FINAL PROGRAM ENVIRONMENTAL IMPACT REPORT

ENVIRONMENTAL PROTECTION MEASURES FOR THE ONGOING ROUTINE OPERATIONS AND MAINTENANCE PROGRAM

State Clearinghouse No. 2002091107

May 2008

Ventura County Watershed Protection District
800 South Victoria Avenue
Ventura, California 93009

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VENTURA COUNTY
WATERSHED PROTECTION DISTRICT

State Clearinghouse No. 2002091107

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The Environmental Report Review Committee recommends that the Board of Supervisors find that this document has been prepared in compliance with the California Environmental Quality Act.

Bruce Smith
Environmental Report Review Committee Chair

4/7/08
Date

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EXECUTIVE SUMMARY

ES.1 PURPOSE

The Ventura County Watershed Protection District (District) has prepared this Final Program Environmental Impact Report (Program EIR) for the consideration of the proposed Environmental Protection Measures for the Ongoing Routine Operations and Maintenance Program.

The proposed "project" addressed in this Program EIR, as defined under the California Environmental Quality Act (CEQA) Guidelines, is to incorporate specific feasible environmental protection measures into the current maintenance program for existing facilities. These measures are called "environmental best management practices" (BMPs) in the Program EIR. The District is voluntarily proposing to adopt these measures as part of the routine maintenance program to reduce incidental effects of the routine maintenance on the environment, and to facilitate acquisition of long-term state and federal permits. This "project" is proposed to improve environmental protection during maintenance activities to the extent feasible without compromising the overall objectives of the maintenance program.

Utilizing the results of the environmental analysis included in this Program EIR, the District will request long-term permits and approvals from the California Department of Fish and Game (CDFG), U.S. Army Corps of Engineers (USACE), and Regional Water Quality Control Board (RWQCB) for its routine maintenance program. Authorization from the U.S. Fish and Wildlife Service (USFWS), National Oceanic and Atmospheric Administration Fisheries (NOAA Fisheries), and State Historic Preservation Officer (SHPO), as well as certification of consistency with state coastal zone management programs (Coastal Zone Management Act), if necessary, will be obtained during the USACE Section 404 process. The District will seek permits with durations of 5 years or more that would include all regulated activities, include a streamlined administrative approval process, and provide predictability and certainty on environmental protection measures. Long-term permits, as compared to case-by-case permitting, will reduce the administrative efforts involved by the District and the permitting agencies, and provide a more comprehensive and effective basis for protecting environmental resources.

This Program EIR describes the current program as the baseline condition in order to evaluate impacts of the incorporation of new environmental BMPs. The proposed project addressed in the Program EIR is <u>not</u> the continuance of the current maintenance program for already constructed facilities, since the current program qualifies as both categorically and statutorily exempt from CEQA, as detailed in Section 2 of this document.

CEQA requires that local, regional, and state agencies and special purpose districts prepare an Environmental Impact Report (EIR) for any discretionary action that may have the potential to significantly affect the quality of the environment. In accordance with Section 15121 of the CEQA Guidelines, the purpose of an EIR is to serve as an informational document that: "...will inform public agency decision-makers and the public generally of the significant environmental effects of a project, identify possible ways to minimize the significant effects, and describe reasonable alternatives to the project..." Based on the findings of the Initial Study (Appendix A), the impacts of adopting the BMPs into the current maintenance program are expected to be beneficial to the

environment, as that is the intent of the project. Even though it has been determined that the project is not expected to have a significant adverse impact on the environment, the District chose to prepare an EIR with the purpose of informing the public and permitting agencies of the beneficial or neutral impacts of the proposed BMPs on the existing maintenance program, as well as providing sufficient information on both the existing maintenance program (baseline condition) and the proposed BMPs (proposed project) to the permitting agencies in order to facilitate the acquisition of long-term state and federal permits.

ES.2 CEQA COMPLIANCE

This Final Program EIR has been prepared in accordance with CEQA (Section 21000 et seq., California Public Resources Code) and the guidelines for implementation of CEQA (Section 15000 et seq., California Code of Regulations, Title 14). Section 15132 of the State CEQA Guidelines requires that a final EIR consist of the following:

- The Draft EIR or a revision of the draft, with corrections to the text of the Draft EIR (included in Sections 1 through 7, Sections 10 and 11, and Appendices A through H);
- Comments and recommendations received on the Draft EIR, either verbatim or in summary (included in Section 9);
- A list of persons, organizations, and public agencies commenting on the Draft EIR (included in Section 8);
- The responses of the lead agency to significant environmental concerns raised in the review and consultation process (included in Section 8); and
- Any other information added by the lead agency (included in Appendix I).

The Final EIR is an informational document prepared by the lead agency that must be considered by decision makers before approving the proposed project.

As stated above, an EIR must be prepared for any project or major action that may have a significant impact on the environment. The implementation of the proposed BMPs is a "project" as defined by the State CEQA Guidelines. Upon preliminary review, the District, as the Lead Agency under CEQA, determined that the proposed project would not have a significant adverse impact on the environment and, therefore, an EIR would not be required. However, as stated in Section ES.1, the District chose to prepare an EIR with the purpose of informing the public and permitting agencies of the beneficial or neutral impacts of the proposed BMPs on the existing maintenance program, as well as providing sufficient information on both the existing maintenance program and the proposed BMPs to the permitting agencies in order to facilitate the acquisition of long-term state and federal permits. The District selected an environmental contractor to prepare the EIR to ensure that the document reflects an independent, objective analysis of the proposed project.

The review period of the Draft Program EIR (State Clearinghouse No. 2002091107) was from December 4, 2007 through January 17, 2008. A list of the agencies, and organizations that commented on the Draft Program EIR and copies of the written comments are included in Sections 8 and 9 of this document. Information provided in the responses to comments refines the BMPs and clarifies the analysis presented in the Draft Program EIR. The Draft Program EIR represented a

good faith effort to disclose all impacts and identify all feasible BMPs and a reasonable range of alternatives to the proposed project, and provided the public with a meaningful opportunity to review and comment on the project's potential environmental impacts. No significant new information, environmental impacts, or a substantial increase in the severity of any impact were identified in the comments or responses. Furthermore, there were no new feasible project alternatives or mitigation measures identified in the responses or comments.

Copies of the Final Program EIR have been mailed to agencies that commented on the Draft Program EIR. The Final Program EIR is also available at the Ventura County Watershed Protection District and Ventura County Clerk Recorder offices (800 S. Victoria Ave, Ventura).

This Final EIR will be used by the District as part of its project approval process.

ES.3 ORGANIZATION OF THE FINAL PROGRAM EIR

This document is organized in the following manner:

- **Executive Summary:** The Executive Summary provides an overview of the EIR process to date and what the Final EIR is required to contain, as well as a summary of the conclusions of the environmental analysis contained in the Final EIR.
- **Section 1.0 Introduction:** Section 1 provides an overview of the District's mission, responsibilities, and proposed project.
- **Section 2.0 Maintenance Program and Proposed Environmental Protection Measures:** Section 2 describes the existing District operations and maintenance program and the proposed BMPs. Changes to the text of the Draft Program EIR are shown in underlined (new text) and strike-out (deleted text) format. These changes reflect the recommendations from agencies received during the public review period. These edits do not change the intent or content of the analysis.
- **Section 3.0 Environmental Analysis**: Section 3 provides the environmental analysis for the proposed BMPs, including information on the environmental setting, thresholds of significance, analysis of potential impacts, and information on mitigation measures and residual impacts. The environmental analysis focuses the discussion on water resources, biological resources, and hydraulic hazards.
- **Section 4.0 Cumulative Impacts:** Section 4 includes a programmatic analysis of cumulative impacts.
- **Section 5.0 Alternatives:** Section 5.0 presents the analysis of alternatives for the proposed project.
- **Section 6.0 Greenhouse Gas Emissions and Global Climate Change:** Section 6.0 discusses a background on greenhouse gas emissions and global climate change, analysis of potential project impacts and climate action strategies.
- **Section 7.0 Growth Inducement:** Section 7.0 presents the growth inducement analysis for the proposed project.

- **Section 8.0 Response to Comments:** Section 8.0 includes a list of agencies and groups that provided comments on the Draft Program EIR and the responses to those written comments made on the Draft Program EIR.
- **Section 9.0 Public Comments:** Section 9.0 includes written comments on the Draft Program EIR received during the public review period.
- **Section 10.0 Bibliography**
- **Section 11.0 EIR Preparers**
- **Appendices:** At the end of the Final Program EIR is a CD that contains appendices identified in the table of contents (Appendices A through I).

ES.4 BACKGROUND AND SUMMARY OF THE DRAFT PROGRAM EIR PUBLIC REVIEW PROCESS

A Draft Program EIR was prepared and circulated for public review from September 30, 2004 to November 15, 2004. The proposed project in the Draft Program EIR incorporated specific BMPs into the existing routine maintenance for existing District facilities. The 2004 Draft Program EIR received few public comments. However, during subsequent discussions with the permitting agencies, CDFG, RWQCB, and USACE provided substantive feedback and determined that the information contained in the 2004 Draft Program EIR did not provide a sufficient level of detail about the facilities and maintenance activities for the issuance of the necessary long-term permits. The 2005 flood season caused the temporary suspension of work on the Draft Program EIR and permitting process, as all emergency District work was a priority at that time.

The Draft Program EIR was revised in 2007 to address the agencies feedback. In addition, the 2007 Draft Program EIR included the Catalog of Facilities (Appendix C) and Debris Basin Manual (Appendix D), which, combined, provide information on all District facilities, the Water Diversion Guide (Appendix E), and the IPM Program (Appendix F). The revised Draft Program EIR was completed and forwarded to the State Office of Planning and Research (OPR) on December 4, 2007 together with a Notice of Completion (NOC). A Notice of Availability (NOA) of the Draft Program EIR for public review was advertised in the Ventura County Star on December 2 and 9, 2007. The NOA, together with a copy of the Draft Program EIR, was forwarded via regular mail to over 95 interested parties, including federal, state, and local agencies potentially having an interest in this project, as well as agency representatives. The 2007 Draft Program EIR was also made available for public review at the District and Ventura County Clerk Recorder offices (800 S. Victoria Ave, Ventura) and at local public libraries for a period of 45 days (December 4, 2007 through January 17, 2008).

The public comment period closed on January 17, 2008. A total of 5 letters of comment and 1 email were received on the 2007 Draft Program EIR. Section 8 of this Final Program EIR contains a summary of the distribution list for the 2007 Draft Program EIR, a list of the parties that provided comments during the public review period, and the response to these comments. A copy of the comments letters received is included in Section 9.

ES.5 CERTIFICATION OF THE FINAL EIR

The Draft Program EIR was circulated for review by public agencies and interested members of the public for a 45-day period beginning December 4, 2007. A public meeting was held before the Ventura County Environmental Report Review Committee (ERRC) on February 27, 2008 to receive written comments, record oral testimony, and determine the technical adequacy of the Program EIR. The ERRC recommended that the Board of Supervisors find that the Final Program EIR has been prepared in compliance with CEQA.

This Final Program EIR is comprised of the Draft Program EIR, comments and responses to comments received during circulation of the Draft Program EIR, and technical appendices. Changes to the text of the Draft Program EIR are noted in underlined (new text) and strike-out (deleted text) format.

The District is the lead agency for the Program EIR and the District's Board of Directors has the responsibility of determining the adequacy of the Program EIR pursuant to CEQA. The District's Board of Directors will review and consider the Final Program EIR. If the Board finds that the Final Program EIR is "adequate and complete", the District may certify the Final Program EIR. The rule of adequacy generally holds that the EIR can be certified if: 1) it shows a good faith effort at full disclosure of environmental information; and 2) provides sufficient analysis to allow decisions to be made regarding the project in contemplation of its environmental consequences. Upon review and consideration of the Final Program EIR, the District may take action to approve, revise, or reject the project. A decision to approve the project would be accompanied by written findings in accordance with State CEQA Guidelines Section 15091.

Information in the Final Program EIR will aid the District in the acquisition of long-term permits from state and federal agencies that regulate much of the maintenance work in watercourses. As stated above. these agencies include the USACE, CDFG, and RWQCB. The proposed environmental BMPs have been designed to address the permit requirements of these state and federal agencies. In addition, the CDFG and RWQCB also require an adopted or certified CEQA document to issue their permits. Hence, the Program EIR provides the CEQA environmental review that these agencies must consider when issuing their permits. The Program EIR also provides environmental information that the USACE will use to complete environmental review under the National Environmental Policy Act (NEPA), which is required to issue a Section 404 permit.

ES.6 PROPOSED PROJECT

The mission of the District is to protect life, property, watercourses, watersheds, and public infrastructure from the dangers and damages associated with flood and storm waters.

Among other responsibilities, the District operates and maintains flood control projects that have been constructed by the District, or by others and transferred to the District. Routine maintenance is conducted on all District facilities to ensure proper operations. Maintenance typically involves removal of sediment and vegetation that reduce conveyance capacity of flood control channels and reduce storage capacity of debris and detention basins.

Many of the District's maintenance activities occur in drainages, watercourses, creeks, basins, and water bodies where such activities are regulated by several state and federal agencies. The modification to the bed, bank, and/or vegetation in natural drainages (and certain man-made drainages) is regulated by CDFG under Section 1600 et seq. of the Fish and Game Code. Activities that result in the discharge of dredged or fill material in natural watercourses (such as bank stabilization and channel grading) are regulated by USACE under Section 404 of the Clean Water Act. Issuance of a Section 404 permit also requires a 401 Water Quality Certification by the RWQCB. Authorization from USFWS and/or NOAA Fisheries and SHPO, as well as certification of consistency with state coastal zone management programs, is obtained, if needed, during the Section 404 process. Currently, the District acquires these permits on an as-needed basis for individual activities and facilities. This approach is time-consuming and inefficient, and often results in maintenance delays. These state and federal agencies can issue long-term permits for the entire routine operations and maintenance program. The incorporation of environmental protection measures is necessary to process such permits. In addition, a certified CEQA document is required in order to obtain the CDFG Agreement and 401 Water Quality Certification. To obtain a Section 404 permit, it is necessary to consider avoidance and minimization alternatives to the proposed project. Although an EIR is not required, the preparation of this document will facilitate the Section 404 permit process by providing information that will satisfy the avoidance and minimization requirement and will be used by the USACE to prepare the required NEPA document.

At this time, the District seeks long-term permits and approvals from the above agencies for its routine maintenance activities. The District desires to obtain permits with durations of 5 years or more that would include all regulated activities and cover all existing facilities, include a streamlined administrative approval process, and provide predictability and certainty on environmental protection measures. Long-term permits, as compared to case-by-case permitting, will reduce the administrative efforts involved by District and the permitting agencies, and provide a more comprehensive and effective basis for protecting environmental resources.

The maintenance program is an ongoing program that began with the formation of the District. The program has grown over the years with the construction of new flood control facilities. As such, the program includes a wide range of facilities constructed over the past 60 years. New facilities requiring maintenance are added as the District completes new projects.

As a condition of state and federal permits that the District must acquire for much of its maintenance work, it must incorporate feasible environmental protection measures. The District already has a number of best management practices as part of its ongoing maintenance program (refer to Section 2.6.1). However, the District recognizes that some of its maintenance work can be performed in an even more environmentally sensitive manner, and that additional precautions and protective measures (refer to Section 2.6.2) can be implemented to further protect the environment.

Therefore, for this project, the District's objectives are to:

1. Reduce delays in operation and maintenance activities due to delays in permit response time
2. Improve environmental protection during maintenance activities
3. Maintain current levels of flood control protection within its jurisdiction to protect life and property

The proposed project addressed in this Program EIR is to incorporate a particular set of feasible environmental protection measures, or BMPs, into the current maintenance program for existing facilities. The proposed BMPs would reduce or avoid effects of the following activities on the environment.

- **Routine Operations and Maintenance.** These activities are described in Section 2.3 of this EIR. The District prepared a Catalog of Facilities (included as Appendix C, in CD format) and a Debris Basin Manual (included as Appendix D, in CD format), which, together, present a list of all facilities currently maintained by the District, and summarizes each facility location, and characteristics, and current maintenance activities.
- **Water Diversion.** Some of the District's channels support surface flows throughout the year and water diversion would be necessary preceding maintenance work. The District prepared the Water Diversion Guide to describe standard methods of water diversion with BMPs to be implemented under typical circumstances. The Water Diversion Guide is included in this EIR as Appendix E.
- **Stream Gauge Maintenance.** The EIR also analyzes the maintenance of stream gauges and stream gauge sites. A list of stream gauge sites is included in Table 2.7.
- **Rodent Control Alternatives.** An Integrated Pest Management (IPM) Program (included in this EIR as Appendix F) was created in response to the Ventura County Board of Supervisors direction to reduce the use of anticoagulant rodenticides in the County. The District maintains many critical dam and levee facilities, and prevention of burrow damage protects the structural integrity of critical facilities and thereby protects public safety. The IPM includes methods of rodent control that reduce primary and secondary wildlife hazards[1] when compared to the current rodent control methods.

The proposed project is the adoption and implementation of the environmental BMPs as part of the ongoing routine maintenance program. Activities included in the ongoing maintenance program are categorically exempt from CEQA requirements as Class 1, 2, and 4 (Guidelines Section 15301 Existing Facilities; Guidelines Section 15302 Replacement or Reconstruction; Guidelines Section 15304 Minor Alterations to Land). In addition, the current maintenance program was initiated prior to the adoption of CEQA in 1970, and as such, the continuation of the program is not subject to environmental review (CEQA Guidelines Article 18 Statutory Exemptions; Section 15261 Ongoing Project). Therefore, the proposed project addressed in the Program EIR is not the continuance of the current maintenance program for already constructed facilities, or for new facilities which are constructed from time to time. The District is not proposing to modify the objectives, geographic scope, activity guidelines, or fundamental methodologies of the current maintenance program. The District does not believe that it can reduce, curtail, or scale back any current maintenance work without hindering its responsibility for protecting life and property.

[1] Primary wildlife hazards occur when other animals are poisoned by consuming the anticoagulant. Secondary hazards occur when other animals eat the dead or dying rodent and are poisoned by the anticoagulant present in the rodent's body.

ES.7 ENVIRONMENTAL IMPACTS OF PROPOSED BMPs

This document represents a Program EIR in which the environmental impacts of the proposed environmental BMPs are evaluated at a programmatic level pursuant to CEQA (Guidelines Section 15168). A program level document is appropriate because the implementation of the BMPs will occur for a variety of maintenance activities, over a wide geographic area with diverse environmental conditions, and over a long period of time.

The proposed environmental BMPs are designed to improve environmental protection during ongoing maintenance activities that are performed to protect public health and safety. As such, the impacts of adopting such measures are expected to be beneficial to the environment, as that is the intent of the proposed project. Based on the analyses in the Program EIR, there are no adverse unintended or incidental adverse environmental impacts (direct or indirect) associated with the proposed BMPs. The BMPs would result in beneficial or neutral impacts (project-specific and cumulative) on water resources, biological resources (including sensitive species),[2] and hydraulic hazards.

ES.8 CUMULATIVE IMPACTS

The Program EIR evaluates whether the cumulative impacts of implementing the proposed environmental BMPs would be significant and if these impacts would be cumulatively considerable. "Cumulatively considerable" 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 (CEQA Guidelines Section 15064 (h)(1)). The Program EIR presents a program-level analysis of these cumulative effects. The information on cumulative impacts will be considered when the District Board of Directors takes action on the proposed project.

As described in Section 3, the proposed BMPs would either have a beneficial impact or no impact on each of the environmental resources evaluated and, therefore, would not have a significant adverse cumulative impact. In addition, Section 4 of this Program EIR concludes that the proposed BMPs are consistent with applicable general plans' goals and policies. The incremental effect of the implementation of the proposed BMPs is not "cumulatively considerable," and, therefore, the impacts of the proposed project are not considered significant (CEQA Guidelines Section 15130(a)).

The project would result in the beneficial cumulative impact of reduced flood hazards, which protects life and property and contributes to the overall social and economic well being of the County's residents.

The analyses included in Section 3 of this Program EIR indicate the proposed project would either reduce or not affect the following effects associated with ongoing maintenance activities in drainages throughout the County. It is important to note that most of the effects occurred when the flood control facilities were originally constructed:

[2] Sensitive species are defined as those plant or animal species listed as rare, threatened, or endangered by the USFWS, NOAA Fisheries, or CDFG. Species that are candidate for listing and "species of concern," as well as plants listed by the California Native Plant Society (CNPS), are also considered sensitive for the purpose of this analysis.

- Modification of the natural hydrologic functions of watersheds in the County,
- Reduction in local beach sand supply,
- Increased turbidity and sediment loading of watercourses and waterbodies of the County due to certain maintenance activities,
- Increased amount of potentially harmful herbicides in the watercourses and waterbodies of the County,
- Increased water temperatures in the watercourses and waterbodies of the County,
- Periodic disturbance to wetland and riparian habitats, including coastal habitats,
- Periodic disturbance to aquatic habitats, and
- Potential disturbance of sensitive species.

ES.9 ALTERNATIVES

Several alternatives were considered in the Program EIR and are discussed in detail in Section 5 of this document. The result of the analysis is summarized below:

- **No Project Alternative (Status Quo).** Under this alternative, the proposed BMPs would not be incorporated into the ongoing maintenance program. Hence, environmental effects of this program would persist at their current levels and the beneficial impacts of the BMPs would not be realized. In addition, the District would continue to experience difficulty and the need to devote substantial staff time in acquiring the necessary state and federal permits to conduct critical channel and basin maintenance. This alternative would not meet the project objectives to further reduce environmental effects of ongoing maintenance or to reduce permitting delays. It could result in increased flood hazards and risks to public health and safety if flood control facilities are not maintained in a timely manner due to difficulty acquiring permits for individual maintenance activities.
- **No Maintenance Alternative.** Another type of "No Project" alternative is the "No Maintenance Alternative." Under this alternative, the current maintenance program would be terminated. Flood control facilities would not be maintained, and over time they would no longer operate properly. This alternative would eliminate the need for permitting, and vegetation would develop within the District's facilities. This alternative is considered undesirable because it would not meet the project objective to protect life and property. This alternative would result in increased flooding and loss of bank protection due to lack of maintenance, resulting in increased property damage and possibly loss of life due to increased flood hazard.
- **Deferred Maintenance Alternative.** Under the deferred maintenance alternative, vegetation and sediment would be allowed to develop and accumulate within District facilities for some time before maintenance. Increased vegetation within District facilities would reduce the function and capacity of the facilities and cause delays in permitting because of agency concerns over habitat protection. Furthermore, development of vegetation and habitat within facilities, which would be removed by maintenance activity, would likely trigger costly mitigation requirements for the District. Therefore, this alternative does not meet the project objectives

would potentially result in substantial delays and expense to the District due to mitigation requirements, and would not allow the District to protect life and property.

- **Alternatives that Avoid Significant Impacts.** Pursuant to the CEQA Guidelines Section 15126.6(a), alternatives must be considered that would avoid or reduce significant environmental impacts. The implementation of the proposed environmental BMPs would not result in any significant impacts. Hence, there is no need to develop alternatives for this purpose.

ES.9.1 Alternative Environmental Protection Measures

The District recognizes that there may be additional environmental protection measures that could further improve environmental protection during maintenance activities. The applicability and feasibility of alternative environmental protection measures are addressed below:

- **Alternative Environmental Protection Measure: Greater Seasonal Restrictions.** Under the ongoing maintenance program, some activities occur during the winter months, when water is likely to be present in the work areas of channels and basins. Changing the time when this maintenance work is conducted from the winter to a period when water is not present would reduce the potential for erosion and sedimentation. Under this alternative, no in-channel or in-basin work would be performed during the winter months to avoid or further reduce the effects of the existing maintenance program on water quality.

  This alternative is not considered feasible for all facilities for the following reasons: 1) Critical maintenance work occurs in the summer and fall, placing a high demand on staff and requiring additional contracting support to meet the District's needs. If the activities that are typically deferred to winter months were restricted to the summer and fall, the District would need to reduce permanent staff levels and rely more on seasonal contract labor. This is not considered feasible because the additional costs of contract labor cannot be covered by the District. 2) Delaying the application of herbicides to the summer and fall would result in a greater amount of herbicide being applied than under current conditions because of the greater biomass at the time of application. Therefore, this change would increase environmental impacts compared to the proposed project. 3) The District has a zero tolerance policy for the presence of rodents that could damage its critical facilities. Seasonal restrictions on rodent control would not meet the project's objective of maintaining the function and structural integrity of flood control facilities in order to maintain current levels of flood control protection.

- **Alternative Environmental Protection Measure: No Herbicide Use.** Under this alternative, all vegetation management in channels and basins would occur by mechanical means (i.e., mowing, discing) or by hand crews using hoes or shovels. This alternative would eliminate the discharge of herbicides to the environment. This alternative is considered infeasible because using mechanical means only for vegetation management would be substantially more labor intensive and the District could not cover the additional labor cost.

- **Alternative Environmental Protection Measure: No Rodenticide Use.** Under this alternative, the District would refrain from using rodenticides at existing facilities. Rodents would be removed using alternative means such as traps. This alternative is not considered feasible due to the high labor cost and the limited efficacy of controlling rodent populations without the use of rodenticides. A decrease in efficacy of the District's rodent control program

would potentially result in inadequate maintenance of critical facilities and damage that could result in catastrophic facility failure.

- **Alternative Environmental Protection Measure: On Site Habitat Restoration.** Under this alternative, the District would implement habitat restoration on the banks of existing flood control channels and in basins, rather than at suitable sites outside flood control facilities. This alternative is not considered feasible because creating habitat within flood control facilities would reduce conveyance and storage capacity, potentially compromise structural integrity, and impair the function of the facilities. In addition, there would be conflicts between the District's maintenance and agencies preference to protect the restored habitat. The proposed approach to habitat restoration provides flexibility for the District to locate suitable restoration sites that would create conflicts.

ES.9.2 Environmentally Superior Alternative

In considering all of the environmental analysis presented in this document, the evaluation of alternatives above, and the project objectives, the environmentally superior alternative is the proposed project.

ES.10 GREENHOUSE GAS EMISSIONS AND GLOBAL CLIMATE CHANGE

Section 6 of this document discusses greenhouse gas (GHG) emissions and global climate change. To assess whether GHG emissions associated with the current operations and maintenance program together with the proposed BMPs may be cumulatively considerable, GHG emissions are discussed in Section 6 in the context of Ventura County's attainment status with local air quality standards. These data are then compared to other regional entities who have reported mobile combustion emissions in the Southern California region. Finally, feasible and applicable GHG reduction strategies from the California Air Resources Board (CARB 2007) and Association of Environmental Professionals (AEP 2007) reports are presented in Section 6 and will be considered by the District's Board of Directors during this CEQA process.

ES.11 GROWTH INDUCEMENT

CEQA Guidelines Section 15126-2(d) requires a discussion of the ways in which a proposed project could foster economic or population growth, or the construction of additional housing, either directly or indirectly, in the surrounding environment. The proposed BMPs would not increase the frequency of ongoing maintenance, expand the geographic area of the maintenance, or affect the level of flooding protection afforded by the existing flood control facilities. Although the proposed project would alter the way in which the ongoing maintenance would occur, it would not affect the intensity of maintenance activities. In addition, the BMPs would not result in construction of new structures or require substantial increase in staffing at the District. Based on these considerations, the proposed BMPs would not induce changes in the pattern of land use or population density and are not considered growth inducing.

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1.0 INTRODUCTION

The Ventura County Watershed Protection District (District) is a special district within the Public Works Agency of the County of Ventura. The District was formerly called the Flood Control District. The name was changed in 2003 to better reflect the broad goals and responsibilities of the District. The mission of the District is to protect life, property, watercourses, watersheds, and public infrastructure from the dangers and damages associated with flood and storm waters. The District's primary responsibilities are listed below.

- **Comprehensive Long Range Watershed Planning.** The District conducts various planning, engineering, and environmental studies to identify projects to reduce flood hazard and improve watershed conditions.
- **Project Development.** Based on the planning studies and availability of funding, the District designs and constructs new drainage, flood, or sediment control projects. Projects are funded through a combination of assessment fees, property taxes, grants, and collaborative efforts. The projects are located on District property, rights-of-ways, or easements.
- **Facility Operations and Maintenance.** The District operates and maintains projects that have been constructed by the District, or by others and transferred to the District. Operation of drainage facilities typically requires very little active management or intervention. Routine maintenance is conducted on all District facilities to ensure proper operations. Finally, storm related maintenance is conducted on an as-needed basis, usually during emergency conditions, to protect life and property.
- **Collaboration with Watershed Stakeholders.** The District participates in various joint or multi-agency studies and projects to facilitate regional solutions and seek opportunities for funding. Collaborating parties include local municipalities, federal agencies (e.g., U.S. Army Corps of Engineers [USACE], National Resource Conservation Service [NRCS]), and landowners.
- **Administration of Adopted Regulations, Policies, and Resolutions.** The District enforces the County's Floodplain Management Ordinance, reviews drainage plans for proposed developments in Flood Hazard Zones, and issues encroachment permits for work in drainages.
- **National Pollutant Discharge Elimination System (NPDES) Stormwater Permit Compliance.** The District is the permit holder for the County-wide permit, and the agency responsible for ensuring compliance with the County Stormwater Management Program.

The District is governed by the County Board of Supervisors, acting as the Board of Directors for the District. The District is funded primarily through property tax assessments and benefit assessments. It is managed by a Director who reports to the Public Works Agency Director. There are four divisions in the District: Planning and Regulatory, Design and Construction, Water and Environmental Resources, and Operations and Maintenance.

There are four zones in the District, which are based on watersheds and shown on Table 1-1 and Figure 1 (included in Appendix B). Planning studies and projects in each zone are funded from assessments in that zone.

TABLE 1-1
SUMMARY OF DISTRICT ZONES

Zone	Watershed	Major Drainages	Cities and Communities
1	Ventura River Watershed	Ventura River, San Antonio Creek, tributaries in the Ojai Valley	Ojai, Ventura, Oak View, Casitas Springs, Live Oak Acres, Meiners Oaks
2	Santa Clara River Watershed and Oxnard Plain	Santa Clara River and its tributaries, various Oxnard Plain drains	Piru, Fillmore, Santa Paula, Ventura, El Rio, Saticoy, Oxnard, Port Hueneme, Nyeland Acres
3	Calleguas Creek Watershed	Arroyo Conejo, Arroyo Simi, Santa Rosa Creek, Conejo Creek, Arroyo Las Posas, Calleguas Creek, Revolon Slough	Simi Valley, Moorpark, Camarillo, Thousand Oaks, Newbury Park, Somis
4	Potrero Creek Watershed, Upper Cuyama River Watershed	Potrero Creek, Medea Creek	Agoura Hills, Westlake Village

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. 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 USACE under Section 404 of the Clean Water Act. Issuance of a 404 permit also requires a 401 Water Quality Certification by the Regional Water Quality Control Board (RWQCB).

Currently, the District acquires the above agreements and permits on an as-needed basis for individual maintenance activities and facilities. This approach is time-consuming and inefficient, and often results in delays. The District previously had long-term Streambed Alteration Agreements for maintenance activities on various watercourses. However, these long-term agreements have expired, prompting the District to seek authorization for the entire maintenance program.

Utilizing the results of the environmental analyses in this Program EIR, the District will request long-term permits and approvals from the above agencies for its ongoing maintenance activities. The District will seek permits with durations of 5 years or more that would include all regulated activities, include a streamlined administrative approval process, and provide predictability and certainty on environmental protection measures. Long-term permits, as compared to case-by-case permitting, will reduce the administrative efforts involved by District and the permitting agencies, and provide a more comprehensive and effective basis for protecting environmental resources.

In order to acquire long-term permits, the District is proposing to incorporate various environmental protection measures into its ongoing maintenance program that will 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, called environmental Best Management Practices (BMPs), are described in Section 2.0.

Inclusion of these BMPs into the current maintenance program represents a discretionary action by the District, and as such, is subject to the environmental review requirements of the California Environmental Quality Act (CEQA). The proposed action addressed in the Program EIR includes BMPs to reduce or avoid effects of the following activities on the environment.

- **Routine Operations and Maintenance.** These activities are described in Section 2.3 of this EIR. The District prepared a Catalog of Facilities (included as Appendix C, in CD format) and a Debris Basin Manual (included as Appendix D, in CD format), which, together, present a list of all facilities currently maintained by the District, and summarizes each facility location, and characteristics, and current maintenance activities.
- **Water Diversion.** Some of the District's channels support surface flows throughout the year and water diversion would be necessary preceding maintenance work. The District prepared the Water Diversion Guide to describe standard methods of water diversion with BMPs to be implemented under typical circumstances. The Water Diversion Guide is included in this EIR as Appendix E.
- **Stream Gauge Maintenance.** The EIR also analyzes the maintenance of stream gauges and stream gauge sites. A list of stream gauge sites is included in Table 2.7.
- **Rodent Control Activities.** An Integrated Pest Management (IPM) Program (included in this EIR as Appendix F) was created in response to the Ventura County Board of Supervisors direction to reduce the use of anticoagulant rodenticides in the County. The District maintains many critical dam and levee facilities, and prevention of burrow damage protects the structural integrity of critical facilities and thereby protects public safety. The IPM includes methods of rodent control that reduce primary and secondary wildlife hazards[1] when compared to the current rodent control methods.

Upon completion of the Program EIR environmental review process, the Board of Directors of the Watershed Protection District will conduct hearings on the proposed BMPs, and will consider certifying the EIR and approving the incorporation of the BMPs into the current ongoing routine maintenance program.

The Program EIR evaluates the environmental impacts of the proposed environmental BMPs on water resources, biological resources, and hydraulic hazards. In addition, the EIR identifies the cumulative environmental impacts of the proposed project. The information on cumulative impacts will be considered by the District Board of Directors when taking action on the proposed environmental BMPs. The District is not proposing any fundamental change in the goals, approach, or

[1] Primary wildlife hazards occur when other animals are poisoned by consuming the anticoagulant. Secondary hazards occur when other animals eat the dead or dying rodent and are poisoned by the anticoagulant present in the rodent's body.

methods of routine maintenance. The ongoing maintenance program is an activity that is statutorily and categorically exempt from environmental review under CEQA, as detailed in Section 2.1.4.

The District has 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. Agreements and permits would be issued subsequent to the certification of the Final Program EIR and the Board of Directors' approval of the environmental BMPs.

2.0 MAINTENANCE PROGRAM AND PROPOSED ENVIRONMENTAL PROTECTION MEASURES

2.1 SCOPE OF THE PROPOSED PROJECT

2.1.1 Objective of Routine Maintenance

The primary objective of the Watershed Protection District's (District's) routine maintenance program is to maintain the proper operation of the District's flood control facilities to protect life and property. Maintenance preserves the appropriate conveyance capacity of the facilities and prevents the accumulation of obstructing vegetation and sediments that could increase existing flood hazards. By maintaining these facilities consistent with their original design, the District reduces or prevents flooding hazards that may result in damage to life, property, and infrastructure.

Maintenance activities are planned and conducted by the Operations and Maintenance Division of the District, which includes about 60 employees operating from the Saticoy and Moorpark maintenance offices. The Saticoy office manages maintenance work in Zones 1 and 2, while the Moorpark office manages work in Zones 3 and 4. Routine maintenance is funded by property assessments. An overview of the District Zones is presented in Figure 1 (included in Appendix B of this document).

2.1.2 Routine Versus Emergency Maintenance

Most of the maintenance activities are considered routine. Maintenance work is scheduled in advance and consists of activities to keep facilities operating in accordance with their design specifications. Work takes place in accordance with a detailed schedule taking into account time of year, staff and equipment resources, and budget. The extent and frequency of maintenance vary greatly from year to year depending upon the degree of flood hazard, conditions of facilities, and environmental constraints.

Non-routine maintenance (i.e., emergency maintenance) consists of responses to unforeseen events that are typically caused by flooding or erosion. Non-routine maintenance work is often conducted under emergency conditions or soon thereafter, when conditions have stabilized. This Program EIR addresses only routine maintenance work. Emergency work would not be included in the long-term permits that the District intends to request. Emergency work would continue to be performed using case-by-case state and federal authorizations.

2.1.3 Status of the Program

The current maintenance program is an ongoing program that began with the formation of the District in 1946. The program has grown over the years as new flood control facilities were constructed. As such, the program includes a wide range of facilities that were constructed (or adopted from other public and private entities) over the past 60 years. New facilities to be maintained are added as the District completes or adopts new capital projects. The maintenance program constantly adapts to a wide variety of site conditions, project designs, and maintenance requirements.

The District does not propose to modify the objectives, geographic scope, activity guidelines, or fundamental methodologies of the current maintenance program. The District does not believe that it can reduce, curtail, or scale back any current maintenance work without hindering its responsibility for protecting life and property.

However, the District recognizes that some of its maintenance work can be performed in a more environmentally sensitive manner, or that certain precautions and protective measures can be implemented that would reduce environmental effects of its work. The District must acquire state and federal permits for much of the maintenance work. Incorporation of environmental protection measures is necessary to meet the permit requirements of state and federal agencies.

2.1.4 Proposed Project

The proposed project addressed in the Program EIR is to incorporate specific feasible environmental protection measures into the current maintenance program for existing facilities. These measures are called "environmental best management practices" (BMPs) in the Program EIR. The District is voluntarily proposing to adopt these measures as part of the routine maintenance program to reduce incidental effects of the routine maintenance on the environment, and to facilitate acquisition of long-term state and federal permits. The proposed "project," as defined under the California Environmental Quality Act (CEQA) Guidelines is the adoption of the environmental BMPs. This "project" is proposed to improve environmental protection during maintenance activities to the extent feasible without compromising the overall objectives of the maintenance program. Therefore, for this project, the District's objectives are to:

1. Reduce delays in operation and maintenance activities due to delays in permit response time
2. Improve environmental protection during maintenance activities
3. Maintain current levels of flood control protection within its jurisdiction to protect life and property

Utilizing the results of the environmental analysis included in this Program EIR, the District will request long-term permits and approvals from the California Department of Fish and Game (CDFG), U.S. Army Corps of Engineers (USACE), and Regional Water Quality Control Board (RWQCB) for its routine maintenance program. Authorization from the U.S. Fish and Wildlife Service (USFWS), National Oceanic and Atmospheric Administration Fisheries (NOAA Fisheries), and State Historic Preservation Officer (SHPO), as well as certification of consistency with state coastal zone management programs (Coastal Zone Management Act), if necessary, will be obtained during the USACE Section 404 process. The District will seek permits with durations of 5 years or more that would include all regulated activities, include a streamlined administrative approval process, and provide predictability and certainty on environmental protection measures. Long-term permits, as compared to case-by-case permitting, will reduce the administrative efforts involved by District and the permitting agencies, and provide a more comprehensive and effective basis for protecting environmental resources.

This Program EIR describes the current program as the baseline condition in order to evaluate impacts of the incorporation of new environmental BMPs. The proposed project addressed in the Program EIR is not the continuance of the current maintenance program for already constructed

facilities, since the current program qualifies as both categorically and statutorily exempt from CEQA, as detailed below.

The District's Routine Operation and Maintenance Program is categorically exempt under Section 15301 "Existing Facilities" because the maintenance of existing public facilities involves no expansion of use beyond the original design.

CEQA Guidelines Section 15301. Existing Facilities.

"Class 1 consists of the operation, repair, maintenance, permitting, leasing, licensing, or minor alteration of existing public or private structures, facilities, mechanical equipment, or topographical features, involving negligible or no expansion of use beyond that existing at the time of the lead agency's determination. (…)"

In-kind minor repairs to facilities fall under the categorical exemption of Section 15302 "Replacement or Reconstruction" because any new structure would be located in the same site with essentially the same function and capacity as the original structure.

CEQA Guidelines Section 15302. Replacement or Reconstruction.

"Class 2 consists of replacement or reconstruction of existing structures and facilities where the new structure will be located on the same site as the structure replaced and will have substantially the same purpose and capacity as the structure replaced(…)"

Temporary and minor impacts to uplands adjacent to facilities meet the definition of categorically exempt under Section 15304 "Minor Alternations to Land."

CEQA Guidelines Section 15304. Minor Alterations to Land.

"Class 4 consists of minor public or private alterations in the condition of land, water, and/or vegetation which do not involve removal of healthy, mature, scenic trees except for forestry or agricultural purposes (…)"

Each year, the District submits the Annual Workplan to the Board of Supervisors as part of the budget approval process. The Annual Workplan details operation and maintenance activities planned for District facilities and the expected expenditures. The District, as lead agency, considers the Program described in the Annual Workplan, categorically exempt under Article 19 Sections 15301, 15302, and 15304, as described above. Following Board approval of the budget and the decision of the District Director to approve or to carry out the Workplan, the 180 day statute of limitations to challenge the approval utilizing the exemption begins. The District has not received legal challenges to date (Public Resources Code Section 21167 (d), no notice of exemption).

