. The installation of on-site septic systems shall meet all applicable State and County regulations.
4. Discretionary development shall not significantly impact the quantity or quality of water resources within watersheds, groundwater recharge areas or groundwater basins.
5. Landscape plans for discretionary development shall incorporate water conservation measures as prescribed by the County's Guide to Landscape Plans, including use of low water usage landscape plants and irrigation systems and/or low water usage plumbing fixtures and other measures designed to reduce water usage.

4.3 Water Resources and Hydraulic Hazards

6. The use of the Santa Clara River as a multiple resource (i.e., source of supply for water, concrete aggregates and biological habitat) shall be permitted to continue; with the use of the River as a water resource having priority over all other uses.
7. Out-of-river mining below the historic or predicted high groundwater level in the Del Norte/El Rio (Oxnard Forebay Basin) area may be permitted if the applicant can demonstrate to the satisfaction of the County of Ventura that the excavation activity will not interfere with or affect groundwater quality and quantity.
8. All discretionary development shall be conditioned for the proper drilling and construction of new oil, gas and water wells and destruction of all abandoned wells on-site.
9. New wells in the Oxnard Plain pressure basin shall not be allowed if they would increase seawater intrusion in the Oxnard or Mugu aquifers.
10. All new golf courses shall be conditioned to prohibit landscape irrigation with water from groundwater basins or inland surface waters identified as Municipal and Domestic Supply or Agricultural Supply in the California RWQCB's Water Quality Control Plan unless either: a) the existing and planned water supplies for a Hydrologic Area, including interrelated Hydrologic Areas and Subareas, are shown to be adequate to meet the projected demands for existing uses as well as reasonably foreseeable probably future uses within the area, or b) it is demonstrated that the total groundwater extraction/recharge for the golf course will be equal to or less than the historic groundwater extraction/recharge (as defined in the Ventura County Initial Study Assessment Guidelines) for the site. Where feasible, reclaimed water shall be utilized for new golf courses.

Flood Hazard Goals

1. Minimize the risk of loss of life, injury, damage to property, and economic and social dislocations resulting from flood hazards.
2. Design and construct appropriate surface drainage and flood control facilities as funding permits.
3. Prevent incompatible land uses and development within floodplains.

Flood Hazard Policies

1. Land use in the regulatory floodway should be limited to open space, agriculture, passive to low intensity recreational uses, subject to the approval of the County Public Works Agency. The floodway's principal use is for safely conveying floodwater away from people and property.
2. Within areas subject to flooding as determined by FEMA on the latest available DFIRMs, the County shall require the recordation of a Notice of Flood Hazard or dedication of a flowage easement with the County Recorder for all divisions of land and discretionary permits.
3. Development proposed with the floodplain shall be designed and built to standards intended to mitigate to the extent possible the impacts from the one percent annual chance storm.
4. The design of structures which are constructed in floodplain areas as depicted on the General Plan Hazards Protection Maps, shall be governed by Federal regulations, specifically Title 44 Code of Federal Regulations Sections 59 through 70, as well as the County Floodplain Management Ordinance and shall

4.3 Water Resources and Hydraulic Hazards

incorporate measures to reduce flood damage to the structure and to eliminate any increased potential flood hazard in the general area due to such construction.

4.3.3 Significance Thresholds

Ventura County *Initial Study Assessment Guidelines* were updated in April 2011. The thresholds of significance for water quality were amended as shown below. However, the update to the thresholds does not change the project-level impact analysis provided in this EIR.

A significant impact to hydrology and/or water quality would be identified if the proposed project is determined to result in any of the following:

Groundwater Quantity

A land use or activity, which could cause a significant adverse impact upon groundwater resources in itself or on a cumulative basis. Threshold criteria include, but are not limited to:

1. Any land use that will directly or indirectly decrease, either individually or cumulatively, the net quantity of groundwater in a basin that is overdrafted or creates an overdrafted groundwater basin, shall be considered to have a potentially significant impact.
2. In groundwater basins that are not overdrafted, or are not in hydrologic continuity with an overdrafted basin, net groundwater extraction that will individually or cumulatively cause the basin(s) to become overdrafted, shall be considered to have a potentially significant impact.
3. In areas where the basin and/or hydrologic unit condition is not well known or documented and there is evidence of overdraft due to declining water levels in a well or wells, any proposed net increase in groundwater extraction from that groundwater basin and/or hydrologic unit shall be considered to cause a significant groundwater quantity impact until such time as reliable studies determine otherwise.
4. Regardless of items 1-3 above, any land use or project which would result in 1.0 acre-feet, or less, of net annual increase in groundwater extraction is not considered to have a significant project or cumulative impact on groundwater quantity.
5. General Plan Goals and Policies - Any project that is inconsistent with any of the policies or development standards relating to *groundwater quantity* of the Ventura County General Plan Goals, Policies and Programs or applicable Area Plan (above), may result in a significant environmental impact. This threshold is not applicable if the project includes a General Plan Amendment (GPA) that would eliminate the inconsistency, and the GPA itself would not have a significant impact on *groundwater quantity* or be inconsistent with any *groundwater quantity* policy or development standard of the General Plan or applicable Area Plan (above).

Groundwater Quality

A land use, or activity, which could cause a significant impact upon groundwater quality in itself or on a cumulative basis. Threshold criteria include, but are not limited to:

1. Any land use proposal that will individually or cumulatively degrade the quality of groundwater and cause groundwater to fail to meet groundwater quality objectives set by the LARWQCB Basin Plan shall be considered to have a potentially significant impact.

4.3 Water Resources and Hydraulic Hazards

2. In cases where the proposed land use impact upon the quality of groundwater is unknown, and there is evidence that the proposed land use could cause the quality of groundwater to fail to meet the groundwater quality objectives set by the LARWQCB Basin Plan, the project shall be considered to have a potentially significant impact until such time as reliable studies determine otherwise.
3. Applicants for land use projects that propose the use of groundwater in any capacity and are located within two miles of the boundary of a former or current test site for rocket engines will be required to test for perchlorate and trichloroethylene (TCE).
4. General Plan Goals and Policies - Any project that is inconsistent with any of the policies or development standards relating to *groundwater quality* of the Ventura County General Plan Goals, Policies and Programs or applicable Area Plan (above), may result in a significant environmental impact. This threshold is not applicable if the project includes a GPA that would eliminate the inconsistency, and the GPA itself would not have a significant impact on *groundwater quality* or be inconsistent with any *groundwater quality* policy or development standard of the General Plan or applicable Area Plan (above).

Surface Water Quantity

A land use or activity that could cause a significant adverse impact upon surface water resources in itself or on a cumulative basis. Threshold criteria include, but are not limited to:

1. Any project that will increase surface water consumptive use (demand), either individually or cumulatively, in a fully appropriated stream reach as designated by SWRCB or where unappropriated surface water is unavailable, shall be considered to have a significant adverse impact on surface water quantity.
2. Any project that will increase surface water consumptive use (demand) including but not limited to diversion or dewatering downstream reaches, either individually or cumulatively, resulting in an adverse impact to one or more of the beneficial uses listed in the LARWQCB Basin Plan, is considered a significant adverse impact.
3. General Plan Goals and Policies - Any project that is inconsistent with any of the policies or development standards relating to surface water quantity of the Ventura County General Plan Goals, Policies and Programs or applicable Area Plan (above), may result in a significant environmental impact. This threshold is not applicable if the project includes a GPA that would eliminate the inconsistency, and the GPA itself would not have a significant impact on surface water quantity or be inconsistent with any surface water quantity policy or development standard of the General Plan or applicable Area Plan (above).

Surface Water Quality

A land use or activity that could cause a significant adverse impact upon surface water resources in itself or on a cumulative basis. Threshold criteria include, but are not limited to:

1. Any land use or project proposal that is expected to individually or cumulatively degrade the quality of Surface Water causing it to exceed water quality objectives as contained in Chapter 3 of the three Basin Plans.
2. Any land use or project development that directly or indirectly causes stormwater quality to exceed water quality objectives or standards in the applicable MS4 Permit or any other NPDES Permits.

4.3 Water Resources and Hydraulic Hazards

Additionally, implementation of the proposed project would result in a significant impact upon Water Resources and Hydraulic Hazards, as defined in Appendix G of the *CEQA Guidelines*, if the project causes any of the following:

- Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, in a manner which would result in substantial erosion or siltation on- or off-site;
- Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site;
- Create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff;
- Place housing within a 100-year flood hazard area as mapped on a federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map;
- Place within a 100-year flood hazard area structures which would impede or redirect flood flows; or
- Expose people or structures to a significant risk of loss, injury or death involving flooding, including flooding as a result of the failure of a levee or dam.

4.3.4 Project-Level Impact Analysis

Groundwater Quantity

Construction

The construction of the proposed drain would require the installation of dewatering wells, dewatering, and discharge of groundwater back into surface water. This dewatering is necessary to create a relatively dry work area for the excavation and construction activities. The pumped groundwater would be tested for contaminants and if determined to be acceptable it would then be allowed to be discharged into the Perkins Drain, away from the work area. The discharged water is expected to flow from a remnant portion of the Perkins Drain east of the OID that allows runoff from the Ormond Lagoon to flow down the coast and ultimately to a wetland area east of the Halaco dump site with portions of the discharged water percolated back to the aquifer. Therefore, the construction dewatering is not expected to result in the overdraft of groundwater. A less than significant impact would occur in this issue area.

Operation

The operation of the proposed project would not utilize groundwater as a water source. Therefore, the proposed project would not deplete groundwater supplies or interfere substantially with groundwater recharge. Impact is less than significant.

Beach Elevation Management Plan

The Beach Elevation Management Plan (BEMP) is anticipated to be used periodically and would only have equipment on the beach for a few hours. A few hours are all that is necessary to groom the beach. No groundwater supplies are associated with the plan and, therefore, no impacts are anticipated for this issue area.

4.3 Water Resources and Hydraulic Hazards

Groundwater Quality

Construction

The construction of the proposed drain would require the installation of dewatering wells, dewatering, and discharge of groundwater back into surface water. This dewatering is necessary to create a relatively dry work area for excavation and construction activities. The pumped groundwater would be tested for contaminants and, if determined to be acceptable, would be discharged into the Perkins Drain, away from the work area. If the pumped groundwater is determined to be contaminated, the water will be collected and either treated or disposed of according to waste discharge requirements of Order No. R4-2008-0032, General NPDES and Waste Discharge Requirements for Discharges of Groundwater from Construction and Project Dewatering to Surface Waters in Coastal Watersheds of Los Angeles and Ventura Counties (adopted by the State Board on June 5, 2008). Additionally, since the project is located near the coast it is expected that much of the groundwater will be highly saline and would not be used for other activities. Because groundwater would be pumped from a shallow aquifer not used for water supply, and would be permitted to percolate back into the shallow aquifer, dewatering is not expected to promote seawater intrusion. Therefore, the above construction impacts on groundwater quality would be less than significant.

According to the ~~Groundwater Modeling~~ *Hydrogeology Study Summary* for J Street Drain (2011), groundwater pumping could cause the Halaco groundwater plume to move approximately 300-50 feet toward the project area during construction. This impact would be significant.

Operation

During the operation of the proposed project, the maintenance activities associated with the proposed drain would be similar in frequency to those currently in place. These activities are intermittent and are for maintenance purposes only. The proposed project would not result in new activities that would cause a significant impact to groundwater quality. Operation of the proposed project would not individually or cumulatively degrade the quality of groundwater and cause groundwater to fail to meet groundwater quality objectives set by the LARWQCB. The District's Final Program Environmental Impact Report (EIR) for Environmental Protection Measures for the Ongoing Routine Operations and Maintenance Program Project contains BMPs for the operational maintenance activities for J Street Drain. These BMPs will be incorporated as part of the proposed project for operational activities and will ensure that impacts are less than significant.

Beach Elevation Management Plan

The BEMP is anticipated to be used periodically basis and would only have equipment on the beach for a few hours. Grooming the beach elevation would ensure the lagoon breaches naturally in response to sufficient storm water runoff before adjacent developed properties can become flooded. The BEMP would not result in a significant impact to groundwater quality.

Surface Water Quantity

Construction

The construction of the proposed project would not require surface water and would not result in the overdraft of surface water. Therefore, a less than significant impact is identified for this issue area.

4.3 Water Resources and Hydraulic Hazards

Operations

During the operation of the proposed project, the maintenance activities associated with the proposed drain would be similar in frequency to those currently in place. These activities are intermittent and are for maintenance purposes only. The proposed project would not result in new activities that would cause a significant impact to surface water quantity. The proposed project would not result in increased flow or surface water quantity, but rather accommodates a greater flood flow that would otherwise cause flooding upstream and eventually flow into surrounding surface water bodies. The District's Final Program EIR for Environmental Protection Measures for the Ongoing Routine Operations and Maintenance Program Project contains BMPs for the operational maintenance activities for J Street Drain. These BMPs will be incorporated as part of the proposed project for operational activities and will ensure that impacts are less than significant.

Beach Elevation Management Plan

The BEMP is anticipated to be used periodically and would only have equipment on the beach for a few hours. Grooming the beach elevation would ensure the lagoon breaches naturally in response to sufficient storm water runoff before adjacent developed properties can become flooded. The BEMP would not change surface water quantity as it would facilitate the natural process of water overtopping the sand berm that allows the seasonal flow of water from the lagoon to the ocean, eliminating flooding upstream. This impact would be less than significant.

Surface Water Quality

Construction

The lagoon is identified as impaired for bacteria and the TMDL for bacteria is being prepared to address the contamination. This TMDL will also indicate the allowable amount of bacteria from all the tributaries of the lagoon. At this time, the TDML has not been identified so there are no water quality standards being violated, however standards will be established in the near future. Since the project is not adding new sources of bacterial water quality impacts there is a less than significant impact for this issue.

Water quality in jurisdictional areas can be adversely affected by surface water runoff and sedimentation during construction. The construction of the proposed project would involve dewatering, demolition, and excavation activities which may result in potential impacts to water quality. Construction of the proposed project would require the use of gasoline and diesel-powered heavy equipment, such as bulldozers, backhoes, water pumps, and air compressors. Chemicals such as gasoline, diesel fuel, lubricating oil, hydraulic oil, lubricating grease, automatic transmission fluid, paints, solvents, glues, and other substances could be utilized during construction. An accidental release of any of these substances could degrade the water quality of the surface water runoff and add pollution into local waterways. Considering the small size of each of the project sites and the small quantities of potential pollutants, the threat of these materials will be minimal.

Discharge of potentially contaminated groundwater to surface water may degrade the water quality of surrounding watercourses and waterbodies. However, pumped groundwater must be tested and if determined to be contaminated, the water must be collected and either treated or disposed of according to waste discharge requirements of Order No. R4-2008-0032, General NPDES and Waste Discharge Requirements for Discharges of Groundwater from Construction and Project Dewatering to Surface Waters in Coastal Watersheds of Los Angeles and Ventura Counties (adopted by the State Board on June 5, 2008). Additionally, the installation of dewatering wells may result in erosion or sedimentation

4.3 Water Resources and Hydraulic Hazards

due to exposed soils and sediment removal and dewatering discharges may cause erosion at the discharge point.

Construction of the proposed project could result in short-term erosion and sediment impacts to the watercourses and waterbodies within the project area. Earth-disturbing activities associated with construction would be temporary and would not result in a permanent or significant alteration of natural topographic features that could increase or exacerbate erosion. Temporary erosion impacts during excavation would depend largely on the areas affected and the length of time soils are subject to conditions that would be affected by erosion processes. Although the potential for erosion would be limited, exposure of soil to wind and water during construction would still occur.

The proposed project would require consultation with the USACE to obtain a Section 404 Permit and associated Section 401 Water Quality Certification via the RWQCB. A separate dewatering permit would be obtained from RWQCB. However, discharges of groundwater to surface water are covered under Order No. R4-2008-0032, General NPDES and Waste Discharge Requirements for Discharges of Groundwater from Construction and Project Dewatering to Surface Waters in Coastal Watersheds of Los Angeles and Ventura Counties (adopted by the State Board on June 5, 2008). Therefore, the proposed project would need to submit a Notice of Intent (NOI) and comply with the permit requirements including waste discharge requirements (WDR) and implement a monitoring and reporting program.

Finally, the RWQCB issues the Construction General Stormwater Permit which addresses the potential pollutants discharged to stormwater by construction activities. To comply with the permit, a Notice of Intent (NOI) must be submitted to the RWQCB and a SWPPP must be prepared and kept on site. The purpose of the SWPPP is to identify and document appropriate BMP installation to minimize erosion and construction site runoff pollution during the length of construction. Impacts to water quality would be significant unless mitigated.

Operations

During the operation of the proposed project, the maintenance activities associated with the proposed drain would be similar to those currently in place, which would generate intermittent activity for maintenance purposes only and are expected to occur at the existing frequency. The proposed project would not result in new activities that would cause a significant impact to surface water quality. The District's Final Program EIR for Environmental Protection Measures for the Ongoing Routine Operations and Maintenance Program Project contains BMPs for the operational maintenance activities for J Street Drain. The BMPs will be incorporated as part of the proposed project for operational activities to maintain impacts at the current less than significant level.

Currently, trash enters the channel either directly or as a result of discharge from tributary storm drains, particularly during storm events. The District's Operations and Maintenance Division cleans out the drain north of the Ventura County Railroad annually in May and June, and south of the railroad to the end of the concrete channel as needed after a natural lagoon breach event (typically sometime between October and February). Trash cleanup does not occur in the lagoon to avoid adverse effects to threatened and endangered species. The J Street Drain itself does not generate trash. Enlargement of the channel would not increase the volume of trash that is generated throughout the watershed and discharged to the J Street Drain. This impact is less than significant. Nonetheless, as discussed in Section 4.3.1.1, the District is working with the Cities of Oxnard and Port Hueneme through a separate process (Ventura Countywide Municipal Stormwater Permit compliance) to install a trash collection device in J Street Drain.

4.3 Water Resources and Hydraulic Hazards

Beach Elevation Management Plan

The BEMP is anticipated to be used periodically and would only have equipment on the beach for a few hours. The BEMP is identified to groom the beach sand berm elevation to facilitate natural breaching in response to storm water runoff. During a natural breach condition, surface water from the lagoon would flow into the Pacific Ocean. Beach grooming would not degrade surface water quality, as this work would not occur within surface waters and would be carried out according to BMPs in the District's Final Program EIR for Environmental Protection Measures for the Ongoing Routine Operations and Maintenance Program Project. This impact would be less than significant.

Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, in a manner which would result in substantial erosion or siltation on- or off-site?

Construction

The construction of the drain would be short-term and would not result in any changes to the existing drainage pattern of the project area. Therefore, impacts would be less than significant.

Operation

The natural action of the ocean waves builds up a sand berm on the beach. This sand berm periodically blocks the lagoon outlet, preventing J Street drainage from reaching the ocean and preventing tidal flow from entering the lagoon. Under the BEMP, the District will maintain a safe sand berm elevation (elevation 6.5 feet \pm NGVD 1929) near the northwest corner of the lagoon, approximately 800 feet southeast of the J Street drain concrete channel outfall. The improvements to J Street Drain would lower the channel outlet approximately 2.5 feet below the existing channel bottom. Because the existing lagoon bottom elevation is approximately at the same elevation as the end of the existing concrete channel, there is the potential that water will pond for a varying period of time at the point where the lowered concrete channel meets the existing lagoon bottom elevation. To minimize potential effects to threatened and endangered species, there are no plans to excavate within the lagoon beyond the project limits at the drain outlet.

In order to analyze the potential change in sediment transport and erosional characteristics of the project, a *Sedimentation Transport Study* was prepared in August 2011 (HDR). The purpose of the study was to evaluate what storm event (e.g., 2-year, 5-year) would allow a new, lower elevation low-flow channel to form through the lagoon, preventing the "ponding" effect.

Sediment transport modeling identified two threshold conditions at which the lagoon bottom downstream of the proposed J Street Drain concrete channel outfall would flow to maintain positive drainage for the proposed improvements: (1) two consecutive 2-year storm events (not necessarily within the same storm season); or (2) a single 5-year storm event. Either one of these scenarios would create a low-flow channel capable of maintaining positive drainage. The probability of a 2-year storm event in a given year is 50 percent. The probability of two consecutive 2-year storms occurring in any given year is approximately 25 percent. The probability of a 5-year storm occurring in a given year is 20 percent. The probability of a 5-year flood event occurring within a 3-year period is approximately 50 percent.

Additionally, given the proximity of the proposed J Street Drain outfall elevation to mean sea level, tidal cycles have a large impact on sediment transport capacity of the system. In a fully-breached lagoon berm condition, the J Street Drain will likely be inundated twice a day from tidal action. When a berm is

4.3 Water Resources and Hydraulic Hazards

present, the channel is also likely to be inundated to some extent over a long period, from lagoon backwater. Based on the analysis, a total inflowing sediment load potential of 17 tons per year was calculated for J Street Drain and Hueneme Drain. This load is minimal compared to the total load (5,000 tons) leaving the drains in the two consecutive 2-year storm events. Annual inflowing load represented approximately 0.30 percent of the out-flowing storm sediment load. Therefore, the build up of sediment within the lagoon creating a “ponding” effect is considered less than significant. The proposed project would increase the capacity of the existing channel to reduce potential flooding in residential and commercial areas of Oxnard and Port Hueneme.

The proposed project would not result in an increase in erosion or siltation off-site since the sedimentation transport described above is a natural balancing of the system. As sediment is brought in by the ocean, it is also removed. The proposed project would not result in a significant change from the existing erosion potential.

Beach Elevation Management Plan

The BEMP requires the use of mechanical equipment to physically groom the berm to a safe elevation above which lagoon waters could overflow in response to storm runoff. Grooming the beach elevation would ensure the lagoon breaches naturally before adjacent developed properties can become flooded. This would occur periodically prior to a forecast storm event when the sand berm elevation exceeds 6.5 feet elevation (NGVD 1929). It is likely that when the lagoon water surface overtops the groomed beach section, there would be movement of sand from the beach into the surf zone. This would just be the existing beach sand and, therefore, part of the natural beach system of sand transport. Therefore, a less than significant impact is identified.

Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site?

Construction

During construction stormwater would be directed around the project work area, but project construction would not contribute additional surface runoff (groundwater pumps would be turned off during storm events). These temporary diversions would include water flowing through J Street Drain, the Hueneme Drain Pump Station, and the tidal action of water moving further into the lagoon. The contractor would be responsible for setting up the appropriate bypass systems as well as the coffer dam which would keep the tidal water out of the active work area. With these bypasses in place, there would be a less than significant impact.

Operation

Sediment transport modeling illustrated that if a breached berm condition exists for Ormond Beach Lagoon, it is possible for a new low-flow channel to form. This new low-flow channel would effectively lower portions of the lagoon bottom and maintain positive drainage from the J Street Drain outfall to the Pacific Ocean. Both cases of either two consecutive 2-year storm series (although not necessarily within the same storm season) or a single 5-year storm were found to create this low-flow channel. The proposed project would not substantially alter the existing drainage pattern. The proposed project would involve increasing the capacity of the existing channel to reduce potential flooding as illustrated in the *Sedimentation Transport Study* and discussed above. While the proposed drain would not increase the amount of surface runoff, the increased capacity drain would increase the rate of surface runoff entering

4.3 Water Resources and Hydraulic Hazards

the Ormond Beach Lagoon. The J Street Drain is located within a 100-year flood hazard area. The capacity of the existing drain is 500-600 cubic feet per second (cfs), the equivalent of a ten-year flood event. The limited capacity of the drain along with the backwater effects at the street crossings along the drain may result in flooding during a severe rain storm larger than a ten-year flood level flow. Therefore, the proposed drain would reduce flooding in the project area during a storm larger than a ten-year storm. The new low-flow channel would effectively lower portions of the lagoon bottom and maintain positive drainage from the J Street Drain outfall to the Pacific Ocean. The results are based on a breached condition existing throughout the storm hydrograph. Project impacts would be less than significant.

Beach Elevation Management Plan

The BEMP is designed to groom the beach berm when it is observed to exceed 6.5 feet elevation (NGVD 1929) and a storm is simultaneously forecasted for the area. Grooming the beach elevation would ensure the lagoon breaches naturally before adjacent developed properties can become flooded. The intent of the BEMP is to facilitate natural release of the lagoon water in response to storm water inflow before it backs up so far that it overtops the channel and floods adjacent residents and businesses, including the OWWTP. Therefore, the BEMP would not cause flooding on or off site and would in fact reduce it. Therefore, there is no impact identified for this issue area.

Create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff?

Construction

During construction earth movement, use of heavy equipment, and placement of concrete within the work area all have the potential to generate polluted runoff. Therefore, this impact is considered significant and would require mitigation.

Operation

The proposed project involves the expansion of capacity for the existing J Street Drain. During operation, the proposed drain would accommodate a 100-year flood flow and decrease backwater effects at the street crossings along the drain that currently result in flooding during a severe rain storm larger than a ten-year flood level flow. However, the proposed project would not result in increased flow, but rather accommodates a greater flood flow and thereby increases the velocity of stormwater runoff entering the lagoon. Therefore, the proposed project would not create or contribute runoff water that would exceed the capacity of existing or planned stormwater drainage systems. As standard practice, BMPs identified the District's Operations and Maintenance EIR (listed in Table 1.9-1) are currently and would continue to be implemented to prevent polluted runoff during maintenance activities. This impact is less than significant.

Beach Elevation Management Plan

The BEMP was created to identify the actions necessary to groom the beach elevation. Grooming the beach elevation would ensure the lagoon breaches naturally in response to storm water inflow before adjacent developed properties can become flooded. Therefore, the BEMP would ~~improve~~ reduce the ~~potential~~ potential flooding and no impact is identified for this issue area. In addition, no polluted runoff would be generated during BEMP implementation.

4.3 Water Resources and Hydraulic Hazards

Place housing within a 100-year flood hazard area as mapped on a federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map?

No housing is proposed for the project. Existing residential development in the project area is located within a 100-year flood hazard area. The proposed project would reduce flooding resulting from a 100-year flood flow. Therefore, this impact is less than significant.

Place within a 100-year flood hazard area structures which would impede or redirect flood flows?

Construction

During construction runoff would be directed around the work area but this would be a temporary condition. Overall, it is expected that this project would reduce the potential for flooding. Therefore, a less than significant impact is anticipated for this issue area.

Operation

The J Street Drain is located within a 100-year flood hazard area. The proposed project would increase the capacity of the existing channel to reduce potential flooding in residential and commercial areas of Oxnard and Port Hueneme. The existing drain capacity would be increased to accommodate a 100-year flood runoff volume. The expanded capacity of the drain would protect structures located within a 100-year flood hazard area. The new low-flow channel that would develop through the lagoon after two 2-year or one 5-year storm would effectively lower portions of the lagoon bottom and maintain positive drainage from the J Street Drain outfall to the Pacific Ocean. The project would direct flood flows to reduce flooding at the project area; therefore, impacts would be less than significant.

Beach Elevation Management Plan

The BEMP was created to identify the actions necessary to facilitate natural breaching of the lagoon in the event the beach sand berm exceeds elevation 6.5 feet (NGVD 1929). Grooming the beach elevation would ensure the lagoon breaches naturally in response to storm water inflow before adjacent developed properties can become flooded. Therefore, the BEMP would eliminate potential flooding and no impact is identified for this issue area.

Expose people or structures to a significant risk of loss, injury or death involving flooding, including flooding as a result of the failure of a levee or dam?

Construction

The construction activities are expected to redirect local runoff around the work area, but this is anticipated to be a temporary condition. During construction there will be flow bypasses facilities installed so that any runoff would be directed around the site. Therefore, since the construction is a temporary condition, flow bypasses would be adequately sized to convey anticipated runoff volumes without failing, and flow bypasses would not direct runoff toward people or structures, a less than significant impact is expected for this issue area.

Operation

The proposed project would increase the capacity of the existing channel to reduce potential flooding in residential and commercial areas of Oxnard and Port Hueneme. Therefore, impacts would be less than significant.

4.3 Water Resources and Hydraulic Hazards

Beach Elevation Management Plan

The BEMP would reduce the potential for flooding the residential and commercial areas by grooming a 100-foot-wide section of beach near the northwest corner of the lagoon to an elevation of 6.5 feet (NGVD 1929). In the event that subsequent storm runoff raises the lagoon water surface above this level, the lagoon would breach naturally. Therefore, a less than significant impact is identified for this issue area.

4.3.5 Cumulative Impacts

Groundwater Quantity

The construction of the proposed drain would require the installation of dewatering wells, dewatering, and discharge of groundwater back into surface water, where it would ultimately percolate into the ground. The operational phase and implementation of the BEMP would not add to a cumulative impact as they would not impact groundwater quantity. Other cumulative projects considered in this analysis may encounter groundwater during project construction, since they are located in the vicinity of the project. For example, the Water Pipeline 1 and 2 projects would be placing underground pipes in an area that has a high groundwater table. However, the amount of groundwater that would be encountered during these projects would be minimal and would not result in a cumulative impact on groundwater quantity. In addition, this groundwater would likely be discharged to surface water and ultimately percolate into the ground. Therefore, cumulative impacts would be less than significant.

Groundwater Quality

The construction of the proposed drain would require the installation of dewatering wells, dewatering, and discharge of groundwater back into surface water. As discussed in the project-level impact analysis, groundwater would be tested for contaminants and either treated before discharge or properly disposed. Further, the operational phase and the implementation of the BEMP would not impact groundwater quality.

Section 4.8 of the EIR discusses the impacts of dewatering with regards to the Halaco superfund site. Currently, the ~~natural~~ direction of the groundwater movement beneath the western portion of the Halaco site (i.e., closest to the J Street Drain) is ~~northward toward the shoreline (i.e. southwest) with ultimate discharge into the Pacific Ocean.~~ The entrainment of metals in groundwater near the J Street Drain project area is considered potentially problematic, in that the contaminated plume could be encountered during construction activity, in which case treatment of the extracted groundwater would be required prior to discharge into the Perkins Drain. A groundwater modeling study was performed to address this potential problem. The maximum expected distance of hazardous material migration from the Halaco Site in response to dewatering is approximately 300-50 feet, or less than ~~one fifth~~ four percent of the distance between the Halaco Site and the channel; ~~a distance of half the maximum (or 150 feet) is more realistic given the conservative assumptions used in the model (specifically the sure of high hydraulic conductivity, to a depth of 400 feet in the 'maximum' scenario).~~ The cessation of dewatering is expected to halt migration of impacted groundwater toward the channel, and in this situation, the groundwater will resume migrating along the natural pre-project gradient toward the Pacific shoreline where its ultimate discharge will occur with considerable dilution as it discharges slowly in contact with surrounding oceanic water. Dewatering at the site ~~would may~~ result in a temporary impact with regards to the potential migration of heavy metals within the ground water plume from the Halaco site. This is considered a significant impact and mitigation is required.

4.3 Water Resources and Hydraulic Hazards

Mitigation measure HAZ-1 identified in Section 4.8 of the EIR requires the use of ~~sheet piling~~ monitoring wells, and possibly injection wells during construction to address this impact. Through numerical modeling, the use of ~~sheet piling~~ injection wells was demonstrated to isolate groundwater from the Halaco Site and prevent migration of groundwater toward the channel. ~~In addition, the use of sheet piling will reduce the overall volume of water required to be withdrawn in order to construct the channel.~~

Surface Water Quantity

Construction

The construction of the proposed drain would require the installation of dewatering wells, dewatering, and discharge of groundwater back into surface water. Construction of the proposed project would result in a less than significant project-level impact to overdraft of surface water. Therefore, a less than significant cumulative impact would result.

Operations

Operation of the proposed project would not utilize surface water as a water source, nor require any water consumption for maintenance purposes beyond existing conditions. Operation of the proposed project would result in a less than significant project-level impact to overdraft of surface water. Therefore, a less than significant cumulative impact would result.

Beach Elevation Management Plan

The BEMP is anticipated to be used periodically and would only have equipment on the beach for a few hours. The BEMP would groom the beach elevation to ensure the lagoon breaches naturally in response to subsequent storm water inflow before adjacent developed properties can become flooded. The BEMP would not change surface water quantity as it would facilitate the natural process of water overtopping the sand berm that allows the seasonal flow of water from the lagoon to the ocean, eliminating flooding upstream. This impact would be less than significant at a project level and would not contribute to a cumulative significant effect.

Surface Water Quality

Construction

Water quality in jurisdictional areas can be adversely affected by surface water runoff and sedimentation during construction. The construction of the proposed project would involve dewatering, demolition, and excavation activities which may result in potential impacts to water quality. None of the cumulative projects would be constructed in the area impacted by the proposed project. Cumulative impacts would be less than significant.

Operations

The proposed project does not include any new land use or activity that would cause a new significant impact to surface water quality. In addition, the District implements water quality BMPs (see Table 1.9-1) during channel maintenance activities, which would continue to be implemented for J Street Drain maintenance activities to prevent water quality impacts. The District would also continue to clean trash out of the J Street Drain, and would install a trash collection device in J Street Drain under the separate Ventura Countywide Municipal Stormwater Permit compliance process. Cumulative impacts are, therefore, less than significant for this issue area.

4.3 Water Resources and Hydraulic Hazards

Beach Elevation Management Plan

The BEMP is anticipated to be used periodically and would only have equipment on the beach for a few hours. Grooming the beach elevation would ensure the lagoon breaches naturally in response to subsequent storm water inflow before adjacent developed properties can become flooded. No impact to water supply quality is expected, as work would not occur within surface waters. Implementation of the BEMP would result in a less than significant project-level impact to surface water quality. Therefore, no cumulative impact would result.

Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, in a manner which would result in substantial erosion or siltation on- or off-site?

Construction

The construction of the drain would be short-term and would involve temporary water diversions that would not result in substantial changes to the existing drainage pattern of the project area. Construction of the proposed project would not result in a project-level impact to the existing drainage pattern. None of the cumulative projects would be constructed in the area impacted by the proposed project. Cumulative impact is less than significant.

Operation

The proposed J Street Drain project would not alter the existing drainage pattern of the site or area. Operation of the proposed project would not result in a project-level impact to the existing drainage pattern. The proposed project would increase the capacity of the existing channel to reduce potential flooding in residential and commercial areas of Oxnard and Port Hueneme. The proposed project would not result in an increase in erosion or siltation off-site since the sedimentation transport described above is a natural balancing of the system. As sediment is brought in by the ocean, it is also removed. This inflow and outflow is considered a natural balancing of the system; therefore, the proposed project would not result in a significant change from the existing erosion potential. Therefore, no cumulative impact would result.

Beach Elevation Management Plan

The BEMP is anticipated to be used periodically and would only have equipment on the beach for a few hours. The BEMP would groom the beach elevation to ensure the lagoon breaches naturally in response to subsequent storm runoff before adjacent developed properties can become flooded. No change to the existing drainage pattern is expected. Implementation of the BEMP would result in a less than significant project-level impact to the existing drainage pattern. Therefore, no cumulative impact would result.

Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site?

Construction

The construction of the drain would be short-term and would involve temporary water diversions that would not result in substantial changes to the existing drainage pattern of the project area. Construction of the proposed project would not result in a significant project-level impact to the existing drainage

4.3 Water Resources and Hydraulic Hazards

pattern. None of the cumulative projects would be constructed in the area impacted by the proposed project. The cumulative impact is therefore less than significant.

Operation

The proposed J Street Drain project would not alter the existing drainage pattern of the site or area. Operation of the proposed project would not result in a project-level impact to the existing drainage pattern. The proposed project would increase the capacity of the existing channel to reduce potential flooding in residential and commercial areas of Oxnard and Port Hueneme. As discussed in the J Street Drain Sediment Transport Study for Proposed Outlet at Ormond Beach Lagoon, the lagoon bottom elevation would lower after two 2-year or one 5-year storm events. The new lagoon bottom elevation would coincide with the lowered J Street Drain invert elevation. However, this would not alter the course of the lagoon or result in flooding. The project may increase the rate of surface runoff during less frequent events larger than a 10-year flood. Therefore, a less than significant cumulative impact would result.

Beach Elevation Management Plan

Implementation of the BEMP would result in a less than significant project-level impact to the existing drainage pattern. Therefore, a less than significant cumulative impact would result.

Create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff?

Construction

Construction of the proposed project could result in a significant project-level impact by generating polluted runoff, therefore requiring mitigation. However, none of the cumulative projects would be constructed simultaneously with the proposed project. The cumulative impact is less than significant.

Operation

The proposed project involves the expansion of capacity for the existing J Street Drain. During operation, the proposed drain would be able to accommodate a 100-year flood flow and decrease backwater effects at the street crossings along the drain that result in flooding during a severe rain storm larger than a five-year flood level flow. However, the proposed project would not result in increased flow, but rather accommodates a greater flood flow. Therefore, the proposed project would not create or contribute runoff water that would exceed the capacity of existing or planned stormwater drainage systems. Operation of the proposed project would result in a less than significant project-level impact to stormwater drainage systems. The cumulative impact is less than significant.

Beach Elevation Management Plan

The BEMP was created to identify the actions necessary to groom the beach in the event the beach sand berm elevation exceeds 6.5 feet (NGVD 1929). Grooming the beach elevation would ensure the lagoon breaches naturally in response to subsequent storm runoff before adjacent developed properties can become flooded. Therefore, the BEMP would improve the flooding potential and no cumulative impact is identified for this issue area.

4.3 Water Resources and Hydraulic Hazards

Place housing within a 100-year flood hazard area as mapped on a federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map?

No housing is proposed for the J Street Drain project. Existing residential development in the project area is located within a 100-year flood hazard area. The proposed project would reduce flooding of existing housing in a 100-year flood along the J Street Drain. The proposed project would not result in a project-level impact associated with 100-year flood hazard. The cumulative impact is less than significant.

Place within a 100-year flood hazard area structures which would impede or redirect flood flows?

The J Street Drain is located within a 100-year flood hazard area. The proposed project would increase the capacity of the existing channel to reduce potential flooding in residential and commercial areas of Oxnard and Port Hueneme. The existing drain would be increased to accommodate 100-year flood runoff volume. The project would direct flood flows to reduce flooding at the project area. Cumulative impacts would be less than significant.

Expose people or structures to a significant risk of loss, injury or death involving flooding, including flooding as a result of the failure of a levee or dam?

The proposed project would increase the capacity of the existing channel to reduce potential flooding in residential and commercial areas of Oxnard and Port Hueneme. The proposed project would not result in a project-level impact associated with flooding as a result of the failure of a levee or dam. The cumulative impact is therefore less than significant.

4.3.6 Mitigation Measures

Water Quality

Stormwater Pollution Prevention Plan

The District shall submit a completed NOI and obtain a waste discharge identification number to obtain coverage under the NPDES General Permit for Discharges Associated with Construction Activity issued by the SWRCB. The contractor shall submit to the County a SWPPP and monitoring program consistent with SWRCB rules for the construction phase of the project prior to initiating construction.

The SWPPP shall contain the following specific mitigation measures designed to reduce or eliminate construction site runoff pollution:

WQ-1 Construction Site Planning BMPs, including but not limited to:

- The amount of cuts and fills shall be minimized; and
- Temporary and permanent roads and driveways shall be aligned along slope contours. Grading operations shall be phased to reduce the extent of disturbed areas and length of exposure.

WQ-2 BMPs to minimize soil movement include but are not limited to:

- Soil stockpiles shall be contained;

4.3 Water Resources and Hydraulic Hazards

- Stabilized access roads and entrances shall be constructed in the initial phase of construction;
- Tire wash stations, gravel beds, and/or rumble plates shall be installed at site entrance and exit points to prevent sediment from being tracked onto adjacent roadways;
- Sediments and construction materials shall be dry-swept from finished streets the same day they are deposited; and
- Site runoff control structures, such as earth berms, drainage swales, and ditches that convey surface runoff during construction into temporary or permanent sediment detention basins shall be installed and made operational in the initial phase of construction, as necessary.

WQ-3 BMPs to capture sediment include but are not limited to:

- Storm drain inlets shall be protected from sediment-laden runoff with inlet protection devices such as gravel bag barriers, filter fabric fences, block and gravel filters, excavated inlet sediment traps, sand bag barriers, and/or other devices; and
- Sediment shall be removed from dewatering discharge with portable settling and filtration methods, such as Baker tanks or other devices.

WQ-4 Good Housekeeping BMPs include but are not limited to the following requirements:

- All storm drains, drainage patterns, and creeks located near the construction site prior to construction shall be identified to ensure that all subcontractors know their location to prevent pollutants from entering them;
- Washing of concrete trucks, paint, equipment, or similar activities shall occur only in areas where polluted water and materials can be contained for subsequent removal from the site; wash water shall not be discharged to the storm drains, street, drainage ditches, creeks, or wetlands; areas designated for washing functions shall be at least 100 feet from any storm drain, waterbody or sensitive biological resources to the extent feasible; the location(s) of the washout area(s) shall be clearly noted at the construction site with signs; the applicant shall designate a washout area. The wash-out areas shall be shown on the construction and/or grading and building plans and shall be in place and maintained throughout construction;
- All leaks, spills, and drips shall be immediately cleaned up and disposed of properly;
- Vehicles and heavy equipment that are leaking fuel, oil, hydraulic fluid or other pollutants shall be immediately contained and either repaired immediately or removed from the site;
- One or more emergency spill containment kits shall be placed onsite in easily visible locations. Personnel will be trained in proper use and disposal methods;
- Vehicles and heavy equipment shall be refueled and serviced in one designated site located at least 100 feet from the drain to the extent feasible;
- Temporary storage of construction equipment shall be limited to an area approved by the City of Oxnard, and shall be located at least 100 feet from any waterbodies to the extent feasible;

4.3 Water Resources and Hydraulic Hazards

- Dry clean-up methods shall be used whenever possible;
- Exposed stockpiles of soil and other erosive materials shall be covered or contained during the rainy season;
- Trash cans shall be placed liberally around the site and properly maintained;
- All subcontractors and laborers shall be educated about proper site maintenance and stormwater pollution control measures through periodic “tailgate” meetings;
- Roadwork or pavement construction, concrete, asphalt, and seal coat shall be applied during dry weather only; and
- Storm drains and manholes within the construction area shall be covered when paving or applying seal coat, slurry, fog seal, etc.

Halaco Superfund Site

Mitigation measure HAZ-1 presented in Section 4.8 of the EIR would require the use of monitoring wells prior to dewatering activities between the Ventura County Railroad and Ormond Beach to verify the direction of groundwater movement at the time of dewatering. ~~sheet piling~~. If the current drain effect along Perkins Road and McWane Boulevard is no longer observed and it is determined that there is a potential for groundwater migration at the site, the District will install five injection wells at the beach parking area between the J Street Drain and the Halaco Site. ~~on the east side of the drain~~. The injection wells would operate during ~~construction dewatering~~ to address the potential impact associated with groundwater pumping. The use of ~~sheet piling~~ injection wells was demonstrated to isolate groundwater from the Halaco Site and prevent migration of groundwater toward the channel. ~~In addition, the use of sheet piling will reduce the overall volume of water required to be withdrawn in order to construct the channel.~~

4.3.6.1 Ventura County Watershed Protection District Best Management Practices

The Ventura County Board of Supervisors adopted the District’s Final Program EIR for Environmental Protection Measures for the Ongoing Routine Operations and Maintenance Program Project No. 80030 in May 2008. The final document includes BMPs that have been added to the District’s Maintenance Activity Guidelines. The Operation and Maintenance Division staff will be responsible for ensuring the proper implementation of the BMPs on a routine, year-round basis. The Division staff will also be responsible for ensuring compliance with all permit conditions, conducting or employing qualified personnel for any required pre-project site surveys or inspections, updating the Activity Guidelines sheets, instructing crews on BMPs, overseeing certain BMP implementation, documenting the implementation of the BMPs, and conducting any agency coordination.

The following BMPs will be implemented to minimize impacts during operation:

- Avoid Channel Work During the Rainy Season. Routine maintenance and repair activities in earthen channels and in channels with soft bottoms and bank protection shall not occur during the rainy season, 1 December to 1 April, to avoid work when water could be present in the drainage due to runoff. Routine maintenance and repair activities may occur during this period if water is absent from the drainage because of low runoff conditions, or activities can be performed without working in flowing water. Work in flowing water during this period may proceed if there are no feasible alternatives and completion of the maintenance work during this time period is critical.

4.3 Water Resources and Hydraulic Hazards

Work in flowing water shall be conducted according to the BMPs established in the Water Diversion Guide attached as Appendix E to this EIR.

- **Prevent Discharge of Silt-Laden Water During Concrete Channel Cleaning.** The removal of sediments, vegetation, algae, and trash from fully lined improved channels for purposes of NPDES storm water permit compliance shall include measures to prevent the discharge of silt-laden water or pollutants to downstream unimproved channels with soft bottoms (Board Order No. 00-108; NPDES Permit No. CAS004002, adopted on July 27, 2000). These measures may include temporary downstream silt barriers (sand bags, straw bales, in-channel materials), silt fences, upstream diversion, etc. Per Section 401 Water Quality Certification requirements, a Water Diversion Plan would be needed for water diversion activities.
- **Location of Temporary Stockpiles.** Temporary stockpiles outside the channels or debris basins shall be stabilized by compacting or other measures if present at the work site from 1 December to 1 April. Silt fences, berms, or other methods shall be used to prevent sediments from being eroded from the temporary stockpile into the adjacent drainage. Temporary stockpiles may be placed in channel bottoms or debris basins if they are located on barren soil or areas with non-native weeds, and are not placed in such a manner that they would be exposed to flowing water. No temporary stockpiles shall be placed on the channel bed or banks during the period of 1 December to 1 April for more than the duration of the sediment removal work. Permanent stockpiles shall be located landward of the 100-year floodplain to the maximum extent feasible.
- **Avoid Road Base Discharge.** The District shall implement measures to prevent the discharge of road base, fill, sediments, and asphalt beyond a previously established road bed when working adjacent to channels and basin bottoms.
- **Concrete Wash-Out Protocols.** The District shall implement appropriate waste management practices during on site concrete repair operations. Waste management practices will be applied to the stockpiling of concrete, curing and finishing of concrete as well as to concrete wash-out operations. Waste management practices shall be adequate to ensure that fluids associated with the curing, finishing and wash-out of concrete shall not be discharged to the channel or basin. Concrete wastes shall be stockpiled separately from sediment and protected by erosion control measures so that concrete dust and debris are not discharged to the channel or basin. The District shall determine the appropriate waste management practices based on considerations of flow velocities, site conditions, availability of erosion control materials and construction costs.
- **Avoid Spills and Leaks.** The District shall ensure that all equipment operating in and near a watercourse, or in a basin, is in good working condition and free of leaks. No equipment maintenance or refueling shall occur in a channel or basin bottom. Spill containment materials must be on site or readily available for any equipment maintenance or refueling that occurs adjacent to a watercourse.

4.3.7 Significance After Mitigation

With implementation of mitigation measures WQ-1 through WQ-4, HAZ-1, and implementation of appropriate BMPs, water quality impacts would be reduced to below a level of significance. All other issue areas related to water resources and hydraulic hazards would be less than significant.

4.4 AIR QUALITY

This section examines the construction-related and long-term air quality effects that may result from the proposed J Street Drain Project. Greenhouse gas emissions from the project are analyzed in Section 4.12. Scientific Resources Associated prepared an Air Quality Technical Report for the project in July 2011. The Air Quality Technical Report is included as Appendix J of this RDEIR.

4.4.1 Environmental Setting

The Cities of Oxnard and Port Hueneme are located within the South Central Coast Air Basin (Basin or SCCAB) within the Ventura County Air Pollution Control District (VCAPCD), which has jurisdiction over Ventura County. Currently, portions of the Basin have been designated as non-attainment by the U.S. Environmental Protection Agency (USEPA) and the California Air Resource Board (CARB) for ozone and particulate matter (PM₁₀).

Air emissions in the Basin are subject to federal, state, and local rules and regulations implemented through provisions of the federal Clean Air Act (CAA), California Clean Air Act (CCAA), and the rules and regulations of the VCAPCD. Under the provisions of the federal and CCAA, air quality management districts with air basins not in attainment of the air quality standards are required to prepare an Air Quality Management Plan (AQMP). An AQMP establishes an area-specific program to control existing and proposed sources of air emissions so that the air quality standards may be attained by an applicable target date.

Ventura County is designated a severe non-attainment area for the state one-hour ozone standard, and recommended by the CARB as a non-attainment area for the federal eight-hour ozone standard. Table 4.4-1 identifies the number of days exceeding the federal and state ozone standards from 2004 to 2009. Table 4.4-1 also details the maximum one-hour ozone concentrations in Ventura County during this same period. Ventura County is designated a non-attainment area for the state standard for PM₁₀ (particulate matter with an aerodynamic diameter of 10 microns or smaller). Table 4.4-1 details the number of violations of the state PM₁₀ standard from 2004 to 2009. Ambient levels of other pollutants in Ventura County do not violate state or federal standards.

4.4.1.1 Climate

Air quality is determined primarily by the types and amounts of contaminants emitted into the atmosphere, the size and topography of the local air basin, and the pollutant-dispersing properties of local weather patterns.

The climate of Ventura County is strongly influenced by its proximity to the Pacific Ocean. The Mediterranean climate of the region and coastal influence produce moderate temperatures year round, with rainfall concentrated in the winter months. Daytime summer temperatures in the area average in the high 70s to the low 90s. Nighttime low temperatures during the summer are typically in the high 50s to low 60s, while the winter high temperatures tend to be in the 60s. Winter low temperatures are in the 40s. Annual average rainfall in Ventura County ranges from about 14 to 27 inches, the majority of which falls in winter months.

**Table 4.4-1. Air Quality Monitoring Summary at El Rio-Rio Mesa School #2
Air Quality Monitoring Station**

Pollutant/Standard	2004	2005	2006	2007	2008	2009
<i>Ozone</i>						
1-Hour > 0.09 ppm (S) ⁽¹⁾	0	0	0	0	0	1
1-Hour > 0.12 ppm (F) ⁽¹⁾	0	0	0	0	0	1
8- Hour > 0.075 ppm (F)	0	0	0	0	0	1
Max 1-Hour Conc. (ppm)	0.084	0.076	0.089	0.089	0.086	0.099
<i>Nitrogen Dioxide</i>						
1-Hour > 0.18 ppm (S) ⁽¹⁾	0	0	0	0	0	0
Max 1-Hour Conc. (ppm)	0.063	0.070	0.050	0.053	0.052	0.051
<i>Respirable Particulates (PM₁₀)</i>						
24-Hour > 50 µg/m ³ (S) ⁽¹⁾	6.5	12.1	24.1	12.2	18.3	12.2
24-Hour > 150 µg/m ³ (F)	0	0	0	6.1	0	0
Max. 24-Hour Conc. (µg/m ³) ⁽²⁾	59.3	54.4	119.1	248.0	79.8	99.9
<i>Ultra-Fine Particulates (PM_{2.5})</i>						
24-Hour > 35µg/m ³ (F) ⁽¹⁾	0	0	0	3.2	0	0
Max. 24-Hour Conc. (µg/m ³) ⁽²⁾	28.5	35.2	29.8	39.9	23.4	19.7

Source: California Air Resources Board. <http://www.arb.ca.gov/adam/topfour/topfour1.php>

Key: (S) = state standard, (F) = federal standard.

ppm = parts per million, µg/m³ = micrograms per cubic meter.

* = data not available

Notes: (1) Number of days (in fractions) standards were exceeded.

(2) Maxima for periods indicated.

4.4.1.2 Air Pollution Control Efforts

Both the federal and state governments have set health-based ambient air quality standards for the following six pollutants:

- Sulfur dioxide (SO₂);
- Lead (Pb);
- Carbon monoxide (CO);
- Respirable particulate matter (PM₁₀);
- Nitrogen dioxide (NO₂); and
- Ozone (O₃)

The federal government has also set standards for PM_{2.5}.

Standards for these pollutants have been designed to protect the most sensitive persons from illness or discomfort with a margin of safety. The California standards are more stringent than federal standards, especially in the case of PM₁₀ and sulfur dioxide. Table 4.4-2 outlines current federal and state ambient air quality standards and health effects of the criteria air pollutants. Additional information about health effects associated with each pollutant is provided by the VCAPCD.

Table 4.4-2. Air Pollution Standards

Pollutant	Averaging Time	California Standards ⁽¹⁾		Federal Standards ⁽²⁾		
		Concentration ⁽³⁾	Method ⁽⁴⁾	Primary ^{(3), (5)}	Secondary ^{(3), (6)}	Method ⁽⁷⁾
Ozone (O ₃)	1 hour	0.09 ppm (180 µg/m ³)	Ultraviolet Photometry	—	Same as Primary Standard	Ultraviolet Photometry
	8 hours	0.07 ppm (137 µg/m ³)		0.075 ppm (147 µg/m ³)		
Respirable Particulate Matter (PM ₁₀)	24 Hour	50 µg/m ³	Gravimetric or Beta Attenuation	150 µg/m ³	Same as Primary Standard	Inertial Separation and Gravimetric Analysis
	Annual Arithmetic Mean	20 µg/m ³		—		
Fine Particulate Matter (PM _{2.5})	24 Hour	No Separate State Standard		35 ug/m ³	Same as Primary Standard	Inertial Separation and Gravimetric Analysis
	Annual Arithmetic Mean	12 ug/m ³	Gravimetric or Beta Attenuation	15 ug/m ³		
Carbon Monoxide (CO)	8 hours	9 ppm (10 mg/m ³)	Non-Dispersive Infrared Photometry (NDIR)	9 ppm (10 mg/m ³)	None	Non-Dispersive Infrared Photometry (NDIR)
	1 hour	20 ppm (23 mg/m ³)		35 ppm (40 mg/m ³)		
	8 Hour (Lake Tahoe)	6 ppm (7 mg/m ³)		—	—	—
Nitrogen Dioxide (NO ₂)*	Annual Arithmetic Mean	0.030 ppm (57 µg/m ³)	Gas Phase Chemiluminescence	53 ppb (100 µg/m ³) (See footnote 8)	Same as Primary Standard	Gas Phase Chemiluminescence
	1 hour	0.18 ppm (339 µg/m ³)		100 ppb (188 µg/m ³) (See footnote 8)	None	
Sulfur Dioxide (SO ₂)	24 hours	0.04 ppm (105 µg/m ³)	Ultraviolet Fluorescence	—	—	Ultra Fluorescence; Spectrophotometry (Parasaniline Method) ⁽⁹⁾
	3 hour	—		—	0.5 ppm (1300 µg/m ³) (See footnote 9)	
	1 hour	0.25 ppm (655 µg/m ³)		75 ppb (196 µg/m ³) (See footnote 9)	—	—
Lead (Pb) ⁽¹⁰⁾	30 Day Average	1.5 µg/m ³	Atomic Absorption	—	—	—
	Calendar Quarter	—		1.5 µg/m ³	Same as Primary Standard	High Volume Sampler and Atomic Absorption
	Rolling 3-Month Average ⁽¹¹⁾	—		0.15 µg/m ³		

4.4 Air Quality

Pollutant	Averaging Time	California Standards ⁽¹⁾		Federal Standards ⁽²⁾		
		Concentration ⁽³⁾	Method ⁽⁴⁾	Primary ^{(3), (5)}	Secondary ^{(3), (6)}	Method ⁽⁷⁾
Visibility Reducing Particles	8 Hour	Extinction coefficient of 0.23 per kilometer—visibility of 10 miles or more (0.07–30 miles or more for Lake Tahoe) due to particles when relative humidity is less than 70%. Method: Beta Attenuation and Transmittance through Filter Tape.		No Federal Standards		
Sulfates	24 Hour	25 µg/m ³	Ion Chromatography			
Hydrogen Sulfide	1 Hour	0.03 ppm (42 µg/m ³)	Ultraviolet Fluorescence			
Vinyl Chloride ⁽¹⁰⁾	24 Hour	0.01 ppm (26 µg/m ³)	Gas Chromatography			

1. California standards for ozone, carbon monoxide (except Lake Tahoe), sulfur dioxide (1 and 24 hour), nitrogen dioxide, suspended particulate matter—PM₁₀, PM_{2.5}, and visibility reducing particles, are values that are not to be exceeded. All others are not to be equaled or exceeded. California ambient air quality standards are listed in the Table of Standards in Section 70200 of Title 17 of the California Code of Regulations.

2. National standards (other than ozone, particulate matter, and those based on annual averages or annual arithmetic mean) are not to be exceeded more than once a year. The ozone standard is attained when the fourth highest eight hour concentration in a year, averaged over three years, is equal to or less than the standard. For PM₁₀, the 24 hour standard is attained when the expected number of days per calendar year with a 24-hour average concentration above 150 µg/m³ is equal to or less than one. For PM_{2.5}, the 24 hour standard is attained when 98 percent of the daily concentrations, averaged over three years, are equal to or less than the standard. Contact U.S. EPA for further clarification and current federal policies.

3. Concentration expressed first in units in which it was promulgated. Equivalent units given in parentheses are based upon a reference temperature of 25°C and a reference pressure of 760 torr. Most measurements of air quality are to be corrected to a reference temperature of 25°C and a reference pressure of 760 torr; ppm in this table refers to ppm by volume, or micromoles of pollutant per mole of gas.

4. Any equivalent procedure which can be shown to the satisfaction of the ARB to give equivalent results at or near the level of the air quality standard may be used.

5. National Primary Standards: The levels of air quality necessary, with an adequate margin of safety to protect the public health.

6. National Secondary Standards: The levels of air quality necessary to protect the public welfare from any known or anticipated adverse effects of a pollutant.

7. Reference method as described by the EPA. An "equivalent method" of measurement may be used but must have a "consistent relationship to the reference method" and must be approved by the EPA.

8. To attain this standard, the 3-year average of the 98th percentile of the daily maximum 1-hour average at each monitor within an area must not exceed 0.100 ppm (effective January 22, 2010). Note that the EPA standards are in units of parts per billion (ppb). California standards are in units of parts per million (ppm). To directly compare the national standards to the California standards the units can be converted from ppb to ppm. In this case, the national standards of 53 ppb and 100 ppb are identical to 0.053 ppm and 0.100 ppm, respectively.

9. On June 2, 2010, the U.S. EPA established a new 1-hour SO₂ standard, effective August 23, 2010, which is based on the 3-year average of the annual 99th percentile of the 1-hour daily maximum concentrations. EPA also proposed a new automated Federal Reference Method (FRM) using ultraviolet technology, but will retain the older pararosaniline methods until the new FRM have adequately permeated State monitoring networks. The EPA also revoked both the existing 24-hour SO₂ standard of 0.14 ppm and the annual primary SO₂ standard of 0.30 ppm, effective August 23, 2010. The secondary SO₂ standard was not revised at that time; however, the secondary standard is undergoing a separate review by EPA. Note that the new standard is in units of parts per billion (ppb). California standards are in units of parts per million (ppm). To directly compare the new primary national standard to the California standard the units can be converted to ppm. To directly compare the new primary national standard to the California standard the units can be converted to ppm. In this case, the national standard of 75 ppb is identical to 0.075 ppm.

10. The ARB has identified lead and vinyl chloride as 'toxic air contaminants' with no threshold level of exposure for adverse health effects determined. These actions allow for the implementation of control measures at levels below the ambient concentrations specified for these pollutants.

11. National lead standard, rolling 3-month average: final rule signed October 15, 2008.

Source: California Air Resources Board (09/08/10) (<http://www.arb.ca.gov/html/fslist.htm>)

mg/m³= milligrams per cubic meter

ppm = parts per million

µg/m³ = micrograms per cubic meter

ppb = parts per billion

4.4.1.3 Monitored Air Quality

The VCAPCD monitors air quality throughout the South Central Coast Air Basin. The closest monitoring station to the project area is located at 545 Central Avenue in the City of Oxnard, approximately 8 miles northeast of the proposed project. This monitoring station at Rio Mesa School monitors O₃, PM₁₀, NO₂, and PM_{2.5}. Table 4.4-1 summarizes maximum pollutant concentrations and the number of days state and federal standards for ozone, nitrogen dioxide, and particulate matter (PM₁₀ and PM_{2.5}) were exceeded between 2004 to 2009 at this monitoring station, which is representative of the project area.

The pollutant concentrations may vary from year to year depending on weather conditions and changes in land use patterns. As indicated in Table 4.4-1, NO₂ levels have not exceeded the state standards, ozone levels exceeded state and federal standards one day in 2009, PM₁₀ levels have routinely exceeded the state standards, and PM_{2.5} exceeded standards once between 2004 and 2009.

4.4.1.4 Sensitive Receptors

Sensitive receptors are populations that are more susceptible to the effects of air pollution than the general population. Residences, schools, child-care facilities, hospitals, and convalescent homes are examples of such receptors. Sensitive receptors located in or near the vicinity of known air emissions sources are of particular concern.

The existing land uses surrounding the proposed project site include a wastewater treatment facility, residential, manufacturing, park and recreation, commercial, and vacant lots (Figure 4.4-1). The residences along the J Street Drain north of Hueneme Road are approximately 50 feet from the drain; the nearest residences in Surfside III are within 20 feet. Other sensitive land use sites include the Bubbling Springs Community Park located at the corner of Bard Road and J Street and Our Saviour's Preschool and Day Care Center located at 905 Redwood Street, approximately 500 feet from J Street Drain. The following are other potentially sensitive land uses within half-mile from the J Street Drain.

- San Miguel Pre-School - 2400 S. J Street, Oxnard, CA
- Kamala Elementary School - 635 W. Kamala Street, Oxnard, CA
- St. Anthony's Elementary School - 2421 S. C Street, Oxnard, CA
- Sunkist Elementary School - 1400 Teakwood Street, Port Hueneme, CA
- EO Green Junior High School - 3739 S. C Street, Oxnard, CA
- Hueneme High School - 500 W. Bard Road, Oxnard, CA
- Community Memorial Hospital of San Buenaventura - Oxnard, 2921 Saviers Road, Oxnard, CA

Criteria Air Pollutants

The United States Environmental Protection Agency (U.S. EPA) identified six “criteria” pollutants that were found to be the most harmful to human health and welfare. These six pollutants are described below.

Ozone (O₃). O₃ is a respiratory irritant and an oxidant that increases susceptibility to respiratory infections and that can cause substantial damage to vegetation and other materials. O₃ is not emitted directly into the atmosphere, but is a secondary air pollutant produced in the atmosphere through a complex series of photochemical reactions involving reactive organic gases (ROG) and nitrogen oxides (NO_x). ROG and NO_x are known as precursor compounds for O₃. Substantial ozone production generally requires O₃ precursors to be present in a stable atmosphere with strong sunlight for approximately three hours. O₃ is a

regional air pollutant because it is not emitted directly by sources, but is formed downwind of sources of ROG and NO_x under the influence of wind and sunlight. O_3 concentrations tend to be higher in the late spring, summer, and fall, when long sunny days combine with regional air subsidence inversions to create conditions conducive to the formation and accumulation of secondary photochemical compounds.

Carbon Monoxide (CO). CO is a non-reactive pollutant that is a product of incomplete combustion of organic material, and is mostly associated with motor vehicle traffic, and in wintertime, with wood-burning stoves and fireplaces. High CO concentrations develop primarily during winter when periods of light winds combine with the formation of ground-level temperature inversions (typically from the evening through early morning). These conditions result in reduced dispersion of vehicle emissions. Motor vehicles also exhibit increased CO emission rates at low air temperatures. When inhaled at high concentrations, CO combines with hemoglobin in the blood and reduces its oxygen-carrying capacity, resulting in reduced levels of oxygen reaching the brain, heart, and other body tissues. This condition is especially detrimental for people with cardiovascular diseases, chronic lung disease, or anemia. CO measurements and modeling were important in the early 1980s when CO levels were regularly exceeded throughout California. However, in more recent years, CO measurements and modeling are not a priority in most California air districts due to the retirement of older vehicles, fewer emissions from new vehicles, and improvements to fuels.

Nitrogen Oxides (NO_x). When combustion temperatures are extremely high, as in aircraft, truck and automobile engines, atmospheric nitrogen combines with oxygen to form various oxides of nitrogen. Nitric oxide (NO) and nitrogen dioxide (NO_2) are the most significant air pollutants generally referred to as NO_x . Nitric oxide is a colorless and odorless gas that is relatively harmless to humans, quickly converts to NO_2 , and can be measured. Nitrogen dioxide has been found to be a lung irritant capable of producing pulmonary edema. Inhaling NO_2 can lead to respiratory illnesses such as bronchitis and pneumonia.

Particulate Matter (PM_{10} and $\text{PM}_{2.5}$). PM_{10} and $\text{PM}_{2.5}$ consists of airborne particles that measure 10 microns or less in diameter and 2.5 microns or less in diameter, respectively. PM_{10} and $\text{PM}_{2.5}$ represent fractions of particulate matter that can be inhaled into the air passages and the lungs, causing adverse health effects. Particulate matter in the atmosphere results from many kinds of dust- and fume-producing industrial and agricultural operations, fuel combustion, wood burning stoves and fireplaces, and atmospheric photochemical reactions. Some sources of particulate matter, such as demolition, construction activities and mining, are more local in nature, while others, such as vehicular traffic and wood burning stoves and fireplaces, have a more regional effect. Very small particles of certain substances (e.g., sulfates and nitrates) can cause lung damage directly, or can contain adsorbed gases (e.g., chlorides or ammonium) that may be injurious to health. Particulates can also damage materials and reduce visibility. Dust comprised of large particles (diameter greater than 10 microns) settles out rapidly and is easily filtered by human breathing passages. This dust is of concern more as a soiling nuisance rather than a health hazard. The remaining fractions, PM_{10} and $\text{PM}_{2.5}$, are a health concern particularly at levels above the federal and state ambient air quality standards. $\text{PM}_{2.5}$ (including diesel exhaust particles) is thought to have greater effects on health, because these particles are so small and thus are able to penetrate to the deepest parts of the lungs. Acute and chronic health effects associated with high particulate levels include the aggravation of chronic respiratory diseases, heart and lung disease, and coughing, bronchitis, and respiratory illnesses in children. Mortality studies since the 1990s have shown a statistically significant direct association between mortality (premature deaths) and daily concentrations of particulate matter in the air. Despite important gaps in scientific knowledge and continued reasons for some skepticism, a comprehensive evaluation of the research findings provides persuasive evidence that exposure to fine particulate air pollution has adverse effects on cardiopulmonary health. CARB has estimated that achieving the ambient air quality standards for PM_{10} could reduce premature mortality rates by 6,500 cases per year.

Source: ESRI, 2006; Coastal Zone Commission, 2008 | \\G:\Projects\75217 J Street\map_docs\map\ER\LandUseFeature.mxd | Last Updated: 12-24-08



Land Use Features
FIGURE 4.4-1

Sulfur Dioxide (SO₂). SO₂ is a combustion product of sulfur or sulfur-containing fuels such as coal and diesel. SO₂ is also a precursor to the formation of atmospheric sulfate and particulate matter, and contributes to potential atmospheric sulfuric acid formation that could precipitate downwind as acid rain.

Lead. Ambient lead concentrations meet both the federal and state standards in the project area. Lead has a range of adverse neurotoxin health effects, and was released into the atmosphere via leaded gasoline products. The phase-out of leaded gasoline in California has resulted in dramatically decreased levels of atmospheric lead.

4.4.2 Regulatory Setting

Federal Clean Air Act

The first comprehensive national air pollution legislation was the federal CAA of 1970. Amendments to the federal CAA occurred in 1977 and required plans for meeting the national health-based standards “as expeditiously as practicable,” but no later than December 31, 1982. In 1990, significant amendments occurred to the federal CAA Amendments (CAAA). Under the CAAA, areas that do not meet the federal one-hour ozone standard are classified according to the severity of each area’s respective ozone problem. The classifications are Marginal, Moderate, Serious, Severe, and Extreme. Marginal areas are closest to meeting the federal one-hour ozone standard. Extreme areas have the worst air quality problems. In 2002, Ventura County achieved the 1-hour ozone standard for the first time as measured by the “design value,” which is the fourth highest 1-hour ozone concentration averaged over a three-year period (for years 2000-2002, with a design value of 12.4 parts per hundred million [pphm]). A design value is a statistic used to describe the air quality of an area relative to the respective National Ambient Air Quality Standards (NAAQS). Design values are used to classify nonattainment areas and assess progress towards meeting the NAAQS, and for developing clean air strategies. Despite meteorological conditions conducive to ozone formation, Ventura County has continued to meet the federal 1-hour ozone standard. The CAAA contain a number of requirements designed to improve air quality. These include motor vehicle emission limits, pollution controls on industrial facilities, use of low-polluting vehicle fuels, permit and compliance programs, and economic incentives to encourage industries to curtail emissions. In December 2006, the U.S. EPA approved new federal standards for PM_{2.5}, and modified the PM₁₀ and ozone standards. The 2010 federal standards are presented in Table 4.4-2.

California Clean Air Act

The California Clean Air Act (CCAA) was enacted on September 30, 1988, and became effective January 1, 1989. The purpose of the CCAA is to achieve the more stringent health-based state clean air standards at the earliest practicable date. The state standards are more stringent than the federal air quality standards. Similar to the federal CAA, the CCAA also classifies areas according to pollution levels. Under the CCAA, Ventura County is classified as a severe ozone non-attainment area, and is a state PM₁₀ non-attainment area. The CCAA requires attainment of the standards at the earliest practicable date. Further, district-wide air emissions must be reduced at least five percent per year (averaged over three years) for each non-attainment pollutant or its precursors. A district may achieve a smaller average reduction if the district can demonstrate that, despite inclusion of every feasible measure in its air quality plan, it is unable to achieve the five percent annual reduction in emissions. On June 20, 2002, the CARB approved revisions to the PM₁₀ annual average standard, and established an annual average standard for PM_{2.5}.

Ventura County Air Pollution Control District (VCAPCD)

The VCAPCD has the responsibility to manage air quality and ensure that federal and state ambient air quality standards are achieved and maintained in the Ventura County portion of the South Central Coast Air Basin. This includes monitoring ambient air pollutant levels throughout the County and developing a regional Air Quality Management Plan (AQMP) that identifies actions necessary to reach attainment of the standards, and implements and enforces rules and regulations to improve air quality in the region. Because ozone is a secondary pollutant formed in the atmosphere, volatile organic compounds (VOCs) and oxides of nitrogen (NO_x) are regulated as ozone precursors.

The 1994 VCAPCD AQMP, revised in 1995, was approved by the USEPA in September 1996, and is the current approved AQMP. It includes multiple air pollution control measures to reduce emissions and bring the region into compliance with the federal ozone standard. EPA designated Ventura County as a “moderate” nonattainment area for the 8-hour ozone standard based on Ventura County’s ozone levels over the previous three years on June 15, 2004. Moderate ozone nonattainment areas are required to attain the federal 8-hour ozone standard by June 15, 2010. On February 14, 2008, ARB formally requested that EPA reclassify Ventura County to a “serious” 8-hour ozone nonattainment area. This means that Ventura County must meet the federal 8-hour ozone standard by June 15, 2013. VCAPCD has released a Final 2007 AQMP (adopted May 13, 2008), which presents new control measures intended to bring the County into compliance by that date.

The 2007 AQMP also presents the 2003-2005 Triennial Assessment and Plan Update required by the CCAA. The goal of the CCAA is to achieve more stringent health-based state air quality standards at the earliest practicable date. Ventura County is designated a severe nonattainment area under the CCAA and must meet many of the most stringent requirements under this act.

While the Final 2007 AQMP contains some additional local control measures, most of the emissions reductions that Ventura County needs to attain the federal 8-hour ozone standard and continued progress to the state ozone standard will come from the ARB’s 2007 SIP. This SIP contains comprehensive emission reduction programs that focus on reducing emissions from mobile sources, consumer products, and pesticides to significantly improve air quality. Based on photochemical modeling and the use of the local and state control measures, Ventura County is projected to attain the federal ozone standard by the required 2013 date.

Rule 55 Fugitive Dust

On June 10, 2008 the Ventura County Air Pollution Control Board adopted new Rule 55. Ventura County does not meet California’s health-based air quality standards for airborne particulate matter (PM). On June 28, 2005, the Ventura County Air Pollution Control Board adopted a plan to reduce PM emissions, as mandated by State law (SB656). Rule 55 Fugitive Dust guidelines apply to any operation, disturbed surface area, or man-made condition capable of generating fugitive dust, including bulk material handling, earth-moving, construction, demolition, storage piles, unpaved roads, track-out, or off-field agricultural operations. Under Rule 55, the Board adopted a standards-based rule to reduce the cost of compliance rather than requiring prescribed control methods.

Ventura County General Plan

Section 1.2.1 and 1.2.2 of the Ventura County General Plan include several countywide goals and policies applicable to the project.

Goals

1. Diligently seek and promote a level of air quality that protects public health, safety, and welfare, and seek to attain and maintain the State and Federal Ambient Air Quality standards.
2. Ensure that any adverse air quality impacts, both long-term and short-term, resulting from discretionary development are mitigated the maximum extent feasible.

Policies

1. Discretionary development that is inconsistent with the Air Quality Management Plan (AQMP) shall be prohibited, unless overriding considerations are cited by the decision-making body.
2. The air quality impacts of discretionary development shall be evaluated by use of the Guidelines for the Preparation of Air Quality Impact Analysis.
3. Discretionary development that would have a significant adverse air quality impact shall only be approved if it is conditioned with all reasonable mitigation measures to avoid, minimize or compensate (offset) for the air quality impact. Developers shall be encouraged to employ innovative methods and technologies to minimize air pollution impacts.
5. Development subject to APCD permit authority shall comply with all applicable APCD rules and permit requirements, including the use of best available control technology (BACT) as determined by the APCD.

City of Oxnard

The City of Oxnard General Plan Open Space/Conservation Element contains the following policies regarding air quality within the City.

Policies

6. The City should encourage measures that maintain clean air and water.
7. The City should support anti-pollution measures and seek to control activities and developments that improve air and water quality.
8. The City shall require as a condition of approval for new development, wherever a short-term construction impact to air quality is identified, that dust control procedures and other measures designed to reduce the impact in ambient air quality are implemented.
51. The City of Oxnard shall provide traffic system improvements sufficient to reduce congestion at the congested intersections where CO concentrations may exceed state or federal standards and which would impact sensitive receptors.
53. The City shall require all construction equipment to be maintained and tuned to meet appropriate EPA and CARB emissions requirements. At such time as new emission control devices or operational modifications are found to be effective, such devices or operational modifications shall be required on all construction equipment operating pursuant to City permits.

54. During smog season (May through October), the construction period should be lengthened so as to minimize the number of vehicles and equipment operating at the same time.
55. To minimize dust and air emissions impacts from construction impacts the City shall consider requiring the following as a condition of obtaining permits:
 - a. Site dust suppression - including:
 - watering all excavated material to prevent wind erosion while it is on-site or being moved,
 - periodic watering of construction sites or use of APCD approved dust suppression compounds that bind with the surface layers of soil and prevent soil particles from being eroded,
 - controlling the number and activity of vehicles on-site at any given time,
 - seeding areas to be left inactive for a long enough period to secure the soil,
 - limiting the area excavated at any given time,
 - limiting on-site vehicle traffic to 15 miles per hour, and
 - sweeping streets adjacent to the construction site to remove dust caused by the construction activities.
 - b. Installing an approved wind measuring device at the construction site and halting dust generating activities during high wind events (winds in excess of 20 miles per hour, averaged over one hour);
 - c. Requiring vehicles hauling dirt or other material subject to wind erosion during transportation to be covered or watered down to prevent dust emissions;
 - d. Limiting the ground area that is exposed to limit the amount of dust that can be generated in high winds even with no construction activity occurring; and
 - e. Requiring construction activities to utilize feasible new technologies to control ozone precursor emissions, as they become available.

City of Port Hueneme General Plan

Air Quality Element

The following goals and policies are intended to improve air quality conditions within the South Central Air Basin Goals and through conformance with the Air Quality Management Policies Plan.

Goal 1: Prevent degradation of regional air quality.

Policy I-I: Cooperate with the VCAPCD in their efforts to implement provisions of the Ventura County Air Quality Management Plan.

Goal 3: Reduce emissions from stationary sources to the greatest extent feasible

Policy 3-1: Support measures adopted by the VCAPCD to reduce pollutants from solvents, including architectural coatings, synthetic solvent dry cleaning, etc.

Policy 3-2: Support technological improvements to improve machinery efficiency.

4.4.3 Significance Thresholds

Section 15002(g) of the *CEQA Guidelines* defines “significant effect on the environment” as “a substantial adverse change in the physical conditions that exist in the area affected by the proposed project.” When an environmental document identifies a significant environmental effect, the government

agency approving the project must make findings as to whether the adverse environmental effects have been substantially reduced or if not, why they were not substantially reduced. A project will have a “potentially significant impact” on air quality if it will:

- Conflict with or obstruct implementation of the applicable air quality plan.
- Violate any air quality standard or contribute substantially to an existing or projected air quality violation.
- Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard (including releasing emissions that exceed quantitative thresholds for ozone precursors).
- Expose the public (especially schools, day care centers, hospitals, retirement homes, convalescence facilities, and residences) to substantial pollutant concentrations.
- Create objectionable odors affecting a substantial number of people.

The Ventura County *Initial Study Assessment Guidelines* (2011) notes that air quality analysis shall use the air quality assessment guidelines as adopted by the VCAPCD. Therefore, the significance of impacts was evaluated based on the guidance in the *Ventura County Air Quality Assessment Guidelines* (VCAPCD 2003), which is an advisory document that provides lead agencies, consultants, and project applicants with a framework and uniform methods for preparing air quality evaluations for environmental documents. The Guidelines recommend specific criteria and threshold levels for determining whether a proposed project may have a significant adverse air quality impact. The Guidelines also provide mitigation measures that may be useful for mitigating the air quality impacts of proposed projects.

The VCAPCD has no thresholds for construction emissions for CO, PM₁₀, or PM_{2.5} in its Guidelines. The only significance thresholds are for reactive organic compounds (ROCs) and nitrogen oxides (NO_x). Table 4.4-3 includes ROC and NO_x thresholds that the VCAPCD has determined will individually jeopardize attainment of the federal one-hour ozone standard, and thus have a significant adverse impact on air quality in Ventura County. However, the VCAPCD guidelines state that ROC and NO_x emissions generated by construction activities do not count toward the significance thresholds below because these emissions are temporary.

Table 4.4-3. VCAPCD Threshold Criteria for Emissions of Criteria Pollutant

Pollutant	Operations Pounds per Day
Reactive Organic Compounds (ROC)	25
Oxides of Nitrogen (NO _x)	25

Source: VCAPCD 2003 Ventura County Air Quality Assessment Guidelines

Because the proposed project impacts occur mainly during construction, the construction thresholds of significance from South Coast Air Quality Management District (Table 4.4-4) will be used to determine the level of significance of the project construction impacts for pollutants other than ROCs and NO_x.

Table 4.4-4. Thresholds of Significance for Air Quality Impacts – SCAQMD

Pollutant	Operational Thresholds of Significance (Pounds per Day)	Construction Thresholds of Significance (Pounds per Day)	CAA Less Than Significant Levels (Tons per Year)
Carbon Monoxide (CO)	550	550	100
Oxides of Sulfur (SO _x)	150	150	100
Particulate Matter (PM ₁₀)	150	150	100
Particulate Matter (PM _{2.5})	55	55	100

Source: SCAQMD CEQA Air Quality Handbook 1993, 1998, 2002

The PM_{2.5} threshold is based upon the proposed standard identified in the, "Final – Methodology to Calculate Particulate Matter (PM) 2.5 and PM_{2.5} Significance Thresholds", published by SCAQMD in October 2006.

Ozone – Cumulative Impacts Based on Project-Specific AQMP Consistency

A project with emissions of two pounds per day or greater of ROC, or two pounds per day or greater of NO_x that is found to be inconsistent with the AQMP will have a significant cumulative adverse air quality impact. A project with emissions below two pounds per day of ROC, and below two pounds per day of NO_x, is not required to assess consistency with the AQMP. Inconsistent projects are usually those that cause the existing population to exceed the population forecasts contained in the most recently adopted AQMP.

4.4.4 Project-Level Impact Analysis

Conflict with or obstruct implementation of the applicable air quality plan?

An environmental document for a proposed project must address project consistency with the AQMP. Project consistency with the AQMP can be determined by comparing the actual population growth in the City of Oxnard and Port Hueneme with the projected growth rates used in the AQMP. The projected growth rate in population is used as an indicator of future emissions from population-related emission categories in the AQMP. These emission estimates are used, in part, to project the date by which Ventura County will attain the federal ozone standard. The County of Ventura Planning Division maintains an ongoing population tracking system. Therefore, a demonstration of consistency with the population forecasts used in the most recently adopted AQMP should be used for assessing project consistency with the AQMP.

The VCAPCD Clean Air Plan provides a detailed estimate of long-range emissions for the region consistent with regional growth and development plans. The proposed project would not result in increase in population in the project area. The project appears consistent with growth projections identified in the VCAPCD Clean Air Plan.

Violate any air quality standard or contribute substantially to an existing or projected air quality violation?

Construction

The proposed J Street Drain project involves increasing the capacity of an existing drain. The construction of the proposed Drain would result in short-term generation of fugitive dust, construction

equipment exhaust, employee trip emissions, and other construction-related emissions. Off-road equipment that is expected to be used during construction includes: wheel loaders, track dozers, scrapers, excavator with hydraulic hammer, pile driver, motor grader, concrete pump, concrete tucks, dump trucks, and other miscellaneous small equipment.

Implementation of the proposed project would generate construction-related air pollutant emissions from two general activity categories: entrained dust, and vehicle and equipment emissions. Construction vehicle pollutant emission generators would consist primarily of haul truck activities such as earthwork haulage, concrete delivery and other suppliers, graders and pavers, contractor vehicles, and ancillary operating equipment such as diesel-electric generators and lifts. Construction activities that generate particulate matter and dust emissions involve earth-moving activities such as grading, construction, demolition, and trenching, particularly when soil moisture is low and when the wind is blowing. Dust emissions and impacts vary substantially from day to day, depending on the level of activity, the specific operation being conducted, and the prevailing meteorological conditions.

The Air Quality Assessment Guidelines recommend the use of the latest version of the URBEMIS program, which is provided by the CARB. The currently approved program is URBEMIS 2007 9.2.4. This program was used to estimate air pollutant emissions associated with project operation as well as short-term emissions associated with project construction. Tables 4.4-5 to 4.4-8 summarize estimated air pollutant emissions resulting from the four construction phases. In the absence of VCAPCD thresholds in place for CO, SO_x, PM₁₀, and PM_{2.5} emissions, this impacts discussion used SCAQMD emissions thresholds for those criteria pollutants. Additionally, VCAPCD thresholds for ROC and NO_x are included as well. A summary of calculations from URBEMIS model outputs and calculations for the actual concentration for each pollutant are available for review in Appendix D.

Table 4.4-5. Construction Emissions, Phase I (pounds per day)

	Reactive Organic Compounds (ROC)	Oxides of Nitrogen (NO _x)	Carbon Monoxide (CO)	Oxides of Sulfur (SO _x)	Respirable Particulate Matter (PM ₁₀)	Respirable Particulate Matter (PM _{2.5})
Site Preparation	16.40	138.41	64.04	0.02	31.73	8.85
Excavation	0.63	4.70	3.45	0.00	0.27	0.25
Paving	4.30	27.07	17.77	0.00	2.21	2.04
Total Simultaneous Emissions	21.33	170.18	85.26	0.02	34.21	11.14
SCAQMD Threshold	-	-	550	150	150	55
Exceeds SCAQMD Threshold?	-	-	No	No	No	No
VCAPCD Threshold	25	25	-	-	-	-
Exceeds VCAPCD Threshold?	No	Yes	-	-	-	-

Table 4.4-6. Construction Emissions, Phase II (pounds per day)

	Reactive Organic Compounds (ROC)	Oxides of Nitrogen (NO _x)	Carbon Monoxide (CO)	Oxides of Sulfur (SO _x)	Respirable Particulate Matter (PM ₁₀)	Respirable Particulate Matter (PM _{2.5})
Site Preparation	13.93	108.48	55.16	0.02	16.49	6.79
Excavation	0.56	4.06	3.40	0.00	0.22	0.20
Paving	3.74	24.05	17.35	0	1.89	1.74
Total Simultaneous Emissions	18.23	136.59	75.91	0.02	18.6	8.73
SCAQMD Threshold	-	-	550	150	150	55
Exceeds SCAQMD Threshold?	-	-	No	No	No	No
VCAPCD Threshold	25	25	-	-	-	-
Exceeds VCAPCD Threshold?	No	Yes	-	-	-	-

Table 4.4-7. Construction Emissions, Phase III (pounds per day)

	Reactive Organic Compounds (ROC)	Oxides of Nitrogen (NO _x)	Carbon Monoxide (CO)	Oxides of Sulfur (SO _x)	Respirable Particulate Matter (PM ₁₀)	Respirable Particulate Matter (PM _{2.5})
Site Preparation	11.81	83.34	52.16	0.02	23.19	7.42
Excavation	0.47	3.22	3.38	0.00	0.17	0.16
Paving	3.25	20.59	17.01	0.00	1.54	1.42
Total Simultaneous Emissions	15.53	107.15	72.55	0.02	24.9	9.00
SCAQMD Threshold	-	-	550	150	150	55
Exceeds SCAQMD Threshold?	-	-	No	No	No	No
VCAPCD Threshold	25	25	-	-	-	-
Exceeds VCAPCD Threshold?	No	Yes	-	-	-	-

Table 4.4-8. Construction Emissions, Phase IV (pounds per day)

	Reactive Organic Compounds (ROC)	Oxides of Nitrogen (NO _x)	Carbon Monoxide (CO)	Oxides of Sulfur (SO _x)	Respirable Particulate Matter (PM ₁₀)	Respirable Particulate Matter (PM _{2.5})
Site Preparation	10.44	65.94	50.51	0.02	14.95	5.16
Excavation	0.40	2.47	3.36	0.00	0.13	0.12
Paving	2.82	17.58	16.74	0.00	1.28	1.18
Total Simultaneous Emissions	13.66	85.99	70.61	0.02	16.36	6.46
SCAQMD Threshold	-	-	550	150	150	55
Exceeds SCAQMD Threshold?	-	-	No	No	No	No
VCAPCD Threshold	25	25	-	-	-	-
Exceeds VCAPCD Threshold?	No	Yes	-	-	-	-

As is evident from Tables 4.4-5 to 4.4-8, construction of the proposed project would not result in significant impacts associated with particulate matter emissions. However, the project is required to implement fugitive dust control measures per Rule 55 adopted by VCAPCD on June 10, 2008. The VCAPCD (Rule 55, Fugitive) contains regulations for the control of fugitive dust. Generally, fugitive dust regulations require that all grading surfaces and materials must be wetted, protected, or contained to reduce nuisance from dust. Dust emissions from construction activities would be greatly reduced by implementing fugitive dust control measures.

Construction emissions during the four phases of the J Street Drain project would not exceed SCAQMD or VCAPCD thresholds for construction emissions with the exception of NO_x emissions, which would exceed the VCAPCD threshold of 25 pounds per day. However, due to the temporary, short-term nature of construction emissions, the VCAPCD does not apply the quantitative emissions thresholds for NO_x to construction activities. Nonetheless, the VCAPCD does require that emission reduction measures be implemented during construction to reduce exhaust emissions and fugitive dust generation. This impact is considered less than significant.

Operations

The operation of the proposed project would not generate daily traffic other than trips during maintenance activities. The maintenance activities associated with the proposed project would be similar to those currently in place, which would generate intermittent trips for maintenance purposes only, and are expected to occur at the existing frequency. Therefore, increasing the existing capacity of the drain will not increase ongoing emissions from operation and maintenance of the drain. The District's Final Program Environmental Impact Report for Environmental Protection Measures for the Ongoing Routine Operations and Maintenance Program contains best management practices (BMPs) for the operational maintenance activities for J Street Drain (see Section 4.4.6.1). These BMPs will be incorporated as part of the proposed project for operational activities to maintain impact at the current less than a significant level.

Beach Elevation Management Plan

The Beach Elevation Management Plan (BEMP) would be implemented periodically and would result in occasional trips to the beach during the rainy season when a storm event is forecast. These trips are expected to be infrequent and would not violate any air quality standards or contribute substantially to an existing or projected air quality violation, and a less than significant impact is identified for this issue area.

Expose the public (especially schools, day care centers, hospitals, retirement homes, convalescence facilities, and residences) to substantial pollutant concentrations?

Construction

Existing sensitive receptors in the project vicinity include residences along the J Street Drain, and Our Saviour's Preschool and Day Care Center. The residences north of Hueneme Road are located as close as 50 feet to the drain, those south of Hueneme Road are within 20 feet of the drain, and the preschool/daycare center is located approximately 500 feet from the drain. Construction of the proposed project would generate emissions; however, as shown in Table 4.4-5 through 4.4-8, construction emissions are below the significance thresholds for all construction phases for all criteria pollutants with the exception of NO_x, which would exceed thresholds for all phases. However, due to the temporary, short-term nature of construction emissions, the VCAPCD does not apply the quantitative emissions thresholds for NO_x to construction activities. Nonetheless, the VCAPCD does require that emission reduction measures be implemented during construction to reduce exhaust emissions and fugitive dust generation. This represents a less than significant impact.

Operations

The operation of the proposed project would not result in an increase in ongoing maintenance activities over current levels. Therefore no new operations impacts are expected to occur and existing operational conditions remain. The District's Final Program Environmental Impact Report (EIR) for Environmental Protection Measures for the Ongoing Routine Operations and Maintenance Program contains BMPs for the operational maintenance activities for J Street Drain. These BMPs will be incorporated as part of the proposed project for operational activities to ensure impacts remain less than significant.

Beach Elevation Management Plan

The BEMP would be implemented periodically and would result in occasional trips to the beach during the rainy season when a storm event is forecast. These trips are expected to be infrequent and would not expose the public to substantial pollutant concentrations. Therefore, a less than significant impact is identified for this issue area.

Create objectionable odors affecting a substantial number of people?

Construction

The construction and operation of the proposed project could generate trace amounts of odor-generating substances such as ammonia, carbon dioxide, hydrogen sulfide, methane, dust, organic dust, and endotoxins (i.e., bacteria are present in the dust). However, odor generation impacts from construction are not expected to be significant since any odor generation would be intermittent and would terminate upon

completion of construction activities. Further, these emissions would occur during daytime hours only and would be isolated to the immediate vicinity of the construction site. Therefore, impacts would be less than significant.

Operations

The operation of the proposed project would include maintenance activities similar to those currently in place, which would generate intermittent trips for maintenance purposes only. During the operational phase, on-site residences would not be exposed to odors from the maintenance of the drain. Land uses generally associated with odor complaints include: agricultural uses, wastewater treatment plants, food processing plants, chemical plants, composting operations, refineries, landfills, dairies, and fiberglass molding facilities. The District's Final Program EIR for Environmental Protection Measures for the Ongoing Routine Operations and Maintenance Program contains BMPs for the operational maintenance activities for J Street Drain. These BMPs will be incorporated as part of the proposed project for operational activities to ensure impacts remain less than significant.

J Street Drain does not currently generate substantial odors, and the Ventura County Air Pollution Control District has not received complaints regarding odors from the drain; odor complaints near J Street Drain have been filed against industrial sources (Jay Nicholas, Air Quality Specialist, Ventura County Air Pollution Control District, personal communication, September 1, 2011). The proposed project would slightly increase the surface area of standing water near Surfside III by one acre, but would not change the current character of water collecting in the drain. The proposed project therefore is not expected to substantially alter existing conditions.

Beach Elevation Management Plan

The BEMP would be implemented periodically and would result in occasional trips to the beach during the rainy season when a storm event is forecast. These trips are expected to be infrequent and would not create objectionable odors affecting a substantial number of people. Therefore, a less than significant impact is identified for this issue area.

4.4.5 Cumulative-Level Impact Analysis

Conflict with or obstruct implementation of the applicable air quality plan?

The proposed project is consistent with growth projections identified in the VCAPCD Clean Air Plan. Nearby programmed related projects that have been approved would also be consistent with those growth projections. Cumulative impacts are less than significant.

Violate any air quality standard or contribute substantially to an existing or projected air quality violation?

Construction

Implementation of the proposed project would generate construction-related air pollutant emissions from two general activity categories: entrained dust, and vehicle and equipment emissions. Construction emissions during the four phases of the project would not exceed the SCAQMD's threshold for construction emissions for all criteria pollutants with the exception of NO_x, which would exceed thresholds for all phases. However, due to the temporary, short-term nature of construction emissions, quantitative emissions thresholds for NO_x are not applied to construction activities. The proposed related

projects are not located in the project area except for the Advance Purification Facility, two water pipelines, and one sewer line, which are located near the Phase I portion of the proposed project. The sewer line has been completed. Construction of the Advance Purification Facility and one of the water pipelines is currently underway and would be completed by the time work begins on the J Street Drain. A second water pipeline is scheduled to be under construction by March 2012. Construction of J Street Drain is anticipated to begin in early 2013. Therefore, cumulative impacts are less than significant.

Operations

The operation of the proposed project would not generate daily traffic other than trips during maintenance activities, but these would not be greater than existing trips. The proposed project would not make a contribution to cumulative conditions. Cumulative impacts are less than significant.

Beach Elevation Management Plan

The BEMP would be implemented periodically and would result in occasional trips to the beach during the rainy season when a storm event is forecast. These trips are expected to be infrequent and would contribute to an air quality violation. Therefore, it is not expected that they would contribute to a cumulative air quality impact. Therefore, a less than significant impact is identified for this issue area.

Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard (including releasing emissions that exceed quantitative thresholds for ozone precursors)?

Construction

Implementation of the proposed project would generate construction-related air pollutant emissions from two general activity categories: entrained dust, and vehicle and equipment emissions. Construction emissions during the four phases of the J Street Drain project would not exceed the SCAQMD's threshold for construction emissions for all criteria pollutants with the exception of NO_x, which would exceed thresholds for all phases. However, due to the temporary, short-term nature of construction emissions, quantitative emissions thresholds for NO_x are not applied to construction activities. The proposed related projects are not located in the project area except for the Advance Purification Facility, two water pipelines, and one sewer line which are located near the Phase I portion of the proposed project. The sewer line has been completed. Construction of the Advance Purification Facility and one of the water pipelines is currently underway and would be completed by the time work begins on the J Street Drain. A second water pipeline is scheduled to be under construction by March 2012. Construction of J Street Drain is anticipated to begin in early 2013. Therefore, cumulative impacts are less than significant.

Operations

The operation of the proposed project would include maintenance activities similar to those currently in place. Operation of the proposed project would not result in project-level impacts of criteria pollutant emissions. Cumulative impacts are less than significant.

Beach Elevation Management Plan

The BEMP would be implemented periodically and would result in occasional trips to the beach during the rainy season when a storm event is forecast. These trips are expected to be infrequent. Therefore, it is

not expected that they would contribute to a cumulative air quality impact related to criteria pollutant emissions. Therefore, a less than significant impact is identified for this issue area.

Expose the public (especially schools, day care centers, hospitals, retirement homes, convalescence facilities, and residences) to substantial pollutant concentrations?

Construction

As evident from Tables 4.4-5 to 4.4-8, construction of the proposed project would not result in significant impacts associated with particulate matter, ROC, or CO emissions. Although NO_x emissions would exceed the VCAPCD threshold of 25 pounds per day, these quantitative thresholds are not applied to construction emissions due to their temporary, short-term nature. Nonetheless, the VCAPCD does require that emission reduction measures be implemented during construction to reduce exhaust emissions and fugitive dust generation. In addition, none of the cumulative projects would be constructed simultaneously with the proposed project. Construction operations at the project site would not result in cumulatively significant impacts to nearby sensitive receptors. Impacts would be less than significant.

Operations

The operation of the proposed project would include maintenance activities similar to those currently in place. Operation of the proposed project would not result in substantial project-level increases in pollutant concentrations. Cumulative impacts are less than significant.

Beach Elevation Management Plan

The BEMP would be implemented periodically and would result in occasional trips to the beach during the rainy season when a storm event is forecast. These trips are expected to be infrequent. Therefore, it is not expected that they would contribute to a cumulative air quality impact related to substantial pollutant concentrations. Therefore, a less than significant impact is identified for this issue area.

Create objectionable odors affecting a substantial number of people?

Construction

Any odor impacts from construction would be isolated to the site and occur only during daytime hours. Also, none of the cumulative projects would be constructed simultaneously with the proposed project. Therefore, the proposed project would not contribute to a significant cumulative odor impact and a less than significant cumulative impact is identified.

Operations

Operation of the proposed project would not result in project-level odor impacts, since there would not be any odor emissions, and maintenance would follow existing practices. Therefore, there is no potential for the project to contribute to a cumulative impact. No cumulative impact is identified.

Beach Elevation Management Plan

The BEMP would be implemented periodically and would result in occasional trips to the beach during the rainy season when a storm event is forecast. These trips are expected to be infrequent. Therefore, it is

not expected that they would contribute to a cumulative air quality impact related to odor. Therefore, a less than significant impact is identified for this issue area.

4.4.6 Mitigation Measures

AQ-1 VCAPCD recommends the following measures to mitigate ozone precursor emissions from construction motor vehicles:

1. Minimize equipment idling time.
2. Maintain equipment engines in good condition and in proper tune as per manufacturers' specifications.
3. Lengthen the construction period during smog season (May through October), to minimize the number of vehicles and equipment operating at the same time.
4. Use alternatively fueled construction equipment, such as compressed natural gas (CNG), liquefied natural gas (LNG), or electric, if feasible.

AQ-2

1. The area disturbed by clearing, grading, earth moving, or excavation operations shall be minimized to prevent excessive amounts of dust.
2. Pre-grading/excavation activities shall include watering the area to be graded or excavated before commencement of grading or excavation operations. Application of water (preferably reclaimed, if available) should penetrate sufficiently to minimize fugitive dust during grading activities.
3. All trucks shall be required to cover their loads as required by California Vehicle Code Section 23114.
4. All graded and excavated material, exposed soil areas, and active portions of the construction site, including unpaved on site roadways, shall be treated to prevent fugitive dust. Treatment shall include, but not necessarily be limited to periodic watering, application of environmentally-safe soil stabilization materials, and/or roll compaction as appropriate. Watering shall be done as often as necessary and reclaimed water shall be used whenever possible.
5. Graded and/or excavated inactive areas of the construction site shall be monitored at least weekly for dust stabilization. Soil stabilization methods, such as water and roll-compaction, and environmentally-safe dust control materials, shall be periodically applied to portions of the construction site that are inactive for over four days. If no further grading or excavation operations are planned for the area, the area shall be permanently stabilized or periodically treated to prevent excessive fugitive dust.
6. Signs shall be posted on site limiting traffic on unpaved areas to 15 miles per hour or less.
7. During periods of high winds (i.e., wind speed sufficient to cause fugitive dust to impact adjacent properties), all clearing, grading, earth moving, and excavation operations shall be curtailed to the degree necessary to prevent fugitive dust created by on site activities and operations from being a nuisance or hazard, either off site or on site. The site superintendent/supervisor shall use his/her discretion in conjunction with the APCD in determining when winds are excessive.
8. Adjacent streets and roads shall be swept at least once per day, preferably at the end of the day, if visible soil material is carried over to adjacent streets and roads.

9. Personnel involved in grading operations, including contractors and subcontractors, shall be advised to wear respiratory protection in accordance with California Division of Occupational Safety and Health regulations.
10. Material stockpiles shall be enclosed, covered, stabilized, or otherwise treated as needed to prevent blowing fugitive dust off site.

AQ-3 All project construction and site preparation operations shall be conducted in compliance with all applicable VCAPCD Rules and Regulations with emphasis on Rule 50 (Opacity), Rule 51 (Nuisance), and Rule 55 (Fugitive Dust), as well as Rule 10 (Permit Required).

4.4.6.1 Ventura County Watershed Protection District Best Management Practices

The Ventura County Board of Supervisors adopted the Ventura County Watershed Protection District (District) Final Program Environmental Impact Report for Environmental Protection Measures for the Ongoing Routine Operations and Maintenance Program Project No. 80030 in May 2008. The final document includes BMPs that have been added to the District's Maintenance Activity Guidelines. The Operation and Maintenance Division staff will be responsible for ensuring the proper implementation of the BMPs on a routine, year-round basis. The Division staff will also be responsible for ensuring compliance with all permit conditions, conducting or employing qualified personnel for any required pre-project site surveys or inspections, updating the Activity Guidelines sheets, instructing crews on BMPs, overseeing certain BMP implementation, documenting the implementation of the BMPs, and conducting any agency coordination.

The following BMPs will be implemented to minimize air quality impacts during construction and operation:

Air Quality BMPs

The following measures are part of the APCD's Model Fugitive Dust Mitigation Plan and shall be incorporated to maintenance activities as needed to further reduce the District's fugitive dust emissions during grading, excavation, and construction activities.

- The areas disturbed at any one time by clearing, grading, earth moving, or excavation operations shall be minimized to prevent excessive amounts of dust.
- Pre-grading/excavation activities shall include watering the area to be graded or excavated before commencement of grading or excavation operations. Application of water (preferably reclaimed, if available) should penetrate sufficiently to minimize fugitive dust during earthmoving, grading, and excavation activities.
- All trucks shall be required to cover their loads as required by California Vehicle Code §23114.
- All graded and excavated material, exposed soil areas, including unpaved parking and staging areas, and other active portions of the construction site, including unpaved on site roadways, shall be treated to prevent fugitive dust. Treatment shall include, but not necessarily be limited to, periodic watering, application of environmentally safe soil stabilization materials, and/or roll-compaction as appropriate. Watering shall be done as often as necessary and reclaimed water shall be used whenever possible.
- Graded and/or excavated inactive areas of the construction site shall be monitored by the District's operation and maintenance staff at least weekly for dust stabilization. Soil stabilization

methods, such as water and roll-compaction, and environmentally safe dust control materials, shall be periodically applied to portions of the construction site that are inactive for over four days. If no further grading or excavation operations are planned for the area, the area should be periodically treated with environmentally-safe dust suppressants.

- During periods of high winds (i.e., wind speed sufficient to cause fugitive dust to impact adjacent properties), all clearing, grading, earth moving, and excavation operations shall be curtailed to the degree necessary to prevent fugitive dust created by on site activities and operations from being a nuisance or hazard, either on site or off site. The District staff shall use his/her discretion in conjunction with the APCD in determining when winds are excessive.
- Rumble strips or track out devices shall be installed where vehicles enter and exit unpaved roads onto paved road, or wash off trucks and any other equipment leaving the site.
- All on site construction roads that have a daily traffic volume of more than 50 daily trips shall be stabilized as to minimize transport of earthen material from the site.
- Open material stockpiles shall be roller compacted, periodically watered, or treated with appropriate dust suppressants.
- There shall be at least one qualified District staff on site each work day to monitor the provisions of the Fugitive Dust Mitigation Plan and any other applicable fugitive dust rules, ordinances, or conditions.
- Personnel involved in grading operations shall be advised to wear respiratory protection in accordance with California Division of Occupational Safety and Health Regulations.
- All project construction operations shall be conducted in compliance with all applicable APCD Rules and Regulations with emphasis on Rule 50 (Opacity) and Rule 51 (Nuisance).

4.4.7 Significance After Mitigation

The District shall implement VCAPCD approved measures for construction equipment to minimize NO_x and fugitive dust emissions. As evident from Tables 4.4-5 to 4.4-8, the short-term estimated construction NO_x emissions are approximately 10 to 25 pounds per day above the VCAPCD thresholds. The estimated construction emissions just exceed the VCAPCD thresholds for NO_x and assumes worst-case scenario, however the VCAPCD does not apply these quantitative thresholds to temporary, short-term construction emissions. Nonetheless, mitigation measures AQ-1 and AQ-2 shall be implemented to reduce exhaust and fugitive dust emissions, as required by the VCAPCD. The impact associated with NO_x would be less than significant.

4.4.8 Response to Notice of Preparation Comments

During the Notice of Preparation (NOP) comment period, the VCAPCD sent a comment letter stating that the VCAPCD concurs with the Initial Study and does not anticipate that the proposed project would result in significant air quality impacts. The VCAPCD also recommended methods to reduce fugitive dust and particulate matter during construction activities. As identified in Section 4.4.6, above, construction mitigation measures and BMPs identified in the District's Final Program EIR for Environmental Protection Measures for the Ongoing Routine Operations and Maintenance Program include measures from the VCAPCD Model Fugitive Dust Mitigation Plan. These mitigation measures and BMPs are included as part of the proposed project and are consistent with the recommendations identified by the VCAPCD.

4.5 TRANSPORTATION AND CIRCULATION

This section discusses transportation and circulation issues associated with the J Street Drain project. This section focuses on potential level of service impacts for the project, pedestrian facilities, bicycle facilities and parking. All other issue areas related to transportation and circulation were determined to be less than significant during the Initial Study process. These issues are not discussed further in the Environmental Impact Report (EIR). Please see Appendix A for the Initial Study.

4.5.1 Environmental Setting

4.5.1.1 *Regional Access*

The proposed project is located in the City of Oxnard, near the border of the City of Port Hueneme in Ventura County. Regional access to the project area is provided by the Ventura Freeway (US-101) which is the principal east-west route through Ventura County. The Santa Paula Freeway (SR-126) runs from US-101 in Ventura to Interstate 5 (I-5) in Santa Clarita, and is also an east-west route. Local residential and commercial streets provide additional access to the area. From Los Angeles County, Pacific Coast Highway (PCH, State Route [SR] 1) crosses into Ventura County and continues along the coast through Point Mugu State Park to just beyond the park's western boundary. Past Point Mugu, PCH leaves the coast and heads northerly and then northwesterly along the northeastern boundary of Naval Air Station Point Mugu for several miles and continues to Wooley Road in Oxnard. From the South Oxnard railroad grade crossing north of Statham Boulevard in Oxnard to Wooley Road, SR-1 is known locally as Oxnard Boulevard. At Wooley Road the direction of SR-1 changes from northwest to north; however, the Oxnard Boulevard name continues to Vineyard Avenue, SR-232. From Vineyard Avenue, SR-1 continues north as PCH and joins US-101 in Oxnard approximately five miles inland from the coast.

4.5.1.2 *Existing Roadway Network*

The existing highway and street system in the project area is illustrated in Figure 4.5-1, Project Roadways Map. This section briefly discusses each of the project area's major roadways within the existing freeway and arterial system.

Ventura Freeway

US-101 (the Ventura Freeway) is part of the Ventura County 2020 regional road network (Figure 4.5-2) and is the most important link between the City and the rest of Ventura County and metropolitan Los Angeles. It lies approximately two and one-half miles north of the downtown area. Although it is a north-south highway in the State freeway system, it is aligned in the east-west direction in the vicinity of the City. Within Oxnard, there are five interchanges on the Ventura Freeway; these interchanges are at Oxnard Boulevard (SR-1), Vineyard Avenue, Rose Avenue, Rice Avenue, and Del Norte Boulevard.

US-101 represents the primary regional access facility for the City of Oxnard. In general, US-101 provides adequate capacity to accommodate existing traffic at an acceptable level of service. However, the segment of US-101 west of Vineyard Avenue does not presently operate at an acceptable level of service. As a result, this route segment serves as a bottleneck for regional travel using the US-101 corridor in Ventura County.

With the exception of Vineyard Avenue, the present interchanges on US-101 in the City of Oxnard are substandard. Specifically, the Rice Avenue and Del Norte Boulevard interchanges have substandard

geometrics and/ or do not provide adequate capacity. However, the Rice Avenue/US-101 interchange is currently being reconstructed to increase capacity and the improvements are expected to be complete in 2012.

State Route 1

SR-1, the Pacific Coast Highway (PCH), presently bisects downtown Oxnard. The roadway functions as a four-lane arterial, although some segments have been widened to six lanes. Within the city, SR-1 passes through 15 signalized intersections. In north Oxnard, SR-1 joins the Ventura Freeway. The portion of this route located within southeastern Oxnard and unincorporated Ventura County east of Oxnard forms part of the 2020 regional road network.

Bard Road

This roadway presently serves as a secondary arterial from Saviers Road to Pleasant Valley Road. Bard Road provides east-west access to the City's south-central and southeast neighborhoods, and also serves as a route from the City of Port Hueneme and the Navy's Construction Battalion Center to SR-1.

C Street

This roadway functions as a local arterial from Gonzales Road to Bard Road. Although it does not have a cross-section consistent with the local arterial standard, it functions as one carrying traffic parallel to relatively congested Oxnard Boulevard.

Channel Islands Boulevard

This is a four-lane east-west thoroughfare that provides the principal access to the Channel Islands Harbor and southwest residential areas. Channel Islands Boulevard presently functions as a primary arterial from Harbor Boulevard to Saviers Road, and as a secondary arterial from Saviers Road east to Rice Avenue. A short segment of Channel Islands Boulevard located in unincorporated Ventura County east of the City of Oxnard lies within the 2020 regional road network.

Del Norte Boulevard

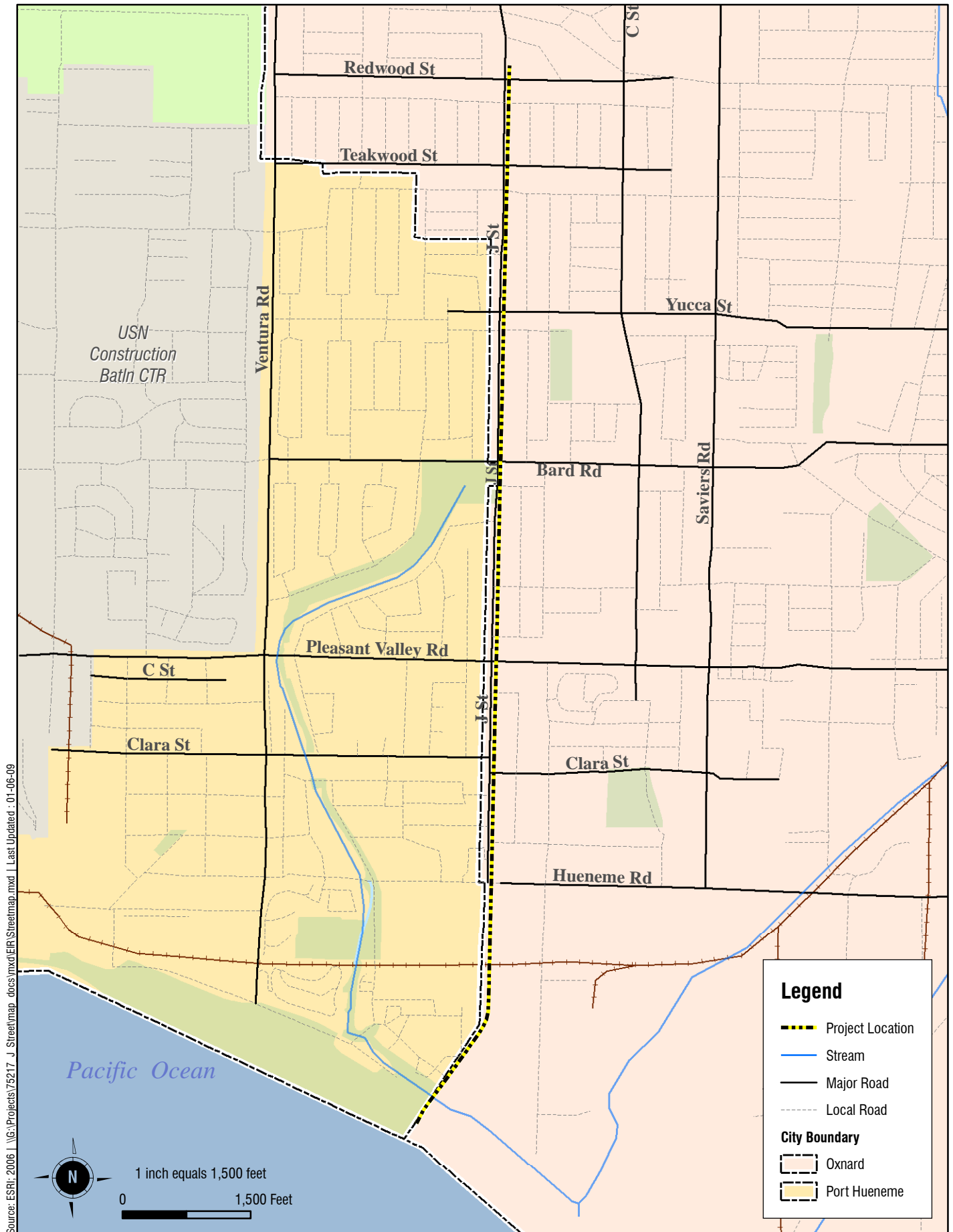
This roadway, completed in 1988, provides access to US-101 from the Northeast Industrial Area. Del Norte Boulevard functions as a secondary arterial from US-101 to Sturgis Road, and as a local roadway from Sturgis Road south to Fifth Street (SR-34).

Emerson Avenue

This local arterial provides access to the Channel Islands Business Center from Rose Avenue and SR-1 via Statham Boulevard. East of Rose Avenue, this roadway functions as a collector street for the Lemonwood neighborhood.