In addition, the current program qualifies as statutorily exempt under Section 15261 "Ongoing Project." The District was formed in the late 1940s and has built and taken ownership of many facilities since then. Therefore, routine maintenance of District facilities began prior to the adoption of CEQA in 1970, and as such, the continuation of the program is not subject to environmental review under the statutory exemption Section 15261.

CEQA Guidelines Section 15261. Ongoing Project.

"(a) If a project being carried out by a public agency was approved prior to November 23, 1970, the project shall be exempt from CEQA unless either of the following conditions exist:

(1) A substantial portion of public funds allocated for the project have not been spent, and it is still feasible to modify the project to mitigate potentially adverse environmental effects, or to choose feasible alternatives to the project, including the alternative of "no project" or halting the project; …

(2) A public agency proposes to modify the project in such a way that the project might have a new significant effect on the environment."

Conditions (1) or (2) noted above do not apply to the current maintenance program for several reasons. First, although the budget details for the maintenance program are approved every year by the Board, the program is continually funded by annual property assessments. The program meets the requirement of an on-going program with continuous annual funding and standard operating budget. Second, the "no project" alternative is infeasible because ceasing routine maintenance of existing facilities would result in the creation of public hazards that would endanger lives and property. Further, the District cannot "modify" its fundamental maintenance approach or adopt an alternative maintenance approach without jeopardizing public health and safety. Third, the District is not proposing any new maintenance objectives, methods, or approaches that would cause a new significant impact to the environment. Instead, the District is proposing the adoption of measures and practices that would reduce incidental effects of maintenance activities on the environment.

2.1.5 Scope of Environmental Analysis

As noted above, the proposed "project" is the adoption of environmental BMPs to improve environmental protection during maintenance activities of an ongoing program to protect life and property. Based on the findings of the Initial Study (Appendix A), the impacts of adopting these measures into the current maintenance program are expected to be beneficial to the environment, as that is the intent of the project. Even though it has been determined that the project is not expected to have a significant adverse impact on the environment, the District chose to prepare an Environmental Impact Report (EIR) with the purpose of informing the public and permitting agencies of the beneficial or neutral impacts of the proposed BMPs on the existing maintenance program, as well as providing sufficient information on both the existing maintenance program (baseline condition) and the proposed BMPs (proposed project) to the permitting agencies in order to facilitate the acquisition of long-term permits.

In addition, the Program EIR evaluates whether the cumulative impacts of implementing the proposed environmental BMPs would be significant and if these impacts would be cumulatively considerable. "Cumulatively considerable" 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 (CEQA Guidelines Section 15064 (h)(1); Section 15065(a)(3); Section 15130). The Program EIR presents a program-level analysis of the proposed project's cumulative effects, which must be considered when the District's Board of Directors takes action on the proposed project.

2.1.6 Maintenance of Future Flood Control Facilities and CEQA Compliance

The District must conduct a CEQA environmental review for the construction of new flood control facilities. In the past, the District typically approved projects without a specific reference to the maintenance requirements for the facilities. It was generally understood that projects would be maintained as necessary to ensure their proper functioning. This practice has resulted in some uncertainty and confusion about the necessary maintenance requirements for existing facilities because there is no documentation from the design and environmental review processes. To avoid future confusion, the District is now including facility-specific maintenance requirements and methods in the environmental review and approval process for most new capital projects. Hence, the environmental impacts of maintenance of new flood control projects are now being addressed in the CEQA documents for the new projects. Through this process, environmental protection measures for the long-term maintenance of new facilities are now being adopted as part of the original project approvals by the District's Board of Directors.

If the District Board of Director's approves the proposed environmental BMPs addressed in this Program EIR, the BMPs will be applied to maintenance requirements of all future capital projects designed and constructed by the District to create uniformity among facilities. The applicability of these BMPs for future projects will be determined in the CEQA review of the new projects. The proposed BMPs will be incorporated to future projects by reference. The BMPs may be supplemented by additional site- or facility-specific measures, if determined to be necessary based on the environmental impact analysis performed for the new project.

2.1.7 State and Federal Permit Requirements

As noted above, one of the primary motivations to incorporate the environmental BMPs into the current maintenance program is to facilitate acquisition of long-term permits from state and federal agencies that regulate much of the maintenance work in watercourses. These agencies include the USACE, CDFG, and RWQCB. The proposed environmental BMPs have been designed to address the permit requirements of these state and federal agencies. In addition, the CDFG and RWQCB also require an adopted or certified CEQA document to issue their permits. Hence, the Program EIR provides the CEQA environmental review that these agencies must consider when issuing their permits. The Program EIR also provides environmental information that the USACE will use to complete environmental review under the National Environmental Policy Act (NEPA), which is required to issue a Section 404 permit.

2.1.8 Coastal Permit Requirements

Maintenance activities in the Coastal Zone of the County may require Coastal Development Permits (CDPs) from the agency with permit authority. In most of the Coastal Zone of the County, the authority to issue permits resides with the local jurisdictions that have an adopted Local Coastal Plan (LCP). These agencies include the County of Ventura Resource Management Agency and the cities of Oxnard, Ventura, and Port Hueneme. In tide lands and certain non-tidal areas of the Coastal Zone, the California Coastal Commission has retained permit authority.

Issuance of a CDP also requires an adopted or certified CEQA document for the proposed project. This Program EIR will provide the CEQA documentation required by a local jurisdiction or the Coastal Commission when considering issuance of a CDP.

2.2 OVERVIEW OF DISTRICT FACILITIES

The District prepared a Catalog of Facilities (included as Appendix C of this EIR) and a Debris Basin Manual (included as Appendix D of this EIR), which together present all facilities currently maintained by the District, and summarize each facility location, its characteristics, and current maintenance activities.

2.2.1 Linear Facilities

A variety of linear facilities are maintained by the District. A list of the major facility types is presented in Table 2-1, organized by the four major categories:

- Open Channels
- Open Channel Inlets, Outlets, and Transitions
- Bank Protection and Related Facilities
- Pipe and Box Culverts (Underground Facilities)

There are about 200 linear miles of facilities maintained by the District. Maintained open channels account for one half of the facilities, while underground facilities account for about 30 percent (see Chart 2-1). The number of facilities varies among the District's maintenance zones, as shown in Table 2-2. Zone 3 contains the highest number of linear facilities and encompasses the Simi Valley, Thousand Oaks, and most of the Oxnard Plain.

A brief description of the major facilities is provided below, organized by facility category. Natural stream channels and channel facilities not owned or operated by the District are not cleared to maintain conveyance as part of the routine maintenance program.

2.2.1.1 Open Channels

As noted above, more than 50 percent of the District's maintained linear facilities are some type of open channel. The most abundant type is the reinforced rectangular or trapezoidal concrete channel, which is a fully lined concrete structure (Chart 2-2). There are approximately 63.4 miles of fully lined concrete channels in the maintenance program (Table 2-1). The next most abundant channel facility type is a graded earthen channel, or unlined channel, which includes about 23.2 miles of channel throughout the county. This channel type accounts for about 22 percent of all open channels. Lastly, grouted (i.e., concreted) riprap channels with earthen channel bottoms account for about 11 miles or 10 percent of all open channels in the county. All other open channel types comprise only a minor amount of the county total (see Table 2-1).

Open channels are primarily maintained by removing accumulated sediments and obstructive vegetation to ensure adequate conveyance capacity. In addition, the dimensions, alignment, and

TABLE 2-1
SUMMARY OF LINEAR FACILITIES

Code	Description	Feet	Miles
Open Channels			
RC rectangular channel	Reinforced concrete rectangular channel (banks and bottom)	205,391	38.9
RC trapezoidal channel	Reinforced concrete trapezoidal channel (banks and bottom)	129,539	24.5
GE channel	Graded earth trapezoidal channel	122,701	23.2
RR trapezoidal channel, soft bottom	Grouted riprap channel with an unlined bottom	58,244	11.0
RR trapezoidal channel	Grouted riprap trapezoidal channel (banks and bottom)	21,547	4.1
IP turf block	Turf block invert pavers	10,881	2.1
URR trapezoidal channel	Ungrouted trapezoidal riprap channel (both banks)	3,850	0.7
GE channel	Graded earth trapezoidal channel ungrouted rock bottom	2,014	0.4
Chute	Rectangular concrete channel or box with steep grade	645	0.1
SSP channel	Steel sheet piling channel	226	0.0
Subtotal=		555,038	105.1
Open Channel Inlets, Outlets, and Transitions			
RC wall	Reinforced concrete flood wall	3,687	0.7
Grade stabilizer	Concrete or riprap grade stabilizer	3,046	0.6
RR outlet	Grouted (concreted) riprap outlet	1,226	0.2
RC inlet	Reinforced concrete rectangular or wingwall inlet	1,213	0.2
RC drop	Reinforced concrete drop inlet	1,150	0.2
RR drop	Grouted riprap drop structure	1,068	0.2
RR inlet	Grouted riprap rectangular or wingwall reinforced inlet	315	0.1
Energy dissipater	Concrete outlet structure with dissipaters	105	0.0
Subtotal=		11,810	2.2
Bank Protection and Related Facilities			
RR bank	Grouted riprap bank protection (one side)	89,130	16.9
URR bank	Ungrouted riprap bank protection	20,233	3.8
PW revetment	Pipe and wire revetment	12,364	2.3
Gabion revetment	Rock filled wire cages	6,168	1.2
RR groin	Grouted riprap groin	4,970	0.9
Dike	Earthen dike	3,321	0.6
RC bank	Concrete bank protection (one side)	2,347	0.4
Subtotal=		138,533	26.2

TABLE 2-1
SUMMARY OF LINEAR FACILITIES

Code	Description	Feet	Miles
Pipe and Box Culverts (Underground Facilities)			
RCP	Reinforced concrete pipe	185,886	35.2
RCB	Reinforced concrete box	142,843	27.1
CIPP	Cast-in-place concrete pipe	4,583	0.9
CMP	Corrugated metal pipe	3,311	0.6
RCB double	Reinforced concrete box culverts (2 side-by-side)	1,603	0.3
Subtotal=		338,226	64.1
Other Facilities			
Levee	Constructed trapezoidal earthen bank	19,227	3.6
Bridge	Bridge	6,159	1.2
Embankment	Earthen dam for a debris basin	5,113	1.0
Dam	Dam	2,294	0.4
Spillway	Rock or concrete spillway	615	0.1
Armco Superspan	"Armco superspan structure"	225	0.0
Subtotal=		33,633	6.4
TOTAL=			204.0

footprint of the channels must be maintained over time. Erosion repairs are made routinely in earthen/unlined channels. Concrete channels occasionally need to be repaired or reconstructed to maintain their structural integrity. A detailed description of sediment, vegetation, and facility maintenance activities in channels is provided in Section 2.3.

2.2.1.2 Open Channel Inlets, Outlets, and Transitions

These facility types account for only a small fraction of the total linear facilities in the county (Table 2-2). They are typically short structures (less than 25 feet in length) that are associated with larger channel systems described above. These facilities occur in locations with hydraulic transitions, such as at the inlet of a lined channel where a rock apron may be constructed to direct flows into the concrete channel, or at the outlet of a lined channel where a rock apron or energy dissipater reduces velocities and prevents undermining of the concrete channel. Transitions may also occur in the middle of a lined channel when flows must pass through road culverts or across vertical displacements in the topography.

Maintenance of transitions consists primarily of removal of obstructive vegetation at inlets and outlets. Maintenance also includes repair and reconstruction of the structures if they are damaged or become degraded with age. A detailed description of facility maintenance activities for inlets, outlets, and transitions is provided in Section 2.3.

Chart 2-1. Summary of District Linear Facilities

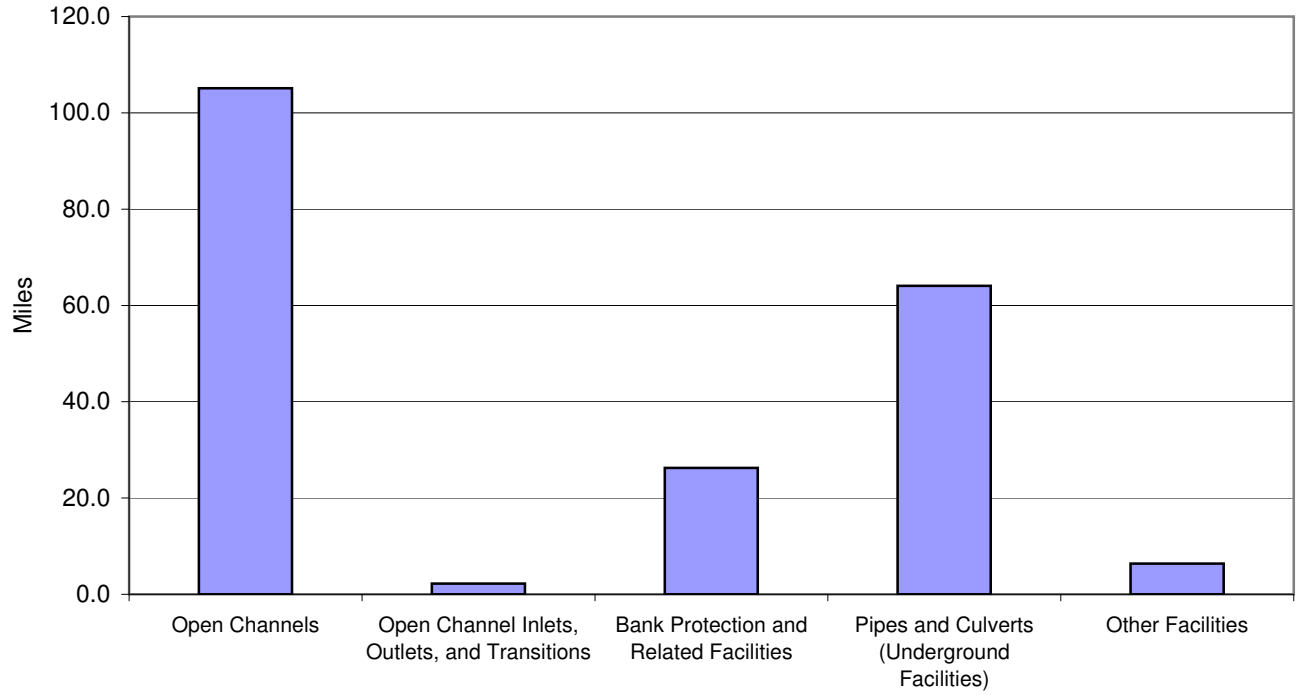

Chart 2-2. Types of Open Channels

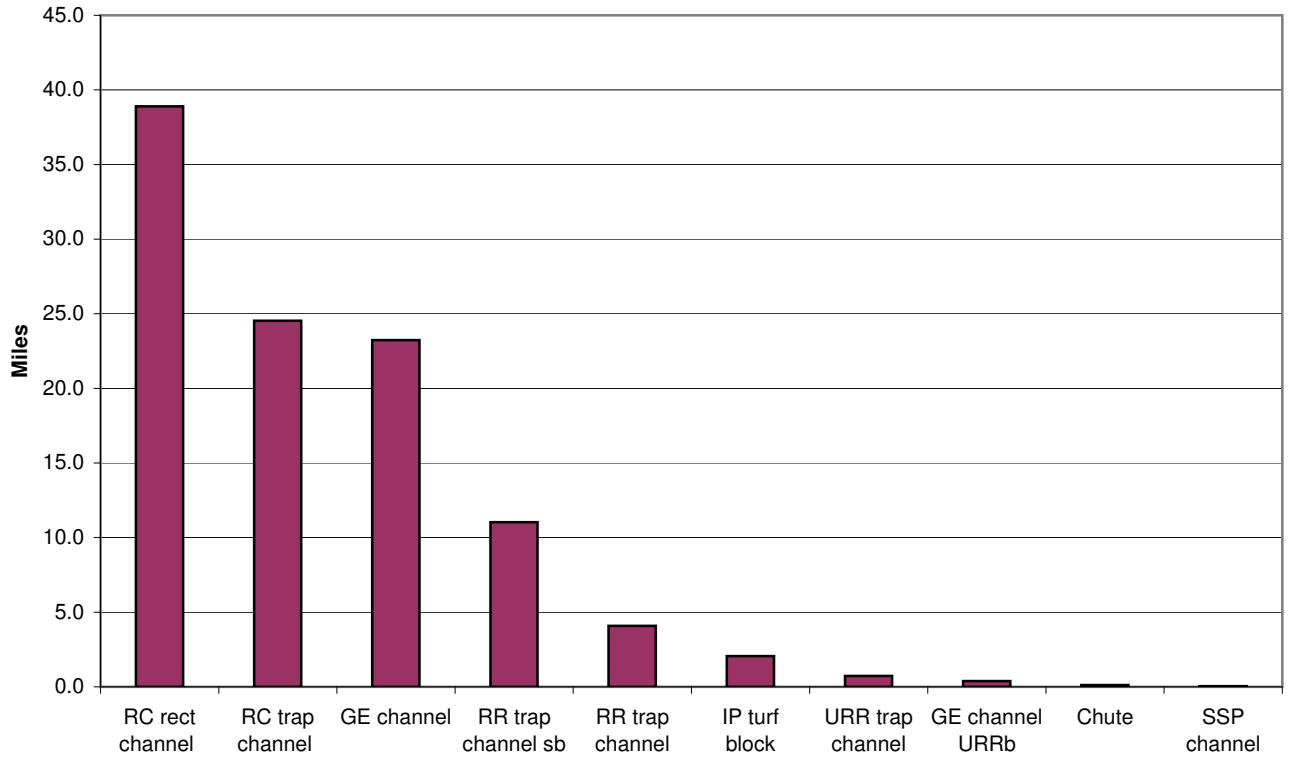

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TABLE 2-2
SUMMARY OF FACILITIES BY ZONE

Facility Type	Zone 1	Zone 2	Zone 3	Zone 4	Total
	Ventura River Watershed	Santa Clara River Watershed and Oxnard Plain	Calleguas Creek Watershed	Potrero Creek Watershed, Upper Cuyama Creek Watershed	
Number of Linear Facilities	49	136	212	6	403
Debris or Detention Basins and Dams	5	9	25	2	41
Pump Stations	0	4	0	0	4
Pumps	0	13	0	0	13
Trash Racks	5	5	0	0	10

2.2.1.3 Bank Protection and Related Facilities

This category includes concreted rock riprap placed on a channel bank to prevent erosion. About 15 percent of these facilities is composed of loose rock riprap. A variety of other types of bank protection accounts for the remainder of this category (Table 2-1). This category is distinguished from open channels with riprap (listed above) because the riprap in this category is typically installed on only one side of a channel, or is placed in specific locations to address localized problems, rather than part of long channel reach.

Maintenance of these facilities primarily consists of vegetation removal or control on the rock slope and at the toe of the bank protection, and occasional repairs. Maintenance also includes repair and reconstruction of bank protection if there is damage by flooding or degradation with age. A detailed description of other facility maintenance activities related to bank protection is provided in Section 2.3.

2.2.1.4 Underground Pipes and Culverts

These facilities include concrete and metal pipes and reinforced concrete box culverts. These structures are located under roads, parking lots, and in many locations, under developed lands. The length of an individual facility can range from 10 to 1,000 feet. Routine maintenance typically consists of removing obstructions and accumulated sediments in low-lying reaches of the pipes and culverts.

2.2.1.5 Other Linear Facilities

There are a variety of linear and other facilities that the District maintains including levees, embankments, spillways and bridges (small structures over flood control channels). With a few exceptions, the District does not generally maintain County bridges or box culverts on County

roads. Maintenance of most of those facilities is performed by the County Public Works Agency, Transportation Division.

In addition to the linear facilities listed in Table 2-1, the District maintains the following unusual facilities which are few in number: channels with grouted riprap bottom and no bank protection; grouted riprap rectangular channel (banks and bottom); trapezoidal sack concrete channel; gunite and sack concrete bank protection; plastic, iron, and pipe and wire revetment; storm drain catch basins; storm drain outlets at the beach; and pump stations.

2.2.2 Debris and Detention Basins

There are numerous debris and detention basins throughout the county. They are typically located in headwaters upstream of developed areas. Those basins constructed within a watercourse are considered "in-line" facilities. A small number are constructed "off-line," in which flows from a watercourse are diverted to the basin constructed in adjacent uplands. Most of the basins were designed and constructed either by the District or by federal agencies and then transferred to the District. Some basins were constructed over 45 years ago. Some have been modified since their original construction to increase storage capacity. The basins are typically formed by the construction of an earthen dam that may or may not be stabilized with rock. A summary of debris and detention basins maintained by the District is presented in Table 2-3.

Most of the basins are "debris basins" primarily designed to capture large debris (sediment, boulders, trees, etc) during winter storms. These types of basins function by allowing flood waters to pond in the basin, thereby slowing water velocity so that debris and sediment settle out in the basin. Storm water is conveyed through the basin via a metal or concrete stand pipe and outlet pipe at the downstream end of the basin. Most debris basins have a concrete or riprap spillway to safely pass water exceeding the basin capacity. Potrero Creek basin is a debris basin that has a unique design because it is located within the water body of Westlake Lake.

Capturing debris in basins reduces the risk of downstream culverts, bridges and channels becoming blocked with debris and sediment which could cause overbank flooding. To a limited extent, debris basins also serve to retain flood flows and reduce peak flow rates, which is an incidental benefit of their design.

Several basins were designed as "detention basins," which detain large volumes of water during the early phases or peak of a storm event, then slowly release the water over time. These basins reduce the peak downstream flows, which reduces flooding. Examples of detention basins include Arundell, Las Posas, Ramona and Tapo Hills #1 and 2. These basins are designed primarily to detain flood water and only a small portion of their capacity for debris storage.

The District maintains 41 debris or detention basins located in the county (Table 2-2). All debris and detention basins were designed to meet specific hydraulic criteria related to storage, flow conveyance, and discharge rates. Basins must contain a certain storage volume to perform in accordance with the design criteria. As sediments accumulate, the design storage volume decreases and the basin will not function as designed. Hence, sediments must be removed to maintain the design volume. A debris basin "cleanout" occurs in advance of each upcoming rain season and/or immediately following the rain season if any sediment and debris have accumulated. If the watershed

TABLE 2-3
SUMMARY OF DEBRIS AND DETENTION BASINS MAINTAINED BY THE DISTRICT

No.	Name (all debris basins unless otherwise noted)	Capacity When Full (cy)*	Dam Length (ft)*	Size of Basin (ac)*	Watershed (ac)*	Year Constructed or Last Modified
Zone 1						
1	Dent	4,100	80	0.18	19	1981
2	Fresno	4,100	Not available	Not available	Not available	2005
3	Live Oak	45,527	318	3.5	794	2002
4	McDonald Cyn [detention]	23,393	238	2.63	573	1998
5	Stewart Canyon	104,215	1,300	10	1,266	1963
Zone 2						
6	Adams Barranca	72,023	330	3.3	5,387	1994
7	Arundell Barranca [detention & debris]	28,266	377	5.9	1,754	1995
8	Cavin Basin	4,100	170	0.4	90	1933
9	Fagan Canyon	72,000	400	3.2	1,856	1994
10	Franklin Barranca	5,050	140	1.1	330	1996
11	Jepson Wash	33,850	700	2.7	858	1961
12	Pole Creek	250,000	Not available	Not available	Not available	2006
13	Real Wash	22,000	330	1.6	160	1964
14	Warring Wash	33,100	320	2.3	695	2003
Zone 3						
15	Canyon No. 2	49,000	1,500	40	Not available	2004
16	Coyote Canyon	24,500	280	1.5	4,400	1955
17	Crestview	2,350	100	1.5	80	1934
18	Edgemore	2,950	80	0.3	105	1991
19	Erringer	33,250	220	0.3	315	1997
20	Ferro	34,500	325	1.6	395	1985
21	Fox Barranca	14,700	120	1.4	3,100	1991
22	Gabbert Canyon	16,300	800	4.8	2,350	1963
23	Honda West	10,350	150	1.5	740	1955
24	Lang Creek [debris]	24,195	N/A	2.3	2,324	2004
25	Lang Creek [detention]	425,270	245	12	2,325	2004
26	Las Llajas Canyon	2,017,000	640	45.4	4,384	1980
27	Las Posas Estates [detention]	24,684	260	1.5	168	1992
28	Line "C' Arroyo Simi [detention]	16,330	N/A	10.1	635	1997

TABLE 2-3
SUMMARY OF DEBRIS AND DETENTION BASINS MAINTAINED BY THE DISTRICT

No.	Name (all debris basins unless otherwise noted)	Capacity When Full (cy)*	Dam Length (ft)*	Size of Basin (ac)*	Watershed (ac)*	Year Constructed or Last Modified
29	Peach Hill Wash [detention]	5,676	240	3	1,589	1988
30	Ramona [detention]	4,665	255	2.3	254	1992
31	Runkle Canyon	161,000	295	5.7	958	1950
32	Santa Rosa Rd	7,300	160	3.3	1,101	1957
33	South Branch Arroyo Conejo [detention]	50,417	350	2.07	2,209	2003
34	Sycamore Cyn	172,500	1520	70	4,380	1981
35	Tapo Hills 1	41,190	250	2.2	104	1971
36	Tapo Hills 2	25,200	240	1.3	133	1977
37	West Camarillo, East Branch	1,840	120	0.5	92	1955
38	West Camarillo, West Branch	5,250	140	1.6	74	1986
39	Potrero – east and west	W 11,200 E 56,047	W N/A E 400	W 1.7 E 2.1	W 12,608 E 12,608	W 1997 E 1997
Zone 4						
40	Potrero Creek (in-channel)	5,628	80	1.7	1,541	2002
41	Bridgegate	12,936	265	0.87	262	2004

* cy = cubic yards; ft = feet; ac = acres

upstream of the basin is burned in the preceding five years basins will be cleaned in advance of the rain season and may be cleaned several times annually until the vegetation in the watershed recovers. In addition, basins may also be cleaned out as needed. It is important to note that not all basins may need to be cleaned annually. Discing and mowing are common weed control methods for basin and channel bottoms during the summer and fall when basins are dry enough for equipment. A detailed description of sediment removal from basins is provided in Section 2.3.2.

Almost all basins were designed with an assumption that the basin bottoms and sides would be devoid of vegetation, or would only periodically support herbaceous vegetation (not woody plants). Hence, the District manages the vegetation on the basin bottoms and slopes to prevent an undesirable accumulation of biomass. Vegetation is typically managed by herbicide application or discing. A detailed description of vegetation management activities in basins is provided in Section 2.3.

Other basin maintenance activities include the following:

- Removal or reduction of vegetation by herbicide spraying on the surface of access roads and along their perimeters to maintain access and for fire abatement purposes
- Removal or reduction in vegetation by herbicide spraying on the dam slope to ensure the integrity of the dam is not compromised by roots or rodents
- Removal or reduction in vegetation by herbicide spraying along the perimeter of basins within 100 feet of residences to comply with local Fire Department regulations and fire abatement requirements
- Removal or reduction in vegetation by herbicide spraying and/or mechanical clearing around drain inlets, drain outlets, spillways, and other structures associated with the basin
- Mechanical removal of obstructive sediment and debris around drain inlets and spillways
- Repair of access ramps into the basin, as needed, including filling erosion gullies
- Repair of fences and gates, as needed
- Repair of stand pipe or bleeder pipe, as needed
- Repair of road base and surface, as needed
- Repair of erosion on basin slopes by mechanical equipment

Standing water is typically absent from the basin during sediment removal or vegetation maintenance of the basin bottom since cleanout is normally delayed until the accumulated storm water percolates or evaporates. If ponded water is present, the District may pump the water from the basin and spread it on the service road or off site for dust control, and for watering vegetation outside the basin. If flowing water is present at District facilities during maintenance activities, District staff shall follow the guidance and applicable BMPs included in the District's Water Diversion Guide (refer to Appendix E of this document).

2.2.3 Other Facilities

Many of the above facilities have chain link fences, gravel roads, and gates that provide access and security to the facilities. The location of the roads and fences vary considerably with each individual facility. Typically, fences are placed along District easement or property boundaries, while access roads are located near the facilities to provide opportunities for inspection and maintenance work. Fences are repaired on an as-needed basis. District service roads are gravel based and periodically require a new base layer, which may require regrading the road and re-compacting it prior to applying a new surface.

The District also maintains several pump stations on the coast (e.g., Hueneme Drain and Silver Strand pump stations) which require periodic mechanical maintenance, as well as cleaning of screens, trash racks, vaults, and manholes. In addition, sand is removed from the outlets of storm drains that discharge to the beach, such as the beach outlets associated with the Silver Strand Drain system (i.e., outlets associated with the Santa Paula Avenue, Santa Monica Avenue, and San Nicholas Avenue pump stations).

2.3 MAINTENANCE ACTIVITIES

2.3.1 Types and Timing of Maintenance Activities

The District plans and conducts maintenance based on the type of "maintenance activity." Individual maintenance activities have been identified that represent distinct work tasks involving a predictable and consistent set of equipment, crew size and skill set, and physical activities. By organizing the maintenance program by work activity, the District can efficiently plan and manage personnel resources.

For each maintenance activity, the District has developed Activity Guidelines which describe the work activity to ensure consistency amongst the crews from year to year. The current Activity Guidelines[1] specify the following:

- Purpose of the work
- Typical limits of work
- Units to measure the work (e.g., square feet, cubic yards, linear feet, gallons of herbicide, etc)
- Performance criteria (i.e., basis for determining that the work must be performed)
- Typical crew size
- Typical equipment required
- Materials, if needed
- Procedures to accomplish the work
- Typical daily productivity
- Special restrictions (which includes environmental protection measures)
- Best management practices for cleaning channels under the County's National Pollution Discharge Elimination System (NPDES) stormwater permit

A description of major activities is presented below by maintenance categories (A through F). A listing of all maintenance activities is provided in Table 2-4. The current Activity Guidelines for each maintenance activity are provided in Appendix G. Any of the Activity Guidelines can be applied to any facilities maintained by the District, if needed.

A schedule of when major maintenance activities typically occur is presented in Chart 2-3. Some type of maintenance work occurs throughout the entire year. For example, during the summer and fall when flows are absent or reduced, lined channels are cleaned of trash and sediment, and herbicides are applied to channel and basin banks and bottoms. Herbicide spraying occurs all year round, as does brush control outside channels, fence and gate repair, and bank protection repair. Removal of sediments from debris basins primarily occurs in the late summer or fall prior to the

[1] The District is currently updating the existing Performance Standards sheets (PT sheets), which will be renamed as Activity Guidelines. However, the PT numbers will remain the same and the Activity Guidelines sheets will have similar information to the existing Performance Standard sheets.

TABLE 2-4
SUMMARY OF MAINTENANCE ACTIVITIES

Work Code	Description	Units of Measurement	Work in Channel Bottom, on Channel Bank, on Basin Bottom or on a Beach?
Category A: Channel and Debris Basin Activities			
PT20	Unimproved Channel Cleanout, Sediment - Crane	CY	X
PT21	Unimproved Channel Cleanout, Sediment - Excavator	CY	X
PT22	Unimproved Channel Cleanout, Trash & Growth	LF	X
PT23	Improved Channel Cleanout, Sediment - Crane	CY	X
PT24	Improved Channel Cleanout, Sediment – Excavator	CY	X
PT25	Improved Channel Cleanout, Sediment - Loader	CY	X
PT26	Improved Channel Cleanout, Trash & Growth – Crane operations	LF	X
PT27	Improved Channel Cleanout, Trash & Growth – Crane & loader operations	LF	X
PT28	Improved Channel Cleanout, Trash & Growth - Excavator	LF	X
PT29	Pump Station Cleanout [Underground Facility], including sediment and vegetation removal at beach outlet	EA	X
PT31	Storage Area or Stockpile Clean-Up	MH	X
PT32	Channel Earthwork - By Hand	SF	X
PT33	Channel Earthwork - Preparation	MH	X
PT34	Channel Earthwork - Mechanical	CY	X
PT35	Dam & Debris Basin Sediment Removal – Scraper	CY	X
PT36	Dam & Debris Basin Sediment Removal – Crane	CY	X
PT37	Dam & Debris Basin Sediment Removal - Loader	CY	X
PT38	Bleeder Pipe Maintenance and Repair	MH	X
Category B: Brush and Weed Control Activities			
PT40	Weed Control, Non-Spray	MH	X
PT41	Brush & Weed Control, Spray w/ Boom	AC	X
PT42	Weed Control, Hand Spray	AC	X
PT43	Brush & Weed Control, Hand Crew	MH	X
PT44	Brush & Weed Control - Channel & Basin Discing	MH	X
PT45	Backpack Weed Spray	MH	X
PT47	Brush & Weed Control, Excavator	LF	X
PT48	Weed Control, Fire Abatement	MH	X

TABLE 2-4
SUMMARY OF MAINTENANCE ACTIVITIES

Work Code	Description	Units of Measurement	Work in Channel Bottom, on Channel Bank, on Basin Bottom or on a Beach?
PT49	Tumbleweed Abatement	MH	X
Category C: Access Road Work Activities			
PT51	Construction or Replacement of Access Roads	TONS	
PT53	Rebasing & Shaping of Access Roads	TONS	
PT55	Routine Grading of Access Roads	LF	
PT56	Grader Operations of Access Roads	LF	
PT57	Maintenance of Misc. Access Road Structures	MH	
Category D: Facilities Maintenance & Reconstruction Activities			
PT60	Fence Repair	LF	
PT61	Misc. Fence Repair	MH	
PT62	Fence Construction	LF	
PT64	Gate Repair/Chain link	EA	
PT65	Gate Construction/Chain link	EA	
PT66	Pipe/Gate Construction/Repair	EA	
PT68	Pipe & Wire Revetment Repair	LF	X
PT70	Riprap Repair	SF	X
PT72	Bank Protection Construction	SF	X
PT74	Stabilizer Construction/Repair	SF	X
PT76	Concrete Construction/Repair [in channel work]	MH	X
PT77	Surface Drainage Facility Construction [outside channel]	SF	
PT80	Pipe/Flap Gate Maintenance & Repair	EA	X
PT83	Trash Rack Cleaning	EA	X
PT85	Sub-Drain Flushing & Reaming	EA	
PT86	Pump Station Maintenance And Storm Prep.	MH	
PT88	Stockpile & Storage Area Work	MH	
PT89	Miscellaneous Maintenance	MH	In some cases
Category E: Storm Related Activity			
PT90	Storm Protection [inspection only]	MH	
PT91	Safety Inspection	MH	
Category F: Miscellaneous Activities			
PT92	Work Release Weed Control Crews	MH	X
PT93	NPDES Facility Inspection/Maintenance	MH	X
PT97	Miscellaneous Crane Activity	MH	

PT = Activity Guideline code (previously Performance Standard)
AC = acres. CY = cubic yards. EA = each. LF = linear feet. MH = man hours. SF = square feet.

CHART 2-3. TYPICAL ANNUAL MAINTENANCE SCHEDULE

Maintenance Activity	July	Aug	Sept	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	June
Channel and Debris Basin Activities												
Unimproved channel clean outs												
Improved channel clean outs												
Improved channel clean outs for NPDES												
Stockpile and storage area clean ups												
Earthen channel bank and bed repairs												
Debris basin clean outs						May be necessary if basins become full						
Brush and Weed Control Activities												
Herbicide spraying (channels and basins)												
Herbicide spraying - pre-emergent												
Herbicide spraying - post-emergent												
Weed and brush control (outside channels)												
Debris basin and channel discing												
Access Road Activities												
Access road work												
Facilities Maintenance and Construction												
Fence and gate repair												
Bank protection and stabilizer repair												
Environmental Considerations												
Typical rainy season												
General bird nesting season												
Steelhead migration period												

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winter season, but may occur in the winter if sediment accumulates in basins from storms. Herbicide spraying does not occur on banks or bottoms during the winter season.

2.3.2 Channel and Debris Basin Maintenance Activities

This category includes the physical removal or "cleanout" of sediments, vegetation, rock, and trash that accumulate in debris or detention basins and channel facilities.

2.3.2.1 Basin Cleanouts

Accumulated sediment, rock, and vegetative debris are removed from debris basins in advance of each upcoming rain season and immediately following the rain season if any sediment and debris have accumulated. If the watershed upstream of the basin is burned in the preceding five years basins will be cleaned in advance of the rain season and may be cleaned several times annually until the vegetation in the watershed recovers. In addition, basins may also be cleaned out as needed. It is important to note that not all basins may need to be cleaned annually.

Sediment and debris is removed from basins using a bulldozer, loader, excavator, truck crane with clamshell or dragline, or scraper. Material is variously excavated, pushed, piled, and loaded depending upon the site conditions. Equipment typically operates from the basin bottom in order to gain full access. Occasionally it is necessary to construct a temporary earthen ramp to achieve access to the basin bottom. The excavated material 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. Basin clean out generally occurs during the period July 1 to December 1 prior to winter rains (Chart 2-3).

The above sediment removal method involves pushing and piling sediment on the basin bottom, which requires an USACE Section 404 permit and CDFG Section 1602 Streambed Alteration Agreement. The District has temporarily avoided the need for a USACE 404 permit by utilizing "clean excavation[2]." However, this method is substantially more expensive and time consuming compared to the previously used methods noted above. In addition, the construction of earthen ramps requires a USACE permit because it involves discharge of fill material. Based on these considerations, the District will request a USACE 404 permit and CDFG Section 1602 Streambed Alteration Agreement to utilize all excavation and stockpiling methods.

2.3.2.2 Channel Cleanout

Sediment that accumulates in channel facilities is removed because it reduces conveyance capacity and thereby increases the risk of overbank flooding. The District has not set thresholds to determine when accumulated sediment and debris should be removed from channels. The District cleans out channels as soon as there is any kind of obstruction or loss of capacity. The District's maintenance

[2] The USACE does not regulate "clean excavation" under Section 404 of the Clean Water Act, which addresses the discharge of dredged material. Clean excavation is defined as the removal of material in a single action that only involves minimal, incidental fallback to the ground, and does not include any temporary pushing or piling of material.

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. This determination is based on a combination of visual inspection and topographic survey, and excavation proceeds following review of the project plans for each facility.

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. 00-108; NPDES Permit No. CAS004002, adopted on July 27, 2000 by the California Regional Water Quality Control Board, Los Angeles Region, pursuant to Division 7 of the California Water Code). This work is conducted 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 work occurs in "improved" and "unimproved" channels. Improved channels have been designed for specific conveyance capacity, and have engineering drawings that specify a certain width and depth. Most "improved" channels are fully or partially lined with concrete. However, there are also "improved" earthen channels that have design dimensions that must be maintained.

"Unimproved" channels are earthen channels or channels with bank protection (i.e., rock riprap, gunite) and a soft bottom. As such, their maintenance is focused on removing obvious flow obstructions and retaining channel integrity. These channels have the greatest potential to support native habitat in the channel bottom and on the banks compared to improved channels which are fully or partially lined, and maintained on a more frequent basis. Unimproved channels maintained by the District within District right-of-way are listed in Table 2-5.

In many of the larger unimproved channels, a bulldozer or loader will push sediments into a pile where it will be removed by a loader, excavator, or truck crane. Sediments are then placed in dump trucks for stockpiling and off site removal.

If water is present in the channel, work is performed by a truck crane (with clamshell or drag line) or excavator on top of the banks, and sediments are temporarily placed in piles in the channel for dewatering during the maintenance event. Dozers and loaders may also conduct limited desilting in wet channels, depending upon site conditions. The District currently uses BMPs to minimize downstream siltation and turbidity.

Improved channel 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. 00-108) restricts these activities to the period April 15 to October 1 (Chart 2-3). Unimproved channel cleanout occurs in the winter and spring months, October 1 to April 1, or as required (Chart 2-3).