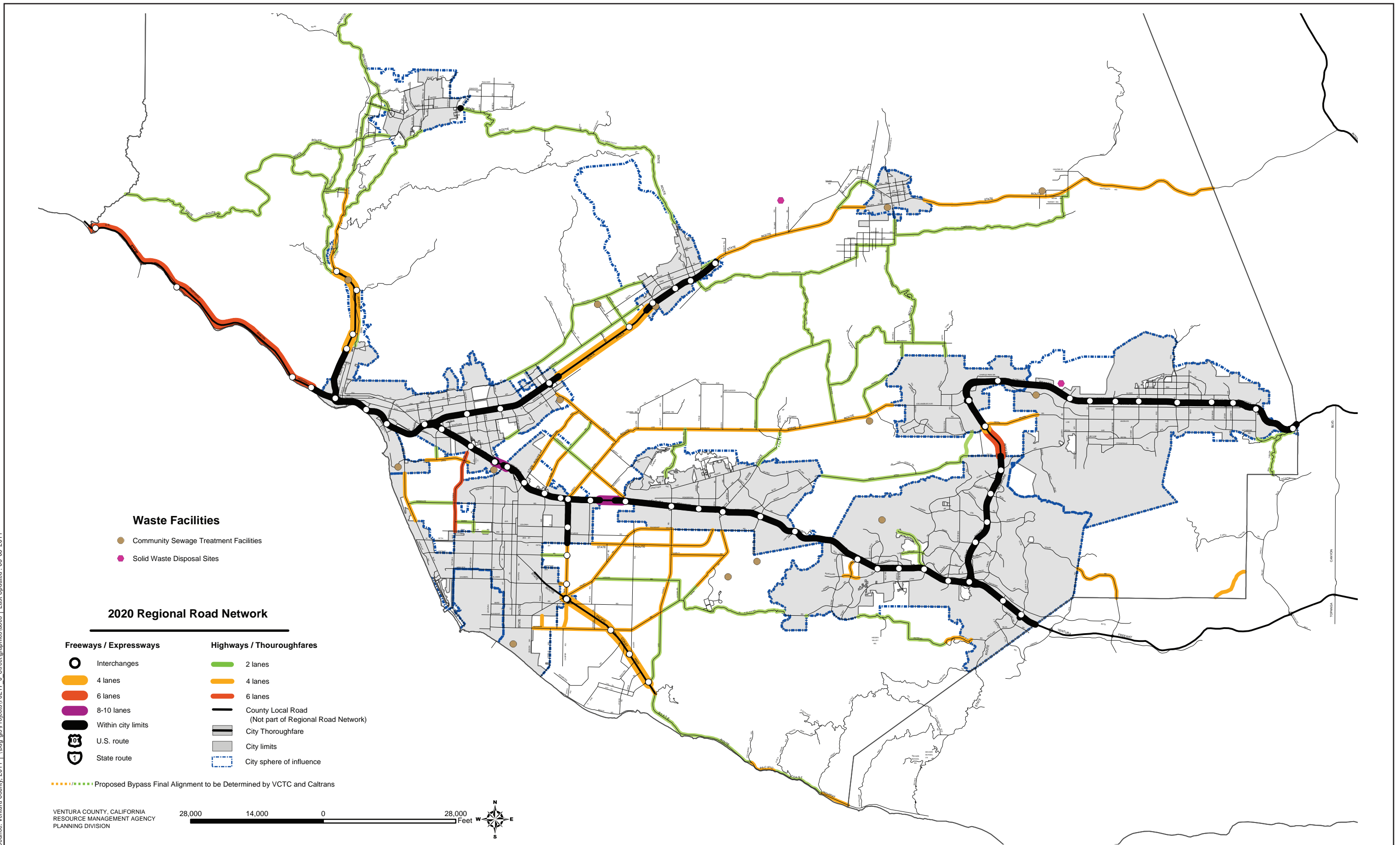
Fifth Street

This thoroughfare is the principal east-west street serving the Central Business District of the City and the mid-City region on both the east and west sides of Oxnard. It is currently designated SR-34 east of Oxnard Boulevard. Fifth Street functions as a secondary arterial except for the segments from Patterson Road to H Street and Oxnard Boulevard to Rose Avenue, which presently function as primary arterials.



Roadway Map
FIGURE 4.5-1

Source: Ventura County, 2011 | \\stdc-gis\Projects\75217_J_Street\graphics\docs | Last Updated: 08-05-2011



2020 Regional Road Network
FIGURE 4.5-2

4.5 Transportation and Circulation

The portion of this road located within unincorporated Ventura County east of the City of Oxnard forms part of the 2020 regional road network.

Gonzales Road

This road is a main east-west thoroughfare that serves the central and north-central portions of the City of Oxnard. This roadway presently extends from Harbor Boulevard to Rice Avenue. Gonzales Road serves as a local arterial over its length except from Ventura Road to Oxnard Boulevard, where it functions as a primary arterial. The portion of Gonzales Road located within unincorporated Ventura County west of the City of Oxnard forms part of the 2020 regional road network.

Harbor Boulevard

This street follows the shoreline extending from the City of Ventura north of the Santa Clara River at the north and terminating into Channel Islands Boulevard, providing accessibility to the beachfront area. Harbor Boulevard is designated as a scenic drive. It functions as a local arterial north of Fifth Street and as a secondary arterial south of Fifth Street. The portion of Harbor Boulevard located within unincorporated Ventura County from McGrath Lake to the Santa Clara River forms part of the 2020 regional road network.

H Street/J Street

This roadway corridor presently functions as a local arterial from Vineyard Avenue to Channel Islands Boulevard. These roadways, however, do not have cross-sections consistent with the local arterial standard. They provide primary access to Channel Island Hospital and the Oxnard Community Center.

Hueneme Road

In addition to serving as a primary arterial west of Saviers Road, this street serves as the main east-west access route to the Port of Hueneme, the City of Port Hueneme, and the Ormond Beach area. The portion of Hueneme Road located within unincorporated Ventura County east of the City of Oxnard forms part of the 2020 regional road network.

Lombard Avenue

This roadway functions as a local arterial serving a portion of the Northeast Industrial Area.

Oxnard Boulevard

This street is one of the principal entrances to Oxnard. It is also the principal north-south access to the Central Area, and continues southerly through the “Five Points” intersection to southeast commercial and residential areas. Although its development as a commercial strip is a handicap, its location in the center of the City has led to its functioning as a primary arterial. Oxnard Boulevard is currently designated as SR-1 and the State is responsible for operations and maintenance. The portion of Oxnard Boulevard located within southeastern Oxnard and unincorporated Ventura County east of Oxnard forms part of the 2020 regional road network.

Patterson Road

This local arterial, which has a gap at the Oxnard Airport, provides access to residential neighborhoods in the northwest and southwest areas of Oxnard. In addition, Patterson Road provides access to the Oxnard Airport, the City of Port Hueneme and the U.S. Navy Construction Battalion Center. A short segment of Patterson Road located in unincorporated Ventura County immediately north of the Oxnard Airport forms part of the 2020 regional road network.

Pleasant Valley Road

This is a four-lane east-west primary arterial which is one of the major distributors of traffic to the City of Port Hueneme and to the U.S. Navy Construction Battalion Center. It also serves as an access route to the commercial Port of Hueneme. To the east of SR-1, Pleasant Valley Road provides access to the City of Camarillo. The portion of Pleasant Valley Road located within unincorporated Ventura County east of the City of Oxnard forms part of the 2020 regional road network.

Rice Avenue/Santa Clara Avenue

This street provides access to the Nyeland Acres Community, the Northeast Industrial Area and the southeast residential areas. Santa Clara Avenue functions as a local arterial while Rice Avenue presently functions as a secondary arterial. Rice Avenue provides an alternative bypass route to Oxnard Boulevard for through trips. Both Rice and Santa Clara Avenues form part of the 2020 regional road network.

Rose Avenue

This street is the first north-south thoroughfare east of the Union Pacific Railroad. North of US-101, it serves the El Rio Community. South of US-101, it serves the western portion of the Northeast Industrial Area, and the residential area south of the freeway and east of Oxnard Boulevard. As a secondary arterial, Rose Avenue also provides access to the residential area south of Fifth Street and east of the Ventura County Railroad, to the Central Industrial Area, and to the Ormond Beach area. The future extension of Rose Avenue between Sanford Street and Hueneme Road would form part of the 2020 regional road network.

Saviers Road

This primary four-lane north-south arterial provides important access from south Oxnard, Port Hueneme and the Ormond Beach area to downtown Oxnard and US-101. It connects to Oxnard Boulevard and Wooley Road at the “Five Points” intersection.

Ventura Road

This four-lane north-south primary arterial provides access to the west side of the City. To the south, the road serves the City of Port Hueneme, the U.S. Navy Construction Battalion Center and to a lesser degree the current Hueneme Road industrial area. Ventura Road also extends north of Vineyard Avenue, and terminates in the Oxnard Town Center area.

Victoria Avenue

This is an important four-lane north-south arterial street in west Oxnard, which provides a crossing of the Santa Clara River for connection with the County Government Center in east Ventura. The southern

4.5 Transportation and Circulation

terminus is in the Silver Strand area. The portion of Victoria Avenue extending from Teal Club Road north nearly to US-101 is included in the 2020 regional road network.

Vineyard Avenue

Vineyard Avenue acts as the important connection between US-101 and central Oxnard via Oxnard Boulevard. Between Oxnard Boulevard and the US-101 interchange, Vineyard Avenue is a six-lane divided facility. Northeast of US-101, it is a secondary arterial facility and is also a principal entrance to Oxnard for westbound traffic on US-101. In addition, it provides access to the westerly portion of the El Rio Community; southwest of US-101, Vineyard Avenue serves the northwest community and the area south of the Santa Clara River and north of Gonzales Road. The portion of Vineyard Avenue north of US-101 and extending from Stroube Street north to Los Angeles Avenue is included in the 2020 regional road network.

Wooley Road

This is a major east-west thoroughfare that provides access to the residential community in the southwest portion of the City, to the central area of Oxnard, and to the Central Industrial Area. This road functions as a secondary arterial but is affected by presence of the rail lines of the Ventura County Railway as well as operational limitations of the “Five Points” intersection. The portion of Wooley Road east of the City of Oxnard is included in the 2020 regional road network.

4.5.1.3 Level of Service (LOS)

The quality of traffic operations is characterized using the concept of level of service (LOS). Level of service is defined by a range of grades from A (best) to F (worst). At intersections, LOS “A” represents free-flow conditions with little or no delay. LOS “F” is characterized by extremely unstable flow conditions and severe congestion with volumes at or near the intersection’s design capacity. This results in long queues backing up from all approaches to intersections. Table 4.5-1 presents a brief description of each level of service letter grade, as well as the range of delays associated with each grade.

Existing Level of Service

The proposed project is located along J Street from Redwood Street down to the Ormond Beach Lagoon. While Saviers Road, Pleasant Valley Road, and Hueneme Road located within the project vicinity are considered to be major traffic corridors within the City of Oxnard, J Street is not. The Oxnard General Plan Update 2020 Background Report: Level of Service (2006) includes traffic counts that were conducted to determine the level of service at City intersections and identify critical AM and PM peak intersections with deficient LOS (LOS D, E, or F). The intersections between J Street and major traffic corridors within the project area were not identified as having deficient LOS.

4.5.1.4 Existing Circulation System

The circulation system in and around the project area includes several different travel modes in addition to the above roadway network.

4.5 Transportation and Circulation

Table 4.5-1. Intersection Level of Service Definitions

Level of Service	Description	Signalized Intersection Delay (seconds per vehicle)	Unsignalized Intersection Delay (seconds per vehicle)
A	Excellent operation. All approaches to the intersection appear quite open, turning movements are easily made, and nearly all drivers find freedom of operation.	≤ 10	≤ 10
B	Very good operation. Many drivers begin to feel somewhat restricted within platoons of vehicles. This represents stable flow. An approach to an intersection may occasionally be fully utilized and traffic queues start to form.	> 10 and ≤ 20	> 10 and ≤ 15
C	Good operation. Occasionally drivers may have to wait more than 60 seconds, and back-ups may develop behind turning vehicles. Most drivers feel somewhat restricted.	> 20 and ≤ 35	> 15 and ≤ 25
D	Fair operation. Vehicles are sometimes required to wait more than 60 seconds during short peaks. There are no long-standing traffic queues.	> 35 and ≤ 55	> 25 and ≤ 35
E	Poor operation. Some long-standing vehicular queues develop on critical approaches to intersections. Delays may be up to several minutes.	> 55 and ≤ 80	> 35 and ≤ 50
F	Forced flow. Represents jammed conditions. Backups from locations downstream or on the cross street may restrict or prevent movement of vehicles out of the intersection approach lanes; therefore, volumes carried are not predictable, potential for stop and go type traffic flow.	> 80	> 50

Source: Highway Capacity Manual, Special Report 209, Transportation Research Board, Washington, D.C., 2000.

Oxnard Airport

The Oxnard Airport is located at 1841 West 5th Street in the City of Oxnard, approximately three miles from the project site. The Oxnard Airport lies west of the Central Business District, in an area generally bounded by Teal Club Road to the north, Ventura Road to the east, West Fifth Street to the south and Victoria Avenue to the west. The Oxnard Airport is limited to business and private airplanes, with no scheduled airlines or military aircraft.

Camarillo Airport

The Camarillo Airport is located at 555 Airport Way in the City of Camarillo, approximately 10 miles from the proposed project site. The Camarillo Airport is limited to business and private airplanes, with no scheduled airlines or military aircraft.

Bicycle Facilities

The City of Oxnard is served by approximately 15 miles of designated bike routes, lanes and paths. The City's Bicycle Facilities Master Plan provides a comprehensive plan intended to guide the overall development of a Citywide and regional bicycle system. According to the city Bicycle Facilities Master Plan, J Street has designated bike lanes between Wooley Road and Hueneme Road. Bike lanes are designated by signs and/or markings but are for the exclusive use of bicyclists. At the project portion of J Street, the bike lanes are designated along both sides of the roadway.

Ventura County Railroad

The Ventura County Railroad (VCRR) serves the project area. The VCRR currently extends for 12.09 miles. The railroad serves the industrial areas of south Oxnard, the Port of Hueneme and the U.S. Naval Facilities Expeditionary Logistics Center, which provides asset management on behalf of the Naval Construction Battalion Center or NCBC. The VCRR connects with a Union Pacific Railroad approximately 2 miles northeast of the northern end of the project. The Union Pacific Railroad carries regional freight, Metrolink, and Amtrak traffic. The nearest station is located at the Oxnard Transportation Center.

Transit Services

Transit service in the Oxnard area is provided by South Coast Area Transit (SCAT), created in 1973 by a joint powers merger of the Oxnard and Ventura municipal bus systems. SCAT carries approximately 300,000 passengers each year in the City of Oxnard. Studies and policy development relating to this system are part of the ongoing transit planning process. The City participates in this process, which includes both short- and long-range plans and programs.

Route 3 Southside serves the project area, which starts at the Oxnard Transportation Center, down J Street and C Street to the C Street Transfer Center and loops back along Teakwood Street and Channel Islands Boulevard and up C and J Street to the Oxnard Transportation Center. The bus route does travel along the J Street segment that is within the project site.

Harbors

Port of Hueneme

The Port of Hueneme is the only major deep water commercial harbor between Los Angeles and San Francisco. It is operated by the Oxnard Harbor District, which has taxation boundaries extending from the cities of Ventura on the west to Thousand Oaks on the east. The Port is approximately three miles southwest of downtown Oxnard, and approximately one mile west of the Ormond Beach area. It is served by rail through the facilities of the Ventura County Railroad, with connections to the Union Pacific main coastline railway. Access to the Port of Hueneme was the subject of a recently completed study by the Southern California Association of Governments (SCAG). The study concluded that the port should be served by two designated routes from US-101; the west route would be via Victoria Avenue while the east route would be via Rice Avenue and Hueneme Road. These routes were endorsed by the cities of Oxnard, San Buenaventura and Port Hueneme.

Although located wholly within the City of Port Hueneme, the impact of the port's future development upon the City of Oxnard will be enormous. There has been a dramatic increase in tonnage handled since the expansion and improvement of its facilities in 1972. This increase has led to another expansion program, which is currently underway. Material in support of offshore oil activity moves through the port to production sites in the Santa Barbara Channel. Numerous other products, such as automobiles and produce, are shipped into and out of the port. As manufacturing increases in the Oxnard area, manufactured goods are expected to become an increasingly significant part of the port's total cargo movement.

Pedestrian Routes

Within the project area, pedestrian travel constitutes a very small portion of total urban travel. Existing pedestrian routes at the project site are along J Street, which ends at Hueneme Road. To the south of the J Street and Hueneme Road intersection, the District maintenance road and the drain are fenced off. At the south end of the project, Ormond Beach serves as a recreational pedestrian route.

Private Roads

The District maintenance road is located to the south of the J Street and Hueneme Road intersection.

Off Street Parking

Existing parking at the project site is currently available along J Street and side streets in the project area.

4.5.2 Regulatory Setting

City of Oxnard General Plan

The Circulation Element addresses all the available travel modes within the City of Oxnard and seeks to create a system that coordinates their operation to the greatest degree possible. The following are the City's circulation policies and goals:

Development Policies

A. Goals

1. A transportation system that supports existing, approved and planned land uses throughout the City while maintaining a level of service "C" on all streets and at all intersections.

B. Objectives

1. Minimize conflicts between automobiles, bicycles and pedestrians.
2. Reduce congestion at major intersections within the City of Oxnard.
5. Achieve a level of service "C" on all City roads where feasible, subject to necessary environmental review.
9. Provide a Citywide system of safe, efficient and attractive bicycle routes for commuter, school and recreational use.

C. Policies

The Circulation Element policies are intended to guide the City so that both governmental and private activities contribute to meeting the goals and objectives of the Circulation Element. As such, the policies act as the linkage between the broader goals and objectives and the specific implementation programs.

Level of Service

To determine whether the addition of project-generated trips at a study intersection results in a significant impact, the City of Oxnard has established the following thresholds of significance:

A significant impact occurs at a study intersection when the addition of project-generated trips causes the peak-hour level of service of the study intersection to change from acceptable operation (LOS A through C) to deficient operation (LOS D through F).

A significant impact occurs at a study intersection when the addition of project-generated traffic increases the volume to capacity ratio (V/C) ratio by two percent or more (> 0.020) at an intersection that was already rated LOS C through F.

City of Port Hueneme General Plan

The Circulation/Infrastructure Element from City of Port Hueneme General Plan includes circulation goals, policies, and implementation to provide a safe, effective, and efficient transportation system for the city.

Goal 1: Provide a comprehensive transportation system for the movement of persons and goods with maximum safety, efficiency, and convenience, and with a minimum of delay and cost.

Policy 1-1: Reduce existing congestion at critical intersections, including Channel Islands Boulevard and Ventura Road, and Ventura Road and Bard Road.

Goal 2: Provide a balanced roadway system which will provide adequate accessibility to existing and future land uses with minimum impact on residential neighborhoods.

Policy 2-1: Encourage the routing of through traffic to designated arterial streets and discourage through traffic in residential neighborhoods.

Policy 2-2: Monitor through traffic intrusion in residential neighborhoods, and where necessary, implement strategies to reduce through traffic impacts.

4.5.3 Thresholds of Significance

Ventura County Initial Study Guidelines

Ventura County *Initial Study Assessment Guidelines* were updated in April 2011. The thresholds of significance for transportation were amended as shown below. However, the update to the thresholds does not change the project-level impact analysis provided in this EIR.

Public Roads and Highways – Level of Service

Roadway Segments

Minimum Acceptable LOS: Minimum Level of Service for road segments within the Regional Road Network (Figure 4.2.3 of the Public Facilities and Service Appendix of the Ventura County General Plan) and the Local Road Network (all other County maintained roads) is shown Table 4.5-2:

Table 4.5-2. Ventura County Minimum Acceptable Level of Service for Roadway Segments

Case	Minimum LOS	Description
a	LOS D	All County thoroughfares and state highways within the unincorporated area of the County, except as provided in case b.
b	LOS E	<ol style="list-style-type: none"> 1. State Route 33 between the end of the Ojai freeway and the City of Ojai. 2. State Route 118 between Santa Clara Avenue and the City of Moorpark. 3. State Route 34 (Somis Road) north of the City of Camarillo. 4. Santa Rosa Road between Camarillo city limit line and Thousand Oaks city limit line. 5. Moorpark Road north of Santa Rosa Road to Moorpark city limits line.
c	LOS C	All County maintained local roads.
d	Varies	The LOS prescribed by the applicable city for all state highways, city thoroughfares, and city maintained local roads located within that city, if the city has formally adopted General Plan policies, ordinances, or a reciprocal agreement with the County, pertaining to development in the city that would individually or cumulatively affect the LOS of state highways, county thoroughfares and county-maintained local roads in the unincorporated area of the County.
e		County LOS standards are applicable for any City that has not adopted its own standards or has not executed a reciprocal agreement with the County pertaining to impacts to County roads.

Note: At any intersection between two roads, each of which has a prescribed minimum acceptable LOS, the less stringent LOS of the two shall be the minimum acceptable LOS of that intersection.

Project Specific Impacts: A significant adverse project specific traffic impact is assumed to occur on any road segment if any one of the following results from the project:

- a. If the project would cause the existing LOS on a roadway segment to fall to an unacceptable level as defined in Table 4.5-2.
- b. If the project will add one or more peak-hour trips (PHT) to a roadway segment that is currently operating at a less than-acceptable LOS as defined in Table 4.5-2.

A potentially significant adverse cumulative traffic impact is assumed to occur on any road segment if any one of the following results from the project:

- a. If the project will add one or more PHT to a roadway segment that is part of the regional road network and the roadway segment is currently operating at an unacceptable LOS as defined in Table 4.5-2.
- b. If the project will add 10 or more PHT to a roadway segment which is part of the regional road network and is projected to reach an unacceptable LOS as defined in Table 4.5-2 by the year 2020.

Intersections

Changes in Level of Service: Potentially Significant project-specific changes in LOS at intersections on the Regional Road Network are shown in Table 4.5-3.

Table 4.5-3. Threshold of Significance for Changes in Level of Service at Intersections

Intersection LOS (Existing)	Increase in V/C* or Trips Greater Than
LOS A	0.20
LOS B	0.15
LOS C	0.10
LOS D	10 PHTs**
LOS E	5 PHTs**
LOS F	1 PHT**

*Volume/Capacity Ratio is the ratio between the existing or projected volume of traffic using a transportation facility and the capacity of that facility.

**To critical movements (highest combination of left and opposing through/right-turn PHT movements).

Project Specific Impacts to Intersections: A significant adverse project specific traffic impact is assumed to occur at an intersection on the Regional Road Network if the project will change the V/C ratio or add PHT to impacted intersections that exceed the thresholds established in Table 4.5-3.

Cumulative Impacts to Intersections: A potentially significant adverse cumulative traffic impact is assumed to occur at any intersection if any one of the following results from the project:

- a. The project will add one or more PHT to the critical movements at an intersection that is part of the regional road network and which is currently operating at an unacceptable LOS as defined in Table 4.5-2 by the year 2020.
- b. The project will add 10 or more PHT to an intersection that is part of the regional road network, which is projected to operate at an unacceptable LOS defined in Table 4.5-2 by the year 2020.

Pedestrian/Bicycle Facilities

Demand for New or Expanded Facilities: Projects that generate or attract pedestrian/ bicycle traffic volumes meeting requirements for protected highway crossings or pedestrian and bicycle facilities may have a significant impact. Pedestrian overcrossings, traffic signals and bikeways are examples of these types of facilities.

Existing and Planned Facilities: A project that will cause actual or potential barriers to existing or planned pedestrian/bicycle facilities may have a significant impact.

Off-Street Parking

Any project that generates additional vehicle trips during the construction or operation phases would have an impact on off-street parking. For the construction phase, if there is sufficient space on-site to park construction vehicles, then the project would have a less-than-significant impact. Conversely, if there would not be sufficient space onsite to accommodate construction vehicles, then the significance must be determined on a case-by-case basis.

For the operation phase, if the project includes parking that meets the Zoning Ordinance requirements, then the project would have a less-than-significant impact. Conversely, if the project does not meet the Zoning Ordinance parking requirements, then significance must be determined on a case-by-case basis.

4.5.4 Project-Level Impact Analysis

Public Roads and Highways - Level of Service

Roadway Segments

Would the project cause the existing LOS on a roadway segment to fall to an unacceptable level as defined in Table 4.5-2?

Construction

Traffic impacts from the construction phase of the proposed project would be relatively short-term and intermittent involving road closures and detours which would temporarily impact motorists (delay and inconvenience), businesses (other uses) along the corridor, and impacts on emergency response operations. The intermittent road closures would include the streets that intersect with J Street in the project area with the exception of Pleasant Valley Road and Hueneme Road. Because the proposed project would be constructed in phases of approximately 3,000 to 4,000 linear feet segments, road closures would not require motorist detour. J Street, Pleasant Valley Road, and Hueneme Road would remain open during all construction phases with intermittent lane closures. On J Street, access to residential and commercial uses fronting J Street would remain open during construction. Motorists traveling along Pleasant Valley Road and Hueneme Road would likely experience delays during lane closures.

The proposed construction would involve excavation and backfill of soils as well as demolition and recycling of existing concrete. Haul trucks will be used to transport excess soil and concrete to designated local landfills and recycling locations, respectively. During the building of the drain, supplies and construction equipment would also be transported to the work area and construction staging area as well. It is anticipated that no more than three haul trucks would be on site for loading at one time and approximately 30 to 45 trips per day or five to six trips per hour are expected to occur. Typically, five to six haul trips would not be considered a significant number of trips; however, one or more of these trips would likely occur during peak hour and may cause LOS of roadway segments in the project vicinity to fall to an unacceptable level. The haul truck trips are expected to result in delays and congestion at the project intersections. The intermittent road closures and haul truck trips during construction may disrupt traffic flow and cause delays, increasing traffic congestion. A significant impact is identified for this issue.

Operations

The operation of the proposed project would result in maintenance activities similar to those currently in place which would generate intermittent trips for maintenance purposes only; therefore, no new transportation impacts would occur. The District's Final Program Environmental Impact Report (EIR) for Environmental Protection Measures for the Ongoing Routine Operations and Maintenance Program Project contains Best Management Practices (BMPs) for the operational maintenance activities for J Street Drain; these BMPs will be incorporated as part of the proposed project for operational activities to result in less than significant impacts. Therefore, the operation of the proposed project would not result in substantial increase in traffic causing impact to existing traffic load or capacity of the street system.

Beach Elevation Management Plan

The BEMP would be implemented periodically and would result in infrequent trips to the beach. Trips associated with BEMP implementation would be one or two District vehicles and a dozer. This would not represent a significant amount of traffic. There is a less than significant impact for this issue area.

Would the project add one or more peak hour trips to a roadway segment that is currently operating at less than-acceptable LOS as defined in Table 4.5-2?

Construction

As mentioned above, the intersections between J Street and major traffic corridors within the project area were not identified as having deficient LOS. However, during construction, the project would generate five to six haul trips per hour. One or more of these trips would likely occur during peak hour and travel through roadway segments in the project vicinity that are currently operating at less-than-acceptable LOS as defined in Table 4.5-1. The intermittent road closures and haul truck trips during construction may disrupt traffic flow and cause delays, increasing traffic congestion. A significant impact is identified for this issue.

Operations

The operation of the proposed project would result in maintenance activities similar to those currently in place which would generate intermittent trips for maintenance purposes only; therefore, no new operational traffic impacts would occur. The District's Final Program EIR for Environmental Protection Measures for the Ongoing Routine Operations and Maintenance Program Project contains BMPs for the operational maintenance activities for J Street Drain, these BMPs will be incorporated as part of the proposed project for operational activities to result in less than significant impacts. Therefore, the operation of the proposed project would not result in a substantial increase in traffic causing an impact to the existing traffic load or capacity of the street system. The proposed project would not add 10 or more ADT or contribute 1 percent or more of the total project ADT to a roadway that is currently operating at a less than acceptable LOS as defined in Table 4.5-1.

Beach Elevation Management Plan

The BEMP would be implemented periodically and would result in infrequent trips to the beach. Trips associated with BEMP implementation would be one or two District vehicles and a dozer. This would not represent a significant amount of traffic. There is a less than significant impact for this issue area.

Intersections

Would the project change the V/C ratio or add PHT to impacted intersections within the regional road network that exceed the thresholds established in Table 4.5-3?

Construction

As mentioned above, the intersections between J Street and major traffic corridors within the project area were not identified as having deficient LOS. Additionally, J Street is not part of the Regional Road Network (Ventura County General Plan Public Facilities and Services Appendix, Last Amended November 15, 2005, Figure 4.2.1). However, the proposed construction would involve excavation and backfill of soils as well as demolition and recycling of existing concrete. Haul trucks will be used to

transport excess soil and concrete to designated local landfills and recycling locations, respectively. During the building of the drain, supplies and construction equipment would also be transported to the work area and construction staging area as well. It is anticipated that no more than three haul trucks would be on site for loading at one time and approximately 30 to 45 trips per day or five to six trips per hour are expected to occur. Typically, five to six haul trips would not be considered a significant number of trips; however, one or more of these trips would likely occur during peak hour and may change the existing V/C ratio of intersections within the regional road network, such as those along Hueneme, Pleasant Valley, or Rice Roads. The haul truck trips may result in delays and congestion at the project intersections. The haul truck trips during construction may disrupt traffic flow and cause delays, increasing traffic congestion. A potentially significant impact is identified for this issue.

Operations

The operation of the proposed project would result in maintenance activities similar to those currently in place which would generate intermittent trips for maintenance purposes only; therefore, no new operational traffic impacts would occur. The District's Final Program EIR for Environmental Protection Measures for the Ongoing Routine Operations and Maintenance Program Project contains BMPs for the operational maintenance activities for J Street Drain, and these BMPs will be incorporated as part of the proposed project for operational activities to result in less than significant impacts. Therefore, the operation of the proposed project would not result in a substantial increase in traffic causing an impact to the LOS at intersections within the regional road network. This impact is less than significant.

Beach Elevation Management Plan

The BEMP would be implemented periodically and would result in infrequent trips to the beach. Trips associated with BEMP implementation would be one or two District vehicles and a dozer. This would not represent a significant amount of traffic. There is a less than significant impact for this issue area.

Pedestrian/Bicycle Facilities

Would the project generate or attract pedestrian/bicycle traffic volumes meeting requirements for protected highway crossings or pedestrian and bicycle facilities? Would the project cause actual or potential barriers to existing or planned pedestrian/bicycle facilities?

Construction

The project would replace an existing undersized flood control facility and would therefore not create a new land use attracting more pedestrian/bicycle traffic. The construction phase of the proposed project would involve road closures and detours along the drain corridor. Both Pleasant Valley Road and Hueneme Road would remain open during all construction phases with intermittent lane closures. The project boundary will be limited to the channel/street right-of-way except at the outlet to the lagoon. At the outlet, the work area will extend 300 feet past the Hueneme Drain Pump station and 50 feet southeast of the easterly right-of-way. According to the City of Oxnard Bicycle Facilities Master Plan, bike lanes are designated on J Street between Wooley Road and Hueneme Road. At the project portion of J Street, the bike lanes are designated along both sides of the roadway. During the construction phase of the drain, construction activities would potentially interfere with designated bike lanes as bike lanes will be closed on J Street, although general vehicular access along J Street would still be maintained. Cyclists along J Street would experience detours that may not be designated bike lanes. Additionally, pedestrians may also experience detours when sidewalks may not be available. This represents a significant impact.

Operations

The operation of the proposed project would result in maintenance activities similar to those currently in place, which would generate intermittent trips for maintenance purposes only. Such activities would not impact pedestrian or bicycle facilities. Therefore, no impact is identified for this issue area.

Beach Elevation Management Plan

The BEMP would be implemented periodically and would result in infrequent trips to the beach. Trips associated with BEMP implementation would be one or two city vehicles and a dozer. This would not represent a significant amount of traffic. Implementation of the BEMP would not impact pedestrian or bicycle facilities.

Off-Street Parking

Construction

North of Hueneme Road, existing on-street parking (parking within the public street right-of-way) at the project site is currently available along J Street and side streets in the project area. Because this area consists primarily of single-family residences, off-street parking (parking outside the public street right-of-way) is typically in the form of driveways and garages. This off-street parking would remain available to residents throughout project construction.

The construction of the proposed project would not result in a substantial demand for parking by construction workers for the J Street project. Workers would park either in the project work area or in on-street spaces. During road closures, on-street parking spaces along J Street would be temporarily unavailable. However, on-street spaces on cross streets or other nearby parallel streets would not be affected. The proposed project would be constructed in phases of approximately 3,000 to 4,000 linear-foot segments; road closures would not result in substantial loss of available spaces. Because the existing land uses within the project area are mostly residential with private off-street parking spaces, on-street spaces are typically available. Given the continued availability of off-street parking throughout construction, the demand for on-street parking during construction from construction workers, equipment materials deliveries, etc. is not expected to result in inadequate off-street parking for the existing residents in the project area north of Hueneme Drain. Therefore, a less than significant impact is identified for construction phases 2 through 4.

J Street ends at Hueneme Road, and on-street parking is not present south of this point. However, if the District employs the trenching technique to construct the drain between Buildings 6 and 7 of the Surfside III property, approximately 30 off-street parking spaces would fall within the temporary work area. These spaces would be unavailable to Surfside III residents during construction of phase 1 of the project. Therefore, a significant impact to off-street parking would result during phase 1 construction.

Operations

The operation of the proposed project would result in maintenance activities similar to those currently in place which would generate intermittent trips for maintenance purposes only; therefore, there would be no new parking demand during operation. Therefore, it is not anticipated that implementation of the J Street Drain project would result in impacts to off-street parking and a less than significant impact is identified.

Beach Elevation Management Plan

BEMP would be implemented periodically and would only have equipment on the beach for a few hours. Implementation of the BEMP would not require off-street parking. There is a less than significant impact for this issue area.

4.5.5 Cumulative-Level Impact Analysis

Roadway Segments

Would the project add one or more PHT to a roadway segment that is part of the regional road network and the roadway segment is currently operating at an unacceptable LOS as defined in Table 4.5-2?

Would the project add ten or more PHT to a roadway segment which is part of the regional road network and is projected to reach an unacceptable LOS as defined in Table 4.5-2 by the year 2020?

As mentioned above, the intersections between J Street and major traffic corridors (Pleasant Valley Road and Hueneme Road) within the project area were not identified as having deficient LOS. Traffic impacts from the construction phase of the proposed project would be relatively short-term and intermittent involving road/lane closures and detours which would temporarily impact motorists (delay and inconvenience), businesses (other uses) along the corridor, and impacts on emergency response operations. J Street, Pleasant Valley Road, and Hueneme Road would remain open during all construction phases with intermittent lane closures. While project construction impacts would be temporary, traffic impacts have the potential to temporarily contribute to the exceedance of the level of service standard established by the City of Oxnard at the project intersections. This represents a significant cumulative traffic impact during construction. Less than significant impacts would occur as a result of operation and BEMP implementation.

Intersections

Would the project add one or more PHT to the critical movements at an intersection that is part of the regional road network and which is currently operating at an unacceptable LOS as defined in Table 4.5-2 by the year 2020?

Would the project add ten or more PHT to an intersection that is part of the regional road network, which is projected to operate at an unacceptable LOS defined in Table 4.5-2 by the year 2020?

As mentioned above, the proposed construction would involve excavation and backfill of soils as well as demolition and recycling of existing concrete. Haul trucks will be used to transport excess soil and concrete to designated local landfills and recycling locations, respectively. During the building of the drain, supplies and construction equipment would also be transported to the work area and construction staging area as well. While the construction impacts would be short-term and temporary, they have the potential to temporarily add PHT to intersections within the regional road network (e.g., along Hueneme, Pleasant Valley, or Rice Roads) currently operating or projected to operate at an unacceptable LOS. The haul truck trips may result in delays and congestion at the project intersections. The haul truck trips during construction may disrupt traffic flow and cause delays, increasing traffic congestion. A potentially significant impact is identified for this issue. Less than significant impacts would occur as a result of operation and BEMP implementation.

Pedestrian/Bicycle Facilities

Construction

The construction phase of the proposed project would involve road closures and detours along the drain corridor. Construction of the drain would potentially interfere with designated bike lanes when lanes are closed on J Street though access along J Street would be maintained. Due to the distance of cumulative projects from the proposed project and the fact that they would not be constructed simultaneously, cumulative impacts would be less than significant.

Operations

The operation of the proposed project would result in maintenance activities similar to those currently in place, which would generate intermittent trips for maintenance purposes only. Such activities would not impact pedestrian or bicycle facilities. The proposed project would not contribute to a significant cumulative impact and a significant cumulative impact would not result. No impact is identified.

Beach Elevation Management Plan

The BEMP would be implemented periodically and would result in infrequent trips to the beach. Trips associated with BEMP implementation would be one or two District vehicles and a dozer. This would not represent a significant amount of traffic. Therefore, the BEMP would not contribute to a significant cumulative impact. No impact is identified.

Off-Street Parking

Construction

A significant project-level impact to off-street parking was identified for phase 1 of the project, at the Surfside III property. No cumulative projects have been proposed along the Surfside III property. Therefore, cumulative impacts to off-street parking would be less than significant.

Operations

Operation of the proposed project would occur as it currently does under existing conditions. Therefore, there would be no new parking demand generated by the proposed project during operation. The proposed project would not contribute to a significant cumulative impact and a significant cumulative impact would not result. No impact is identified.

Beach Elevation Management Plan

The BEMP is anticipated to be used periodically and would only have equipment on the beach for a few hours. There would be no need for off-street parking. Therefore, the BEMP would not contribute off-street parking demand and a cumulative impact would not result.

4.5.6 Mitigation Measures

Project- and Cumulative-Level Traffic Impacts and Pedestrian/Bicycle Facility Impacts

- TR-1** The District shall prepare a construction worksite traffic control plan and submit it to the County, ~~and cities,~~ Gold Coast Transit, Oxnard School District, Oxnard Union High School District, and Hueneme School District for review and approval prior to soliciting bids for the construction contract. This plan shall include such elements as the location of any lane closures, restricted hours during which lane closures would not be allowed, local traffic detours, protective devices and traffic controls (such as barricades, cones, flagmen, lights, warning beacons, temporary traffic signals, warning signs), access to abutting properties, provisions for pedestrians and bicycles, and provisions to maintain emergency access through construction work areas. The contractor shall comply with this plan.
- TR-2** The Contractor shall coordinate with emergency service providers (police, fire, ambulance and paramedic services) to provide advance notice of any lane closures, construction hours and changes to local access and to identify alternative routes where appropriate.
- TR-3** To preserve parking for residents during phase 1 construction, the District shall employ vertical shoring techniques along the Surfside III property where open trenching would result in the temporary removal of off-street parking spaces.

4.5.6.1 Ventura County Watershed Protection District Best Management Practices

The Ventura County Board of Supervisors adopted the Ventura County Watershed Protection District (District) Final Program EIR for Environmental Protection Measures for the Ongoing Routine Operations and Maintenance Program Project No. 80030 in May 2008. The final document includes Best Management Practices (BMPs) that will be added to the District's Maintenance Activity Guidelines. The Operation and Maintenance Division staff will be responsible for ensuring the proper implementation of the BMPs on a routine, year-round basis. The Division staff will also be responsible for ensuring compliance with all permit conditions, conducting or employing qualified personnel for any required pre-project site surveys or inspections, updating the Activity Guidelines sheets, instructing crews on BMPs, overseeing certain BMP implementation, documenting the implementation of the BMPs, and conducting any agency coordination.

The following BMPs will be implemented to minimize impacts during operation:

- If maintenance activities would result in substantial vehicle trips on a roadway with unacceptable LOS at peak hours, maintenance staff should either choose an alternate route or conduct vehicle trips off peak hours. In addition, District staff shall avoid stacking of maintenance trucks on public roads during maintenance activities. The minimum acceptable LOS for road segments and intersections within the County Regional Road Network and Local Road Network shall be as follows:
 - LOS D for all County thoroughfares and federal highways and state highways in the unincorporated area of the County, except as otherwise provided below;
 - LOS E for SR-33 between the northerly end of the Ojai Freeway and the City of Ojai, Santa Rosa Road, Moorpark Road north of Santa Rosa Road, and SR-34 north of the City of Camarillo;

- LOS C for all County-maintained local roads; and
- The LOS prescribed by the applicable city for all federal highways, state highways, city thoroughfares and city-maintained local roads located within that city, if the city has formally adopted General Plan policies, ordinances, or a reciprocal agreement with the County respecting development in the city that would individually or cumulatively affect the LOS of federal highways, state highways, County thoroughfares and County-maintained local roads in the unincorporated area of the County.

4.5.7 Significance After Mitigation

Implementation of mitigation measures TR-1 through TR-3 would reduce the impact to roadway level of service, pedestrian and bicycle facilities, and off-street parking due to intermittent lane closures as well as potential project- and cumulative-level impacts to below a level of significance.

4.5.8 Response to Notice of Preparation Comments

During the Notice of Preparation (NOP) comment period, the City of Oxnard sent a comment letter requesting that impacts to the J Street bike path be examined and stating that the City supports an analysis of a covered box culvert with a bike lane within landscaping. As discussed in the preceding analysis, the construction of the proposed project would potentially interfere with designated bike paths along J Street. Cyclists on J Street may experience detours that may not be designated bike lanes. However, impacts to bike paths would be temporary during construction activities. Additionally, since bike paths along J Street are located on the outer edge of the roadway, impacts would likely be minimal as construction occurs on the drain in the center of the roadway. An analysis of the impacts associated with a covered box culvert is included in Section 5.0, Alternatives, of this document. As discussed, a covered box culvert with landscaping would be a more expensive alternative to the proposed project.

The City of Oxnard also commented that construction impacts related to parking and truck deliveries be fully evaluated and that circulation impacts along J Street and all intersecting streets be evaluated after drain improvements. The preceding analysis includes a discussion of impacts related to parking and truck haul trips (including deliveries and debris removal). As identified above, the proposed project has the potential to degrade LOS at intersections and roadway segments during construction activities. Mitigation measures TR-1 and TR-2 have been proposed to reduce these impacts to below a level of significance. Additionally, upon completion of drainage improvements, circulation impacts along J Street and all intersecting streets are anticipated to be less than significant since the drain would function generally as it does under existing conditions.

The County of Ventura Transportation Department requested that the project applicant submit the proposed truck route for the project to the Department and that trucks be covered during hauling. As indicated in mitigation measures TR-1 and TR-2, a TCP would be prepared and submitted to the County for review and approval prior to any construction work. Additionally, as identified in Section 4.4, Air Quality, of this document, trucks would be covered during hauling to prevent flying debris, fugitive dust, and particulate matter.

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4.6 NOISE AND VIBRATION

This section evaluates the potential project- and cumulative-level noise impacts associated with the implementation of the J Street Drain Project.

4.6.1 Environmental Setting

Noise is generally defined as unwanted sound. Noise can result in speech interference and disrupt activities at home and work, including sleep patterns and recreational pursuits. The long-term effects of excessive noise exposure are physical, as well as psychological. Physical effects may include headaches, nausea, irritability, constriction of blood vessels, changes in heart and respiratory rate, and increased muscle tension.

4.6.1.1 *How Sound is Measured*

Sound levels are expressed on a logarithmic scale of decibels (abbreviated as dB), in which a change of ten units on the decibel scale reflects a ten-fold increase in sound energy. A ten-fold increase in sound energy roughly translates to a doubling of perceived loudness.

In evaluating human response to noise, acousticians compensate for the response of people to varying frequency or pitch components of sound. The human ear is most sensitive to sounds in the middle frequency range used for human speech, and is less sensitive to lower and higher-pitched sounds. The “A” weighting scale is used to account for this sensitivity; thus, most community noise standards are expressed in decibels on the “A”-weighted scale, abbreviated dB(A). Zero on the decibel scale is set roughly at the threshold of human hearing. Sound levels of common sounds in the environment include office background noise at about 50 dB(A); human speech at 10 feet at about 60 to 70 dB(A); cars driving by at 50 feet at 65 to 70 dB(A); trucks at 50 feet at 75 to 80 dB(A); and aircraft overflights directly overhead a mile from the runway at about 95 to 100 dB(A).

4.6.1.2 *Noise Sensitive Land Uses*

Noise sensitive land uses include residences, schools, churches, libraries, daycare facilities, hospitals, and similar users; although sensitivity varies by time of day (see Table 4.6-1). These land uses are common in an urban environment and occur within the J Street Drain Project area. The existing land uses surrounding the proposed project site include a wastewater treatment facility, residential, a nursing home, manufacturing, park and recreation, a church, commercial, and vacant lots. The residences along the J Street Drain north of Hueneme Road are approximately 50 feet from the drain. Buildings 6 and 7 of the Surfside III condominiums, located immediately north of the Pump Station, are noise sensitive receptors approximately five feet from the temporary work area’s west boundary. Hospitals and quasi-residential nursing homes are considered sensitive 24 hours a day. When in use, schools, churches, and libraries are considered sensitive from the hours of 7:00 a.m. to 10:00 p.m. Residential land uses are considered sensitive from the hours of 7:00 p.m. to 7:00 a.m. (*Ventura County Initial Study Assessment Guidelines*, April 26, 2011; *County of Ventura Construction Noise Threshold and Criteria Plan*, November 2005).

Table 4.6-1. Land Use Noise Compatibility Guidelines

Land Use Category	Hourly Equivalent Noise Level (L _{eq})							Nature of the Noise Environment where the L _{eq} level is
	55	60	65	70	75	80	85	
Residential - Low-Density Single-Family, Duplex, Mobile Homes								Below 55 dB Relatively quiet suburban or urban areas, no arterial streets within 1 block, no freeways within ¼ mile
Residential – Multiple Family								
Transient Lodging – Motels, Hotels								
Schools, Libraries, Churches, Hospitals, Nursing homes								55-65 dB Mostly somewhat noisy urban areas, near but not directly adjacent to high volumes of traffic
Auditoriums, Concert Halls, Amphitheaters								
Sports Arenas, Outdoor Spectator Sports								
Playgrounds, Neighborhood Parks								65-75 dB Very noisy urban areas near arterials, freeways or airports
Golf Courses, Riding Stables, Water Recreation, Cemeteries								
Office Buildings, Business, Commercial and Professional								
Industrial, Manufacturing, Utilities, Agriculture								75+ dB Extremely noisy urban areas adjacent to freeway or under airport traffic patterns



Normally Acceptable

Specified land use is satisfactory, based on the assumption that any buildings are of normal conventional construction, without any special noise insulation requirements.



Conditionally Acceptable

New construction or development should be undertaken only after a detailed analysis of noise reduction requirements is made and needed noise insulation features included in design. Conventional construction, but with closed windows and fresh air supply systems or air conditioning, will normally suffice.



Normally Unacceptable

New construction or development should generally be discouraged. If new construction or development does proceed, a detailed analysis of noise reduction requirements must be made and needed noise insulation features included in design.



Clearly Unacceptable

New construction or development should generally not be undertaken.

Source: State of California Governor's Office of Planning and Research 2003, EDAW 2007

Other sensitive land use sites include the Bubbling Springs Community Park located at the corner of Bard Road and J Street and Our Savior's Preschool and Day Care Center located at 905 Redwood Street, approximately within 500 feet from J Street Drain. The following are other potentially sensitive land uses within one-half mile from the J Street Drain:

- San Miguel Pre-School – 2400 S. J Street, Oxnard, CA
- Kamala Elementary School – 635 W. Kamala Street, Oxnard, CA
- St. Anthony's Elementary School – 2421 S. C Street, Oxnard, CA
- Sunkist Elementary School – 1400 Teakwood Street, Port Hueneme, CA
- EO Green Junior High School – 3739 S. C Street, Oxnard, CA

- Hueneme High School – 500 W. Bard Road, Oxnard, CA
- Community Memorial Hospital of San Buenaventura-Oxnard – 2921 Saviers Road, Oxnard, CA

4.6.1.3 Existing Noise

Noise sources are classified in two forms: (1) point sources, such as stationary equipment; and (2) line sources, such as a roadway with a large number of pass-by sources (motor vehicles). Sound generated by a point source typically diminishes (attenuates) at a rate of 6.0 dB(A) for each doubling of distance from the source to the receptor at acoustically “hard” sites and 7.5 dB(A) at acoustically “soft” sites. Sound generated by a line source typically attenuates at a rate of 3 dB(A) and 4.5 dB(A) per doubling distance, for hard and soft sites, respectively. Sound levels can be attenuated by man-made or natural barriers. A “hard” or reflective site does not provide any excess ground-effect attenuation and is characteristic of asphalt or concrete surfaces, and very hard-packed soils. An acoustically “soft” or absorptive site is characteristic of unpaved, vegetated ground. For example, a 60 dB(A) noise level measured at 50 feet from a point source at an acoustically hard site would be 54 dB(A) at 100 feet from the source and 48 dB(A) at 200 feet from the source. A noise level generated over an acoustically “soft” site would attenuate from 60 dB(A) noise level measured at 50 feet from a point source to be 52.5 dB(A) at 100 feet from the source and 45 dB(A) at 200 feet from the source.

The existing land uses surrounding the proposed project site include a wastewater treatment facility, residential, manufacturing, a nursing home, park and recreation, a church, commercial, and vacant lots. The Downstream of Hueneme Road, the existing noise level for the residential development along J Street Drain in the City of Oxnard would approximate a “quiet suburban area” from Table 4.6-2, which is about 40 dB(A). Along J Street (north of Hueneme Road), the Oxnard General Plan Noise Model measured the existing weekday peak-hour noise level, as measured 100 feet from the street centerline, at 65 dB(A) L_{eq} (Appendix F, City of Oxnard 2030 General Plan Draft Program Environmental Impact Report, February 2009).

Table 4.6-2. Typical Noise Levels

Common Outdoor Noise Sources	Noise Level (dB(A))	Common Indoor Noise Sources
	110	Rock band
Jet fly-over at 100 feet	100	
Gas lawnmower at 3 feet	90	
Diesel Truck going 50 mph at 50 feet	80	Garbage disposal at 3 feet
Noisy urban area (daytime)		
Gas lawnmower at 100 feet	70	Vacuum cleaner at 10 feet
Commercial area		Normal speech at 3 feet
Heavy traffic at 300 feet	60	
Quiet urban area (daytime)	50	Dishwasher in next room
Quiet urban area (nighttime)	40	Theatre, large conference room (background) (nighttime)
Quiet suburban area		
	30	Library
Quiet rural area (nighttime)		Bedroom at night, concert hall (background)
	20	
	10	
Threshold of human hearing	0	Threshold of human hearing

Source: California Department of Transportation

4.6.2 Regulatory Setting

City of Oxnard

Development Policies

Noise problems in the Oxnard community can be mitigated through the 2020 General Plan and particularly the Noise Element. Mutually compatible goals and objectives provide a general framework for future efforts to achieve a quiet environment.

A. Goals

A quiet environment for the residents of Oxnard.

B. Objectives

1. Provide acceptable noise levels for residential and other noise-sensitive land uses consistent with State guidelines.
2. Protect noise sensitive uses from areas with high ambient noise levels.
3. Integrate noise considerations into the community planning process to prevent noise/land use conflicts.

C. Policies

1. The City should encourage land uses that are not noise sensitive in areas that are permanently committed to noise producing land uses, such as transportation corridors.
2. The City should promote maximum efficiency in noise abatement efforts through intergovernmental coordination and public information programs.
3. Educational institutions should be located in areas where students and teachers can perform without distraction from noise.
4. The City shall promote, where feasible, alternative sound attenuation measures other than the traditional wall barrier. These may include berms, a combination of berms and landscaping, or locating buildings away from the roadway or other noise source.
5. Municipal policies shall be consistent with the Ventura County Airport Land Use Commission's adopted land use plan.
6. Proposed development projects shall not generate more noise than that classified as "satisfactory," as determined by the noise compatibility standards, on nearby property. Project applicants shall reduce or buffer the noise generated by their projects.
7. The City shall prohibit the development of noise-sensitive land uses within the Oxnard Airport 65 dB(A) Community Noise Equivalent Level (CNEL) contour.
8. The City shall continue to enforce State Noise Insulation Standards for proposed projects in suspected high noise environments. The Planning Division shall notify prospective developers that, as a condition of permit issuance, they must comply with noise mitigation measures, which are designed by an acoustical engineer. No building permits will be issued without City staff approval of the acoustical report/design.
9. The City shall establish noise referral zones along existing or proposed major transportation routes. Proposed development within these zones should be evaluated for noise impacts.

10. Preparation of the Ormond Beach Specific Plan shall include acoustical analysis to determine potential impacts from Point Mugu NAS and Air National Guard facility.
11. Noise contour maps and tables shall be utilized as a guide to future land use decisions.

Implementation Measures

1. Adopt State of California noise-compatible land use criteria.
2. Develop and adopt a noise ordinance.
3. Enforce State Noise Insulation Standards.
4. Update noise standards and criteria at least every five years to reflect new developments in the area of noise control.
5. Rezone property within the Oxnard Airport area to nonresidential and non-sensitive land uses that are consistent with the “Airport Compatible” designation of the Land Use Element.
6. Establish noise referral zones along existing or proposed major transportation routes.
7. Work with the California Department of Transportation to develop a highway noise mitigation program for the Route 101 corridor (Ventura Freeway).

City of Oxnard Noise Ordinance

The City of Oxnard also has adopted a Noise Ordinance (Article XI Sections 7-180 through 7-194 of the Municipal Code) that incorporated the standards shown in Table 4.6-3.

Table 4.6-3. Exterior Noise Level Standards

Sound Zone	Type of Land Use	Allowable Exterior Sound Level	
		7:00 a.m. to 10:00 p.m.	10:00 p.m. to 7:00 a.m.
I	Residential	55 dB(A)	50 dB(A)
II	Commercial	65 dB(A)	60 dB(A)
III	Industrial	70 dB(A)	70 dB(A)
IV	As identified in Figure IX-2 of the 2020 General Plan		

The noise levels specified above for the identified uses are not to be exceeded by more than 30 minutes in an hour. The Ordinance includes various adjustments, both up and down, for these limits based on duration and quality of the noise.

For transportation noise sources, noise impacts are commonly described in terms of the potential for annoyance. The potential significance of changes in cumulative noise exposure for such sources is frequently evaluated based upon data reviewed by the Federal Interagency Committee on Noise (FICON). Table 4.6-4 summarizes the FICON recommendations.

Table 4.6-4. Significance of increases in Cumulative Noise Exposure for Transportation Noise Sources

Ambient Noise Level Without Project (L _{dn} or CNEL)	Significant Impact
<60 dB	5.0 dB or more
60-65 dB	3.0 dB or more
>65 dB	1.5 dB or more

Source: Federal Interagency Committee on Noise (FICON), as applied by Brown-Buntin Associates, Inc.

Section 7-188(D) of the Municipal Code exempts from the provisions of Article XI “sound sources associated with or created by construction, repair, remodeling or grading of any real property or during authorized seismic surveys, provided the activities occur between the hours of 7:00 a.m. and 6:00 p.m. on weekdays, including Saturday.

City of Port Hueneme

Noise Element

The following goals and supporting policies emphasize Goals and Policies for noise reduction through increased public and private awareness of noise sources, including mobile and stationary sources. By incorporating noise concerns into land use planning, mitigating measures and noise reduction will be implemented and attained.

Goal 1: Protect the Public’s Health and Welfare From Adverse Noise Levels.

Policy 1-1: To the extent feasible, record and improve noise conditions in the local environment through the active, ongoing efforts of the City in coordination with other government agencies.

Policy 1-2: Increase public input on environmental noise issues, and establish a program for the monitoring and abatement of local noise sources.

Goal 2: Identify Mobile Noise Sources Affecting the Community, and Establish Effective Noise Abatement Measures.

Policy 2-1: Prohibit through truck traffic in noise-sensitive areas, such as the four school sites located in Port Hueneme.

Policy 2-2: Minimize through vehicular traffic in the City’s residential areas.

Policy 2-4: Enforce the State Motor Vehicle noise standards for cars, trucks, and motorcycles.

Goal 3: Improve the Noise Environment of the Community Through Sensitive Planning and Development Practices.

Policy 3-1: Incorporate sound attenuation measures in residential developments where outdoor ambient noise levels exceed 65 CNEL.

Policy 3-2: Incorporate ambient noise level considerations into land use decisions involving schools, hospitals, and similar noise-sensitive uses.

Policy 3-3: Ensure all new developments provide adequate sound insulation or other protection from existing and projected noise sources.

Policy 3-4: Utilize the development approval process to assure that buildings are sited and traffic circulation systems designed to minimize the impact of noise-generating activities on noise-sensitive land uses.

Policy 3.8: Ensure that equipment, machinery, fan, and air conditioning noise does not exceed specified levels, established in the City's Noise Ordinance.

Article III Public Health and Safety

Chapter 5 Noise Control

Division 2. Designated Noise Zones

3429 Assignment of Noise Zones

Receiving properties are assigned to Designated Noise Zones as follows:

- (a) Designated Noise Zone I: Noise Sensitive Properties.
- (b) Designated Noise Zone II: Residential Properties.
- (c) Designated Noise Zone III: Commercial Properties.
- (d) Designated Noise Zone IV: Industrial Properties.

3430 Noise Zones--Exterior Noise Levels

The following Exterior Noise Levels, unless otherwise specifically indicated, shall apply to all receiving properties within a Designated Noise Zone for the purpose of establishing Noise Level Limits in Section 3431 below:

Designated Zone Time Intervals Exterior Noise Levels

- | | | |
|-------------------------------------|-------------------|-------------------|
| • Zone I Noise Sensitive Properties | 7 a.m.-10 p.m. 55 | 10 p.m.-7 a.m. 50 |
| • Zone II Residential Properties | 7 a.m.-10 p.m. 55 | 10 p.m.-7 a.m. 50 |
| • Zone III Commercial Properties | Anytime 65 | |
| • Zone IV Industrial Properties | Anytime 75 | |

3431 Noise Level Limits

Unless otherwise provided in this Article, no person shall operate or cause to be operated any source of sound at any location within the City, or allow the creation of any noise on property owned, leased, occupied or otherwise controlled by such person which causes the noise level when measured on any receiving property to exceed the following Noise Level Limits or more restrictive standards established elsewhere in this Code:

- (a) The Exterior Noise Levels for that land use, as specified in Section 3430 above, for a total period of more than thirty minutes in any consecutive sixty minutes; or
- (b) The Exterior Noise Levels plus 5 dB for a total period of more than fifteen minutes in any consecutive sixty minutes; or
- (c) The Exterior Noise Levels plus 10 dB for a total period of more than five minutes in any consecutive sixty minutes; or

- (d) The Exterior Noise Levels plus 15 Db for a total period of more than one minute in any consecutive sixty minutes; or
- (e) The Exterior Noise Levels plus 20 dB for any period of time.

3432 Ambient Noise Level in Excess of Noise Level Limit

If the ambient noise level exceeds that permissible for any of the Noise Level Limits, the Noise Level Limit shall be increased in 5 dB increments as appropriate to encompass or reflect said ambient noise level.

3439 Construction of Buildings and Structures

Between the hours of 7 p.m. of one day and 7 a.m. of the next, Monday through Saturday, and no earlier than 9 a.m. or later than 6 p.m. on Sunday and federal holidays, no person adjacent to or within any residential zone in the city shall operate power construction equipment or tools or perform any outside construction or repair work on buildings or structures, or operate any pile driver, steam shovel, pneumatic hammer, steam or electric hoist, or other construction device so as to create any noise which exceeds the noise level limits of this Article. The performance of emergency work is exempt from the provisions of this Section.

4.6.3 Significance Thresholds

Ventura County Initial Study Guidelines (2011)

Ventura County *Initial Study Assessment Guidelines* were updated in April 2011. Any project that produces noise in excess of the standards for noise in the Ventura County General Plan Goals, Policies, and Programs (Section 2.16) or the applicable Area Plan has the potential to cause a significant noise impact. Noise-generating uses that either individually or when combined with other recently approved, pending, and probable future projects, exceeds the noise thresholds of General Plan Noise Policy 2.16.2-1(4) are considered to have a potentially significant impact.

The General Plan (Section 2.16.2-1 of the Goals, Policies and Programs) establishes the following threshold criteria; above which significant noise impacts would be anticipated:

- (1) Noise sensitive uses proposed to be located near highways, truck routes, heavy industrial activities and other relatively continuous noise sources shall incorporate noise control measures so that:
 - a. Indoor noise levels in habitable rooms do not exceed CNEL 45.
 - b. Outdoor noise levels do not exceed CNEL 60 or $L_{eq}1H$ of 65 dB(A) during any hour.
- (2) Noise sensitive uses proposed to be located near railroads shall incorporate noise control measures so that:
 - a. Guidelines a. and b. above are adhered to.
 - b. Outdoor noise levels do not exceed L10 of 60 dB(A).

- (3) Noise sensitive uses proposed to be located near airports:
 - a. Shall be prohibited if they are in a CNEL 65 or greater, noise contour.
 - b. Shall be permitted in the CNEL 60 to CNEL 65 noise contour area only if means will be taken to ensure interior noise levels of CNEL 45 or less.
- (4) Noise generators proposed to be located near any noise sensitive use shall incorporate noise control measures so that outdoor noise levels at the noise receptor do not exceed:
 - a. $L_{eq}1H$ of 55 dB(A) or ambient noise level plus 3 dB(A), whichever is greater, during any hour from 6:00 a.m. to 7:00 p.m.
 - b. $L_{eq}1H$ of 50 dB(A) or ambient noise level plus 3 dB(A), whichever is greater, during any hour from 7:00 p.m. to 10:00 p.m.
 - c. $L_{eq}1H$ of 45 dB(A) or ambient noise level plus 3 dB(A), whichever is greater, during any hour from 10:00 p.m. to 6:00 a.m.

This standard is not applicable to increased traffic noise along any of the roads identified within the 2010 Regional Roadway Network (Figure 4.2.3) of the Public Facilities Appendix of the Ventura County General Plan. In addition, State and federal highways, all railroad line operations, aircraft in flight, and public utility facilities are noise generators having Federal and State regulations that preempt local regulations.

- (5) Construction noise shall be evaluated and, if necessary, mitigated in accordance with the County Construction Noise Threshold Criteria and Control Plan:
 - a. Daytime Construction – Daytime (7:00 a.m. to 7:00 p.m. Monday through Friday, and from 9:00 a.m. to 7:00 p.m. Saturday, Sunday, and local holidays) generally means any time period not specifically defined as a more noise-sensitive time period. The daytime construction noise threshold criteria are given in Table 4.6-5 below. Depending on project duration, the daytime noise threshold criteria shall be the greater of the fixed $L_{eq}(h)$ limit (which includes non-construction evening and nighttime noise) or the measured ambient $L_{eq}(h)$ plus 3 dB. These criteria only apply to the noise-sensitive receptors that are sensitive to noise impacts during the daytime, as shown in Table 4.6-6 below.

Table 4.6-5. Daytime Construction Activity Noise Threshold Criteria (NTC)

Construction Duration Affecting Noise-Sensitive Receptors	Noise Threshold Criteria shall be the greater of these noise levels at the nearest receptor area or 10 feet from the nearest noise-sensitive building	
	Fixed $L_{eq}(h)$, dB(A)	Hourly Equivalent Noise Level (L_{eq}), dB(A) ^{1,2}
0 to 3 days	75	Ambient $L_{eq}(h)$ + 3 dB
4 to 7 days	70	Ambient $L_{eq}(h)$ + 3 dB
1 to 2 weeks	65	Ambient $L_{eq}(h)$ + 3 dB
2 to 8 weeks	60	Ambient $L_{eq}(h)$ + 3 dB
Longer than 8 weeks	55	Ambient $L_{eq}(h)$ + 3 dB

1. The instantaneous L_{max} shall not exceed the NTC by 20 dB(A) more than 8 times per daytime hour.
2. Local ambient L_{eq} measurements shall be made on any mid-week day prior to project work.

Table 4.6-6. Noise-Sensitive Receptors

Receptor Description	Typical Sensitive Time Period
Hospitals, Nursing Homes (quasi-residential)	24 hours
Single-Family and Multi-Family Dwellings (residential)	Evening/Night
Hotels/Motels (quasi-residential)	Evening/Night
Schools, Churches, Libraries (when in use)	Daytime/Evening

- b. Evening Construction – Evening hours (7:00 p.m. to 10:00 p.m.) are more noise-sensitive time periods. Therefore, evening construction noise threshold criteria differ from the daytime criteria. Overall project construction noise, for the noise-sensitive hours specified, shall not exceed the noise threshold criteria listed in Table 4.6-7, at the nearest noise-sensitive receptor area or 10 feet from the façade of the nearest noise-sensitive building. These criteria apply to all noise-sensitive receptors shown in Table 4.6-6 above.

Table 4.6-7. Evening Construction Activity Noise Threshold Criteria

Receptor Location	Evening Noise Threshold Criteria shall be the greater of these noise levels at the nearest receptor area or 10 feet from the nearest noise-sensitive building	
	Fixed $L_{eq}(h)$, dB(A)	Hourly Equivalent Noise Level (L_{eq}), dB(A) ^{1,2}
Residential	50	Ambient $L_{eq}(h) + 3$ dB

1. The instantaneous L_{max} shall not exceed the NTC by 20 dB(A) more than 6 times per evening hour.
2. Hourly evening local ambient noise measurements shall be made on a typical mid-week evening prior to project work.

- c. Nighttime Construction – Nighttime hours (10:00 p.m. to 7:00 a.m. Monday through Friday, and from 10:00 p.m. to 9:00 a.m., Saturday, Sunday, and local holidays) are the most noise-sensitive time periods. Therefore, nighttime and holiday construction noise threshold criteria differ from the daytime and evening criteria. Overall project construction noise, for the noise-sensitive hours specified, shall not exceed the noise threshold criteria listed in Table 4.6-8 below, at the nearest noise-sensitive receptor area or 10 feet from the façade of the nearest noise-sensitive building. These criteria only apply to the noise-sensitive receptors that are sensitive to noise impacts during the nighttime shown in Table 4.6-6 above.

Table 4.6-8. Nighttime Construction Activity Noise Threshold Criteria

Receptor Location	Nighttime Noise Threshold Criteria shall be the greater of these noise levels at the nearest receptor area or 10 feet from the nearest noise-sensitive building	
	Fixed $L_{eq}(h)$, dB(A)	Hourly Equivalent Noise Level (L_{eq}), dB(A) ^{1,2}
Residential, Live-in Institutional	45	Ambient $L_{eq}(h) + 3$ dB

1. The instantaneous L_{max} shall not exceed the NTC by 20 dB(A) more than 4 times per nighttime hour.
2. Hourly nighttime local ambient noise measurements shall be made on a typical mid-week night prior to project work.

- d. **Maximum Construction Noise** – In addition, the construction-related, slow response, instantaneous maximum noise (L_{max}) shall not exceed the noise threshold criteria by 20 dB(A) more than eight times per daytime hour, more than six times per evening hour and more than four times per nighttime hour.

Discretionary development which would be impacted by noise or generate project related noise which cannot be reduced to meet the above standards, shall be prohibited. This policy does not apply to noise generated during the construction phase of a project if a statement of overriding considerations is adopted by the decision-making body in conjunction with the certification of a final Environmental Impact Report (EIR).

The impact of the proposed project related to noise may be considered significant if it would exceed the following Standards of Significance, in accordance with Appendix G of the *CEQA Guidelines* and the CEQA Handbook:

- Expose people to or generate noise levels in excess of standards established in any applicable plan or noise ordinance, or applicable standards of other agencies;
- Expose people to or generate excessive ground-borne vibration or ground-borne noise levels;
- Result in a substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project;
- Result in a substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project;
- Result in exposure of people residing or working in the project area to excessive noise levels if the project is located within an area covered by an airport land use plan, or where such a plan has not been adopted, within two miles of a public airport or public use airport; or
- Result in exposure of people residing or working in the project area to excessive noise levels if the project is located in the vicinity of a private airstrip.

Vibration Thresholds – Construction

The Ventura County Initial Study Assessment Guidelines (2011) state that any project that either individually or when combined with other recently approved, pending, and probable future projects, including construction activities involving blasting, pile-driving, vibratory compaction, demolition, and drilling or excavation which exceed the threshold criteria provided in Section 12.2 of the Federal Transit Administration (FTA) *Transit Noise and Vibration Impact Assessment* (2006), is considered to have a potentially significant impact.

Per the FTA, construction vibration should be assessed quantitatively in cases where there is significant potential for impact from construction activities. Such activities include blasting, pile-driving, vibratory compaction, demolition, and drilling or excavation in close proximity to sensitive structures and the recommended procedure for estimating vibration impact from construction activities is as follows:

Damage Assessment

- Select the equipment and associated vibration source levels at a reference distance of 25 feet from Table 4.6-9.
- Make the propagation adjustment according to the following formula (this formula is based on point sources with normal propagation conditions):

$$PPV_{equip} = PPV_{ref} \times (25/D)^{1.5}$$

where: PPV (equip) is the peak particle velocity in in/sec of the equipment adjusted for distance

PPV (ref) is the reference vibration level in in/sec at 25 feet from Table 4.6-9

D is the distance from the equipment to the receiver.

- Apply the vibration damage criteria as shown in Table 4.6-10.

Table 4.6-9. Vibration Source Levels for Construction Equipment

Equipment		PPV at 25 ft (in/sec)	Approximate $L_v^{(1)}$ at 25 ft.
Pile Driver (impact)	Upper range	1.518	112
	Typical	0.644	104
Pile Driver (sonic)	Upper range	0.734	105
	Typical	0.170	93
Clam Shovel Drop (slurry wall)		0.202	94
Hydromill (slurry wall)	In Soil	0.008	66
	In Rock	0.017	75
Vibratory Roller		0.210	94
Hoe Ram		0.089	87
Large Bulldozer		0.089	87
Caisson Drilling		0.089	87
Loaded Trucks		0.076	86
Jackhammer		0.035	79
Small Bulldozer		0.003	58

(1) RMS velocity in decibels (VdB) re 1 micro-inch/second

Table 4.6-10. Construction Vibration Damage Criteria

Building Category	PPV (in/sec) ⁽¹⁾	Approximate $L_v^{(2)}$
I. Reinforced-concrete, steel or timber (no plaster)	0.5	102
II. Engineered concrete and masonry (no plaster)	0.3	98
III. Non-engineered timber and masonry buildings	0.2	94
IV. Buildings extremely susceptible to vibration damage	0.12	90

(1) PPV = peak particle velocity

(2) RMS velocity in decibels (VdB) re 1 micro-inch/second

Annoyance Assessment

- If desired for consideration of annoyance or interference with vibration-sensitive activities, estimate the vibration level L_v at any distance D from the following equation and apply the vibration impact criteria for General Assessment for vibration-sensitive sites (Table 4.6-11):

$$L_v(D) = L_v(25 \text{ ft}) - 30 \log(D/25)$$

Table 4.6-11. Ground-Borne Vibration (GBV) Impact Criteria for General Assessment

Land Use Category	GBV Impact Levels (VdB re 1 micro-inch/sec)		
	Frequent Events ⁽¹⁾	Occasional Events ⁽²⁾	Infrequent Events ⁽³⁾
Category 1: Buildings where vibration would interfere with interior operations.	65 VdB ⁴	65 VdB ⁴	65 VdB ⁴
Category 2: Residences and buildings where people normally sleep.	72 VdB	75 VdB	80 VdB
Category 3: Institutional land uses with primarily daytime use.	75 VdB	78 VdB	83 VdB

(1) "Frequent Events" is defined as more than 70 vibration events of the same source per day

(2) "Occasional Events" is defined as between 30 and 70 vibration events of the same source per day.

(3) "Infrequent Events" is defined as fewer than 30 vibration events of the same kind per day.

(4) This criterion limit is based on levels acceptable for most moderately sensitive equipment such as optical microscopes.

The criteria for environmental impact from ground-borne vibration and noise are based on the maximum root-mean-square (rms) vibration levels for repeated events of the same source. The criteria presented in Table 4.6-11 account for variation in project types as well as the frequency of events.

4.6.4 Project-Level Impact Analysis**Would the project conflict with any of the thresholds for noise identified in the General Plan as identified in Section 4.6.3 of the EIR related to the development of noise sensitive land uses?**

The project does not propose any noise sensitive land uses. The project is the construction and operation of a drain as well as implementation of a Beach Elevation Management Plan (BEMP). These are not considered noise sensitive uses as defined in Table 4.6-6. Therefore, no impact is identified for this issue area.

Would the project generate noise located near any noise sensitive uses in a manner that would exceed the thresholds identified in Section 4.6.3 of the EIR?***Construction***

Noise impacts from the construction phases of the proposed project would be relatively short-term and intermittent and would be a function of the noise generated by construction equipment, the location and sensitivity of nearby land uses, and the timing and duration of the noise generating activities. The proposed project construction would not involve evening or nighttime construction activity. Daytime construction would not occur within 500 feet of a hospital, ~~nursing home~~, school, ~~church~~, or library. There is a senior home, Shoreline Care Center, located adjacent to the proposed project site at 5225 South J Street. Our Saviour's Evangelical Lutheran Church is located approximately 275 feet west of the

project site, at 905 Redwood Street. The above Ventura County outdoor noise thresholds would apply during the construction of J Street Drain. As shown in Table 4.6-5, the applicable noise threshold for construction longer than eight weeks is the greater of 55 dB(A) $L_{eq}(h)$ or Ambient $L_{eq}(h) + 3$ dB. As discussed in Section 4.6.1.3 above, the existing ambient noise level along J Street is 65 dB(A) $L_{eq}(h)$. Thus, the daytime noise threshold along J Street is 68 dB(A) $L_{eq}(h)$.

The project boundary will be limited to the channel/street right-of-way except at the outlet to the lagoon. At the outlet, the work area will extend 300 feet past the pump station and 50 feet southeast of the easterly right-of-way. Off-road equipment that is expected to be used during construction includes: wheel loaders, track dozers, scrapers, excavator with hydraulic hammer, pile driver, motor grader, concrete pump, concrete tucks, dump trucks, and other miscellaneous small equipment. However, detailed construction equipment and associated activities have not been identified. The Society of Automotive Engineers has developed standardized procedures for measuring reference noise levels for the certification of mobile and stationary construction equipment. Typical 50-foot reference noise levels from representative pieces of construction equipment are listed in Table 4.6-12.

The major noise producing construction activities within the project area would likely be pile driving (Phase 1 only), pavement breaking, demolition, excavation, earth moving, and haul trucking. The equivalent sound level (L_{eq}) as it relates to construction activity depends on several factors including machine power, the manner of operation and the amount of time the equipment is operated over a given time period. The information provided in Table 4.6-12 illustrates typical levels generated by various construction equipment and provides guidance on determining the noise from construction activities.

The existing sensitive land uses along J Street Drain range from 5 to 500 feet away as mentioned above. As evident from Table 4.6-12, noise levels generated from the proposed off-road equipment that is expected to be used during construction will likely exceed the 55/68 dB(A) L_{eq} daytime County standards for hospitals, nursing homes, schools, churches, and libraries. As mentioned previously, there are a nursing home and a church are located within 500 feet of the proposed project. Therefore, a potentially significant impact is identified and mitigation is required. ~~but such facilities are not present within 500 feet of the proposed project.~~ Standards for residential areas apply to evening and night, but because construction is not proposed for these time periods, the standards would not be exceeded. ~~Construction of the proposed project would result in a less than significant noise impact; however~~ Construction noise mitigation measures will be implemented during each phase of the proposed project to comply with the County threshold and City ordinances.

Operations

The operation of the proposed project would include maintenance activities similar to those currently in place, which would generate intermittent daytime trips for maintenance purposes only; therefore, no new operational noise impact would occur. The District's Final Program EIR for Environmental Protection Measures for the Ongoing Routine Operations and Maintenance Program Project contains BMPs for the operational maintenance activities for J Street Drain. These BMPs will be incorporated as part of the proposed project for operational activities. Impacts would be less than significant.

Beach Elevation Management Plan

The BEMP would be implemented periodically and would result in occasional daytime trips to the beach during the rainy season when a large storm event is forecast. These trips are expected to be infrequent and would not be characterized as excessive or leading to a significant noise impact. Therefore, a less than significant impact is identified for this issue area.

Table 4.6-12. Typical Construction Equipment Noise

Equipment Type Noise Source	Dominant Noise Components ¹	50-Foot Noise Level (L _{eq}) dB(A) ^{2, 3}	Noise Level Range (L _p) dB(A) ^{2, 3}	50-Foot Maximum Noise Level (L _{max}) dB(A) ^{2, 3}
Air Compressor (portable) ⁴	E, C, H, I	81	76-89	89
Air Compressor (stationary)	E, C, H, I	82	76-89	89
Auger, Drilled Shaft Rig	E, C, F, I, W	82	76-89	89
Backhoe	E, C, F, I, H, W	85	81-90	90
Bar Bender	E, P, W	82	78-88	85
Chain Saw	E, W, C	85	72-88	88
Compactor	E, C, F, I, W	82	81-85	85
Concrete Batch Plant	W, E, C	92	80-96	96
Concrete Mixer (small trailer)	W, E, C	67	65-68	68
Concrete Mixer Truck	E, C, F, W, T	85	69-89	89
Concrete Pump Trailer	E, C, H	82	74-84	84
Concrete Vibrator	W, E, C	76	68-81	81
Crane, Derrick	E, C, F, I, T	88	79-90	90
Crane, Mobile	E, C, F, I, T	83	80-85	85
Dozer (Bulldozer)	E, C, F, I, H	80	77-90	90
Excavator	E, C, F, I, H, W	87	83-92	92
Forklift	E, C, I, W	84	81-86	86
Front End Loader	E, C, F, I, H	79	77-90	90
Generator	E, C	78	71-87	87
Gradall	E, C, F, I, W	82	78-85	85
Grader	E, C, F, I, W	85	79-89	89
Grinder	W	80	75-82	82
Hydraulic Hammer	W, E, C, H	102	99-105	105
Impact Wrench	W, P	85	75-85	85
Jack Hammer	P, W, E, C	82	75-88	88
Paver	E, D, F, I	89	82-92	92
Pile Driver (Impact/ Sonic/ Hydraulic)	W, P, E	101 / 96 / 65	94-107 / 90-99 / 65	107 / 99 / 65
Pavement Breaker	W, E, P	82	75-85	85
Pneumatic Tool	P, W, E, C	85	78-88	88
Pump	E, C	76	68-80	80
Rock Drill	W, E, P	98	83-99	99
Roller	E, C, F, I, W	74	70-83	83
Sand Blaster	W, E, C, H, I	85	80-87	87
Saw, Electric	W	78	59-80	80
Scraper	E, C, F, I, W	88	82-91	91
Shovel	E, C, F, I, W	82	77-90	90
Tamper	W, E, C	86	85-88	88
Tractor	E, C, F, I, W	82	77-90	90
Trencher		83	81-85	85

4.6 Noise and Vibration

Equipment Type Noise Source	Dominant Noise Components ¹	50-Foot Noise Level (L _{eq}) dB(A) ^{2, 3}	Noise Level Range (L _p) dB(A) ^{2, 3}	50-Foot Maximum Noise Level (L _{max}) dB(A) ^{2, 3}
Trucks (Under Load)	E, C, F, I, T	88	81-95	95
Water Truck	W, E, C, F, I, T	90	89-94	94
Other Equipment with Diesel	E, C, F, I	82	75-88	88

Notes: 1. Ranked noisy components. C=Casing, E=Exhaust, F=Fan, H=Hydraulics, I=Intake air, P=Pneumatic exhaust, T=Transmission, W=Work tool.
2. Table based on EPA studies and measured data from various construction equipment and manufacturer's data.
3. Equipment noise levels are at 50 feet from individual construction equipment and with no other noise contributors.
4. Portable air compressor rated at 75 cfm or greater and operating at greater than 50 psi.

Expose people to or generate excessive ground-borne vibration or ground-borne noise levels?

Construction

The proposed project has the potential to expose people to or generate excessive groundborne vibration or groundborne noise levels because pile driving is required for construction. Off-road equipment expected to be used during construction includes: wheel loaders, track dozers, scrapers, excavator with hydraulic hammer, pile driver, motor grader, concrete pump, concrete trucks, dump trucks, and other miscellaneous small equipment. The Ventura County Initial Study Assessment Guidelines (2011) state that any project that either individually or when combined with other recently approved, pending, and probable future projects, including construction activities involving blasting, pile-driving, vibratory compaction, demolition, and drilling or excavation which exceed the threshold criteria provided in Section 12.2 of the *FTA Transit Noise and Vibration Impact Assessment* (2006), is considered to have a potentially significant impact. Tables 4.6-9 and 4.6-10 show the vibration source levels for construction equipment and the construction vibration damage criteria respectively. Table 4.6-11 illustrates the groundborne vibration impact criteria for general assessment. The nearby residences would be considered a Category 2.

As discussed in Section 4.5 Transportation and Circulation, during construction, no more than three haul trucks would be on site for loading at a given time, and approximately 45 construction-related trips per day are expected to occur. Haul truck trips during construction would also cause noise and vibration impacts. The City of Oxnard and City of Port Hueneme have designated specific roadways as truck routes (Hueneme Road and Arnold Road), which minimize noise and vibration impacts. Truck-related construction traffic would use these roads during haul trips, which would minimize noise and vibration related to truck traffic. Vertical shoring is ~~no longer proposed on the west side of the channel.~~ ~~However,~~ Ground-borne vibration and ground-borne noise impacts are considered potentially significant. Mitigation is required.

Operations

Project operation would include maintenance activities similar to those currently in place, which would generate intermittent trips for maintenance purposes only; therefore, no new operational vibration impacts would occur. The District's Final Program EIR for Environmental Protection Measures for the Ongoing Routine Operations and Maintenance Program Project contains BMPs for the operational maintenance activities for J Street Drain. These BMPs will be incorporated as part of the proposed project for operational activities to ensure impacts remain less than significant.

Beach Elevation Management Plan (BEMP)

The BEMP would be implemented periodically and would result in occasional trips to the beach during the rainy season when a large storm event is forecast. These trips are expected to be infrequent and would not be characterized as excessive or leading to a significant vibration impact. Therefore, a less than significant impact is identified for this issue area.

Expose people to or generate noise levels in excess of standards established in any applicable plan or noise ordinance, or applicable standards of other agencies?

Construction

City of Oxnard

Section 7-188(D) of the City of Oxnard Municipal Code exempts from the provisions of Article XI – Sound Regulation “sound sources associated with or created by construction, repair, remodeling or grading of any real property...provided the activities occur between the hours of 7:00 a.m. and 6:00 p.m. on weekdays, including Saturday.” Project construction would occur between the hours of 7:00 a.m. and 6:00 p.m.; therefore, the project would not exceed the standards of the City of Oxnard ordinance. Additionally, the mitigation measures presented in Section 4.6.6 (Mitigation Measures NOISE-1 and NOISE-2) would reduce construction noise levels to a less than significant level under the County’s threshold.

City of Port Hueneme

The City of Port Hueneme Municipal Code does not include an exemption for construction activities, rather, the City’s Noise Ordinance regulates the time in which construction activities are prohibited altogether. According to the City’s ordinance, no person adjacent to or within any residential zone in the city shall operate power construction equipment or tools or perform any outside construction or repair work on buildings or structures, or operate any pile driver, steam shovel, pneumatic hammer, steam or electric hoist, or other construction device so as to create any noise which exceeds the noise level limits of the Noise Ordinance between the hours of 7 p.m. and 7 a.m. Monday through Saturday, and no earlier than 9 a.m. or later than 6 p.m. on Sunday and federal holidays. Project construction would occur between the hours of 7:00 a.m. and 6:00 p.m. Monday through Saturday; therefore, the project would comply with the standards of the City of Port Hueneme’s ordinance with respect to construction time prohibitions.

Although the City’s noise ordinance allows for construction activities to occur between the hours of 7 a.m. and 7 p.m., operational exterior noise levels between the hours of 7:00 a.m. and 6:00 p.m. are defined as 55 dB for noise sensitive and residential, 65 dB for commercial and 75 dB for industrial properties in the City of Port Hueneme (Section 3430 of the Port Hueneme Municipal Code). Section 3431 states that “no person shall operate or cause to be operated any source of sound at any location within the City... when measured on any receiving property to exceed the following Noise Level Limits...:

- (a) The Exterior Noise Levels for that land use, as specified in Section 3430 above, for a total period of more than thirty minutes in any consecutive sixty minutes; or
- (b) The Exterior Noise Levels plus 5 dB for a total period of more than fifteen minutes in any consecutive sixty minutes; or

- (c) The Exterior Noise Levels plus 10 dB for a total period of more than five minutes in any consecutive sixty minutes; or
- (d) The Exterior Noise Levels plus 15 dB for a total period of more than one minute in any consecutive sixty minutes; or
- (e) The Exterior Noise Levels plus 20 dB for any period of time.”

The land uses within the City of Port Hueneme adjacent to the proposed project site include residential, commercial, and industrial uses. As identified in Section 3431 of the City’s Noise Ordinance, there are different thresholds for the different land uses. Construction of the proposed project may exceed the threshold for residences and commercial property within the City of Port Hueneme’s city limits.

Construction activities will occur in four phases, with construction within or immediately adjacent to the City of Port Hueneme city limits occurring during phase 1 of the project. Phases 2 through 4 would be constructed within the City of Oxnard, but approximately 70 to 130 feet from residences located within the City of Port Hueneme. Although the City of Port Hueneme’s Noise Ordinance does not exempt construction activity, its recognition that daytime construction noise should be regulated differently than non-daytime construction noise is consistent with County Construction Noise Threshold Criteria and the City of Oxnard’s Noise Ordinance. Construction noise levels will be substantially similar for those portions of the project located in Port Hueneme and Oxnard. Land uses adjacent to the project are also substantially similar for all phases of the project. There is no basis for making a distinction between those phases of the project to be constructed in the City of Oxnard, and those portions of the project to be constructed in the City of Port Hueneme. The County Construction Noise Threshold Criteria and Control Plan takes into account the many factors that contribute to the potential impacts due to construction noise, including the location of sensitive receptors, the type or phase of construction, the combination of equipment used, the site layout, and the construction methods employed. Given the disparity between City ordinances, the District applies County thresholds for determining noise significance in a uniform manner to all project phases.

The mixed use nature of the area (i.e., residential, commercial and industrial) results in varying noise thresholds within a small area. The Ventura County Watershed Projection District’s thresholds of significance for noise provide additional guidance for evaluating noise impacts within a mixed land use area. As shown on Table 4.6-12, noise levels generated from the proposed off-road equipment that is expected to be used during construction will likely exceed 55dB(A) L_{eq} (south of Hueneme Road) and 68 dB(A) L_{eq} (north of Hueneme Road) daytime County standards for hospitals, nursing homes, schools, churches, and libraries. As discussed above, a nursing home and a church are located north of Hueneme Road. Standards for residential areas apply to evening and night, but because construction is not proposed for these time periods, the standards would not be exceeded. Construction of the proposed project would result in a significant noise impact for the nursing home and church. Construction noise mitigation measures will be implemented during each phase of the proposed project to reduce noise and address County threshold and City ordinances.

Operations

Project operation would include maintenance activities similar to those currently in place, which would generate intermittent trips for maintenance purposes only; therefore, no new operational noise impacts would occur. The District’s Final Program EIR for Environmental Protection Measures for the Ongoing Routine Operations and Maintenance Program Project contains BMPs for the operational maintenance activities for J Street Drain. These BMPs will be incorporated as part of the proposed project for operational activities to ensure impacts remain less than significant.

Beach Elevation Management Plan

The BEMP would be implemented periodically and would result in occasional trips to the beach during the rainy season when a large storm event is forecast. Staging of one dozer would occur briefly in the easternmost Port Hueneme Beach Park parking area, located near residential property in Port Hueneme. The grooming itself would occur away from all residential, commercial, industrial, or other sensitive properties, and therefore would not be subject to City ordinances. Work would be completed within a few hours on each grooming occasion. Therefore, a less than significant impact is identified for this issue area.

Result in a substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project?

Construction

During construction of the J Street Drain, off-road equipment expected to be used includes: wheel loaders, track dozers, scrapers, excavator with hydraulic hammer, pile driver, motor grader, concrete pump, concrete tucks, dump trucks, and other miscellaneous small equipment. This equipment can generate noise; however, since this is a temporary condition associated with project construction, the impact would be less than significant.

Operations

Project operation would result in maintenance activities similar to those currently in place which would generate intermittent trips for maintenance purposes only; therefore, no new noise impacts would occur during operation. The District's Final Program EIR for Environmental Protection Measures for the Ongoing Routine Operations and Maintenance Program Project contains BMPs for the operational maintenance activities for J Street Drain. These BMPs are incorporated as part of the proposed project for operational activities and would ensure that impacts are less than significant. The proposed project would not result in a permanent increase in ambient noise levels at J Street Drain Project area. A less than significant impact is identified.

Beach Elevation Management Plan

The BEMP would be implemented periodically and would result in occasional trips to the beach during the rainy season when a large storm event is forecast. These trips are expected to be infrequent and would not be characterized as excessive or leading to a significant noise impact. Therefore, a less than significant impact is identified for this issue area.

Result in a substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project?

Construction

The J Street Drain Project is proposed to be constructed in four phases with the first phase scheduled to begin in spring 2013 and lasting for 10 months. Temporary noise generated by construction equipment, including trucks, graders, bulldozers, concrete mixers and portable generators have the potential to reach high levels as evident from Table 4.6-12. As stated previously, the District applies County thresholds for determining noise significance in a uniform manner to all project phases. However, e-Construction would be scheduled during daytime hours only, so Ventura County thresholds for residential areas would not be exceeded. ~~The project would not be constructed within 500 feet of receptors defined as noise-~~

~~sensitive during daytime hours.~~ The County's standard for daytime sensitive noise receptors would likely be exceeded adjacent to Shoreline Care Center, and potentially at Our Saviour's Evangelical Lutheran Church. Therefore, temporary increases in ambient noise would be ~~less than~~ significant.

Operations

The operation of the proposed project would include maintenance activities similar to those currently in place, which would generate intermittent daytime trips for maintenance purposes only; therefore, no new noise impacts would occur during operation. The District's Final Program EIR for Environmental Protection Measures for the Ongoing Routine Operations and Maintenance Program Project contains BMPs for the operational maintenance activities for J Street Drain. These BMPs will be incorporated as part of the proposed project for operational activities. Impacts would be less than significant.

Beach Elevation Management Plan

The BEMP is anticipated to be used on a periodic basis and would result in infrequent trips to the beach. The grooming of the sand berm involves a single dozer and would not result in substantial temporary increase in ambient noise level. Therefore, a less than significant impact is identified for this issue area.

Result in exposure of people residing or working in the project area to excessive noise levels if the project is located within an area covered by an airport land use plan, or where such a plan has not been adopted, within two miles of a public airport or public use airport?

The Oxnard Airport is located at 1841 West 5th Street in the City of Oxnard, approximately three miles from the project site. The Camarillo Airport is located at 555 Airport Way in the City of Camarillo, approximately 10 miles from the proposed project site. Therefore, a less than significant impact is identified for this issue.

Result in exposure of people residing or working in the project area to excessive noise levels if the project is located in the vicinity of a private airstrip?

A private airstrip is not located in the vicinity of the project site. The airport closest to J Street Drain is the Oxnard Airport, a public airport located approximately three miles north of the drain. No impacts are anticipated for the J Street Drain project with regard to noise generated by private airstrips.

4.6.5 Cumulative-Level Impact Analysis

The General Plan (Section 2.16.2-1 of the Goals, Policies and Programs) establishes the threshold criteria mentioned previously; above which significant noise impacts would be anticipated.

Construction

Construction activities would likely exceed the 55 dB(A) L_{eq} (south of Hueneme Road) and 68 dB(A) L_{eq} (north of Hueneme Road) daytime County standard for hospitals, nursing homes, schools, churches, and libraries. As mentioned previously, there are a nursing home and a church within 500 feet of the proposed project, but such facilities are not present within 500 feet of the proposed project. Standards for residential areas apply to evening and night, but because construction is not proposed for these time periods, the standards would not be exceeded. When the proposed project is considered with the other cumulative projects (Table 2.0-1), no cumulative impact is anticipated because the project would not be constructed between the hours of 7:00 p.m. and 7:00 a.m. and the cumulative projects are located greater than 500 feet from the Shoreline Care Center and Our Saviour's Evangelical Lutheran Church. Therefore,

construction of cumulative projects would not contribute to a significant cumulative noise impact. Impacts would be less than significant.

Operations

Operation of the proposed project would occur as it currently does under existing conditions. Therefore, there would be no new noise generated by the proposed project during operation. The proposed project would not contribute to a significant cumulative impact and a significant cumulative impact would not result. No impact is identified.

Beach Elevation Management Plan

Cumulative projects closest to the BEMP access route include Water Pipeline I, Water Pipeline II, and Advanced Purification Facility. Implementation of the BEMP would only generate noise for a very short duration of time between the hours of 7:00 a.m. and 7:00 p.m., and would be associated with the sound from one dozer, and would not result in project-level noise impacts. Therefore, noise generated by implementation of the BEMP would not contribute to a significant cumulative noise impact. Impacts would be less than significant.

Expose people to or generate excessive ground-borne vibration or ground-borne noise levels?

Construction

The proposed project has the potential to expose people to or generate excessive ground-borne vibration or ground-borne noise levels. Because all cumulative projects near the proposed project are either constructed, in the early planning phase or currently under construction, none would be constructed concurrently with the proposed project. Therefore, cumulative impacts would be less than significant.

Operations

Operation of the proposed project would occur as it currently does under existing conditions. Therefore, there would be no new ground-borne vibration generated by the proposed project during operation. The proposed project would not contribute to a significant cumulative impact and a significant cumulative impact would not result. No impact is identified.

Beach Elevation Management Plan

Implementation of the BEMP would not result in substantial ground-borne vibration or ground-borne noise levels. Due to the distance between the BEMP access route and cumulative projects, implementation of the BEMP would not contribute to a significant cumulative impact related to ground-borne vibration. Therefore, a less than significant cumulative impact is identified.

Expose people to or generate noise levels in excess of standards established in any applicable plan or noise ordinance, or applicable standards of other agencies?

Construction

As stated in the project-level analysis, the District applies County thresholds for determining noise significance in a uniform manner to all project phases. As shown on Table 4.6-12, noise levels generated from the proposed off-road equipment that is expected to be used during construction will likely exceed 55dB(A) L_{eq} (south of Hueneme Road) and 68 dB(A) L_{eq} (north of Hueneme Road) daytime County

standards for hospitals, nursing homes, schools, churches, and libraries. There is a senior home, Shoreline Care Center, located adjacent to the proposed project site at 5225 South J Street. There is also a church, Our Saviour's Evangelical Lutheran Church, located approximately 275 feet from the project site. Construction activities would exceed the noise standards for care facilities at these locations at the individual project level, but because cumulative projects are located more than 500 feet away from either facility, cumulative impacts are less than significant.

Standards for residential areas apply to evening and night, but because construction is not proposed for these time periods, the standards would not be exceeded. Construction of the proposed project would result in a less than significant project-level noise impact. Furthermore, because none of the cumulative projects would be constructed in the project area concurrent with construction of the proposed project, cumulative impacts are also less than significant. Construction noise mitigation measures will be implemented during each phase of the proposed project to reduce noise and address the County threshold and City ordinances.

Operations

Project operation would include maintenance activities similar to those currently in place, which would generate intermittent trips for maintenance purposes only; therefore, no new operational noise impacts would occur. The District's Final Program EIR for Environmental Protection Measures for the Ongoing Routine Operations and Maintenance Program Project contains BMPs for the operational maintenance activities for J Street Drain. These BMPs will be incorporated as part of the proposed project for operational activities to ensure cumulative impacts remain less than significant.

Beach Elevation Management Plan

The BEMP would be implemented periodically and would result in occasional trips to the beach during the rainy season when a large storm event is forecast. Staging of one dozer would occur briefly in the easternmost Port Hueneme Beach Park parking area, located near residential property in Port Hueneme. The grooming itself would occur away from all residential, commercial, industrial, or other sensitive properties, and therefore would not be subject to City ordinances. Work would be completed within a few hours on each grooming occasion. Therefore, a less than significant cumulative impact is identified for this issue area.

Result in a substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project?

Construction

Construction of the proposed project would not result in a permanent increase in ambient noise in the project vicinity. Therefore, construction of the project would not contribute to a permanent increase in ambient noise and cumulative impacts would be less than significant.

Operations

Operation of the proposed project would occur as it currently does under existing conditions. Therefore, there would be no new permanent sources of ambient noise generated by the proposed project during operation. The proposed project would not contribute to a significant cumulative impact and a significant cumulative impact would not result. A less than significant impact is identified.

Beach Elevation Management Plan

Implementation of the BEMP would not result in a permanent increase in ambient noise levels, as the beach grooming operations would be periodic and of a short duration. Therefore, the BEMP would not contribute to a permanent increase in ambient noise and a cumulative impact would not result.

Result in a substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project?

Construction

It is anticipated that there would be temporary noise impacts from equipment and haul trucks during construction of the proposed project. None of the cumulative projects would be constructed in the project area concurrent with construction of the proposed project. Therefore, due to the distance between the proposed project and cumulative projects, the proposed project would not contribute to a significant temporary increase in ambient noise. Cumulative impacts would be less than significant.

Operations

Operation of the proposed project would not result in significant project-level impacts to ambient noise levels, as current activities would continue as they occur now. Therefore, a less than significant cumulative impact would result.

Beach Elevation Management Plan

Implementation of the BEMP would result in a temporary increase in ambient noise. However, none of the cumulative projects would be constructed near the BEMP implementation area. Therefore, temporary noise generated by cumulative projects (i.e., construction-related noise) would not combine with temporary noise generated by implementation of the BEMP and a significant cumulative impact would not result.

Result in exposure of people residing or working in the project area to excessive noise levels if the project is located within an area covered by an airport land use plan, or where such a plan has not been adopted, within two miles of a public airport or public use airport?

Construction and operation of the proposed project would not generate excessive noise levels within an area covered by an airport land use plan. Due to the distance between the proposed project and cumulative projects and due to the timing of construction of cumulative projects, the proposed project would not contribute to a significant cumulative impact related to noise within an area covered by an airport land use plan. Therefore, cumulative impacts would be less than significant for this issue.

Result in exposure of people residing or working in the project area to excessive noise levels if the project is located in the vicinity of a private airstrip?

The proposed project is not located in the vicinity of a private airstrip. Therefore, construction and operation of the proposed project would not result in exposure of people residing or working in the project area to excessive noise levels in the vicinity of a private airstrip. Cumulative impacts would be less than significant for this issue.

4.6.6 Mitigation Measures

The following mitigation measures shall be implemented to comply with City ordinances:

1. Use of various combinations of equipment source noise reduction and propagation path noise reduction.
2. Feasible and reasonable equipment noise mitigation measures shall be implemented to reduce noise. Examples of equipment source noise reduction methods are listed in this section. The implementation of one or more of these measures, along with those of the other sections, may be desirable to reduce construction noise.

NOISE-1 Equipment Noise Reduction

1. Minimize the use of impact devices, such as jackhammers, pavement breakers, and hoe rams. Where possible, use concrete crushers or pavement saws rather than hoe rams for tasks such as concrete or asphalt demolition and removal.
2. Pneumatic impact tools and equipment used at the construction site shall have intake and exhaust mufflers recommended by the manufacturers thereof, to meet relevant noise limitations.
3. Provide impact noise reducing equipment; i.e., jackhammers and pavement breaker(s), with noise attenuating shields, shrouds or portable barriers or enclosures, to reduce operating noise.
4. Provide upgraded mufflers, acoustical lining or acoustical paneling for other noisy equipment, including internal combustion engines.
5. Avoid blasting and impact-type pile driving.
6. Use alternative procedures of construction and select a combination of techniques that generate the least overall noise and vibration. Such alternative procedures could include the following:
 - a. Use electric welders powered by remote generators.
 - b. Mix concrete at non-sensitive off-site locations, instead of on-site.
 - c. Erect prefabricated structures instead of constructing buildings on-site.
7. Use construction equipment manufactured or modified to reduce noise and vibration emissions, such as:
 - a. Electric instead of diesel-powered equipment.
 - b. Hydraulic tools instead of pneumatic tools.
 - c. Electric saws instead of air- or gasoline-driven saws.
8. Turn off idling equipment when not in use for periods longer than 30 minutes.

NOISE-2 A temporary noise control barrier shall be installed and maintained between the temporary work area and Buildings 6 and 7 in the Surfside III community during periods when heavy equipment is operating within 500 feet of these residences or when heavy-duty trucks are regularly using the access road adjacent to the drain. Additionally,

temporary noise control barriers shall be installed and maintained in residential and commercial areas along Phases 2-4 to the extent that they do not affect traffic sight lines (e.g., noise barriers would not be installed at intersections). The noise barrier shall be composed of noise control blankets 10 feet tall with a sound transmission class of at least STC-25. In addition to placement of noise control blankets along the construction area adjacent to the Shoreline Care Facility, located at 5225 South J Street, and if needed, Our Saviour's Evangelical Lutheran Church at 905 Redwood Street, to further reduce noise levels below 68 dB(A) L_{eq} , additional noise control barriers shall be installed. To ensure sufficient noise barriers are deployed, construction noise levels shall be monitored ten feet from the exterior of the nursing home and church at the start of work activities within 500 feet of these two locations. Barriers would be installed to reduce noise levels generated by the loudest equipment when construction activities are closest to the nursing home and church. Monitoring would occur at the nursing home during construction Phases 2 and 3 and at the church during construction Phase 4. Construction noise levels would be monitored weekly thereafter to ensure proper function of the barriers throughout work and that the desired noise attenuation at these locations is achieved.

This noise control barrier will also provide visual screening along the eastern boundary of the Surfside III property to shield residents from views of the J Street Drain. If the Surfside III Condominium Owners' Association does not grant a temporary work area to enable installation of temporary noise barriers at Buildings 6 and 7, the District will provide funds for the Association to arrange the barrier installation on their property. Sound barriers would not be installed where encircling block walls already exist (e.g., newer condo/townhome complex west of J Street Drain in Phase 1).

The following mitigation measure shall be implemented to reduce vibration impacts:

NOISE-3 Prior to construction, the District shall request property owner permission to video record the condition of structures adjacent to the J Street Drain in the presence of the property owner. The recording shall be performed and stored by an independent third-party, with a copy given to the property owner. If vibration-induced damages occur as a result of construction, property owners would be invited to submit claims documenting such damages within one year following construction completion. The third-party would again enter the property to video record its post-construction condition, again providing a copy to the property owner. Both recordings would be compared, and the District would provide compensation to repair new damages observed in the post-construction recordings. Once both parties have agreed to the compensation, both pre- and post-construction video recordings stored by the third-party would be given to the property owner.

4.6.6.1 Ventura County Watershed Protection District Best Management Practices

The Ventura County Board of Supervisors adopted the Ventura County Watershed Protection District (District) Final Program EIR for Environmental Protection Measures for the Ongoing Routine Operations and Maintenance Program Project No. 80030 in May 2008. The final document includes Best Management Practices (BMPs) that will be added to the District's Maintenance Activity Guidelines. The Operation and Maintenance Division staff will be responsible for ensuring the proper implementation of the BMPs on a routine, year-round basis. The Division staff will also be responsible for ensuring compliance with all permit conditions, conducting or employing qualified personnel for any required pre-project site surveys or inspections, updating the Activity Guidelines sheets, instructing crews on BMPs,

overseeing certain BMP implementation, documenting the implementation of the BMPs, and conducting any agency coordination.

The following BMPs will be implemented to minimize noise impacts during operation:

- Construction Noise BMPs. Noise-generating construction activities shall be restricted to the daytime (i.e., 7:00 AM to 7:00 PM, Monday through Friday), during which noise levels shall not exceed:
- 75 dB(A) $L_{eq}(h)$ at noise sensitive locations when construction work duration would last up to 3 days;
- 70 dB(A) $L_{eq}(h)$ at noise sensitive locations when construction work would last from 4 to 7 days;
- 65 dB(A) $L_{eq}(h)$ at noise sensitive locations when construction work would last from 1 to 2 weeks;
- 60 dB(A) $L_{eq}(h)$ at noise sensitive locations when construction work would last from 2 to 8 weeks, or
- 55 dB(A) $L_{eq}(h)$ at noise sensitive locations when construction work duration would exceed 8 weeks.

If these thresholds are exceeded at noise sensitive locations, noise abatement measures shall be implemented to reduce noise levels. Noise abatement measures shall include, but are not limited to, the construction equipment source noise reduction methods and construction noise propagation path reduction methods provided in the County of Ventura Construction Noise Threshold Criteria and Control Plan. As defined by the County of Ventura Construction Noise Threshold Criteria (2005), daytime noise-sensitive receptors include hospital, nursing homes (quasi-residential), schools, churches, and libraries (when in use). Single-family, multi-family dwellings, hotels, and motels are considered evening and nighttime noise-sensitive receptors. Since noise-generating construction activities would not occur during the evening or night hours, no noise mitigation for single-family dwellings, multi-family dwellings, hotels or motels is necessary.

4.6.7 Significance After Mitigation

Mitigation measure NOISE-1 requires equipment noise reduction techniques to be implemented during construction. Mitigation measure NOISE-2 will require the installation of a temporary noise control barrier ~~within the Surfside III along all project phases.~~ Implementation of the NOISE-1 and NOISE-2 ~~identified mitigation measures is not required, as the noise impacts associated with the construction of proposed project are will reduce impacts to a less than significant level.~~ However, Construction noise mitigation measures will be implemented as part of the proposed project along portions of Phase 1 due to the proximity of Buildings 6 and 7 of the Surfside III Condominiums during construction of all project phases to address the County threshold and City ordinances. Mitigation measure NOISE-3 would reduce impacts resulting from vibration to a level less than significant. ~~Vibration impacts after mitigation are less than significant.~~

4.7 GEOLOGIC AND SEISMIC HAZARDS

This section addresses geologic processes and features, including topography, geology and geologic hazards, soils, and erosion potential related to the J Street Drain Project, assesses impacts of the proposed uses, and recommends mitigation measures to reduce potential project impacts. Additionally, the following document was used in the preparation of this section:

Geotechnical Study J Street Drainage Improvements. Prepared by Fugro West, Inc. January 2009 (Appendix F).

Ormond Beach Lagoon Sand Berm Management Technical Memo. Prepared by HDR Engineering, Inc. August 2011 (Appendix C).

4.7.1 Environmental Setting

The proposed project is located in the City of Oxnard, located at the western edge of the Oxnard Plain, an alluvial plain that covers over 200 square miles in the southern portion of Ventura County. Much of the city is on the relatively flat coastal plain, but steeply sloped hills abut the northern portion of the community. The western portion of the city stretches north along the Santa Clara River and is characterized by a narrow valley with steeply sloped areas on both sides.

Topographic Setting – Regional Overview

The proposed project site is located on the Oxnard Coastal Plain situated in the Transverse Range Province, which extends along the coast from the Santa Ynez Mountains to the Los Angeles Basin. The Transverse Range Province is an east-west trending belt of mountains and uplands bounded on the north by the Santa Ynez fault, on the east by the San Bernardino Mountains, on the south by the Transverse Ranges frontal fault zone, and on the west by the Pacific Ocean. The province is characterized by a diverse assemblage of igneous, volcanic, metamorphic and sedimentary rocks ranging in age from Cretaceous (65 million years ago) to Holocene (recent). Pronounced east-west trending folds and reverse faults characterize the region and reflect regional north-south compressional forces. The Ventura Basin is bounded on the north by the Santa Ynez-Topatopa Mountains and on the south by the Channel Islands, the western Santa Monica Mountains, and the Simi Hills. To the east, the basin is bounded by the San Gabriel fault zone. To the west, the Santa Barbara Channel separates the offshore islands from the mainland. Near the Santa Barbara Channel, the Ventura Basin is a transitional zone consisting of a coastal plain and shoreline. The coastal plain is composed of a broad alluvial plain, some of which forms estuaries and lagoons.

The general topographic character of the project area is flat with an approximately 18-foot elevation change from north to south. This area ranges in elevation from approximately 24 feet above mean sea level (AMSL) at the northern end of the project boundary to 3 feet AMSL at the southern end within the Ormond Beach Lagoon.

Project Site Soils

The soils of the City of Oxnard and surrounding area have been classified by the U.S. Department of Agriculture (USDA) Soil Conservation Service (SCS) to determine soil capability for agricultural production. The SCS mapping program rates the agricultural suitability of soils in terms of both the Land Use Capability Classification System and the Storie Index. Capability classes range from Class I soils, which have few limitations restricting their use for agriculture, to Class VIII soils, which are unsuitable

4.7 Geologic and Seismic Hazards

for agriculture. The majority of soils in the City of Oxnard are Class I and II, which by definition constitute “prime agricultural soils” under the SCS Land Use Capability Classification System.

The project alignment contains eight different soil types that are mapped and listed in Figure 4.7-1. The map shows soils within 500 feet of the project boundary.

Soils in the project area vary and include Camarillo loam (Cc), Camarillo sandy loam (Cd), Hueneme sandy loam (Hn), as well as coastal beaches (CnB). Soil depths are variable and may be as shallow as 10 inches. The Camarillo-Hueneme-Pacheco Association can be described as level and nearly level, very deep, poorly drained loamy sands and silty clay loams. Soil depth can be up to 60 inches or more. The soils in this association are Class II soils and are also some of the most productive in the City. They are used for irrigated vegetables, field crops, lemons and strawberries. In undrained areas, there is a seasonal water table within a depth of two feet and periodically the soils contain soluble salts.

Erosion

Rates of erosion can vary depending on a number of factors including climate conditions, soil material, soil structure, and levels of human activity. Generally, soils on steeper slopes have a higher potential risk of erosion. The City of Oxnard 2020 General Plan Background Report, Agricultural and Soil Resources (5.5), identifies the K-factor for soil surfaces or soils easily susceptible to erosion processes within the City. The project site is identified as having moderate erosion susceptibility or K-factor of 0.24-0.28, with the lower channel area identified as having low erosion susceptibility or K-factor of 0.17-0.20.

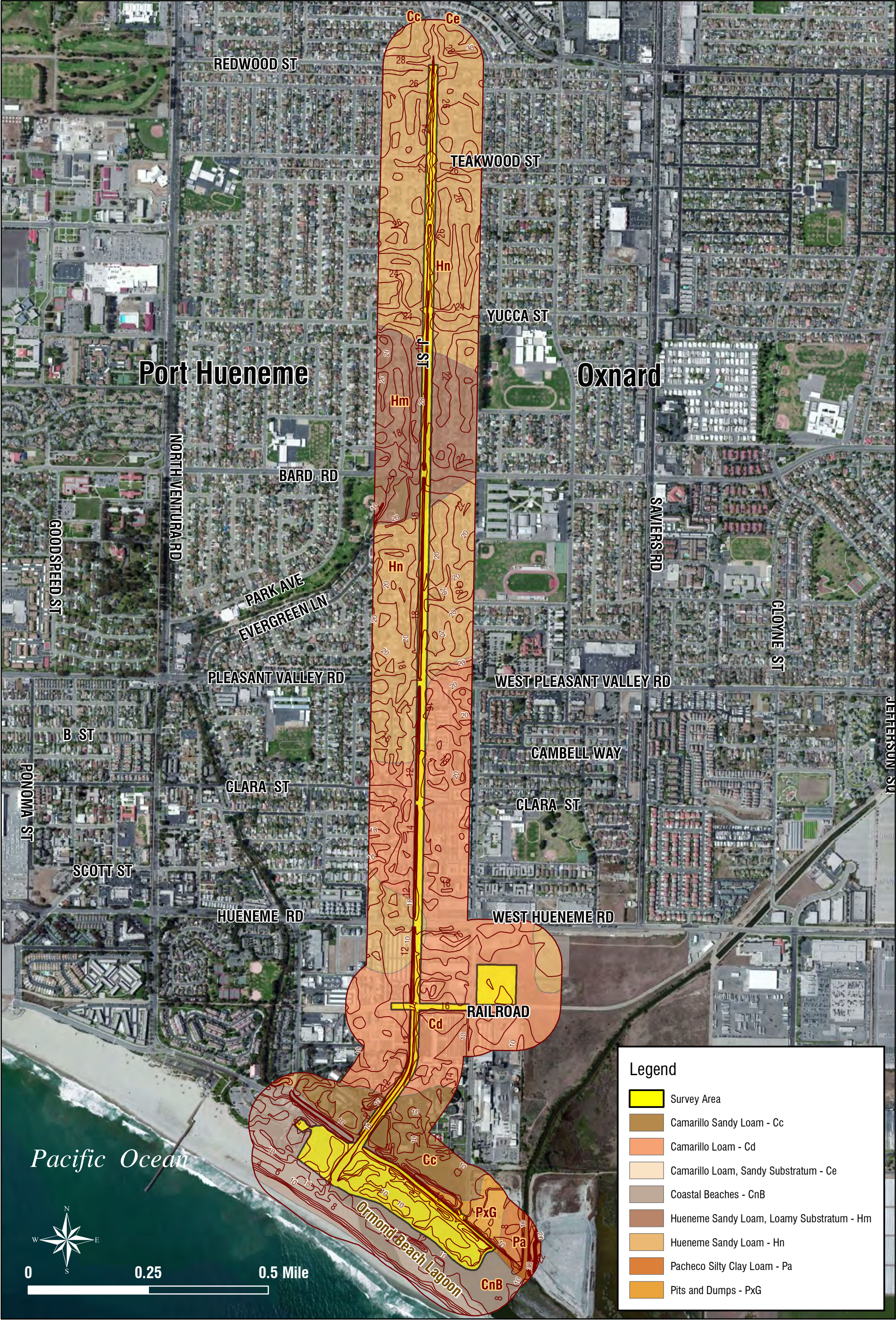
Seismicity

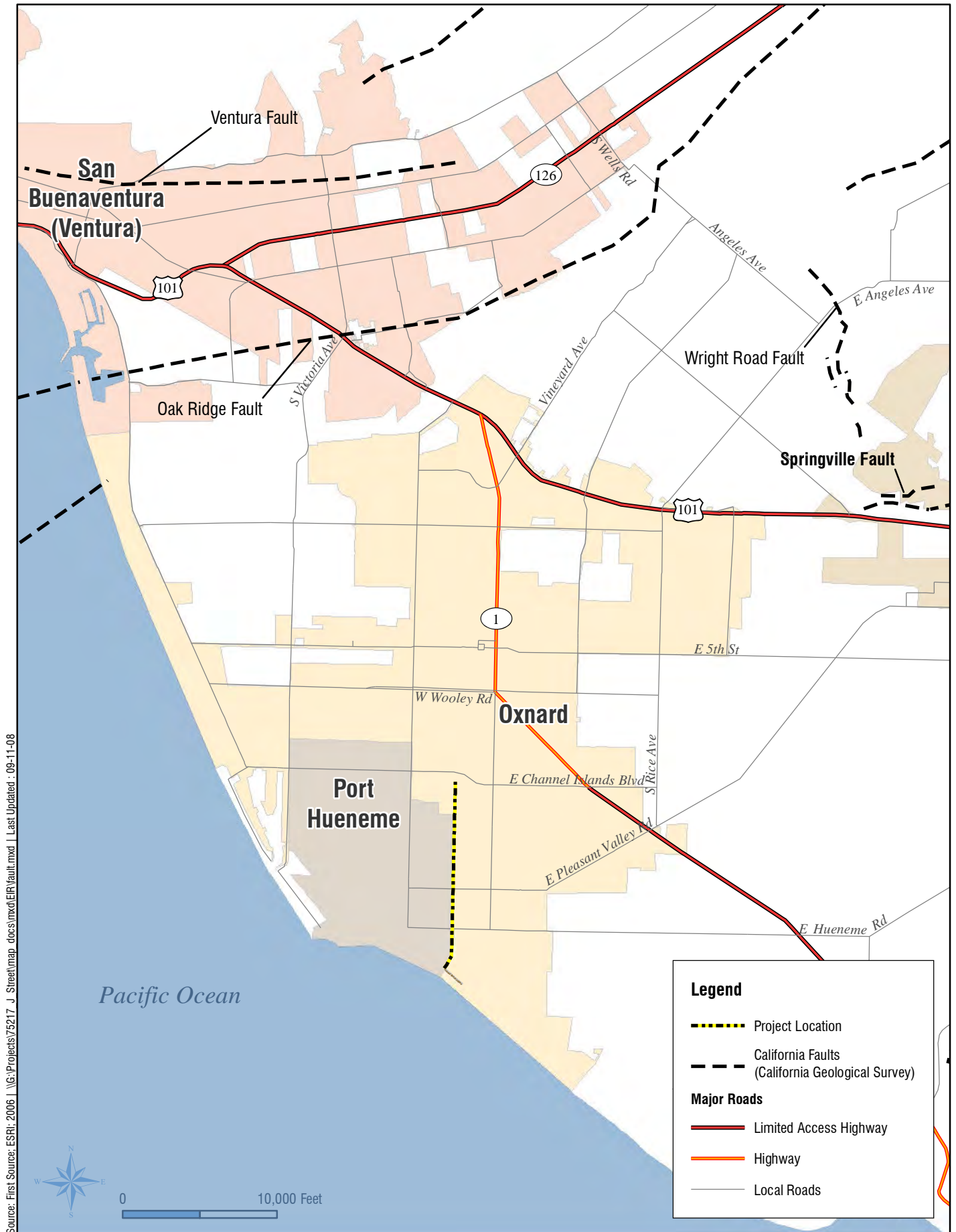
Ground Rupture and Ground Shaking

The project is located within the seismically active Southern California Region. The California Division of Mines and Geology (CDMG) designates faults as active, potentially active, and inactive. A fault is considered active if it can be demonstrated that the fault has experienced surface displacement in the past 11,000 years. A fault is considered potentially active if it can be demonstrated that movement has occurred in the past 2 million years. Finally, a fault is considered inactive if it can be demonstrated that no movement has occurred in the past two million years. As depicted in Figure 4.7-2, active and potentially active faults are located within the project vicinity.