TABLE 2-5
UNIMPROVED CHANNELS*

Zone and Channel Name	Reach	Reach Number**
Zone 1		
Caltrans Secondary	Ventura River u/s to Hwy 33	41728
Canada Larga	Ventura River to lined section	41151
Canada de San Joaquin	Ventura River to Hwy 33	41134
	Ventura Ave upstream	41134
	Ventura Ave upstream to Mohawk Ave	41134
	Mohawk Ave upstream	41134
Cozy Dell	Ventura River to McDonald Canyon	41311
Dent Secondary	Ventura River u/s to Hwy 33	41721
Freeway Side Drain No. 1	Ventura River u/s to Hwy 33	41751
Freeway Side Drain No. 2	Ventura River u/s to Hwy 33	41752
Freeway Side Drain No. 3	Ventura River u/s to Hwy 33	41753
Freeway Side Drain No. 4	Ventura River u/s to Hwy 33	41754
Freeway Side Drain No. 5	Ventura River u/s to Hwy 33	41755
Fresno Canyon Trap	Fresno Canyon u/s Hwy 33	41182
Happy Valley Drain	Lomita Avenue (upper) to El Roblar Drive	41284
Harrison Secondary	Ventura River u/s Hwy 33	41727
Howard Ave	Brandt Ave to Howard Ave	41717
Live Oak Creek Diversion	Ventura River to Burnham Road	41217
McDonald Cyn	Cozy Dell to Rice Road	41301
Peking Street Secondary	Ventura River u/s Hwy 33	41729
Ramona Street Secondary	Ventura River u/s Hwy 33	41730
Simpson Street Secondary	Ventura River u/s Hwy 33	41731
Stanley Avenue Secondary	Ventura River u/s Hwy 33	41110
Vince Street Secondary	Ventura River u/s Hwy 33	41732
Thacher Creek	Boardman Rd to Hwy 150	41443
Zone 2		
Arundell Barranca	Main St. thru Estates Ave.	42404
Arundell Barranca	Estates Ave to Loma Vista Road	42405
Bardsdale Ditch	Santa Clara River to West end of Bardsdale Ditch	43161
Basolo Ditch	Santa Clara River to Guiberson Rd	43191
Brown Barranca	Santa Clara River to Telephone Road	42511
Camarillo Hills Drain	Revolon Channel to Camarillo Airport	42131
Cavin Road Drain	Santa Clara River to Telegraph Rd	43221
Central Avenue Drain	Santa Clara River thru Vineyard Ave.	42205
Doris Drain	Edison Canal to Victoria Avenue	42381
Fagan Canyon	Santa Clara River to lined section	43051
Fagan Canyon	Main St. thru Cemetery Rd.	43055
Fagan Canyon	Fagan Canyon u/s Cemetery Rd.	43056

TABLE 2-5
UNIMPROVED CHANNELS*

Zone and Channel Name	Reach	Reach Number**
Franklin Barranca	Hwy 126 to Foothill Road	42534
Grimes Canyon Wash	Santa Clara River to Riverside Ave	43181
Harmon Barranca	Hwy 126 to Telegraph Rd	42476
Harmon Barranca	Harmon Barranca u/s Foothill Rd.	42478
Hueneme Drain	Pump Station to foot bridge	42332
Hueneme Drain	Foot bridge to Joyce Drive	42333
J Street Drain	Pacific Ocean to Hueneme Rd	42321
Jepson Wash	Grand Ave to Debris Basin	43352
	Sespe Creek to Grand Ave	43351
Keefe Ditch	Grand Ave upstream	43362
Montalvo Golf Course Secondary	Santa Clara River to Olivas Park Rd.	42701
Nyeland Trib. Lateral A	Ventura Blvd to Nyeland Drain	42171
Oxnard Industrial Drain	J Street Drain to RR Crossing	42301
Piru Storage & Stockpile	Torrey Rd. Thru Howe Rd.	43009
Pole Creek	Santa Clara River to Lined Section	43201
	Fourth Street upstream	43204
Real Canyon	Warring Wash to Center Street	43253
Real Canyon	Between Camulos St. and R.R. Tracks	43254
Santa Clara Avenue Drain	Nyeland drain NW of Santa Clara Ave.	42191
Santa Clara River (North Bank Groins)	101 Freeway to So. Mountain	42026
Santa Paula Creek	Telegraph Rd. d/s from RR Tracks	43062
Santa Paula Creek	Mupu School to Steckel Park	43065
Santa Paula Creek	Main Street to Mupu School	43060
Saticoy Drain	Saticoy Park to Hwy 126	42522
Side Drain 1A, SC River Levee	u/s Hwy 118 Bridge @ end of Levee	42031
Sudden Barranca	Santa Clara River to Railroad Crossing	42501
Victoria Avenue Drain Secondary	Santa Clara River to Gonzales Road	42704
Warring Wash	u/s End of Lining to Center Street	43262
Warring Wash South	Santa Clara River to Pacific Street	43271
Wason Barranca	Hwy 126 to Telegraph Rd	42542
Willard Road Secondary	Santa Clara River to 2800' South of Hwy 126	43701
Wright Road Drain	Santa Clara Avenue Drain v/s	42201
Zone 3		
Arroyo Colorado	d/s La Loma	45271
Arroyo Conejo North Fork	Keats Ave. and Tennyson St.	46165
Arroyo Las Posas	Seminary Road to Coyote Canyon	42051

TABLE 2-5
UNIMPROVED CHANNELS*

Zone and Channel Name	Reach	Reach Number**
Arroyo Santa Rosa	Blanchard Rd to Secondary to Arroyo Santa Rosa Tributary	46073
Arroyo Santa Rosa	South of Santa Rosa Rd.	46074
Arroyo Santa Rosa Tributary	Arroyo Santa Rosa to Lined Section	46081
Arroyo Simi	RR to Canyon No. 2	47015
Arroyo Simi	Canyon No. 2 to Alamitos Canyon	47016
Arroyo Simi	Lined Section to RR Tracks	47035
Beardsley Wash	Conelly Triple Arch u/s to Milligan Barranca	45248
Blanchard Road Drain Secondary	Arroyo Santa Rosa to Blanchard Road	46702
Castano Tributary	Castano to Calle Damaseo	46191
Conejo Creek	Mission Oaks to Upland	46016
	Hwy 101 to Mission Oaks	46015
	u/s Sanitation Plant to Hwy 101	46014
	Sanitation Rd. to N Howard Rd.	46013
	Pancho Rd. to Howard Rd.	46012
	Calleguas Creek to Pancho Road	46011
Duval Road Drain Secondary	Arroyo Santa Rosa u/s to Duvall Rd.	45703
Ferro Ditch	Hwy 118 to Debris Basin	45301
Honda Barranca	Milligan Barranca to Center School Road	45251
Honda Barranca East Fork	La Loma Ave u/s	45262
Honda Barranca	Price Rd. to Honda Barranca East Fork	45255
Jenny Drive Secondary	South of Henry Drive to North of Carl Court	46800
Lang Creek	Lower Le Monte Drive to Marview Drive	46226
	Hwy 23 to Lower Monte Drive	46225
Las Llajas Canyon	Cochran St. to Alamo St.	47513
	Los Angeles Ave. to Cochran St	47512
Lynn Ranch Secondary	South of Caminos dos Rios to 140' South of Calle Pecos	46749
Mission Oaks Drain	Santa Rosa Rd. to Mission Blvd.	46042
Newbury Park S.O. #1	Theresa Drive to Borchard Rd.	46143
	Michael Drive to Theresa Drive	46142
	Wendy Dr. to South Branch, Arroyo Conejo to Michael Drive	46141
Newbury Park S.O. #2	South of Jenny Dr. to High School	46133
	South Branch, Arroyo Conejo to Jenny Drive	46131
No. 2 Canyon	Arroyo Simi to Hwy 118	47201
North Simi Drain	Fwy 118 to Caldwell Ave.	47345
Olsen Channel	Wildwood Ave to Callutheran Pl.	46153
	Ave. de los Arboles to Wildwood Ave.	46152

TABLE 2-5
UNIMPROVED CHANNELS*

Zone and Channel Name	Reach	Reach Number**
	No. Fork Arroyo Conejo to Av. De los Arboles	46151
Peach Hill Wash	Arroyo Simi to Homes Acre Drain Junction	47121
Pleasant Valley Road Drain	West Gate Entrance to End of Flood Control ROW	45133
Revolon Slough	Hueneme Road to Wood Rd. (Zone 2)	45105
	Las Posas Rd to Hueneme Rd.	45103
	Hwy 101 to Las Posas Rd.	45101
Rotsler Ditch Secondary	Santa Rosa Road to 2300' Southerly	46701
Santa Clara Ave Drain	Mesa School through La Vista Rd	45293
South Branch Arroyo Conejo	Wendy Dr. To Reino Rd.	46114
	Boarchard to Wendy Dr.	46113
Sta Susana Knolls Secondary	Elm Ct. to RR Tracks	47760
Strathearn Canyon	East Fork u/s	47184
Upland Road Drain	Conejo Creek to Santa Rosa Rd.	46051
Walnut Canyon	d/s end box section to unimproved section	47116
West Camarillo Hills Drain Tributary	W. Camarillo Hills Drain 400' South of Camarillo Drive	45178
Zone Four		
Medea Creek	Conifer St. To Oak Hills Dr.	48072
	LA County Line to Conifer St.	48071
Potrero Creek	Lake Eleanor Creek to Potrero	48025
	Westlake Blvd. to Lake Eleanor Creek	48023

* "Unimproved" channels are full earthen channels or channels with bank protection (i.e., rock riprap, gunite) and a soft bottom that do not have engineered design specifications.

** Project reach number is a code used by the District for inventory purposes.

2.3.2.3 Channel Bed and Bank Repair

This maintenance category includes earthen channel repair and reshaping due to bank or bed erosion. On site materials are used to reshape and re-compact an eroded bank to a more stable and smooth surface. If necessary, fill material will be imported, placed, and compacted in eroded areas. As noted earlier, these channels function as flood control facilities, not natural streams or creeks. The distinction is that the District's flood control facilities (including unimproved channels) are facilities located within the District's right-of-way, have been engineered, remain serviceable, and are routinely maintained within the District's right-of-way.

Earthwork may also occur on the channel bed to redirect flows that are undermining banks and causing bank erosion or failure (that can lead to channel obstructions). Sandbars that redirect flows may be lowered and spread out across the channel bed, filling low areas that have been scoured, or placed in eroded areas on the banks. In some instances, material from sandbars is removed off site.

Grading is usually conducted with a bulldozer which accesses the channel bottom from existing ramps. If a ramp is not located in proximity to the site, the District will construct a temporary earthen ramp at the work site by placing temporary fill on the banks.

Small areas of actively eroding channel banks that threaten property and infrastructure may be temporarily stabilized by using a variety of methods such as ungrouted or grouted riprap, sand bags, and concrete sackwalls. The choice of bank protection material depends on the site specific conditions. These types of in-kind repairs of existing facilities are temporary until a long-term solution or capital project is developed and permitted.

The channel bed and bank repair maintenance activities in this category generally occur in the winter and spring months, November 1 to April 1, when other maintenance work is at a lower level (Chart 2-3). If water is present in the channel, it is diverted around the work site with temporary diversion dams using on site channel materials or sandbags; temporary by-pass pipes and pumps may also be used.

2.3.3 Brush and Weed Control Activities – Channels and Basins

Herbicides, equipment, or manual labor are used to remove or reduce obstructive vegetation that reduces channel or debris basin capacity by its mass or is likely to cause a build up of sediment in the future. In addition, vegetation is removed if it could undermine rock slope protection or levees through root action or prevent visual inspection of bank protection and other in-channel facilities.

A District maintenance supervisor or his designee makes a visual determination of what constitutes obstructive vegetation that needs to be reduced or removed. Vegetation is also removed or reduced by herbicides in a 15-foot wide zone at the base of any bank protection (e.g., concrete, riprap) to provide an unobstructed view of the toe of the slope to allow for visual inspection. Finally, vegetation is removed or reduced by herbicides along both sides of access roads along channels (10-30 feet from edge of the road) for fire abatement purposes.

The District uses a variety of herbicides, all of which are approved by the Environmental Protection Agency (EPA). During the growing season, foliage of actively growing plants (less than 36 inches high) is sprayed with Aquamaster™ (formerly Rodeo™) or Round-up.™ Several other herbicides are used throughout the year for pre- and post-emergent applications (see Table 2-6). Many of the herbicides are applied with surfactants, dispersion aids, and adjuvants. The District uses only those products approved for aquatic work by the EPA for maintenance work within the bed and banks of channels and basins.

The District applies herbicides throughout the year. Pre-emergent herbicides are applied to areas of concern in the winter and early spring to prevent the growth of undesirable plants and reduce the need to conduct foliar spray at a later time. It is the District's objective to keep the undesirable vegetation from becoming established through strategic pre-emergent and early growth stages spraying, rather than to treat mature plants. Post-emergent herbicides are applied throughout the year to the foliage of plants to reduce or remove them. The timing and amount of post-emergent herbicide applications vary considerably from year to year based on weather conditions. In summary, herbicides may be applied 2 or 3 times a year (or as required) in areas of concern to prevent or manage undesirable plant cover

TABLE 2-6
HERBICIDES USED TO CONTROL VEGETATION

Herbicides and Aids	Type
Diuron	Pre-emergent
AquaMaster	Post emergent
Direx	Pre-emergent
Land Mark	Pre-emergent
Oust	Pre- and post-emergent
Garlon 4	Post emergent
Round-up Pro	Post emergent
Sta-Put	Dispersion aid/adjuvant
Pro-Spreader	Surfactant
Magnify	Surfactant
Tripleline	Adjuvant*
Blazon	Marker

* Adjuvants are substances that increase the effectiveness of the primary herbicide compounds.

The method and extent of spraying vary based on the site specific conditions. In general, herbicides are applied to channels and the sides of access roads using a boom spray. If a boom spray cannot be used due to space restrictions or the need to avoid desirable plants, the District will use hand sprayers connected to spray trucks. Only vegetative material is sprayed; herbicide is not applied to open water or bare earth. Backpack herbicide spraying is only used to treat otherwise inaccessible areas along channels or in basins.

The herbicides used by the District require a qualified applicator. Herbicides are applied in conformance with the ~~District's Herbicide Spray Manual~~ Ventura County Application Protocol for Pesticides, Fertilizers, and Herbicides (included in Appendix I) and ~~,~~ with the requirements of the ~~State Aquatic Pesticide Permit, and with State Water Resources Control Board (SWRCB) Water Quality Order Nos. 2004-0008-DWQ and 2004-0009-DWQ.~~ 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).

As an alternative to herbicide treatment, the District removes undesirable plants in channel and basin bottoms by mechanical means (i.e., discing, mowing, or hydroaxe) or by hand crews. Discing and mowing are common weed control methods for basin and channel bottoms during the summer and fall when basins are dry enough for equipment. Chippers may be used to reduce the weed mass prior to removing it from the site.

2.3.4 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. Resurfacing roads generally occurs in the winter when

there is better crew availability but can occur any time of the year. Base aggregate is placed on the road and compacted with heavy equipment.

The District maintains a limited number of asphalt roads along channels and at basins, which are repaired as needed.

2.3.5 Facilities Maintenance and Reconstruction

This maintenance category includes a wide variety of work that occurs throughout the year on an as-needed basis. Facilities deteriorate over time and may require repair or reconstruction, particularly after a winter with high flood flows. This maintenance category includes gate and fence repair. It also includes the repair of bank protection damaged from flood flows, including grouted and ungrouted riprap, pipe and wire revetment, and concrete sack walls. In general, the same type of bank protection is used for the repair or replacement, and the length of bank protection is similar to the original condition. Various types of heavy equipment are used, including loaders, excavators, concrete trucks, cranes, excavators, 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 length of the bank protection to repair and depth of the erosion.

In addition to the repair of bank protection along earthen channels, the District also maintains and repairs (as necessary) concrete grade control structures that are located in the channel bottom. The maintenance zone upstream and downstream of grade control structures is 15 feet.

Repair work 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.

2.3.6 Water Diversions

Routine maintenance and repairs will sometimes need to occur while there is flowing water present in a channel or basin. This requires the diversion of water which can be done in one of several ways. In general, the work area may be isolated by the impounding of flows behind a coffer dam or within an in-stream excavated basin. Flows from the coffer dam or excavated basin are routed around or through the work area by a bypass system. The bypass system may consist of a pipeline, excavated channel, lined flume or a bermed portion of the existing channel. Because of the potential of the water diversion to affect water quality and aquatic life, appropriate BMPs must be incorporated into the design and operation of the water diversion. The District has developed specific BMPs for water diversions, which are included in the Water Diversion Guide (attached to this Program EIR as Appendix E). The proposed project includes BMP 18, which would implement the Water Diversion Guide for applicable maintenance activities.

2.3.7 Stream Gauge Maintenance

As part of the District's stream flow monitoring program, 14 stream gauge stations are maintained throughout the County. The stations consist of flow monitoring equipment mounted on bridges and/or other structures spanning several watercourses in the County. In order to get accurate flow readings, the flow beneath the monitoring equipment must be laminar (i.e., non-turbulent). Also, flow meters frequently used to make discharge measurements can be damaged by debris. Therefore, vegetation within the channel must be cleared to bank-full capacity (unless otherwise specified)

upstream and downstream of the gauging station or bridge. Vegetation clearing and debris removal from bridge piers is conducted annually or every other year. Hand crews are used whenever practical, and mechanized equipment (chain saws) is used when large amounts of debris are being cut and hauled away. Stream gauge maintenance generally occurs between September 15 and March 1. Stream gauge maintenance sites are presented in Table 2-7.

2.3.8 Rodent Control

In accordance with California Division of Safety of Dams (DSOD) requirements, the District must maintain all state-size dams to meet public safety standards. In addition, in order to ensure the safety of life and property, the District maintains dams, levees and channels to meet public safety standards. Since the burrowing activities of California ground squirrels (*Spermophilus beecheyi*) and, to a lesser extent, pocket gophers (*Thomomys bottae*) can cause structural damage to District facilities, DSOD has a zero tolerance policy for ground squirrel and other rodent infestations at critical facilities where failure would affect public safety. Consequently, the District has an ongoing rodent control program for critical structures that are listed in Table 2-8. Additional sites may be added to the list presented in Table 2-8 at any time.

Ground squirrels are found throughout the District. District maintenance personnel note any ground squirrel damage during routine facility inspections. When damage is identified, the District schedules repairs, which consist of destroying the burrows and restoring the structural integrity of the damaged facility. In addition, the District conducts a pest control program on an ongoing basis to prevent ground squirrel damage at critical facilities by using bait stations with diphacinone treated oats.

Currently the District contracts with a Pest Control Operator (PCO) that specializes in wildlife damage control to carry out the pest control program. Controlling the ground squirrel populations in adjacent areas is key to preventing ground squirrels from migrating to the District facility sites and damaging flood control facilities as they build their burrows. At the critical facilities where ground squirrel emigration pressure is constant, the damage prevention program calls for the PCO to maintain anticoagulant bait stations throughout the year. Individual squirrels consume the anticoagulant bait and die before they have a chance to establish new burrows in critical facility structures. Until recently, the District has used standard PVC T bait stations. Now the District also uses modified sprinkler valve boxes as anticoagulant bait stations because they provide greater protection from vandalism. Depending on the density of the ground squirrel population, bait stations are checked every 14 to 30 days.

Some primary hazards to non-target species occur. Although most toxicant residues are metabolized and excreted, some high concentrations may still be found in the deceased animals. Consequently, some secondary poisoning may occur if the dead or dying squirrel that has been consumed contains residues of the toxicant and it dies outside its burrow; however, most ground squirrels die in their burrows.

Regular rodent control is not currently provided at the District's non-critical facilities. When squirrel damage is found at non-critical facilities, the District may treat the infestation with zinc phosphide bait near the ground squirrel burrow entrances. The Ventura County Agricultural Commissioner

TABLE 2-7
STREAM GAUGE MAINTENANCE SITES

Site No.	Site Name	Maintenance Activity	Frequency
602	Matilija Creek at Matilija Hot Springs	Removal of surface vegetation 50' upstream and 50' downstream of the cableway	every other year
604	North Fork Matilija Creek at Matilija Hot Springs	Removal of surface vegetation from the stilling well to 50' downstream	every other year
605	San Antonio Creek at Casitas Springs	Removal of surface vegetation 50' upstream and 50' downstream of the bridge; flood debris removal from the two bridge piers	every other year
608	Ventura River at Foster Park	Removal of surface vegetation 50' upstream and 50' downstream of the Casitas Vista Road Bridge; flood debris removal from the bridge piers	every other year
669	Thacher Creek at Boardman Road	Removal of surface vegetation for 25' upstream of the double-box culvert beneath Boardman Rd	every other year
		Flood debris removal from the center pier of Boardman Rd bridge	annual
720	Santa Clara River at 12th Street Bridge	Removal of surface vegetation for 50' downstream of bridge	every other year
709	Santa Paula Creek at Mupu Bridge	Removal of 50' surface vegetation upstream and downstream of bridge	every other year
723	Santa Clara River at Victoria Avenue	Removal of surface vegetation for 50' downstream of bridge	every other year
724	Santa Clara River at the United Water Conservation District Freeman Diversion	Removal of surface vegetation 100' upstream of concrete stabilizer (diversion dam)	every other year
738	Todd Barranca at Telegraph Road Bridge	Removal of sediment and vegetation 25 feet downstream of bridge	every other year
805	Calleguas Creek at CSUCI	Removal of 50' surface vegetation upstream and downstream; removal of debris from piers	every other year
806	Calleguas Creek at Hwy 101	Removal of flood debris from bridge piers	every other year
838	Arroyo Santa Rosa at Blanchard Road	Sediment and vegetation removal on concrete channel and 100' downstream	every other year
841	Arroyo Simi at Hitch Blvd. Bridge	Debris removal from bridge piers	annual

TABLE 2-8
CRITICAL WATERSHED PROTECTION DISTRICT FACILITIES WITH ANTICOAGULANT RODENTICIDE APPLICATIONS

Zone	Facility	Reach
1	Dent Debris Basin Dam	41121
1	Live Oak Creek Diversion Dam	41904
1	Mirror Lake Drain Levee	41321
1	Stewart Debris Basin Dam	41902
2	Adams Barranca Debris Basin Dam	43906
2	Arundell Barranca Debris Basin Dam	42901
2	Arundell Barranca Harbor to Arundell Circle	42402
2	Fagan Canyon Debris Basin Dam	43907
2	Jepson Wash Debris Basin Dam	43901
2	Real Canyon Debris Basin Dam/Levee	43251, 43252, 43253, 43254, 43255, 43903
2	Rice Road Drain Levee	42311, 42312, 42313, 42314, 42315, 42317, 42318, 42319
2	Sespe Creek Levee	43305, 43306, 43308
2	Warring Debris Basin Dam	43904
3	Arroyo Simi Channel Levees	47011, 47012, 47013, 47014
3	Calleguas Creek Channel Levees	45021, 45023, 45025, 45027, 45033, 45035, 45037
3	Conejo Mountain Creek Basin #1 Dam	43906
3	Ferro Ditch Debris Basin Dam	45908
3	Las Llajas Canyon Basin Dam	47908
3	Somis Drain Levee	45451, 45452, 45453, 45454
3	South Branch Arroyo Conejo Levee	46124

(VCAC) limits zinc phosphide applications to no more than two per year at the same facility, although the VCAC may approve a third application under special circumstances.

The District sometimes treats pocket gophers with aluminum phosphide pellets at habitat restoration sites maintained by the District. In response to complaints about rats (*Rattus spp.*) from neighboring property owners, the District has occasionally cleared ground cover along drainage channels.

On March 22, 2005, the Ventura County Board of Supervisors voted to support legislative efforts (AB 1548) to restrict or eliminate the use of anticoagulant rodenticides in the County. In 2006 the District completed a study of alternatives (Rodent Control for Dam and Levee Protection: Evaluation of Current Program and Alternatives, Salmon 2006) to consider pest management alternatives that would reduce overall environmental effects while still maintaining public safety at the District's facilities. By reducing the total amount of rodenticides, the District's goal is to reduce the primary and secondary hazards to non-target species compared to the prior bait station technique. A pilot Integrated Pest Management (IPM) program is currently under way to test the

efficacy of pest management alternatives at several District facilities. The proposed BMP provides for a variety of pest management methods that will be used on an as-needed basis depending on the site conditions at the District's critical and non-critical facilities.

2.3.9 Storm Related Emergency Activities

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). As stated in Section 2.1.2, emergency projects are authorized separately.

2.3.10 Miscellaneous Activities

This category includes several maintenance activities that do not fit into other categories. It includes weed removal by hand crews, NPDES facility inspection and maintenance, and miscellaneous crane activities.

2.4 SUMMARY OF RECENT MAINTENANCE ACTIVITIES

The District keeps daily records of all maintenance activities performed. This information can be used to characterize the maintenance work each year, and indicate which activities are most common and which ones occur infrequently. A summary of the maintenance activities for each of the fiscal years from 1998 to 2006 (July 1 through June 30) is presented in Table 2-9.

Maintenance activities vary from year to year due to weather and runoff conditions. For example, in-channel maintenance work is typically increased after winters with significant storm events (e.g., following El Niño winters) due to flood damage to channel banks and beds, and higher than normal deposition of sediments in basins. In channel work during drought years may be reduced due to the slower and less extensive plant growth in flood control channels and basins.

The maintenance activities (see Table 2-9) which occurred most frequently, involved the greatest level of effort (man-hours) or materials (cubic yards), and/or affected the greatest area (e.g., linear feet, acres) during the period 1998-2006 are listed below:

- Unimproved and Improved Channel Clean-out of Sediments and Vegetation (PT20, PT21, PT23, PT24 and PT25). This activity involved an annual average of about 26,000 cubic yards of sediment removal from channels with soft bottoms and lined or unlined banks.
- Improved Channel Clean out of Trash and Growth (PT22, PT26, PT27, PT 28). Each year, this activity involved about 130 miles of clean outs of fully lined concrete channels in order to comply with the District's NPDES municipal stormwater permit (Board Order No. 00-108; NPDES Permit No. CAS004002, adopted on July 27, 2000). This maintenance activity involved the greatest geographic area of any single maintenance activity.

TABLE 2-9
SUMMARY OF MAINTENANCE ACTIVITIES 1998-2006

Code	Maintenance Activity	Unit	1998	1999	2000	2001	2002	2003	2004	2005	2006	Avg	Min	Max
PT20	Unimp Chnl Clnout, Sed/Crane	CY	1,150	0	1,890	5,070	0	0	1,304	4,362	0	1,531	0	5,070
PT21	Unimp Chnl Clnout, Sed /Drott	CY	17,189	1,482	4,125	4,754	546	3,166	4,296	29,010	3,800	7,596	546	29,010
PT22	Unip Chanl Clnout, T & G Crane	LF	4,440	2,700	63	1,100	0	0	150	0	0	939	0	4,440
PT23	Imp Chnl Clnout, Sed/Crane	CY	7,610	5,358	10,601	5,130	1,510	3,930	4,923	14,302	0	5,929	0	14,302
PT24	Imp Chnl Clnout, Sed/Drott	CY	17,555	1,962	2,809	2,248	816	3,901	3,380	50,375	2,504	9,506	816	50,375
PT25	Chnl Clnout, Sed/Loader	CY	0	225	950	0	848	0	7,668	2,144	1,970	1,534	0	7,668
PT26	Imp Chnl Clnout, T & G / Crane	LF	144,903	148,525	181,468	199,340	202,625	207,433	206,165	114,367	0	156,092	0	207,433
PT27	Chnl Clnout, T & G / Loader	LF	56,502	42,716	32,069	46,301	52,117	42,985	67,944	6,450	63,059	45,571	6,450	67,944
PT28	Imp Chnl Clnout, T & G / Drott	LF	165,884	257,033	220,371	344,832	290,842	263,135	249,366	293,336	775,968	317,863	165,884	775,968
PT29	Pump Station Cleanout	EA	194	0	330	172	0	170	108	161	294	159	0	330
PT31	Storage Area Cleanup	MH	2,773	6,418	3,295	1,464	1,555	1,349	345	549	668	2,046	345	6,418
PT32	Earthwork, Hand	SF	3,591	1,334	2,387	1,504	912	764	748	3,639	2,238	1,902	748	3,639
PT33	Earthwork, Preparation	MH	396	257	46	297	105	20	98	365	46	181	20	396
PT34	Earthwork, Mechanical	CY	17,815	20,694	6,765	8,138	5,696	4,877	11,806	14,681	15,020	11,721	4,877	20,694
PT35	Dam / D. Basin Scraper	CY	0	0	0	0	0	0	0	0	0	0	0	0
PT36	Dam & D.B Sediment Removal	CY	888	5,630	0	3,264	788	0	15,492	8,594	0	3,851	0	15,492
PT37	Dam / D. Basin - Rental Loader	CY	0	0	0	6,478	0	9,364	9,028	12,016	0	4,098	0	12,016
PT38	Bleeder Pipe Maintenance Repair	MH	235	112	199	323	106	257	300	1,328	741	400	106	1,328
PT40	Weed Control / Non Spray	MH	1,082	1,185	1,168	1,060	1,294	939	900	700	685	1,001	685	1,294
PS41	Weed Control / Pre-Emg't Boom Spray	AC	628	659	577	676	630	582	534	29	428	527	29	676
PS42	Weed Control / Pre-Emg't Hand Spray	AC	62	67	270	95	62	155	77	23	151	107	23	270
PT41	Weed Control / Boom Spray	AC	1,643	1,930	2,143	1,638	1,910	1,719	1,416	1,570	1,400	1,708	1,400	2,143
PT42	Weed Control / Hand Spray	AC	549	728	655	533	606	582	674	708	649	632	533	728
PT43	Weed Control / Hand Crew	MH	6,412	9,771	9,601	8,580	9,396	9,360	8,625	5,705	5,761	8,135	5,705	9,771
PT44	Channel Activities / Mechanical	MH	1,405	2,073	1,555	1,656	1,304	2,241	1,816	2,271	2,773	1,899	1,304	2,773
PT45	Weed Control / Backpack Spray	MH	36	89	72	180	131	126	138	156	72	111	36	180
PT47	Weed Control / Drott	LF	60	260	179	147	674	227	304	46	127	225	46	674

TABLE 2-9
SUMMARY OF MAINTENANCE ACTIVITIES 1998-2006

Code	Maintenance Activity	Unit	1998	1999	2000	2001	2002	2003	2004	2005	2006	Avg	Min	Max
PT48	Weed Control / Fire Abatement	MH	692	776	1,356	1,084	953	1,733	1,724	1,671	1,452	1,271	692	1,733
PT49	Weed Control / Tumbleweed Abtm't	MH	299	133	198	510	478	472	670	494	290	394	133	670
PT51	Construct or Replace Access Road	TN	0	0	0	0	0	696	0	6,061	0	751	0	6,061
PT53	Rebase & Shape, Access Road	TN	6,393	17,034	20,472	2,677	7,616	4,587	3,206	8,349	6,640	8,553	2,677	20,472
PT55	Routine Grading, Access Road	LF	146,947	322,389	234,824	263,903	201,980	194,435	146,406	37,966	76,368	180,580	37,966	322,389
PT56	Grader Operations	LF	465	213	561	567	280	532	2,061	713	153	616	153	2,061
PT57	Maintain Road Facilities / Structures	MH	338	289	147	167	771	288	546	367	30	327	30	771
PT58	Maintain Access Road Ditch	MH	13,312	60	57,237	0	0	0	0	450	0	7,895	0	57,237
PT60	Fence Repair	LF	2,122	4,578	3,731	3,605	3,656	3,818	2,950	2,123	3,627	3,357	2,122	4,578
PT61	Misc. Fence Maintenance	MH	441	666	870	730	566	543	700	452	647	624	441	870
PT62	Fence Construction	LF	60	60	16	28	7	470	453	1,063	2,060	469	7	2,060
PT64	Gate Repair (chain link)	EA	95	101	110	70	58	38	30	38	66	67	30	110
PT65	Gate Construction / Chain Link	EA	25	6	16	3	23	9	66	61	31	27	3	66
PT66	Pip Gate - Construction / Repair	LF	15	21	37	19	12	27	53	54	235	53	12	235
PT68	Pipe & Wire Revet. - Repair	LF	24	0	0	0	0	0	0	0	0	3	0	24
PT70	Riprap Bank Repair	SF	46,324	10,088	12,561	8,569	9,341	10,636	2,352	4,182	0	11,561	0	46,324
PT72	Bank Protection Construction	SF	0	0	480	0	2,800	1,917	315	500	0	668	0	2,800
PT74	Stabilizer Const. / Repair	SF	5,081	6,720	510	0	670	2,476	1,145	700	723	2,003	0	6,720
PT76	Concrete Construction Repair	MH	1,459	1,168	704	540	677	553	442	432	995	774	432	1,459
PT77	Surface Drainage Facility Const.	SF	1,044	1,133	2,187	1,102	870	423	381	832	327	922	327	2,187
PT80	Pipe / Flap Gate - Paint	EA	53	42	107	2	67	80	5	9	0	41	0	107
PT83	Trash Rack Cleaning	Rack	504	379	180	131	134	141	181	227	47	214	47	504
PT85	Sub - Drain Flushing and Reaming	EA	156	304	174	179	143	277	596	110	24	218	24	596
PT86	Pump Station / Maint. & Preparation	MH	285	168	293	200	204	223	210	230	356	241	168	356
PT87	Contract O & M Work	$	100	0	0	69,040	15,360	0	25,420	14,172,955	187,758	1,607,848	0	14,172,955
PT88	Stockpile & Storage Work	MH	475	276	254	325	401	491	444	751	416	426	254	751
PT89	Miscellaneous Maintenance	MH	3,467	2,717	2,137	2,066	1,963	2,115	2,344	2,317	1,836	2,329	1,836	3,467

TABLE 2-9
SUMMARY OF MAINTENANCE ACTIVITIES 1998-2006

Code	Maintenance Activity	Unit	1998	1999	2000	2001	2002	2003	2004	2005	2006	Avg	Min	Max
PT90	Storm Protection	MH	5,847	3,785	4,116	3,744	2,052	3,244	1,680	4,041	3,431	3,549	1,680	5,847
PT91	Safety Inspection	MH	1,422	1,872	0	0	80	0	123	435	0	437	0	1,872
PT92	Work Release	MH	841	0	1,610	1,616	1,544	2,098	1,954	1,615	1,690	1,441	0	2,098
PT93	NPDES Insp/ Maint.	MH	0	56	136	354	186	262	415	28	30	163	0	415
PT97	Miscellaneous Crane Activities	MH	266	309	277	331	165	346	370	16	38	235	16	370

Notes: PT=Activity Guideline Code (previously Performance Standard); AC = acres; CY = cubic yards; EA = each; MH = man hours; $ = cost; LF = linear feet; SF square feet

- Channel Earthwork – Mechanical (PT34). Each year, this activity involved about 12,000 cubic yards of earthwork. It involves the restoration of eroded banks and levees using heavy equipment.
- Dam and Debris Basin Sediment Removal (PT36, PT37). The total average annual amount of sediment removed from all debris and detention basins maintained each year was about 8,000 cubic yards for all basins combined.
- Brush and Weed Control – Boom Spray (PT41). About 3,400 acres of channel, roadside, and right-of-way areas were sprayed using a boom truck each year. Many areas were sprayed several times; hence, this acreage includes repetitive treatment of the same areas during the year.
- Brush and Weed Control – Hand Spray (PT42). About 1,700 acres of channel, roadside, and right-of-way areas were sprayed using a hand sprayer each year. Many areas were sprayed several times; hence, this acreage includes repetitive treatment of the same areas during the year.
- Routine Maintenance of Access Roads (PT53, PT55, PT57, PT58). The maintenance of access roads involved an annual average of 8,850 man-hours, 9,300 tons of earthwork and 180,000 linear feet of grading.

Several maintenance activities that have the potential to affect in-channel environmental resources do not involve substantial areas. For example, the repair of riprap (Riprap Repair, PT70) only affected about 0.5 acres each year. Similarly, grade stabilizer repairs (Stabilizer Repair, PT74) only involved about 3,500 square feet each year.

2.5 PERMIT REQUIREMENTS

2.5.1 U.S. Army Corps of Engineers (USACE)

Under Section 404 of the Clean Water Act, the USACE regulates the discharge of fill and dredged material into "waters of the United States," which are broadly defined in 33 CFR 328.3(a) to include navigable waters, tributaries to navigable waters (including intermittent streams), and wetlands adjacent to such streams.

The lateral limits of USACE 404 jurisdiction in non-tidal "waters" are defined as the ordinary high water mark (OHWM), unless adjacent wetlands are present. If wetlands occur within, or adjacent to, "waters," the lateral limits of jurisdiction will extend beyond the ordinary high water mark to the outer edge of the wetlands. The OHWM means the line on the shore or edge of a channel established by the fluctuation of water and indicated by physical characteristics such as a clear natural line impressed on the bank, shelving, destruction of vegetation, debris, etc. It is typically associated with a 2.5-year runoff event; however, the final determination of the OHWM is based on the physical characteristics of a given channel.

In tidal lands, the USACE' jurisdiction under Section 404 of the Clean Water Act extends to the high tide line. Under Section 10 of the Rivers and Harbors Act, the USACE' jurisdiction extends to the mean higher high water line.

The USACE defines wetlands as: *"Those areas that are inundated or saturated by surface or groundwater at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation*

typically adapted for life in saturated soil conditions" (33 CFR 328.3). Under the Clean Water Act, wetlands must exhibit the following three characteristics: 1) Hydrophytic vegetation – a predominance of plants that are adapted to anaerobic soil conditions; 2) Hydric soils – soils classified as hydric or that exhibit characteristics of reducing soil environment; and 3) Wetland hydrology – inundation or soil saturation during a certain portion of the growing season. In the absence of one or more characteristic, the area is not considered a regulated wetland.

2.5.1.1 USACE Section 404 Permit Requirements

In the past, the District has acquired permits from state and federal agencies for routine maintenance work on an as-needed basis. Through project-by-project coordination, the District staff has determined when such permits were required for maintenance activities. Most routine maintenance and repair activities undertaken by the District that require 404 permitting are conducted under one of the Nationwide Permits (NWPs). The NWPs most commonly used in the District are NWP No. 31 – Maintenance of Existing Flood Control Facilities and NWP No. 33 – Temporary Construction, Access and Dewatering. NWP No. 31 allows the discharge of dredged material or fill materials associated with the routine maintenance of flood control facilities in any watercourse that has been previously determined to be within a predetermined "maintenance baseline." The "maintenance baseline" is a physical description of the flood control facility approved by the District Engineer and is based on its approved or constructed flood control capacity. NWP No. 33 authorizes the temporary structures and discharges necessary for construction activities authorized by the USACE under other individual permits and NWPs. NWP No. 33 has been used by the District to authorize activities such as the construction of temporary access ramps, water diversions and coffer-dams used to support routine maintenance activities. NWP No. 3 – Maintenance is also commonly used to authorize maintenance that may involve a change in the type of materials or construction methods.

With the implementation of the proposed BMPs, the District intends to acquire a USACE 404 Regional General permit which covers routine maintenance and repair activities and precludes the need to submit separate Pre-Construction Notifications (PCNs) for each maintenance activity.

2.5.1.2 Maintenance Activities Exempt from USACE Section 404 Permit Requirements

A maintenance activity or location is exempt from the permit requirements of Section 404 of the Clean Water Act if it does not cause the "discharge of dredge or fill material" into "waters of the United States." It should be noted that maintenance activities that are exempt from USACE permitting may also be exempt from the requirement for a 401 Water Quality Certification from the RWQCB.

The following are examples of activities that do not occur within USACE jurisdiction and, therefore, are not subject to Section 404 permit requirement:

- Clean out of pump station vaults, manholes, and trash racks because such structures do not represent "waters" (Maintenance Work Codes PT29 and 86)
- Application of herbicides to "waters" because spraying does not represent a regulated discharge (Maintenance Work Codes PT41 and 42)

- All access road maintenance work because it would occur outside of regulated "waters" (Maintenance Work Codes PT51-57)
- Maintenance of gates and fences because it would occur outside of regulated "waters" (Maintenance Work Codes PT60-66)
- Maintenance of drainage facilities outside "waters," such as flap gates on storm drain outlets, trash rack cleaning, sub-drain flushing into vacuum trucks, stockpile work outside "waters," and storm water drainage facility maintenance outside "waters" (Maintenance Work Codes PT77, 80, 83, 85, and 88)

2.5.2 California Department of Fish and Game (CDFG)

Fish and Game Code Section 1600 et seq. requires that the CDFG be notified of any activity that could affect the bank and bed of any stream that has value to fish and wildlife. Upon notification, the CDFG has the opportunity to execute a Streambed Alteration Agreement. CDFG does not have a formal definition of watercourses under their jurisdiction. In practice, they include any natural drainage with a definable bank and bed. Man-made drainages are typically included if the drainages have taken on the character of a natural stream, the drainage supports habitat, and/or the drainage will function as a natural watercourse in the future without human intervention, and is not supported solely by irrigation runoff. Wetlands (as defined by the USACE) need not be present for CDFG jurisdiction. The lateral extent of CDFG jurisdiction is typically the top of the bank or the outer limit of any riparian vegetation contiguous with the vegetation rooted on the bank of the watercourse.

2.5.2.1 CDFG Streambed Alteration Agreement Requirements

CDFG regulates all activities that occur within the bed and bank of a creek, stream, river, or natural watercourse if they could affect fish and wildlife habitat. In addition, the reduction or removal of vegetation by the application of herbicides must be authorized by CDFG through a 1602 Streambed Alteration Agreement. All maintenance activities that occur in (1) lined, partially lined or earthen channels and (2) debris basins require a Streambed Alteration Agreement.

The following agreements illustrate the scope and scale of operation and maintenance activities authorized by CDFG. Other agreements for individual facilities have been obtained as needed and are currently being used.

- Maintenance Agreement 5-541-91. Arroyo Las Posas. Issued in 1991 and extended to December 2003, this agreement allowed for the removal of obstructive sediments and vegetation from the channel bottom at four locations, totaling 4,450 linear feet, within 100 feet upstream and downstream of all grade stabilizers, within 25 feet upstream and downstream of bank protection, and within 3 feet of the toe of slope for protected banks. Bank repair may occur at any time of the year. Maintenance was restricted to the period July 1 to February 1. The original Agreement did not include any habitat restoration requirements. The extension to the Agreement required a 10:1 on site replacement of oak and sycamore trees that are removed, and a 5:1 replacement for willow trees that are removed. In addition, disturbed channel areas must be seeded with native grasses after maintenance. The Agreement also required that "temporary" impact areas be

restored at a 3:1 ratio and "permanent" impact areas be restored at a 5:1 ratio. No guidance was provided on how to calculate these impact areas.

- Maintenance Agreement 5-540-91. Calleguas Creek upstream of Highway 101. This agreement was issued in 1991 and allowed for the removal of vegetation from channel banks and within 25 feet of the toe of slope along protected banks, and within 100 feet upstream and downstream of all grade stabilizers and bridges. Maintenance was restricted to the period July 1 to February 1. The original Agreement did not include any habitat restoration requirements.

- Maintenance Agreement 5-542-91. Conejo Creek. This agreement was issued in 1991 and allowed for the removal of vegetation from access roads, channel banks, within 25 feet of the toe of slope along protected banks, and within 100 feet upstream and downstream of all grade stabilizers and bridges. Vegetation from the channel bottom could also be removed if strips of vegetation are retained from year to year. Maintenance was restricted to the period July 1 to February 1. The original Agreement did not include any habitat restoration requirements.

- Maintenance Agreement 5-115-89. Conejo Creek downstream of Highway 101. This agreement was issued in 1989 and allowed for the removal of vegetation from the channel bottom, provided a 15-foot wide permanent riparian corridor of vegetation was maintained along portions of the reach and a 15-foot wide pilot channel was maintained by discing and herbicide spraying. Maintenance was restricted to the period July 1 to February 1. The original Agreement did not include any habitat restoration requirements.

- Maintenance Agreement 5-386-90. Santa Clara River and Tributaries (55 facilities). This agreement was issued in 1990 and allowed for the removal of vegetation from access roads and channel bottoms using herbicides, and the removal of obstructive sediments from channel banks and bottoms. There were no seasonal restrictions on maintenance work, except that herbicides could only be applied from April 1 to December 1. Only two applications of herbicides were allowed in channels; there are no restrictions on the frequency of herbicide treatment at channel outlets. The District understood that the restrictions on herbicide frequency only applied to post-emergent applications. The original Agreement did not include any habitat restoration requirements. (It should be noted that the two herbicide application restriction is no longer considered feasible by the District as more than two applications may be necessary to achieve the necessary maintenance objectives.)

- Maintenance Agreement 5-387-90. Ventura River and Tributaries (24 facilities). This agreement was issued in 1990 and allowed for the removal of vegetation from access roads and channel bottoms using herbicides, and the removal of obstructive sediments from channels. There were no seasonal restrictions on maintenance work except that herbicides could only be applied from April 1 to December 1. Only two applications of herbicides were allowed. The original Agreement did not include any habitat restoration requirements. (It should be noted that the two herbicide application restriction is no longer considered feasible by the District as more than two applications may be necessary to achieve the necessary maintenance objectives.)

- Maintenance Agreement 5-388-90. Calleguas Creek Watershed. This agreement was issued in 1990 and allowed for the removal of vegetation from access roads and channel bottoms using herbicides, and the removal of obstructive sediments from channels. There were no seasonal restrictions on maintenance work except that herbicides could only be applied from April 1 to December 1. Three applications of herbicides were allowed. The District understood that the

restrictions on herbicide frequency only applied to post-emergent applications. The original Agreement did not include any habitat restoration requirements.

- Maintenance Agreement 5-389-90. Zone 4 watercourses. This agreement was issued in 1990 and allowed for the removal of vegetation from access roads and channel bottoms using herbicides, and the removal of obstructive sediments from channels. There were no seasonal restrictions on maintenance work except that herbicides could only be applied from April 1 to December 1. Only two applications of herbicides were allowed. The original Agreement did not include any habitat restoration requirements. (It should be noted that the two herbicide application restriction is no longer considered feasible by the District as more than two applications may be necessary to achieve the necessary maintenance objectives.)
- Maintenance Agreement 5-270-92. Revolon Slough. This agreement was issued in 1991 and allowed for the removal of vegetation from the channel bottom provided a permanent 15-foot wide riparian strip is retained, channel work occurred every other year, and certain pockets of riparian vegetation had to be retained per a complex set of permit conditions. Maintenance was restricted to the period July 1 to February 1.

2.5.2.2 Maintenance Activities Exempt from CDFG Streambed Alteration Agreement Requirements

A maintenance activity or location is exempt from the notification requirements of Fish and Game Code 1600 et seq. under the following circumstances: (1) the activity occurs outside the bank and bed of a natural watercourse and not within a riparian habitat zone continuous with the top of the bank, and will not result in an indirect impact on habitat in a nearby drainage, (2) the drainage consists of a man-made fully lined concrete channel that is devoid of rooted perennial vegetation and is not in close proximity to an upstream or downstream natural watercourse, and (3) the activity does not adversely affect or modify the physical habitat (e.g., vegetation, sediments, water) in a flood control facility. In summary, work outside the channel and basin that would not affect habitat in the channel or basin does not require an Agreement. Examples include fence repair, access road resurfacing, and herbicide spraying on the outside (landward) portion of access roads next to channels.

Therefore, certain maintenance activities usually exempt from CDFG approval are summarized below.

- Clean out of pump station vaults, manholes, and trash racks because such structures do not represent "streams" (Maintenance Work Codes PT29, 83 and 86)
- All access road maintenance work because it would occur outside of regulated drainages (Maintenance Work Codes PT51-57)
- Maintenance of gates and fences because it would occur outside of regulated drainages (Maintenance Work Codes PT60-66)
- Maintenance of flap gates on storm drain outlets, trash rack cleaning, sub-drain flushing, and storm water drainage facility maintenance because the work would occur outside drainages (Maintenance Work Codes PT77, 80, 83, 85, and 88)

2.5.3 California Coastal Commission and Local Coastal Jurisdictions: Coastal Development Permit (CDP)

Under the Coastal Act, certain activities in the Coastal Zone are regulated, including land development, public infrastructure projects, and certain maintenance activities. The authority for regulating such activities varies throughout the Coastal Zone. In tide lands and certain non-tidal areas of the coastal zone, the California Coastal Commission has retained permit authority. In all other areas of the Coastal Zone in Ventura County, permit authority resides with the local governing agency, including Ventura County for unincorporated area, and the coastal municipalities of Port Hueneme, Oxnard, and Ventura. Most of the permits issued by the County and local municipalities are appealable to the Coastal Commission. Each of these local jurisdictions has an adopted Local Coastal Program (LCP) which provides guidance on land uses and permit requirements in their areas of jurisdiction. Coastal Development Permits (CDPs) issued by these jurisdictions must be consistent with the applicable LCP, as well as the Coastal Act.

Coastal Act Policy 30610(d) exempts the following activities from a CDP[3]:

> *"Repair or maintenance activities that do not result in the addition to, or enlargement or expansion of, the object of those repair or maintenance activities; provided, however, that if the Commission determines that certain extraordinary methods of repair and maintenance involve a risk of substantial adverse environmental impacts, it shall, by regulation, require that a permit be obtained pursuant to this chapter."*

The primary challenge with acquiring a CDP is consistency with Coastal Act policies 30230, 30231, 30233, and 30240. These policies restrict development in the Coastal Zone that could affect wetlands or environmentally sensitive habitats. Coastal Act Policy 30233 is the most restrictive in that it prohibits development in wetlands except for eight specific allowable uses, and requires that only the least environmentally damaging alternative is permitted. Maintenance of existing flood control facilities in the Coastal Zone that contain wetlands would be allowed under Policy 30233(5), which includes "incidental public service purposes…" The definition of wetlands in the Coastal Act is very broad. In practice, the Coastal Commission and local jurisdictions with approved LCPs typically identify wetlands in the Coastal Zone based on only one of the three characteristics used by the USACE (see Section 2.6.1). Hence, coastal wetlands can consist of unvegetated mudflats or ponds, and areas that contain a predominance of wetland-type plants (hydrophytic plants) but do not exhibit wetland hydrology or hydric soils.

Coastal Act Policy 30240 requires that any permitted development must not significantly affect "environmentally sensitive habitat areas," and only uses dependent upon such resources are allowable.

Section 30107.5 of the Coastal Act defines "Environmentally sensitive area" as *"… any area in which plant or animal life or their habitats are either rare or especially valuable because of their special nature or role in an ecosystem and which could be easily disturbed or degraded by human activities and developments."* In the Coastal Act, "environmentally sensitive area" is synonymous with "environmentally sensitive habitat area" (ESHA). Coastal wetlands are generally considered ESHAs. Other typical ESHAs include threatened or endangered species habitat areas.

[3] Regardless of whether maintenance work is exempt from the requirements of a CDP, a conformity determination under the CZMA is required for any activities subject to USACE permit requirements within the Coastal Zone.

"Development" in the Coastal Zone is regulated under the Coastal Act. It is broadly defined in Coastal Act Section 30106 to include "…grading, removing, dredging, mining, or extraction of any materials;… construction, reconstruction, demolition, or alteration of the size of any structure, including any facility of any private, public, or municipal utility; …..the removal of any major vegetation…" "As used in this section, "structure" includes but is not limited to any building, road, pipe, flume, conduit, siphon, aqueduct, …"

2.5.3.1 CDP Requirements

Coastal Zone facilities within the District include:

- Ventura River levee downstream of US 101
- Arundell Barranca downstream of US 101
- Doris Drain
- West 5th Street Drain
- Hueneme Drain
- J Street Drain[4]
- Oxnard Industrial Drain
- Lower Calleguas Creek

Based on the above considerations, the District concludes that in general, all maintenance activities are allowable in the Coastal Zone without a CDP provided that the activity does not affect wetlands or environmentally sensitive areas.

Certain maintenance activities in the Coastal Zone of the County require CDPs from the agency with permit authority. The following maintenance activities may require a CDP when located in the Coastal Zone if the activity would adversely affect wetlands or ESHAs:

- Unimproved Channel Cleanout of Sediments (PT20, PT21, PT22)
- Improved Channel Cleanout of Sediments if there is a soft bottom (PT23 - 28)
- Removal of Sediments or Vegetation (rarely present) from Pump Station Beach Outlet (PT29)
- Storage Area and Stockpile Establishment and Clean Up (PT31, PT88)
- Channel Earthwork (PT32, PT33, PT34)
- Brush and Weed Control by Herbicide (PT41, PT42)
- Brush and Weed Control by Hand Crew (PT43)
- Brush and Weed Control by Discing (PT44)

[4] At the downstream end of J Street Drain is the Ormond Beach Lagoon. There are tidewater gobies in this area (as the concrete lined section transitions to sand), so there is some limited environmentally sensitive habitat.

- Brush and Weed Control by Back Pack Spraying (PT45)
- Brush and Weed Control by Excavator (PT47)
- Weed Control for Fire Abatement (PT48)
- Tumbleweed Abatement (PT49)
- Maintenance, Repair, Grading, Surfacing, and Shaping Access Road (PT51-57)
- Riprap Repair (PT70)
- Bank Protection Construction (PT72)
- Stabilizer Construction/Repair (PT74)
- Concrete Construction/Repair (PT76)
- Pipe/Flap Gate Maintenance and Repair (PT80)

However, in the past 5 to 10 years, it has not been necessary for the District to conduct most of these activities in Coastal Zone because it only maintains open channels, access roads, grade stabilizers, and storage areas in the Coastal Zone periodically. The only routine maintenance of a coastal facility involves the clearing of sand and sediment from pump station beach outlets. Vegetation and environmentally sensitive habitats are not typically present at these outlets.

2.5.4 Regional Water Quality Control Board (RWQCB)

2.5.4.1 Section 401 Certification

Section 401 of the Clean Water Act requires that States must certify that any activity subject to a federal permit meets state water quality standards. The Los Angeles RWQCB (Region 4) administers the 401 certification program in Ventura County.

A Section 401 certification from the RWQCB is required for most projects that require Section 404 permits. Projects that require water diversions during maintenance and/or repair activities have been required by the Los Angeles RWQCB to submit a separate Water Diversion Plan as part of the 401 certification.

2.5.4.2 NPDES Permits

Section 402 of the Clean Water Act authorizes the National Pollutant Discharge Elimination System (NPDES) which regulates point and non-point source discharges to Waters of the United States. The NPDES program is implemented through the issuance of individual and general permits. In California, responsibility for the NPDES program is managed by the State Water Resources Control Board (SWRCB) and the nine Regional Water Quality Control Boards (RWQCBs).

The SWRCB issued the Construction General Stormwater Permit to address the potential pollutants discharged to stormwater by construction activities. The general permit is triggered by construction activities that result in a land disturbance of one acre or more or less than one acre but part of a larger work area of one acre or more. To comply with the permit, a Notice of Intent (NOI) must be

submitted to the RWQCB and a Stormwater Pollution Prevention Plan (SWPPP) must be prepared and kept on site. Construction activity as defined under the general permit does not include routine maintenance so the majority of District maintenance and repair activities under one acre will not require coverage under the construction general permit. Larger repair activities have required the preparation of a SWPPP.

The Ventura County Municipal Stormwater NPDES Permit (Board Order No. 00-108; NPDES Permit No. CAS004002) was issued by the SWRCB under Phase I of the NPDES stormwater permitting program. The District is the principal co-permittee of the Ventura County Municipal Stormwater Permit (Permit) along with 10 municipalities within Ventura County. The Ventura County Stormwater Quality Management Plan (SMP) defines the requirements of the Permit and implements the Ventura County Stormwater Quality Management Program (SQMP). The SMP requires the District to oversee and perform a number of actions to protect stormwater quality in Ventura County. In addition to stormwater monitoring, the District is required under the SMP to remove sediment and debris from all concrete stormwater management channels on an annual basis.

2.6 PROPOSED ENVIRONMENTAL BMPs

2.6.1 Overview of BMPs and their Application

The District currently implements BMPs during routine maintenance activities. Implementation of these existing BMPs would continue in addition to the proposed BMPs. The following is a summary of the existing BMPs that the District currently uses during routine maintenance activities.

- The minimum size/type of equipment is employed to complete the activity to minimize potential impacts.
- The minimum strength required to achieve the goal for each chemical product is used and staff follows specific pesticide protocols. Only products approved for aquatic use are applied within the bed and banks of any channel or basin facility. Post-emergent products are applied only to plants via target application where plants are sparse.
- Gates, fences, and "no trespassing" signs are kept in working order to discourage dumping and vandalism.
- Silt fencing, k-rail, sandbag barriers, and straw wattles are routinely installed and maintained during work to prevent soil from leaving the work areas into the stream or channel.
- Silt fencing or other barriers are placed around temporary soil stockpile sites to contain material. Soil stockpiles are maintained free of vegetation.
- Water diversions are routinely used to prevent soil and concrete from entering surface waters adjacent to maintenance work areas.
- Plastic-lined sandbag concrete wash out pits stationed in uplands are required for each site where concrete pouring occurs.
- Pipe and pump station flushing activities are conducted with a vacuum system to avoid release of materials into channels or surface waters.

- Trash is screened and separated from trash racks and debris collected from channels and basin. Trash is then hauled to a County waste transfer facility.
- Rumble strips, street sweepers, and wattles over storm drain inlets are employed to prevent soil from entering streets and storm drains.
- Local fire abatement requirements are met by conducting annual brush clearance in District right of way adjacent to residential areas.

In addition, the District developed the Operators Manual for Conducting Flood Control Activities in Ventura County Streams and Rivers (1981), which serves as an additional resource for training of operations and maintenance staff.

The District has formally developed various additional environmental BMPs to reduce the environmental effects of its routine maintenance program for existing and new flood control facilities. The BMPs represent precautions and procedures to be used when planning and implementing maintenance activities that could affect sensitive environmental resources including wetlands, riparian habitat, aquatic habitat, threatened and endangered species, species of special concern, water quality, and hydraulic conditions in the watershed. The BMPs have been designed to be feasible and practical. They will not curtail, reduce, or otherwise inhibit the District's maintenance requirements and activity guidelines. Implementation of the BMPs will become standard practice for the maintenance crews.

The proposed environmental BMPs have been designed to address resource issues and regulatory requirements associated with the permits and approvals from the USACE, CDFG, and RWQCB required for certain maintenance activities. As noted in Section 1.0, one of the reasons for the preparation of the Program EIR is to assist in acquiring long-term permits and approval from these agencies for routine maintenance activities. A process to facilitate the acquisition of these permits and approvals is shown on Chart 2-4.

The District ~~will~~ issued the Draft Program EIR for review and comment by the general public and permitting agencies. Prior to completing the Final Program EIR, the District ~~will~~ convened additional meetings with the permitting agencies to review their comments and to refine the environmental BMPs in anticipation of using them as the basis for permit conditions.

This ~~e District will issue a~~ Final Program EIR includes ~~after completing~~ responses to comments from permitting agencies and the general public on the Draft Program EIR. After issuance of the Final Program EIR, the District will conduct a public hearing to consider certification of the Final Program EIR and adoption of the environmental BMPs as part of the routine maintenance program.

Upon issuance of the permits and approvals from the USACE, CDFG, and RWQCB, the District will incorporate any permit conditions that are different from the already adopted environmental BMPs into the maintenance program (see Chart 2-4). In addition, the BMPs would also be incorporated into the maintenance plans for all new capital projects, along with any project-specific environmental BMPs developed during the CEQA environmental review process for the new project.

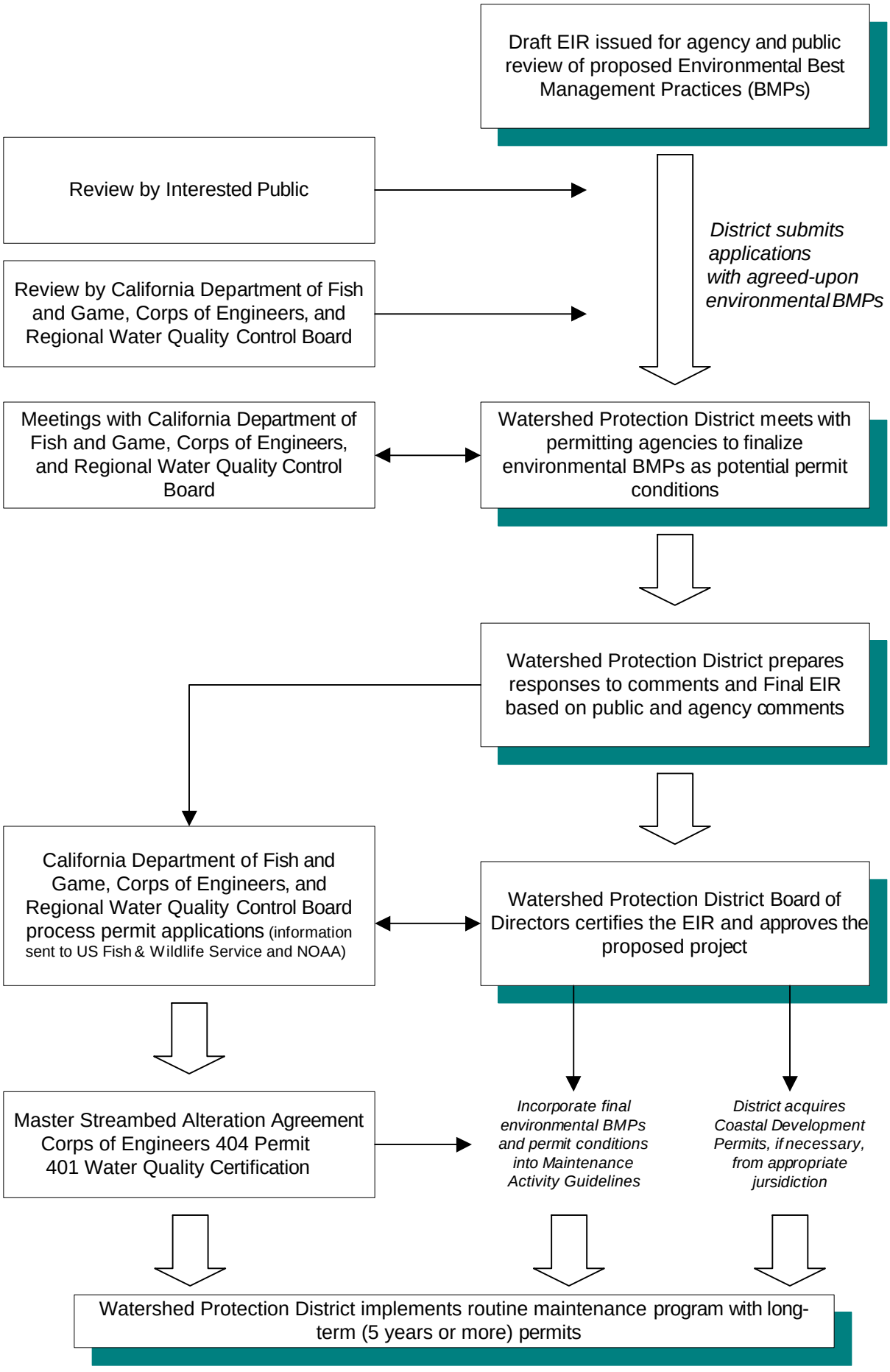

Chart 2-4. Process to Acquire Long-term Permits

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The BMPs will be added to the District's Maintenance Activity Guidelines (see Appendix G). An example of how the BMPs and the permit authorizations would be incorporated into the Activity Guidelines sheets is shown on Chart 2-5. The Activity Guidelines sheets are used on a regular basis to plan and implement specific maintenance activities. Hence, incorporating the environmental BMPs on the sheets will ensure compliance by the maintenance staff.

The environmental BMPs include the following types of actions to reduce environmental effects of routine maintenance.

- Avoiding work in or near certain sensitive resources
- Scheduling work at certain times of the year to avoid impacts to sensitive resources
- Modifying the work method or equipment usage in or near sensitive resources
- Restoring (re-grading, compacting, reconstructing) areas disturbed by earthwork
- Revegetating (seeding, planting) certain areas disturbed by earthwork
- Conducting pre-maintenance surveys or inspections to determine if certain sensitive species are present or absent
- Monitoring certain maintenance activities that occur in proximity to some sensitive species
- Instructing or informing maintenance crews of restrictions, precautions, or work limits in certain sensitive areas

Most of the BMPs will be implemented by the maintenance crews that are performing the work. 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 annual implementation of the maintenance program with the adopted environmental BMPs and long-term permits is shown on Chart 2-6. Each fall, the District prepares a maintenance plan for the next fiscal year (July 1 – June 30). The plan may be updated during the year as field conditions change. Under the proposed project, the Division staff will identify the BMPs that need to be implemented with the planned maintenance work, including any seasonal or geographic restrictions that could affect the timing, methods, and limits of the planned work. It will be necessary for the Division staff to conduct site visits to certain locations, and to utilize a qualified biologist in some instances. Using the information from the Division staff (and a qualified biologist, if necessary), the annual maintenance plan will be completed. A list of work planned to occur in and near sensitive environmental resources will be submitted to the USACE, CDFG, and RWQCB at that time. USACE expects to issue a Notice to Proceed (NTP) within 30 days of receiving the list of planned maintenance. The NTP would need to be issued before work begins.

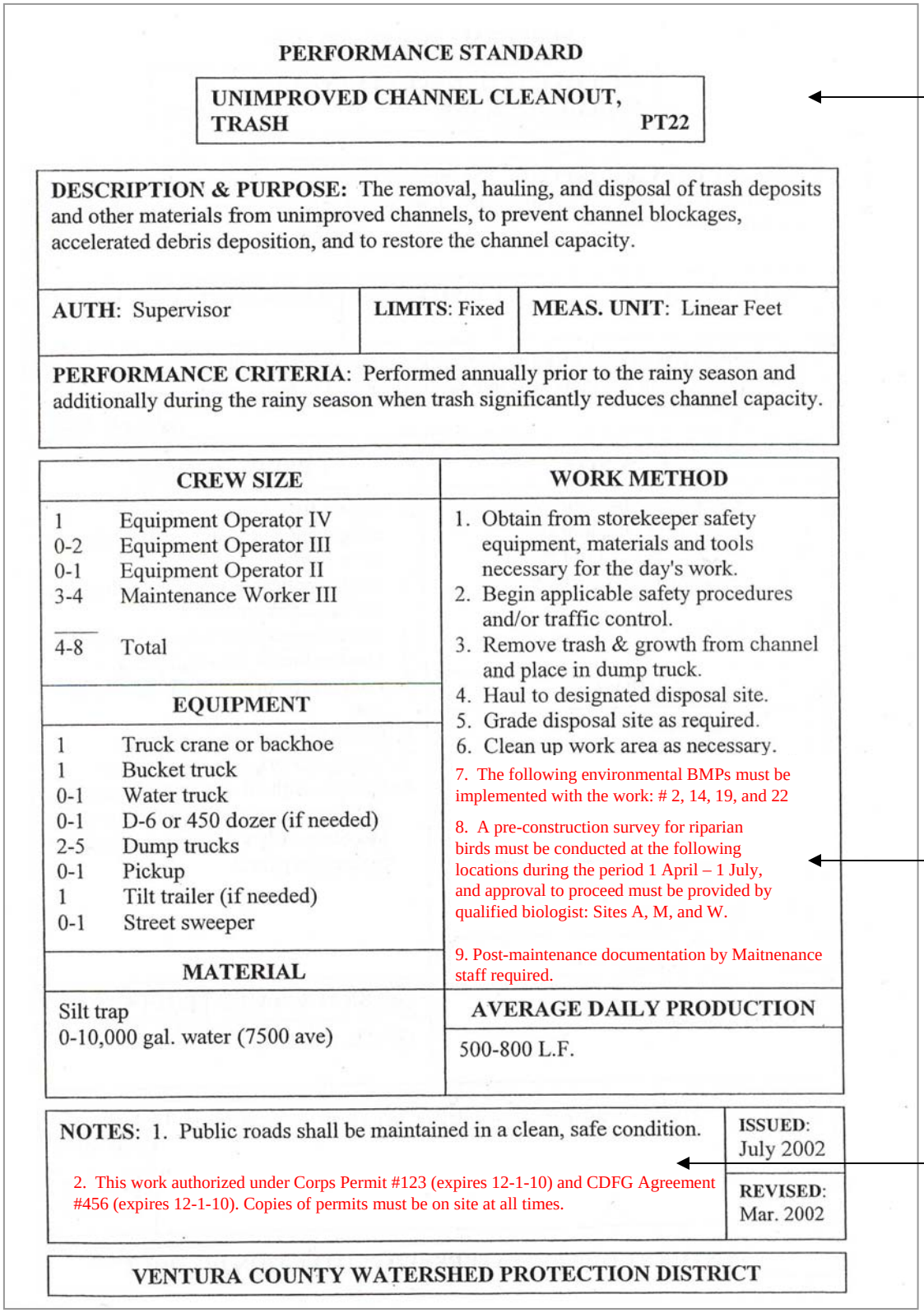
The Division staff will coordinate the implementation of the environmental BMPs and permit conditions during the course of the year, as described above. At the end of the year, an annual report documenting all work performed and the successful use of the BMPs will be submitted to the

USACE, CDFG, and RWQCB for their records. Appendix H includes a template for year-end reporting to these agencies.

2.6.2 Proposed Environmental BMPs

Based on the analyses in Section 2.5, the maintenance activities that will require permits from the USACE, CDFG, and/or RWQCB, or that could require a CDP, are listed below.

- Unimproved Channel Sediment Cleanout (PT20, PT21, PT22)
- Improved Channel Sediment Cleanout, if soft bottom is present (PT23-28)
- Removal of Sediments from Pump Station Beach Outlet (PT29)
- Storage Area and Stockpile Establishment and Clean Up, if in riparian corridor (PT31)
- Channel Earthwork (PT32, PT33, PT34)
- Basin Sediment Removal (PT35, PT36, PT37)
- Brush and Weed Control by Herbicide (PT41, PT42)
- Brush and Weed Control by Hand Crew (PT43)
- Brush and Weed Control by Discing (PT44)
- Brush and Weed Control by Back Pack Spraying (PT45)
- Brush and Weed Control by Excavator (PT47)
- Weed Control for Fire Abatement, if in riparian corridor or channel (PT48)
- Tumbleweed Abatement, if in riparian corridor or channel (PT49)
- Maintenance, Repair, Grading, Surfacing, and Shaping Access Road (PT51-57)
- Pipe & Wire Revetment Repair (PT68)
- Riprap Repair (PT70)
- Bank Protection Construction (PT72)
- Stabilizer Construction/Repair (PT74)
- Concrete Construction/Repair (PT76)
- Pipe/Flap Gate Maintenance & Repair, if aquatic habitat is affected (PT80)
- Trash Rack Cleaning, if aquatic habitat is affected (PT83)
- Work Release Weed Control Crews (PT92)



PERFORMANCE STANDARD

UNIMPROVED CHANNEL CLEANOUT, TRASH PT22

DESCRIPTION & PURPOSE: The removal, hauling, and disposal of trash deposits and other materials from unimproved channels, to prevent channel blockages, accelerated debris deposition, and to restore the channel capacity.

AUTH: Supervisor	LIMITS: Fixed	MEAS. UNIT: Linear Feet

PERFORMANCE CRITERIA: Performed annually prior to the rainy season and additionally during the rainy season when trash significantly reduces channel capacity.

CREW SIZE

1	Equipment Operator IV
0-2	Equipment Operator III
0-1	Equipment Operator II
3-4	Maintenance Worker III
4-8	Total

EQUIPMENT

1	Truck crane or backhoe
1	Bucket truck
0-1	Water truck
0-1	D-6 or 450 dozer (if needed)
2-5	Dump trucks
0-1	Pickup
1	Tilt trailer (if needed)
0-1	Street sweeper

MATERIAL

Silt trap
0-10,000 gal. water (7500 ave)

WORK METHOD

1. Obtain from storekeeper safety equipment, materials and tools necessary for the day's work.
2. Begin applicable safety procedures and/or traffic control.
3. Remove trash & growth from channel and place in dump truck.
4. Haul to designated disposal site.
5. Grade disposal site as required.
6. Clean up work area as necessary.
7. The following environmental BMPs must be implemented with the work: # 2, 14, 19, and 22
8. A pre-construction survey for riparian birds must be conducted at the following locations during the period 1 April – 1 July, and approval to proceed must be provided by qualified biologist: Sites A, M, and W.
9. Post-maintenance documentation by Maitnenance staff required.

AVERAGE DAILY PRODUCTION

500-800 L.F.

NOTES: 1. Public roads shall be maintained in a clean, safe condition.

2. This work authorized under Corps Permit #123 (expires 12-1-10) and CDFG Agreement #456 (expires 12-1-10). Copies of permits must be on site at all times.

ISSUED: July 2002

REVISED: Mar. 2002

VENTURA COUNTY WATERSHED PROTECTION DISTRICT

Number and title of standards to remain unchanged to allow continuation of ongoing system

Incorporating Environmental BMPs

Incorporating Permits

Example of Typical Activity Guideline

Chart 2-5. Example of Incorporation of Environmental BMPs into Activity Guidelines

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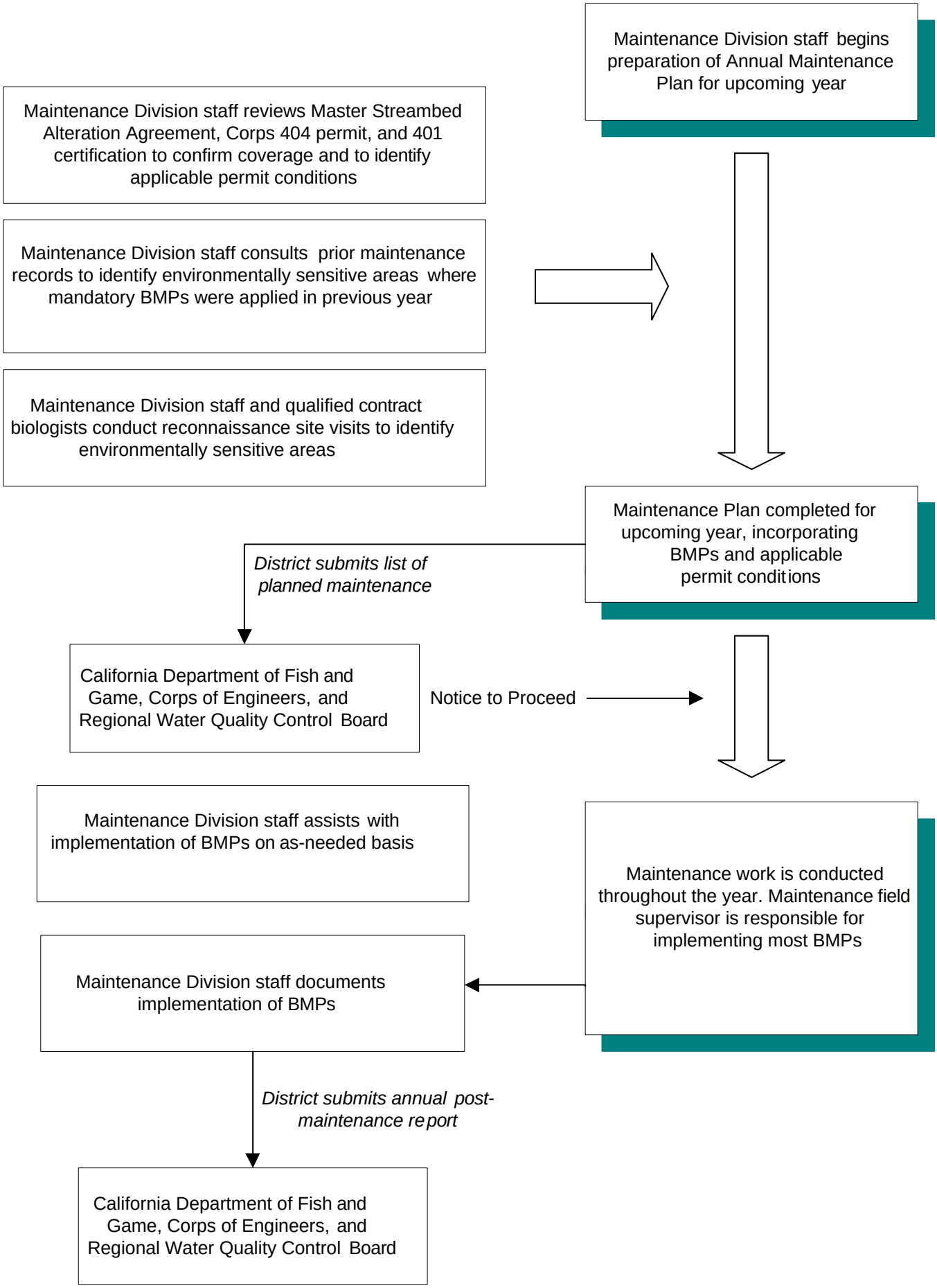

Chart 2-6. Annual Maintenance Planning and Implementation Process

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The District proposes to modify the Activity Guidelines[5] (see Appendix G and Chart 2-5) for the above maintenance activities to include environmental BMPs specific to each activity. Applicable BMPs for each Activity Guideline are shown in Table 2-10. However, any BMP may be used for any of the PTs, as needed. For all other maintenance activities, environmental BMPs are generally not required because the activities would not affect natural resources such as water quality, habitat, and sensitive species. The environmental BMPs do not apply to emergency work that the District may perform following severe storm events, floods, or facility failures. In emergency circumstances, the District will perform the necessary maintenance and repairs in accordance with the emergency procedures of each permitting agency, and under the emergency provisions of CEQA and the Coastal Act.

The proposed BMPs are as follows:

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.

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

[5] The District is currently updating the existing Performance Standards sheets, which will be renamed as Activity Guidelines. However, the Activity Guidelines sheets are not completed at this time, therefore, an example of incorporation of the BMPs into the Activity Guidelines sheets is not provided. For this reason, Chart 2-5 illustrates how the BMPs would be incorporated in the existing Performance Standard sheet. The Activity Guidelines sheets will have similar information to the existing Performance Standard sheets and a field will be used for the proposed BMPs.

TABLE 2-10
ACTIVITY GUIDELINES AND APPLICABLE BMPs*

Activity Guideline Code	Description**	Applicable BMPs
	Channel and Debris Basin Activities	
PT20	Unimproved Channel Cleanout, Sediment - Crane	1, 3, 4, 5, 6, 7
PT21	Unimproved Channel Cleanout, Sediment - Excavator	1, 3, 4, 5, 6, 7
PT22	Unimproved Channel Cleanout, Trash & Growth	1, 3, 4, 5, 6, 7
PT23	Improved Channel Cleanout, Sediment - Crane	1, 2, 3, 4, 5, 6
PT24	Improved Channel Cleanout, Sediment – Excavator	1, 2, 3, 4, 5, 6
PT25	Improved Channel Cleanout, Sediment - Loader	1, 2, 3, 4, 5, 6
PT26	Improved Channel Cleanout, Trash & Growth	1, 2, 3, 4, 5, 6
PT27	Improved Channel Cleanout, Trash & Growth - Crane	1, 2, 3, 4, 5, 6
PT28	Improved Channel Cleanout, Trash & Growth - Excavator	1, 2, 3, 4, 5, 6
PT29	Conduit Cleanout [Underground Facility, including pump stations]	8
PT31	Storage Area or Stockpile Clean-Up [outside channel or basin bottom]	3
PT32	Channel Earthwork - By Hand	1, 3, 4, 5, 6
PT33	Channel Earthwork - Preparation	1, 3, 4, 5, 6
PT34	Channel Earthwork - Mechanical	1, 3, 4, 5, 6, 21, 22
PT35	Dam & Debris Basin Sediment Removal – Scraper	22, 23
PT36	Dam & Debris Basin Sediment Removal – Crane	22, 23
PT37	Dam & Debris Basin Sediment Removal - Loader	22, 23
PT38	Bleeder Pipe Maintenance and Repair	22, 23
	Brush & Weed Control Activities	
PT40	Weed Control, Non-Spray	10, 11, 12, 13
PT41	Brush & Weed Control, Spray w/ Boom [inside channels]	9, 11, 12, 13
PT42	Weed Control, Hand Spray [inside channels]	9, 11, 12, 13
PT43	Brush & Weed Control, Hand Crew [inside channels]	9, 11, 12, 13
PT44	Brush & Weed Control - Channel & Basin Discing	9, 11, 12, 13
PT45	Backpack Weed Spray [inside and outside channels]	9, 11, 12, 13
PT47	Brush & Weed Control, Excavator [inside and outside channels]	9, 11, 12, 13, 23
PT48	Weed Control, Fire Abatement [inside and outside channels]	9, 10, 11, 12, 13
PT49	Tumbleweed Abatement [inside and outside channels]	9, 11, 12, 13
	Access Road Work Activities	
PT51	Construction or Replacement of Access Roads	14, 23
PT53	Rebasing & Shaping of Access Roads	14, 23
PT55	Routine Grading of Access Roads	14, 23
PT56	Grader Operations of Access Roads	14, 23
PT57	Maintenance of Misc. Access Road Structures	14, 23
	Facilities Maintenance & Construction Activities	
PT60	Fence Repair	23
PT61	Misc. Fence Repair	23
PT62	Fence Construction	23

TABLE 2-10
ACTIVITY GUIDELINES AND APPLICABLE BMPs*

Activity Guideline Code	Description**	Applicable BMPs
PT64	Gate Repair/Chain link	23
PT65	Gate Construction/Chain link	23
PT66	Pipe/Gate Construction/Repair	23
PT68	Pipe & Wire Revetment Repair	1, 4, 5, 6, 15, 16, 21, 22
PT70	Riprap Repair	1, 4, 5, 6, 15, 16, 17, 21, 22
PT72	Bank Protection Construction	1, 4, 5, 6, 15, 16, 17, 21, 23
PT74	Stabilizer Construction/Repair	1, 4, 5, 6, 15, 16, 17, 21
PT76	Concrete Construction/Repair [inside channel work]	1, 4, 5, 6, 15, 16, 17, 21
PT77	Surface Drainage Facility Construction [outside channel]	4, 15, 16, 17, 21
PT80	Pipe/Flap Gate Maintenance & Repair	21
PT83	Trash Rack Cleaning	21
PT85	Sub-Drain Flushing & Reaming	21
PT86	Pump Station Maintenance And Storm Prep.	8
PT88	Stockpile & Storage Area Work [outside channels]	3, 21
PT89	Miscellaneous Maintenance	21
Storm Related Activity		
PT90	Storm Protection [inspection only]	N/A***
PT91	Safety Inspection [inspection only]	N/A***
Miscellaneous Activities		
PT92	Work Release Weed Control Crews[inside/outside channels]	9, 11, 12, 13
PT93	NPDES Facility Inspection/Maintenance	N/A***
PT97	Miscellaneous Crane Activity	21
PS41	Brush & Weed Control, Spray w/Boom (inside channels)	9, 11, 12, 13
PS42	Brush & Weed Control, Hand Crew (inside channels)	9, 11, 12,13

* BMP 24 shall be incorporated to maintenance activities as needed to further reduce the District's fugitive dust emissions during grading, excavation, and construction activities.
BMP 25 shall be incorporated to noise-generating construction activities near noise sensitive locations.
BMP 26 shall be incorporated to maintenance activities which would result in substantial vehicle trips on a roadway with unacceptable LOS at peak hours.