The Alquist-Priolo Earthquake Fault Zoning Act's main purpose is to prevent the construction of buildings used for human occupancy on the surface trace of active faults. The Act only addresses the hazard of surface fault rupture and is not directed toward other earthquake hazards. Ground rupture is defined as surface displacement which occurs along the surface of the causative fault during an earthquake. No known traces or zones of an Alquist-Priolo Fault Act-zoned fault are located within the project area.

The primary geologic hazard at the site is moderate to strong ground motion (acceleration) caused by an earthquake on any of the local or regional faults. The project site is located within Seismic Risk Zone 4. Areas within Seismic Zone 4, have a one in ten chance that an earthquake with an active peak acceleration level of 0.04 g (4/100 the acceleration of gravity) will occur within the next 50 years. Peak ground accelerations could range from 0.50 g to 0.80 g. Though no Alquist-Priolo Zones exist within the proposed project area, because the proposed project site lies in a seismically active region, it is susceptible to several types of earthquake-related risks, including surface rupture, ground shaking, liquefaction, tsunamis, and inundation.





Source: First Source: ESRI, 2006 | \G:\Projects\75217 J Street\map docs\mxd\EIR\fault.mxd | Last Updated : 09-11-08

Alquist-Priolo Fault Zone/Fault Map

FIGURE 4.7-2

J Street Drain | Ventura County Watershed Protection District | EIR



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4.7 Geologic and Seismic Hazards

The project site would probably experience ground shaking from earthquake activity that is associated with the faults in the surrounding area. In relative terms, the ground shaking could be severe with an earthquake of maximum credible or probable magnitude in one of the nearby faults. The two most significant factors in determining the intensity of ground shaking are magnitude and distance from the epicenter of an earthquake. Based on a regional probabilistic seismic hazard evaluation using averaged results from the ground motion attenuation relations, the CDMG estimates peak horizontal ground acceleration (PGA) ranging from 0.59g to 0.62g for a 10 percent probability of exceedance in a 50-year exposure period (2002). CDMG (2002) also indicates that the predominant earthquake moment magnitude is about M7.3 and the modal distance is about two kilometers (km) for the project area.

Figure 4.7-2 outlines the active faults within the project vicinity. The most regionally active faults are the Oak Ridge, Pitas Point-Ventura, Simi, Red Mountain, San Cayetano, and Malibu Coast faults, all within 15 miles of the project site. Table 4.7-1 lists the active faults for the City of Oxnard and associated seismic information.

Table 4.7-1. Regionally Active Faults

Fault Zone	Location Relative to City of Oxnard	Slip Rate (mm/yr) ^a	Maximum Credible Magnitude	Maximum Probable Magnitude
Oak Ridge	1 mile NW	3.5 to 6.0	7.5	6.7
Pitas Point-Ventura	6 miles NW	0.5 to 1.5	6.1	6.6
Red Mountain	10 miles NW	0.4 to 1.5	N/A	6.6
San Cayetano	15 miles N	1.3 to 9.0	6.75	6.7
Simi	7 miles NW	N/A	6.6	6.6
Malibu Coast	15 miles SE	0.3	7.5	6.6

Note: a = Average rate of displacement at a point along a fault.

Source: Southern California Earthquake Data Center and the City of Oxnard 2020 General Plan Background Report (2007).

Landslides

Landslide is the general term for the dislodging and falling of a mass of soil or rocks along a sloped surface. The relatively flat terrain of the project site minimizes the potential for landslides.

Slope Stability

Various types and degrees of slope instability are part of the natural weathering and erosional cycles. Factors contributing to slope instability include topography, bedrock and soil types, bedrock orientation, precipitation, vegetation, seismic shaking, and human-induced topographic alteration. Slope stability covers a series of mass- movement phenomena such as large landslides, rockfalls, mudflows, and shallow soil failure. These mass movements may be triggered by seismic activity, rainfall, undercutting of seacliffs by wave erosion, and other factors. Because the proposed project site is relatively flat, hazards associated with slope stability would be low.

Liquefaction

Liquefaction can be described as a “quicksand” condition in which there is a total loss of foundation support caused by a shock (typically an earthquake of significant magnitude). This condition results from a sudden decrease of shearing resistance in a cohesionless soil (such as sand) accompanied by a

4.7 Geologic and Seismic Hazards

temporary increase in porewater pressure. Important factors in determining liquefaction potential are the intensity and duration of shaking, and the presence of relatively low-density fine sand and silt, in an area of shallow ground water.

Liquefaction potential also increases as the depth to ground water decreases. Typically, in order for liquefaction to occur, the groundwater table must be less than 50 feet deep. Groundwater at the project area was encountered at depths ranging from 4½ feet to 11 feet bgs. The proposed project site is located in the Oxnard Plain which has a high ground water table underlain by several saturated aquifers. The City of Oxnard Safety Element Liquefaction Potential Map depicts the Study Area to be located within an area with high to moderate liquefaction potential. The City of Port Hueneme and the City of Oxnard, including the project site, have been identified as a Liquefaction Hazard Zone by the State of California.

Settlement

Seismically-induced settlement or compaction of dry or moist cohesionless soils can be an effect related to earthquake ground motion. Some such settlement can be expected to occur on the site as a result of strong ground-shaking.

Differential settlement often affects foundations placed on varying soils or fill materials, where the varying soils or fills settle at different rates. Soils throughout the project site are anticipated to be relatively horizontally stratified and laterally continuous over broad areas based on the USDA Soil Survey maps.

Expansive Soils

Expansive soils have the characteristic of expanding when wet and shrinking when dry. Soils with expansive qualities can cause damage to structures such as foundations and buried utilities due to the expansion and contraction of the soil during wetting and drying periods. The USDA Soil Maps for Ventura County includes mapped locations of soils and classifies the expansion potential of a soil according to the shrink-swell potential. Soils with moderate shrink-swell (expansive) potential have been identified in the project area. Soils with expansion potential contain clay minerals that expand when wet and shrink when dry. Repeated shrinking and swelling of the soil can result in damage to foundations, fill slopes, utilities, and other associated facilities. Site-specific geotechnical studies will be required to identify areas underlain by expansive soils and provide appropriate mitigation measures.

Land Subsidence

Subsidence is the displacement of the ground surface vertically over a broad region or at localized areas. Land subsidence is typically caused by groundwater extraction, oil field production, or by tectonic processes. Both Ventura County and the City of Oxnard identify three subsidence hazard zones within the county: (1) negligible land subsidence; (2) probable subsidence less than 0.05 ft/yr; and (3) probable subsidence of 0.05 ft/yr. According to Figure IX-1, Seismic/Geologic Hazards, from the City of Oxnard 2020 General Plan, the project area is located within the City of Oxnard zone of probable land subsidence of 0.05 ft/yr. Portions of the City of Oxnard have subsided. According to the City of Oxnard 2020 General Plan Safety Element, the available records show that the amount of much of this subsidence is at least one foot. In the area near Hueneme Road and SR-1, which is adjacent to the southeast corner of the City, the amount of subsidence has been up to 12 feet.

No recognized subsidence has been identified in the City of Port Hueneme. The likelihood of significant subsidence occurring in the City is considered very minimal.

Tsunamis and Seiches

A tsunami is an ocean wave produced by offshore seismic activity. The proposed project site is located near the Pacific Ocean and the potential for tsunami damage exists. Approximately 50 tsunamis have been reported along the California coast since 1912. Waves induced by offshore tsunamis could be transported from the shoreline to approximately one mile inland. The Ventura County coast has a low tsunami damage potential, but may be unsafe during such an event. These waves are not common, and Port Hueneme is somewhat sheltered from tsunamis generated in the North Pacific by the Channel Islands; however, it is relatively exposed to tsunamis generated in the South Pacific. The largest tsunami wave amplitude recorded at Port Hueneme was 8.8 feet, associated with the Chilean earthquake of 1960.

Seiches are harmonic waves in an enclosed water body caused by seismic activity. Seiches typically occur in lakes and bays, and are normally caused by unusual tides, winds or currents, but can also be produced by earthquake ground motion. The shaking oscillates the water back and forth, causing seiche waves. The primary threat from a seiche is to structures and boats in or very near a lake, harbor or bay. Due to the location of the J Street Drain, potential for seiches to occur near the project site is low.

4.7.2 Regulatory Setting

Federal Authorities and Administering Agencies

No federal authorities or administering agencies are known to have regulatory jurisdiction over geologic issues pertaining to the project.

California Code of Regulations

Title 24 of the California Code of Regulations (CCR) is the California Building Code. The State of California provides a minimum standard for building design through the 2001 California Building Code (CBC). The 2001 CBC is based entirely on the 1997 Uniform Building Code (UBC), but has been modified for California conditions. It is generally adopted on a jurisdiction-by-jurisdiction basis, subject to further modification based on local conditions. Industrial and residential buildings are plan-checked by local building officials of California's 476 cities and 58 counties (not by state agencies). Chapter 23 of the CBC contains specific requirements for seismic safety. The Study Area is located in Seismic Zone 4, the highest zone in terms of seismic risk in California. Chapter 29 of the CBC regulates excavation, foundations, and retaining walls. Chapter 33 of the CBC contains specific requirements pertaining to site demolition, excavation, and construction to protect people and property from hazards associated with excavation cave-ins and falling debris or construction materials. Chapter 70 of the CBC regulates grading activities, including drainage and erosion control. Construction activities are subject to occupational safety standards for excavation, shoring, and trenching as specified in California Occupational Safety & Health Administration (Cal-OSHA) regulations (Title 8 of the CCR) and in Section A33 of the CBC.

Because J Street Drain is a flood control facility rather than an industrial or residential building, it will be constructed according to the *Ventura County Flood Control District Design Manual*, originally adopted by the Ventura County Board of Supervisors in July 1968 and periodically updated thereafter.

California Alquist-Priolo Earthquake Fault Zoning Act

The Alquist-Priolo Fault Zoning Act of 1972 prohibits the construction of buildings used for human occupancy on active surface faults, which are faults that have ruptured the ground surface in the past 11,000 years (Holocene Epoch). It specifies, in part, that new habitable building structures maintain a

minimum 50-foot setback from all known active faults. The California Geological Society (CGS) Special Publication 42 (updated 1999) describes Alquist-Priolo Earthquake Fault hazard zones in California. None of the Study Area is within an Alquist-Priolo Earthquake Fault Zone designated by the State of California.

Seismic Hazards Mapping Act

CGS also provides guidance with regard to seismic hazards. Under CGS' Seismic Hazards Mapping Act, seismic hazard zones are to be identified and mapped to assist local governments for planning and development purposes. The intent of this publication is to protect the public from the effects of strong ground shaking, liquefaction, landslides, or other ground failure, and other hazards caused by earthquakes. CGS' Special Publications 117, Guidelines for Evaluating and Mitigating Seismic Hazards in California (CGS 1997b), provides guidance for evaluation and mitigation of earthquake-related hazards for projects within designated zones of required investigations. The study area is located within a CGS-designated liquefaction seismic hazard zone. Appropriate evaluation and mitigation of liquefaction hazard must be evaluated in site-specific geotechnical investigations.

Local Ordinances and Administering Agencies

Ventura County

The Ventura County General Plan, Chapter 2 Hazards, identifies goals, policies, and programs relating to known existing and potential hazards, and other significant physical constraints to development/land use.

The specific goals, policies, and programs are organized under the following major headings: (1) general goals, policies and programs, (2) fault rupture, (3) ground shaking, (4) liquefaction, (5) seiche, (6) tsunami, (7) landslides/mudslides, (8) expansive soils, (9) subsidence, (10) flood hazard, (11) inundation from dam failure, (12) coastal wave and beach erosion, (13) fire hazards, (14) transportation-related hazards, (15) hazardous materials and waste, (16) noise hazards, and (17) civil disturbance.

2.1 General Goals, Policies and Programs

The following general goals, policies and programs apply to hazards:

2.1.1 Goals

1. Identify all major hazards and other physical constraints to development in Ventura County, and convey this information to all appropriate parties.
2. Protect public health, safety and general welfare from identified hazards and potential disasters.
3. Shield public and private property and essential facilities from identified hazards and potential disasters.
4. Minimize loss of life, injury, damage to structures, and economic and social dislocations resulting from identified hazards and potential disasters.

2.1.2 Programs

5. The County Sheriff's Department Office of Emergency Services (OES) will continue to maintain and periodically update the Ventura County Multi-hazard Functional Plan, including mitigation measures and preparedness, response, and recovery strategies for the following twelve hazard

specific contingency sections (i.e., plans): Earthquake Hazards, Hazardous Materials and Waste, Flood and Flood Hazards, Inundation from Dam Failure, Transportation Related Hazards, Civil Unrest, Terrorism, National Security Emergency, Landslides/Mudslides, Tsunami, Marine Oil Spill, and Fire Hazards. To the extent feasible, County agencies will, and other public agencies are encouraged to, participate in joint emergency planning and response training, and cooperatively respond to emergencies when they occur.

6. All agencies involved in warning and evacuation activities should periodically review and, if necessary, update their plans and procedures for the hazards defined and described in this Chapter, and shall provide updated hazard and constraint information to the Planning Division when available.
7. The Building and Safety Division will continue to enforce requirements of the California Building Code pertaining to earthquake-resistant design and construction.
8. The Building and Safety Division will comply with applicable provisions of Chapter 12.2 (commencing with Sec. 8875), Division 1, of Title 2 of the Government Code, pertaining to identification of potentially hazardous buildings in the unincorporated area of Ventura County, and establishment of a mitigation program for such potentially hazardous buildings.

2.2 Fault Rupture

The goal, policies and programs that apply to fault rupture are as follows:

2.2.1 Goal

Minimize the risk of loss of life, injury, collapse of habitable structures, and economic and social dislocations resulting from fault rupture.

2.2.2 Policies

1. Detailed geologic investigations performed by Certified Engineering Geologists are required for all proposed habitable structures in Earthquake Fault Hazard Zones as defined by the Alquist-Priolo Earthquake Fault Zoning Act. Development will not be allowed unless the investigation confirms that the proposed habitable structures are not subject to fault rupture hazard. Proposed developments that are located at the ends of the Earthquake Fault Hazard Zones may be required, at the discretion of the Public Works Agency Certified Engineering Geologist, to be evaluated for earthquake fault rupture hazards.
2. No habitable structures shall be located across or on any active fault zone as defined by the Alquist-Priolo Earthquake Fault Zoning Act. Furthermore, no habitable structures shall be located within 50 feet of the mapped trace of an active fault unless an appropriate geologic investigation and report demonstrates that the site is not subject to a fault rupture hazard.
3. All development projects involving construction within Earthquake Fault Hazard Zones, shall be reviewed by the Public Works Agency Certified Engineering Geologist in accordance with the requirements of the Alquist-Priolo Earthquake Fault Zoning Act and the policies and criteria established by the State pursuant to said Act.
4. Land in Earthquake Fault Hazard Zones and potentially active fault areas should, where feasible, be designated Open Space or Agriculture on the General Land Use Maps.

5. Roads, streets, highways, utility conduits, and oil and gas pipelines, shall be planned to avoid crossing active faults where feasible. When such location is unavoidable, the design shall include measures to reduce the effects of any fault movement as much as possible.
6. No new essential facilities, special occupancy structures, or hazardous materials storage facilities shall be located within active fault zones unless it can be adequately demonstrated that the facilities are not subject to fault rupture hazard.

2.2.3 Programs

1. The Fault Rupture chapter should be updated as part of every update to the Hazards Appendix of the County General Plan.
2. The Multi-hazard Functional Plan - Major Earthquake Contingency section will be reviewed and revised annually by the County Sheriff's Office of Emergency Services. The Office of Emergency Services will continue to provide public information programs and pamphlet information on earthquake preparedness.
3. The Building and Safety Division, with the support of the General Services Agency-Facilities & Materials Division and CEO-Risk Management, Health, Safety & Loss Prevention (HSLP) will implement the requirements of the Essential Services Buildings Seismic Safety Act of 1986.

2.3 Ground Shaking

The goal, policy and programs that apply to ground shaking are as follows:

2.3.1 Goal

Minimize the risk of loss of life, injury, collapse of habitable structures, and economic and social dislocations resulting from ground shaking.

2.3.2 Policy

All structures designed for human occupancy shall incorporate engineering measures to mitigate against risk of collapse from ground shaking.

2.4 Liquefaction

The goal, policy, and programs that apply to liquefaction are as follows:

2.4.1 Goal

Minimize the risk of loss of life, injury, collapse of habitable structures, and economic and social dislocations resulting from liquefaction.

2.4.2 Policy

Prior to issuance of building or grading permits for essential facilities, special occupancy structures, two-story single family residences, or hazardous materials storage facilities located within areas prone to liquefaction, a geotechnical report that includes a seismic analysis and evaluation of liquefaction in accordance with the State of California Guidelines shall be prepared in order to assess the liquefaction potential and provide recommendations for mitigation.

2.4.3 Programs

1. The Liquefaction chapter should be updated as part of all updates to the Hazards Appendix of the County General Plan.
2. The Building and Safety Division will implement the requirements of the California Building Code to reduce the effects of liquefaction on habitable structures.

2.5 Seiche

The goal, policies and programs that apply to seiche hazards are as follows:

2.5.1 Goal

Minimize the risk of loss of life, injury, collapse of habitable structures and economic and social dislocations resulting from a seiche.

2.5.2 Policies

1. The Seiche Hazard Area shall be considered during the preparation of regional and area plans and special studies, and used to guide future investigations of the hazard.
2. The seiche hazard shall be taken into account in the design of all development within a Seiche Hazard Area.

2.5.3 Programs

1. The County Sheriff's Department Office of Emergency Services will annually review and revise the Multi-hazard Functional Plan's Tsunami/Seiche Contingency section.
2. The Building and Safety Division will implement the requirements of the California Building Code to reduce the effects of seiche hazard on habitable structures.

2.6 Tsunami

The goal, policy and program that apply to tsunami hazards are as follows:

2.6.1 Goal

Minimize the risk of loss of life, injury, and collapse of habitable structures, and economic and social dislocations resulting from a tsunami.

2.6.2 Policy

Essential facilities, special occupancy structures and hazardous materials storage facilities should not be located in tsunami hazard areas.

2.6.3 Program

The County Sheriff's Department Office of Emergency Services will annually review and revise the County Multi-hazard Functional Plan's Tsunami/Seiche Contingency section.

2.7 Landslides/Mudslides

The goal, policies and programs that apply to landslides/mudslides are as follows:

2.7.1 Goal

Minimize the risk of life, injury, collapse of habitable structures, and economic and social dislocations resulting from landslides/mudslides.

2.7.2 Policies

1. Development in mapped landslide/mudslide hazard areas shall not be permitted unless adequate geotechnical engineering investigations are performed, and appropriate and sufficient safeguards are incorporated into the project design.
2. In landslide/mudslide hazard areas, there shall be no alteration of the land which is likely to increase the hazard, including concentration of water through drainage, irrigation or septic systems, removal of vegetative cover, and no undercutting of the bases of slopes or other improper grading methods.
3. Drainage plans that direct runoff and drainage away from slopes shall be required for construction in hillside areas.

2.7.3 Programs

1. The Landslides/Mudslides chapter should be updated as part of every update to the Hazards Appendix of the County General Plan.
2. The Public Works Agency will continue to enforce Chapter 70 (Excavation and Grading) of the California Building Code to ensure that areas of mapped landslides/mudslides or hillside areas are adequately investigated. Proposed development must incorporate appropriate design provisions to prevent landsliding and demonstrate that an adequate factor of safety against landsliding exists or will exist upon completion of the proposed development.
3. The Public Works Agency will enforce the requirements of the State of California Seismic Hazards Act and for all sites within potential earthquake induced landslide areas as mapped by the State Geologist. Project proponents for these sites must submit a geotechnical report that addresses the potential for earthquake induced landslides or rock falls to the Public Works Agency for review prior to obtaining a grading or building permit.

2.8 Expansive Soils

The goal and policies that apply to expansive soils are as follows:

2.8.1 Goal

Minimize the risk of damage to structures from the effects of expansive soils.

2.8.2 Policies

1. Construction must conform to established standards of the Ventura County Building Code, adopted from the California Building Code.

2. A geotechnical report, prepared by a registered civil engineer and based upon adequate soil testing of the materials to be encountered at the sub-grade elevation, shall be submitted to the County Surveyor, Environmental Health Division, and Building and Safety for every applicable subdivision and Building Permit application (as required by the California Building Code).
3. No habitable structures or individual sewage disposal systems shall be placed on or in expansive soils unless suitable mitigation measures to prevent the adverse effect of these conditions are incorporated into the project.

2.9 Subsidence

The goal, policies and programs that apply to subsidence are as follows:

2.9.1 Goal

Minimize the risk of damage to structures, transportation corridors, and infrastructure from the effects of subsidence.

2.9.2 Policies

2. Structural design of buildings and other structures shall recognize the potential for hydrocompaction subsidence and provide mitigation recommendations for structures that may be affected.
3. No structure which is needed for public safety or emergency services shall be located where an interruption in service could result from structural failure due to subsidence. If such location in an area subject to potential subsidence is unavoidable, the structure shall be designed to mitigate the hazard.

2.9.3 Programs

1. The Subsidence chapter should be updated as part of all updates to the Hazards Appendix of the County General Plan.
2. The Building and Safety Division will implement the requirements of the California Building Code to reduce the effects of subsidence on habitable structures as required by the California Building Code.

City of Oxnard

Conformance with the City's Grading and Building Codes are considered generally satisfactory (by the City) to address geologic hazards and development grading activities. The City of Oxnard General Plan Safety Element recommends an adequate site-specific investigation be performed where the possibility of soil or geologic problems exist. Additionally, the Safety Element includes the following goals and policies regarding geologic hazards.

Development Policies

A. Goals

Maintenance and enhancement of a safe community.

B. Objectives

1. Manage urban development to protect areas subject to geologic hazards.
2. Minimize beach erosion.
3. Minimize damage to public and private property from flooding.
4. Provide for the safe use and transportation of hazardous materials and wastes.

C. Policies

Geologic Hazards

1. The City should adopt updated versions of the Uniform Building Code and require all new private and public construction to conform to its earthquake resistant design provisions.
2. The City shall require that adequate soils, geologic and structural evaluation reports be prepared by registered soils engineers, engineering geologists, and/or structural engineers, as appropriate, for all new development.
3. The City should require that geological reports, building plans and the appropriate sections of environmental impact reports be reviewed by registered engineering geologists and/or structural engineers.
4. The City should evaluate disaster plans and potential effectiveness in light of various earthquake intensities.
5. With applications for permits and approvals, the City should require the submission of a geological report or a request for a waiver of such a report if the proposed development is located in a potential liquefaction area and the development proposal is one of the following:
 - a. Any subdivision of land subject to the Subdivision Map Act for which the eventual construction of a structure for human occupancy is contemplated; or
 - b. Structures for human occupancy, except single-family dwellings and mobile homes, to be built or placed on lots previously approved through the building permit process.
6. Structures for human occupancy may only be constructed or placed on the site if the approved geological report shows that no undue hazard would be created. Mitigation measures may be required for human occupancy structures, based on the recommendation in the geological report.

Waiver of the liquefaction report is allowed in certain situations where it can be shown as follows: (1) that groundwater or geologic conditions do not constitute a liquefaction hazard; or (2) that the proposed project is a land division; or (3) that satisfactory mitigation of the potential hazard is possible, as submitted by a qualified engineer or geologist. 6. All proposed development shall be required to complete a site-specific soils investigation, which addresses at a minimum liquefaction and compressible soil characteristics on-site. A report shall be submitted to the City detailing the findings of this soil investigation, and the report shall identify any necessary construction techniques or other mitigation measures to prevent significant liquefaction/compressible soils impacts upon the proposed development. All recommendations of said report shall be incorporated into the development as conditions of approval.

7. The City shall avoid, to the maximum extent feasible, increases in the level of groundwater extraction as a method for meeting new water demands. If feasible, the City shall reduce the level of current groundwater extraction to minimize existing subsidence trends.

4.7 Geologic and Seismic Hazards

8. The City should locate all facilities necessary to carry out post-disaster emergency services in areas of low geologic hazard risk.
9. All existing and future abandoned oil wells shall be required to be capped and secured according to the California Division of Oil and Gas Standards.

City of Port Hueneme

The City of Port Hueneme General Plan, Public Safety and Facilities Element contains the following goals and policies regarding geologic hazards.

GOAL 2: Mitigate the Potential for loss of life, injuries, damage to property, and economic and social displacement resulting from future earthquakes or other geologic hazards by the avoidance, elimination, or reduction of risk to an acceptable level.

Policy 2-1: Improve interjurisdictional cooperation and communication to improve disaster response and emergency preparedness.

Policy 2-2: Incorporate guidelines and recommendations resulting from the implementation of AR 3897, Seismic Hazards Mapping Act, as they become available into the Seismic Safety Element, Zoning Ordinance, and other City policy documents, codes, and guidelines.

Policy 2-3: Promote the public's education of earthquake and associated hazards through City newsletters, school programs, neighborhood groups, and other methods as appropriate.

Policy 2-4: Maintain, revise (when necessary) and enforce appropriate standards and codes to reduce or avoid all levels of seismic or geologic risk.

California Coastal Act

Section 30253 of the California requires new development to do all of the following to minimize adverse impacts:

- a. Minimize risks to life and property in areas of high geologic, flood, and fire hazard.
- b. Assure stability and structural integrity, and neither create nor contribute significantly to erosion, geologic instability, or destruction of the site or surrounding area or in any way require the construction of protective devices that would substantially alter natural landforms along bluffs and cliffs.

4.7.3 Significance Thresholds

Significant thresholds are addressed according to the thresholds set forth by the County of Ventura Initial Study Assessment Guidelines (2011), County of Ventura Administrative Supplement to the State *CEQA Guidelines*, County of Ventura General Plan, and the state *CEQA Guidelines*.

Fault Rupture Hazard

According to the Ventura County Initial Study Assessment Guidelines (2011), a project is potentially at risk with respect to fault rupture if it is located within any of the following areas: (1) A State of California designated Alquist-Priolo Special Fault Study Zone; and (2) A County of Ventura designated Fault Hazard Area.

Ground Shaking

1. Is the proposed structure designed to be built in accordance with all applicable requirements of the Ventura County Building Code? If the answer is no, then the project has the potential to expose people or other structures to potential significant adverse effects, including the risk of loss, injury or death involving ground shaking hazards. If the answer is yes, then the project design will reduce the adverse effects of ground shaking to less than significant.
2. The hazards from ground shaking will affect each project individually; and no cumulative ground shaking hazard would occur as a result of other approved, proposed or probable projects.

Liquefaction

1. The State of California, based on the Quaternary Geology of Ventura County, water well records for material type and density, and highest groundwater elevations, has produced the Seismic Hazards Zone Maps including potential for liquefaction. The State of California Seismic Hazard Zones Maps are utilized for all determinations for liquefaction potential. A proposed project will expose people or structures to potential adverse effects, including the risk of loss, injury, or death involving liquefaction if it is located within a Seismic Hazards Zone.
2. The hazards from liquefaction will affect each project individually; and no cumulative liquefaction hazard would occur as a result of other approved, proposed or probable projects.

Expansive Soils Hazards

1. According to the Ventura County Initial Study Assessment Guidelines, the determination of a significant soils expansion effect shall be based on an inquiry of whether a proposed project will expose people or structures to potential adverse effects, including the risk of loss, injury, or death involving soil expansion if it is located within a soils expansive hazard zone or where soils with an expansion index greater than 20 are present.
2. Expansive soils hazards will affect each project individually; and no cumulative expansive soils hazard would occur as a result of other approved, proposed or probable projects.

Landslide/Mudflow Hazard

1. According to the Ventura County Initial Study Assessment Guidelines, the threshold for landslide/mudflow hazard is determined by the Public Works Agency Certified Engineering Geologist based on the location of the site or project within or outside of mapped landslides, potential earthquake induced landslide zones, and geomorphology of hillside terrain.
2. Landslide/mudslide hazards will affect each project individually; and no cumulative landslide/mudslide hazard would occur as a result of other approved, proposed or probable projects.

Seiche Hazard

1. According to the Ventura County Initial Study Assessment Guidelines, areas subject to seiche hazards are those located within 10 to 20 feet of vertical elevation from an enclosed body of water such as a lake or reservoir. The height of hazard above the water level is dependent on the ground motion intensity, duration of shaking, and subsurface topography of the lake or reservoir

4.7 Geologic and Seismic Hazards

and surface topography of the shoreline. There are no enclosed lakes or reservoirs within 10 feet vertical elevation from the project study area.

2. Seiche hazards will affect each project individually; and no cumulative seiche hazard would occur as a result of other approved, proposed or probable projects.

Tsunami Hazard

1. According to the Ventura County Initial Study Assessment Guidelines, threshold criteria for tsunami hazard is whether the project is located in a mapped area of tsunami hazard, as shown on the County General Plan maps. For most portions of the north and south coastal areas, the tsunami hazard does not extend to areas more than 30 feet above sea level. For areas along the coastal plain, the tsunami hazard extends inland for approximately one mile.
2. Tsunami hazards will affect each project individually; and no cumulative tsunami hazard would occur as a result of other approved, proposed or probable projects.

Subsidence Hazard

1. According to the Ventura County Initial Study Assessment Guidelines, the determination of a significant subsidence effect shall be based on an inquiry of whether a proposed project will expose people or structures to potential adverse effects, including the risk of loss, injury, or death involving subsidence if it is located within a subsidence hazard zone.
2. Subsidence hazards will affect each project individually; and no cumulative subsidence hazard would occur as a result of other approved, proposed or probable projects.

As defined in Appendix G of the *California Environmental Quality Act (CEQA) Guidelines*, impacts related to geology and soils are considered significant if the project would:

- Expose people or structures to potential substantive adverse effects, including the risk of loss, injury, or death involving:
 - Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault,
 - Strong seismic ground shaking;
 - Seismic related ground failure, including liquefaction;
 - Landslides.
- Result in substantial soil erosion or the loss of topsoil;
- Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse;
- Be located on expansive soil, as defined in Table 18-1-B of the UBC (1994), creating substantial risks to life or property; or
- Have soils incapable of adequately supporting the use of septic tanks or alternative water disposal system where sewers are not available for the disposal of waste water.

4.7.4 Project Impacts

Fault Rupture Hazard

Construction

No active faults are located on the proposed project site, nor is the project site located within an Alquist-Priolo Earthquake Fault Zone or Ventura County designated Fault Hazard Area. The fault nearest to the J Street Drain is the Oak Ridge Fault, located approximately one mile north of the site. The fault rupture potential is considered to be low. Thus, construction of the proposed project would not result in exposure of people or structures to substantial adverse effects related to fault rupture. A less than significant impact is identified.

Operations

Operation of the proposed project would generally occur as it does under existing conditions, but with greater drain capacity. Additionally, maintenance activities would occur generally as they do under existing conditions. Therefore, no new actions are associated with operation and maintenance of the proposed project. No impact associated with fault rupture hazard is identified.

Beach Elevation Management Plan

Implementation of the Beach Elevation Management Plan (BEMP) is not anticipated to result in a significant impact associated with fault rupture hazard because no active faults are located on the proposed project site, nor is the project site located within an Alquist-Priolo Earthquake Fault Zone or Ventura County Fault Hazard Area. The fault nearest to the BEMP access route is the Oak Ridge Fault, located approximately one mile north of the route. The fault rupture potential of the Oak Ridge Fault is considered to be low. Therefore, impacts associated with the BEMP would be less than significant.

Ground Shaking Hazard

Construction

The project area is subject to moderate ground shaking (Ventura County General Plan Hazards Appendix, May 8, 2007). According to the Ventura County *Initial Study Assessment Guidelines*, ground shaking hazards throughout Ventura County are accommodated by the Ventura County Building Code. The effects of ground shaking hazard are required to be considered within the existing framework of grading and building code ordinances which apply to all sites and projects. Although it would not comply with the Ventura County Building Code, the project would be designed and constructed according to the *Ventura County Flood Control District Design Manual*, which is more relevant to the J Street Drain. The Ventura County Building Code applies specifically to industrial and residential buildings, neither of which would be constructed as part of the proposed project. Therefore, the project is not anticipated to expose people or structures to substantive adverse effects related to ground shaking. Because the J Street Drain would comply with the *Design Manual*, which takes the place of the Building Code in the case of flood control facilities, a less than significant impact is identified.

Operations

Operation of the proposed project would generally occur as it does under existing conditions, but with greater drain capacity. The proposed project does not include any above-ground structures. Additionally,

4.7 Geologic and Seismic Hazards

maintenance activities would occur generally as they do under existing conditions. Therefore, no new actions are associated with operation and maintenance of the proposed project. No impact associated with ground shaking hazard is identified.

Beach Elevation Management Plan

Implementation of the BEMP is not anticipated to result in a significant impact associated with ground shaking hazard because the BEMP access route is not located on an active fault or within an Alquist-Priolo Earthquake Fault Zone. Ground shaking is considered an existing and perpetual hazard in Southern California and implementation of the BEMP would not affect this condition. Implementation of the BEMP would not construct any structures nor would it expose emergency personnel to increased risks involving ground shaking since no structures are located along the BEMP access route. Therefore, impacts would be less than significant.

Liquefaction

Construction

A Geotechnical Study was prepared for the proposed project by Fugro West, Inc. According to the *Geotechnical Study J Street Drainage Improvements* (January 2009), a subsurface exploration program was utilized to obtain geotechnical data for use in developing recommendations for the proposed project. Eleven Cone Penetrometer Test (CPT) soundings were advanced to depths ranging from approximately 33 feet to 50 feet below the ground surface (bgs). Details of the subsurface exploration are presented in Appendix F of the EIR.

Groundwater was observed in all of the borings at depths ranging from about 4.5 feet to 11 feet bgs. Groundwater levels published by the California Geologic Society (2002) indicate historic groundwater levels within five feet bgs.

Soil liquefaction occurs as a result of a loss of shear strength or shearing resistance in loose, saturated soils subjected to earthquake-induced ground shaking. Typically, soil liquefaction occurs within the upper 50 feet of the soil profile and can be manifested at the ground surface by the formation of sand boils, ground surface settlement, lateral spreading, and/or ground oscillation. Like most of Oxnard and Port Hueneme, the J Street Drain is located within a liquefaction hazard zone as mapped by CDMG (2002). Granular subsurface soils and high groundwater suggest liquefaction settlement could occur along the alignment. The magnitude of liquefaction-induced settlement along the channel alignment was estimated using the CPT-Analyst software program at each of the 11 CPT soundings performed for this project. A design groundwater level of five feet bgs along J Street was used at all locations. The design earthquake input parameter was the site PGA, which is described in the discussion regarding ground shaking in Section 4.7-1 above. The range of estimated liquefaction settlements at each CPT location is between two and eight inches with settlement increasing as CPT locations move toward the ocean.

While the proposed project does not include structures that would expose people to liquefaction hazards, the range of estimated liquefaction settlements has the potential to substantially damage the proposed drain during the design earthquake. However, the drain would have reinforced walls and a reinforced concrete floor approximately eight inches thick. Additionally, the design and construction of the drain would comply with the *Ventura County Flood Control District Design Manual*. Therefore, the drain would be designed to withstand potential damage associated with liquefaction. A less than significant impact is identified.

Operations

Operation of the proposed project would generally occur as it does under existing conditions, but with greater drain capacity. Additionally, maintenance activities would occur generally as they do under existing conditions. Therefore, no new actions are associated with operation and maintenance of the proposed project. No impact associated with liquefaction is identified.

Beach Elevation Management Plan

Implementation of the BEMP is not anticipated to result in a significant impact associated with liquefaction because the BEMP would not construct any structures within a liquefaction prone area. Additionally, the primary action associated with implementation of the BEMP is grooming the sand berm at Ormond Beach Lagoon to a specified height at a pre-specified location immediately prior to a predicted storm event. Activities associated with periodic grooming of the sand berm would not be affected by liquefaction since these activities could occur without consideration of liquefaction settlement. Therefore, implementation of the BEMP would not expose people or structures to adverse effects related to liquefaction. Therefore, impacts would be less than significant.

Subsidence Hazard

Construction

Land subsidence is typically caused by groundwater extraction, oil field production, or tectonic processes. According to Figure IX-1, Seismic/Geologic Hazards, in the City of Oxnard 2020 General Plan, the project area is located within the zone of probable land subsidence of 0.05 feet per year. The construction of the proposed drain would require the installation of dewatering wells, dewatering, and discharge of groundwater into surface water. Dewatering is necessary to create a relatively dry work area for excavation and construction activities. Due to the temporary nature of construction dewatering, as well as the relatively small size of the project area and relatively small amount of groundwater extraction required (when compared to the rate of extraction of the Oxnard aquifer (see Section 4.3 Water)), the existing rate of subsidence is not anticipated to increase as a result of the proposed project. Also, although located within a subsidence zone, the project would not create new habitable structures that would expose people to risk of loss, injury, or death. Therefore, impacts related to subsidence would be less than significant.

Operations

Operation of the proposed project would generally occur as it does under existing conditions, but with greater drain capacity. Additionally, maintenance activities would occur generally as they do under existing conditions. Therefore, no new actions are associated with operation and maintenance of the proposed project. No impact associated with subsidence hazard is identified.

Beach Elevation Management Plan

Implementation of the BEMP would not require groundwater extraction nor would it construct any structures within an area prone to subsidence. Therefore, implementation of the BEMP would not affect the existing subsidence rate. No impact would result.

Expansive Soils Hazards

Construction

According to the Ventura County *Initial Study Assessment Guidelines*, the determination of a significant soils expansion effect shall be based on an inquiry of whether a proposed project will expose people or structures to potential adverse effects, including the risk of loss, injury, or death involving soil expansion if it is located within a soils expansive hazard zone or where soils with an expansion index greater than 20 are present. Soils with moderate shrink-swell (expansive) potential have been identified in the project area by USDA Soil Maps for Ventura County. Soils with expansion potential contain clay minerals. Native soils observed in the borings and encountered in the CPTs at the ground surface or below the artificial fill consisted of predominately coarse-grained alluvial deposits with interbedded fine-grained deposits of variable thickness and consistency. The coarse-grained deposits consisted of loose to medium dense sands, silty sands and clayey sands. The fine-grained material consisted of soft to stiff silts and clays. According to the *Geotechnical Study J Street Drainage Improvements* (2009), expansive clays were observed in three locations along the J Street Drain alignment: one along J Street between Yucca Street and Bard Road, one near the intersection of J Street and Clara Street, and a third at the proposed beach outlet. These clays exhibited relatively high plasticity indices (above 27) which can be used as an indicator of expansive soils. Therefore, a potentially significant impact is identified and mitigation is required.

Operations

Operation of the proposed project would generally occur as it does under existing conditions, but with greater drain capacity. Additionally, maintenance activities would occur generally as they do under existing conditions. Therefore, no new actions are associated with operation and maintenance of the proposed project. No impact associated with expansive soils hazard is identified.

Beach Elevation Management Plan

Implementation of the BEMP is not anticipated to result in a significant impact associated with expansive soils hazard because no structures would be constructed under the BEMP. Additionally, the primary action associated with implementation of the BEMP is grooming the sand berm at Ormond Beach Lagoon to a specified height at a pre-specified location immediately prior to a predicted storm event. Activities associated with grooming the sand berm would not be affected by the expansion potential of sand. Therefore, implementation of the BEMP would not expose people or structures to adverse effects related to expansive soils. Therefore, impacts would be less than significant.

Landslide/Mudflow Hazard

Construction

The J Street Drain project site is not anticipated to be prone to landslides or mudflow as the site is relatively flat. No impact is identified for this issue area.

Operations

Operation of the proposed project would generally occur as it does under existing conditions, but with greater drain capacity. Additionally, maintenance activities would occur generally as they do under

existing conditions. Therefore, no new actions are associated with operation and maintenance of the proposed project. No impact associated with landslide/mudflow is identified.

Beach Elevation Management Plan

Implementation of the BEMP is not anticipated to result in a significant impact associated with landslide/mudflow because the BEMP access route and sand berm location are relatively flat. Therefore, no impacts would result.

Seiche Hazard

Construction

According to the Ventura County *Initial Study Assessment Guidelines*, areas subject to seiche hazards are those located within 10 to 20 feet of vertical elevation from an enclosed body of water such as a lake or reservoir. The height of hazard above the water level is dependent on the ground motion intensity, duration of shaking, and subsurface topography of the lake or reservoir and surface topography of the shoreline. There are no enclosed lakes or reservoirs within 10 feet vertical elevation from the project study area. Therefore, no impact is associated with seiche.

Operation

Operation of the proposed project would generally occur as it does under existing conditions, but with greater drain capacity. Additionally, maintenance activities would occur generally as they do under existing conditions. Therefore, no new actions are associated with operation and maintenance of the proposed project. No impact associated with seiche is identified.

Beach Elevation Management Plan

Implementation of the BEMP would not result in a significant impact related to seiche because no lakes or reservoirs are located near the BEMP access route or approximate grooming location. No impact is identified.

Tsunami Hazard

Construction

According to Figure IX-3, Flooding and Tsunami/Seiche Potential, of the City of Oxnard General Plan Safety Element, the proposed project is located in an area subject to tsunami (1984). However, in 2006 the Ventura County Sheriff's Office of Emergency Services prepared the Ventura County Operational Area Tsunami Evacuation Plan with input from the cities of Oxnard, Port Hueneme, Ventura, and other agencies and jurisdictions. If risk of a tsunami hazard within the project area is identified, the proposed project would comply with the stipulations of the Ventura County Operational Area Tsunami Evacuation Plan. By complying with this plan, impacts associated with tsunami would be less than significant.

Operation

Operation of the proposed project would generally occur as it does under existing conditions, but with greater drain capacity. Additionally, maintenance activities would occur generally as they do under existing conditions. Therefore, no new actions are associated with operation and maintenance of the proposed project. No impact associated with tsunami is identified.

Beach Elevation Management Plan

Implementation of the BEMP is not anticipated to expose people or structures to a tsunami hazard. If a tsunami warning is issued, the BEMP would not be implemented since beach areas would be evacuated (Ventura County Sheriff's Office of Emergency Services 2006). By complying with the stipulations of the Ventura County Operational Area Tsunami Evacuation Plan, a less than significant impact related to tsunami would occur.

Substantial Soil Erosion or the Loss of Topsoil

Construction

Construction of the proposed project would require excavation of the existing drain which would result in disturbance of soils and subsequent exposure to wind and water erosion. The proposed development would require groundwater dewatering, demolition of existing concrete lining, removal and stockpiling of soils onsite, and the construction of the new, higher capacity drain. Prior to the replacement of concrete lining within the drain, project excavation would expose soil to erosion by wind or water. Additionally, construction of the proposed drain may result in erosion or sedimentation related to exposed soils and sediment removal and dewatering discharges may cause erosion at the discharge point.

Earth-disturbing activities associated with construction would be temporary and would not result in a permanent or significant alteration of significant natural topographic features that could exacerbate erosion. Specific erosion impacts would depend largely on the areas affected and the length of time soils are subject to conditions that would be affected by erosion processes. Although the potential for erosion would be limited, exposure of soil to wind and water during construction would still occur. During construction, erosion potential would be minimized by following the recommendations regarding erosion potential outlined in the *Geotechnical Study J Street Drainage Improvements* (2009). However, these recommendations would not fully avoid potential impacts associated with erosion. Therefore, impacts associated with short-term exposure of graded soils and sedimentation are considered significant and require mitigation.

Operations

The operation of the project will not result in soil erosion or the loss of topsoil because the project would be completely covered in concrete. Therefore, no impact is anticipated.

Beach Elevation Management Plan

The primary action associated with implementation of the BEMP is grooming the sand berm at Ormond Beach Lagoon to a specified height at a pre-specified location immediately prior to a predicted storm event. Grooming of the sand berm is not anticipated to result in sand erosion, as the sand will be smoothly redistributed on Ormond Beach, not removed. Therefore, implementation of the BEMP would not result in substantial soil erosion or loss of topsoil. Impacts would be less than significant.

Have soils incapable of adequately supporting the use of septic tanks or alternative water disposal system where sewers are not available for the disposal of waste water?

The proposed J Street Drain project does not propose the use of septic tanks or alternative waste disposal methods. No impact is identified.

4.7.5 Cumulative Impacts

Fault Rupture Hazard

Construction

Construction of the proposed project would not result in a project-level significant impact associated with fault rupture because it is not located within an Alquist-Priolo Earthquake Fault Zone or Ventura County designated Fault Hazard Area. The nearest fault is located approximately one mile away. Therefore, construction of the proposed project would not contribute to a cumulative impact related to exposure of people or structures to fault rupture hazard. A less than significant cumulative impact is identified.

Operations

Operation of the proposed project would not result in a project-level impact associated with fault rupture hazard and, therefore, would not contribute to any cumulative impact. Cumulative impacts would not occur.

Beach Elevation Management Plan

Implementation of the BEMP would require temporary activities associated with periodic grooming of the sand berm at Ormond Beach Lagoon. Implementation of the BEMP would not place people or structures on an active fault or within an Alquist-Priolo Earthquake Fault Zone or Ventura County designated Fault Hazard Area. Therefore, the BEMP would not substantially contribute to a significant cumulative impact related to exposure of people or structures to fault rupture. A less than significant cumulative impact is identified.

Ground Shaking Hazard

Construction, Operations, and Beach Elevation Management Plan

The Ventura County Initial Study Assessment Guidelines state that hazards from ground shaking will affect each project individually, and no cumulative ground shaking hazard would occur as a result of other approved, proposed, or probable projects. Therefore, the project will not cause a cumulative ground shaking impact during construction, operation, or implementation of the BEMP.

Liquefaction

Construction, Operations, and Beach Elevation Management Plan

The Ventura County Initial Study Assessment Guidelines state that hazards from liquefaction will affect each project individually, and no cumulative liquefaction hazard would occur as a result of other approved, proposed, or probable projects. Therefore, the project will not cause a cumulative liquefaction impact during construction, operation, or implementation of the BEMP.

Subsidence Hazard

Construction, Operations, and Beach Elevation Management Plan

The Ventura County Initial Study Assessment Guidelines state that hazards from subsidence will affect each project individually, and no cumulative subsidence hazard would occur as a result of other approved, proposed, or probable projects. Therefore, the project will not cause a cumulative subsidence impact during construction, operation, or implementation of the BEMP.

Expansive Soils Hazards

Construction, Operations, and Beach Elevation Management Plan

The Ventura County Initial Study Assessment Guidelines state that hazards from expansive soils will affect each project individually, and no cumulative expansive soils hazard would occur as a result of other approved, proposed, or probable projects. Therefore, the project will not cause a cumulative expansive soils impact during construction, operation, or implementation of the BEMP.

Landslide/Mudflow Hazard

Construction, Operations, and Beach Elevation Management Plan

The Ventura County Initial Study Assessment Guidelines state that hazards from landslides/mudflows will affect each project individually, and no cumulative landslide/mudflow hazard would occur as a result of other approved, proposed, or probable projects. Therefore, the project will not cause a cumulative landslide/mudflow impact during construction, operation, or implementation of the BEMP.

Seiche Hazard

Construction, Operations, and Beach Elevation Management Plan

The Ventura County Initial Study Assessment Guidelines state that seiche hazards will affect each project individually, and no cumulative seiche hazard would occur as a result of other approved, proposed, or probable projects. Therefore, the project will not cause a cumulative seiche impact during construction, operation, or implementation of the BEMP.

Tsunami Hazard

Construction, Operations, and Beach Elevation Management Plan

The Ventura County Initial Study Assessment Guidelines state that tsunami hazards will affect each project individually, and no cumulative tsunami hazard would occur as a result of other approved, proposed, or probable projects. Therefore, the project will not cause a cumulative tsunami impact during construction, operation, or implementation of the BEMP.

Substantial Soil Erosion or Loss of Topsoil

Construction

Earth-disturbing activities associated with construction would be temporary and would not result in a permanent or significant alteration of significant natural topographic features that could increase or exacerbate erosion. In addition, cumulative projects in the vicinity of the J Street Drain would not be constructed concurrently with the proposed project. Therefore, construction of the proposed project would not substantially contribute to a cumulative impact related to soil erosion or loss of topsoil. Cumulative impacts would be less than significant.

Operations

Operation of the proposed project would occur in accordance with Best Management Practices (BMPs) listed in the District's Final Program EIR for Environmental Protection Measures for the Ongoing Routine Operations and Maintenance Program (see Section 4.7.6.1). Therefore, operations would not result in a project-level impact associated with soil erosion or the loss of topsoil and, therefore, would not contribute to any cumulative impact. Cumulative impacts would not occur.

Beach Elevation Management Plan

Implementation of the BEMP would not result in substantial soil erosion or loss of topsoil since the periodic grooming activities would smoothly redistribute the sand on Ormond Beach, not remove it. Implementation of the BEMP would not substantially contribute to a cumulative impact related to soil erosion or loss of topsoil. Cumulative impacts would be less than significant.

Have soils incapable of adequately supporting the use of septic tanks or alternative water disposal system where sewers are not available for the disposal of waste water?

The proposed J Street Drain project does not propose the use of septic tanks or alternative waste disposal methods. No cumulative impact is identified.

4.7.6 Mitigation Measures

As discussed in Section 4.3, Water Resources and Hydraulic Hazards, prior to the start of construction, a construction Stormwater Pollution Prevention Plan (SWPPP) will be prepared that describes the site, erosion and sediment controls, runoff water quality monitoring, means of waste disposal, control of post-construction sediment and erosion control measures and maintenance responsibilities, and non-stormwater management controls.

GEO-1 Erosion and Sediment Control

In order to mitigate potential soil erosion and loss of topsoil from excavation, the construction SWPPP shall incorporate, but not be limited to, the following measures, as appropriate, to minimize erosion:

- Excavation and grading shall be restricted to the dry season (April 15 to October 15) unless an erosion control plan is in place and all measures therein are in effect.

- Best Management Practices (BMPs) will be employed to control erosion, including temporary siltation protection devices such as silt fencing, straw bales, and sand bags. These shall be placed at the base of all cut and fill slopes and soil stockpile areas where potential erosion may occur.
- Refer to Section 4.3, Water Resources and Hydraulic Hazards, for additional requirements related to stormwater and non-stormwater pollution prevention and control.

GEO-2 Seismic Related Ground Failure and Expansive Soils

The proposed project shall comply with all pertinent recommendations set forth in the Preliminary Geologic Geotechnical Investigation (Appendix F) to reduce the risk of hazards associated with seismic-related ground failure and expansive soils along the J Street Drain. These recommendations address the following:

- Site preparation
- Excavation – stabilization measures, dewatering procedure, and shoring
- Fill Material and General Fill Placement
- Channel Foundation Design

- GEO-3**
- A Licensed Surveyor shall plan and install a survey monument monitoring system on buildings within 25 feet of proposed vertical shoring to collect monthly baseline data for six months before construction. The monuments shall remain in place and be monitored monthly for one year after construction completion to track any latent changes. During construction, the Licensed Surveyor shall conduct surveys corresponding to major phases of work such as shoring installation, excavation, and backfill.
 - Before Phase 1 construction may begin, the District shall require the Contractor to prepare a Work Plan, which would take into account all available geotechnical information for the areas where vertical shoring and sheet piles are to be installed. The Plan would specify the contractor's approach to installing vertical shoring and sheet piles in a manner that would avoid and minimize associated potential vibration damage to adjacent structures.
 - The Work Plan shall require the Contractor to take daily measurements of the survey monuments on adjacent structures described in (a) above to track potential changes during construction.
 - Should the surveys or measurements described in (a) and (c) above indicate subsidence or other damage due to construction activities, the Contractor shall modify the Work Plan to address the causes. Property owners within 25 feet of the proposed shoring shall be promptly notified of observed damage, and any Work Plan revisions shall be available to property owners upon request. For multi-unit structures, the District shall identify a single designated representative with whom to communicate.
 - The District shall provide a construction contact telephone number to adjacent residents before work commences so that they may report possible observations of damage immediately to the District.

4.7.6.1 *Ventura County Watershed Protection District Best Management Practices*

The Ventura County Board of Supervisors adopted the District's Final Program EIR for Environmental Protection Measures for the Ongoing Routine Operations and Maintenance Program Project No. 80030 in May 2008. The final document includes BMPs that have been added to the District's Maintenance Activity Guidelines. The Operation and Maintenance Division staff will be responsible for ensuring the proper implementation of the BMPs on a routine, year-round basis. The Division staff will also be responsible for ensuring compliance with all permit conditions, conducting or employing qualified personnel for any required pre-project site surveys or inspections, updating the Activity Guidelines sheets, instructing crews on BMPs, overseeing certain BMP implementation, documenting the implementation of the BMPs, and conducting any agency coordination.

The following BMPs will be implemented to minimize impacts during operation:

- **Avoid Channel Work During the Rainy Season.** Routine maintenance and repair activities in earthen channels and in channels with soft bottoms and bank protection shall not occur during the rainy season, 1 December to 1 April, to avoid work when water could be present in the drainage due to runoff. Routine maintenance and repair activities may occur during this period if water is absent from the drainage because of low runoff conditions, or activities can be performed without working in flowing water. Work in flowing water during this period may proceed if there are no feasible alternatives and completion of the maintenance work during this time period is critical. Work in flowing water shall be conducted according to the BMPs established in the Water Diversion Guide attached as Appendix E to this EIR.
- **Location of Temporary Stockpiles.** Temporary stockpiles outside the channels or debris basins shall be stabilized by compacting or other measures if present at the work site from 1 December to 1 April. Silt fences, berms, or other methods shall be used to prevent sediments from being eroded from the temporary stockpile into the adjacent drainage. Temporary stockpiles may be placed in channel bottoms or debris basins if they are located on barren soil or areas with non-native weeds, and are not placed in such a manner that they would be exposed to flowing water. No temporary stockpiles shall be placed on the channel bed or banks during the period of 1 December to 1 April for more than the duration of the sediment removal work. Permanent stockpiles shall be located landward of the 100-year floodplain to the maximum extent feasible.
- **Avoid Road Base Discharge.** The District shall implement measures to prevent the discharge of road base, fill, sediments, and asphalt beyond a previously established road bed when working adjacent to channels and basin bottoms.
- **Concrete Wash-Out Protocols.** The District shall implement appropriate waste management practices during on site concrete repair operations. Waste management practices will be applied to the stockpiling of concrete, curing and finishing of concrete as well as to concrete wash-out operations. Waste management practices shall be adequate to ensure that fluids associated with the curing, finishing and wash-out of concrete shall not be discharged to the channel or basin. Concrete wastes shall be stockpiled separately from sediment and protected by erosion control measures so that concrete dust and debris are not discharged to the channel or basin. The District shall determine the appropriate waste management practices based on considerations of flow velocities, site conditions, availability of erosion control materials and construction costs.

4.7.7 Significance After Mitigation

With incorporation of the identified mitigation measures, impacts will be less than significant.

4.7.8 Response to Notice of Preparation Comments

During the Notice of Preparation (NOP) comment period, the County of Ventura Public Works Agency, Water Resources and Engineering Department sent a comment letter requesting that each seismic and geologic hazard identified in the Initial Study be evaluated in the EIR. In response, the *Geotechnical Study J Street Drainage Improvements* was prepared for the proposed project and is included as Appendix F of this EIR. The *Geotechnical Study J Street Drainage Improvements* was completed in accordance with Ventura County standards and CEQA Guidelines. This includes a subsurface exploration program to obtain geotechnical data and provide recommendations for project construction and channel foundation design. Per the Geotechnical Study, mitigation measure GEO-2 was proposed to mitigate project impacts associated with geology and soils.