** Unimproved channel = full earthen channels or channels with bank protection (i.e., rock rip-rap, gunite) and a soft bottom that do not have engineered design specifications. Improved channels = partially or fully lined channels with engineering design, but rarely may include earthen designed to specific cross-section.

*** N/A = not applicable

bed or banks during the period of 1 December to 1 April for more than the duration of the sediment removal work.

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~~adjacent to~~ 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 feet 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 ~~song~~ 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.

BMP 5. Survey for Steelhead Migration Conditions Prior to Routine Maintenance Work. Prior to maintenance and repair activities in a channel during the period 1 December to 1 June that require the diversion of stream flow, work in flowing water, or work within 100 feet of flowing water on the Ventura River, San Antonio Creek, Thacher Creek, Santa Clara River, Santa Paula Creek, Sespe Creek, Hopper Creek, Pole Creek (unlined portions), and Piru Creek, qualified District personnel shall determine if flow conditions (i.e., flow, depth, stream continuity) are potentially suitable for the upstream or downstream migration of southern steelhead in the work area. Surveys for all sensitive aquatic species in the project area (i.e. California red-legged frogs including egg masses and tadpoles, Arroyo chub, Arroyo toad, and Southwestern pond turtle) shall also be conducted. The District shall immediately notify CDFG, USFWS, and/or NOAA for consultation on specific mitigation actions upon finding sensitive species within or immediately adjacent to any work area. Channel cleanout shall be postponed to 1 June if flows are sufficient for steelhead migration in the work area or within 100 feet of the work area. Per Section 401 Water Quality Certification requirements, a Water Diversion Plan would be needed for any water diversion activities.

BMP 6. Survey for Steelhead Rearing Habitat Prior to Routine Maintenance Work. Prior to maintenance and repair activities in a channel during the period 1 December to 1 June that requires the diversion of stream flow, work in flowing water, or work within 100 feet of flowing water on the Ventura River, San Antonio Creek, Thacher Creek, Santa Clara River, Santa Paula Creek, Sespe Creek, Hopper Creek, Pole Creek (unlined portions), and Piru Creek, a District biologist or consulting biologist shall determine if suitable rearing habitat for steelhead is present in the work area or within 100 feet of the work area. If rearing habitat is present, District personnel shall determine if steelhead are present in the pools. If steelhead are not present, the work may proceed. If steelhead are present, the District shall follow avoidance and/or relocation procedures approved by NOAA Fisheries for such maintenance work if the work will occur while fish are present.

BMP 7. Continue Existing Procedures for Sediment Removal and Vegetation Control for Calleguas Creek, Conejo Creek, and Revolon Slough. The District shall continue its procedures for sediment removal and in-stream vegetation control along unimproved channels along Calleguas Creek, Conejo Creek, Revolon Slough, Arroyo Las Posas and generally throughout Zone 3 in accordance with previous Streambed Alteration Agreements 5-540-91, 5-542-91, 5-115-89, 5-270-92, 5-541-91, and 5-388-90 unless otherwise negotiated in the new long-term agreement. The terms of these agreements will supersede any conflicting conditions in other BMPs.

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. [It should be noted that vegetation and goby habitat have not been present at access routes and beach storm drain outlets to date.]

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 ~~its Herbicide Manual.~~ the Ventura County Application Protocol for Pesticides, Fertilizers, and Herbicides (included in Appendix I).

BMP 10. Leave Vegetation on Upper Basin Slopes. The District shall not remove established vegetation on the basin slopes above the 20 percent capacity debris line except as follows: (1) the vegetation is non-native; (2) shrubs and trees become hazards to the stability and function of the basin; (3) the sediment meets or exceeds the 20 percent capacity line; (4) slope re-grading is required to correct or prevent rill erosion or other damage, (5) the vegetation is located on engineered fill, or (6) vegetation constitutes a fire hazard to nearby properties.

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 13. Maximum 15-foot Vegetation-Free Zone at the Toe of the Bank. When reducing or removing vegetation from channel banks or bottoms for the sole purpose of visual access to inspect the toe of slopes with riprap or concrete, the District shall treat a maximum 15-foot wide zone from the base of the slope into 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 16. Oak Tree Mitigation Ratio. For any repair of in-channel structures and features that requires the removal of native oak trees with diameters at breast height of 6 inches or more, the District shall replace the trees at a 5:1 ratio in or near the affected work areas after the repair or reconstruction work. A tree replacement plan shall be developed for each repair project that specifies the tree replacement locations, performance criteria for survival and growth, and at least a three-year maintenance and monitoring procedures.

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 this EIR.

BMP 19. Minimize Erosion from Stream Gauge Maintenance. During stream gauge maintenance activities, vegetation shall be cleared from channel banks by cutting with chain-saw only. The vegetation roots shall be left intact and not be sprayed with herbicide as a measure to minimize potential erosion of cleared channel banks. The District shall implement additional erosion control methods as needed, based on considerations of flow velocities, site conditions, availability of materials, construction costs, durability and maintenance requirements.

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 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 red-legged 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.

BMP 23. Invasive Plant Removal Protocols. Invasive plant species shall be removed in a manner that prevents propagation. Where this type of vegetation is routinely treated, maintenance personnel should spray or mow plants before seeds ripen. All cut/removed invasive vegetation should be taken to a dump as destruction load. Maintenance personnel should avoid letting cut stems or seed pods be washed downstream or be left behind to propagate. In the case of giant reed (*Arundo donax*) removal, the District shall minimize ground disturbance and use foliar glyphosate treatment on smaller infestations as much as possible. Stems shall be removed only when the plants are dead. Root masses should not be removed, as bank overhangs provide cover for wildlife, which may include sensitive fish species.

BMP 24. 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).

BMP 25. 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 dBA $L_{eq}(h)$ at noise sensitive locations when construction work duration would last up to 3 days;

- 70 dBA L_{eq}(h) at noise sensitive locations when construction work would last from 4 to 7 days;
- 65 dBA L_{eq}(h) at noise sensitive locations when construction work would last from 1 to 2 weeks;
- 60 dBA L_{eq}(h) at noise sensitive locations when construction work would last from 2 to 8 weeks, or
- 55 dBA L_{eq}(h) at noise sensitive locations when construction work duration would exceed 8 weeks.

If these thresholds are~~55 dBA L_{eq}(h) is~~ 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 (2005~~2~~:Appendix D). 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.

BMP 26. Traffic BMPs. 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 State Route 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 State Route 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.

2.6.3 Environmental BMPs for Basin Sediment Removal (PT35, PT36, PT37)

The District has determined that there are no feasible or practical environmental BMPs for sediment removal from debris and detention basins. The annual sediment removal process, by nature, involves extensive earthwork and the creation of an exposed basin bottom devoid of vegetation. The basin bottom will be subject to flooding and sedimentation in the following winter, and future sediment removal events. Sediments in the basin bottom are retained, by design, and do not represent a sediment source that cause adverse impacts to downstream aquatic habitats. Hence, stabilizing the basin bottom after sediment removal by erosion control blankets or vegetation represents wasteful and ineffective measures.

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3.0 ENVIRONMENTAL ANALYSIS

3.1 SCOPE OF THE PROJECT AND ENVIRONMENTAL ANALYSIS

As noted in Section 2.1, the proposed project addressed in the Program EIR is to incorporate feasible environmental best management practices (BMPs) into the current maintenance program for existing facilities. The District is proposing to adopt these measures as part of the routine maintenance program to reduce the effects of its ongoing maintenance program on the environment and to facilitate acquisition of state and federal permits. Therefore, the proposed "project," as defined under the California Environmental Quality Act (CEQA) Guidelines, is the adoption and implementation of BMPs as part of the District's ongoing routine maintenance at its existing facilities.

The ongoing maintenance program is an activity that is statutorily and categorically exempt from environmental review under CEQA, as detailed in Section 2.1.4. The District is not proposing to modify the objectives, geographic scope, operating criteria, or fundamental methodologies of the current maintenance program. The District does not believe that it can reduce, curtail, or scale back any current maintenance work without hindering its responsibility for protecting life and property. The proposed project addressed in the Program EIR is not the continuance of the current operations and maintenance program for already constructed facilities, or for new facilities which are constructed from time to time.

The environmental impacts of the proposed BMPs are evaluated at a programmatic level pursuant to CEQA (Guidelines Section 15168). A program level document is appropriate because the implementation of the BMPs will occur for a variety of maintenance activities, over a wide geographic area with diverse environmental conditions, and over a long period of time.

The proposed BMPs have been designed to reduce effects on the environment from an ongoing maintenance program which protects public health and safety. The project objectives are to:

1. Reduce delays in operation and maintenance activities due to delays in permit response time
2. Improve environmental protection during maintenance activities
3. Maintain current levels of flood control protection within the District's jurisdiction to protect life and property

Therefore, the impacts of adopting the BMPs are expected to be beneficial to the environment or neutral.

The impact analysis identifies proposed BMPs that would reduce specific effects of the general operation and maintenance activities, as well as BMPs that would reduce specific effects from water diversions and rodent control.

In addition, the Program EIR also evaluates the cumulative significance of the proposed project at the program level (refer to Section 4 of this document). The information on cumulative impacts will be considered when the District Board of Supervisors takes action on the proposed project.

The impact assessment focuses on the following key resources identified during the scoping for the Program EIR, as follows.

- Water resources, including surface water and groundwater quality as it relates to sedimentation and herbicides
- Biological resources, including endangered and threatened species, wetland, riparian, and coastal habitats, and aquatic habitats and organisms
- Hydraulic hazards, as they relate to erosion and flooding

Impacts of the proposed BMPs on other environmental factors such as traffic, noise, and air quality (among others) were not considered in this section because no significant impact is anticipated (see Initial Study, included as Appendix A). Please refer to Section 6 for greenhouse gas emissions analysis.

3.2 SIGNIFICANCE CLASSIFICATION AND THRESHOLDS

The significance of environmental impacts is classified in the manner shown below.

- Class I Impacts. Significant, unavoidable impacts. For these impacts, the District must issue a "Statement of Overriding Considerations" under Section 15092 (b) of the CEQA Guidelines if the project is approved.
- Class II Impacts. Significant environmental impacts that can be mitigated. The District must make "findings" under Section 15091(a) of the CEQA Guidelines if the Project is approved.
- Class III Impacts. Other potentially adverse environmental impacts that are less than significant. Mitigation measures may be recommended to minimize adverse impacts.
- Class IV Impacts. Beneficial impacts.

The level of significance of potential impacts was determined using significance thresholds from the Ventura County Initial Study Assessment Guidelines.

3.3 WATER RESOURCES

The proposed project would not significantly decrease the net quantity of groundwater and would have no impact on surface water quantity, since the BMPs would not result in an increase in the net utilization of surface water (refer to the Initial Study, included as Appendix A). Therefore, the discussion of the proposed project's impacts on water resources is focused on surface water quality and groundwater quality. The analysis included in this chapter describes the effects of existing routine maintenance activities on surface water and groundwater quality and details the proposed BMPs that would result in beneficial impacts when compared to the baseline condition.

3.3.1 Environmental Setting

3.3.1.1 Surface Water Quality

District facilities are located within "receiving" waters; that is, these facilities receive runoff which can contain sediment, trash, organic matter, and other pollutants. Surface water quality in the maintained drainage facilities is dependent upon many factors. The primary factors are the nature of the watershed (i.e., geology, soils, drainages, gradient, and weather patterns) and the amount and types of man-made pollutants discharged to the watershed. Runoff from undeveloped watersheds with sedimentary parent material exhibit a naturally high mineral content, but low levels of pollutant such as metals and nutrients. In contrast, runoff from a watershed dominated by agricultural land uses exhibits higher nutrient and sediment levels. Runoff from urbanized watersheds exhibits high levels of nutrients, pesticides and herbicides, oil and grease, other hydrocarbons, and heavy metals, but typically lower levels of sediment.

Water quality also varies over time within a single watershed. For example, water quality is generally very poor during the first seasonal major runoff event when sediments, trash, and accumulated organic matter in the drainage are mobilized. As the winter progresses, water quality improves due to flushing and dilution.

A wide variety of pollutants are generated by urban land uses, depending upon the mix of commercial, industrial, and residential land use types. Pollutants are generated through the exposure of industrial activities to rainfall and runoff, septic fields, littering, landscape maintenance, animal waste, fuel dispensing, vehicle servicing, outdoor waste receptacles, roadway maintenance activities, painting, and other activities. Stormwater pollutants from agricultural operations consist primarily of sediments, nutrients from fertilizers, and pesticides (which include herbicides). Runoff from construction sites may be a major source of sediments in stormwater runoff. An overview of major stormwater pollutants that affect the drainages in the County is provided below.

- *Sediment* is the largest contributor by volume to stormwater pollution. Suspended matter is primarily generated through erosion processes during rain events. It is a natural element of runoff and is only considered a pollutant to the extent that sediment loads are elevated over natural ones. Sediments cause a decrease in light transmission through water, which in turn, causes a decrease in primary productivity of aquatic plants and phytoplankton upon which other species feed. Sediments can also obscure or bury spawning and feeding areas for fish and aquatic organisms and may directly interfere with respiration of aquatic species. In addition, sediments decrease the value of receiving waters for recreational uses and drinking water supplies. It should be noted that other stormwater pollutants are often adsorbed to suspended solids, particularly phosphorus, heavy metals, and organic compounds. In urbanized areas, the accumulation of sediments along roadways includes road and tire wear, brake dust, exhaust particulates, and materials washed into curbs and gutters from adjacent areas.
- *Nutrients* such as nitrogen and phosphorus are common constituents of stormwater. Nutrients enter runoff from sources such as fertilizers, plant matter, animal waste, seepage from septic systems, and detergents. An excess of nutrients will accelerate the process of eutrophication in receiving waters. Algal blooms can occur, and the resulting decay of organic material may create

conditions that eliminate aquatic vegetation and destroy food for fish and aquatic species. Some algal blooms can produce toxic substances and lethal drops in dissolved oxygen. They may also inhibit recreational uses of the receiving waters, and reduce the suitability of water for drinking water supplies.

- *Heavy metals* in stormwater originate from the operation of motor vehicles, direct atmospheric fallout, some construction activities, and the degradation of highway pavement materials. The most abundant heavy metals in Ventura County's stormwater are chromium, zinc, and copper. Heavy metals accumulate in sediment and may adversely affect benthic organisms. In addition, heavy metals can bioaccumulate in animal tissues and result in chronic toxic effects. Dissolved metals can be toxic to fish and aquatic species (e.g., insects, invertebrates, amphibians).

- *Oxygen demanding substances* include numerous organic compounds which are decomposed by microorganisms, thereby creating a need for oxygen. The presence of oxygen-demanding substances can cause oxygen depletion in the receiving water and kill fish and increase the number of anaerobic microorganisms that produce unpleasant odors.

- *Other types* of organic compounds are problematic in stormwater because they cannot be easily decomposed by microorganisms and will persist for a long time. Examples include hydrocarbon fractions of oils and greases from transportation sources, benzene from gasoline, synthetic detergents, pesticides, herbicides, wood preservatives, and synthetic industrial products. Many of these compounds are toxic to fish and aquatic organisms, which exhibit both acute and chronic toxic effects. They may also inhibit reproduction, respiration, and development of fish and aquatic species, and in many cases, are mutagenic and carcinogenic. The presence of these compounds in contaminated fish and water can pose a human health risk. Many chlorinated hydrocarbons are very persistent and bioaccumulate in the food chain. They also create adverse aesthetic effects due to oily sheens on the water. Many organic compounds adhere to sediment particles resulting in persistent substrate contamination.

- *Pathogens* include bacteria, fungi, viruses, and protozoans capable of transmitting disease and affecting human health. The primary sources in stormwater include animal wastes, illegal wastewater connections to storm drains, and leaking septic systems or sewer lines. The principal indicator of pathogen contamination is coliform bacteria, particularly when the source of contamination is sanitary sewers. Pathogens pose a human health risk for recreational users.

Water quality conditions along the maintained drainages of the County are highly variable because of differing circumstances in each watershed. However, the primary pollutants of concern in each of the maintained drainages of Ventura County include sediment, nutrients, pesticides, oxygen demanding substances, total and fecal coliform bacteria, mercury, polyaromatic hydrocarbons (PAHs), DDT and their by-products, diazinon, total suspended solids (TSS), copper, lead, chloride, phosphorous, trash, algae, Polychlorinated Biphenyls (PCBs), and total dissolved solids (TDS).

The State Water Resources Control Board (SWRCB), in cooperation with the federal Environmental Protection Agency (EPA) and Los Angeles Regional Water Quality Control Board (RWQCB), have designated "impaired waters" of the state, which are those water bodies that exhibit evidence of impaired beneficial uses due to pollution. In Ventura County, several waterbodies have been

designated "impaired" (Table 3-1). Portions of some of these drainages or facilities are subject to maintenance by the District.

TABLE 3-1
IMPAIRED WATERBODIES IN VENTURA COUNTY

Waterbody	Impairment
Brown Barranca *	Nitrates and nitrite
Calleguas Creek *	Ammonia, endosulfin, chlordane, copper, DDT, mercury, nickel, nitrogen, PCBs, sediment toxicity, sedimentation/siltation, zinc, toxaphene, chloride, algae, boron, Chem A, fecal coliform, dieldrin, selenium, sulfates, total dissolved solids, trash, organophosphorus pesticides, sediment toxicity
Canada Larga *	fecal coliform, low dissolved oxygen
Channel Island Harbor	lead, zinc
Channel Island Harbor Beach	bacteria indicators
Oxnard Industrial Drain *	Chem A, chlordane, DDT, nitrogen, sediment toxicity, toxaphene
Fox Barranca *	boron, nitrate and nitrite, sulfates, total dissolved solids
Hobie Beach	bacteria indicators
Lake Sherwood	algae, ammonia
Matilija Creek *	fish barriers
McGrath Beach	high coliform count
McGrath Lake	Chlordane, DDT, dieldrin, fecal coliform, PCBs, sediment toxicity
Ormond Beach	bacteria indicators
Piru Creek *	pH
Pole Creek *	sulfates, total dissolved solids
Port Hueneme Harbor	DDT, PCBs
Promenade Beach Park	bacteria indicators
Rincon Beach	bacteria indicators
San Buenaventura Beach	bacteria indicators
Santa Clara River estuary	Chem A, high coliform count, toxaphene
Santa Clara River (various reaches)	ammonia, chloride, nitrates and nitrites, high coliform count
Surfer's Point at Seaside	bacteria indicators
Ventura River estuary	algae, eutrophic, fecal coliform, total coliform, trash
Ventura Harbor at Ventura Keys	high coliform count
Ventura River *	algae, pumping, diversion

* Portions of these drainages or facilities are subject to maintenance by the District.

Surface water quality is managed through the regulatory actions of the Los Angeles RWQCB. The Basin Plan for the Los Angeles Region lists the beneficial uses of waterways in the region and describes how water quality must be protected to maintain these uses. The Basin Plan also contains policies, programs, and actions necessary to achieve the standards established in the plan. The RWQCB implements the plan by issuing and enforcing waste discharge requirements.

Typical beneficial uses in the rivers and creeks of the County include: municipal and domestic supply, wildlife habitat, agricultural supply, cold freshwater habitat, groundwater recharge, warm freshwater habitat, and water contact recreation. The Basin Plan also includes water quality objectives, which are numeric or narrative standards considered necessary to protect beneficial uses.

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), which was re-issued in 2000 (Permit CAS004002). Pursuant to the permit, the District has developed a County-wide Stormwater Quality Management Plan that includes programs and BMPs to reduce the discharge of pollutants from the public stormwater system to the maximum extent practicable.

The NPDES municipal stormwater permit[1] includes the following requirements that directly affect flood control facility maintenance. The District has met these requirements.

- *"Co-permittees shall inspect and clean the catch basins, open drainage facilities, and detention/retention basins at least one time each year prior to the wet season. At any time, any catch basin that is at least 40% full of trash and debris shall be cleaned out. All reinforced concrete open channels shall be cleaned at least once each year prior to the wet season."*
- *"The Discharger shall develop a standardized protocol for the routine and non-routine application of pesticides, herbicides (including pre-emergents), and fertilizers within one year after permit adoption. There shall be no application of pesticides or fertilizers during the following conditions:*
    - *During rain events*
    - *Within one day of a rain event forecasted to be greater than 0.25 inches except for application of pre-emergent herbicides*
    - *After a rain event where water is leaching or running*
    - *When water is running off site*
- *"The Discharger shall ensure that staff applying pesticides are either certified by the California Department of Food and Agriculture, or are under the direct supervision on site of a certified pesticide applicator."*

In certain cases during routine maintenance and repair operations, groundwater dewatering must be conducted in order to maintain a dry work area. If the District or contractor establishes that a maintenance or repair operation covered under this EIR will require dewatering during construction, a separate permit from the RWQCB will be required. Discharges of groundwater to surface water are covered under Order No. R4-2003-0111, General National Pollutant Discharge Elimination

[1] Board Order No. 00-108; NPDES Permit No. CAS004002, adopted on July 27, 2000 by the California Regional Water Quality Control Board, Los Angeles Region, pursuant to Division 7 of the California Water Code.

System 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 August 7, 2003).

3.3.1.2 Ground Water Quality

Changes in surface water quality within the maintained drainages have a limited and potentially adverse effect on ground water quality. In unimproved or soft-bottom channels, surface flows are hydrologically connected to the shallow alluvial aquifer underlying the channel. A high water table can be a major contributor to surface flows in some unimproved channels. Conversely, surface flows may be a significant source of recharge to the shallow alluvial aquifer. Shallow alluvial aquifers can be a major source of recharge for deeper hydrologically connected aquifers which may be pumped for water supply. Water soluble or volatile pollutants in stormwater or surface flows can thus migrate through the sediments of the channel bottom to the underlying aquifer. Pollutants from accidental spills and releases can also be released to groundwater via the percolation of rainwater to the subsurface.

The California Department of Water Resources (DWR) provides periodic assessments of groundwater quality conditions within California's groundwater basins and advises the SWRCB and RWQCBs in preparation of water quality control plans or Basin Plans. The Basin Plan addresses water quality objectives for both surface water and groundwater. Groundwater basins designated for beneficial use by the RWQCB as a domestic or municipal supply have water quality objectives for chemical constituents, nitrates, bacteria, mineral quality as well as taste and odor. Specific groundwater basins in Ventura County have numeric objectives for TDS, sulfate, chloride and boron. The RWQCB has the authority to regulate discharges to groundwater via the issuance of general and individual waste discharge requirements.

The recharge or percolation of stormwater within District facilities has the potential to introduce pollutants such as nutrients, pesticides, mercury, polyaromatic hydrocarbons (PAHs), DDT and their by-products, diazinon, copper, lead, chloride, phosphorous, PCBs, and TDS to underlying aquifers. However, the DWR has not identified recharge of polluted stormwater as a serious threat to groundwater quality in the County (DWR, 2003). Sources of groundwater pollutants introduced by the recharge of surface flows (VCDPW, 1994) are mainly attributed to the following: chlorides, pesticides and nitrates from agricultural return flows, nitrates from septic tanks and confined animal operations and hydrocarbons from leaking underground storage tanks.

3.3.2 Thresholds of Significance

The applicable threshold criteria for this resource issue from the Ventura County Initial Study Assessment Guidelines are as follows:

> *4.b.C. Groundwater Quality Threshold Criteria. (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 RWQCB shall be considered to have a potentially significant impact. (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 RWQCB, the project shall be considered to have a potentially significant impact until such time as reliable studies determine otherwise.

4.d.C. Surface Water Quality Threshold Criteria. (1) Any land use proposal that will degrade the quality of surface water and cause it not to meet surface water quality objectives for a hydrologic unit defined in the 4A, 3, or 5D Plans is a significant adverse impact. (2) In cases where the proposed land use impact upon the quality of surface water is unknown or the quality of surface water in a hydrologic unit is unknown, the impact is unknown and must be determined by additional investigation.

3.3.3 Potential Impacts of the Proposed BMPs

The proposed BMPs have been designed to ***reduce*** incidental environmental effects of routine maintenance activities while ensuring that the required maintenance activities are completed in a cost effective manner, and meet the performance standards established for each facility. The proposed BMPs would not degrade the quality of groundwater and cause groundwater to fail to meet groundwater quality objectives set by the RWQCB. The proposed BMPs would also not degrade the quality of surface water and cause it not to meet surface water quality objectives. The BMPs would not cause significant adverse surface water or groundwater quality impacts because the measures would not increase erosion potential, increase herbicide use, or increase the probability of accidental spills of hazardous substances. Instead, the BMPs related to water quality are focused on reducing the erosion potential, herbicide use, or the probability of accidental spills of hazardous substances in the ongoing maintenance program. A detailed impact analysis is provided below.

Hence, incorporation of the BMPs into the flood control maintenance program is expected to result in ***a beneficial impact on current water quality conditions of the County's watersheds (Class IV).***

The following discussion shows the potential effects of the proposed BMPs on the existing operations and maintenance activities, which constitute the baseline condition for this analysis. The discussion of potential impacts of the proposed BMPs on surface and groundwater quality is subdivided in the following issue areas:

- Sedimentation and turbidity
- Pesticide and herbicide use
- Accidental spills and releases
- Surface water temperatures
- Rodent control activities

3.3.3.1 Sedimentation and Turbidity

3.3.3.1.1 General Maintenance and Repair Activities. Several ongoing maintenance activities disturb the channel bed of a flood control facility, and could potentially increase channel erosion and downstream sedimentation with attendant short term adverse effects on surface water

quality. Activities under the existing maintenance program that may result in increased sedimentation and turbidity are listed below:

- Brush and Weed Control by Herbicide Spraying (PT41, 42, and 45), Hand Crews (PT43), and/or Discing (PT44); for Fire and Tumbleweed Abatement (PT48 and 49) in both Channels and Basins; and for Work Release Weed Control Crews (PT92). These maintenance activities remove vegetation from channel and basin bottoms, exposing bare dirt to possible erosion during subsequent winter flows.
- Sediment Cleanout in Unimproved and Improved Channels (PT 20-28). The removal of sediment from channels physically disturbs bed materials, which may increase the potential for channel bed erosion during the subsequent winter flows.
- Channel Earthwork (PT32, PT33, PT34). Channel shaping, grading, and compacting physically disturbs bed materials, which may increase the potential for channel bed erosion.
- Storage Area and Stockpile Establishment and Clean Up (PT31). The creation of a sediment stockpile near a watercourse could cause sedimentation if the stockpile is not stabilized or is exposed to erosive rainfall or overland flow.
- Maintenance, Repair, Grading, Surfacing, and Shaping Access Roads (PT51-57). This work can cause sedimentation of adjacent watercourses if the disturbed areas are not stabilized after construction and are exposed to potentially erosive rainfall or runoff.
- Pipe and Wire Revetment Repair, Riprap Repair, Bank Protection Construction Stabilizer Construction/Repair, and Concrete Construction/Repair (PT68, PT70, PT72, PT74, PT76). Construction activities in a watercourse can cause local erosion and sedimentation if the work destabilizes the channel bed or bank.

Erosion of channel or basin bed or bank material may cause an increase in the wash and bed loads of the drainage at and below the affected reach. The amount of material eroded depends on the velocity of the flows and its inherent capability to convey sediment. It should also be noted that channel erosion is a natural process in all natural and maintained drainages in the County. Sediments are naturally generated in the upper watershed as mountains erode. The sediments are conveyed along the watercourse, and in a natural system, are deposited on the floodplain to create the valley landforms. More sediment is conveyed with higher flows due to the greater kinetic energy of the stream. During most runoff events in the County, the initial flows carry sediment and exhibit very high turbidity. As the flows recede, sediment content and turbidity decrease. This is a natural process which contributes sediment and sand to downstream reaches. The establishment and maintenance of downstream estuaries and beaches is dependent on supplies of sediment from rivers and streams.

The proposed BMPs 1, 2, 3, 8, 10, 11, 14 and 17 (see Section 2.6.2) would reduce the contribution of future maintenance activities to increased sedimentation and turbidity. Therefore, the proposed BMPs would have a *beneficial impact (Class IV)*.

3.3.3.1.2 Water Diversion. Water diversions do not increase flow rates and thus do not increase the overall transport of sediment. However, modification of the low flow channel exposes surface water to erodable material. The initial and post-construction re-routing of the stream flow

may result in short-term 'slug' loadings of sediment in the channel, which may result in high levels of turbidity and sediment. These sediment pulses, although unavoidable, are temporary in duration and are minimized by proposed BMPs. Channel erosion, as noted previously, is a natural process in all natural and maintained drainages in the County.

The proposed BMP 18 (see Section 2.6.2) would reduce the contribution of future water diversion activities to increased sedimentation and turbidity. Therefore, the proposed BMPs would have a *beneficial impact (Class IV)*.

3.3.3.1.3 Stream Gauge Maintenance. Stream gauge maintenance activities do not disturb the channel bed of a flood control facility directly. The maintenance activity is limited to the removal (cutting) of vegetation from the channel banks and bed. As the roots are left intact and there is vegetation growth in the spring season, stream gauge maintenance activities do not increase erosion during storm events and do not increase sediment and turbidity.

The following proposed BMPs would further reduce the contribution of future stream gauge maintenance activities to increased sedimentation and turbidity, and therefore have a *beneficial effect (Class IV)*: BMPs 4, 5, 6 and 19 (see Section 2.6.2).

3.3.3.2 Pesticide and Herbicide Use

3.3.3.2.1 General Maintenance and Repair Activities. The following maintenance activities involve the application of herbicides to reduce or remove vegetation from basin bottoms, channel banks and bottoms, access roads, and District right-of-way:

- Brush and Weed Control by Herbicide Spraying with Boom (PT41)
- Weed Control by Hand Spray (PT42)
- Backpack Weed Spray (PT45)

The District applies both pre-emergent and post-emergent herbicides. The former is applied to bare soils and dirt access roads in the winter prior to the germination of plants. As rainfall percolates into the soil, the herbicide is transported into the root zone and is taken up by seeds or roots of young plants. Post-emergent herbicides are applied throughout the year. They are applied to leaves and stems where the herbicide is absorbed.

The District applies herbicides in accordance with the label instructions; hence, very little is available to be transported to groundwater or surface water. Once an herbicide is absorbed into plant tissues, it is readily taken up and metabolized, and is not available to other organisms in the environment.

Herbicides can be introduced to the surface water and groundwater by three mechanisms: (1) overspray that deposits herbicide directly into open water; (2) overspray that deposits post-emergent herbicides on dry substrates where it may be dissolved by flowing water at a later time; and (3) excessive applications of pre- and post-emergent herbicide which cannot be absorbed by the target plants.

The District applies herbicides in strict conformance with the label instructions, the BMPs contained in the District's Herbicide Manual, and the District's NPDES Stormwater Quality Management Program[2]. Herbicides are applied by or under direct supervision of a state qualified applicator. As such, all feasible measures have been incorporated into the District maintenance program to minimize the amount of herbicide used, to select the most appropriate type and application rate, to apply the herbicide in the most effective and accurate manner, and to prevent accidental spills or excessive applications.

Nevertheless, the District applies a substantial amount of herbicide to the basins and channels throughout the County each year. The average annual volume of herbicide used typically is about 4,000 to 6,000 gallons. Because of repetitive application, there is a potential for herbicide use under the maintenance program to affect surface water and groundwater quality.

Proposed BMP 9 (Section 2.6.2) reaffirms the need to apply the appropriate precautions when using herbicides to protect natural resources and to minimize the amount used. Incorporation of BMP 9 in the maintenance program will have a *beneficial impact (Class IV),* as it would reduce the overall magnitude of existing maintenance activities' use of herbicides.

3.3.3.3 Accidental Spills and Releases

3.3.3.3.1 General Maintenance and Repair Activities. Heavy equipment is used in most of the flood control maintenance activities. For most actions, equipment is staged on a bank, but there are occasions when a loader and graders will work on the channel bottom. Sediment removal from basins and discing require equipment access to the basin bottom.

The accidental leakage or spill of fuel and/or oil from heavy equipment working within or directly adjacent to the watercourse or in a basin can cause a discharge of pollutants to the watercourse, which could degrade downstream surface and/or groundwater quality. These are anticipated to be highly localized events because most accidental spills are limited in quantity (e.g., less than 50 gallons). However, many of the maintenance activities occur in the winter months when spills can be readily dispersed to downstream areas.

The potential for accidental spills of herbicides from existing maintenance activities is considered low because of the precautions used by the District in their transport and application. In addition, herbicides are not mixed in or near watercourses or basins.

Proposed BMPs 9, 17, and 21 (Section 2.6.2) would provide additional restrictions that would further reduce the probability of an accidental spill of hazardous substances that could affect surface water and ground water quality. Therefore, the proposed BMPs are expected to have a *beneficial impact (Class IV).*

3.3.3.3.2 Water Diversion. The diversion of water may require the use of heavy equipment within the channel bottom to create a new low-flow channel or to transport materials for dam construction. The accidental leakage or spill of fuel and/or oil from heavy equipment working to create a water diversion within the watercourse or in a basin can cause a discharge of pollutants to

[2] Application Protocol version 4.0 (Pesticides, Fertilizers, and Herbicides), June 8, 2001.

the watercourse that degrades downstream surface or ground water quality. The potential for this type of effect is limited because construction of water diversions is of short-duration compared to the total project operations timeline.

Proposed BMPs 18 and 21 (Section 2.6.2) would provide additional restrictions that would further reduce the probability of an accidental spill of hazardous substances that could affect surface and ground water quality, and have a *beneficial impact (Class IV)*.

3.3.3.3.3 Stream Gauge Maintenance. The accidental leakage or spill of fuel and/or oil from equipment such as chain-saws used for the clearing of vegetation directly adjacent to the watercourse can cause a discharge of pollutants to the watercourse. However, the effect for stream gauge maintenance will be highly localized due to the limited extent of vegetation clearance. In addition, the District has existing protocols to clean up potential leakage and spills in order to avoid the discharge of pollutants to a watercourse.

Proposed BMP 21 (Section 2.6.2) would provide additional restrictions that would further reduce the probability of an accidental spill of hazardous substances that could affect surface and ground water quality and would have a *beneficial impact (Class IV)*.

3.3.3.4 Water Temperature

3.3.3.4.1 General Maintenance and Repair Activities. The following maintenance activities reduce or remove vegetation from basin bottoms and channel banks and bottoms:

- Brush and Weed Control by Herbicide Spraying with Boom (PT41)
- Weed Control by Hand Spray (PT42)
- Work Release Weed Control Crews (PT92)

In some instances, the removal of brush and weeds from a channel bottom or bank can reduce the amount of shade on surface water in the channel. Increased surface water temperatures can stimulate algal growth which reduces dissolved oxygen and harms aquatic organisms. However, most facilities are maintained so that only early seral, low-growing herbaceous vegetation may establish. Trees and large shrubs are actively precluded from establishing because they compromise the structural integrity of the facilities. Therefore, most facilities lack shade. Along most maintained drainages, effects are expected to be minor because: (1) water is generally not present during maintenance; and (2) the vegetation typically removed from maintained creeks does not generally create a dense canopy with a shading effect.

The District has developed BMPs 11, 12, and 13 (see Section 2.6.2), which would have the *beneficial impact (Class IV)* of reducing the contribution of future maintenance activities to vegetation removal and, therefore, to increased water temperatures. However, the District has not been able to identify feasible BMPs that would fully mitigate the effect of ongoing and future maintenance on aquatic habitats without hindering the required channel and basin maintenance to ensure adequate conveyance or storage capacity.

3.3.3.4.2 Water Diversion. Water diversion activities have the potential to increase surface water temperatures by a variety of means. Ponding water behind a dam in an exposed area and conveying flows in an exposed pipeline could result in an increase in water temperature and an associated drop in dissolved oxygen content. The alteration in temperature and dissolved oxygen could result in non-compliance with applicable surface water quality criteria. Diverting flows within a by-pass channel may have an effect on water temperature if the diverted flow is substantially slowed and exposed to sunlight. However, specific BMPs included in the Water Diversion Guide (Proposed BMP 18, refer to Section 2.6.2) would require the maintenance of existing flow rates during water diversions. Therefore, BMP 18 would minimize water temperature increases due to water diversions and have a *beneficial impact (Class IV)*.

3.3.3.4.3 Stream Gauge Maintenance. The clearing of vegetation for stream gauge maintenance will expose the cleared bed to direct sunlight. Removal of vegetation may cause a localized increase in water temperature. Increased water temperatures can stimulate algal growth which reduces dissolved oxygen and may harm aquatic organisms. However, the extent of the cleared area is unlikely to have a significant effect on the water temperature of a flowing stream. The effect of the stream gauge maintenance (and the resultant temperature increase) on increased water temperatures is minimal due to the limited area of stream courses (approximately 8 acres) that are affected throughout the County over time. Therefore no BMPs are proposed to address this issue area and *the proposed project would have no impact.*

3.3.3.5 Rodent Control Activities

Currently the District contracts with a Pest Control Operator (PCO) that specializes in wildlife damage control to carry out a pest control program. The damage prevention program calls for the PCO to maintain anticoagulant bait stations throughout the year at critical facilities. The District is evaluating an Integrated Pest Management (IPM) program to reduce the total amount of rodenticides used by the District with the goal of reducing the primary and secondary hazards to non-target species compared to the existing bait station technique. A pilot IPM program is currently under way to test the efficacy of several pest management alternatives at several District facilities and is included as part of BMP 20. The current pest control program and proposed pilot IPM do not have a substantial effect on water quality and aquatic habitat as no rodenticides are broadcast in aquatic habitat or when rain is forecast.

Proposed BMP 20 (Section 2.6.2) would provide additional restrictions that would further reduce the probability that stormwater contact with rodenticides would affect surface and ground water quality. Therefore, the proposed BMPs would have a *beneficial impact (Class IV)*.

3.3.4 Mitigation Measures and Residual Impacts

The proposed BMPs would not cause any adverse water quality impacts, and as such, no mitigation measures are required or considered necessary.

3.4 BIOLOGICAL RESOURCES

Biological resources include natural plant and animal species and their habitats, communities and ecosystems. This section of the document addresses significant biological resources, which include the following:

- Endangered, Threatened, or Rare Species and Locally Important Species/Communities
- Wetland, Riparian, and Coastal Habitat
- Aquatic Habitat and Organisms

As the proposed BMPs would be applied to maintenance activities at flood control facilities, the evaluation of impacts to migration habitats is reflected in the analysis of aquatic habitats.

The proposed BMPs have been designed to reduce incidental effects on the environment resulting from routine maintenance activities. Therefore, the BMPs are not expected to cause significant adverse impacts to endangered, threatened, or rare species, existing wetland, riparian, and coastal habitats at or near flood control facilities, migration corridors, or locally important species/communities. The analysis included in this chapter describes the existing routine maintenance activities effects on biological resources and details the proposed BMPs that would result in beneficial impacts when compared to the baseline condition.

3.4.1 Endangered, Threatened, or Rare Species, and Locally Important Species/Communities

3.4.1.1 Environmental Setting

Several fish and wildlife species designated as rare, threatened or endangered by the California Department of Fish and Game (CDFG), US Fish and Wildlife Service (USFWS), and/or National Oceanic and Atmospheric Administration's National Marine Fisheries Service (NOAA Fisheries) occur in aquatic, wetland, and riparian habitats in the watersheds of Ventura County. In addition, there are numerous other sensitive species present in these watersheds. These species have been designated "species of special concern" by CDFG due to their low numbers and restricted distribution in the state.