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4.8 HAZARDOUS MATERIALS AND WASTES

This section focuses on hazardous materials and wastes that may be present in the proposed J Street Drain Project. The potential hazards are described by location and type. Additionally, the following documents were used in the preparation of this section:

EDR DataMap Corridor Study, J Street Drain Project, Oxnard, CA 93033. Prepared by Environmental Data Resources, Inc. May 2, 2008 (Appendix G of this EIR).

Groundwater Modeling Summary for the J Street Drainage Improvement Project, Oxnard, California *Hydrogeology Study Summary: J Street Drainage Improvement Project, Oxnard, California.* MU Hydrogeological and Environmental Services. ~~September~~ December 2011 (Appendix K of this EIR).

Solid Matrix Sampling and Analysis Results for the Oxnard Industrial Drain and Lagoon Areas, Halaco Superfund Site Remedial Investigation, Oxnard, California. Prepared for the U.S. Environmental Protection Agency Region 9 by CH2M Hill. June 2011. (<http://yosemite.epa.gov/r9/sfund/r9sfdocw.nsf/BySite/Halaco?OpenDocument#progress>)

4.8.1 Environmental Setting

The area immediately adjacent to the J Street Drain is residential with some commercial development near Hueneme Road and the City of Oxnard Waste Water Treatment Plant south of Hueneme Road. Prior to residential development the area was under agricultural use. As the area developed, J Street Drain was excavated from the agricultural fields to provide drainage for the local area because there was no natural channel in the area. The area is now fully developed with the previously mentioned residential, commercial, and waste water treatment development. The local topography is relatively flat and approximately 10-20 feet above mean sea level (AMSL).

4.8.1.1 Existing Conditions

Approximately 0.25 miles to the east of the southern end of the J Street Drain is a recently designated Superfund site identified as the Halaco site. The Halaco site is located at 6200 Perkins Road, Oxnard, California. The Halaco facility abuts the Ormond Beach wetlands and is in proximity to the Ormond Beach Lagoon, Ormond Beach, and the Pacific Ocean. In January 2007, the State of California issued a letter supporting the addition of the Halaco Site to the Superfund National Priorities List (NPL). This site was proposed for the Environmental Protection Agency (EPA) Region 9 NPL on March 07, 2007, and listed as final on the NPL on September 19, 2007. Currently, study and remedy selection for this Superfund site is underway. The site is an abandoned secondary metal smelter bisected by the Oxnard Industrial Drain (OID), located over 1,000 feet from the J Street Drain project site. The site includes an 11-acre parcel containing the former smelter and an adjacent 26-acre waste management area where wastes were deposited. Immediately adjacent to the site lays a portion of the Ormond Beach wetlands. Halaco Engineering Company operated in Oxnard from 1965 until 2004. During their 40 years of operation, Halaco produced a large quantity of waste. The primary wastes were metal oxides, metal salts, and other materials that were skimmed off the top of the molten metal or that settled to the bottom during the smelting process (i.e., slag or dross). From about 1965 to 1970, Halaco discharged waste to the OID, which empties into the Ormond Beach Lagoon. From about 1970 to 2002, Halaco deposited wastes into unlined earthen settling ponds east of the smelter (the waste management area). An estimated 500,000 to

4.8 Hazardous Materials and Wastes

700,000 cubic yards of waste remain onsite. In 2002, Halaco filed for Chapter 11 bankruptcy. In 2006, after Halaco ceased operations, the bankruptcy was converted to a Chapter 7 (liquidation) bankruptcy.

Sampling conducted by the State of California and U.S. EPA from 1970 to 2004 found contamination sources on the smelter property and the waste disposal parcel. The smelter parcel has an estimated 50,000 cubic yards of process waste, and a larger amount of waste from a municipal dump that operated on what is now the smelter parcel in the 1940s and 1950s (Personal Communication, Wayne Praskins, Project Manager, EPA Superfund Program, August 2011). A surface impoundment and waste disposal pile are located on the waste disposal parcel, which together likely contain over 500,000 cubic yards of waste. Contamination found onsite includes a combination of several metals and radionuclides significantly above background. These contaminants include aluminum, arsenic, barium, beryllium, cadmium, chromium, copper, lead, magnesium, manganese, nickel, silver, zinc, thorium-228, thorium-230, and thorium-232. The EPA did not find elevated levels of cesium-137 in testing completed in 2006. Additionally, the EPA does not generally consider potassium-40 as a contaminant since it is naturally occurring (Praskins 2011). Contaminated soils and sediments containing one or more of the same metals and radionuclides have also been found on adjacent properties, including a nature preserve, and wetlands. The EPA has not found evidence of Halaco wastes on the beach (Praskins 2011).

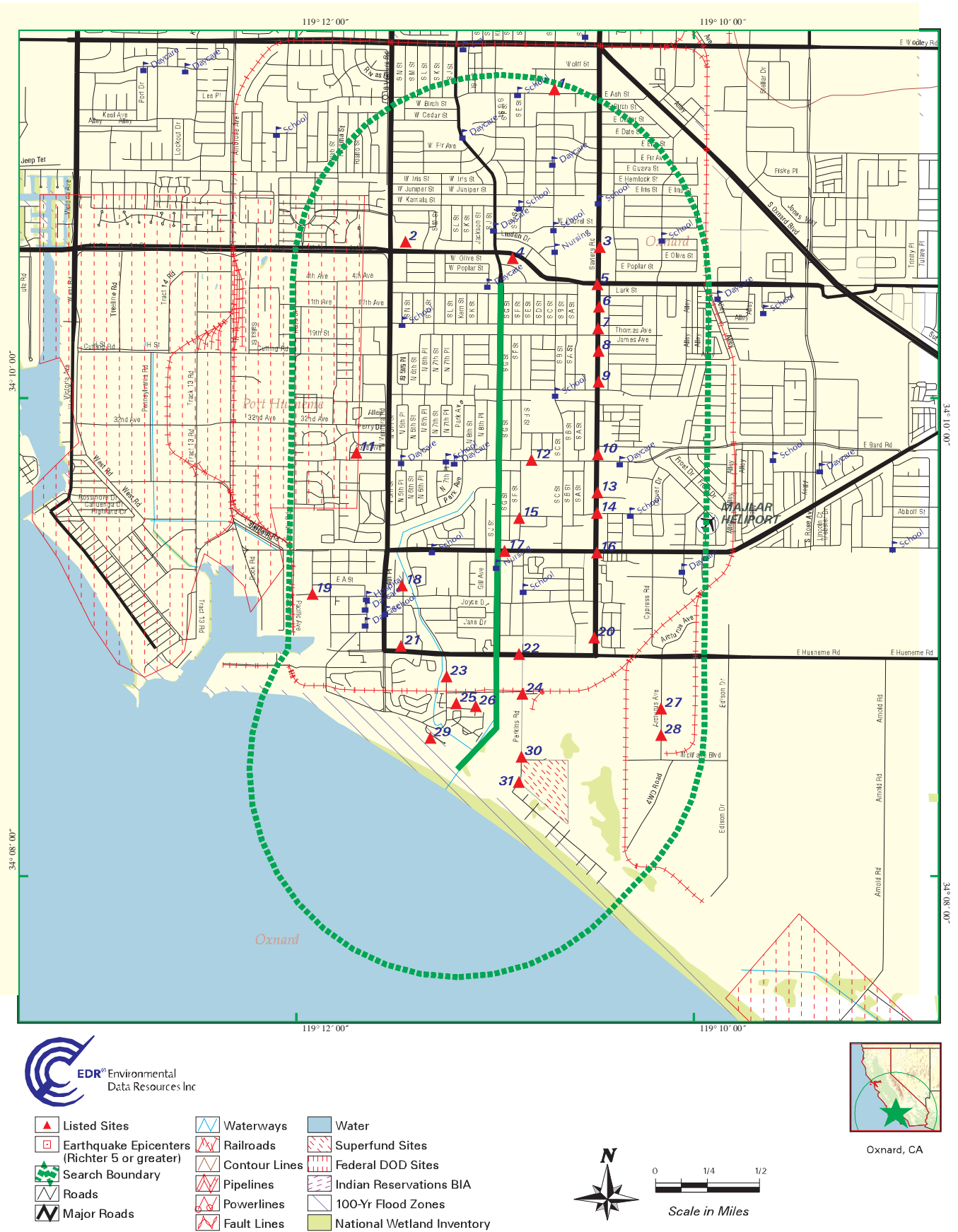
In February 2006, the State of California requested that the U.S. EPA conduct a “removal action” at the Halaco site. In July of 2006, the U.S. EPA reached an agreement with site owners to conduct a “time-critical removal action” to remove drums and other hazardous substances, fence the waste pile, and install a silt curtain and straw wattles. In February of 2007, the EPA began working to stabilize and secure the site and limit offsite migration of contaminated wastes (DTSC 2007) and in 2010, they demolished two abandoned industrial buildings that were at risk of collapse. The Halaco site is separated from the proposed project by the Oxnard Wastewater Treatment Plant and wetlands. Between 2008 and 2011, the EPA completed a screening-level ecological and human health risk assessment, prepared a preliminary evaluation of the sources, nature, extent, and movement of contamination in surface and ground water, and prepared and implemented a plan for additional sampling and analysis activities needed before site remediation can occur (EPA 2011).

Oil and Gas Facilities in the Project Vicinity

There are oil and gas extraction, processing, and treatment facilities located in and around the City of Oxnard. Potential concerns to public health and safety associated with these types of facilities are releases of hazardous materials, including flammable, explosive, and toxic materials. No active oil wells were identified within one mile of the project site.

Hazardous Materials

A Corridor Study dated May 02, 2008 was prepared by Environmental Data Resources, Inc (EDR). The report includes environmental database information, a scaled map showing the location of all identified potential sources of contamination, and information from state and federal databases for sites that may impact the project. According to the Corridor Study, the proposed project alignment does not run through any hazardous materials sites. However, as shown in Figure 4.8-1, several hazardous waste sites are in proximity to the proposed project site. A summary of these sites is included in Table 4.8-1. As shown, although hazardous material sites are located in proximity to the proposed project alignment, these sites do not pose a substantial hazard risk.



Hazardous Materials Sites FIGURE 4.8-1

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4.8 Hazardous Materials and Wastes

Table 4.8-1. Summary of Hazardous Materials Sites Near Proposed Project

Site Number	Site	Distance from J Street Drain	Summary	Associated Hazard Risk
4	Manhole	0.13 mile	Potential to impact drinking water.	Unsubstantial because site is not connected to J Street Drain.
12	Hueneme High School	0.15 mile	Generates a small quantity of hazardous wastes.	Unsubstantial because no violations were found.
15	Los Padres National Forest	0.10 mile	Underground storage tank.	Unsubstantial because no leaks were identified.
17	Chase Brothers Dairy	0.02 mile	Historical underground storage tank. Leak visually identified, but no substantial risk was identified.	Unsubstantial because leak has been cleaned up and storage tank has been replaced.
22	AMSEC	0.10 mile	Generates a small quantity of hazardous wastes. Historical leaking underground storage tanks have since undergone remediation and cases have been closed.	Unsubstantial because no violations were found, remediation has occurred, and case is closed.
24	Oxnard Wastewater Treatment Plant	0.10 mile	Historical leaking underground storage tank affected groundwater. Contaminated soil was removed and disposed of appropriately; however case was only partially closed because other contamination likely associated with the Halaco site was found.	Unsubstantial because contaminated soil was removed and Halaco site is undergoing remediation.
25	Pac Foundries	0.18 mile	Generates a small quantity of hazardous wastes.	Unsubstantial because no violations were found.
26	B & C Welding	0.10 mile	Leaking underground storage tank. Contaminated soil was removed and disposed of appropriately and case was closed in 1991.	Unsubstantial because remediation has occurred and case was closed in 1991.
29	Port Hueneme South Coast Defense Site	0.20 mile	Former work site of United States Army Corps of Engineers (USACE). Inactive since 2006.	Unsubstantial because no contamination was found and site is now inactive.
30-32	Halaco Engineering Company	0.25 mile	See above (Section 4.8.1.1).	Moderate because mitigation is required in order to prevent the potential movement of the contamination plume from migrating. See mitigation measure HAZ-1 below.

Source: Environmental Data Resources (May 2008)

Adjacency to Schools

There are five schools located within 0.25 mile of the project site. The five schools include: E.O. Green Junior High School, located approximately 0.2 mile east of the intersection of J Street and Yucca Street; Parkview Elementary School, located approximately 0.25 mile west of the intersection of J Street and Bard Street; Hueneme High School, located approximately 0.15 mile east of the intersection of J Street and Bard Street; Richard Bard Kindergarten School, located approximately 0.22 mile west of the intersection of J Street and Pleasant Valley Road; and Art Haycox Elementary School, located approximately 0.10 mile east of the intersection of J Street and Clara Street. Additionally, there is a day care center, Our Saviour's Preschool and Day Care Center, that is located approximately 0.08 mile west of the northern terminus of the proposed project.

Adjacency to Airports

The airport nearest to the project site is the Oxnard Airport, located approximately 2.18 miles northwest of the northern terminus of the proposed project. The runway is parallel to 5th Street, and runs in an east/west direction.

Emergency Plans

As identified in the City of Oxnard's General Plan Public Safety Element, the City has adopted an Emergency Plan (EP) to meet the requirements of the California Emergency Services Act of 1951 (Section 8550 et seq., Government Code). The City's EP identifies the evacuation routes, emergency facilities, and City personnel and equipment available to deal with emergency situations. While the EP is the authority for emergency actions within the City by City officials, it recognizes and supports the general concepts contained within the State of California Emergency Plan.

Wildland Fires

The project area is located within a fully developed area of the City of Oxnard, near the Pacific Ocean. The border of the City of Port Hueneme is close by, and that portion of the City is also fully developed. Because of the developed nature of this area, there are no identified plans for preventing wildland fires in this area.

4.8.2 Regulatory Setting

The term hazardous substance refers to both hazardous materials and hazardous wastes. A material is defined as hazardous if it appears on a list of hazardous materials prepared by a federal, state, or local regulatory agency or if it has characteristics defined as hazardous by such an agency.

The California Environmental Protection Agency, Department of Toxic Substances Control (Cal-EPA, DTSC) defines hazardous waste, as found in the California Health and Safety Code Section 25141(b), as follows:

[...] its quantity, concentration, or physical, chemical, or infectious characteristics:
(1) cause, or significantly contribute to an increase in mortality or an increase in serious irreversible, or incapacitating reversible illness; (2) pose a substantial present or potential hazard to human health or the environment, due to factors including, but not limited to, carcinogenicity, acute toxicity, chronic toxicity, bioaccumulative properties, or

persistence in the environment, when improperly treated, stored, transported, or disposed of, or otherwise managed.

Many agencies regulate hazardous substances. The following discussion contains a summary review of regulatory controls pertaining to hazardous substances, including federal, State, and local laws and ordinances.

Federal Regulations

Federal agencies that regulate hazardous materials include the EPA, the Occupational Safety and Health Administration (OSHA), the Department of Transportation (DOT), and the National Institute of Health (NIH). The following federal laws and guidelines govern hazardous materials:

- Federal Water Pollution Control Act
- Clean Air Act
- Occupational Safety and Health Act
- Federal Insecticide, Fungicide, and Rodenticide Act
- Comprehensive Environmental Response, Compensation, and Liability Act
- Guidelines for Carcinogens and Biohazards
- Superfund Amendments and Reauthorization Act Title III
- Resource Conservation and Recovery Act
- Safe Drinking Water Act
- Toxic Substances Control Act

Prior to August 1992, the principal agency at the federal level regulating the generation, transport and disposal of hazardous waste was the EPA under the authority of the Resource Conservation and Recovery Act (RCRA). As of August 1, 1992, however, the California Department of Toxic Substances Control (DTSC) was authorized to implement the State's hazardous waste management program for the EPA. The federal EPA continues to regulate hazardous substances under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA).

CERCLA, commonly known as Superfund, was enacted by Congress on December 11, 1980. This law created a tax on the chemical and petroleum industries and provided broad Federal authority to respond directly to releases or threatened releases of hazardous substances that may endanger public health or the environment. CERCLA was amended by the Superfund Amendments and Reauthorization Act (SARA) on October 17, 1986.

Subsection 101(40) of CERCLA defines "bona fide prospective purchaser" (BFPP) as a person, or tenant of that person, who acquires ownership of a facility after the date of enactment of the Brownfields Amendments, January 11, 2002. A BFPP may be subject to a "windfall lien" under the CERCLA Section 107(r), up to the amount of unrecovered response costs incurred by the United States at a facility for which the owner is not liable as a BFPP, and where the response action increases the fair market value of the facility. As to the amount and duration of any windfall lien, the Brownfields Amendments state that the amount is not to exceed the increase in fair market value attributable to the response action at the time of sale or other disposition of the property. The windfall lien arises at the time response costs at the facility are incurred by the United States, and shall continue until the earlier of satisfaction of the lien by sale or other means, or, notwithstanding any statute of limitations under CERCLA Section 113, recovery of all response costs incurred at the facility.

State Regulations

The Cal-EPA and the State Water Resources Control Board (SWRCB) establish rules governing the use of hazardous materials and the management of hazardous waste. Applicable State and local laws include the following:

- Public Safety/Fire Regulations/Building Codes
- Hazardous Waste Control Law
- Hazardous Substances Information and Training Act
- Air Toxics Hot Spots and Emissions Inventory Law
- Underground Storage of Hazardous Substances Act
- Porter-Cologne Water Quality Control Act

Within Cal-EPA, DTSC has primary regulatory responsibility, with delegation of enforcement to local jurisdictions that enter into agreements with the State agency, for the management of hazardous materials and the generation, transport, and disposal of hazardous waste under the authority of the Hazardous Waste Control Law (HWCL).

Assembly Bill 387 and Senate Bill 162 provide a comprehensive program to ensure that hazardous material contamination issues are adequately addressed prior to school development. The program involves the preparation of a Phase I Environmental Site Assessment to determine whether a release of a hazardous material has occurred onsite in the past or if there may be a naturally occurring hazardous material present at the site. Based on the information gathered, the Phase I should conclude that either: (1) no recognized environmental conditions were identified, or (2) a Preliminary Endangerment Assessment (PEA) is necessary.

California Department of Conservation, Division of Oil, Gas, and Geothermal Resources (DOGGR)

DOGGR is mandated by Section 3106 of the Public Resources Code to supervise the drilling, operation, maintenance, and abandonment of oil and gas wells for the purpose of preventing: (1) damage to life, health, property, and natural resources; (2) damage to underground and surface waters suitable for irrigation or domestic use; (3) loss of oil, gas, or reservoir energy; and 4) damage to oil and gas deposits by infiltrating water and other causes. DOGGR regulations are contained in CCR Title 14.

Ventura County Environmental Health

In 1997, the Ventura County Hazardous Materials Program was approved by the Cal-EPA to be a Certified Unified Program Authority (CUPA). The CUPA provides regulatory oversight for the following programs: Hazardous Waste Generator; Hazardous Waste Generator Onsite Treatment (Tiered Permit); Underground Storage Tank; Aboveground Storage Tank Spill Prevention Control and Countermeasure Plan; Hazardous Materials Release Response Plans and Inventory (Business Plans); and Risk Management Plans. In addition to conducting annual facility inspections the Hazardous Materials Program is involved with hazardous materials emergency response, investigation of the illegal disposal of hazardous waste, public complaints, and stormwater illicit discharge inspections.

Ventura County General Plan

The following General Plan goals and policies apply to the project:

Goals

1. Minimize the risk of life, injury, serious illness, damage to property, and economic and social dislocations resulting from the use, transport, treatment and disposal of hazardous materials and hazardous wastes.
2. Locate potentially hazardous facilities and operations in areas that would not expose the public to a significant risk of injury, loss of life, or property damage.

Policies

1. Hazardous wastes and hazardous materials shall be managed in such a way that waste reduction through alternative technology is the first priority, followed by recycling and on-site treatment, with disposal as the last resort.
2. Site plans for discretionary development that will generate hazardous wastes or utilize hazardous materials shall include details on hazardous waste reduction, recycling and storage.
3. Any business that handles a hazardous material shall establish a plan for emergency response to a release or threatened release of a hazardous material. The County Fire Protection District is designated as the agency responsible for implementation of this policy.
4. Applicants shall provide a statement indicating the presence of any hazardous wastes on a site, prior to development. The applicant must demonstrate that the waste site is properly closed, or will be closed before the project is inaugurated.
5. Commercial or industrial uses which generate, store, or handle hazardous waste and/or hazardous materials shall be located in compliance with the County Hazardous Waste Management Plan's siting criteria.

4.8.3 Significance Thresholds

In accordance with the Ventura County Initial Study Assessment Guidelines and *California Environmental Quality Act (CEQA) Guidelines*, the following thresholds are addressed in determining the significance of a project in relation to hazardous materials and wastes. The Ventura County *Initial Study Assessment Guidelines* were updated in April 2011. However, the update to the thresholds for hazardous materials and wastes does not change the project-level impact analysis provided in this EIR.

Whether the hazardous material and waste impacts of a project are significant shall be decided on a case-by-case basis and depends on:

- Individual or cumulative physical hazard of material(s) or waste;
- Amounts of materials or waste on-site, either in use or storage;

4.8 Hazardous Materials and Wastes

- Proximity of hazardous materials or waste to populated areas and compatibility of materials with neighboring facilities;
- Federal, state, and local laws, and ordinances, governing storage and use of hazardous materials or waste;
- Potential for spill or release; and
- Proximity of hazardous materials or waste to receiving waters or other significant environmental resource.

The storage, handling and disposal of potentially hazardous materials shall be in conformance with the requirements set forth in the following regulations:

- Underground Storage Tanks (USTs) - California Health and Safety Code, Division 20, Chapter 6.7 and California Code of Regulations (CCR) Title 23, Division 3, Chapter 16;
- Business Plan (BP) - California Health and Safety Code, Division 20, Chapter 6.95, Article 1;
- Risk Management Plan (RMP) - California Health and Safety Code, Division 20, Chapter 6.95, Article 2;
- Certified Uniform Program Agency (CUPA) - California Health and Safety Code, Division 20, Chapter 6.11;
- Fire Code – The Fire Code adopted by the VCFPD in regards to aboveground hazardous materials. Reference California Health and Safety Code, Division 12, part 2.7.
- Enabling Legislation - CCR Title 22, Division 4.5;
- California Health and Safety Code, Division 20, Chapter 6.5; and
- Permit Requirements - Ventura County Ordinance Code, Division 4, Chapter 5 (Hazardous Substances), Article 1, (CUPA).

4.8.4 Project-Level Impact Analysis

Individual or Cumulative Physical Hazard of Material(s) or Waste

Construction

Construction activities could involve the use, transport, and disposal of hazardous substances such as diesel fuel, gasoline, equipment fluids, concrete, cleaning solutions and solvents, lubricant oils, adhesives, human waste, and chemical toilets. These materials and waste have the potential to be toxic and may pollute, poison, or degrade environmental resources in the project area. However, extensive safety procedures and measures required by federal, state, and local laws protect worker health and safety and the environment to the maximum extent possible. Compliance with all applicable regulations involving the use, transport, and disposal of hazardous substances would minimize the risk of an accidental release of hazardous materials during construction. Other known hazardous substances and toxic emissions are controlled by existing rules and regulations regarding lead-based paint, polychlorinated biphenyls, and contaminated soils. Mandatory compliance with these required procedures would ensure a less than significant impact related to the removal of these materials during construction.

4.8 Hazardous Materials and Wastes

The project will require the placement of dewatering wells approximately 15 to 20 feet deep, along the work area of the J Street Drain. These wells will be installed and removed as construction moves upstream. Once installed, these wells will be attached to temporary pumps to extract the water (i.e., dewatering) for discharge into the Perkins Drain. Because portions of the channel are located close to the Pacific shoreline, the dewatering will require pumping so that the water table is lowered to approximately mean sea level and below, in order to accommodate construction of the improvements to the channel. Based on timetables established for the project, it is anticipated that dewatering along the lower reach of the channel would endure for a period of approximately two to four months.

The nearby Halaco Superfund Site, located approximately 1,500 feet east of the southern portion of the J Street Drain, overlies a groundwater plume impacted primarily by Halaco metals. Currently, the natural direction of groundwater movement beneath the western portion of the Halaco Site (i.e., closest to the J Street Drain) is toward ~~the shoreline~~ McWane Boulevard (i.e., ~~southwest northward~~) ~~with ultimate discharge into the Pacific Ocean~~. The entrainment of metals in groundwater nearest the J Street Drain project area is considered potentially problematic, in that the contaminated plume could be encountered during construction activity, in which case treatment of the extracted groundwater would be required prior to discharge into the Perkins Drain. A groundwater modeling study was performed to address this potential problem.

The numerical model of the groundwater system beneath the J Street Channel was used to evaluate potential impacts to groundwater in response to dewatering that will be necessary to construct the drain, particularly with regards to whether metal contaminants in groundwater may migrate toward the channel and possibly enter into the dewatering stream. The numerical model of the groundwater system beneath the J Street Channel area demonstrates that a drain, possibly the sewer line beneath McWane Boulevard and Perkins Road, in combination with elevated surface water in the Ormond Beach Lagoon and the OID have significant effects on groundwater elevations and migration in the area with groundwater flow identified in the direction of McWane Boulevard and Perkins Road. The simulations demonstrate that it is unlikely for dewatering to draw groundwater from beneath the Halaco Site toward the J Street Drain under current conditions. However, should the existing northward drain effect on groundwater cease, the dewatering effort may cause migration of potentially impacted groundwater from beneath the Halaco Site up to 50 feet toward the J Street Drain (based on refined hydraulic conductivity determined during field testing in November 2011). A potentially significant impact is identified. Injection of water into the shallow aquifer through five wells located in the beach parking area between the J Street Drain and the Halaco Site can be utilized to mitigate potential migration of groundwater from beneath the Halaco Site. The monitoring of water levels within selected monitoring wells in the vicinity of the Halaco Site can be utilized before and during Phase 1 dewatering to assess whether groundwater continues to move toward a northern “drain,” and during dewatering to identify if migration of groundwater from the Halaco Site toward the J Street Drain is occurring. Mitigation Measure HAZ-1 would reduce potentially significant impacts to a less than significant level.

As a result of the numerical groundwater model, it is expected that dewatering will pull contaminated groundwater toward the line of pumping wells that will be placed along the channel for dewatering purposes. However, the maximum expected distance of migration from the Halaco Site in response to proposed construction dewatering is approximately 300 feet, or less than one-fifth of the distance between the Halaco Site and the channel. A distance of half the maximum (or 150 feet) is more realistic given the conservative assumptions used in the model (specifically the use of a high hydraulic conductivity in the ‘maximum’ scenario). Regardless of the actual distance that contaminated groundwater may flow in the direction of the channel, the cessation of dewatering is expected to halt migration of impacted groundwater toward the channel. In this situation, with removal of the artificial gradient induced by the pumps, the groundwater will resume the natural gradient toward the Pacific shoreline where its ultimate

4.8 Hazardous Materials and Wastes

discharge will occur with considerable dilution as it discharges slowly in contact with surrounding oceanic water. Dewatering at the site would result in a temporary impact with regards to the potential migration of heavy metals within the groundwater plume from the Halaco site. This is considered a significant impact and mitigation is required.

Mitigation measure HAZ-1 requires the use of sheet piling during construction to address this impact. Through numerical modeling, the use of sheet piling was demonstrated to isolate groundwater from the Halaco Site and prevent migration of groundwater toward the channel. In addition, the use of sheet piling will reduce the overall volume of water required to be withdrawn in order to construct the channel.

As noted in the project description, the discharged water will be tested, and treated if necessary, prior to placement into Perkins Drain, as required by the project NPDES permit for groundwater dewatering.

Operation

Operation of the proposed project would occur as it does under existing conditions and would not require the use or result in production of greater quantities of hazardous materials or waste than under existing conditions. Maintenance activities associated with operation of the proposed project would also occur as they do under existing conditions and would involve sediment removal and vegetation control. These activities typically involve the use of minor quantities of hazardous materials to power an excavator or truck. However, since no new actions are proposed, no new impact would result. In addition, groundwater pumping would not occur during operation. Although the J Street Drain would be enlarged to contain the 100-year storm, this increased volume of water would not come into contact with the Halaco Superfund site, as the lagoon would breach and thus storm runoff would discharge directly to the ocean under much smaller flow conditions, such as a 2-year storm. Therefore, operation of the proposed project is not anticipated to result in an individual or cumulative physical hazard of materials or waste. A less than significant impact is identified.

Beach Elevation Management Plan

Implementation of the Beach Elevation Management Plan (BEMP) would require minimal use of hazardous materials and may generate minimal quantities of hazardous waste. Specifically, operation of beach grooming equipment (i.e., bulldozers) would require the use of hazardous substances such as diesel fuel, gasoline, equipment fluids, and/or lubricant oils. However, extensive safety procedures and measures required by federal, state, and local laws regulate the use of these materials and protect worker health and the environment to the maximum extent possible. Compliance with all applicable regulations would minimize the risk of an accidental release of hazardous materials or waste during implementation of the BEMP. Therefore, a less than significant impact is anticipated.

Amounts of Materials or Waste On-site, Either in Use or Storage

Construction

As identified above, construction of the proposed project could require the transport, use, and disposal of potentially hazardous materials and may generate minimal quantities of waste. However, the proposed project is required to comply with existing federal, state, and local regulations related to the transport, use, disposal, and storage of these materials and waste. Additionally, construction of the proposed project would be done in phases and construction materials would be transported to the project site on an as-needed basis. Materials would be located on-site temporarily and would not be stored for long-term use. Therefore, it is not anticipated that the amount of hazardous materials required for construction of the

proposed project would pose a risk to workers or the environment. Impacts would be less than significant.

Operation

Operation of the proposed project would occur generally as it does under existing conditions, but with greater drain capacity. Additionally, maintenance activities would occur as they do under existing conditions and no new impacts would result. Operation and maintenance of the proposed project are not anticipated to require the use or production of greater quantities of hazardous materials than are currently used. Also, since no new actions are proposed, no new impact would result. Therefore, impacts would be less than significant.

Beach Elevation Management Plan

Implementation of the BEMP would require minimal use of hazardous substances such as diesel fuel, gasoline, equipment fluids, and/or lubricant oils and may generate minimal quantities of hazardous waste. However, extensive safety procedures and measures required by federal, state, and local laws regulate the use of these materials and protect worker health and the environment to the maximum extent possible. Additionally, federal, state, and local safety procedures and measures are in place for the handling and disposal of any hazardous wastes. Compliance with all applicable regulations would minimize the risk of an accidental release of hazardous materials during implementation of the BEMP. Therefore, a less than significant impact is anticipated.

Proximity of Hazardous Materials or Waste to Populated Areas and Compatibility of Materials with Neighboring Facilities

Construction

Five schools and one preschool/day care center are located within 0.25 mile of the proposed project site. This includes E.O. Green Junior High School, Parkview Elementary School, Hueneme High School, Richard Bard Kindergarten School, Art Haycox Elementary School, and Our Saviour's Preschool and Day Care Center. Additionally, the proposed project alignment runs immediately adjacent to single- and multi-family residences.

Hazardous materials and wastes associated with construction of the proposed project includes diesel fuel, gasoline, equipment fluids, concrete, cleaning solutions and solvents, lubricant oils, adhesives, human wastes, and chemical toilets. These materials are often encountered in daily life. Potentially hazardous construction materials would be kept within the project site and would not be present in substantial amounts. Additionally, as identified above, existing federal, state, and local regulations would prevent significant impacts associated with the use, transport, and disposal of hazardous materials and waste. Further, construction of the proposed project would not require the use or production of any material or waste not typically required for construction activities. Therefore, although construction materials and waste have the potential to be hazardous, the associated risks are not unusual for construction activities. These materials are not anticipated to impact any populated areas or neighboring facilities.

Pursuant to CEQA, a project would result in a significant hazardous materials impact if it would be located on a site included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5. According to the EDR Datamap Corridor Study prepared for the proposed project, the project site is not included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5. However, some hazardous materials sites were identified within proximity to the proposed project site. As identified above in Table 4.8-1, these hazardous materials sites do not pose a

4.8 Hazardous Materials and Wastes

substantial hazard risk to the proposed project. None of the sites are currently identified by the DTSC as active sites, with the exception of the Halaco site. Between 2007 and 2011 the Halaco site underwent investigation to determine the extent of contamination in accordance with EPA regulations and requirements (DTSC 2008, EPA 2011).

As discussed above, if groundwater movement were to change either before or during Phase 1 dewatering from its current northward direction to a southward direction, the maximum expected distance of hazardous material migration from the Halaco Site in response to dewatering is approximately 300-50 feet, or less than ~~one fifth~~ four percent of the distance between the Halaco Site and the channel; ~~a distance of half the maximum (or 150 feet) is more realistic given the conservative assumptions used in the model (specifically the use of a high hydraulic conductivity value in the 'maximum' scenario).~~ The cessation of dewatering is expected to halt migration of impacted groundwater toward the channel, and in this situation, the groundwater from the western portion of the Halaco Site lying closest to the J Street Drain will resume migrating along the natural pre-project gradient toward the Pacific shoreline where its ultimate discharge will occur with considerable dilution as it discharges slowly in contact with surrounding oceanic water. Dewatering at the site ~~would~~ may result in a temporary impact with regards to the potential migration of heavy metals within the ground water plume from the Halaco site. This is considered a significant impact and mitigation is required.

Mitigation measure HAZ-1 requires the use of sheet piling monitoring wells, and possibly injection wells during construction to address this impact. Through numerical modeling, the use of sheet piling injection wells was demonstrated to isolate groundwater from the Halaco Site and prevent migration of groundwater toward the channel. ~~In addition, the use of sheet piling will reduce the overall volume of water required to be withdrawn in order to construct the channel.~~

Operation

Operation of the proposed project would generally occur as it does under existing conditions, but with greater drain capacity. Additionally, maintenance activities would occur as they do under existing conditions and no new impacts would result. Since operation and maintenance activities would occur as they do under existing conditions impacts to populated areas and neighboring facilities would be less than significant.

Beach Elevation Management Plan

Implementation of the BEMP would require minimal use of hazardous substances such as diesel fuel, gasoline, equipment fluids, and/or lubricant oils and minimal quantities of waste may be generated. However, extensive safety procedures and measures required by federal, state, and local laws regulate the use and disposal of these materials and wastes and protect worker health and the environment to the maximum extent possible. Compliance with all applicable regulations would minimize the risk of an accidental release of hazardous materials or waste during implementation of the BEMP. Therefore, a less than significant impact to populated areas and neighboring facilities is anticipated.

Federal, State, and Local Laws, and Ordinances, Governing Storage and Use of Hazardous Materials or Waste

Construction

Construction of the proposed project could involve the use and storage of hazardous substances such as diesel fuel, gasoline, equipment fluids, concrete, cleaning solutions and solvents, lubricant oils, adhesives, human waste, and chemical toilets. Federal, state, and local laws have been established to regulate the

4.8 Hazardous Materials and Wastes

handling of these materials and waste and ensure the safety of workers and the environment. The proposed project is subject to comply with these regulations and, therefore, impacts related to federal, state, and local laws and ordinances are anticipated to be less than significant.

Operation

Operation of the proposed project would generally occur as it does under existing conditions, but with greater drain capacity. Additionally, maintenance activities would occur as they do under existing conditions and no new impacts are anticipated. Operation and maintenance of the proposed project are not anticipated to require the use or production of greater quantities of hazardous materials or waste than under existing conditions. Therefore, since operation and maintenance activities would occur generally as they do under existing conditions, a less than significant impact is identified.

Beach Elevation Management Plan

Implementation of the BEMP would require minimal use of hazardous substances such as diesel fuel, gasoline, equipment fluids, and/or lubricant oils and minimal quantities of hazardous waste may be generated. However, extensive safety procedures and measures required by federal, state, and local laws regulate the use of these materials and protect worker health and the environment to the maximum extent possible. Compliance with all applicable regulations would minimize the risk of an accidental release of hazardous materials during implementation of the BEMP. Therefore, a less than significant impact is anticipated.

Potential for Spill or Release

Construction

The proposed project would involve the transport and use of fuels, lubricants, and various other liquids needed for operation of construction equipment at the site. These materials would be transported to the construction site on an as-needed basis by equipment service trucks. Materials and waste hazardous to humans, wildlife, and sensitive environments would be present during project construction, including diesel fuel, gasoline, equipment fluids, concrete, cleaning solutions and solvents, lubricant oils, adhesives, human waste, and chemical toilets. The potential exists for direct impacts to the environment from accidental spills of small amounts of hazardous materials or waste from construction equipment; however, existing federal and state standards are in place for the handling, storage and transport of these materials and waste. Compliance with the federal and state standards is required, thus a less than significant impact is anticipated during construction due to upset or accidental release of hazardous materials or waste into the environment.

Operation

Operation of the proposed project would generally occur as it does under existing conditions, but with greater drain capacity. Additionally, maintenance activities would occur as they do under existing conditions and no new impacts are anticipated. Operation and maintenance of the proposed project are not anticipated to require the use or production of greater quantities of hazardous materials or waste than under existing conditions. Therefore, since operation and maintenance activities would occur generally as they do under existing conditions, impacts related to potential spill or release of hazardous materials would be less than significant.

Beach Elevation Management Plan

Implementation of the BEMP would require minimal use of hazardous substances such as diesel fuel, gasoline, equipment fluids, and/or lubricant oils and minimal quantities of hazardous waste may be generated. However, extensive safety procedures and measures required by federal, state, and local laws regulate the use and disposal of these materials and waste and protect worker health and the environment to the maximum extent possible. Compliance with all applicable regulations would minimize the risk of an accidental spill or release of hazardous materials during implementation of the BEMP. Therefore, a less than significant impact is anticipated.

4.8.5 Cumulative-Level Impact Analysis

Individual or Cumulative Physical Hazard of Material(s) or Waste

Construction

Construction of the proposed project and cumulative projects would be required to comply with federal, state, and local regulations regarding the transport, use, storage, and disposal of hazardous materials and waste. Compliance with these regulations would prevent a significant hazardous materials or waste impact to people and the environment. Dewatering activities associated with the proposed project and cumulative projects (e.g., Water Pipeline II) would result in temporary impacts with regards to the potential migration of heavy metals within the groundwater plume from the Halaco site. Mitigation measure HAZ-1 requires the use of sheet monitoring wells, and possibly injection wells during dewatering activities to address this impact. Through numerical modeling, the use of sheet piling injection wells was demonstrated to isolate groundwater from the Halaco Site and prevent migration of groundwater toward the channel. ~~In addition, the use of sheet piling will reduce the overall volume of water required to be withdrawn in order to construct the channel.~~ Similar activities associated with cumulative projects near the Halaco site would be subject to similar mitigation to avoid potential impacts. Therefore, by adhering to applicable regulations and mitigation measures, cumulative impacts would be less than significant.

Operation

Operation and maintenance activities associated with the proposed project would occur generally as they do under existing conditions. Therefore, no new impacts related to hazardous materials or waste are anticipated during operation and maintenance. Cumulative impacts would be less than significant.

Beach Elevation Management Plan

Implementation of the BEMP would require minimal use of hazardous substances such as diesel fuel, gasoline, equipment fluids, and/or lubricant oils and minimal quantities of hazardous waste may be generated. However, extensive safety procedures and measures required by federal, state, and local laws regulate the use and disposal of these materials and waste and protect worker health and the environment to the maximum extent possible. Compliance with all applicable regulations would minimize the risk of an accidental spill or release of hazardous materials or waste during implementation of the BEMP. Therefore, a less than significant cumulative impact is anticipated.

Amounts of Materials or Waste On-site, Either in Use or Storage

Construction

Construction of the proposed project and cumulative projects would be required to comply with federal, state, and local regulations regarding the transport, use, storage, and disposal of hazardous materials and waste. Compliance with these regulations would prevent a significant hazardous materials or waste impact to people and the environment. Therefore, by adhering to applicable regulations, cumulative impacts would be less than significant.

Operation

Operation and maintenance activities associated with the proposed project would occur generally as they do under existing conditions. Therefore, no new impacts related to hazardous materials or waste are anticipated during operation and maintenance. Cumulative impacts would be less than significant.

Beach Elevation Management Plan

Implementation of the BEMP would require minimal use of hazardous substances such as diesel fuel, gasoline, equipment fluids, and/or lubricant oils and minimal quantities of waste may be generated. However, extensive safety procedures and measures required by federal, state, and local laws regulate the use and disposal of these materials and waste and protect worker health and the environment to the maximum extent possible. Compliance with all applicable regulations would minimize the risk of an accidental spill or release of hazardous materials or waste during implementation of the BEMP. Therefore, a less than significant impact is anticipated.

Proximity of Hazardous Materials or Waste to Populated Areas and Compatibility of Materials with Neighboring Facilities

Construction

Construction of the proposed project and cumulative projects would be required to comply with federal, state, and local regulations regarding the transport, use, storage, and disposal of hazardous materials and waste. Compliance with these regulations would prevent a significant hazardous materials or waste impact to populated areas and neighboring facilities. Dewatering activities associated with the proposed project and cumulative projects (e.g., Water Pipeline II) ~~would~~ may result in temporary impacts with regards to the potential migration of heavy metals within the groundwater plume from the Halaco site. Mitigation measure HAZ-1 requires the use of sheet piling monitoring wells, and possibly injection wells during dewatering activities to address this impact. Through numerical modeling, the use of sheet piling injection wells was demonstrated to isolate groundwater from the Halaco Site and prevent migration of groundwater toward the channel. ~~In addition, the use of sheet piling will reduce the overall volume of water required to be withdrawn in order to construct the channel.~~ Similar activities associated with cumulative projects near the Halaco site would be subject to similar mitigation to avoid potential impacts. Therefore, by adhering to applicable regulations and mitigation measures, cumulative impacts would be less than significant.

Operation

Operation and maintenance activities associated with the proposed project would occur generally as they do under existing conditions. Therefore, no new impacts related to hazardous materials or waste are anticipated during operation and maintenance. Cumulative impacts would be less than significant.

Beach Elevation Management Plan

Implementation of the BEMP would require minimal use of hazardous substances such as diesel fuel, gasoline, equipment fluids, and/or lubricant oils and minimal quantities of hazardous waste may be generated. However, extensive safety procedures and measures required by federal, state, and local laws regulate the use and disposal of these materials and waste and protect worker health and the environment to the maximum extent possible. Compliance with all applicable regulations would minimize the risk of an accidental spill or release of hazardous or waste materials during implementation of the BEMP. Therefore, a less than significant impact is anticipated.

Federal, State, and Local Laws, and Ordinances, Governing Storage and Use of Hazardous Materials and Waste

Construction

Construction of the proposed project and cumulative projects would be required to comply with federal, state, and local regulations regarding the transport, use, storage, and disposal of hazardous materials and waste. Compliance with these regulations is required to prevent a significant hazardous materials or waste impact. By complying with regulations, cumulative impacts would be less than significant.

Operation

Operation and maintenance activities associated with the proposed project would occur generally as they do under existing conditions. Therefore, no new impacts related to hazardous materials or waste are anticipated during operation and maintenance. Cumulative impacts would be less than significant.

Beach Elevation Management Plan

Implementation of the BEMP would require minimal use of hazardous substances such as diesel fuel, gasoline, equipment fluids, and/or lubricant oils and minimal quantities of hazardous waste may be generated. However, extensive safety procedures and measures required by federal, state, and local laws regulate the use and disposal of these materials and waste and protect worker health and the environment to the maximum extent possible. Compliance with all applicable regulations would minimize the risk of an accidental spill or release of hazardous materials or waste during implementation of the BEMP. Therefore, a less than significant impact is anticipated.

Potential for Spill or Release

Construction

Construction of the proposed project and cumulative projects would be required to comply with federal, state, and local regulations regarding the transport, use, storage, and disposal of hazardous materials and waste. Compliance with these regulations would reduce the potential for accidental spill or release of hazardous materials or waste. Therefore, by adhering to applicable regulations, cumulative impacts would be less than significant.

Operation

Operation and maintenance activities associated with the proposed project would occur generally as they do under existing conditions. Therefore, no new impacts related to hazardous materials or waste are anticipated during operation and maintenance. Cumulative impacts would be less than significant.

Beach Elevation Management Plan

Implementation of the BEMP would require minimal use of hazardous substances such as diesel fuel, gasoline, equipment fluids, and/or lubricant oils and minimal quantities of hazardous waste may be generated. However, extensive safety procedures and measures required by federal, state, and local laws regulate the use and disposal of these materials and waste and protect worker health and the environment to the maximum extent possible. Compliance with all applicable regulations would minimize the risk of an accidental spill or release of hazardous materials during implementation of the BEMP. Therefore, a less than significant impact is anticipated.

4.8.6 Mitigation Measures

HAZ-1 Prior to dewatering activities between the Ventura County Railroad and the south project terminus, ~~sheet piling shall be placed on the east side of the drain channel in order to prevent the migration of groundwater from the Halaco site~~ the District shall install or use existing monitoring wells in order to verify the direction of groundwater movement at the time of dewatering. If it is determined that there is a potential for groundwater migration at the site, the District shall install and operate five injection wells. Injection of water into the shallow aquifer at the beach parking area between the J Street Drain and the Halaco Site would minimize the migration of groundwater from beneath the Halaco Site. Note that additional field testing is currently being conducted to provide a more representative value for hydraulic conductivity for the vicinity of the drain. In the event that the results show the need for sheet piling on both the west and east side of the drain, sheet piling will be placed on both sides of the drain.

4.8.7 Significance After Mitigation

Implementation of the HAZ-1 measure would prevent the migration of contaminated groundwater at the Halaco site to the J Street drain site. The impact ~~is~~ would be reduced to a less than significant level.

4.8.8 Response to Notice of Preparation Comments

During the comment period for the NOP, the County of Ventura Resource Management Agency sent a comment letter regarding the storage, handling, and disposal of hazardous materials. As identified in the analysis above, construction of the proposed project would comply with all federal, state, and local regulations regarding the transport, use, handling, and disposal of hazardous materials. Impacts to people and the environment resulting from the use of hazardous materials would be less than significant. Additionally, the Resource Management Agency commented that the proposed project would generate hazardous waste, which may create adverse impacts. However, the proposed project is not anticipated to generate greater quantities of hazardous wastes than under existing conditions. Hazardous wastes generated by construction activities would comply with all federal, state, and local regulations regarding the storage, handling, and disposal of these materials. Therefore, substantial impacts are not anticipated.

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4.9 CULTURAL AND PALEONTOLOGICAL RESOURCES

This section describes known cultural resources (including their potential significance), assesses potential impacts of the proposed uses, and recommends mitigation measures to reduce the significance of potential project impacts. Additionally, the following document was used in the preparation of this section and is included as Appendix E of this Environmental Impact Report (EIR):

Cultural Resources Constraint Analysis. Prepared by Kyle Consulting. June 2008.

4.9.1 Environmental Setting

Cultural resources are places, structures, or objects that are important for scientific, historic, and/or religious reasons to cultures, communities, groups, or individuals. Cultural resources include historic and prehistoric archaeological sites, architectural remains, engineering structures, and artifacts that provide evidence of past human activity. They also include places, resources, or items of importance in the traditions of societies and religions.

The Cultural Resources Constraint Analysis was completed in compliance with Ventura County and *California Environmental Quality Act (CEQA) Guidelines*. The study area is a linear alignment approximately 3,352.8 meters (11,000 feet) in length that is located in Ventura County, California. The project area is shown on the Oxnard 7.5' U.S. Geological Survey (USGS) topographic map.

Literature information and site records on recorded cultural resources within a one-half mile radius of the study area were obtained from data provided by the South Central Coastal Information Center (SCCIC) at California State University, Fullerton, California. In addition, early maps were checked for historic resources. Consultation regarding this project was completed with the Native American Heritage Commission (NAHC) and local Native Americans.

4.9.1.1 History

Prehistoric Cultural Background

The Native American occupants of the study area, identified as Chumash, were one of the first native California groups encountered by European explorers, specifically Cabrillo who sailed between the Channel Islands in 1542-1543. This large group of Hokan speaking California natives was basically a coastal people who occupied territory in Central California that extended from Estero Bay on the north to Malibu Canyon in the south, from the Carrizo Plain in the east to the Santa Barbara Channel Islands to the west. Kroeber (1925) expressed doubt that there were any permanent Chumash villages in the Carrizo Plains area to the east away from the coastal area. Chumash generally exploited the exceptionally rich maritime resources that were available to them in the coastal areas of their territory.

Kroeber (1925) states that the Chumash lived in large houses up to 50 feet or more in diameter that housed a community of up to 50 individuals. These structures were constructed of willow or other poles that were bent and tied together at the top and then covered with tule mats or thatch. The Chumash seemed to have been one of the few California Native groups who constructed raised platforms that were used for beds within rooms inside the houses. Canoes constructed from wooden planks were used to travel to the islands within the Santa Barbara Channel. The Chumash used spear throwers as well as bows and arrows for hunting. The Chumash were skilled artisans who made fine baskets and stone cookware.

4.9 Cultural and Paleontological Resources

Chumash rock art has been identified in caves and on overhangs, many located in the Los Padres National Forest.

A Spanish land expedition led by Gaspar de Portola left Baja California in 1769, eventually reaching Chumash territory. Five Spanish missions were established in Chumash territory, introducing European diseases that decimated the local inhabitants. Chumash territory was divided into Mexican Land Grants and settled by European settlers, resulting in further displacement of the native Chumash. Today, the Chumash are a nationally-recognized tribe. They live just outside Santa Ynez near Mission Santa Inés and throughout original Chumash territory (Chumash Tribe History Page <http://www.santaynez.org/>).

Previously Recorded Archaeological Sites

A literature review and record search of the project site and a one-half mile radius was completed by the SCCIC at California State University, Fullerton, California. This search identified seventeen studies that have been conducted within a one-half mile radius of the project site. Of these, six include the project location. There are twelve additional investigations located on the Oxnard 7.5' USGS Quadrangle that are unmapped due to insufficient locational information but that may be within a one-half mile radius of the project area.

Two prehistoric archaeological sites and one historic site have been identified outside of the project area but within the one-half mile radius. One of the archaeological sites, 4-VEN-662, was originally recorded by Van Valkenburgh in 1933 and rerecorded in 1979 by Home and Craig who noted cores, flakes, hammerstones, ground stone, burned rock, shellfish, and faunal remains. Van Valkenburgh, Home and Craig stated that the site might represent the ethnographic village of Wenem, a Chumash word that means "sleeping place." Home and Craig described the site as very important. A site update was completed in 2004 by Wlodarske and Bonner who noted that approximately 60 percent of the site had been destroyed by construction. They also state that the site may represent the village of Hueneme and, that if that is true, it may be one of the most important resources in the region. The second archaeological site, 56-150016, was recorded by Taylor in 1978 although no site description was provided.

Home and Craig (1979) recorded a historic resource, 4-VEN-664(H), which they described as the remains of twentieth century farm buildings. Artifacts noted included shell, cut cow bone, 1903 glass, crockery, stoneware, bricks, irrigation tile, ceramics, glass, and one handmade shell button.

The cultural resource studies identified no cultural resources within the proposed project site. No properties have been listed within a one-half mile of the project area by the California Point of Historical Interest of the Office of Historic Preservation, Department of Parks and Recreation, the California Historical Landmarks of the Office of Historic Preservation, Department of Parks and Recreation, the California Register of Historic Places, the National Register of Historic Places, or the California Historic Resources Inventory.

Paleontological Resources

Paleontological resources are any remains, traces, or imprints of a plant or animal that has been preserved in the Earth's crust since some past geologic time. Paleontological resources include invertebrate fossils, microfossils, petrified wood, plants, tract, and vertebrate fossils.

According to the Geologic Map of California, Los Angeles Sheet prepared by the California Department of Conservation, the proposed project site is underlain by Quaternary alluvium (1969). The Quaternary Period is the geologic time period occurring from roughly 2.6 million years ago to the present. Therefore,

4.9 Cultural and Paleontological Resources

Quaternary alluvial deposits are considered to be relatively young with a relatively low potential for fossils to occur.

4.9.1.2 *Native American Consultation Results*

Native American consultation included a sacred lands check with the NAHC for the presence of Native American cultural resources in the immediate project area. No specific site information was on file with the NAHC. However, the NAHC provided a list of Native American individuals and organizations that might have knowledge of cultural resources within the project area. A letter explaining the project and asking for any comments was mailed to all names on the list. The contact list and a sample of the letter along with correspondence from the NAHC are included in Appendix B of the Cultural Resources Constraint Analysis.

Two responses were received, from Patrick Tumamait and Randy Guzman-Folkes. The comments were requested to be presented in writing but had not yet been received upon completion of the report. Patrick Tumamait noted in a telephone conversation with the sub-consultant that two Chumash burial sites are located in the area near the beach area. These sites were not identified by the record search unless Mr. Tumamait was referring to 4-VEN-662, the village of Wenemu/Hueneme. The recorded location of this village site is outside of any area that might be impacted by the proposed project.

4.9.2 Regulatory Setting

California Coastal Act

The California Coastal Act (CCA) recognizes archaeological and historic resources as sensitive and requires the development of reasonable mitigation measures with the California Office of Historic Preservation. These procedures are defined in CCA Section 30244.

Public Resources Code

Section 15064.5 of the *CEQA Guidelines* also assigns special importance to human remains and specifies procedures to be used when Native American remains are discovered. These procedures are detailed under California Public Resources Code (PRC) Section 5097.98. In short, it prohibits interference with the free expression of Native American religions by any public agency or contracted private party on public land, and by similarly prohibiting the disturbance of any Native American cemetery or sacred site by such parties on public land.

State Health and Safety Code Section 7050.5

In the event that human remains are encountered, State Health and Safety Code Section 7050.5 states that no further disturbance shall occur until the Ventura County Coroner has made the necessary findings as to origin. If the County Coroner determines the remains to be Native American, the NAHC shall be contacted within 24 hours. Subsequently, the NAHC shall identify the “most likely descendant.” The most likely descendant shall have 24 hours to make recommendations to the District for the disposition of the remains as provided in Public Resources Code 5097.98.

4.9 Cultural and Paleontological Resources

Native American Graves Protection and Repatriation Act

The Native American Graves Protection and Repatriation Act (NAGPRA) is a federal law passed in 1990. NAGPRA provides a process for federal agencies and museums to return certain Native American cultural items, such as human remains, funerary objects, sacred objects, and objects of cultural patrimony, to lineal descendants, culturally affiliated Native American tribes, and Native Hawaiian organizations.

Ventura County

Ventura County General Plan

1.8 Paleontological and Cultural Resources

The goals, policies and programs which apply to paleontological and cultural resources are as follows:

1.8.1 Goals

1. Identify, inventory, preserve and protect the paleontological and cultural resources of Ventura County (including archaeological, historical and Native American resources) for their scientific, educational and cultural value.
2. Enhance cooperation with cities, special districts, other appropriate organizations, and private landowners in acknowledging and preserving the County's paleontological and cultural resources.

1.8.2 Policies

1. Discretionary developments shall be assessed for potential paleontological and cultural resource impacts, except when exempt from such requirements by CEQA. Such assessments shall be incorporated into a County-wide paleontological and cultural resource data base.
2. Discretionary development shall be designed or re-designed to avoid potential impacts to significant paleontological or cultural resources whenever possible. Unavoidable impacts, whenever possible, shall be reduced to a less than significant level and/or shall be mitigated by extracting maximum recoverable data. Determinations of impacts, significance and mitigation shall be made by qualified archaeological (in consultation with recognized local Native American groups), historical or paleontological consultants, depending on the type of resource in question.
3. Mitigation of significant impacts on cultural or paleontological resources shall follow the Guidelines of the State Office of Historic Preservation, the State Native American Heritage Commission, and shall be performed in consultation with professionals in their respective areas of expertise.
4. During environmental review of discretionary development the reviewing agency shall be responsible for identifying sites having potential archaeological, architectural or historical significance and this information shall be provided to the County Cultural Heritage Board for evaluation.
5. During environmental review of discretionary development the reviewing agency shall be responsible for identifying sites having potential archaeological, architectural or historical significance and this information shall be provided to the County Cultural Heritage Board for evaluation.

4.9 Cultural and Paleontological Resources

6. The Building and Safety Division shall utilize the State Historic Building Code for preserving historic sites in the County.

City of Oxnard

City of Oxnard General Plan

The City of Oxnard General Plan Conservation Element includes the following goals and policies regarding cultural resources.

Development Policies

A. Goals

Maintenance and enhancement of natural resources and open space.

B. Objectives

7. Protect and enhance areas of cultural and historic significance.

Cultural Resources

39. The City shall require a cultural resources study that includes a field study component prior to the permitting of specific development plans that may affect significant historical resources. A qualified archaeologist should inspect development locations for surface evidence of archaeological deposits, and archaeological monitoring during grading should be required in areas where significant cultural resources have been identified or are expected to occur. If cultural resources are uncovered during construction, all work in the area should be halted and a qualified archaeologist consulted to determine the significance of the find. In the event that development threatens significant archaeological resources, alternatives should be considered, including planning construction to avoid archeological sites, deeding archaeological sites into permanent conservation easements, and planning parks, green space, or other open space to incorporate archaeological sites.

City of Port Hueneme

City of Port Hueneme General Plan

The City of Port Hueneme General Plan Conservation/Open Space/Environmental Resource Element contains goals and polices that maintain and enhance the City's historically significant sites and structures.

Goal 10: Maintain and Enhance the City's historically significant sites or structures.

Policy 10-1: Identify, designate, and protect facilities of historical significance.