As described in Sections 3.4.2 and 3.4.3, most of the District's facilities do not contain well-developed, undisturbed native wetland, riparian, or aquatic habitat. Few, if any, threatened, endangered, or sensitive species occur in regularly maintained channels and basins. However, there is a potential for sensitive species to be present under the following circumstances:

- Aquatic species can move upstream and downstream along a watercourse, and may temporarily occur in or adjacent to a maintained reach.
- Avian species may temporarily utilize habitat in or near flood control facilities during migration or foraging events, or may establish residence in nearby native habitat that provides the required cover.

- The following District facilities have mature habitat due to existing agreements: Adams Canyon Debris Basin, Arroyo Las Posas Unit IV Area "A", Arroyo Simi near Sequoia Avenue Bridge, Aroyo Simi Wetland Mitigation Area, Fagan Canyon Debris Basin, McDonald Canyon Detention Basin, Live Oak Diversion Channel, South Branch Arroyo Conejo, and Ventura River Giant Cane Removal (including Ventura River Giant Cane Removal Amendment).

The following threatened and endangered species occur in the watersheds of Ventura County and may occur at or near certain flood control facilities under certain circumstances:

- *Tidewater Goby (Eucylogobius newberryi)*. The tidewater goby is a federally listed endangered species and a California species of special concern. It is a small fish that occurs in coastal lagoons and small waterbodies, typically occupying the upper ends of lagoons in brackish water. Tidewater gobies occur in the Ventura River and Santa Clara River estuaries, and may occur periodically in small, ephemeral waterbodies at the mouths of natural drainages and storm drains along the Ventura County coast. The tidewater goby occurs in the Ormond Beach Lagoon, including the lower reach of the J Street Drain. Tidewater gobies have also been found in the Hueneme Drain, east Hueneme Channel, Oxnard Industrial Drain, although the habitat quality at these locations is sub-optimal.

- *Southern Steelhead Trout (Oncorhynchus mykiss irideus)*. The southern steelhead is a federally listed endangered species and California species of special concern that occurs in coastal streams and creeks of California and southern Oregon. The populations that occur from the Santa Maria River in Santa Barbara County southward to the US-Mexican border constitute the Southern California Coast Steelhead Distinct Population Segment (DPS), which has been designated an endangered species by NOAA Fisheries. Southern California coast steelhead occurs in the Rincon Creek, Ventura River and Santa Clara River watersheds. NMFS has designated all accessible streams along the Ventura County coastline (i.e., streams without impassable fish barriers) within the historic range of the steelhead. Per NOAA's determination, no steelhead occurs within the Calleguas Creek watershed.

- *Unarmored Threespine Stickleback (Gasterosteus aculeatus williamsoni)*. The unarmored threespine stickleback is a federally listed endangered species and State fully protected species. These small fish (up to six centimeters) inhabit slow-moving reaches or quiet water microhabitats of streams and rivers. Suitable habitat usually includes areas shaded by dense vegetation. In more open reaches, algal mats or barriers may provide refuge for the species. Unarmored threespine sticklebacks feed on insects, small crustaceans, snails, flatworms, and nematodes. Once common throughout southern California, these fish are now restricted to the upper Santa Clara River and its tributaries in Los Angeles and Ventura counties, San Antonio and Canada Honda creeks on Vandenberg Air Force Base in Santa Barbara County, and Shay Creek in San Bernardino County. Threats to the fish are primarily due to competition with or predation by non-native fish, loss of habitat through urbanization and channelization, and introgression with other subspecies of sticklebacks.

- *California Red-legged Frog (Rana aurora draytonii)*. The California red-legged frog is federally listed threatened species and a California species of special concern. They are confined strictly to aquatic habitats, such as creeks, streams, and ponds, and occur primarily in areas having pools two- to three-feet deep with dense emergent or shoreline vegetation. Although they may move

between breeding pools and foraging areas, they rarely leave the dense cover of the riparian corridor. The red-legged frog occurs in the upper Ventura River watershed above Matilija Dam, and in San Antonio Creek; as well as other watersheds within the County located within the National Forest such as Matilija and Sespe Creeks.

- *Arroyo Toad (Bufo californicus)*. The arroyo toad is a federally listed endangered species and a state species of special concern. It historically occurred in coastal drainages from the upper Salinas River to Rio Santo Domingo in Baja California Norte. Recent surveys indicate that the species has been extirpated from many historic locations. The species occurs in semi-arid regions near washes or intermittent streams. It is threatened, in part, due to loss of habitat to gravel mining and altered hydrologic conditions due to the presence of dams. Known populations exist in the upper portions of major southern California coastal watersheds, including the Santa Clara River watershed, and the Sespe Creek and Piru Creek subwatersheds.

  Arroyo toads are typically found in the upper reaches of streams, and therefore appear unlikely to be found within flood control facilities. They breed in pools generally less than one foot deep with minimal current and a gently sloping shoreline, and where bordering vegetation is absent or set back from the margins of the pool. Adults use nearby sandy terraces for burrowing and may forage in live oak flats and riparian woodland along the river floodplain.

- *Least Bell's Vireo (Vireo bellii pusillus)*. The least Bell's vireo is a state and federally listed endangered bird species that is a summer breeder in riparian woodlands along major drainages of southern California. The vireo is an obligate riparian breeder, using various riparian habitats such as willow and mulefat scrub and willow-cottonwood forest. It generally prefers early successional habitat that provides dense cover for nesting and structurally complex canopy for foraging. Least Bell's vireos tend to nest in willow-dominated habitats, but may occur in tall canopy oak- riparian forests if there is a dense understory of riparian shrubs. The species often utilizes adjacent upland habitats for foraging. Vireo populations are known along the lower Ventura River and at several locations along the Santa Clara River, including sites in the vicinity of Vern Freeman Diversion and south of the Highway 101 bridge.

- *Southwestern Willow Flycatcher (Empidonax traillii extimus)*. The Southwestern willow flycatcher is a state and federally listed endangered species. This species occurs in willow riparian scrub within all or a portion of seven southwestern states. On the west coast, they occur from Baja California, Mexico to Santa Barbara County, California. The Santa Clara River has the second largest breeding population within its range. At mid to low elevations, Southwestern willow flycatchers are found in sites where the canopy height is between 4 to 30 meters. Native plant species include willow, cottonwood, and box elder with numerous sub-canopy shrub and a mixed understory species. Non-native species such as tamarisk and Russian olive are known to be used by Southwestern willow flycatchers. A key characteristic of the breeding habitat appears to be dense vegetation at all levels within close proximity (less than 20 yards) to open water or very saturated soil. The habitat patch size varies from 0.6 hectare to as much as 100 hectare though most are at the smaller end of this range. Habitat patches less than 10 meters wide are too narrow for breeding Southwestern willow flycatchers.

- *Western Snowy Plover (Charadrius alexandrinus nivosus)*. The western snowy plover is a federally listed threatened species and a California species of concern. The Pacific coast population of the western snowy plover breeds primarily on coastal beaches from southern Washington to

southern Baja California, Mexico. The nesting season extends from early March through late September. The breeding season generally begins earlier in more southerly latitudes, and may be two to four weeks earlier in southern California than in Oregon and Washington. Snowy plovers forage on invertebrates in the wet sand and amongst surf-cast kelp within the intertidal zone, in dry, sandy areas above the high tide, on salt pans, on spoil sites, and along the edges of salt marshes, salt ponds, and lagoons. They sometimes probe for prey in the sand and pick insects from low-growing plants. Habitats used by nesting and non-nesting birds include sandy coastal beaches, salt pans, coastal dredged spoils sites, dry salt ponds, salt pond levees and gravel bars. Snowy Plovers are present at Ormond Beach and near the Santa Clara River mouth at Surfers Knoll, and may occasionally forage at the Ventura River mouth.

- *Western Yellow-Billed Cuckoo (Coccyzus americanus occidentalis)*. The western yellow-billed cuckoo is a State-listed endangered and federal candidate bird species that, although once common in southern Canada, the United States and northern Mexico, has declined precipitously throughout its range. Yellow-billed Cuckoos in California are threatened by the loss or degradation of suitable large tracts of riparian habitat, pesticide poisoning, and loss of prey base due to pesticides. Optimal breeding sites for Western Yellow-billed Cuckoos are at least 198 acres in extent and more than 1,969 feet wide consisting of broad, well-developed, low-elevation riparian woodlands comprised primarily of mature cottonwoods. Yellow-billed Cuckoos have large home ranges, averaging 42 acres in southern California riparian habitats. This habitat occurs currently in the vicinity of the Vern Freeman diversion, and may increase as areas of the Santa Clara River corridor are restored; however, due to the nature of maintained flood control facilities and the species habitat requirements, at this time this species is not expected to occur in or adjacent to flood control facilities.

- *California Least Tern (Sterna antillarum browni*). The California Least Tern is a state and federally endangered species and a California fully protected species. The historical breeding range of this species is along the Pacific Coast from Monterey County, California to southern Baja California, Mexico. Nesting locations are in dry sand or dirt near lagoons or estuaries with a dependable food supply. Due to decreasing habitat, terns are often forced to nest on man-made structures such as airports or landfills. They usually arrive around mid-April and breed in colonies from mid-May to early August and then migrate south over the winter. This species has been known to attempt breeding within United Water Conservation District facilities near Saticoy. California Least Terns are also present at Ormond Beach.

- *Coastal California Gnatcatcher (Polioptila californica ssp. californica)*. The coastal California gnatcatcher, a small, blue-gray songbird, is a California Species of Concern and federally listed threatened, non-migratory member of the old-world warbler and gnatcatcher Sylviidae family. The *californica* subspecies occurs from northwest Baja California, Mexico to Ventura County at lower elevations (<500m) south and west of the Transverse and Peninsular Ranges. Preferred habitat consists of open sage scrub dominated by California sagebrush (*Artemisia californica*), on relatively flat to gentle slopes. Presence of California Gnatcatcher is not related to patch size in coastal areas of range. While construction monitoring studies suggest California Gnatcatchers are tolerant of adjacent construction activities and noise, disturbances that reduce shrub cover, such as frequent fire or mechanical disruption appear to reduce habitat suitability. The species was at one time believed to have been extirpated from Ventura County, but is recently reported rarely from the lower Santa Clara River Valley, and from Moorpark.

The following species of special concern also occur in the watersheds of Ventura County and may occur at or near some flood control facilities under certain circumstances:

- *Arroyo Chub (Gila orcutti)*. The arroyo chub is a state Species of Special Concern. The arroyo chub is a relatively small, chunky minnow, typically less than five inches in length. Arroyo chubs prefer slow moving sections of rivers with a sand or mud substrate, or standing waters in reservoirs. This species occurs in the Santa Clara River and most, if not all, of its major tributaries when perennial aquatic habitat is present such as lower Calleguas Creek.
- *Southwestern Pond Turtle (Clemmys marmorata pallida)*. The southwestern pond turtle is a state Species of Concern that lives in freshwater rivers, streams, lakes, and ponds. They may live in intermittent streams where permanent pools exist. The species requires slow moving water and appropriate basking sites such as logs, banks, or other suitable areas above water level. This species occurs in suitable habitat in all major watersheds of the County.
- *Two-Striped Garter Snake (Thamphis hammondii)*. The two-striped garter snake is a State Species of Special Concern typically found near slow moving creeks and streams, ponds, and coastal lagoons where water is permanent and tadpoles, frogs, and small fish are present as a prey base. These snakes are often found in areas of barren soil or short grass near the aquatic sites, and individuals may use large boulders for basking. This species occurs in suitable habitat in all major watersheds of the County.
- *Other Bird Species*. There are several bird species designated as Species of Special Concern by the CDFG that could occur at or near maintained drainages and basins. These species use dense willow, oak, or eucalyptus woodland habitats or cattail marsh that are located at or near flood control facilities, and include: Cooper's hawk, sharp-shinned hawk, yellow warbler, yellow breasted chat, purple marlin, tri-colored blackbird, and long-eared owl.

Table 3-2 shows District facilities that support sensitive species.

3.4.1.2 Thresholds of Significance

Applicable threshold criteria for this resource issue from the Ventura County Initial Study Assessment Guidelines are as follows:

> *"6.C.1 Biological Resources – Endangered, Threatened, or Rare Species. Threshold Criteria. A significant impact to such species would occur if a project would directly or indirectly reduce species population, reduce species habitat, or restrict reproductive capacity."*
>
> *"6.C.5 Biological Resources – Locally Important Species/Communities. Threshold Criteria. Since this group of species/communities is so diverse, the determination of significance must be made by a qualified biologist on a case-by-case basis."*

3.4.1.3 Potential Impacts of the Proposed BMPs

The proposed BMPs have been designed to ***reduce*** incidental environmental effects of routine maintenance activities while ensuring that the required maintenance activities are completed in a cost effective manner, and meet the performance standards established for each facility. The BMPs

TABLE 3-2
SENSITIVE SPECIES POTENTIALLY OCCURING IN THE VICINITY OF DISTRICT FACILITIES

Channel	Reach	Zone	Sensitive Species
Cal-Trans Secondary	41728	1	Monarch Butterfly, Tricolored Blackbird, Least Bells' Vireo, Southern Steelhead
Casitas Springs Bank Protection	41021	1	Mexican Long-tongued Bat, Pallid Bat and Tri-colored Blackbird
Dent Drain	41755	1	Monarch Butterfly, Tri-colored Blackbird, Pallid Bat and Mexican Long-tongued Bat
Fox Canyon	41422	1	California Red-legged Frog
Fox Canyon	41424	1	California Red-legged Frog
Freeway Side Drain #1	41751	1	Monarch Butterfly, Tri-colored Blackbird, Pallid Bat and Mexican Long-tongued Bat
Freeway Side Drain #2	41752	1	Monarch Butterfly, Tri-colored Blackbird, Pallid Bat and Mexican Long-tongued Bat
Freeway Side Drain #3	41753	1	Monarch Butterfly, Tri-colored Blackbird, Pallid Bat and Mexican Long-tongued Bat
Freeway Side Drain #4	41754	1	Monarch Butterfly, Tri-colored Blackbird, Pallid Bat and Mexican Long-tongued Bat
Harrison Secondary	41727	1	Monarch Butterfly and Tri-colored Blackbird
Live Oak Acres Bank Protection	41031	1	Monarch Butterfly, Mexican Long-tongued Bat, Southern Steelhead and Least Bell's Vireo
McDonald Canyon	41301	1	California Red-legged Frog
Peking Secondary	41729	1	Monarch Butterfly and Mexican Long-tongued Bat
Ramona St. Secondary	41730		Monarch Butterfly, Mexican Long-tongued Bat, Tri-colored Blackbird, Southern Steelhead, Pallid Bat, California Red-legged Frog, and Least Bell's Vireo
Riverside Bank Protection	41032	1	Monarch Butterfly and Mexican Long-tongued Bat
San Jon Barranca	41551	1	Pallid Bat
San Jon Barranca	41554	1	Monarch Butterfly and Pallid Bat
Simpson St. Secondary	41731	1	Monarch Butterfly, Mexican Long-tongued Bat, Pallid Bat and Tri-colored Blackbird
Thatcher Creek	41443	1	Southern Steelhead
Ventura River Bank Protection	41011	1	Mexican Long-tongued Bat, Pallid Bat and Tri-colored Blackbird
Ventura River Bank Protection	41012	1	Mexican Long-tongued Bat, Pallid Bat and Tri-colored Blackbird
Ventura River Bank Protection	41015	1	Mexican Long-tongued Bat, Pallid Bat and Tri-colored Blackbird

TABLE 3-2
SENSITIVE SPECIES POTENTIALLY OCCURING IN THE VICINITY OF DISTRICT FACILITIES

Channel	Reach	Zone	Sensitive Species
Arundell Barranca	42406	2	Coast (San Diego) Horned Lizard and Two-striped Garter Snake
Arundell Barranca	42407	2	Coast (San Diego) Horned Lizard and Two-striped Garter Snake
Bardsdale Ditch	43161	2	Two-striped Garter Snake
Barsolo Ditch	43191	2	Coast (San Diego) Horned Lizard
Cavin Road Drain	43221	2	Coast (San Diego) Horned Lizard
Clark Barranca	42491	2	Two-striped Garter Snake
Doris Drain	42381	2	Two-striped Garter Snake
Ellsworth Barranca	42552	2	Two-striped Garter Snake
Fagan Canyon	43051	2	Coast (San Diego) Horned Lizard, Least Bell's Vireo, Two-striped Garter Snake and Western Yellow-billed Cuckoo
Fagan Canyon	43055	2	Coast (San Diego) Horned Lizard, Least Bell's Vireo, Two-striped Garter Snake and Western Yellow-billed Cuckoo
Fagan Canyon	43056	2	Coast (San Diego) Horned Lizard, Least Bell's Vireo, Two-striped Garter Snake and Western Yellow-billed Cuckoo
Franklin Barranca	42531	2	Two-striped Garter Snake
Harmon Barranca	42471	2	Two-striped Garter Snake
Harmon Barranca	42474	2	Monarch Butterfly and Two-striped Garter Snake
Harmon Barranca	42475	2	Monarch Butterfly and Two-striped Garter Snake
Harmon Barranca	42476	2	Two-striped Garter Snake
Hueneme Drain (Pump Drain)	42331	2	California Least Tern and Tidewater Goby
Hueneme Drain	42332	2	California Least Tern and Tidewater Goby
Hueneme Drain	42333	2	California Least Tern, Tidewater Goby and Southwestern Pond Turtle
J Street Drain	42321	2	California Least Tern, Tidewater Goby and Western Snowy Plover
Jepson Wash	43351	2	Coast (San Diego) Horned Lizard and Two-striped Garter Snake
Jepson Wash	43352	2	Coast (San Diego) Horned Lizard and Two-striped Garter Snake
Montalvo Golf Course	42701	2	Western Yellow-billed Cuckoo
Oxnard Industrial Drain	42301	2	California Least Tern and Tidewater Goby
Oxnard Industrial Drain	42302	2	California Least Tern

TABLE 3-2
SENSITIVE SPECIES POTENTIALLY OCCURING IN THE VICINITY OF DISTRICT FACILITIES

Channel	Reach	Zone	Sensitive Species
Pole Creek	43201	2	Two-striped Garter Snake and Pallid Bat
Pole Creek	43204	2	Two-striped Snake
Santa Clara River Levee (North Groins)	42026	2	Least Bell's Vireo and Southern Steelhead
Santa Clara River Levee	42031	2	Coast (San Diego) Horned Lizard
Santa Clara River Levee	42037	2	Coast (San Diego) Horned Lizard, Southern Steelhead and Least Bell's Vireo
Santa Clara River	42036	2	Southern Steelhead
Santa Paula Creek	43061	2	Southern Steelhead, Western Yellow-billed Cuckoo, Two-striped Garter Snake, Arroyo Toad
Santa Paula Creek	43062	2	Southern Steelhead, Western Yellow-billed Cuckoo, Two-striped Garter Snake, Arroyo Toad
Santa Paula Creek	43065	2	Southern Steelhead, Arroyo Toad, Two-striped Garter Snake and Western Yellow-billed Cuckoo
Sespe Creek	43308	2	Arroyo Toad, California Red-legged Frog, Least Bell's Vireo, Two-striped Garter Snake, Western Yellow-billed Cuckoo and Southern Steelhead
Sespe Creek Levee	43305	2	Arroyo Toad and Southern Steelhead
Sespe Creek Levee	43306	2	Arroyo Toad, California Red-legged Frog, Least Bell's Vireo, Two-striped Garter Snake, Western Yellow-billed Cuckoo and Southern Steelhead
Silver Strand (Santa Paula Outfall)	42342	2	Western Snowy Plover
Silver Strand (Santa Monica Outfall)	42346	2	Western Snowy Plover
Warring Wash	43262	2	Two-striped Garter Snake
Wason Barranca	42542	2	Two-striped Garter Snake
Arroyo Colorado	45271	3	Two-striped Garter Snake
Arroyo Las Posas	45051	3	Arroyo Chub
Arroyo Las Posas	45063	3	Arroyo Chub
Arroyo Las Posas	45065	3	Arroyo Chub
Arroyo Santa Rosa Trib.	46081	3	Arroyo Chub
Arroyo Simi	47011	3	Arroyo Chub, San Diego Desert Woodrat, Two-striped Garter Snake, Least Bell's Vireo, Coastal Western Whiptail
Arroyo Simi	47012	3	Arroyo Chub, San Diego Desert Woodrat, Two-striped Garter Snake, Least Bell's Vireo, Coastal

TABLE 3-2
SENSITIVE SPECIES POTENTIALLY OCCURING IN THE VICINITY OF DISTRICT FACILITIES

Channel	Reach	Zone	Sensitive Species
			Western Whiptail
Arroyo Simi	47013	3	Arroyo Chub, San Diego Desert Woodrat, Two-striped Garter Snake, Least Bell's Vireo, Coastal Western Whiptail
Arroyo Simi	47014	3	Arroyo Chub, San Diego Desert Woodrat, Two-striped Garter Snake, Least Bell's Vireo, Coastal Western Whiptail
Arroyo Simi	47015	3	Arroyo Chub, San Diego Desert Woodrat, Two-striped Garter Snake, Least Bell's Vireo, Coastal Western Whiptail
Arroyo Simi	47016	3	Arroyo Chub, San Diego Desert Woodrat, Two-striped Garter Snake, Least Bell's Vireo, Coastal Western Whiptail
Arroyo Simi	47017	3	Arroyo Chub, San Diego Desert Woodrat, Two-striped Garter Snake, Least Bell's Vireo, Coastal Western Whiptail
Arroyo Simi	47021	3	Arroyo Chub, San Diego Desert Woodrat, Two-striped Garter Snake, Least Bell's Vireo, Coastal Western Whiptail
Arroyo Simi	47022	3	Arroyo Chub, San Diego Desert Woodrat, Two-striped Garter Snake, Least Bell's Vireo, Coastal Western Whiptail
Arroyo Simi	47024	3	Arroyo Chub, San Diego Desert Woodrat, Two-striped Garter Snake, Least Bell's Vireo, Coastal Western Whiptail
Arroyo Simi	47025	3	Arroyo Chub, San Diego Desert Woodrat, Two-striped Garter Snake, Least Bell's Vireo, Coastal Western Whiptail
Arroyo Simi	47027	3	Arroyo Chub, San Diego Desert Woodrat, Two-striped Garter Snake, Least Bell's Vireo, Coastal Western Whiptail
Arroyo Simi	47031	3	Arroyo Chub
Arroyo Simi	47033	3	Arroyo Chub
Arroyo Simi	47035	3	Arroyo Chub, San Diego Desert Woodrat, Two-striped Garter Snake, Least Bell's Vireo, Coastal Western Whiptail
Arroyo Simi	47037	3	Arroyo Chub
Beardsley Wash	45241	3	Arroyo Chub, California Horned Lark and Least Bell's Vireo

TABLE 3-2
SENSITIVE SPECIES POTENTIALLY OCCURING IN THE VICINITY OF DISTRICT FACILITIES

Channel	Reach	Zone	Sensitive Species
Beardsley Wash	45243	3	Arroyo Chub, California Horned Lark and Least Bell's Vireo
Beardsley Wash	45245	3	Arroyo Chub, California Horned Lark and Least Bell's Vireo
Beardsley Wash	45247	3	Arroyo Chub, California Horned Lark and Least Bell's Vireo
Beardsley Wash	45248	3	Arroyo Chub, California Horned Lark and Least Bell's Vireo
Calleguas Creek	45021	3	Arroyo Chub and Two-striped Garter Snake
Calleguas Creek	45023	3	Arroyo Chub and Two-striped Garter Snake
Calleguas Creek	45025	3	Arroyo Chub and Two-striped Garter Snake
Calleguas Creek	45027	3	Arroyo Chub and Two-striped Garter Snake
Calleguas Creek	45033	3	Arroyo Chub and Two-striped Garter Snake
Calleguas Creek	45035	3	Arroyo Chub and Two-striped Garter Snake
Calleguas Creek	45037	3	Arroyo Chub and Two-striped Garter Snake
Conejo Creek	46011	3	Arroyo Chub and Two-striped Garter Snake
Conejo Creek	46012	3	Arroyo Chub and Two-striped Garter Snake
Conejo Creek	46013	3	Arroyo Chub and Two-striped Garter Snake
Conejo Creek	46014	3	Arroyo Chub and Two-striped Garter Snake
Conejo Creek	46015	3	Arroyo Chub and Two-striped Garter Snake
Conejo Creek	46016	3	Arroyo Chub and Two-striped Garter Snake
Dry Canyon	47386	3	Coast (San Diego) Horned Lizard
Dry Canyon	47387	3	Coast (San Diego) Horned Lizard
Happy Camp Canyon	47174	3	California Gnatcatcher
Jenny Drive Secondary	46800	3	Southern Tarplant
Pleasant Valley Rd. Drain	45133	3	California Horned Lark
Revelon Slough	45101	3	Arroyo Chub and Two-striped Garter Snake
Revelon Slough	45103	3	Arroyo Chub and Two-striped Garter Snake
Revelon Slough	45105	3	Arroyo Chub and Two-striped Garter Snake
South Branch Arroyo Conejo	46113	3	Arroyo Chub and Two-striped Garter Snake
South Branch Arroyo Conejo	46114	3	Arroyo Chub and Two-striped Garter Snake
Strathearn Canyon	47184	3	Coast (San Diego) Horned Lizard
Upland Road Drain	46051	3	Two-striped Garter Snake

would not cause adverse impacts to threatened, endangered, or sensitive species, or locally important species and communities that may currently occur at or near flood control facilities because the measures would not increase the removal of habitat or the extent of maintenance work. Incorporation of the BMPs into the flood control maintenance program would establish additional restrictions on vegetation removal (for example, BMPs 11 and 12) and on the timing of maintenance

(for example, BMPs 4, 5, and 6), which would contribute to protect such species and result in a *beneficial impact (Class IV)*.

The following discussion shows the potential impacts of the proposed BMPs on the existing operations and maintenance activities, which constitute the baseline condition for this analysis. The discussion of potential impacts of the proposed BMPs is subdivided in the following issue areas:

- General maintenance and repair activities
- Temporary water diversion activities
- Stream gauge maintenance activities
- Rodent control activities

3.4.1.3.1 General Maintenance and Repair Activities. Maintenance activities in channels and basins that remove or reduce aquatic, wetland, or riparian habitat have the potential to affect threatened, endangered, or sensitive species if the habitat being disturbed is used by such species. In instances, the maintenance activity would reduce the available habitat for these species, displace the species if present, and/or cause disturbance to foraging and nesting.

Most of the aquatic, wetland, and riparian habitats at flood control facilities are not suitable for special status species because the habitats are continually disturbed by sediment removal, herbicide spraying, and/or discing. The District's ongoing maintenance program has generally precluded the establishment and persistence of threatened, endangered, or sensitive species or locally important species within facility boundaries.

However, the District recognizes that such species can and will occur in or adjacent to maintenance areas under some circumstances. The most obvious example is the occurrence of steelhead trout in the Ventura River, and the least Bell's vireo along the Santa Clara River and Ventura River.

The effect the ongoing maintenance activities on sensitive fish and wildlife species is considered adverse in areas where sensitive species and facilities co-occur. However, the implementation of proposed BMPs 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 15, 22, and 23 (see Section 2.6.2) would reduce the contribution of future maintenance activities to this adverse effect to sensitive species. Therefore, the proposed project would result in *beneficial impacts (Class IV)* to sensitive fish and wildlife species.

3.4.1.3.2 Temporary Water Diversion. Water diversion activities that affect water quality or entrap aquatic species have the potential to affect threatened, endangered, sensitive species or locally important species if they are present. However, water diversions are temporary and are usually conducted during times when aquatic species are not expected to be present or may be present in low numbers. The effect of high sediment loading to water quality during construction and demolition of the water diversion is reduced in a short time period.

The implementation of proposed BMP 18 (see Section 2.6.2) and, therefore, the BMPs included as part of the Water Diversion Guide, as applicable (See Appendix E) would reduce the effect of water diversion activities on aquatic species and would therefore have a *beneficial impact (Class IV)*.

3.4.1.3.3 Stream Gauge Maintenance Activities. Stream gauge maintenance requires removal of riparian vegetation adjacent to flowing water. This maintenance activity is ongoing and occurs annually or every other year. In addition to the removal of vegetation that could potentially provide habitat for sensitive wildlife species, increased erosion from the denuded areas has the potential to affect aquatic species by increasing erosion and sedimentation in the waterway. The effect of ongoing stream gauge maintenance activities on sensitive aquatic species is considered minimal due to the small areas involved (approximately 8 acres total). The implementation of BMPs 4, 5, 6, 9 and 19 (see Section 2.6.2) would further protect sensitive species during stream gauge maintenance activities and would therefore have a *beneficial impact (Class IV)*.

3.4.1.3.4 Rodent Control Activities. At the nineteen critical facilities where ground squirrel emigration pressure is constant, the damage prevention program calls for the PCO to maintain anticoagulant bait stations throughout the year. Individual squirrels consume the anticoagulant bait (diaphacinone in oats) and die before they have a chance to establish new burrows in critical facility structures.

Some primary hazards to non-target special status species occur. Although most toxicant residues are metabolized and excreted, some high concentrations may still be found in the livers of deceased animals. Consequently, some secondary poisoning may occur if the dead or dying squirrel that has been consumed contains residues of the toxicant. Although most ground squirrels die in their burrows, some secondary effects on non-target species may occur.

The proposed IPM program prescribes new monitoring methods and a suite of options for rodent control (refer to Appendix F and Section 2.6.2, BMP 20). When compared to the current rodent control program, the proposed IPM program substantially alters chemical control methods to reduce both primary and secondary poisoning hazards. In addition, many non-chemical control methods have been introduced, reducing the frequency of chemical use.

The current pest control program and pilot IPM program have minimal effects on threatened and endangered species due to these species being absent from the District's critical facilities, current baiting practices, and the design of the bait stations. Implementation of BMP 20 would require the District to further minimize potential primary and secondary hazards to non-target species resulting from rodent control activities. Therefore, the BMP would have a *beneficial impact (Class IV)*.

3.4.1.4 Mitigation Measures and Residual Impacts

The proposed BMPs would not cause any adverse impacts to threatened, endangered, and sensitive species and locally important species and, as such, no mitigation measures are required or considered necessary.

3.4.2 Wetland, Riparian, and Coastal Habitats

3.4.2.1 Environmental Setting

Wetland, riparian, and coastal habitats are defined herein as vegetated areas dominated by native and/or non-native plants. The presence of plants generally stabilizes the substrate for low and moderate flow

conditions and provides structure, microhabitats and cover for wildlife, provides a source of food for invertebrates and vertebrates, and forms the basis of an ecosystem with different trophic levels and the flow of energy and organic matter through cycles of production and decomposition. These habitats provide many functions, including support for wildlife, erosion control, temperature modulation, water storage, and energy exchange.

In general, there is little to no native wetland or riparian habitat present in the flood control facilities maintained by the District. Most of the facilities were designed many years to decades ago, and do not include capacity for vegetation growth on channel and basin bottoms and banks. In addition, new facilities are also designed to function without vegetation. Hence, the proper functioning and operation of most of the existing flood control facilities in the County is predicated on the absence of vegetation. However, several recent flood control designs provide allowances for vegetation due to considerations of habitat, erosion control, water quality, and aesthetics. Maintenance of these facilities requires special precautions and substantial expense to retain the desired vegetation, while removing the undesirable vegetation.

Most of the maintenance activities conducted by the District focus on removing or managing the amount of vegetation at flood control facilities. The majority of the maintenance effort is directed toward removing plants and the sediment that provides the substrate for plants. The need to exclude vegetation is based on the original facility design, and is not at the discretion of the maintenance staff.

The District's maintenance efforts are linked to the cycle of plant colonization, growth, maturation, and senescence. The timing and method of vegetation control take into consideration this cycle. Most vegetation management is focused on controlling colonization and the early growth stages of plants in order to be cost effective. Herbicide applications that occur prior to emergence, or that are directed to young plants, are very effective. Discing of young plants is also a highly efficient control method. The District does not typically allow vegetation at a flood control facility to become woody and mature for two reasons: (1) the development of the vegetation would compromise the function and capacity of the facility and could create a flooding hazard; and (2) removal of woody plants is more expensive and time consuming than the removal of young herbaceous plants.

The continual cycle of vegetation reduction or removal by maintenance activities, followed by recolonization and regrowth favors non-native invasive species with high dispersal rates, effective colonization abilities, a wide range of tolerance to varying environmental conditions, high growth rates, and aggressive growth habits. Because of ongoing vegetation control efforts, maintained areas are mostly dominated by non-native weedy species.

Wetland and riparian vegetation in a maintained channel or basin bottoms will progress through a predictable cycle with the following stages:

1. Colonization
2. Early growth
3. Reduction or removal by maintenance
4. Absence of live plants

5. (Repeat cycle)

If the maintenance activities are delayed or postponed to the next year, the plants have the opportunity to complete their life cycle and either produce seed for another generation (annual plants), or produce biomass and seeds to persist through another year. Often, these plants become very large and more difficult to remove.

In light of the above information, the wetland and riparian habitat conditions in the maintained channels and basins can be characterized by the following three points.

- Most of the maintained flood control facilities do not support or contain native wetland and riparian habitats because of ongoing maintenance to reduce, remove, or preclude plants.
- The wetland and riparian species that colonize flood control facilities comprise primarily annual non-native aggressive and opportunistic plants. The life cycle and period of development of these plants are too short to create a fully functioning ecosystem. Hence, the habitats are generally in the early successional stages of development, and do not provide complex structure or substantial biomass.
- Much of the vegetative growth occurs in small, discontinuous patches amongst developed or barren areas, and in many cases, within cracks and fissures in hardened structures.

Most flood control facilities require some brush and weed control. Even fully lined channels can support patches of weedy plants that colonize cracks in the channel lining or accumulations of sediment on the surface of the lining. Flood control facilities that provide a substrate for wetland and riparian habitat to develop include the following:

- Channels that have a soft bottom, with or without bank protection
- Unimproved channels that are fully earthen, or that have bank protection and a soft bottom
- Improved or unimproved channels that contain ungrouted riprap bank protection
- Debris and detention basins with soft bottoms
- Areas at end of storm drain outlets where soil or sand substrate is present
- Fully lined channels where sediment has accumulated, providing a substrate for weedy invasive plants
- Access roads, side of access roads, and portions of District right-of-way outside channels

3.4.2.2 Types of Habitats

A variety of wetland and riparian habitats (including vegetated and unvegetated areas) can occur in the channel and basin bottoms or on banks, albeit under difficult conditions as described above. A summary of the major wetland and riparian habitats in and adjacent to flood control facilities with soft bottoms is provided below.

3.4.2.2.1 Channel and Basin Bottom Types.

- *Unvegetated Creek Bed and River Wash*. These are creek beds and sand bars that are devoid of vegetation due to maintenance activity, scouring, recent deposition, or very dry conditions. Many of these areas have active substrates that are mobilized during high flows. In scoured areas, the fine sediments have been removed, leaving coarse gravel and cobbles. These areas are generally located adjacent to the low flow channel. Where enough moisture is present, creek beds may be colonized by herbaceous riparian plants (see below).

- *Freshwater Marsh/Emergent Wetlands*. This habitat occurs where there is ponded water or saturated soils, usually along the low flow channel, in poorly drained portions of debris basins, and at storm drain outlets. This habitat is susceptible to periodic removal by flood flows and maintenance practices if in a District facility. It consists of a mixture of opportunistic, fast-growing perennial herbs that are common to freshwater situations throughout Southern California, including bulrush (*Scirpus* sp.), nutsedge (*Cyperus* sp.), spikerush (*Eleocharis laustris*), willow herb (*Epilobium paniculatum*), cattail (*Typha latifolia*), watercress (*Rorippa nasturium-aquaticum*), horsetail (*Equisetum telmateia*), common rush (*Juncus patens*), speedwell (*Veronica anagallis-aquaticum*), bentgrass (*Agrostis semiverticillata*), and pondweed (*Potomogeton foliosus*). Common non-native species that occur in this habitat include umbrella plant (*Cyperus alternifolius and C. eragrostis*), Johnson grass (*Sorghum halepense*), kikuyu grass (*Pennisetum clandestinum*), rabbitsfoot grass (*Polypogon monspeliensis*), knotweed (*Polygonum punctatum*), barnyard grass (*Echinochloa crusgalli*), and giant reed (*Arundo donax*).

- *Herbaceous Riparian*. A variety of small native and non-native perennial plants occur in the seasonally moist bottoms of drainages and basins. They persist by either colonizing the channel bottom each year after flows recede, or withstanding the winter flows by laying over and/or re-sprouting. In general, these species can occur as scattered individuals, or in dense stands. They occur on sandbars and within protected, moist portions of the channel bed with full or partial sunlight. Common native species include mugwort (*Artemisia douglasiana*), mulefat seedlings (*Baccharis salicifolia*), arroyo willow seedlings (*Salix lasiolepis*), saltgrass (*Distichlis spicata*), bentgrass (*Agrostis semiverticillata*), and common smartweed (*Polygonum arensastrum*). Non-native plants are also common, such as smilo grass (*Piptatherum miliaceum*), rabbitsfoot grass, pimpernel (*Anagallis arvensis*), periwinkle (*Vinca major*), curly dock (*Rumex crispus*), horehound (*Marrubium vulgare*), sow thistle (*Sonchus oleraceus*), white sweet clover (*Melilotus alba),* knotweed, and kikuyu grass. Exposed, disturbed portions of the creek bed and banks are often dominated by invasive weeds such as castor bean (*Ricinus communis*), hemlock (*Conium maculatum*), field mustard (*Hirschfeldia incana*), black mustard (*Brassica nigra)*, and wild radish (*Raphanus sativus*). Giant reed also colonizes disturbed areas, forming dense stands over time.

- *Riparian Scrub*. This habitat consists of dense thickets of arroyo willow and/or mulefat, and in some locations, giant reed. It occurs in the channel bottom or lower banks where there is periodic inundation, but infrequent scouring flows to remove the woody plants. The density and height of plants vary depending upon the amount of moisture and sunlight in the channel. Stands over five years old may be six to eight feet high (or more). This habitat is well-developed in broad, open drainages. It is a hardy vegetation that is able to withstand prolonged dry periods. Invasive non-native plants are infrequent, except for giant reed. Most riparian scrub occurs adjacent to, not within, District facilities.

3.4.2.2.2 Channel and Basin Bank Types.

- *Riparian Woodland*. This habitat consists of mature trees that occur along the middle stream terraces, slope of banks, tops of banks, and floodplain of creeks adjacent to District facilities. The most common trees include willow (arroyo, sandbar, narrow leaf and red willow), western sycamore (*Platanus racemosa*), Fremont cottonwood (*Populus fremontii*), and black cottonwood (*Populus trichocarpa).* Other less common trees include white alder (*Alnus rhombilofia*), and elberberry (*Sambucus mexicana*). This habitat is occasionally inundated by high flows. It creates a tall closed canopy over narrow drainages. A highly variable shrub understory is present with such species as blackberry (*Rubus ursinus*), poison oak (*Toxicodendron diversilobum*), nightshade (*Solanum* sp.), giant reed (*Arundo donax*), and coyote brush. Many invasive weeds and ornamental plants are present in the understory, including English ivy (*Hedera helix*), German or Cape ivy (*Senecio mikanioides or Delzieria odorata*), nasturtium, ice plant (*Carpobrotus spp*), myoporum, pittosporum, palms, and periwinkle.

- *Oak Woodland-Riparian Woodland*. This habitat occurs on the floodplain adjacent to creeks where there are deep soils to support oak trees. It consists of a mixture of riparian woodland (see above) and coast live oak (*Quercus agrifolia*) woodland. In closed canopy woodlands, the understory is dominated by shade tolerant shrubs and woody vines such as nightshade, poison oak, and blackberry. In openings in the canopy, common understory shrubs include California sagebrush and coyote brush. The understory may also contain escaped ornamental plants, such as English ivy, German ivy, periwinkle, and nasturtium.

  Along some drainages, the habitat consists of a mixture of coast live oak and western sycamore trees. The latter rise above the oak trees and provide patches of sunlight in the late winter and early spring when they are leafless. Many of the understory shrubs and herbs in coast live oak woodland appear in this vegetation type, particularly poison oak and blackberry. Other characteristic species include mugwort, horsetails, and willow. Frequent non-natives include eucalyptus, castor bean, myoporum, and periwinkle.

- *Eucalyptus Woodland*. This habitat comprises a monoculture of large non-native evergreen trees, primarily blue gum (*Eucalyptus globulus*). These trees were planted in Ventura County in the late 1800s for both lumber and windbreaks, and have spread throughout the landscape, particularly along drainages. The stands usually occur on terraces above creeks and basins. There is little to no understory. The woodlands generate a tremendous amount of litter, branches, and downed trees that often are deposited into creeks and create debris dams. This habitat is generally located outside any maintenance work areas.