Policy 10-5: Require mitigation measures to protect archaeological or paleontological resources in the event that new resources are discovered.

4.9 Cultural and Paleontological Resources

4.9.3 Significance Thresholds

Impact to a cultural resource will be significant if the project will:

- Cause a substantial adverse change in the significance of a historical resource as defined in §15064.5 of the State *CEQA Guidelines* and the Ventura County *Initial Study Assessment Guidelines*;
- Cause a substantial adverse change in the significance of an archaeological resource pursuant to §15064.5 and the Ventura County *Initial Study Assessment Guidelines*;
- Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature as defined in the Ventura County *Initial Study Assessment Guidelines*; or
- Disturb any human remains, including those interred outside of formal cemeteries, pursuant to §15064.5 and the Ventura County *Initial Study Assessment Guidelines*.

The above thresholds are taken from Appendix G of the State *CEQA Guidelines* and expanded to incorporate by reference those significance thresholds recently adopted by the Ventura County Board of Supervisors. According to the 2011 Ventura County *Initial Study Assessment Guidelines*, the significance of an archaeological or historic resource is materially impaired when a project:

1. Demolishes or materially alters in an adverse manner those physical characteristics that account for its inclusion in a local register of historical resources pursuant to Section 5020.1(k) of the Public Resources Act or its identification in a historical resources survey meeting the requirements of Section 5024.1(g) of the Public Resources Code, unless the public agency reviewing the effects of the project establishes by a preponderance of evidence that the resource is not archaeologically, historically, or culturally significant; or
2. Demolishes or materially alters in an adverse manner those physical characteristics of an archaeological or historical resource that convey its archaeological or historical significance and that justify its inclusion in, or eligibility for inclusion in, the California Register of Historical Resources as determined by a lead agency for purposes of CEQA; or
3. Demolishes or materially alters in an adverse manner those physical characteristics of a historical resource that convey its historical significance and that justify its eligibility for inclusion in the California Register of Historical Resources as determined by a lead agency for purposes of CEQA.
4. Demolition, relocation, or alteration such that the significance of an archaeological or historical resource would be impaired (Public Resources Code, Sections 5020(g) and 5020(q)).

Impacts to paleontological resources would be significant if:

1. They would affect a geologic formation with moderate to high paleontological importance directly through grading and excavation of fossiliferous rock, which can result in the loss of scientifically important fossil specimens and associated geological data, or indirectly by increasing access opportunities for unauthorized collection of fossil materials from valuable sites. Cumulative impacts include all projects which contribute to the progressive loss of exposed rock in Ventura County that can be studied and prospected for fossil remains.

4.9 Cultural and Paleontological Resources

4.9.4 Project-Level Impact Analysis

Cause a substantial adverse change in the significance of a historical resource as defined in §15064.5 of the State CEQA Guidelines and the Ventura County Initial Study Assessment Guidelines?

Construction

The Cultural Resources Constraint Analysis Report prepared for the project site did not identify any historical resources located within the J Street Drain Project Area. Therefore, construction of the proposed project would not demolish, materially alter or relocate any historical resources. Therefore, no impact to historical resources due to project construction is identified.

Operation

No historical resources are located within the proposed project area. Therefore, operation of the proposed project would not demolish, materially alter, or relocate any historical resources. Therefore, no impact to historical resources due to operation and maintenance is identified.

Beach Elevation Management Plan

No historical resources are located within the proposed project area. Therefore, implementation of the Beach Elevation Management Plan (BEMP) would not demolish or materially alter any historical resources. Therefore, no impact to historical resources due to implementation of the BEMP is identified.

Cause a substantial adverse change in the significance of an archaeological resource, pursuant to §15064.5 and the Ventura County Initial Study Assessment Guidelines?

Construction

The Cultural Resources Constraint Analysis Report prepared for the J Street Drain project did not identify any archeological resources located within the project area. However, archaeological resource sites have been identified in proximity to the project alignment and there is the potential for previously unknown subsurface artifacts to be demolished, materially altered, or relocated during ground disturbing activities. Therefore, construction of the proposed project would result in potentially significant impacts and mitigation is required.

Operation

Operation of the proposed project would generally occur as it does under existing conditions, but with greater drain capacity. Additionally, maintenance activities would occur generally as they do under existing conditions. Further, operation and maintenance activities do not involve new excavation or disturbance of native soil, thus there is not a potential to demolish, materially alter, or relocate archaeological resources.

Beach Elevation Management Plan

The Cultural Resources and Constraint Analysis did not identify any archaeological resources on the project site. It is not anticipated that implementation of the BEMP would result in impacts to undiscovered archeological resources because the sand in this location is the result of ongoing natural

4.9 Cultural and Paleontological Resources

beach processes. Being recently deposited, beach sands are not expected to contain archaeological resources. The only ground disturbing activities associated with implementation of the BEMP involve periodic shallow grooming of the sand berm. Therefore, no impacts to archaeological resources are identified.

Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature as defined in the Ventura County *Initial Study Assessment Guidelines*?

Construction

The potential for paleontological resources to occur within Quaternary alluvial deposits is relatively low. According to the Ventura *County Initial Study Assessment Guidelines*, Quaternary alluvial deposits would not be characterized as a geologic formation with a moderate to high potential for paleontological importance. Therefore, ground disturbing activities associated with the construction of the proposed project have little potential to impact undiscovered paleontological resources. This impact is considered less than significant.

Operation

Operation of the proposed project would generally occur as it does under existing conditions, but with greater drain capacity. Additionally, maintenance activities would occur generally as they do under existing conditions. Operation and maintenance activities do not involve new excavation or disturbance of land formations. Additionally, the project area is underlain with Quaternary alluvial deposits, which have a low potential for containing paleontological resources. Therefore, no new actions are associated with operation and maintenance of the proposed project, and no impact to paleontological resources is identified due to operations and maintenance activities.

Beach Elevation Management Plan

Implementation of the BEMP is not anticipated to result in a significant impact to undiscovered paleontological features or a unique geological feature because sand in this location is the result of ongoing natural beach processes. Being recently deposited, beach sands are not expected to contain paleontological resources. The only ground disturbing activities associated with implementation of the BEMP involve periodic shallow grooming of the sand berm. Therefore, impacts would be less than significant.

Disturb any human remains, including those interred outside of formal cemeteries, pursuant to §15064.5 and the Ventura County *Initial Study Assessment Guidelines*?

Construction

No evidence of human remains, including those interred outside of formal cemeteries, was discovered during the records search, literature review, field survey, or site testing and evaluation at the project site. There is no remaining indication that the project site was used by Native Americans for religious, ritual, or other special activities and therefore impacts to Native American burial sites are not expected. However, although no evidence was uncovered during the literature review and field survey, there is still potential that human remains may be disturbed during construction activities. Therefore, a potentially significant impact is identified and mitigation is required.

4.9 Cultural and Paleontological Resources

Operation

Operation of the proposed project would generally occur as it does under existing conditions, but with greater drain capacity. Operation and maintenance activities do not involve new excavation or disturbance of native soil, thus there is not a potential to unearth human remains. Additionally, maintenance activities would occur generally as they do under existing conditions. Therefore, no new actions are associated with operation and maintenance of the proposed project. No impact to human remains is anticipated.

Beach Elevation Management Plan

Implementation of the BEMP is not anticipated to result in a significant impact to undiscovered human remains because the sand berm supporting Ormond Beach Lagoon consists of recent deposits that are not anticipated to contain human remains. The only ground disturbing activities associated with implementation of the BEMP involve shallow grooming of this recently deposited sand. Therefore, impacts would be less than significant.

4.9.5 Cumulative-Level Impact Analysis

Cause a substantial adverse change in the significance of a historical resource as defined in §15064.5 of the State CEQA Guidelines and the Ventura County Initial Study Assessment Guidelines?

Construction

Construction of the proposed project would not result in a project-level impact to historical resources, as there are not any historical resources located within the project area, thus the project does not have the potential to contribute to a cumulative impact. Therefore, no cumulative impact to historical resources due to project construction is identified.

Operation

Operation and maintenance of the proposed project would not result in a project-level impact to historical resources, thus, the project does not have the potential to contribute to a cumulative impact. Therefore, no cumulative impact to historical resources due to project operation and maintenance is identified.

Beach Elevation Management Plan

Implementation of the BEMP would not result in a project-level impact to historical resources and, thus, the project does not have the potential to contribute to a cumulative impact. Therefore, no cumulative impact to historical resources due to periodic implementation of the BEMP is identified.

Cause a substantial adverse change in the significance of an archaeological resource pursuant to §15064.5 and the Ventura County Initial Study Assessment Guidelines?

Construction

Any potential impacts to archaeological resources would be site-specific. The Water Pipeline 1 and the J Station Elimination projects would intersect the J Street Drain project at Hueneme Road and the Ventura

4.9 Cultural and Paleontological Resources

County Railroad, respectively. Therefore, the proposed project could contribute to a significant cumulative impact to archaeological resources if such resources were encountered along those project alignments as well as within the J Street Drain work area. A potentially significant cumulative impact is identified for construction activities.

Operation

Operation and maintenance of the proposed project would not result in project-level impacts to archaeological resources, thus, the project does not have the potential to contribute to a cumulative impact. Therefore, no cumulative impact to archaeological resources due to project operation and maintenance is identified.

Beach Elevation Management Plan

Implementation of the BEMP would not result in project-level impacts to archaeological resources, thus, the project does not have the potential to contribute to a cumulative impact. Therefore, no cumulative impact to archaeological resources due to periodic implementation of the BEMP is identified.

Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature, as defined in the Ventura County *Initial Study Assessment Guidelines*?

Construction

Less than significant project-level impacts to paleontological resources were identified, since the project area is underlain with Quaternary alluvium, which has a relatively low potential for paleontological resources. Other cumulative projects considered in this analysis are also located in areas underlain by Quaternary alluvium, therefore, it is expected that the potential for paleontological resources would also be low. Therefore, the proposed project would not contribute to a significant cumulative impact to paleontological resources, and a less than significant cumulative impact is identified for construction activities.

Operation

Operation and maintenance of the proposed project would not result in project-level impacts to paleontological resources, thus, the project does not have the potential to contribute to a cumulative impact. Therefore, no cumulative impact to paleontological resources due to project operation and maintenance is identified.

Beach Elevation Management Plan

Implementation of the BEMP would not result in project-level impacts to paleontological resources, thus, the project does not have the potential to contribute to a cumulative impact. Therefore, no cumulative impact to paleontological resources due to periodic implementation of the BEMP is identified.

4.9 Cultural and Paleontological Resources

Disturb any human remains, including those interred outside of formal cemeteries, pursuant to §15064.5 and the Ventura County *Initial Study Assessment Guidelines*?

Construction

Any impacts to human remains would be site-specific. The Water Pipeline 1 and the J Station Elimination projects would intersect the J Street Drain project at Hueneme Road and the Ventura County Railroad, respectively. Therefore, the proposed project could contribute to a significant cumulative impact to human remains if any were encountered along those project alignments as well as within the J Street Drain work area. A potentially significant cumulative impact is identified for construction activities.

Operation

Operation and maintenance of the proposed project would not result in project-level impacts to human remains and, therefore, would not contribute to any cumulative impact. No cumulative impacts related to human remains are identified for the operation and maintenance phase of the project.

Beach Elevation Management Plan

Implementation of the BEMP would result in less than significant project-level impacts to human remains and, therefore, would not contribute to any cumulative impact. Less than significant impacts related to human remains are identified for the periodic implementation of the BEMP.

4.9.6 Mitigation Measures

Archaeological Resources

To mitigate for potential project-level and cumulative impacts to archaeological resources, the following mitigation measures shall be implemented:

- CULT-1** In the event that archaeological resources are exposed during project construction, all earth disturbing work within the vicinity of the find shall be temporarily suspended or redirected until a qualified archaeologist has evaluated the nature and significance of the find. After the find has been appropriately mitigated, work in the area may resume.
- CULT-2** If the resource is determined to be potentially significant, a cultural resources treatment plan shall be developed to provide appropriate mitigation measures. These measures may include archaeological testing and data recovery excavation. The treatment plan shall also include a detailed description of associated reporting requirements, curation requirements for any cultural materials collected during treatment, and the qualifications for archaeologists involved in treatment activities.

Human Remains

To reduce potential impacts to human remains, the following mitigation measure shall be implemented:

- CULT-3** If human remains are encountered, California Health and Safety Code Section 7050.5 states that no further disturbance shall occur until the Ventura County Coroner has made the necessary findings as to origin. Further, pursuant to California Public Resources Code

4.9 Cultural and Paleontological Resources

Section 5097.98(b) remains shall be left in place and free from disturbance until a final decision as to the treatment and disposition has been made. If the Ventura County Coroner determines the remains to be Native American, the NAHC shall be contacted within a reasonable timeframe. Subsequently, the NAHC shall identify the “most likely descendant.” The most likely descendant shall then make recommendations, and engage in consultations concerning the treatment of the remains as provided in Public Resources Code 5097.98.

4.9.7 Significance After Mitigation

Implementation of the proposed project would not result in impacts to historical or paleontological resources as these resources do not occur within the project area. However, during construction, the proposed project has the potential to encounter unidentified archaeological resources. Additionally, any construction project has the potential to encounter unexpected human remains. However, by implementing mitigation measures CULT-1 and CULT-2, in the event that ground disturbing activities discover archaeological resources, a qualified archaeological monitor would be on-site to stop construction activities until the resource can be appropriately treated, if necessary. By obtaining a qualified archaeological monitor and empowering the monitor to stop construction activities, the cultural value of any discovered archaeological resources would be retained. Additionally, in the event that human remains are uncovered during ground disturbing activities, implementation of mitigation measure CULT-3 would ensure that the appropriate agencies are contacted such that the remains are respectfully treated. Therefore, by implementing mitigation measures CULT-1 through CULT-3, potential impacts to cultural resources and human remains would be reduced to below a level of significance.

4.9.8 Response to Notice of Preparation Comments

During the Notice of Preparation (NOP) comment period, the NAHC sent a comment letter with recommendations in assessing and mitigating project-related impacts to archaeological resources. Recommendations include contacting a regional archaeological information center, preparation of an archaeological report, contacting the NAHC for a Sacred Lands File check, and provision of mitigation measures. In response, a Cultural Resources Constraint Analysis was prepared for the proposed project and is included as Appendix E of this EIR. The Cultural Resources Constraint Analysis was completed in accordance with Ventura County standards and *CEQA Guidelines*. This includes contact with the SCCIC, the regional archaeological information center, and a Sacred Lands File check with the NAHC. Additionally, the Cultural Resource Constraints Analysis serves as the archaeological report and meets the requirements identified in the NAHC NOP comment letter. Per the Cultural Resources Constraints Analysis, mitigation measures CULT-1 through CULT-3 are proposed to mitigate impacts to cultural resources associated with the proposed project.

4.10 WASTE TREATMENT/DISPOSAL

This section of the Environmental Impact Report (EIR) focuses on potential solid waste impacts due to implementation of the project. Other subject areas related to utilities and service systems were determined to be less than significant during the Initial Study process. Specifically, the environmental issue areas of water supply quality, water supply quantity, fire flows, sewage disposal systems, sewage treatment collection, flood control/drainage facilities, electric, gas, and communication were determined to either be not impacted or impacted at a less than significant level. Therefore, these issues are not further analyzed in the EIR. Please see Appendix A of the EIR for the Initial Study. Issues related to solid waste were also determined to be less than significant during the Initial Study process; however, due to comments received on the Notice of Preparation (NOP), solid waste is further analyzed in the EIR.

4.10.1 Environmental Setting

City of Oxnard

The City of Oxnard currently collects and disposes in excess of 203,000 tons of refuse annually through the City-owned Del Norte Regional Recycling and Transfer Station (Del Norte). Del Norte accepts refuse from Oxnard and several other cities and areas in western Ventura County and is capable of recycling 50 to 80 percent of the refuse it receives. Currently, refuse incapable of being recycled is hauled to Chiquita Canyon Disposal Facility.

The Chiquita Canyon Disposal Facility is a 592-acre landfill located in Los Angeles County, California. Currently, 257 acres are permitted for the actual disposal of waste. The remainder of the site is for sedimentation ponds, buffer area and future expansions. The facility accepts approximately 5,000 to 6,000 tons per day. The landfill is restricted to receive no more than 6,000 tons per day or 30,000 tons per week.

The Del Norte Regional Recycling & Transfer Station is a 16-acre regional transfer station and materials recovery facility. It is owned by the City of Oxnard and operated by the private sector. Materials accepted by Del Norte include the following: refuse, yard and green waste, scrap wood, demolition debris, tires, refrigerators and air conditioners. Currently, Del Norte processes nearly 1,500 tons of waste every day.

City of Port Hueneme

The City of Port Hueneme Solid Waste Division provides all solid waste and recycling services for the residents, commercial businesses, and Naval Base in Port Hueneme. The City's solid waste is also transported to Del Norte Regional Recycling & Transfer Station.

4.10.2 Regulatory Setting

County of Ventura

The Public Facilities and Services Chapter of the General Plan identifies goals, policies and programs applicable to public facilities and services throughout Ventura County at both a local and regional level. The following general goals, policies and programs apply to public facilities and services:

4.1 General Goals, Policies and Programs

4.1.1 Goals

1. Ensure the provision of adequate individual and public sewage/waste collection, treatment and disposal facilities to meet the County's current and future needs in a manner which will protect the natural environment and ensure protection of the public's health, safety and welfare.
3. Ensure continuous waste disposal capacity to meet the County's current and projected waste disposal needs.

4.1.2 Policies

1. Community sewage treatment facilities and solid waste disposal sites shall be deemed consistent with the General Plan only if they are designated on the Public Facilities Map. On-site septic systems (i.e., individual sewage disposal systems), on-site wastewater treatment facilities, waste transfer stations, off-site waste treatment facilities and on-site storage facilities are consistent with the General Plan if they conform to the goals, policies and programs of the General Plan.
2. Any subdivision, or discretionary change in land use having a direct effect upon the volume of sewage, shall be required to connect to a public sewer system. Exceptions to this policy to allow the use of septic systems may be granted in accordance with County Sewer Policy. Installation and maintenance of septic systems shall be regulated by the County Environmental Health Division in accordance with the County's Sewer Policy, County Building Code, and County Service Area 32.
4. Discretionary development adjacent to existing and proposed waste treatment, transfer and disposal sites, as identified in the Countywide Integrated Waste Management Plan, shall not conflict with the current and anticipated future use of these waste facilities.
6. Applicants for discretionary development shall be encouraged to employ practices that reduce the quantities of wastes generated and shall be requested to engage in recycling activities to further reduce the volume of waste disposed of in landfills.

City of Oxnard General Plan

Development Policies

A. Goals

Public facilities and services adequate to serve existing and future development within the City's Urban Service Area.

B. Objectives

3. Reduce solid waste requiring disposal at local landfills and encourage recycling.

C. Policies

Solid Waste

1. Resource recovery shall be utilized to reduce the amount of solid waste that needs disposal.

3. The City shall require applicants for discretionary development approval to employ practices that reduce the quantities of wastes generated and promote resource recovery.

City of Port Hueneme General Plan

City of Port Hueneme Public Safety and General Plan 34 Facilities Element

Goal 10: Provide Necessary Control and Reduction of Solid Waste Generation and Disposal

Policy 10-1: Implement the City's Source Reduction and Recycling Element.

Policy 10-3: Investigate the feasibility of creating a curbside recycling program for all residential uses, and implement if cost effective.

Policy 10-4: Encourage and facilitate waste reduction, recycling, and use of recycled materials within City government offices and facilities.

Policy 10-6: Review waste collection procedures for conformance with safety codes.

4.10.3 Significance Thresholds

As defined in Appendix G of the *CEQA Guidelines*, the project would result in significant impacts to utilities and service systems if the project would not:

- Be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs; or
- Comply with federal state, and local statutes and regulations related to solid waste.

The 2011 Ventura County *Initial Study Assessment Guidelines* state:

- Does the proposed project have a direct or indirect adverse effect on a landfill such that it impairs the landfill's disposal capacity in terms of reducing its useful life to less than 15 years? If it does, then the project has a potentially significant impact on the demand for solid waste disposal capacity.

In addition, Ventura County Ordinance 4155 minimizes the potential solid waste disposal capacity impacts for any project by mandating the recycling of materials found on the "Director's List of Recyclables."

4.10.4 Project-Level Impact Analysis

Landfill Capacity

Construction

As required by California Public Resources Code (Public Resources Code, 2006 Division 30, Chapter 4, Article 1, §41701), Ventura County's Countywide Siting Element (CSE), adopted in June of 2001 and updated annually, confirms Ventura County has at least 15 years of disposal capacity available for waste generated by in-County projects. Therefore, because the County exceeds the minimum disposal capacity required by state Public Resources Code (PRC), no individual project of this type or magnitude will

significantly impact the County's remaining solid waste disposal capacity. Therefore, impacts are less than significant.

Table 4.10-1 quantifies the amount of soil and concrete volume for transport due to project construction. As shown in Table 4.10-1, when all phases of construction are considered, it is anticipated that 139,569 cubic yards (cy) of soil material and 7,816 cy of concrete material will be transported offsite. In accordance to the Ventura County Ordinance 4155, the proposed project would recycle soils and concrete resulting from demolition of the existing channel construction of the new J Street Drain. The construction of the proposed J Street Drain would involve demolition of concrete channel and excavation of channel to the appropriate depth during which the dirt would either be stockpiled for backfill or transported to a recycling facility. The demolition of the existing drain and construction of the new, higher capacity drain, will take place in phases. The demolition of the existing channel will be conducted using heavy equipment to break up the concrete. Once the concrete is broken up, it would be loaded for transport to another location for recycling. As discussed above, Del Norte Regional Recycling and Transfer Station currently handles waste transfer and recycling for the City of Oxnard. It is anticipated that concrete/ demolition debris would be recycled at Del Norte and excess soil would be either reused or hauled to Chiquita Canyon Disposal Facility for use as daily soil cover. The construction contract specifications would include a requirement that all recyclable construction materials generated during the demolition and construction phases of the project be reused on site, or recycled at a permitted recycling facility. For this project that includes, at a minimum, concrete, asphalt, wood, and metal. Additionally, all sediment and soil, not reused on site during the construction and/or landscaping phases of the project, should be transported to an authorized or permitted facility for recycling or reuse. The proposed project may potentially contribute excess soil to the local landfills; however, the proposed recycling or reuse of most materials to be removed from the site would minimize the volume of solid waste that would be transported to the landfill. The project is not expected to reduce the landfill's capacity such that its useful life would fall below 15 years. Therefore, impacts are less than significant.

Table 4.10-1. Soil and Concrete Volumes

Phase	Soil Volume for Transport (cy)	Concrete Volume (cy)
1	51,657	2,458
2	29,546	1,658
3	37,212	2,219
4	21,154	1,481
Total	139,569	7,816

Source: HDR 2008.
cy = cubic yards

Operations

The operation of the proposed project would include maintenance activities similar to those currently in place and would not be characterized as generating solid waste. Therefore, impacts are less than significant.

Beach Elevation Management Plan

The Beach Elevation Management Plan (BEMP) would be implemented periodically and would only have equipment on the beach for a few hours. The BEMP is not expected to generate any solid waste as the grooming of the berm would redistribute the sand on the beach and would not require any disposal of sand. Therefore, no impact is identified for this issue area.

Compliance with Standards

The project will comply with all applicable federal state, and local statutes and regulations related to solid waste. Therefore, no impact is identified.

4.10.5 Cumulative-Level Impact Analysis

Landfill Capacity

The construction of the proposed project would recycle soils and concrete resulting from construction activities. The proposed project would not result in project-level impacts to solid waste management. When the project is considered with other cumulative projects, there would be an incremental increase in material that is going to the Del Norte Regional Recycling and Transfer Station and the Chiquita Canyon Disposal Facility. However, since there is a minimum of 15 years of disposal capacity at Chiquita Canyon, there would not be a cumulative impact.

4.10.6 Mitigation Measures

No impacts were identified; therefore, no mitigation is required.

4.10.7 Significance After Mitigation

No impacts were identified; therefore, no mitigation is required. Project- and cumulative-level impacts related to solid waste would be less than significant.

4.10.8 Response to Notice of Preparation Comments

During the NOP comment period, the County of Ventura Integrated Waste Management Division (IWMD) commented that the proposed project would result in a less than significant impact to solid waste disposal facilities. However, the proposed project is subject to comply with the requirements of Ventura County Ordinances 4308 and 4357 to assist in diverting 50 percent of the County's solid waste from local landfills, as required by Assembly Bill (AB) 939. The IWMD also recommended contract specifications to ensure that the proposed project would comply with Ventura County Ordinances 4308 and 4357. As discussed above under the discussion of solid waste management during construction, the proposed project would recycle soils and concrete resulting from excavation and demolition activities at the Del Norte Regional Recycling and Transfer Station. Additionally, the construction contract specifications would include a requirement that all recyclable construction materials generated during demolition and construction activities be reused onsite, or recycled at a permitted recycling facility. These materials include concrete, asphalt, wood, metal, and sediment/soil. Therefore, the proposed project would comply with Ventura County Ordinances 4308 and 4357, and the proposed project would divert at least 50 percent of its solid waste from local landfills.

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4.11 PUBLIC HEALTH

This section of the Environmental Impact Report (EIR) focuses on potential public health impacts due to implementation of the project. Issues related to public health were determined to be less than significant during the Initial Study process; however, due to comments received from the public, public health is further analyzed in the EIR. Larry Walker Associates prepared a Mosquito Technical Study for the proposed project area in January 2011. The technical study provides an analysis of the mosquito production potential of the proposed J Street Drain Project compared with the current J Street Drain and the proposed project alternatives. The complete report is included as Appendix I of the EIR.

4.11.1 Environmental Setting

Vectors

An organism, such as a mosquito or tick that carries disease-causing microorganisms from one host to another is known as a disease vector. Mosquitoes are of particular concern because of their breeding habits. The mosquito's water requirement during breeding makes areas with quantities of standing water breeding grounds for mosquitoes. Areas with natural and induced standing water (e.g., highly urban areas where rain and activities such as landscape irrigation creates water pools) are susceptible. According to the Ventura County Vector Control Program, there are typically 15 species of common mosquitoes found in Ventura County.

Mosquitoes are potential vectors of organisms that can cause disease to pets, domestic animals, wildlife, or humans. Although 12 mosquito-borne viruses are known to occur in California, only West Nile virus, western equine encephalomyelitis virus, and St. Louis encephalitis virus are significant causes of human disease in California. Mosquito-borne diseases that are of concern in Ventura County are St. Louis encephalitis (SLE), western equine encephalitis (WEE), West Nile virus (WNV), and malaria.

According to the California Department of Public Health, U.C. Davis Center for Vectorborne Diseases, Mosquito and Vector Control Association of California, and California Department of Food and Agriculture¹, the latest data on West Nile virus show that West Nile virus activity in California has been decreasing since 2004. The 2011 data demonstrate that there have been no human cases of the West Nile virus in Ventura County as of August 5, 2011. The most recent human case of West Nile virus in Ventura County was observed in 2006.²

Mosquito Life Cycle. The mosquito life cycle is characterized by four distinct stages: egg, larva, pupa, and adult. In those species of greatest public health concern in California, eggs are laid on the surface of standing water where they float for approximately 48 hours and then hatch as larvae. The larvae live in water, but do not have gills. Instead, they rely on a special siphon tube used to break the surface-tension of the water and breathe atmospheric air. Larvae feed on micro-organisms and organic matter in the water column, and grow in size until they metamorphose into the pupal stage. The pupal stage is a resting, non-feeding stage during which the adult mosquito develops. After a few days in the pupal stage, the winged adult emerges from the water and flies away. Adult mosquitoes must feed to survive, but only female mosquitoes take blood. They use the protein in the blood to develop eggs for the next generation.

¹ California Department of Public Health, et al. "West Nile Virus Activity in California Counties 2011 Year to Date." August 5, 2011. <http://www.westnile.ca.gov/home.php>.

² California Department of Public Health, et al. "2006 Summary Table of Human Infection," "2007 Summary Table of Human Infection," "2008 Summary Table of Human Infection," "2009 Summary Table of Human Infection," "2010 Human WNV Incidence Report," and "2011 Human WNV Incidence Report." August 5, 2011. http://www.westnile.ca.gov/reports.php?report_category_id=1.

(Larry Walker Associates 2011). A single female mosquito may bite the same or multiple hosts many times.

Mosquitoes may be lured by a number of different attractants. After mating, newly emerged females are attracted to host cues such as CO₂, heat, and body odors in order to find a host and take a blood meal for egg development. After several days of rest in a protected location, their attraction shifts to odors associated with waters that are potential larval habitats. Artificial lights can be somewhat attractive to certain species, but usually only in less developed areas with few competing light sources.

Nearly all species of mosquitoes have a definite seasonality that varies depending on the geographic region (Larry Walker Associates 2011). Temperature is important in mosquito production and the development of larvae. Many mosquitoes experience a hibernation-like period where mosquito production ceases during the winter (Larry Walker Associates 2011). In Ventura County and other parts of southern California, mosquito production decreases substantially beginning in the cooler late fall or winter months and then increases from spring into summer (Larry Walker Associates 2011).

Mosquito Breeding. Mosquitoes are inherently linked to water since all the immature life stages are aquatic. However, not all sources of water are conducive to mosquito breeding. Mosquitoes generally require calm, stagnant water for breeding as opposed to open, exposed water. Flowing waters or waters with surface disturbance from wind, waves, or animals are not suitable habitat for mosquito breeding. Disturbance of the water surface can cause mosquito larvae to drown if it causes the siphon tube through which they breathe to disconnect from atmospheric air. Similarly, waters deep enough to sustain populations of fish and other aquatic organisms are not suitable habitat because mosquito larvae are a food source for these predators. Wetlands and salt marshes, especially those with unmanaged, dense, emergent vegetation, are notorious mosquito breeding habitats. Vegetation protects mosquito larvae from wind, wave, and animal disturbance and provides safe refuge from predators (Larry Walker Associates 2011). As an example, large lakes only produce mosquitoes along shorelines protected from wind and predators by vegetation. Waters that contain substantial emergent (e.g., cattails, bulrush) or floating vegetation (e.g., duckweed, hyacinth) provide refuge for developing mosquito larvae with calm, predator-free waters (Larry Walker Associates 2011). Wetlands and salt marshes, especially those with unmanaged, dense, emergent vegetation, are notorious mosquito breeding habitats.

Common Species at J Street Drain. Three main species of biting mosquitoes are commonly found in the J Street Drain area: *Culex tarsalis*, *Culex quinquefasciatus*³, and *Culex erythrothorax*. *Culex quinquefasciatus* and *Culex tarsalis* are considered primary vectors of encephalitis viruses (e.g., West Nile virus) while the role of *Culex erythrothorax* in virus transmission is believed to be minor (Goddard et al., 2002). All three species readily bite humans and can become a nuisance, thus they are primary targets of control efforts in Ventura County and throughout the state. Each species has habitat preferences for larval development (detailed below). Because of their significance to public health and as nuisance species, the biology and ecology of these species have been well studied. Relevant species-specific habitat preferences are described here.

- *Culex tarsalis* are opportunistic and will breed in a variety of habitats including wetlands, birdbaths, neglected swimming pools, and almost any artificial container (Larry Walker Associates, 2010). *Culex tarsalis* larvae are known to occur in brackish marshes as long as the salt content does not exceed one percent. However, *Culex tarsalis* larvae are not tolerant of polluted waters (e.g., nutrient rich waters). Adult *Culex tarsalis* are known to disperse from their origins up to several kilometers (Larry Walker Associates 2011).

³ Synonymous with *Culex pipiens* in some locations.

- *Culex quinquefasciatus* prefer nutrient-rich waters containing high concentrations of organic matter and also have a strong affinity for underground areas such as storm drains. However, they are also opportunistic and will share many of the habitats used by *Culex tarsalis*, especially urban sources and nutrient-rich treatment wetlands. Adult *Culex quinquefasciatus* can travel up to 1.5 kilometers (0.9 miles) from their origin, but generally travel less than 1 kilometer (0.6 miles) (Larry Walker Associates 2011).
- *Culex erythrothorax* are closely tied to wetlands, preferring swamps and marshes or the margins of water bodies that contain dense, emergent vegetation such as cattails (Larry Walker Associates 2011). This species is almost never found outside these habitats. Adult *Culex erythrothorax* are known to disperse from their origins up to approximately 1 kilometer (Larry Walker Associates 2011), but the majority of adults appear to remain relatively close to their preferred wetland habitats.

Vector Control Program

The Vector Control Program of the Ventura County Environmental Health Division monitors and controls mosquito breeding in flood control channels, drains, roadside ditches, catch basins, gutters, creeks, marshes, retention and detention basins, pools, and rain water depressions. Vector Control Program staff constantly monitor and control over 2,000 potential mosquito breeding sources to prevent and minimize exposure of the public to mosquito borne diseases. Vector control staff also responds to reports of mosquitoes or potential mosquito breeding sources from the public. The mission of the program is to suppress the population of mosquitoes to minimize the potential transmission of disease and reduce annoyance caused by these insects. The Vector Control staff conducts continuous encephalitis virus surveillance, including West Nile virus, and monitors the County areas for plague, Lyme disease, and Hantavirus to prevent and minimize the exposure of the public to these diseases.

Existing Conditions

Water Levels and Water Ponding

The J Street Drain flows into the Ormond Beach Lagoon, which consists of a dynamic array of wetland, freshwater, estuarine, and marine habitats. Water levels in the lagoon and the drain are a function of the initial water level, beach conditions (elevation, width), and freshwater inflow (from the drain). The expected maximum water level is regulated by the lowest beach crest elevation or the height of the sand berm, above which a breach in the lagoon would take place (in the absence of manual breaching) and water from the lagoon would discharge into the Pacific Ocean. When the lagoon closes off to the ocean, there are times when the backed up, or “ponded” water, extends from the lagoon to just upstream of Hueneme Road in the drain. Figure 4.11-1 shows two conditions where the water surface levels are at 6.5 feet and 3.8 feet and the associated acres of water. This figure illustrates the back up of water that occurs within the lagoon and the drain. Because of the dynamic nature of the project area, the level of water at the lagoon and drain varies throughout the year. Because the water level is typically higher prior to breaching, the water ponds further upstream in the drain. At that time, the water level may reach 6.5 feet, covering about 41.6 acres of the lagoon and the drain and extending just north of Hueneme Road. After breaching, the water surface level may reach 3.8 feet, covering about 23.3 acres and ponding upstream to the railroad (VCRR). The standing water in the drain during both conditions creates potential mosquito breeding sites.

Adult Mosquito Surveillance

The Ventura County Vector Control Program (VCVCP) uses adult mosquito traps as part of their comprehensive mosquito surveillance and control plan. Traps provide the VCVCP with quantitative data vital to decision-making in regards to mosquito control for the protection of public health. Mosquitoes captured in the traps can serve some or all of the following uses: (1) to monitor mosquito abundance and species composition in a local area; (2) to collect specimens for laboratory testing to determine if disease pathogens (e.g., encephalitis viruses) are circulating within the local mosquito population; (3) to provide early detection of exotic (i.e., non-native species); and (4) to evaluate the effectiveness of local mosquito control efforts. Although trap data may help pinpoint local areas where mosquito populations require additional control, the VCVCP typically only treats bodies of water against mosquito larvae based on direct evidence of immature mosquitoes in the waterbody rather than due to the presence of adults in the area. The traps use carbon dioxide (CO₂) as an attractant and capture only female mosquitoes. However, it should be noted that traps, because they are deployed overnight, represent only a “snap shot” in time of the mosquito population in an area. Attempts are made to deploy traps during representative weather conditions.

The VCVCP has limited resources available that must be used to protect the entire County. Adult mosquito traps are deployed in areas of greatest concern, usually triggered by evidence of local disease transmission in birds, humans, or other animals, but also in response to local nuisance complaints. For this reason, the number and location of traps deployed often varies seasonally and yearly. During 2008-2010, citizen complaints from the Surfside III Condominium Complex, located in the area near the terminal end of the J Street Drain, led the VCVCP to increase their surveillance efforts in the immediate vicinity in an attempt to identify both the species present and their potential points of origin. As a result, more data were generated for this area during this two-year period than in previous years. It should also be noted that trap data are collected during the late spring through early fall. Mosquito production is generally low during the late fall and winter months, thus traps are typically not deployed at those times. This section discusses the relevant trap data collected in the J Street Drain area between 1999 and 2010. A map of the locations for which trap data were collected in the J Street Drain area is presented in Figure 4.11-2.

Data Analysis: Greater J Street Drain Area

VCVCP deployed adult mosquito traps in nine locations in the greater J Street Drain area in 2005, 2008, 2009, and 2010 (Figure 4.11-2). In locations where traps were placed more than once, data vary widely from one deployment to the next. For example, the trap site at J Street Drain near Hueneme Road captured numbers ranging from less than 25 to greater than 200 with equally variable species composition. A multitude of factors can influence the flight of adult mosquitoes and associated overnight trap captures including natural factors (such as temperature, wind, and rain) and artificial factors (such as street lights and vehicle traffic). However, adult populations also fluctuate in response to seasons, habitat availability, and control efforts. The more urban trap sites located to the north and west of Ormond Beach Lagoon, and the trap site located in the undeveloped floodplain of the Oxnard Industrial Drain, captured a substantial percentage of *Culex quinquefasciatus*. This species thrives in disturbed and nutrient-rich habitats, including belowground stormwater infrastructure (Larry Walker Associates 2011). Its opportunistic use of nearly any small source of urban water (e.g., neglected pools, ornamental ponds, clogged rain gutters, flower pots) as well as belowground sources for breeding make it challenging to control. These same traps also captured a large percentage of *Culex tarsalis*, which also thrives in urban areas, but almost never breeds belowground.

Source: Ventura County Watershed Protection District; 2009 | G:\Projects\75217_J_Street\graphics\docs\Ponded_Water.ai | Last Updated: 10-26-09



Ponded Water
FIGURE 4.11-1



Adult Mosquito Trap Locations in the Greater J Street Drain Area

FIGURE 4.11-2

J Street Drain | Ventura County Watershed Protection District | EIR

The relatively high number of adult mosquitoes captured in traps in September 2009, combined with numerous complaints from residents of the Surfside III Condominium Complex, prompted the VCVCP to investigate the OWWTP as a possible source of increased mosquito production. The VCVCP routinely monitors several areas within the OWWTP, including the pond and inactive treatment cells, which would be likely mosquito breeding sources. In response to the resident complaints and increase in *Culex quinquefasciatus* mosquitoes captured in traps, the VCVCP requested authorization to more broadly examine the OWWTP for new mosquito breeding sources and OWWTP staff cooperated with this request. The investigation led to the detection of a large belowground flooded basement that was actively producing *Culex quinquefasciatus* mosquitoes. The flooded basement was considered a new mosquito source in the area. The VCVCP has since routinely addressed this source and other newly added smaller potential sources on the OWWTP property, in addition to the sites within the OWWTP previously monitored and treated. Trap data collected in 2010 show far fewer mosquitoes in the greater J Street Drain area, reflecting the increased control efforts at new source locations by the VCVCP. Overall, these data suggest that mosquito production is spread relatively equally within the developed areas surrounding the J Street Drain, with no evidence of sharp rises in mosquito numbers in traps located near the J Street Drain that would implicate this conveyance channel as a major source of mosquitoes. Table 4.11-1 lists locations near the J Street Drain routinely inspected for mosquitoes by the VCVCP.

Existing Treatment

The VCVCP focuses the bulk of its efforts on mosquito control, i.e. minimizing populations of vector and nuisance mosquitoes to protect public health and quality of life throughout Ventura County. The Mosquito Abatement and Vector Control District Law⁴ provides authority to the VCVCP to address any altered property that supports the development, attraction, or harborage of vectors; any water that is a breeding place for vectors; and any activity that supports the development, attraction, or harborage of vectors. Mosquito control is not intended to eliminate all mosquitoes. Rather, the goal is to reduce adult mosquito populations to a level that minimizes the possibility of people and animals getting sick due to mosquito-transmitted diseases (Larry Walker Associates 2011).

Mosquito control usually occurs through an integrated pest management strategy that utilizes a variety of measures to control mosquitoes. Whereas adult mosquitoes are widespread in the environment, as discussed above, larvae must have water to develop. Therefore, larval control in aquatic habitats is the foundation of most mosquito control programs in California. Minimizing the number of adults that emerge is crucial to reducing the incidence and risk of nuisance and disease. The measures most often utilized in the mosquito control approach include habitat modification, biological controls, and chemical application. Habitat modification includes creating ditches to maintain water circulation through swamps and marshes and thinning or removing emergent vegetation within and along the margins of water bodies to maintain water movement, reduce cover, and destroy mosquito larvae. Biological controls include the use of fish and aquatic invertebrates to prey on mosquito larvae. Chemical application is a more target-direct and, therefore, more often utilized way to abate mosquitoes than habitat modification or biological controls. Mosquito control formulations can target mosquitoes during specific life cycle stages and are most effective at controlling mosquitoes during the larval stage (CDPH 2008).

⁴ California Health and Safety Code, Division 3, Chapter 1.

Table 4.11-1. Existing Vector Source within Project Area

Site No.	Site Name	Site Description
1	Bubbling Springs Park drains	Concrete drain south of Hueneme Road and north of footbridge
2	Hueneme Drain Sec E	Surfside Drive to J Street Drain
3	Hueneme Drain Sec D	Hueneme Road. to south end of Bubbling Springs Park
4	Surfside catch basin	Catch basin on surfside South of Hueneme Road
5	Hueneme drain construction	Enter off Ocean View Drive-through parking lot to left
6	Oxnard Wastewater Treatment Plant-pond	Pond behind (west) of plant
7	Oxnard Wastewater Treatment Plant-cells	Individual cells and overflow area
8	Sedimentation building sump 2	Oxnard wastewater treatment plant
9	J Street Drain Sec E	Hueneme Road to beach
10	Sodium hypochlorite tank sump	Oxnard wastewater treatment plant
11	Sodium bisulfate tank 1	Oxnard wastewater treatment plant
12	Sedimentation sump 1	Oxnard wastewater treatment plant
13	Oxnard Wastewater Treatment Plant - Old influent building	Confined space hazard - flooded basement
14	West gallery sumps	Oxnard wastewater treatment plant
15	Halaco dunes wetland	Access from Ocean View Drive
16	Blower building sump	Oxnard wastewater treatment plant
17	Blower sump 2	Oxnard wastewater treatment plant
18	Aeration sump 1a	Oxnard wastewater treatment plant
19	Aeration tank ditch 1a	Oxnard wastewater treatment plant
20	Waste water treatment plant ditch	Oxnard wastewater treatment plant
21	Aeration tank 1c sump	Oxnard wastewater treatment plant
22	Aeration tank ditch 1c	Oxnard wastewater treatment plant
23	Blower sump 1	Oxnard wastewater treatment plant
24	Aeration tank 2b pathway	Oxnard wastewater treatment plant
25	Halaco-ocean overflow	Swamp area bordered by Oxnard Industrial Drain, J Street Drain, and Pacific Ocean
26	West McWane Boulevard marsh & ponding	West end of McWane Boulevard /access by dirt path along pole line
27	Oxnard Industrial Drain Sec F	Hueneme Road to beach
28	Ormond beach salt marsh	Access end McWane Boulevard by k-rail
29	Edison marsh railway ditch	Ditch along railway and agricultural fields
30	West McWane Boulevard ditch	Ditch both sides of McWane Boulevard paved section near k-rail
31	Arcturus-BMW ditch	Grass ditch in front of BMW processing facility
32	Edison marsh	Marsh east of Ormond beach salt marsh
33	South end of Edison Road, marsh	Marsh area around outside contractors parking lot
34	Edison Road canal-west side	On west side of canal at end of Edison Road
35	Edison Road ditch	McWane Boulevard to Edison plant
36	Edison Road canal, east	Canal at east side and end of Edison Road
38	Arnold Road and wetland area	Ditches along both sides of Arnold road, wetland

Site No.	Site Name	Site Description
39	End of Casper Road	Ditch and canal running north-south at end of Casper
40	Casper Road Sec A	Along both sides of road, south of Hueneme Road
41	Casper Road Sec B	Ditches on both sides of road
42	Casper Road Sec C	Ditches along both sides of Casper Road
43	Ventura Duck Club	Enter off of Casper Road. see caretaker
44	Pt. Mugu Duck Club	Enter off Hueneme Road next to Mugu drain
45	Mugu drain Sec B	Hueneme Road to 1st gate

Source: County of Ventura Environmental Health Division Vector Control Program

The application of any chemical to control mosquitoes is done only after establishing the need to do so by the presence of mosquito larvae detected during mosquito monitoring and surveillance. Larval mosquito monitoring includes identifying and checking likely larval developmental sites for the presence of mosquito larvae and then treating the water to kill the mosquito larvae before they emerge as flying, biting adults. Personnel working for vector control agencies who apply pesticides in California are certified by the California Department of Public Health (CDPH) (CDPH and MVCAC 2010). The VCVCP uses a focused approach for chemical application to target waterbodies with known mosquito breeding grounds and does not use a “blanket approach” to chemical application for all water bodies. The VCVCP applies chemicals in this manner as part of best management practices to reduce the amount of chemicals applied to waterbodies. Furthermore, it is not efficient or effective to target all waterbodies as many waterbodies have habitat characteristics which make them unlikely breeding grounds for mosquitoes, as discussed above. The VCVCP uses two categories of larvicides as part of chemical applications, both of which are considered relatively non-toxic to non-target organisms and have no documented ecological side-effects when applied according to the label:

- VectoLex (*Bacillus sphaericus*) and VectoBac (*Bacillus thuringiensis israelensis*) are microbial larvicides. These products work by exploiting insecticidal toxins found in natural bacteria that only have significant effects on the target insects (CDPH and MVCAC 2010).
- Methoprene is an insect growth regulator that comes in several formulations including extended release pellets, briquettes, and ingots, water-soluble packets, and liquid. Methoprene disrupts the physiological development of larvae, which prevents adults from emerging from the water body. Methoprene has minimal non-target effects and has no use restrictions in California (CDPH and MVCAC 2010).

It is often difficult to pin-point “hot spots” of mosquito breeding due to the vast number of potential sources in developed areas. An important tool used by vector control agencies, including the VCVCP, is adult mosquito traps. Traps are deployed in areas suspected of producing large numbers of mosquitoes based on historical data, disease surveillance data, and public complaints. Trap captures allow the VCVCP to count and identify mosquitoes to determine the potential public health risk and the need for control. Adult mosquito surveillance can also be used as a feedback or quality control mechanism to determine how effectively an overall program reduces mosquito populations (CDPH and MVCAC 2010). With limited resources, vector control programs prioritize adult mosquito surveillance for use in tracking and preventing diseases such as West Nile virus over public annoyance and treatment feedback. Public complaints are addressed through field visits to assess if additional treatment is needed, though may not result in the deployment of adult traps.

4.11.1.1 Current J Street Drain Configuration

The J Street Drain is currently a trapezoidal, concrete flood control channel approximately 20-30 feet wide with 1.5:1 sloped walls and an average depth near 4 feet. The J Street Drain discharges into Ormond Beach Lagoon, which usually does not have an outlet to the ocean. The effect of Ormond Beach Lagoon having no outlet is that water backs up into the J Street Drain nearly to Hueneme Road. While mosquito control best management practices (BMPs) largely advocate reducing or eliminating standing water in channels and drains as the primary strategy for mosquito control, the endangered species requirements in Ormond Lagoon prevent such practices.

The current J Street Drain has a concrete substrate and relatively steep sides, both of which inhibit emergent vegetation growth along the bottom and margins of the channel. Lack of vegetation can prevent mosquito production as no sheltered areas for mosquito larvae to use as refuge are provided. As described above, the current J Street Drain is 20-30 feet wide. Because of this wide, open surface, the lack of vegetative cover, and the location near the Pacific Ocean, the water surface in the drain experiences wind and wave action, especially near the beach. Even relatively minor wind and wave action on the surface of the water prevent the breathing siphons of mosquito larvae from maintaining a connection to the air, therefore effectively drowning the larvae. This makes the current J Street drain not ideal habitat for mosquito breeding. In addition, the depth of the J Street Drain allows it to support numerous fish of various sizes (Section 4.2, page 4.2-14 of this EIR) that will opportunistically prey on mosquito larvae. Recent inspections of the J Street Drain by California Department of Public Health, Vector-Borne Disease Section staff confirmed that the J Street Drain does not currently provide suitable habitat to support large mosquito populations (Larry Walker Associates 2011). Additionally, the open channel allows for safe and easy maintenance, monitoring, and treatment.

4.11.2 Regulatory Setting

Pursuant to Division 3, Chapter 5, §2001(f) of the California Health and Safety Code:

- (c) In enacting this chapter, it is the intent of the Legislature to create and continue a broad statutory authority for a class of special districts with the power to conduct effective programs for the surveillance, prevention, abatement, and control of mosquitoes and other vectors.
- (d) It is also the intent of the Legislature that mosquito abatement and vector control districts cooperate with other public agencies to protect the public health, safety, and welfare. Further, the Legislature encourages local communities and local officials to adapt the powers and procedures provided by this chapter to meet the diversity of their own local circumstances and responsibilities.

4.11.3 Significance Thresholds

The purpose of these guidelines is to ensure consistent and complete assessment of the project-related impacts to public health in accordance with the California Environmental Quality Act (CEQA), the *CEQA Guidelines*, the 2011 Ventura County Initial Study Assessment Guidelines, and the Ventura County Administrative Supplement implementing CEQA.

Significance must be determined on a case by case basis and is related to project type, location and other environmental factors. If it is determined that project-related impacts are significant and can be mitigated through minor project redesign or adoption of standard conditions, then project specific mitigation shall be identified.

For projects requiring testing for perchlorate and trichloroethene, the standards used for the threshold will be based on current information from the U.S. Environmental Protection Agency (EPA) Preliminary Remedial Goal and the California Department of Health Services Public Health Goal or Maximum Contaminant Level (MCL) for perchlorate and TCE in water and soil.

4.11.4 Project-Level Impact Analysis

Construction

The existing J Street Drain concrete lining ends approximately 50 feet south of the Hueneme Drain Pump Station. After reconstruction of the J Street Drain concrete lining, the channel invert would be about three feet lower than the existing invert in order to create the required channel capacity. As a result, the finished invert would need to be daylighted via an earthen ramp to the sand berm/lagoon at a 10:1 slope over a distance of approximately 40 feet from the end of the existing concrete. A 6- to 8-foot thick layer of four-ton rock riprap would be placed horizontally beneath the earthen ramp at the end of and at the same elevation as the concrete drain bottom to dissipate energy flow. It is anticipated that during the first few natural lagoon breaching events following Phase 1 construction, the movement of water (tidal and drain flow) would result in an equilibrium elevation within the channel transition area, between the end of the concrete channel and the Ormond Beach Lagoon annual breach location. When the lagoon has breached, there is a potential for temporary standing water to accumulate upstream of the earthen ramp before the new equilibrium elevation establishes at the end of the reconstructed J Street Drain. The lagoon typically breaches during the late fall and winter, when storm runoff increases the water surface elevation enough to overtop the beach sand berm. As described above, mosquito production decreases substantially in the cooler late fall and winter months. Therefore, temporary accumulation of standing water behind the earthen ramp is not expected to substantially increase mosquito production.

When the lagoon outlet is closed and the water surface elevation in Ormond Beach Lagoon is at 6.5 feet, the additional surface water acreage of the J Street Drain would be one additional acre at the completion of Phase I (north limit at Hueneme Road) and 2.6 additional acres at the completion of Phase II (north limit at Pleasant Valley Road). However, neither the changes in channel configuration nor the resulting additional back-up are expected to increase the suitability of the drain habitat for mosquito breeding.

As discussed above, the Vector Control Program currently uses larvicides for mosquito abatement, including VectoLex G and VectoBac G, which are applied according to the manufacturer's label and meet all state and federal regulations. These larvicides contain biological insecticides, such as the microbial larvicides, *Bacillus sphaericus* and *Bacillus thuringiensis israelensis*, which are naturally occurring bacteria that produce toxins targeting various species of mosquitoes, fungus gnats, and black flies. Only these species are susceptible to these bacteria – other aquatic invertebrates and non-target insects are unaffected. In addition, the EPA evaluates and registers (licenses) pesticides to ensure that they can be used safely by vector control programs. To evaluate any pesticide, EPA assesses a wide variety of tests to determine whether a pesticide has the potential to cause adverse effects on humans, wildlife, fish and plants, including endangered species and non-target organisms. Therefore, the larvicides used by the Ventura County Vector Control Program undergo extensive testing prior to registration and are virtually nontoxic to humans and do not pose risks to wildlife, non-target species, or the environment when applied according to label instructions.

Potential vector impacts associated with mosquitoes may occur due to increased areas of temporary standing water within the J Street Drain concrete channel between the lagoon and Hueneme Road. As discussed above, the Ventura County Vector Control Program's ongoing mosquito abatement activities

are expected to effectively control mosquito populations without impacting other, desirable species after the construction of J Street Drain concrete channel and earthen ramp. In addition, the widened channel would continue to be subject to wind and wave disturbance, as is the existing channel. Deeper water within the channel would support a larger population of fish and other predatory aquatic life than currently exists. Therefore, this impact is considered less than significant.

Operations

The proposed J Street Drain project includes changing the existing open trapezoidal concrete channel into an open rectangular channel with vertical rather than sloped walls. The channel would be approximately four feet deeper and the existing sloped channel walls would be replaced with vertical walls. Conversion to vertical channel walls would eliminate existing shallow water along the edges of the channel. The wider, deeper channel will increase the overall capacity of the channel and convey greater volumes of flood water to prevent the channel from over-topping and causing damage to property and vital facilities. The change in channel geometry would increase the depth, surface area, and length of backed up water. When the lagoon outlet is closed and the water surface elevation in Ormond Beach Lagoon is at 6.5 feet, the additional surface water acreage of the J Street Drain would be one additional acre at the completion of Phase I and 2.6 additional acres at the completion of Phase II. However, neither the changes in channel configuration nor the resulting additional back-up are expected to increase the suitability of the drain habitat for mosquito breeding. The proposed changes in the channel geometry will likely amplify the design characteristics' negative effects on mosquito breeding. Vertical channel walls are considered the most desirable design choice to reduce potential for vegetative or other cover along the channel margins and present the best scenario for preventing refuge for immature mosquitoes. Additionally, the deeper channel will provide better habitat for predator fish while the wider channel will increase wind, wave, and animal disturbances of the water surface. The proposed channel geometry will not reduce the ease or safety of access for mosquito monitoring and treatment or channel maintenance.

Due to endangered species constraints, the deepening of the J Street Drain as part of the proposed project would not extend into Ormond Beach Lagoon. Following a breach event, this could result in a situation where the majority of the J Street Drain empties, while a section of standing water remains at the terminus of the drain where the elevation is lower than the lagoon. This scenario is not expected to increase the probability of mosquito production for the following reasons:

- 1) Vertical walls, lack of vegetation, and wind action would maintain poor mosquito habitat similar to pre-breach conditions
- 2) Fish living in coastal lagoons, such as the tidewater goby, are adapted to tolerate fluctuations in water level and should remain in the channel providing predation and additional surface water disturbance.
- 3) Breach events usually take place during the colder winter months when mosquito production is low; therefore, any short-term creation of habitat prior to the lagoon refilling would not be expected to produce a substantial number of mosquitoes.

It should also be noted that breaches close relatively quickly, and the continuous flow in the channel would refill the drain, preventing this configuration from persisting. Furthermore, it is expected that the depth of the drain and the lagoon would equalize over time such that standing water may not remain in the drain during future breaches. Therefore, this impact is considered less than significant.

Beach Elevation Management Plan

The Beach Elevation Management Plan (BEMP) is anticipated to be periodically and would only have equipment on the beach for a few hours. Grooming the beach elevation would ensure the lagoon breaches naturally before adjacent developed properties can become flooded. As discussed previously, the breaching of Ormond Beach Lagoon would decrease the water level in the lagoon and the drain. Standing water and potential mosquito breeding sites would decrease as a result of the BEMP, however mosquito populations are expected to be low when the BEMP would be implemented in the fall and winter. The Ventura County Vector Control Program would continue to conduct mosquito surveillance and abatement activities as needed within the project area. Therefore, no impact is identified for this issue area.

4.11.5 Cumulative-Level Impact Analysis

Construction

The construction of the proposed project would result in temporary ponding at the transition area between the end of the concrete channel and Ormond Beach Lagoon. Construction of the proposed project would not result in a project-level significant impact to public health. In addition, other proposed projects near J Street Drain would not increase the amount of standing water in the project vicinity. Therefore, a less than significant cumulative impact would result.

Operations

The wider, deeper channel will increase the overall capacity of the channel and convey greater volumes of flood water to prevent the channel from over-topping and causing damage to property and vital facilities. The change in channel geometry would increase the depth, surface area, and length of backed up water. There is a potential for temporary standing water to accumulate upstream of the earthen ramp before the new equilibrium elevation establishes at the end of the reconstructed J Street Drain. When the water surface elevation in Ormond Beach Lagoon is at 6.5 feet, the additional surface water acreage of the J Street Drain would be one additional acre at the completion of Phase I and 2.6 additional acres at the completion of Phase II. However, neither the changes in channel configuration nor the resulting additional back-up are expected to increase the suitability of the drain habitat for mosquito breeding.