- *Non-native Grassland*. This very common upland habitat type is dominated by widespread non-native grasses and herbs including Italian ryegrass (*Lolium multiflorum*), wild oat (*Avena* sp.), and brome (*Bromus* sp.). The habitat occurs primarily on both disturbed and undisturbed exposed banks with limited seasonal moisture within and adjacent to District facilities. These areas often have scattered invasive weeds (see Ruderal/Disturbed) and coastal sage scrub species. Annual mowing for fire abatement occurs within District right of way at many facilities.

- *Ruderal/Disturbed*. This common habitat occurs on channel and basin banks and bottoms that have been disturbed by erosion or maintenance, and have become colonized with aggressive weeds, such as wild fennel (*Foeniculum vulgare)*, black mustard, castor bean, cheeseweed (*Malva parvifolia*),

and wild radish, Italian thistle (*Carduus* sp.), milk thistle (*Silybum marianum*), white sweet clover, cocklebur, ox tongue (*Picris echioides*), horseweed, tree tobacco (*Nicotiana glauca*), and others.

- *Coastal Sage Scrub*. This habitat consists of a low, dense to sparse scrub dominated by coyote brush, California sage brush (*Artemisia californica*), goldenbush (*Isocoma venetus*), morning glory (*Calystegia macrostegia*), California buckwheat (*Eriogonum fasciculatum*), giant wild rye (*Leymus condensatus*), and annual non-native grasses (see above). Coastal sage scrub occurs on rocky, well-drained upper banks and terraces, usually with a south facing aspect. Elderberry trees are often found associated with coastal sage scrub stands. Coastal sage scrub occurs primarily adjacent to maintained portions of District facilities as it does not tolerate routine mowing or disking.

3.4.2.2.3 Habitat Conditions in Maintained Channels and Basins. Surveys throughout the County of maintained channels that have earthen bottoms and/or banks where there is the greatest potential for wetland and riparian habitats to develop were conducted in March and April 2003. Over 350 reaches of 104 individual flood control channels were examined by biologists from URS Corporation. At each reach, the predominant habitat type in the channel bottom and on the channel banks, was recorded and documented with a photograph. The results are summarized in Charts 3-1 and 3-2. These data indicate that most channel banks are barren (over 60 percent of the reaches observed), and that the remainder contained a wide variety of non-native, weedy, ornamental, and native vegetation. Approximately 15 percent of the facilities contained woody riparian vegetation, such as willow woodland, on one or both banks (Chart 3-1). It is important to note that the survey depicts overall habitat conditions at that point in time, and should not be considered an accurate representation of the maintained conditions at all facilities.

The channel bottoms exhibited a similar vegetation pattern. About half of the reaches observed did not support any vegetation on the channel bottom. However, native wetland and riparian habitats occurred on about 20 percent of the reaches.

In general, debris and detention basins bottoms are either barren and devoid of vegetation, or have a cover of annual weeds that have recently colonized the basins. The District routinely removes sediments and vegetation from the basin bottoms to maintain their functions; hence, vegetation on the bottom of a basin is typically a temporary condition.

3.4.2.3 Thresholds of Significance

The applicable threshold criteria for this resource issue from the Ventura County Initial Study Assessment Guidelines are as follows:

- *6.C.2. Biological Resources – Wetlands. Threshold Criteria. A significant impact would result from the direct reduction or, or a substantial indirect impact to, a significant wetland habitat. All wetlands are potentially significant; therefore, a qualified biologist must make a determination of significance in consultation with the California Department of Fish and Game during initial consultation.*

- *6.C.3. Biological Resources – Coastal Habitats. Threshold Criteria. According to the State Coastal Act and the County's Local Coastal Program, virtually any direct reduction of, or indirect impact to, a Coastal Habitat could be considered significant.*

Chart 3-1: Dominant Vegetation on Banks of Earthen or Partially Lined Maintained Channels

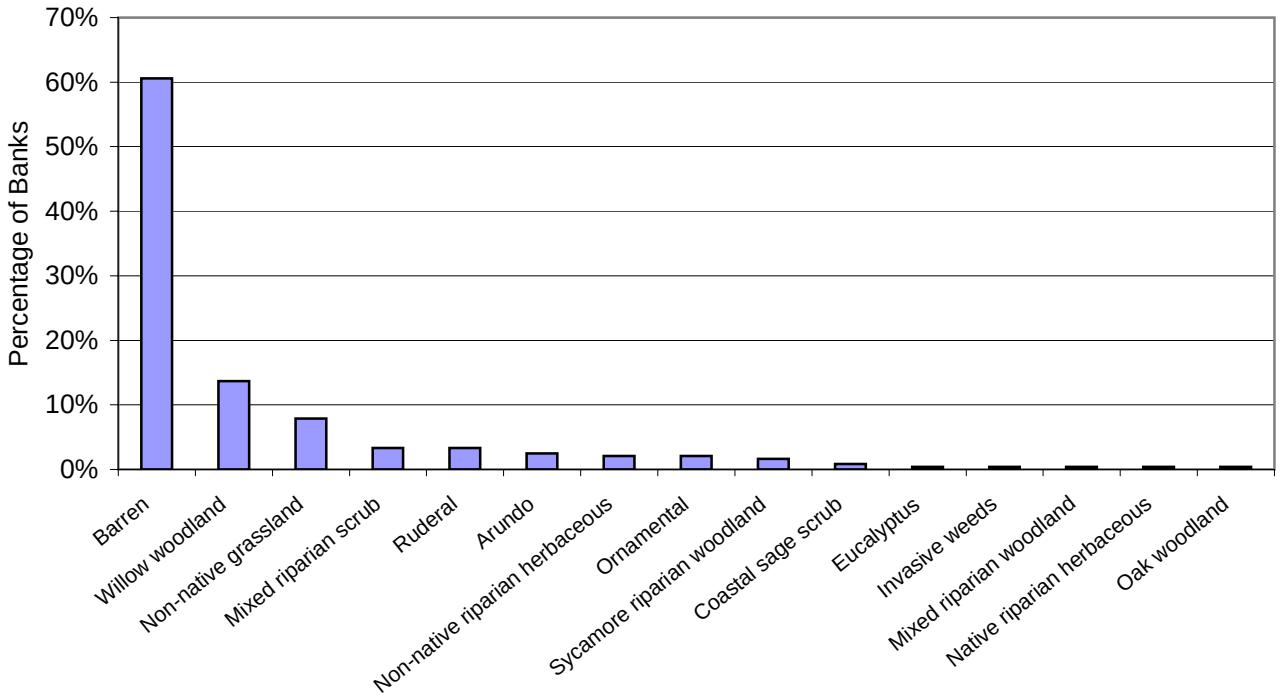
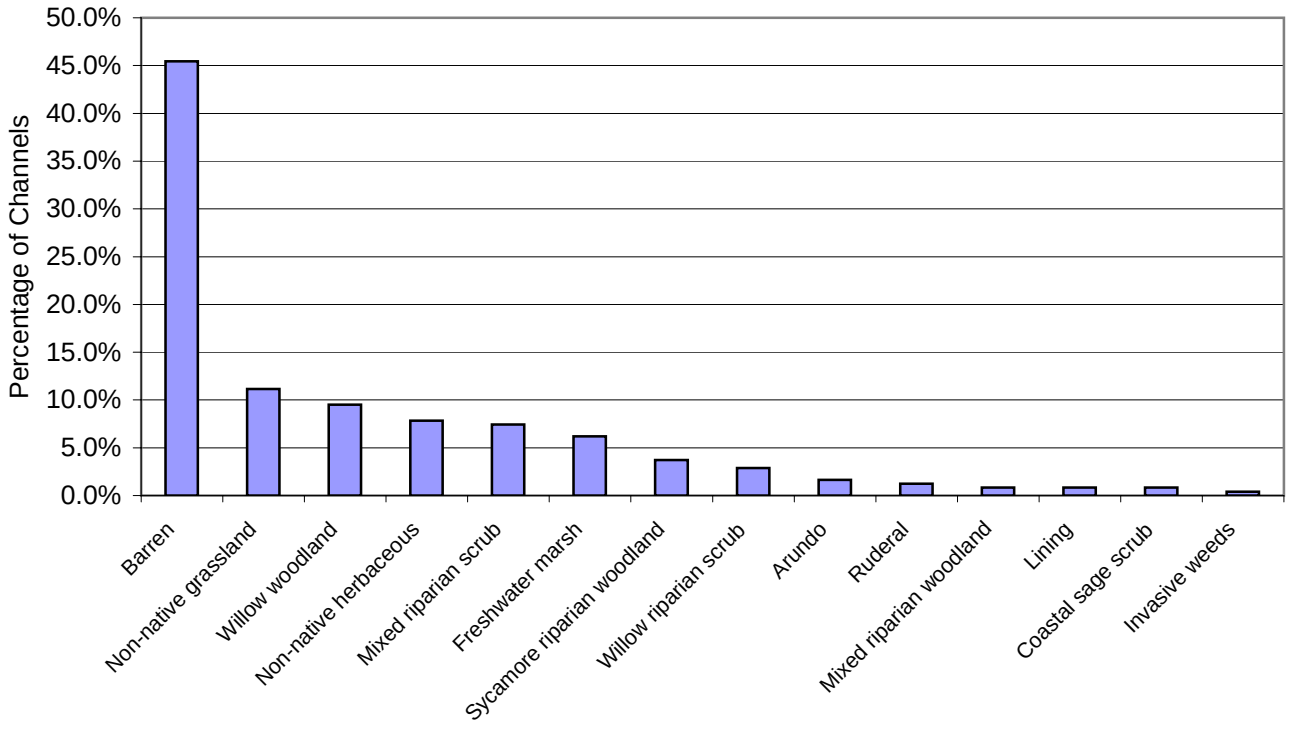


Chart 3-2: Dominant Vegetation on Bottom of Earthen and Partially Lined Maintained Channels



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3.4.2.4 Potential Impacts of the Proposed BMPs

The proposed BMPs have been designed to ***reduce*** incidental effects of routine maintenance activities on the environment while ensuring that the required maintenance activities are completed in a cost effective manner and meet the performance standards established for each facility. The BMPs would not cause adverse impacts to existing wetland and riparian habitats at or near flood control facilities as the measures would not involve the removal of native plants, increase herbicide and pesticide use, or increase the extent of maintenance work. Incorporation of the BMPs into the flood control maintenance program would result in a *neutral to beneficial impact (Class IV)* on wetland and riparian habitats in the County's watersheds, as detailed in the discussion below.

The following discussion shows the potential impacts of the proposed BMPs on the existing operations and maintenance activities, which constitute the baseline condition for this analysis. The discussion of potential impacts of the proposed BMPs is subdivided in the following issue areas:

- General maintenance and repair activities
- Temporary water diversion activities
- Stream gauge maintenance activities
- Rodent control activities

3.4.2.4.1 General Maintenance and Repair Activities.

Disturbance of Wetland and Riparian Habitats during Routine Brush and Weed Control.
The following maintenance activities remove or reduce wetland and riparian vegetation from channel and basin bottoms and banks in order to maintain conveyance capacity:

- Sediment Cleanout in Unimproved and Improved Channels (PT 20-28)
- Removal of Sediments from Pump Station Beach Outlet [*vegetation is usually absent from beach outlets*] (PT29)
- Channel Earthwork (PT32, PT33, PT34)
- Basin Sediment Removal (PT35, PT36, PT37)
- Brush and Weed Control by Herbicide Spraying with Boom (PT41)
- Weed Control by Hand Spray (PT42)
- Weed Control, Hand Crew (PT 43)
- Weed Control for Fire Abatement (PT48)
- Tumbleweed Abatement (PT49)
- Work Release Weed Control Crews (PT92)

Vegetation is removed or reduced by herbicides, sediment excavation by hand, scraping, or discing. These actions cause a temporary reduction in vigor and/or cover of wetland and riparian plants that are present, as well as any weedy species. In most cases, the effect is temporary. New plants recolonize the disturbed areas, typically the same species that were present prior to the maintenance activity. If left unmaintained, the natural successional process may lead to development of more complex and woody phases of vegetation, such as freshwater marsh and willow woodland. The affected wetland and riparian habitats in channel and basin bottoms are adapted to periodic catastrophic disturbance from flooding. Hence, some maintenance work simulates the effect of certain natural disturbances.

It should be recognized that many areas disturbed by maintenance will not return to native vegetation. Disturbed areas often become colonized by aggressive weeds that dominate the site and exclude native plants. Moderate to intense vegetation management can result in the conversion of native vegetation to non-native vegetation. The periodic disturbances associated with maintenance provide a competitive advantage to non-native weeds. Continual management of weedy species at facilities reduces negative effects by minimizing opportunities for these species to spread to nearby habitats.

The amount of wetland and riparian habitats affected each year varies greatly due to the varying number of maintenance locations, and the varying sizes of work areas. During the period 1998-2003, the average annual amount of sediment removal in unimproved channels was about 15,000 cubic yards, which is likely to represent less than one linear mile of channel. The average annual length of improved channels that were cleaned was about 130 miles – most of these channels contained concrete bottoms, and as such, little to no wetland and riparian habitats were present. About 4,400 acres of channels, basin bottoms, and District right-of-way were sprayed with herbicide each year during 1998-2003, some of which contained early seral wetland and riparian plants. It is important to note that the County has approximately 1,980 miles of channels, which include "blueline" and "redline" channels. The total linear miles of existing "blueline" channels (i.e., channels that are blue lines on a USGS Quad map and are considered "waters of the US") within the County is approximately 1,747 miles. The linear miles of "redline" channels, which correspond to the facilities maintained by the District, is significantly less: approximately 230 miles.

The existing routine maintenance activities affect a substantial area of wetland and riparian habitats during routine vegetation control throughout the County over time. The District has developed several BMPs (Nos. 10, 11, 12, 13, 15, 22, and 23; see Section 2.6.2) that would reduce the contribution of future maintenance activities to the disturbance of wetland and riparian habitats during vegetation control, and would therefore have a *beneficial cumulative impact (Class IV)*. However, the District has not been able to identify feasible BMPs that would fully mitigate the effect of ongoing and future maintenance on wetland and riparian habitats without hindering the required channel and basin maintenance to ensure adequate conveyance or storage capacity.

Loss or Disturbance of Wetland and Riparian Habitats During Repair Work. The following maintenance activities involve physical disturbances to channels or basins in order to repair or reconstruct roads and structures:

- Pipe and Wire Revetment Repair, Riprap Repair, Bank Protection Construction Stabilizer Construction/Repair, and Concrete Construction/Repair (PT68, PT70, PT72, PT74, PT76)

These activities may require or result in the removal of early seral wetland and riparian habitats that are present in the work areas. Much of this disturbance is temporary, and the affected areas are allowed to recover naturally. In addition, the extent of the areas temporarily disturbed to allow the repair is usually very small. Therefore, the temporary and permanent losses of early seral wetland and riparian habitats due to routine repair activities are considered adverse, but not substantial.

The District has developed BMPs (Nos. 15, 16, and 22; see Section 2.6.2) that would further reduce the contribution of future maintenance activities to the disturbance of wetland and riparian habitats during repair work, and would therefore have a *beneficial cumulative impact (Class IV)*.

3.4.2.4.2 Temporary Water Diversion. Water diversions result in temporary disturbances to channel beds and basins. Under routine conditions, water diversions will not result in the permanent removal of wetland and riparian habitats. Therefore, no specific BMPs were developed to address effects of temporary water diversion to riparian habitat.

3.4.2.4.3 Stream Gauge Maintenance Activities. Stream gauge maintenance activities require the removal of wetland and riparian habitats that are present in the work areas. Because vegetation clearance is conducted annually or every other year, the removal of wetland and riparian habitat is sustained over time and is not considered temporary. The affected areas are subject to re-colonization and regrowth of plants until the next clearance event. The estimated area of vegetation removal for all stream gauge stations is approximately 8 acres. The proposed BMPs would not increase disturbance of wetland or riparian habitat, and therefore would have *no impact* on the effects of stream gauge maintenance activities on wetland or riparian habitat.

3.4.2.4.4 Rodent Control Activities. Rodent control activities within the District are conducted at critical facilities which are devoid of vegetation or habitat, as required by the DSOD or federal agency sponsor. As such, no riparian or wetland habitats are associated with rodent control. Therefore, the proposed BMPs would have *no impact* on the effects of rodent control activities on wetland and riparian habitat.

3.4.2.5 Mitigation Measures and Residual Impacts

The proposed BMPs would not cause any adverse impacts to wetland, riparian, and coastal habitats. As such, no mitigation measures are required or considered necessary.

3.4.3 Aquatic Habitats and Organisms

3.4.3.1 Environmental Setting

For many watercourses in Ventura County, water is only present during the winter and spring due to runoff from rain events. By the fall, flows have decreased substantially and aquatic habitats are either absent or present in small isolated locations. However, there are drainages with perennial flows (e.g., San Antonio Creek, Ventura River, Calleguas Creek, etc.) due to natural spring and bank seepage,

urban runoff, agricultural return flows, industrial discharges, and wastewater discharges. The presence of water creates aquatic habitat that can be used by fish, aquatic insects, and aquatic invertebrates. In addition, aquatic habitat provides water for terrestrial wildlife, and food for wading birds and waterfowl.

The most common aquatic habitat in maintained drainages and basins is the low-flow channel. Other aquatic habitat types may include in-stream pools formed in the main channel in a scour hole, off-stream pools formed from a previous scouring event, pools created by a road or bridge crossing due to upstream impoundments or downstream scouring, and pools created in low-lying portions of basins that do not completely drain. The size, depth, and water temperature of these aquatic habitat features vary considerably, primarily due to rainfall and runoff conditions and presence/absence of shade. In addition, some pools will only persist for weeks after runoff events, while others may persist all year due to summer inflows.

All aquatic habitats in channels and basins are subject to periodic disturbances from winter storm flows. These flows carry and deposit sediments, seeds, and organic debris (e.g., stems, downed trees). New sandbars are formed and old ones are destroyed. Stands of vegetation are eroded by high flows, and new areas are created where vegetation becomes established by seeds or buried stems. Flows can change the alignment of the low flow channel, the number and location of pools, and the depth of pools. In addition, sediment removal from channel and basin bottoms can create low-lying areas that collect water in the subsequent years, creating new aquatic habitat.

Hence, the aquatic habitats of maintained channels and basins, when present, are in a constant state of creation, development, and disturbance. The diversity of habitat conditions at any one time can support a variety of aquatic invertebrates, aquatic plants, and fish in some watercourses.

3.4.3.2 Thresholds of Significance

The most applicable threshold criterion for this resource issue from the Ventura County Initial Study Assessment Guidelines is as follows:

> *6.C.4. Biological Resources – Migration Corridors. Threshold Criteria. A significant impact to a migration corridor would result if a project would substantially interfere with the use of said area 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.*
>
> *6.C.5. Biological Resources – Locally Important Species/Communities. Threshold Criteria. Since this group of species/communities is so diverse, significance determination must be made by a qualified biologist on a case by case basis.*

3.4.3.3 Potential Impact of Proposed BMPs

The proposed BMPs have been designed to ***reduce*** incidental effects of routine maintenance activities on the environment while ensuring that the required maintenance activities are completed in a cost effective manner, and meet the performance standards established for each facility. The BMPs would not cause adverse impacts to existing aquatic habitats within flood control facilities because the measures would not involve the removal of pools or live streams, or increase the extent

of maintenance work. Incorporation of the BMPs into the flood control maintenance program would have *neutral or beneficial impacts* to aquatic habitats, in the County's watersheds *(Class IV)*, as detailed in the discussion below.

The following discussion shows the potential impacts of the proposed BMPs on the existing operations and maintenance activities, which constitute the baseline condition for this analysis. The discussion of potential impacts of the proposed BMPs is subdivided in the following issue areas:

- General maintenance and repair activities
- Temporary water diversion activities
- Stream gauge maintenance activities
- Rodent control activities

3.4.3.3.1 General Maintenance and Repair Activities. The following maintenance activities remove or reduce aquatic habitat from channel and basin bottoms and banks during the course of the maintenance work, which could occur throughout the year:

- Sediment Cleanout in Unimproved and Improved Channels (PT20-28)
- Removal of Sediments from Pump Station Beach Outlet [*vegetation is usually absent from beach outlets*] (PT29)
- Channel Earthwork (PT32, PT33, PT34)
- Basin Sediment Removal (PT35, PT36, PT37)

Aquatic habitat (if present at the time of scheduled maintenance) would be directly removed or disturbed by sediment excavation, scraping, or discing. The effect would be most severe if it resulted in the complete destruction of the aquatic feature. In some instances, the aquatic feature, such as a pool or low flow channel, would return, and the effect would be temporary. The nature and extent of effects on aquatic organisms would vary considerably based on site specific conditions and the time of year.

The effect the ongoing maintenance activities on sensitive fish and wildlife species is considered adverse in areas where sensitive species and facilities co-occur. The District has developed several BMPs (Nos. 1, 8, 9, 10, 11, 12, 13, 15, 22, and 23; see Section 2.6.2) that would reduce the contribution of future maintenance activities to the disturbance of aquatic habitats, and thus have a *beneficial impact (Class IV)*. However, the District has not been able to identify feasible BMPs that would fully mitigate the effect of ongoing routine maintenance on aquatic habitats without hindering the required channel and basin maintenance to ensure adequate conveyance or storage capacity.

The impact of herbicide use on aquatic habitats would be the same as that described in Section 3.3.3.

3.4.3.3.2 Temporary Water Diversion. Water diversions have the potential to affect aquatic habitat by increasing siltation and turbidity as a result of alterations in channels bottoms and basins. The construction of the water diversion and its removal would result in temporary increases of total

settleable and suspended solids as well as turbidity within the waterway. During low flows, this may have the temporary effect of reducing dissolved oxygen concentrations. During construction, the application of erosion and sediment controls can significantly reduce the amount of sediment discharged to the waterway. However, BMPs cannot completely remove all sediments discharged to the waterway, particularly at beginning and end points of the water diversion.

The District has developed BMP 18, and the VCWPD Water Diversion Guide, which is attached as Appendix E to the Program EIR (see Section 2.6.2). The effect of water diversion on aquatic habitats is considered minimal due to the temporary and reversible nature of the activity. The use of the Water Diversion Guide (part of BMP 18) would further reduce the effects of increased sediment in waterways as a result of water diversion and have a *beneficial impact (Class IV)*.

3.4.3.3.3 Stream Gauge Maintenance Activities. Stream gauge maintenance activities are limited to the removal (cutting) of vegetation from the channel banks and bed. As the roots are left intact and there is vegetation growth in the spring season, stream gauge maintenance activities do not increase erosion during storm events and do not increase sediment and turbidity, which could have the potential to affect aquatic habitat. In addition, due to the limited extent of the vegetation clearing associated with stream gauge maintenance (total 8 acres), the effect of gauge maintenance work that increases sedimentation is considered a minimal.

The following proposed BMPs would reduce the contribution of future maintenance activities to this effect and therefore have a *beneficial impact (Class IV)*: BMPs 4, 5, 6 and 19 (see Section 2.6.2).

3.4.3.3.4 Rodent Control Activities. Rodent control activities within the District are conducted at critical facilities with unvegetated banks. As such, there is a potential that stormwater runoff could become contaminated by contact with bait stations (rodenticides). However, the effect is considered minimal due to the limited exposure of bait to stormwater.

Proposed BMP 20 (Section 2.6.2) would provide additional restrictions that would further reduce the probability of stormwater contact with rodenticides that could affect aquatic habitat, therefore having a *beneficial impact (Class IV)*.

3.4.3.4 Mitigation Measures and Residual Impacts

The proposed BMPs would not cause adverse impacts to aquatic habitat, and as such, no mitigation measures are required or considered necessary.

3.5 HYDRAULIC HAZARDS

As mentioned in the Initial Study (Appendix A), erosion, siltation, and flooding hazards are ubiquitous throughout Ventura County and are addressed in the Ventura County Public Works Agency, Flood Control District Standards and Specifications Design Manual. Erosion and siltation hazards are required to be considered within the existing framework of grading and building code ordinances, which apply to all sites and projects. The BMPs would contribute to the appropriate maintenance of flood control facilities and would neither adversely affect the operation of any flood

control facilities, nor cause an increase in flood hazard. Therefore, hydraulic hazards addressed in this section are those related to erosion and siltation resulting from implementation of the BMPs.

3.5.1 Environmental Setting

Flood control maintenance activities occur in or adjacent to watercourses throughout the County, including rivers, creeks, streams, and man-made drainages in three major watersheds: the Ventura River, Santa Clara River, and Calleguas Creek watersheds. The length, width, and channel dimensions for natural watercourses in the County vary greatly, and range from the small intermittent creeks in the headwaters to the very large channel of the Santa Clara River.

Most of the watercourses in the County have been modified to varying degrees. The most common modifications have reduced the width and altered the alignment of natural channels to allow for adjacent urban development or agriculture. In addition, engineered improvements such as grouted and ungrouted riprap, reinforced concrete, and other materials are common in urban areas and adjacent to some agricultural land, and comprise a substantial portion of the District's linear facilities.

The District only maintains flood control facilities. Such facilities have been designed and constructed to address a flooding problem or bank erosion that contributes to flooding, which affect public and private property and public infrastructure. While most of the maintained facilities are located within watercourses, facilities are not natural undisturbed rivers, creeks, and streams. They have been modified in some manner to address a flood control problem. Table 2-1 summarizes linear facilities maintained by the District.

Flood control channels are subject to ongoing maintenance to retain their design conveyance capacity. Maintenance includes vegetation reduction or removal, sediment removal, and repair of any lining or bank protection. As such, these facilities operate at or near their design capacity, thereby reducing flooding hazards in adjacent urban, suburban, industrial, commercial, and agricultural areas.

Most of the District's debris and detention basins are also located within watercourses. By their nature, the basins have altered the hydrology of the watercourses, typically reducing peak downstream flows and the sediment loading. Basins are subject to ongoing maintenance.

3.5.2 Thresholds of Significance

The applicable threshold criterion for this resource issue from the Ventura County Initial Study Assessment Guidelines is as follows:

> *"15a.B. Erosion/Siltation. Threshold Criteria. Erosion/Siltation hazards are ubiquitous throughout Ventura County and are accommodated by the Ventura County Public Works Agency, Flood Control District Standards and Specifications Design Manual. Erosion/siltation hazard is required to be considered within the existing framework of grading and building code ordinances which apply to all sites and projects. Special threshold criteria for erosion/siltation hazard are thus not established."*
>
> *"15b.B. Flooding Hazard. Threshold Criteria. Flooding hazards are ubiquitous throughout Ventura County, and are accommodated by the Ventura County Building Code and Ventura County Public Works,*

Flood Control District Standards and Specifications Design Manual. The effects of flooding hazards are required to be considered within the existing framework of grading and building code ordinances which apply to all sites and projects."

3.5.3 Potential Impact of the Proposed BMPs

The BMPs would not adversely affect the operation of any flood control facilities, nor cause an increase in flood hazard or bank erosion. The proposed BMPs have been designed to ***reduce*** incidental effects of routine maintenance activities on the environment while ensuring that the required maintenance activities are completed in a cost effective manner, and meet the performance standards established for each facility.

There are no incidental or unintended erosion/siltation or flood hazard impacts resulting from implementation of the BMPs because the BMPs are focused on preventing unnecessary or excessive removal of native vegetation, minimizing erosion and sedimentation, maintaining natural hydraulic and hydrologic functions of drainages, avoiding deleterious releases of herbicides, and reducing adverse effects on sensitive fish and wildlife species. In summary, incorporation of the BMPs into the flood control maintenance program would have the *beneficial impact (Class IV) of reducing erosion* and would not cause any adverse effects on the flooding hazards conditions of the County's watershed, as detailed below.

The following discussion shows the potential impacts of the proposed BMPs on the existing operations and maintenance activities, which constitute the baseline condition for this analysis. The discussion of potential impacts for the proposed BMPs is subdivided in the following issue areas:

- General maintenance and repair activities
- Debris basin maintenance and repair activities
- Temporary water diversion
- Stream gauge maintenance activities

3.5.3.1 General Maintenance and Repair Activities

The District's maintenance program is designed to ensure the proper operation of flood control facilities that were designed to reduce flooding and associated bank erosion hazards in developed areas of the County. These facilities have contributed to the alteration of the natural hydrologic and hydraulic conditions in the affected watersheds. Other contributing factors include groundwater pumping for agricultural and municipal uses, and urban and agricultural development. Typical effects resulting from flood control improvements include the following:

- Higher peak flow volumes and velocities due to channelization, loss of floodplain storage, and paving of watershed
- Decreased sedimentation in downstream areas, which increases channel bed scouring and bank erosion

- Creation of over-steepened banks due to channel bed degradation, which requires hardened bank protection to stabilize
- Increased localized velocities due to bank protection and hydraulic bottlenecks at bridges and culverts

The modification of the natural hydrologic and hydraulic conditions in the watersheds of Ventura County began well before the formation of the District as the County's agricultural industry expanded in the late 1800s. The construction and maintenance of modern flood control facilities beginning in the 1940s in response to urban development pressures and flood damage suffered by agricultural producers has contributed to the alteration of regional hydrologic conditions relative to the pre-development watershed condition.

While land uses and the presence of flood control facilities have altered hydrologic and hydraulic functions in urbanized areas and agricultural lands, flood hazards in the developed floodplains of the County have been reduced. The continual maintenance of these facilities ensures public health and safety, and provides a fundamental benefit to the social and economic well being of the County's residents. Hence, the maintenance of flood control facilities as a component of the developed landscape of the County is considered beneficial, as it protects life and property and benefits society.

Incorporation of the BMPs into the flood control maintenance program would not cause any significant adverse effects on the current hydrologic and hydraulic conditions of the County's watershed because the proposed BMPs would not result in the creation of new facilities, design modifications, or expansion of existing facilities. In addition, it is important to note that the County has approximately 1,980 miles of channels, of which only 230 miles are facilities maintained by the District. Therefore, the proposed BMPs would not increase peak flow volumes and velocities, or significantly modify the existing hydrologic and hydraulic conditions. *Less than significant impacts to flood hazards would occur (Class III).* In addition, proposed BMPs 2, 3, and 17 would further reduce the potential for erosion and siltation during routine maintenance activities, and therefore have a *beneficial impact (Class IV).*

3.5.3.2 Debris Basin Maintenance and Repair Activities

The construction and operation of debris basins in the watersheds of the County has contributed to reduced sediment supplies to local beaches, which in turn, contributes to coastal beach erosion. Other significant contributing factors are water supply dams (Matilija, Santa Felicia, Casitas, Twitchell, and Bradbury) and offshore canyons (e.g. Mugu) where beach sand is removed from the littoral sand transport process. Sediments removed from debris basins during routine maintenance are not typically returned to the beach because hauling costs are prohibitive. Maintenance of debris basins have contributed to this regional effect on shoreline conditions.

Incorporation of the BMPs into the flood control maintenance program *would not have any impact* on the contribution of sediment supplies to local beaches.

3.5.3.3 Temporary Water Diversion

Routine maintenance and repair of flood control facilities may require the temporary diversion of surface waters within channels and debris basins. The water diversions are temporary, of short duration, and are typically conducted as part of maintenance activities timed to occur outside of the rainy season. These water diversions are designed with adequate capacity so as to accommodate existing and small storm flows without restriction. As such, the temporary water diversions associated with maintenance activities have no substantial effect on the natural hydrologic functioning of local watersheds, flood hazards, or erosion hazards and no BMPs have been identified to address this minimal effect. *No impacts* would occur from the implementation of the BMPs.

3.5.3.4 Stream Gauge Maintenance Activities

The District operates a number of stream gauge monitoring stations located on bridges spanning several waterbodies and channels within the County. These stations are used for the collection of flow data. The routine maintenance of stream gauge monitoring sites within the County requires the removal of vegetation (vegetation is cut to ground level) a distance of 50 feet upstream and 50 feet downstream of the monitoring site. The purpose of the vegetation removal is to obtain laminar flow upstream and downstream of the monitoring equipment and subsequently a more accurate measurement of in-stream flow. The removal of the vegetation has a short-term effect on localized flow regimes adjacent to the stream gauge station; removal of the upstream vegetation allows for a temporary increase in flow velocity relative to flow volume within the cleared channel length. This effect is limited due to the limited extent of the cleared area in relationship to the watershed. Downstream of the stream gauge station clearance zone, riparian vegetation acts to restrict flow and the flow regime quickly returns to natural conditions.

Incorporation of the BMPs into the flood control maintenance program would not cause any significant impacts on the current hydrologic and hydraulic conditions of the County's watershed because no increase in the area or intensity of maintenance is proposed. In addition, proposed BMP 19 would further reduce the potential for erosion and siltation during stream gauge maintenance activities, and therefore have a *beneficial impact (Class IV)*.

3.5.4 Mitigation Measures and Residual Impacts

The proposed BMPs (see Section 2.6.2) would not cause any hydraulic hazards impacts, and as such, no mitigation measures are required or considered necessary.

4.1 CUMULATIVE IMPACTS

The cumulative environmental impacts of the proposed BMPs are evaluated at a programmatic level (CEQA Guidelines Section 15168). A program level impact analysis is appropriate because the implementation of the BMPs will occur for a variety of maintenance activities, over a wide geographic area with diverse environmental conditions, and over a long period of time. The information on cumulative impacts will be considered when the District Board of Directors takes action on the proposed project.

This Program EIR evaluates whether the cumulative impacts of implementing the proposed BMPs are cumulatively considerable. "Cumulatively considerable" 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 (CEQA Guidelines Section 15064(h)(1)). The discussion of cumulative impacts reflects the severity of potential impacts and their likelihood of occurrence, but the discussion does not provide as great detail as is provided for the effects attributable to the project alone, which are presented in Section 3 of this document (CEQA Guidelines Section 15130(b)).

The Program EIR uses the information contained in applicable general plans as the basis for the cumulative analysis, due to the regional nature of potential impacts from implementation of the BMPs. CEQA Guidelines Section 15130(d) allows previously approved general plans to be used in cumulative impact analysis. No further cumulative impacts analysis is required when a project is consistent with a general plan where the lead agency determines that the areawide cumulative impacts of the proposed project have already been adequately addressed, as defined in CEQA Guidelines Section 15152(f), in a certified EIR for that plan[1].

4.2 AREAWIDE CONDITIONS IN VENTURA COUNTY

The following is a summary of projections contained in the Ventura County General Plan (Ventura County, 2005), which describes areawide conditions contributing to potential cumulative impacts (CEQA Guidelines Section 15130(b)(1)(B)).

4.2.1 Land Use

The Ventura County General Plan Land Use Appendix shows the potential future land use acreage, population, and housing based on future development according to adopted general plans for the County and cities. Future population for Ventura County would range from 751,593 to 1,422,805 and the future number of dwelling units within the County would range from 263,360 to 503,940. The employment holding capacity would be approximately 410,293 countywide. The Land Use Appendix of the Ventura County General Plan also shows the 2020 countywide population forecast,

[1] If a cumulative impact was adequately addressed in a prior EIR for a community plan, zoning action, or general plan, and the project is consistent with that plan or action, then an EIR for such a project should not further analyze that cumulative impact, as provided in Section 15183(j) (CEQA Guidelines Section 15130 (e)).

which is expected to be approximately 906,479 people. The 2020 dwelling unit forecast is 309,758 units countywide.

4.2.2 Air Quality

Ventura County does not meet State and Federal standards for ozone. The adopted strategies and methods for enhancing the County's air quality are listed in the Air Quality Management Plan (AQMP). The Ventura County General Plan states that these measures should be implemented through conditions of approval of discretionary entitlements and the goals, policies, and programs of the County General Plan. In addition, particulate matter (PM_{10}) concentrations in Ventura County exceed the state 24-hour air quality standard. Ventura County is also a nonattainment area for the state PM_{10} and $PM_{2.5}$ annual average standards.

4.2.3 Water Quality

Water quality of the major reservoirs (Lake Casitas, Lake Piru, and Bard Reservoir) has remained constant and is generally of good quality. However, during rainy periods, Lake Casitas exceeds the State domestic water turbidity maximum contaminant standard. Lake Casitas received a compliance order from the State Department of Health Services to meet this standard by January 1992. Recent and upcoming revisions to State drinking water standards have also required additional treatment of the domestic waters of the County. Surface water quality of County rivers and streams fluctuates from season to season but is adequate in most areas for agricultural use.

Contamination of surface and groundwater can occur due to urban, industrial, and agricultural runoff, septic system failure, hillside agricultural erosion, abandoned water wells, underground storage tanks, and various point sources. Mining or flood control operations in river channels can affect surface water quality including increasing turbidity. Seawater intrusion can contaminate the County's groundwater resources, and the County General Plan recommends participation in the Seawater Intrusion Abatement Program to address this problem. Groundwater resources are most susceptible to contamination at aquifer recharge areas. Depletion or degradation of water resources could be prevented by effective resource management. The County implements several programs to protect surface and groundwater quality, such as the Urban Runoff Program and Hillside Erosion Control Ordinance, which are administered by the County Public Works Agency.

4.2.4 Biological Resources

Existing management and land use practices within Ventura County sometimes conflict with the protection and preservation of the County's plant and animal species. The activities that have the greatest effects on various biological communities are urbanization and other forms of human intrusion. Problems related to urbanizing pressures, such as increased fire danger, as well as water, air and noise pollution, have contributed to the degradation and/or destruction of many habitats countywide. Introduction of predators and human harassment have affected wildlife and introduction of invasive nonnative species has disrupted plant communities. Protection can usually be accomplished through appropriate project design after a site survey and project reviews performed by a qualified biologist. The following is a description of Ventura County's biological

resources, based on information available in the Resources Appendix of the Ventura County General Plan (Ventura County, 2005).

4.2.4.1 Native Vegetation

The diverse climate and topography in Ventura County have given rise to establishment of a wide range of plant communities. Native vegetation in Ventura County can be categorized into seven general plant communities: grasslands, coastal sage - scrub, chaparral, oak woodland, riparian, pinyon - juniper, and timber - conifer. In the ***south half of the County***, much native vegetation has been extirpated due to urban and agricultural development. For the most part, this development is confined to the fertile valleys and plains, and along the coastline. Consequently, most of the mountainous areas in the south half still support significant native plant communities. Chaparral is the most common type of vegetation association in the County and consists of many species of woody shrubs which can attain heights greater than twelve feet and are often densely arranged. The coastal sage - scrub association contains many plants of the chaparral, but is located at lower elevations (generally below 3000 feet) and is dominated by sages that are generally only three to four feet in height and are more widely spaced than those in the chaparral. Grassland vegetation is not common, and as groundcover, is usually associated with oak woodland or open areas. The oak woodland community in Ventura County contains the easily identifiable valley oaks, with trees 20 to 60 feet tall and grassland and soft shrubs as groundcover, as found in the Thousand Oaks, Lake Casitas, and Hidden Valley areas. Riparian vegetation is significant due both to its rarity and its high value as wildlife habitat and use as migration corridor(s). Riparian vegetation is found along most of the permanent and ephemeral streams within the County. Typical trees of this community include sycamores, willows, cottonwoods, and alders. Extensive riparian growth lines Piru, Sespe, and Santa Paula Creeks, and the Santa Clara and Ventura Rivers.

The diversity of topography and climate in the ***north half of the County*** has resulted in a range of vegetation communities from Mediterranean-climate chaparral to subalpine forest, from desert shrublands to riparian woodlands. The front ranges south of Pine Mountain Ridge are largely covered with chaparral. Riparian vegetation borders all perennial and many intermittent streams. Pine Mountain Ridge supports a significant band of ponderosa pine forest from west to east across the County. The north slopes of Pine Mountain Ridge are covered with thick, mixed chaparral. The badlands and low elevation areas in the northwest corner of the County grade from desert scrub into pinyon-juniper woodlands on the higher and wetter sites - especially up Quatal and Apache Canyons. Lockwood Valley is largely in ranching today. The mountains to the north, Mount Pinos and Sawmill Mountain, and east Frazier Mountain, support ponderosa pine forests which at the highest elevation on Mount Pinos grade into subalpine limber pine. To the east, pinyon-juniper woodlands cover much of the mountains with sagebrush in the valleys. Hungry Valley on the northeast corner was characterized as native grassland and the valley is still surrounded by significant valley oak woodland. Approximately 81% of the parcels of private land in the north half are currently vacant with native vegetation (or with the disturbed grassland typical or an area previously grazed). The large isolated ranches are almost all in pasture or cultivation in forage crops such as alfalfa. Development in Lockwood Valley has partially been into the pinyon-juniper community. For the most part, there has been only spotty destruction of the native vegetation (except loss of the native perennial grasslands).