The Ventura County Vector Control Program would continue to conduct mosquito surveillance and abatement activities within the project area during operation. Operation of the proposed project would not result in a project-level significant impact to public health. In addition, other proposed projects near J Street Drain would not increase the amount of standing water in the project vicinity. Therefore, a less than significant cumulative impact would result.

Beach Elevation Management Plan

The Beach Elevation Management Plan (BEMP) would be implemented periodically and would only have equipment on the beach for a few hours. Grooming the beach elevation would ensure the lagoon breaches naturally before adjacent developed properties can become flooded. As discussed previously, the breaching of Ormond Beach Lagoon would decrease the water level in the lagoon and the drain. Implementation of the BEMP would not result in a project-level impact to public health. Therefore, no cumulative impact would result.

4.11.6 Mitigation Measures

No significant impacts were identified, therefore no mitigation is required.

4.11.6.1 Ventura County Watershed Protection District Best Management Practices

The Ventura County Board of Supervisors adopted the District's Final Program EIR for Environmental Protection Measures for the Ongoing Routine Operations and Maintenance Program Project No. 80030 in May 2008. The final document includes BMPs that have been added to the District's Maintenance Activity Guidelines. The Operation and Maintenance Division staff will be responsible for ensuring the proper implementation of the BMPs on a routine, year-round basis. The Division staff will also be responsible for ensuring compliance with all permit conditions, conducting or employing qualified personnel for any required pre-project site surveys or inspections, updating the Activity Guidelines sheets, instructing crews on BMPs, overseeing certain BMP implementation, documenting the implementation of the BMPs, and conducting any agency coordination.

The following BMPs will be implemented to minimize impacts during operation:

- *Aquatic Pesticide BMPs.* The District shall follow the most up-to-date BMPs and the monitoring and reporting requirements in the District's NPDES Stormwater Quality Management Plan (Board Order No. 00-108; NPDES Permit No. CAS004002, adopted on July 27, 2000, available at http://vcstormwater.org/documents/workproducts/stormwater_quality_mangement_plan.pdf) when applying herbicides to channels and basins. The District shall also follow BMPs in the Ventura County Application Protocol for Pesticides, Fertilizers, and Herbicides (included in Appendix I).

4.11.7 Response to Notice of Preparation Comments

After the Notice of Preparation (NOP) comment period, the Surfside III Condominium Owners' Association J Street Drain Project Committee commented that the proposed project would result in increased standing water containment and mosquito infestation in the project area and requested that public health be addressed in the EIR. A detailed mosquito analysis was prepared based upon this response and is included in Appendix I. There is a potential for temporary standing water to accumulate upstream of the earthen ramp before the new equilibrium elevation establishes at the end of the reconstructed J Street Drain. When the water surface elevation in Ormond Beach Lagoon is at 6.5 feet, the additional surface water acreage of the J Street Drain would be one additional acre at the completion of Phase I and 2.6 additional acres at the completion of Phase II. However, neither the changes in channel configuration nor the resulting additional back-up are expected to increase the suitability of the drain habitat for mosquito breeding.

Furthermore, mosquito surveillance and abatement activities conducted by the Ventura County Vector Control Program within the project area would continue after the project is completed. As a result, impacts related to public health would be less than significant.

4.12 GREENHOUSE GAS EMISSIONS

This section examines potential global climate change impacts associated with the proposed J Street Drain Project. A Global Climate Change Evaluation was prepared by Scientific Resources Associated (2011) and is included as Appendix H.

4.12.1 Environmental Setting

Greenhouse gases (GHG) include both naturally occurring and anthropogenic gases that trap heat in the earth's atmosphere. GHGs include, but are not limited to, carbon dioxide (CO₂), methane (CH₄), nitrous oxide (N₂O), hydrofluorocarbons (HFC), perfluorocarbons (PFC), and sulfur hexafluoride (SF₆). These gases capture heat radiated from the sun and re-radiated from the earth's surface as it is reflected back into the atmosphere, roughly analogous to the retention of heat energy in a greenhouse. The accumulation of GHGs has been implicated as a driving force for global climate change. Definitions of climate change vary between and across regulatory authorities and the scientific community, but in general can be described as the changing of the earth's climate caused by natural fluctuations and the impact of human activities that alter the composition of the global atmosphere.

Both natural processes and human activities emit GHGs. Global climate change is a change in the average weather on earth that can be measured by wind patterns, storms, precipitation and temperature. Although there is disagreement as to the speed of global warming and the extent of the impacts attributable to human activities, the majority of the scientific community now agrees that there is a direct link between increased emission of GHGs and long-term global temperature. Potential global warming impacts in California may include, but are not limited to, loss in snow pack, sea level rise, more extreme heat days per year, more high ozone days, more large forest fires, and more drought years. Secondary effects are likely to include a global rise in sea level, impacts to agriculture, changes in disease vectors, and changes in habitat and biodiversity. One of the purposes of the J Street Drain project is to improve stormwater flow and reduce potential flooding in the cities of Oxnard and Port Hueneme. The project would therefore alleviate potential flooding impacts in the event that global climate change affects the severity of storms and runoff or raises sea level.

The accumulation of GHGs in the atmosphere regulates the earth's temperature; however, emissions from human activities such as electricity production and motor vehicles have elevated the concentration of GHGs in the atmosphere. In 2005, in recognition of California's vulnerability to the potential effects of climate change, Governor Schwarzenegger established Executive Order S-3-05, which sets forth a series of target dates by which California emissions of GHG would be progressively reduced, as follows:

- By 2010, reduce GHG emissions to 2000 levels;
- By 2020, reduce GHG emissions to 1990 levels; and
- By 2050, reduce GHG emissions to 80 percent below 1990 levels.

Ozone-depleting gases contribute to the destruction of the earth's naturally occurring ozone, which protects our planet from the damaging effects of solar ultraviolet radiation. The biggest contributors to ozone depletion are chlorofluorocarbons (CFCs), halons, carbon tetrachloride, methyl chloroform, and other halogenated compounds.

4.12.2 Regulatory Setting

Assembly Bill 32

In 2006, California passed Assembly Bill (AB 32), the California Global Warming Solutions Act of 2006, which requires the California Air Resources Board (ARB) to design and implement emission limits, regulations, and other measures, such that California GHG emissions will be reduced to 1990 levels by 2020. AB 32 required that by January 1, 2008, ARB would determine what the statewide GHG emissions level was in 1990, and approve a statewide GHG emissions limit that is equivalent to that level, to be achieved by 2020. ARB adopted its Scoping Plan in December 2008, which provided estimates of the 1990 GHG emissions level and identified sectors for the reduction of GHG emissions. The ARB has estimated that the 1990 GHG emissions level was 427 million metric tons (MMT) net CO_{2e}. The ARB estimates that a reduction of 173 MMT net CO_{2e} emissions below business-as-usual would be required by 2020 to meet the 1990 levels (ARB 2007b). This amounts to a 15 percent reduction from today's levels, and a 30 percent reduction from projected business-as-usual levels in 2020.

Senate Bill 97

Senate Bill (SB) 97, enacted in 2007, amends the CEQA statute to clearly establish that GHG emissions and the effects of GHG emissions are appropriate subjects for CEQA analysis. It directs the Governor's Office of Planning and Research (OPR) to develop draft CEQA guidelines "for the mitigation of greenhouse gas emissions or the effects of greenhouse gas emissions" by July 1, 2009 and directs the Resources Agency to certify and adopt the CEQA guidelines by January 1, 2010.

OPR Technical Advisory, CEQA and Climate Change

The OPR published a technical advisory on CEQA and Climate Change on June 19, 2008. The guidance did not include a suggested threshold, but stated that the OPR has asked CARB to recommend a method for setting thresholds which will encourage consistency and uniformity in the CEQA analysis of greenhouse gas emissions throughout the state." The OPR does recommend that CEQA analyses include the following components: (1) identify greenhouse gas emissions; (2) determine significance; and (3) mitigate impacts. In April 2011, the OPR published its proposed revisions to CEQA to address GHG emissions.

California Air Pollution Control Officers Association

In January 2008, the California Air Pollution Control Officers Association (CAPCOA) issued a white paper on evaluating and addressing GHGs under CEQA entitled *CEQA and Climate Change: Evaluating and Addressing Greenhouse Gas Emissions from Projects Subject to the California Environmental Quality Act*. This resource guide was prepared to support local governments as they develop their programs and policies around climate change issues. The paper was intended to provide a common platform of information about key elements of CEQA as they pertain to GHG, including an analysis of different approaches to setting significance thresholds. The paper discussed a range of GHG emission thresholds that could be used.

Senate Bill 375

Senate Bill 375 requires that regions within the state which have a metropolitan planning organization must adopt a sustainable community's strategy as part of their regional transportation plans. The strategy

must be designed to achieve certain goals for the reduction of GHG emissions. The bill finds that GHG from autos and light trucks can be substantially reduced by new vehicle technology, but even so “it will be necessary to achieve significant additional greenhouse gas reductions from changed land use patterns and improved transportation. Without improved land use and transportation policy, California will not be able to achieve the goals of AB 32.” SB 375 provides that new CEQA provisions be enacted to “encourage developers to submit applications and local governments to make land use decisions that will help the state achieve its goals under AB 32,” and that “current planning models and analytical techniques used for making transportation infrastructure decisions and for air quality planning should be able to assess the effects of policy choices, such as residential development patterns, expanded transit service and accessibility, the walkability of communities, and the use of economic incentives and disincentives.”

4.12.3 Significance Thresholds

As defined in Appendix G of the *California Environmental Quality Act (CEQA) Guidelines*, impacts to Global Climate Change would be considered significant if the project would:

- Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment; or
- Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases.

As discussed in Section 15064.4 of the *CEQA Guidelines*, the determination of the significance of greenhouse gas emissions calls for a careful judgment by the lead agency, consistent with the provisions in Section 15064. Section 15064.4 further provides that a lead agency should make a good-faith effort, to the extent possible on scientific and factual data, to describe, calculate or estimate the amount of GHG emissions resulting from a project. A lead agency shall have discretion to determine, in the context of a particular project, whether to:

- 1) Use a model or methodology to quantify greenhouse gas emissions resulting from a project, and which model or methodology to use. The lead agency has discretion to select the model or methodology it considers most appropriate, provided it supports its decision with substantial evidence. The lead agency should explain the limitations of the particular model or methodology selected for use; and/or
- 2) Rely on a qualitative analysis or performance based standards. Section 15064.4 also advises a lead agency to consider the following factors, among others, when assessing the significance of impacts from greenhouse gas emissions on the environment:
 - a) The extent to which the project may increase or reduce greenhouse gas emissions as compared to the existing environmental setting;
 - b) Whether the project emissions exceed a threshold of significance that the lead agency determines applies to the project; and
 - c) The extent to which the project complies with regulations or requirements adopted to implement a statewide, regional, or local plan for the reduction or mitigation of greenhouse gas emissions.

CAPCOA recommended a threshold of 900 metric tons of CO_{2e} emissions as a threshold below which no further evaluation would be required, and no significant impact would occur (CAPCOA 2008). Lead

agencies have utilized this threshold as an initial screening threshold to determine whether further evaluation is required.

To date, Ventura County has not adopted specific quantitative thresholds of significance for GHGs. The County has reviewed thresholds and approaches for evaluating significance based on guidance issued by the South Coast Air Quality Management District (SCAQMD), the Bay Area Air Quality Management District, and the San Joaquin Valley Air Pollution Control District, but has not implemented any of the approaches used by these agencies.

On December 5, 2008, the SCAQMD Governing Board adopted the staff proposal for an interim GHG significance threshold for projects where the SCAQMD is the lead agency. On September 28, 2010, the SCAQMD recommended a threshold of 10,000 metric tons of CO_{2e} annually for industrial projects. Given the nature of the project as a temporary construction project, for the purpose of this document, the significance of impacts has been evaluated based on the SCAQMD's interim threshold for industrial projects of 10,000 metric tons of CO_{2e} annually.

The Council on Environmental Quality (CEQ) has also issued draft guidance directing Federal agencies on consideration of the effects of GHG emissions in National Environmental Policy Act (NEPA) documents. The CEQ indicated that the environmental analysis and documents in the NEPA process should provide the decision maker with information on: (1) the GHG emissions effects of a proposed action and alternatives; and (2) the relationship of climate change effects to a proposed action or alternatives, including the relationship to proposed design, environmental impacts, mitigation, and adaptation measures. The draft guidance indicated that if a proposed action would be reasonably anticipated to cause direct emissions of 25,000 metric tons or more of CO_{2e} GHG emissions on an annual basis, agencies should conduct a qualitative and quantitative analysis of GHG impacts. The CEQ does not propose this level as an indicator of a threshold of significant effects, but rather as an indicator of the minimum level of GHG emissions that may warrant some description in the NEPA analysis.

Because the SCAQMD's interim threshold of 10,000 metric tons of CO_{2e} for industrial projects is more stringent than the CEQ's guideline of 25,000 metric tons of CO_{2e} on an annual basis, the SCAQMD's threshold was utilized. The SCAQMD also recommends that, to evaluate the Project's contribution of GHG emissions over a project lifetime (assumed to be 30 years), the project's construction GHG emissions be amortized over a 30-year period. The amortization approach has been followed in this analysis to assess the potential significance of construction emissions.

4.12.4 Project-Level Impact Analysis

Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?

Construction Emissions

The main source of GHG emissions associated with the proposed project is from combustion of fossil fuels in construction equipment. Construction GHG emissions were calculated using the URBEMIS Model, Version 9.2.4. The URBEMIS Model contains the most recent emission factors from the Air Resources Board's EMFAC2007 and OFFROAD models. Model outputs are provided in Appendix A of EIR Appendix H. The URBEMIS Model provides estimates of CO₂ emissions only; to estimate emissions of CH₄ and N₂O, the relative emission rates from combustion of diesel fuel were used to derive conversion factors. The CO₂-equivalent emissions were calculated by multiplying the emissions of GHG by their global warming potential, and then summing the emissions. As shown in Table 4.12-1, amortized

4.12 Greenhouse Gas Emissions

construction emissions would contribute 804 metric tons annually to the lifetime of the project (30 years). The emissions are below the SCAQMD's annual threshold for industrial projects of 10,000 metric tons of CO_{2e}, and, when amortized, are below the CAPCOA recommended threshold of 900 metric tons of CO_{2e} emissions. A less than significant impact is identified.

Table 4.12-1. Estimated Construction GHG Emissions

Construction Phase	Total Emissions per Phase, Metric Tons ¹			
	CO ₂	CH ₄	N ₂ O	CO _{2e} ²
Phase I	6,206	0.35	0.16	6,262
Phase II	5,968	0.34	0.15	6,022
Phase III	5,866	0.34	0.15	5,920
Phase IV	5,864	0.34	0.15	5,918
Total CO _{2e} Emissions, metric tons				24,122
Amortized CO _{2e} Emissions, metric tons				804

Source: Scientific Resources Associated, 2011

1. Metric tons are calculated by dividing the total short tons by a factor of 1.1023

2. Conversion Factors:

CO₂ 1
CH₄ 21
N₂O 310

Operational Emissions

Operational impacts associated with the proposed project are associated with ongoing maintenance activities. It is anticipated that maintenance of the reconstructed drain will be similar to the existing maintenance activities.

In order to programmatically address operational activities associated with ongoing maintenance, the Ventura County Watershed Protection District prepared a Program Environmental Impact Report (EIR) for the *Environmental Protection Measures for the Ongoing Routine Operations and Maintenance Program*. The Final Program EIR for was certified in May 2008. The environmental protection measures proposed by the District aim to reduce the current administrative process to comply with agreements and permits necessary for the maintenance activities at the District's facilities. Currently, many of the District's facility maintenance activities occur in drainages, watercourses, creeks, basins, and water bodies where such activities are regulated by several state and federal agencies. Typical maintenance activities include sediment removal and vegetation control to maintain capacity within the facility. The modification to the bed, bank, and/or vegetation in a natural drainage (and certain man-made drainages) is regulated by the California Department of Fish and Game (CDFG) under Section 1600 et seq. of the Fish and Game Code, by the US Army Corps of Engineers (USACE) under Section 404 of the Clean Water Act, and by the Regional Water Quality Control Board (RWQCB) under Section 401 of the Clean Water Act.

In the Program EIR, GHG emissions attributable to operation and maintenance activities were evaluated. The main source of emissions associated with operation and maintenance activities was from vehicles. It was estimated that operation and maintenance activities would contribute 23.04 metric tons per year of CO_{2e} from light-duty vehicles and 44.30 metric tons per year of CO_{2e} from heavy duty vehicles, for a total of 67.34 metric tons per year. Operation and maintenance activities for the proposed project would

be included in this estimate. Maintenance activities associated with the proposed J Street Drain would be similar to the activities currently taking place for the existing drain maintenance. Therefore, no new GHG impacts would result from the proposed drain maintenance activities during project operation.

The Program EIR identified climate action strategies that will reduce GHG emissions to the extent possible. These measures include discrete early action measures proposed by the ARB to reduce GHG emissions in their Scoping Plan (ARB 2008), as well as measures identified in the Association of Environmental Professionals (AEP) White Paper (AEP 2007). The ARB discrete early action measures and AEP climate action strategies that are relevant to operational emissions associated with operation and maintenance activities for the J Street Drain, as identified in the EIR, include the following:

- Implementation of the Low Carbon Fuel Standard. This standard will be implemented state-wide through fuels programs regulated by the ARB.
- Reduction of HFC-134a emissions from non-professional servicing of motor vehicle air conditioning systems. Vehicle maintenance is conducted by County automotive professionals, and employees are prohibited from servicing District vehicles.
- Diesel anti-idling provisions that limit motor vehicle idling to 5 minutes or less from commercial vehicles. The ARB has promulgated a rule that applies to commercial vehicles.
- Alternative fuels: the ARB is evaluating requirements to require the use of 1 to 4 percent biodiesel in California fuels, and evaluating increasing the use of ethanol in fuels.
- Achieve a statewide goal of 50 percent recycling. Recycling of construction waste is currently mandated by the County's Integrated Waste Management Division (Ordinance 4357) and is a requirement of all contracts for operation and maintenance work within Ventura County.

The J Street Drain project will comply with these climate action measures and will reduce GHGs to the extent feasible. Impacts would be less than significant.

Beach Elevation Management Plan

The BEMP would be implemented periodically and would result in occasional trips to the beach during the rainy season when a storm event is forecast. These trips are expected to be infrequent and would not be characterized as generating excessive emissions. Therefore, a less than significant impact is identified for this issue area.

Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?

Construction and Operation

Emissions of GHGs were evaluated for both construction and operation of the J Street Drain Project. The main source of emissions associated with the project would be construction activities. Operational emissions would be unchanged from existing conditions. Emissions from construction would be below the SCAQMD's interim threshold of 10,000 metric tons of CO₂e annually for industrial projects, and, when amortized, would be below the CAPCOA recommended threshold of 900 metric tons of CO₂e emissions. Impacts would be less than significant.

Beach Elevation Management Plan

The BEMP would be implemented periodically and would result in occasional trips to the beach during the rainy season when a storm event is forecast. These trips are expected to be infrequent, would not be characterized as generating excessive emissions, and would not conflict with any applicable plan, policy or regulation related to greenhouse gas emission. Therefore, a less than significant impact is identified for this issue area.

4.12.5 Cumulative-Level Impact Analysis

The proposed project would result in an incremental increase in GHG emissions. However, as shown in the analysis above, the emissions are below the SCAQMD's annual threshold for industrial projects of 10,000 metric tons of CO₂e, and, when amortized, are below the CAPCOA recommended threshold of 900 metric tons of CO₂e emissions. When added to the projects identified in Table 2.0-3, Cumulative Projects, the incremental increase in GHG emissions from the proposed project would not be significantly considerable. Therefore, a less than significant impact is identified.

4.12.6 Mitigation Measures

The project impacts were determined to be less than significant therefore, no mitigation is required. Additionally, mitigation measures AQ-1 identified in Section 4.4, Air Quality, would reduce ozone precursor emissions to a less than significant level. Operational BMPs discussed in Section 4.12.4 and previously adopted by the District would aid in minimizing potential GHG emissions.

4.12.7 Significance After Mitigation

As presented in Section 4.12.4 and 4.12.5, no mitigation is required. Project- and cumulative-level GHG emissions are less than significant.

4.12.8 Response to Notice of Preparation Comments

There were no Notice of Preparation (NOP) comments regarding greenhouse gas emissions.

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5.0 ALTERNATIVES

The identification and analysis of alternatives is a fundamental concept under California Environmental Quality Act (CEQA). This is evident in that the role of alternatives in an Environmental Impact Report (EIR) is set forth clearly and forthrightly within the CEQA statutes. Specifically, CEQA §21002.1(a) states:

“The purpose of an environmental impact report is to identify the significant effects on the environment of a project, to identify alternatives to the project, and to indicate the manner in which those significant effects can be mitigated or avoided.”

The *CEQA Guidelines* require an EIR to “describe a range of reasonable alternatives to the project, or to the location of the project, which would feasibly attain the basic objectives of the project but would avoid or substantially lessen any of the significant effects of the project, and evaluate the comparative merits of the alternatives” (*CEQA Guidelines* §15126.6(a)). The *CEQA Guidelines* direct that selection of alternatives focus on those alternatives capable of eliminating any significant environmental effects of the project or of reducing them to a less-than significant level, even if these alternatives would impede to some degree the attainment of project objectives, or would be more costly. In cases where a project is not expected to result in significant impacts after implementation of recommended mitigation, review of project alternatives is still appropriate.

The range of alternatives required within an EIR is governed by the “rule of reason” which requires an EIR to include only those alternatives necessary to permit a reasoned choice. The discussion of alternatives need not be exhaustive. Furthermore, an EIR need not consider an alternative whose implementation is remote and speculative or whose effects cannot be reasonably ascertained. Alternatives that were considered but were rejected as infeasible during the scoping process should be identified along with a reasonably detailed discussion of the reasons and facts supporting the conclusion that such alternatives were infeasible.

Based on the alternatives analysis, an environmentally superior alternative is designated among the alternatives. If the environmentally superior alternative is the No Project Alternative, then the EIR shall identify an environmentally superior alternative among the other alternatives (*CEQA Guidelines* §15126.6(e)(2)).

5.1 CRITERIA FOR ALTERNATIVES ANALYSIS

The J Street Drain Project is to provide flood control protection for the residents and properties along J Street from a 100-year flood. The primary objectives of the project are:

- Flood control protection – increase drain size to provide capacity for 100-year flood flow;
- Maintain the existing functional characteristics of the Ormond Beach Lagoon;
- Ensure project compatibility with future Ormond Beach Lagoon restoration plans;
- Minimize the disturbance to tidewater goby habitat downstream of the J Street lined channel;
- Minimize operation and maintenance requirements, especially during storms; and
- Minimize effects on water quality of the lagoon.

The following analysis focuses on identifying alternatives that can reduce or avoid the identified significant impacts. Significant but mitigated impacts have been identified for visual resources, biological resources, water resources and hydraulic hazards, transportation and circulation, geologic and

seismic hazards, noise, and cultural resources. Residences are located within five feet of the drain in the Surfside III condominium community, and within 50 feet of the drain north of this area. Several different design alternatives were considered for the project and are identified in Sections 5.2 through 5.3 of the EIR. All of these alternatives would require construction of some type that would result in elevated noise levels at adjacent sensitive receptors. The only alternative that would eliminate construction-related noise is the “no project” alternative, which is analyzed in Section 5.3.

5.2 ALTERNATIVES ELIMINATED FROM FURTHER CONSIDERATION

In addition to specifying that the EIR evaluate “a range of reasonable alternatives” to the project, Section 15126.6(c) of the *CEQA Guidelines* requires that an EIR identify any alternatives that were considered but were rejected as infeasible. The following outlet alternatives, dike system and natural system with the restoration project, were considered for analysis in the Draft EIR, but were not considered for further evaluation. These alternatives are described below, along with a discussion of why they were rejected from further consideration.

5.2.1 Outlet Alternative A: Dike System

Under this alternative, flow from the J Street Drain is allowed to drain directly into the Pacific Ocean, essentially bypassing the Ormond Beach Lagoon. This alternative would require channeling of the beach including the construction of a berm on the west side of the channel. This berm would prevent flow from traveling through the Ormond Beach Lagoon as it does now. Due to sand deposition from the ocean, this alternative would require yearly maintenance to ensure that the constructed channel remains open.

By diverting drain water from the end of drain to the ocean, this alternative would remove drain water from portions of the lagoon. The dike system alternatives would reduce inflows from J Street Drain to the lagoon, creating lower water levels in the lagoon and possibly affecting the frequency at which the sand berm barrier is breached. This alternative could affect two endangered species—the California least tern and tidewater goby. The former species would be affected if the water levels in the Ormond Beach Lagoon were significantly reduced in the spring and summer when this species is foraging in the lagoon. The latter species would be affected by increased salinity in the diverted J Street Drain, particularly if the diked channel were open to the ocean during the dry season, when freshwater input is low. The high salinities in the diked channel would not support tidewater goby over the long term, as this species requires brackish water. Therefore, the extent of this species, which currently occupies the lower J Street Drain, as well as the lagoon, could diminish.

This alternative would not reduce impacts relating to other issue areas including water quality, air quality, traffic, noise, geology and soils, hazardous materials, cultural resources, utilities, and public health compared to the Preferred Alternative. However, this alternative would result in greater impacts to biological resources and is therefore eliminated from further consideration.

5.2.2 Outlet Alternative B: Natural System with the Restoration Project (California State Coastal Conservancy)

This alternative would involve leaving the end of the drain as it is, but having a managed lagoon outlet as described in the Beach Elevation Management Plan (BEMP). Under this alternative, flow from the J Street Drain is allowed to drain directly into the Ormond Beach Lagoon and out to the Pacific Ocean at its present location. This alternative would be based on the Coastal Conservancy’s development of a wetland just south of the area where the Oxnard Industrial Drain flows into the Ormond Beach Lagoon.

This wetland area is to be developed/designed by the Coastal Conservatory. In this alternative, the Ormond Beach Lagoon would require little to no maintenance at the ocean outlet. As part of this alternative, the lagoon area on the east side of the J Street Drain Channel, just south of the old Hueneme Drain Channel, would be excavated down to improve outlet conditions for the J Street Drain and to increase the wetland area.

This alternative would not reduce significant impacts that have been identified for the Preferred Alternative. After reconstruction of the J Street Drain concrete lining, the channel invert would be about four feet lower than the existing invert in order to create the required channel capacity. This alternative would require excavation of the lagoon downstream of J Street Drain to facilitate the movement of water from the drain into the lagoon, potentially reducing the extent of standing water in upstream portions of the drain and transferring it to the lagoon instead. This would shift available mosquito breeding areas from an easily treated location (the J Street Drain) to one that is less accessible to Ventura County Vector Control Program (VCVCP) staff and more suitable for mosquito breeding by way of its shallow, vegetated margins. Due to the additional excavation, this alternative would result in greater impacts to air quality, traffic, noise, geologic hazards, hazardous materials, water resources, and cultural resources. Furthermore, extensive excavation within the lagoon would have greater impacts to sensitive biological resources such as tidewater goby, California least tern, and marsh habitats. Because this alternative would not reduce potential significant impacts, it was eliminated from further consideration.

5.3 EVALUATION OF ALTERNATIVES

5.3.1 Beach Outlet Alternatives

5.3.1.1 Outlet Alternative C: Preferred Outlet Alternative

The alternative is the Preferred Outlet Alternative, as discussed in Section 3.0 of this document. The analysis of the environmental impacts associated with this alternative is discussed in Sections 4.1 through 4.12 of this document. This alternative will only be discussed for comparative purposes in this section.

5.3.1.2 Outlet Alternative D: No Project

Under this alternative, the Ormond Beach Lagoon would not be altered in any way. Essentially, this alternative allows the lagoon to function as it does now with periodic natural breaching. J Street Drain would drain directly to the Ormond Beach Lagoon as it does now. In this option, the VCWPD would not modify the Ormond Beach Lagoon, and a BEMP would not be adopted. Flow from J Street Drain would continue to pass through the lagoon and out to the ocean at its present location. This alternative would accommodate future development of a wetland just south of the area where the Oxnard Industrial Drain flows into the Ormond Beach Lagoon. This wetland area may be developed/designed by the Coastal Conservancy. As part of Alternative D, maintenance personnel would need to periodically remove vegetation around the ocean outlet. This maintenance work would prevent root establishment in the ocean outlet area and allow the outlet to open more easily by natural breaching processes.

Environmental Effects

The Preferred Outlet Alternative involves excavation and construction of a new drain outlet, replacement of approximately 0.07 acres of existing rock riprap at the end of the reconstructed concrete channel, and construction of a 40-foot earthen ramp to transition the deepened channel to the higher adjacent lagoon elevation. This ramp would be temporary, since it is anticipated that the movement of water (tidal and

drain flow) during the first few natural breaching events would ultimately result in an equilibrium elevation within the drain channel transition area. The Preferred Outlet Alternative also includes adoption and possible implementation of a BEMP. Therefore, compared to the Preferred Outlet Alternative, the No Project Outlet Alternative would result in no construction-related impacts since construction or emergency breaching activities would not occur. The No Project Outlet Alternative would not impact the existing hydrology, circulation pattern, water quality, or biological resources at the Ormond Beach Lagoon. Additionally, this alternative would not result in impacts relating to other issue areas including land use and planning, air quality, traffic, noise, geology and soils, hazardous materials, cultural resources, and utilities. Compared to the Preferred Outlet Alternative, the No Project Outlet Alternative would result in fewer environmental impacts. However, when the No Project Outlet Alternative is combined with the Preferred Channel Alternative, the lack of a transition from the deepened channel to the lagoon may increase erosion of the lagoon and cause more extensive ponding of flows upstream, ~~hence increasing potential mosquito breeding areas.~~

Relation to Project Objectives

This alternative would meet most of the objectives of this project including ensuring project compatibility with future Ormond Beach Lagoon restoration plans. However, ~~in the event of rare emergency conditions where the lagoon has not breached naturally,~~ the No Project Outlet Alternative does not provide an action plan for beach grooming (BEMP) to ensure sufficient flood protection for upstream properties. Furthermore, the lack of a transition between the deepened drain and the adjacent higher elevation lagoon may conflict with the objective of providing 100-year flood protection.

5.3.2 Channel Alternatives

Alternative A: Buried box culverts that would allow for planting on top (Figure 5.0-1). This alternative would require that the box culverts be strengthened to hold the additional weight of the vegetation on top.

Alternative B: This alternative is the Preferred Channel Alternative, as discussed in Section 3.0 of this document (Figure 5.0-1). The analysis of the environmental impacts associated with this alternative is discussed in Sections 4.1 through 4.12 of this document. This alternative will only be discussed for comparative purposes in this section.

Alternative C: Open rectangular channel with step (Figure 5.0-1). This alternative would have a main channel with vertical walls that would be sufficient to carry most stormwater flows, however as flow increased it would reach the step and spread out further. This would still allow for the desired capacity, but would also allow for creating a narrow recreation area on the step.

Alternative D: Two separated buried box culverts (Figure 5.0-1). Like Alternative A, this alternative would require strengthening the box culverts to allow for vegetation on top. By separating the culverts a vegetated swale would be created between the culverts. This vegetated swale could then be used to treat the stormwater runoff before it enters the culverts.

Alternative E: Natural Channel (Figure 5.0-1). This alternative would be a completely natural channel with no concrete sides or bottom. This would require a much wider channel than currently exists, and would impact the existing streets and require removal of homes on one side of the street.

Alternative F: No Project.

Figure 5.0-1. Alternatives

5.3.2.1 *Alternative A: Buried Box Culverts*

Alternative A would feature buried box culverts that would allow for landscaping on top. This alternative would require that the box culverts be strengthened to hold the additional weight of the vegetation on top. Having vegetation on top would allow for an aesthetic benefit for the length of J Street. However, the drain would remain an open channel south of Hueneme Road to avoid impacts to listed species.

Environmental Effects

Alternative A would not require additional right-of-way (Figure 5.0-1). This alternative would result in similar environmental impacts when compared to the Preferred Alternative. During construction, excess soil would be transported to landfills and concrete debris would be transported for recycling. This alternative would require greater soil excavation than the Preferred Alternative and may result in greater excess soil to be hauled off to landfills. Therefore, construction of this alternative would involve additional haul truck trips. With regard to air quality, construction-related oxides of nitrogen (NO_x) emissions would exceed the Ventura County Air Pollution Control District (VCAPCD) and South Coast Air Quality Management District (SCAQMD) daily thresholds of significance. However, these impacts would be less than significant due to their temporary nature and implementation of VCAPCD mitigation measures. With regard to global climate change, impacts would be similar to those analyzed in Section 4.12. Construction emissions would add to greenhouse gas emissions in the atmosphere; however, as with the proposed project, the emissions are not anticipated to exceed SCAQMD's annual threshold for industrial projects of 10,000 metric tons of carbon dioxide equivalent (CO_{2e}) and, when amortized, would be below the California Air Pollution Control Officers Association (CAPCOA) recommended annual threshold of 900 metric tons of CO_{2e} emissions. Noise construction impacts associated with this alternative would be similar to those of the Preferred Alternative and would be less than significant with incorporation of mitigation. Traffic impacts would be greater due to more haul truck trips to transport excess soil. However, traffic impacts would be less than significant with mitigation measures. The excess soil would result in a greater solid waste impact as more soil would be required to be accommodated at landfills.

Construction-related impacts to cultural resources would be the same as the Preferred Alternative as no archeological resources were found within the project area. Mitigation measures would be in place for the potential that previously unknown subsurface artifacts are encountered during ground disturbance activities. The potential for impacts to paleontological resources would be low, as it is for the Preferred Alternative. Impacts associated with geology including liquefaction and expansive soil would be similar to the Preferred Alternative as well. The construction associated with this alternative would be similar to the Preferred Alternative. Impacts are less than significant with mitigation measures.

Water and biological impacts for this alternative would result in similar impacts and mitigation measures as the Preferred Alternative because both alternatives would require similar footprints for construction.

As indicated above, waste treatment/disposal impacts associated with this alternative would be greater than the Preferred Alternative. This alternative would include a covered top for landscaping which would result in long-term visual resources benefits, thus reducing this significant impact. This alternative would not change the amount of ponded water compared to the Preferred Alternative. Public health impacts associated with mosquito breeding areas would be greater than the Preferred Alternative because the covered channel would be difficult to access and therefore mosquito treatment may be less effective.

The operation of this alternative would result in maintenance activities similar to those currently in place and the Preferred Alternative. However, the box culvert drain would not be accessible for dumping and trash would not blow into the covered drain; therefore, less maintenance with regards to trash clean up would be necessary for this alternative.

Relation to Project Objectives

This alternative would meet all of the project objectives regarding flood control protection, Ormond Beach Lagoon, and tidewater goby. Additionally, Alternative A would provide an aesthetic benefit by adding landscaping on top of the drain for the length of J Street. However, Alternative A would likely cost substantially more than the Preferred Alternative due to the increased construction and landscaping costs.

5.3.2.2 Alternative C: Open Rectangular Channel with Step

This alternative would have a main channel with vertical walls that would be sufficient to carry most stormwater flows, however as flow increased it would reach the step and spread out further. This would still allow for the desired capacity, but would also allow for creation of a narrow landscaping area on the step.

Environmental Effects

Alternative C would require additional right-of-way as evident in Figure 5.0-1. While this alternative would involve design features that differ from the Preferred Alternative, construction impacts associated with this alternative would not differ considerably.

During construction, excess soil would be transported to landfills and concrete debris would be transported for recycling. This alternative would require similar soil excavation as the Preferred Alternative and would result in similar quantities of excess soil to be hauled off to landfills. With regards to air quality, construction-related NO_x emissions would exceed the VCAPCD and SCAQMD daily thresholds of significance, but impacts would be considered less than significant due to their temporary nature. With regard to global climate change, impacts would be similar to those analyzed in Section 4.12. Construction emissions would add to greenhouse gas emissions in the atmosphere; however, as with the proposed project, the emissions are not anticipated to exceed SCAQMD's annual threshold for industrial projects of 10,000 metric tons of CO_{2e}, and, when amortized, would be below the CAPCOA recommended annual threshold of 900 metric tons of CO_{2e} emissions. Noise construction impacts associated with this alternative would be similar to those of the Preferred Alternative and would be less than significant with mitigation. Traffic construction impacts associated with this alternative would be similar to those of the Preferred Alternative, which would be less than significant with mitigation measures.

The potential for impacts to paleontological resources would be low, as it is for the Preferred Alternative.

Other construction impacts relating to cultural resources would be the same as the Preferred Alternative as no archeological resources were found within the project area. Mitigation measures would be in place for the potential that previously unknown subsurface artifacts are encountered during ground disturbance activities. Additionally, impacts associated with geology, including liquefaction and expansive soil, would be similar to the Preferred Alternative as well.

Water and biological impacts for this alternative would result in similar impacts and mitigation measures as the Preferred Alternative because both alternatives would require similar footprints for construction.

As indicated above, waste treatment/disposal impacts associated with this alternative would be similar to the Preferred Alternative. This alternative would include a narrow area on the step for vegetation which would result in long-term visual resources benefits, thus reducing this significant impact. This alternative may increase the area of ponded water compared to the Preferred Alternative, with water within the “step” channel sections being shallower and supporting vegetation. This would create more suitable habitat for mosquito breeding than the Preferred Alternative. Public health impacts associated with mosquito breeding areas would therefore be greater than the Preferred Alternative.

The operation of this alternative would require maintenance activities similar to those currently in place and the Preferred Alternative. Operational impacts would be the same as the Preferred Alternative.

Relation to Project Objectives

This alternative would also meet the project objectives with regards to flood control protection, Ormond Beach Lagoon, and tidewater goby. Additionally, Alternative C would provide an aesthetic benefit by having a vegetated step for the length of the drain. However, this alternative would require additional right-of-way which has the potential to alter the alignment of J Street.

5.3.2.3 Alternative D: Two Separated Buried Box Culverts

Like Alternative A, this alternative would require strengthening the box culverts to allow for vegetation on top. By separating the culverts a vegetated swale would be created between the culverts. This vegetated swale could then be used to treat stormwater runoff before it enters the culverts. Due to the presence of endangered California least tern and tidewater goby south of Hueneme Road (Phase 1), this alternative is only considered for Phases 2-4.

Environmental Effects

Alternative D would require additional right-of-way and relocation of existing utility compared to the Preferred Alternative (Figure 5.0-1). This alternative would result in a significant impact to utilities and would require additional mitigation measures.

Excess soil from excavation would be transported to landfills and concrete debris from demolition would be transported for recycling. This alternative would require greater soil excavation than the Preferred Alternative and may result in greater quantities of excess soil to be hauled off to landfills. Construction of this alternative would involve additional haul truck trips. Construction NO_x emissions would exceed the VCAPCD and SCAQMD daily thresholds of significance; however, impacts would be considered less than significant due to their temporary nature. With regard to global climate change, impacts would be similar to those analyzed in Section 4.12. Construction emissions would add to greenhouse gas emissions in the atmosphere; however, as with the proposed project, the emissions are not anticipated to exceed SCAQMD’s annual threshold for industrial projects of 10,000 metric tons of CO_{2e}, and, when amortized, would be below the CAPCOA recommended annual threshold of 900 metric tons of CO_{2e} emissions. Noise construction impacts associated with this alternative would be similar to those of the Preferred Alternative and would be less than significant with mitigation. Traffic impacts would be greater due to more haul truck trips to transport excess soil. However, as with the Preferred Alternative, traffic impacts would be less than significant with mitigation measures. The excess soil would result in a greater solid waste impact as more soil would be required to be accommodated at landfills.

The potential for impacts to paleontological resources would be low, as it is for the Preferred Alternative.

Other construction impacts relating to cultural resources would be the same as the Preferred Alternative as no archeological resources located within the project area were found. Mitigation measures would be in place to address the potential for previously unknown subsurface artifacts to be encountered during ground disturbance activities. Impacts associated with geology including liquefaction and expansive soil would be similar to the Preferred Alternative as well.

Water and biological impacts for this alternative would result in similar impacts and mitigation measures as the Preferred Alternative because both alternatives would require similar footprints for construction. Impacts relating to waste treatment and disposal and water supply demand would be greater than the Preferred Alternative, as indicated above. This alternative would include a covered top for vegetation which would result in long-term visual resources benefits, thus reducing this significant impact. This alternative would not change the amount of ponded water compared to the Preferred Alternative. Public health impacts associated with mosquito breeding areas would be greater than the Preferred Alternative because the covered channel would be difficult to access and therefore mosquito treatment may be less effective.

The operation of this alternative would result in maintenance activities similar to those currently in place and the Preferred Alternative. However, the buried box culvert drain would not be accessible for dumping and trash would not blow into the covered drain; therefore, less maintenance with regard to trash clean up would be necessary with this alternative.

Relation to Project Objectives

This alternative would meet the project objectives with regards to flood control protection, Ormond Beach Lagoon, and tidewater goby. Additionally, Alternative D would provide an aesthetic benefit by having a landscaped median for the length of J Street. However, this alternative would likely cost substantially more than the Preferred Alternative due to increased landscaping and construction costs and the cost of relocating existing utilities.

5.3.2.4 Alternative E: Natural Channel

This alternative would be a completely natural channel with no concrete sides or bottom. This would require a much wider channel than currently exists, and would impact the existing streets and require removal of homes on one side of the street.

Environmental Effects

Alternative E would require additional right-of-way and relocation of existing utilities and homes compared to the Preferred Alternative (Figure 5.0-1). This alternative would result in a significant impact to land use and would require mitigation measures.

This alternative would require excavation and demolition during construction in order to create the natural channel. Excess soil and concrete debris would be transported to landfills and recycling centers, respectively. Regarding air quality, construction-related NO_x emissions would exceed the VCAPCD and SCAQMD daily thresholds of significance. However, impacts would be considered less than significant due to their temporary nature and the implementation of VCAPCD mitigation measures. With regard to global climate change, construction emissions would be greater and the greenhouse gas emission would be greater. The proposed project results in 804 metric tons of CO_{2e}. Even with the increased footprint,

the emissions are not anticipated to exceed SCAQMD's annual threshold for industrial projects of 10,000 metric tons of CO_{2e}, and, when amortized, would be expected to be below the CAPCOA recommended threshold of 900 metric tons of CO_{2e} emissions.

Additionally, impacts related to noise and traffic would be of a greater degree than that associated with the Preferred Alternative since the construction footprint would be substantially larger. Further, because one side of J Street would be eliminated under this alternative, traffic impacts would likely be significant and unmitigable. After excavation and demolition, the drain would remain as a natural earthen channel and no additional construction impacts (i.e., concrete placement) would occur. Therefore, air quality, noise, and traffic construction impacts would not be as significant as those of the Preferred Alternative.

Construction impacts relating to cultural and paleontological resources would be less than significant because this alternative does not require excavation of previously undisturbed subsurface areas because the natural channel would be shallower than the concrete channel alternatives. Impacts associated with geology, including liquefaction and expansive soil, would be similar to the Preferred Alternative.

Biological impacts and mitigation measures for this alternative would be greater than the Preferred Alternative because a greater project footprint is required for construction. However, there is potential that the open channel could be used by aquatic species as habitat. Groundwater and surface water quality impacts may be significant as a result of this alternative because the natural channel allows runoff containing pollutants to percolate through the permeable surface into groundwater supply. During storm events, flows passing through the natural channel would be more turbid than flows in a concrete channel due to bed and bank erosion. Additionally, runoff flow would decrease as some runoff maybe lost due to groundwater recharge.

Impacts relating to waste treatment and disposal would be greater than the Preferred Alternative as a result of the larger volume of soil that would be transported to the landfill.

This alternative would potentially result in long-term benefits to visual resources due to the aesthetic value of an open channel. The impact to visual resources would therefore be less than the Preferred Alternative. This alternative might increase the area of ponded water compared to the Preferred Alternative. Suitable mosquito breeding habitat would be more extensive because of shallower flow depth and availability of vegetation to shelter larvae from wind, waves, and natural predators. Public health impacts resulting from larger mosquito breeding areas would be greater than the Preferred Alternative.

The operation of this alternative would require maintenance activities similar to those currently in place and the Preferred Alternative; however, maintenance activities would potentially have to occur more frequently. In the natural channel option desired vegetation would be planted within the channel to help maintain slopes and minimize erosion. However, the vegetation would need to be trimmed and maintained by the District to prevent reduction of capacity. Therefore, maintenance for the natural channel alternative may be greater than the Preferred Alternative.

Relation to Project Objectives

This alternative would meet the project objectives regarding flood control protection. However, this alternative may not meet project objectives regarding Ormond Beach Lagoon and tidewater goby since the greater project footprint and natural channel have the potential to introduce greater quantities of polluted runoff, particularly turbid flows, into tidewater goby habitat and/or groundwater supply. Conversely, converting the existing concrete channel to an earthen channel could increase the area of

potential breeding habitat for tidewater goby, as this species burrows into channel or lagoon sediments to deposit eggs. This alternative would likely cost more than the Preferred Alternative due to the increased costs of construction and maintenance associated with removal of homes and maintaining the natural channel. Further, this alternative would eliminate part of an existing housing community, require substantially more rights-of-way, and eliminate a portion of J Street.

5.3.2.5 Alternative F: No Project

The No Project alternative, required by law to be evaluated in the EIR, considers "existing conditions as well as what would be reasonably expected to occur in the foreseeable future if the project were not approved, based on current plans and consistent with available infrastructure and community services" [CEQA Guidelines Section 15126.6 (e)(2)].

Environmental Effects

This alternative would not result in any of the construction- or BEMP-related impacts associated with the Preferred Alternative since no construction would occur and a BEMP would not be established. However, without the increase in flood protection the local area would continue to be susceptible to increased flooding; ~~as well as federal requirements to purchase flood insurance for properties within an identified flood area.~~

Relation to Project Objectives

This alternative would not meet the project objectives with regards to flood control protection. Current conditions for Ormond Beach Lagoon and the tidewater goby would persist.

5.3.2.6 Environmentally Superior Alternative

Table 5.3-1 provides a qualitative comparison of the impacts for each alternative compared to the proposed project. As noted in Table 5.3-1, the No Project/No Development alternative would be considered the environmentally superior alternative, since it would eliminate all of the significant impacts identified for the project. However, CEQA Guidelines Section 15126.6(e)(2) states that "if the environmentally superior alternative is the No Project Alternative, the EIR shall also identify an environmentally superior alternative among the other alternatives." Of the identified channel alternatives, Alternative A, Buried Box Culverts, would have the smallest degree of environmental impact. It would provide a long-term aesthetic benefit and therefore reduced impacts to visual resources compared to the Preferred Alternative.

Table 5.3-1. Comparison of Proposed Project to Channel Alternatives

Issue Area	Proposed Project (Alternative B)	Alternative A: Buried Box Culverts	Alternative C: Open Rectangular Channel With Step	Alternative D: Two Separated Buried Box Culverts	Alternative E: Natural Channel	Alternative F: No Project
Visual Resources	CEQA Significance: Mitigated to below a level of significance	CEQA Significance: Less than significant Compared to proposed project: Less impact	CEQA Significance: Mitigated to below a level of significance Compared to proposed project: Similar impact	CEQA Significance: Less than significant Compared to proposed project: Less impact	CEQA Significance: Less than significant Compared to proposed project: Less impact	CEQA Significance: Less than significant Compared to proposed project: Less impact
Biological Resources	CEQA Significance: Mitigated to below a level of significance	CEQA Significance: Mitigated to below a level of significance Compared to proposed project: Similar impact	CEQA Significance: Mitigated to below a level of significance Compared to proposed project: Similar impact	CEQA Significance: Mitigated to below a level of significance Compared to proposed project: Similar impact	CEQA Significance: Mitigated to below a level of significance Compared to proposed project: Greater impact because greater project footprint	CEQA Significance: Less than significant Compared to proposed project: Less impact
Water Resources and Hydraulic Hazards	CEQA Significance: Mitigated to below a level of significance	CEQA Significance: Mitigated to below a level of significance Compared to proposed project: Similar impact	CEQA Significance: Mitigated to below a level of significance Compared to proposed project: Similar impact	CEQA Significance: Mitigated to below a level of significance Compared to proposed project: Similar impact	CEQA Significance: Mitigated to below a level of significance Compared to proposed project: Similar impact (construction); greater impact (operation)	CEQA Significance: Potentially significant flooding hazard Compared to proposed project: Greater impact
Air Quality	CEQA Significance: Mitigated to below a level of significance	CEQA Significance: Mitigated to below a level of significance Compared to proposed project: Similar impact	CEQA Significance: Mitigated to below a level of significance Compared to proposed project: Similar impact	CEQA Significance: Mitigated to below a level of significance Compared to proposed project: Similar impact	CEQA Significance: Mitigated to below a level of significance Compared to proposed project: Similar impact	CEQA Significance: Less than significant Compared to proposed project: Less impact

5.0 Alternatives

Issue Area	Proposed Project (Alternative B)	Alternative A: Buried Box Culverts	Alternative C: Open Rectangular Channel With Step	Alternative D: Two Separated Buried Box Culverts	Alternative E: Natural Channel	Alternative F: No Project
Transportation and Circulation	CEQA Significance: Mitigated to below a level of significance	CEQA Significance: Mitigated to below a level of significance Compared to proposed project: Similar impact	CEQA Significance: Mitigated to below a level of significance Compared to proposed project: Similar impact	CEQA Significance: Mitigated to below a level of significance Compared to proposed project: Similar impact	CEQA Significance: Significant even with mitigation Compared to proposed project: Greater impact because one lane would be eliminated from J Street	CEQA Significance: Less than significant Compared to proposed project: Less impact
Noise and Vibration	CEQA Significance: Mitigated to below a level of significance	CEQA Significance: Mitigated to below a level of significance Compared to proposed project: Similar impact	CEQA Significance: Mitigated to below a level of significance Compared to proposed project: Similar impact	CEQA Significance: Mitigated to below a level of significance Compared to proposed project: Similar impact	CEQA Significance: Mitigated to below a level of significance Compared to proposed project: Greater impact because greater project footprint	CEQA Significance: Less than significant Compared to proposed project: Less impact
Geologic and Seismic Hazards	CEQA Significance: Mitigated to below a level of significance	CEQA Significance: Mitigated to below a level of significance Compared to proposed project: Similar impact	CEQA Significance: Mitigated to below a level of significance Compared to proposed project: Similar impact	CEQA Significance: Mitigated to below a level of significance Compared to proposed project: Similar impact	CEQA Significance: Mitigated to below a level of significance Compared to proposed project: Similar impact	CEQA Significance: Less than significant Compared to proposed project: Less impact
Hazardous Materials and Waste	CEQA Significance: Mitigated to below a level of significance	CEQA Significance: Mitigated to below a level of significance Compared to proposed project: Similar impact	CEQA Significance: Mitigated to below a level of significance Compared to proposed project: Similar impact	CEQA Significance: Mitigated to below a level of significance Compared to proposed project: Similar impact	CEQA Significance: Mitigated to below a level of significance Compared to proposed project: Similar impact	CEQA Significance: Less than significant Compared to proposed project: Less impact

5.0 Alternatives

Issue Area	Proposed Project (Alternative B)	Alternative A: Buried Box Culverts	Alternative C: Open Rectangular Channel With Step	Alternative D: Two Separated Buried Box Culverts	Alternative E: Natural Channel	Alternative F: No Project
Cultural and Paleontological Resources	CEQA Significance: Mitigated to below a level of significance	CEQA Significance: Mitigated to below a level of significance Compared to proposed project: Similar impact	CEQA Significance: Mitigated to below a level of significance Compared to proposed project: Similar impact	CEQA Significance: Mitigated to below a level of significance Compared to proposed project: Similar impact	CEQA Significance: Mitigated to below a level of significance Compared to proposed project: Greater impact because greater project footprint	CEQA Significance: Less than significant Compared to proposed project: Less impact
Waste Treatment/ Disposal, Utilities	CEQA Significance: Mitigated to below a level of significance	CEQA Significance: Mitigated to below a level of significance Compared to proposed project: Similar impact	CEQA Significance: Mitigated to below a level of significance Compared to proposed project: Similar impact	CEQA Significance: Mitigated to below a level of significance Compared to proposed project: Greater impact because need to relocate existing utilities	CEQA Significance: Mitigated to below a level of significance Compared to proposed project: Greater impact because need to relocate existing utilities	CEQA Significance: Less than significant Compared to proposed project: Less impact
Public Health	CEQA Significance: Less than significant	CEQA Significance: Potentially significant Compared to proposed project: Greater impact	CEQA Significance: Potentially significant Compared to proposed project: Greater impact	CEQA Significance: Potentially significant Compared to proposed project: Greater impact	CEQA Significance: Potentially significant Compared to proposed project: Greater impact	CEQA Significance: Less than significant Compared to proposed project: Similar impact
Greenhouse Gas Emissions	CEQA Significance: Less than significant	CEQA Significance: Less than significant Compared to proposed project: Similar impact	CEQA Significance: Less than significant Compared to proposed project: Similar impact	CEQA Significance: Less than significant Compared to proposed project: Similar impact	CEQA Significance: Less than significant Compared to proposed project: Similar impact	CEQA Significance: Less than significant Compared to proposed project: Less impact
Meets Project Objectives?	Yes	Yes	Yes	Yes	Yes	No

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6.0 OTHER ENVIRONMENTAL CONSIDERATIONS

6.1 GROWTH-INDUCING IMPACTS

This section discusses the ways in which the J Street Drain project could foster economic or population growth. Growth-inducing impacts are caused by those characteristics of a project that tend to foster or encourage population and/or economic growth. Inducements to growth include the generation of construction and permanent employment opportunities in the support sector of the economy. A project could also induce growth by lowering or removing barriers to growth or by creating an amenity that attracts new population or economic activity.

In accordance with Section 15126.2(d) of the *California Environmental Quality Act (CEQA) Guidelines*, an Environmental Impact Report (EIR) must “*discuss the ways in which the Proposed Project could foster economic or population growth, or the construction of additional housing, either directly or indirectly, in the surrounding environment. Included in this are projects which would remove obstacles to population growth ... Increases in the population may tax existing community service facilities, requiring construction of new facilities that could cause significant environmental effects. Also discuss the characteristics of some projects which may encourage and facilitate other activities that could significantly affect the environment, either individually or cumulatively. It must not be assumed that growth in any area is necessarily beneficial, detrimental, or of little significance to the environment.*” Two issues must be considered when assessing the growth-inducing impacts of a project:

- Elimination of obstacles to population growth: The extent to which additional infrastructure capacity or a change in regulatory structure would allow additional development in the City; and
- Promotion of economic growth: The extent to which the proposed project can cause increased activity in the local or regional economy. Economic impacts can include direct effects, such as the direction and strategies implemented within the project area and indirect or secondary impacts, such as increased commercial activity needed to serve the additional population projected from the project.

The J Street Drain project is proposed to accommodate existing 100-year flood flows. Implementation of the project would not eliminate any obstacles to population growth since the project would meet an existing demand for improved surface water drainage facilities in an area that is already developed. The project would not encourage new development in the area because of this improvement. Additionally, the project would not encourage economic growth since commercial or business components are not proposed as part of the project. Therefore, the J Street Drain project would not be growth-inducing and growth-inducing impacts would be less than significant.

6.2 INVENTORY OF UNAVOIDABLE IMPACTS

In accordance with California Environmental Quality Act *CEQA Guidelines* Section 15126(b), EIRs must include a discussion of significant environmental effects that cannot be avoided if the proposed project is implemented. There are no significant and unavoidable impacts associated with the proposed project. The impact analysis, as detailed in Section 4 of this Draft EIR, concludes that the following impacts would remain significant after mitigation for impacts resulting from the proposed project.

6.2.1 Noise

~~Equipment that would be utilized for the construction of the J Street Drain project would generate noise exceeding the 55 A-weighted decibel (dBA) Equivalent Sound Level (L_{eq}) City of Port Hueneme daytime standard for residential areas. This noise would impact single family homes and Surfside III Condominiums, located immediately adjacent to the J Street Drain. Although mitigation is proposed in Section 4.6 of the EIR, this mitigation would not adequately reduce construction noise to below the 55 dBA L_{eq} threshold. Aside from mitigation measures Noise 1 and Noise 2, there is no mitigation available to reduce construction related noise. Therefore, construction related noise would result in a significant unavoidable impact.~~

6.3 SIGNIFICANT IRREVERSIBLE CHANGES

In accordance with *California Environmental Quality Act (CEQA) Guidelines* Section 15126.2(c), an EIR must identify any significant irreversible environmental changes that would be caused by the proposed project being analyzed. Irreversible environmental changes may include current or future commitments to the use of non-renewable resources or secondary growth-inducing impacts that commit future generations to similar uses.

Construction and operation of the project will contribute to the incremental depletion of resources, predominantly of non-renewable resources. Resources such as lumber used in building construction, are generally considered renewable resources, and would be replenished over the lifetime of the project. However, the proposed project would not require the use of lumber. Non-renewable resources, such as natural gas, petroleum products, steel, copper and other materials are typically considered to be in finite supply and would not be replenished over the lifetime of the project.

Construction of the J Street Drain would result in significant impacts to California least tern, western snowy plover, and tidewater goby. Further, potential impacts would result to migratory bird nesting and foraging habitat. However, because these impacts to biological resources are temporary, they do not represent significant irreversible changes to the environment.

The majority of changes associated with the proposed project would be temporary during the construction phase. The project would not induce population growth or result in permanent impacts to biological resources, traffic, air quality, or noise. Therefore, aside from the use of non-renewable resources, the project would not result in further significant irreversible changes to the environment.

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