4.2.4.2 Fish and Wildlife

The naturally vegetated areas of the County provide shelter, food, and nesting areas to create habitats for a wide variety of animal species. The low-elevation, drier plant communities, such as the grasslands, coastal sage-scrub, and chaparral, support a wildlife population which includes rodents, insectivores, hares, fox, coyotes, raptors (such as hawks, falcon, owls, and eagles) and numerous perching birds, from hummingbirds to ravens. The upland plant communities, such as the oak woodlands, pinyon juniper, and timber-conifer, provide habitats for larger animals as well, and include populations of bobcat and mountain lion, mule deer, and black bear, in addition to a game population of quail, rabbit, tree squirrel, band-tailed pigeon, dove, turkey, and chukar (partridge). Reptiles are commonly found throughout the County.

The two big game species found in the ***north half of the County*** are California mule deer and black bear. There are seven major species of upland game which occur primarily in the mountain areas: quail, rabbits, tree squirrels, band-tailed pigeons, dove, turkey and chukar. The vast majority of wildlife species on the Los Padres National Forest (and within Ventura County) falls within the nongame category. There are at least 64 species of birds, 61 mammals, 32 reptiles and 16 amphibians which constitute this nongame group. Although owls and cuckoos were once prevalent along the riparian green belts, their populations have been greatly diminished due to human intrusion and modification of these habitats.

4.2.4.3 Endangered, Threatened, and Rare Species

Pursuant to State and Federal legislation, the California Department of Fish and Game (CDFG) and the U.S. Fish and Wildlife Service (USFWS) have established lists of Endangered, Threatened, and Rare (CDFG only) Species. In addition, the USFWS lists species as: candidates for listing as endangered or threatened. Various additional species are considered sensitive by biologists. Ventura County is home to numerous species of plants and animals that are *endangered, threatened, rare*, or considered to be a *candidate* for one of those designations. The following is a list of species that are found in Ventura County, based on the Resources Appendix of the County General Plan:

- Beldings Savannah Sparrow
- Blunt Nose Leopard Lizard
- Brautons Milk Vetch
- California Blacktailed Gnatcatcher
- California Black Rail
- California Brackishwater Snail
- California Condor (habitat)
- California Least Tern
- Conejo Buckwheat
- Conejo Dudleya
- Dudleya Verityi
- Flax-Like Monardella
- Globuse Dune Beetle
- Least Bell's Vireo
- Light Footed Clapper Rail
- Lyons Pentachaeta
- Ojai Fritillary
- Salt Marsh Bird's Beak
- Saltmarsh Skipper
- San Diego Thornmint

- San Joaquin Antelope Squirrel
- San Joaquin Pocket Mouse
- Santa Monica Mts. Dudleya
- Santa Susana Tarweed
- Snowy Plover
- Southern Rubber Boa
- Tidewater Goby
- Ventura Marsh Milk Vetch
- Western Yellow Billed Cuckoo

4.2.4.4 Locally Unique Habitats

Ventura County contains several areas that are of unique significance due to their ability to provide habitat for endangered, rare and threatened species or because they constitute an example of a unique plant community. The coastal wetlands and lagoons found along the south coast of the County provide shelter, forage, and nesting areas for thousands of birds, fish, mollusks, crabs, seals, and many other marine organisms and plants. The wetland area with the richest diversity is the Mugu Lagoon, which shelters the remnants of many plant, bird, fish, and insect populations which once inhabited the coast from the Ventura River to the Santa Monica Mountains. Other wetlands include the McGrath Lake and Ormond Beach areas, and the mouths of the Ventura and Santa Clara Rivers. These areas are considered significant biological resources. The Pothole in the Devil's Potrero, on the Agua Blanca Creek, is an inland freshwater marsh that contains several small species of plants that are unique to freshwater marshes. It is located in the Los Padres National Forest, and is within the Sespe Condor Sanctuary. Sespe Creek is designated as a "Wild Trout Stream" by the State of California. The steelhead trout, an anadromous fish, uses this stream as its spawning area. The Pacific lamprey, an anadromous vertebrate, also uses the Sespe Creek (and the Santa Clara River) for its spawning area. The creek also supports a significant population of rainbow trout, cousin to the steelhead.

The "Wild Trout Stream" designation affords some protection of water flows and riparian vegetation, both threatened by water development projects. In addition, in 1992 the Forest Service determined that a 31.5 mile portion of Sespe Creek as a "Wild and Scenic River" (USDA 2003). The Sespe Creek is also mapped as a Significant Biological Resource. The Santa Clara River east of Piru is the last remnant of relatively undisturbed riverine habitat in the county. Several endangered, threatened, and rare species of birds have been sighted in this area, and nowhere else in the County, over the past few years. The Ventura River deserves mention as it currently supports a limited population of rainbow trout in the Foster Park area and a limited steelhead run in the River and San Antonio Creek. According to CDFG, the River has the potential for the introduction of a steelhead fishery in the future. Local populations of steelhead and rainbow trout along the Ventura River have nearly been eliminated, a result of dam construction and water pollution from agricultural operations and septic system leachate.

Ventura County has two large areas set aside as sanctuaries for the California Condor, even though there are (as of 1986) no longer any of these rare birds living in the wild. Both Matilija and Sespe Condor Sanctuaries remain as significant biological habitats.

"Essential" habitat are those areas intended to supplement the officially designated critical habitat. These areas have no legal status ("Critical Habitat" is a legal status); however, the habitat

management recommendations are intended to be applied with equal emphasis in these areas. Both areas in Ventura County extend the Sespe-Piru critical habitat -- on the northeast to Liebre Mountain in Los Angeles County and the west to Madulce Peak in Santa Barbara County. Hopper Mountain National Wildlife Refuge (N.W.R.) lies adjacent to the Sespe Condor Sanctuary on the east and south just outside the Los Padres National Forest. The area is a traditional working cattle ranch. Condor use was infrequent--probably due to the surrounding land uses, especially oil and gas exploration.

4.2.5 Hazards

The following is a description of Ventura County's hazards, based on information available in the Hazards Appendix of the Ventura County General Plan (Ventura County, 2005).

4.2.5.1 Seismic Hazards

- **Fault Rupture.** Available geologic information indicates that the potential for the occurrence of surface displacement along one or more of the major east-west trending faults within the County and within the life of existing structures is high compared to the potential hazard Statewide. Experience has shown that when sudden surface displacement occurs along faults, structures located over those faults are almost totally destroyed. Although the hazard is considered real within the County, the effect of the hazard is low compared to the likelihood of greater losses that could occur as a result of strong ground shaking.

  Much of the existing land development occurred many years ago, before the full potential danger of concealed or obscure faults was recognized and, therefore, little subsurface investigation of geologic conditions was conducted. In general, little is known of the recency of past movement along most of the faults within the County, or whether any related fault branches may be present. Several recent investigations for private development in the vicinity of some of the faults have indicated no fault disturbance of near-surface earth materials. Future investigations could reveal that some segments and branches, or extensions of faults within the zones are active.

- **Ground shaking.** Individual site investigation to provide detailed estimates of ground shaking sufficient for design purposes are presently performed by two methods: a Deterministic Seismic Hazard Analysis (DSHA), and a Probabilistic Seismic Hazard Analysis (PSHA). The DSHA analysis considers a specific scenario earthquake (with a magnitude and location) and the ground motion is computed for the particular site based applicable attenuation equations. The PSHA approach considers multiple potential earthquakes, that is, all of the magnitudes and locations believed to be applicable to the potential sources are included in the analysis.

  The California Geologic Survey (CGS) is in the process of creating Ground Motion Maps for the County of Ventura. The maps show ground motion as a maximum horizontal acceleration (MHA) having a 10 percent probability of being exceeded in a 50-year period in keeping with the Uniform Building Code (UBC) hazard level. Mitigation of the potential ground-shaking hazard is generally by the implementation of the UBC in the design and construction of structures.

- **Liquefaction.** Liquefaction was a damaging hazard in Simi Valley during the 1994 Northridge Earthquake and it remains the biggest seismic threat in the County. The hazard exists wherever

there are certain soils, particularly loose sands that are constantly or seasonally saturated with water. This might include most of the river valleys and the low-lying plains areas that have poor drainage. Since subsurface soil properties are not precisely known, it is necessary to assume that all alluvial areas having high groundwater may be subject to liquefaction during strong ground shaking. If general surface liquefaction were to occur, most structures in the hazard zone could be affected to a greater or lesser degree.

There is little that can feasibly be done to reduce the regional liquefaction hazard. Important or critical structures can utilize special designs to alleviate the effects of the hazard, except possibly in areas subject to landsliding. Land use controls are the only other methods available to reduce the threat to life and property. Special attention should be given to the liquefaction potential in evaluating the adequacy of existing critical or essential facilities in the high hazard areas, since the threat may be quite severe, especially to larger buildings.

- **Seiche.** It appears that the actual threat that is posed by seiches in Ventura County is small, in that it is probably the most remote of the hazards studied, although it may not be the least severe. There is no way to alleviate the effects of possible seiches except by prohibiting construction within the hazard area. Due to the indefinite nature of the triggering mechanisms, it seems doubtful that enough information will be known in the foreseeable future for general prediction of the hazard or predicting accurate seiche uprush limits for planning purposes.
- **Tsunami.** Because of the small possibility of a major tsunami occurring in Ventura County it is not reasonable to prohibit all development near beaches, nor is it practical to recommend drastic measures to protect existing coastline development. In addition, the warning systems and evacuation plans that are in place are considered to provide adequate protection in the event of a major tsunami being generated beyond the Santa Barbara Channel.

4.2.5.2 Geological Hazards

- **Landslides/Mudslides.** Existing landslides should be recognized and, in general, their boundaries and immediate adjacent areas should not be developed, unless detailed geologic and geotechnical studies demonstrate adequate factors of safety or provide recommendations to be implemented with development to increase the factor of safety of landsliding to acceptable levels. However, these studies may indicate that it is feasible to stabilize some of these features by buttressing, etc., and thereby utilize the landslide for some form of appropriate development. Present requirements of the Uniform Building Code and Grading Code do not place an acceptable factor of safety on slope stability analysis; however, the County utilizes the common standard within the geotechnical community of 1.5 for static conditions and 1.1 for pseudo-static (earthquake) conditions. Construction in hillside areas could result in formation of new landslides or reactivation of existing landslides if the grading or development design in such areas does not take into consideration potentially adverse conditions; either existing or created by the proposed development. Improper or poorly supervised grading projects, long term irrigation and onsite sewage disposal effects in areas underlain by ancient landslides or prone to slope instability could trigger movement.

  Approximately 75% of the total area of Ventura County can be considered as mountainous or hillside areas, and residential development has extended to some hillside areas within the county.

Much of this development occurred prior to establishment of many of the present grading ordinance requirements concerning evaluation of hillside stability and incorporation of design provisions to safeguard against landsliding. Development of the Ventura County Subdivision and Grading Ordinances, land development policies and building codes over the past several years has progressively resulted in greater public safety. The present County requirements are considered equivalent to, or exceed, those of other counties in California, and are considered adequate to ensure that areas of landsliding or areas prone to landsliding are not indiscriminately developed and that adequate measures are incorporated in grading and building design to ensure that landsliding will not occur. Most incorporated Cities within the County have adopted more stringent requirements to protect against landsliding.

- **Subsidence.** Most of the subsidence damage will occur at the boundary between the subsiding area and the adjacent non-subsiding area. The prediction of the boundary areas is difficult and relates to many different parameters that are presently not known. Some potential subsidence damage can be controlled. Such controls, however, must await the definite determination of the cause or causes of subsidence, as well as the rate of this subsidence. Until this information is fully developed, little can be done to plan for or respond to this hazard.

- **Expansive soils.** The resources most often affected by expansive soils are unequally loaded structures and rigid flatwork. The County Building and Safety Division oversees the building permit and inspection processes. These processes, which have effectively ended the dangers of expansive soils, include representative soils tests at each construction site and the enforcement of building standards keyed to varying degrees of expansive soils. Through proper investigation and design, the potential for damage can be eliminated.

- **Flood hazards.** Floods are natural occurrences whose frequency and magnitude depend on the rainfall and drainage patterns. It can be expected that the flood plain will probably be completely inundated on the average of once every 100 years. Past floods indicate that loss of life, property damage and loss of economic production could be extensive. In addition, funding for flood damage is limited and is costly to the public in general. The most appropriate uses for flood plains are open space uses such as greenbelts, parks and some types of agriculture.

- **Fire hazards.** Those communities located adjacent to fire hazard areas could be at risk, but there are few critical facilities located in the hazard zone that are not adequately protected. There are, however, some particularly hazardous lightly populated locations that could be severely damaged in case of a major fire. The areas that have high brush and that have not been burned for quite some time are probably the most susceptible. Most areas of high hazard have burned at least once within the last fifty years. Therefore, these areas could be expected to burn again in the next fifty years unless some method of fuel management is undertaken. Due to distances of such properties from County fire stations, there may be considerable response time lag for structural fire protection on private lands within the National Forest boundaries. An effective ongoing fuel management program can reduce the hazard.

  After a fire, efforts must be made to reduce the risk from mudslides. This could include reseeding areas by the State Division of Forestry, the Ventura County Watershed Protection District, or the individual homeowners. Even if reseeding has been undertaken, precautionary measures should be taken to protect communities and individual structures from mudslides.

4.2.5.3 Transportation-Related Hazards

- **Aircraft Incident.** The airports and their users in Ventura County have excellent safety records, and therefore the degree of risk associated with airport and aircraft hazards is minimal. Airport management and safety are thoroughly dealt with in the plans for each individual airport. The County will continue to promote safety in airport hazard zones by prohibiting high-intensity development in these areas and encouraging cities adjacent to county airports to do the same.
- **Railroad Incident.** A major train derailment that occurs in a heavily populated industrial area can result in considerable loss of life and property. Potential hazards could be overturned rail cars, direct impact into an industrial building or entering into normal street traffic. Each of these hazards encompasses many threats, such as a hazardous materials incident, fire, severe damage to either adjacent buildings or vehicles and loss of life of those in either adjacent buildings or vehicles and pedestrians. Land uses adjacent to railroad rights-of-way may be planned and regulated to reduce the potential effects of this potential hazard.
- **Trucking Incident.** Local law enforcement agencies and the California Highway Patrol are constantly looking for means to prevent, mitigate or lessen the impact of truck-related accidents. Such accidents, while currently on the decline, may be expected to become more frequent as traffic levels continue to increase.
- **Marine Oil Spill/Onshore Oil Pipeline Spill.** While regulation, construction standards, and exercises can mitigate the effects of spills, as long as the use of oil continues there will be the possibility of oil spills. Natural seepage continues on and offshore of the County, and will probably continue for many years. Constant vigilance and adherence to safety regulations will reduce or mitigate the effects of accidental spillage, and allow for expeditious response and cleanup.

4.2.5.4 Hazardous Materials/Waste

Although Ventura County generates a relatively small proportion of the hazardous waste generated in Southern California, this amount still contributes to the need for hazardous waste treatment and disposal facilities. There are problems with ground and surface water contamination, as well as with air quality. As stated in the County Hazardous Waste Management Plan (CHWMP, 1989), hazardous waste treatment, transfer disposal, recycling and incineration facilities are needed for Ventura County wastes. However, not all needed facilities will be located in Ventura County; therefore, the County supports the Joint Powers Agreement among the counties to support facility siting which may serve more than one county's needs. In addition, the primary goal of Ventura County is the support of a Waste Reduction Policy whereby hazardous waste is managed with first priority given to source reduction, followed by recycling, treatment, and lastly, disposal.

4.2.6 Noise

According to the Hazards Appendix of the Ventura County General Plan, the County Planning Division has identified areas of concentrated noise sensitive uses. Increases in noise levels between the present and the year 2020 will be caused primarily by increases in traffic levels. In terms of existing development, the greatest number of noise-sensitive uses will be impacted by growth in

traffic levels along Wendy Drive, Ventura Avenue (Holt Street area), Camino Dos Rios, and Santa Ana Road (at Burnham Road); but the actual number of dwellings affected is relatively small (fewer than 100). The following roadway segments will tend to become noisier as 2020 approaches. The segments have vacant lands adjacent to them that could develop at urban or rural densities pursuant to adopted plants and/or zoning. Future development in these areas should take account of the highway noise. Noise-sensitive uses should be set back beyond the 65dB[2] contour line, or incorporate sound-attenuating measures such as masonry walls, earth berms, and the like.

- La Luna Ave., south of Lomita Avenue (residential zoning).
- Main Street, Piru; east side, south of railroad (residential zoning).
- The eastern portion of Santa Rosa Road (designated Existing Community).
- The Somis area, near the junction of Lewis Road and Highway 118 (designated Existing Community).
- Kanan Road, east of Thousand Oaks city limits. Note, however, that plans already submitted for this area incorporate sound-attenuating measures such as earth berms, masonry walls and increased building setbacks.

In addition, several new highway links have been proposed for the County. Noise contours have been estimated for these links for the year 2020, and these estimates are presented in the General Plan.

The following strategies may be used individually or collectively to mitigate noise impacts, and to minimize the number of people exposed to high levels of noise.

- Maximize separation of industrial and residential uses.
- Maximize separation of residential uses and truck routes.
- Restrict trucking hours through existing residential areas.
- Minimize stop signs and signals along truck routes through residential areas, but enforce a speed limit of 35-40 miles per hour (mph) in such areas (motor vehicle noise is a strong function of speed).
- Lobby for enforcement of vehicle noise emission codes.
- Restrict operation of industrial facilities to hours that are compatible with sleep patterns of nearby residential areas. Although 7 a.m. is the "official" end of nighttime, the observation from the measurement trips is that most people in areas near industrial uses are awake by 6:00 or 6:30 a.m.

[2] Decibel (dB) - A unit division on a logarithmic scale whose base is the tenth root of ten, used to represent ratios of quantities proportional to power. In acoustics, the decibel is the common unit of measurement of the sound pressure level (Lp) and sound power level (Lw) with respect to their standardized references, 20 micropascal and 1 picowatt, respectively.

- Establish a County Noise Ordinance, limiting intrusive noise levels (Leq(1H))[3] at noise sensitive land uses to the ambient level (or a presumed ambient-base level) plus 3 to 5 dB.
- The Board of Supervisors should determine the presumed ambient-base levels, with recommendations from Planning Staff and their consultants.
- Adopt a County Noise Exposure Ordinance, requiring mitigation of outdoor living space noise to CNEL[4] or Leq24H 60 or 65 and indoor living space noise to CNEL 45 in new residential construction.
- Require that an acoustical site analysis and noise control specification be undertaken for noise-sensitive projects located within the CNEL 60 or 65 contour of any roadway, railroad, airport or industrial use as identified in this or subsequent studies.

4.2.7 Traffic

The Public Facilities and Services Appendix of the Ventura County General Plan states that the existing County Regional Road Network is generally adequate to meet present travel demands, except for US 101 between the cities of Oxnard and Camarillo and SR 118 between Somis and Moorpark. However, Ventura County is confronted with the potential for significant population growth by the year 2020. This projected increase in population will place a major strain on the County's Regional Road Network. To meet this challenge, the Goals, Policies and Programs of the General Plan must address means of moving people and goods in the most efficient and cost effective manner possible, including expansion of the existing road network, encouraging alternate transportation modes (ridesharing, bicycling, transit, etc.), and disbursing peak traffic demand to better utilize the existing road network.

4.3 CUMULATIVE IMPACT ANALYSIS

Tables 4.1, 4.2, 4.3, 4.4, 4.5, and 4.6 detail the proposed project's consistency with goals and policies included in the following general plans.

- Ventura County General Plan
- City of Camarillo General Plan
- City of Fillmore General Plan 1988-2010
- City of Moorpark General Plan
- City of Ojai General Plan

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[3] Time Average Sound Level (LeqT - dB) - The level, in decibels, of the mean squared sound pressure averaged over time period T. This is often referred to as the "energy average sound level" and "equivalent sound level" and hence the "eq" subscript. The "equivalence" is to a sound of constant level which has the same total acoustic energy content.

[4] Community Noise Equivalent Level (CNEL - dB(A)) - The long term time average sound level, weighted as follows:
- Frequency response is filtered using the A-weighting network.
- Sounds occurring between 7 p.m. and 10 p.m. are increased by 5 dB (in effect, the number of noise events is multiplied by 3.15).
- Sounds occurring between 10 p.m. and 7 a.m. are increased by 10 dB (in effect, the number of noise events is multiplied by 10).

- City of Oxnard 2020 General Plan
- City of Port Hueneme 2015 General Plan and Local Coastal Program
- City of Santa Paula General Plan
- Simi Valley General Plan
- City of Thousand Oaks General Plan
- Achieving the Vision, 2005 City of Buenaventura General Plan

Tables 4.1, 4.2, 4.3, 4.4, 4.5, and 4.6 show that the proposed BMPs are consistent with applicable general plans' goals and policies. In addition, as described in Section 3, the proposed BMPs would either have a beneficial impact or no impact on each of the environmental resources evaluated and, therefore, would not have a significant adverse cumulative impact. The incremental effect of the implementation of the proposed BMPs is not "cumulatively considerable," and, therefore, ***the impacts of the proposed project are not considered significant*** (CEQA Guidelines Section 15130(a)).

The project would result in the ***beneficial cumulative impact*** of reduced flood hazards, which protects life and property and contributes to the overall social and economic well being of the County's residents.

Section 3 of this EIR shows that the proposed project would either reduce or not affect the following effects associated with ongoing maintenance activities in drainages throughout the County. It is important to note that most of the effects occurred when the flood control facilities were originally constructed.

- Modification of the natural hydrologic functions of watersheds in the County
- Reduction in local beach sand supply
- Increased turbidity and sediment loading of watercourses and waterbodies of the County due to certain maintenance activities
- Increased amount of potentially harmful herbicides in the watercourses and waterbodies of the County
- Increased water temperatures in the watercourses and waterbodies of the County
- Periodic disturbance to wetland and riparian habitats, including coastal habitats
- Periodic disturbance to aquatic habitats
- Potential disturbance of sensitive species

TABLE 4.1
CONSISTENCY ANALYSIS WITH GENERAL PLAN LAND USE GOALS AND POLICIES

Jurisdiction	Applicable Goals and Policies and Programs	General Plan Reference	Project Consistency
LAND USE COMPATIBILITY WITH RESPECT TO COMMUNITY AND NATURAL ENVIRONMENT CHARACTERISTICS			
County of Ventura	Ensure that the County can accommodate anticipated future growth and development while maintaining a safe and healthful environmental by preserving valuable natural resources, guiding development away from hazardous areas, and planning for adequate public facilities and services. Promote planned, well-ordered, and efficient land use and development patterns.	Land Use Goal 3.1.1(1)	The proposed BMPs are consistent with these policies and would contribute to maintain current levels of flood control protection within the District's jurisdiction, in order to protect life and property. The proposed project would contribute to protect both urban and agricultural lands from flood hazards. The proposed project would not increase the area of facilities or frequency of current maintenance activities. Therefore, it would not affect the existing general environmental characteristics of hillside areas, beach and harbor environment, or community characteristics.
City of Camarillo	To continually improve the areas as places for living by ensuring that those portions of the City which are best suited for residential use will be developed and preserved as healthful, safe, pleasant, attractive neighborhoods where all citizens are served by a full range of appropriate community facilities.	Land Use Objective	
	To encourage the maintenance and improvement of all residential areas throughout the City through a continuous program of street tree planting and care, adequate streets and sidewalks, street and sidewalk lighting, storm drainage and other utilities.	Land Use Principle (v)	
	Preserve the natural features and general environmental characteristics of the hillside areas with minimum disturbance to native plants and animals. Establish open space areas that maintain and enhance the hillsides and provide a buffer between developments and open space and agriculture.	Conservation and Open Space Policy 8	
City of Fillmore	Preserve Fillmore's unique physical and social character at both the neighborhood and community levels.	Goal 13	
	Maintain a sense of natural openness around the urban environment in order to enhance the physical, emotional, and mental well-being of the City residents.	Goal 15	

TABLE 4.1
CONSISTENCY ANALYSIS WITH GENERAL PLAN LAND USE GOALS AND POLICIES

Jurisdiction	Applicable Goals and Policies and Programs	General Plan Reference	Project Consistency
	Promote the preservation and wise use of the region's natural and agricultural resources.	Land Use Goal 11	In addition, the BMPs include measures to remove invasive species in a manner that prevents propagation (BMP 23) and measures to further minimize effects of the maintenance program on water quality. BMP 24 includes measures that 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.
City of Moorpark	Ensure that a full range of public facilities and services are provided to meet the needs of the community.	Land Use Goal 12	
	Maintain a high quality environment that contributes to and enhances the quality of life and protects public health, safety, and welfare.	Land Use Goal 15	
	Public and private projects shall be designed so that significant vegetation shall be maintained and protected, including riparian and oak woodland vegetation and mature trees (as defined in the City Code).	Land Use Policy 15.1	
	Ecologically sensitive habitats shall be protected and preserved or replaced with no net loss of habitat so long as there is substantial public benefit to any relocation program.	Land Use Policy 15.2	
	Preserve and enhance the unique aesthetic and visual qualities of Moorpark as a city with scenic topographic features and elements that promote the quality of life that Moorpark citizens pursue.	OSCAR Goal 1	
	Ensure the health, safety, and general welfare of the public through designating land uses that will minimize the risk of danger to the public.	OSCAR Goal 3	
City of Ojai	Recognize Ojai's natural environment as a key community asset, and establish a system wherein the natural environment will be protected not only as an amenity for the developed portions of the City but also because of a sense of responsibility and commitment to good stewardship of the natural environment.	Policy LU-12	
City of Oxnard	Preservation of scenic views, natural topography, natural physical amenities, and air quality.	Land Use Goal A.2	

TABLE 4.1
CONSISTENCY ANALYSIS WITH GENERAL PLAN LAND USE GOALS AND POLICIES

Jurisdiction	Applicable Goals and Policies and Programs	General Plan Reference	Project Consistency
City of Port Hueneme	Creative utilization and responsible conservation of the City's major natural asset – the beach and harbor environment.	Land Use Goal 2	*(continued from previous page)*
City of Santa Paula	A healthy balance of land uses and adequate land for all community needs should be provided.	Goal 3.1	
	Adequate land should be provided for all needs and a healthy balance of land uses.	Objective 3(a)	
	Hazards to natural resources should be controlled or eliminated, including but not limited to: invasive non-native plants and animals, pollution, and incompatible activities or land uses.	Goal 5.3	
City of Simi Valley	Projects should be designed to provide a compatible relationship with adjoining uses.	Policy III-1.6	
City of Ventura	Sustain and complement cherished community characteristics.	Policy 3A	
LAND USES WITHIN FLOODPLAIN AREAS			
County of Ventura	Prevent incompatible land uses and development within flood plains.	Hazards Goal 2.10.1 (3)	The proposed project is consistent with these goals and policies, because it does not propose a change in land use for District facilities or a change in district right-of-way.
	Land use in the floodway should be limited to open space, agricultural, or passive to low intensity recreational uses, subject to the approval of the County Watershed Protection District. The floodway's principal use is for safely conveying floodwater away from people and property.	Hazards Policy 2.10.2(1)	
City of Camarillo	To protect public safety by reserving flood plains, flood control channels, earthslide and seismic fault zones, fire breaks, and other similar areas and employ them for safe non-disaster-time occupancies or permanent open spaces.	Natural Resources, Principle 4	
City of Fillmore	Minimize the risk of exposure to the public from natural and man-made hazards.	Land Use Goal 14	

TABLE 4.1
CONSISTENCY ANALYSIS WITH GENERAL PLAN LAND USE GOALS AND POLICIES

Jurisdiction	Applicable Goals and Policies and Programs	General Plan Reference	Project Consistency
City of Moorpark	The flood control easement area adjacent to the Arroyo Simi floodway shall be preserved and enhanced as an important natural and scenic feature of the community.	Land Use Policy 14.4	*(continued from previous page)*
	Compatible open space/recreational uses of the Arroyo Simi floodway should be encouraged which are consistent with the provisions of the Federal Emergency Management Agency for floodway uses.	Land Use Policy 14.5	
City of Oxnard	Land within the 100-year floodplain is to be designated permanent open space as shown on Land Use Map.	Open Space Goal VIII.C.42	
City of Thousand Oaks	Open space shall contain those areas, such as flood plains, areas of unstable slopes, and fuel modification zones which are identified by the Safety Element as necessary to remain in an undeveloped state for the purposes of maintaining public safety.	Policy OS-8	
MANAGEMENT AND USE OF OPEN SPACE			
County of Ventura	Open Space should also include areas of land or water which are set aside for public health and safety, thereby safeguarding humans and property from certain natural hazards, including, but not limited to, areas which require special management or regulation because of hazardous or special conditions such as earthquake fault zones, unstable soil areas, flood plains, watersheds, areas presenting high fire risks, areas required for the protection of water quality and water reservoirs, and areas required for the protection and enhancement of air quality.	Land Use Policy 3.2.2 (5)(4)	The proposed BMPs are consistent with these goals and policies, because the proposed project would not change the land use for District facilities. District facilities will remain as open space, which is a land use designation compatible with the existing use.
City of Camarillo	To make maximum compatible multi-use of open space (hiking and riding trails along flood control channels, picnic sites at reservoirs, rest stops and viewpoints along scenic highways, after-hour use of school playgrounds); to prevent erosion and silting, euthrophication,	Natural Resources, Principle 5	The proposed BMPs include measures to minimize the effects of the ongoing

TABLE 4.1
CONSISTENCY ANALYSIS WITH GENERAL PLAN LAND USE GOALS AND POLICIES

Jurisdiction	Applicable Goals and Policies and Programs	General Plan Reference	Project Consistency
	waterlogging and, salt buildup, by good watershed management and irrigation/drainage practices.		operations and maintenance in the natural environment, including measures to further reduce the potential for erosion, siltation, and water pollution by good operations and maintenance practices. The proposed project would contribute to the timely maintenance of flood control facilities, and therefore, to the cleanup of streamside areas of trash and other debris. The proposed BMPs would not increase the number or area of District facilities.
City of Moorpark	Consider floodway management design that includes areas where stream courses are left natural or as developed open space.	Safety Policy 5.3	
City of Ojai	Limit the use of land within the occupied habitats of rare, endangered plant or animal species to permanent open space.	Policy LU-16	
City of Oxnard	Maintenance and enhancement of natural resources and open space.	Open Space Goal VIII.A	
City of Thousand Oaks	Continue efforts to protect water quality of streams located within open space areas from adverse effects associated with recreational use; since the streams and creeks within open space drain the Conejo Valley in general, continue to implement and improve programs and measures to reduce pollution stormwater and nuisance water pollution.	Policy OS-28	
	Develop a program to periodically clean streamside areas of trash and other foreign debris deposited during stormwater flows.	Impl. Measure (iii) for Policy OS-28	
City of Ventura	Require that sensitive wetland and coastal areas be preserved as undeveloped open space wherever feasible and that future developments result in no net loss of wetlands or "natural" coastal areas.	Action 1.11	
City of Thousand Oaks	Natural drainage courses should be protected within open space areas. Use of concrete or other flood control improvements in natural drainage courses is discouraged, and should occur only when no reasonable alternatives can be found that would maintain natural hydrological and ecological functions.	Policy OS-31	

TABLE 4.1
CONSISTENCY ANALYSIS WITH GENERAL PLAN LAND USE GOALS AND POLICIES

Jurisdiction	Applicable Goals and Policies and Programs	General Plan Reference	Project Consistency
	Manage open space and control adjacent development so as to preclude wherever possible the need for flood control improvements within natural drainage courses. Where such facilities are unavoidable for public safety reasons, use innovative design and construction techniques to minimize impact to open space resources.	Implementation Measure for Policy OS-31	*(continued from previous page)*
PROPER LAND USE TO PROTECT BIOLOGICAL, NATURAL, AND ENVIRONMENTAL RESOURCES			
County of Ventura	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.	Resources Goal 1.5.1	The proposed BMPs are consistent with these goals and policies, because the proposed project would not change the land use for District facilities. Further, the proposed project would not increase the area of facilities or frequency of current maintenance activities. The BMPs include measures to reduce vegetation removal (where possible) and protect sensitive species during maintenance activities.
City of Fillmore	Protect environmental sensitive areas.	Land Use Goal 9	
	Preserve important natural features, such as barrancas, tree rows, wetlands, ridgelines, and wildlife movement corridors.	Land Use Policy LU-24	
City of Moorpark	Establish land uses and development intensities which are compatible with scenic and natural resources and which encourage environmental preservation.	Land Use Goal 14	
	Natural and cultural resources having significant education, scientific, scenic, recreational, or social value shall be protected and preserved.	Land Use Policy 15.3	
	Preserve and maintain the physical and biological environment from future growth-related degradation. In those areas where degradation is inevitable, ensure the restoration of affected areas.	OSCAR Policy 4.1	
City of Santa Paula	Preserve important natural features, such as barrancas, tree rows, wetlands, ridgelines, and wildlife movement corridors.	Policy 5.b.b	

TABLE 4.1
CONSISTENCY ANALYSIS WITH GENERAL PLAN LAND USE GOALS AND POLICIES

Jurisdiction	Applicable Goals and Policies and Programs	General Plan Reference	Project Consistency
	Wetlands, natural flowing streams, and barrancas should be preserved to the maximum extent possible.	Objective 6I	*(continued from previous page)*
	Flood control projects should be carried out in a manner that leaves streams and barrancas as natural as possible.	Policy 8.g.g	
City of Simi Valley	Preserve and promote the image of the community as a tree-covered valley surrounded by the natural hillsides.	Goal III-1	
COORDINATION WITH OTHER AGENCIES			
City of Camarillo	To coordinate the selection and use of open space with other affected public agencies (park sites with school sites, flood control storm drains with municipal wastewater treatment, reclamation with bridle paths and equestrian trail systems, and other similar areas.)	Natural Resources, Principle 3	The District coordinates with local jurisdictions to ensure the provision and maintenance of adequate flood control facilities, which is consistent with these policies. The proposed BMPs would be implemented to reduce the effects of the ongoing operations and maintenance activities within existing District facilities. Impacts of the proposed BMPs would be neutral or beneficial (see Section 3).
City of Ojai	Establish a sound basis for the City of Ojai to work with Ventura County, Caltrans, and other public service agencies to ensure that actions taken by these agencies do not adversely affect Ojai's quality of life or its unique small town character. · Identify opportunities for joint programs to further common interests in a cost efficient manner. · Assist agencies providing services within the City of Ojai, as well as agencies involved in land use, transportation, and the provision of public services and facilities within unincorporated areas adjacent to the City to understand the importance and physical components of, as well as the potential impacts of their actions on preserving Ojai's small town character. · Work with agencies providing services within the City of Ojai, as well as agencies involved in land use, transportation, and the provision of public services and facilities within unincorporated areas adjacent to the City to resolve differences in the interests and	Policy LU-19	

TABLE 4.1
CONSISTENCY ANALYSIS WITH GENERAL PLAN LAND USE GOALS AND POLICIES

Jurisdiction	Applicable Goals and Policies and Programs	General Plan Reference	Project Consistency
	concerns that might exist between them and the City of Ojai.		*(continued from previous page)*
City of Port Hueneme	Protect the City's interests by continued participation with adjacent and regional jurisdictions to address common issues; including air quality, transportation, water quality and supply, and solid waste disposal.	Land Use Goal 5	
City of Simi Valley	Coordinate with other public agencies and utilities to improve the safety, efficiency, and cost-effectiveness of community service facilities.	Implementation Measures III-QQ	
City of Thousand Oaks	Open space managers should work cooperatively with the utility companies, water agencies, and the Ventura County Flood Control District to assure that facilities subject to their jurisdiction are planned and designed in a manner which provides effective public service and also protects the natural environment.	Policy OS-30	
	Continue to work with utility companies and agencies, and the Ventura County Flood Control District to accommodate utility lines and flood control facilities where such improvements are necessary for public health and safety, while minimizing disturbance to open space resources.	Implementation Measure for Policy OS-30	
DESIGN AND APPEARANCE OF FLOOD CONTROL PROJECTS			
City of Fillmore	Ensure that flood control projects are designed utilizing colors, materials, and other design features that allow the projects to blend into the surrounding environment.	Land Use Impl. Measure 25	The proposed project does not include construction of new District facilities, but only BMPs applicable to the operation and maintenance of existing facilities. Therefore, policies related to design of new facilities are not applicable
City of Moorpark	Enhanced landscaping shall be used around residential, commercial, and industrial buildings and parking areas as well as along easements of flood control channels, roadways, railroad right of ways, and other public and private areas, to soften the urban environment and enhance views from roadways and surrounding uses.	Land use Policy 17.6	

TABLE 4.1
CONSISTENCY ANALYSIS WITH GENERAL PLAN LAND USE GOALS AND POLICIES

Jurisdiction	Applicable Goals and Policies and Programs	General Plan Reference	Project Consistency
City of Santa Paula	Ensure that flood control projects are designed utilizing colors, materials, and other design features that allow the projects to blend in to the surrounding environment.	Implementation Action 56.a	to the proposed project.
City of Simi Valley	The design of a project should respect, work with, and complement the natural features of the land.	Policy III-1.5	
	Structures and developments which are in highly visible locations shall be designed to minimize their impact on natural vistas.	Policy III-1.2.2	
	Highly visible public improvements should be designed and landscaped to blend into the environment.	Policy III-1.3	
	Structures to channel or retain water should be designed and constructed of materials and colors so as to blend with the natural environment.	Policy III-1.3.3	
City of Ventura	Enhance the appearance of districts, corridors, and gateways (including views from highways) through controls on building placement, design elements, and signage.	Action 3.2	

TABLE 4.2
CONSISTENCY ANALYSIS WITH GENERAL PLAN AIR QUALITY GOALS AND POLICIES

Jurisdiction	Applicable Goals, Policies, and Programs	General Plan Reference	Project Consistency
SUPPORT OF GENERAL AND REGIONAL EFFORTS TO IMPROVE AIR QUALITY			
County of Ventura	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.	Goal 1.2.1	The proposed BMPs are consistent with the Ventura County Air Quality Management Plan and would contribute to protect air quality. BMP 24 includes measures that 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 operation and maintenance activities.
City of Fillmore	Protect the environmental resources of the City and surrounding area for the long-range health, safety, and general welfare of all citizens.	Goal 1	
City of Moorpark	Cooperate and participate in regional air quality management plans, programs, enforcement measures, and mitigation measures designed to reduce and/or minimize the amount of primary and secondary air pollutants.	OSCAR Policy 4.1	
	The Ventura County Air Pollution Control District shall be supported in its effort to implement transportation demand management strategies.	Circulation Policy 7.6	
City of Ojai	A level of air quality which protects the public health, safety, and welfare, and meets or surpasses State and Federal primary and secondary standards.	Air Quality Goal 1	
City of Oxnard	The City should encourage measures that maintain clean air and water.	Policy VIII.C.6	
	The City should support anti-pollution measures and seek to control activities and developments that improve air and water quality.	Policy VIIIC.7	
City of Port Hueneme	Prevent degradation of regional air quality.	Air Quality Goal 1	
	Cooperate with the Ventura County Air Pollution Control District in their efforts to implement provisions of the Ventura County Air Quality Management Plan.	Air Quality Policy 1-1	

TABLE 4.2
CONSISTENCY ANALYSIS WITH GENERAL PLAN AIR QUALITY GOALS AND POLICIES

Jurisdiction	Applicable Goals, Policies, and Programs	General Plan Reference	Project Consistency
City of Santa Paula	The improvement and protection of air quality should be encouraged and supported.	Conservation and Open Space Goal 4.1	*(continued from previous page)*
	Support regional efforts to improve air quality.	Conservation and Open Space Objective 4(a)	
City of Simi Valley	The City shall take steps toward attainment and maintenance of air quality standards consistent with the health and welfare of the residents of the Simi Valley Area of Interest.	Policy IV-1.4	
	The City shall support the goals and policies contained in the Ventura County Air Quality Management Plan.	Policy IV-1.4.1	
City of Thousand Oaks	The City shall place high priority on maintaining and improving local and regional air quality.	General Plan Goal	
City of Ventura	Minimize exposure to air pollution and hazardous substances.	Policy 7D	
TRANSPORTATION CHANGES TO MINIMIZE IMPACTS			
City of Fillmore	Programs which reduce vehicle trip length, reduce dependency on the automobile or otherwise act to maintain or improve air quality shall be encouraged.	Open Space/Conservation Policy IV-8	The proposed BMPs would not result in an increase in vehicle trips when compare to the baseline condition. In addition, BMP 26 would minimize vehicle trips during peak hours if they would result in substantial vehicle trips on a roadway with unacceptable LOS at peak hours.
City of Ojai	Eliminate excessive vehicle trips and reduce vehicle miles traveled.	Air Quality Goal 2	
	Encourage transportation modes that minimize the use of single passenger motor vehicles and the associated air emissions.	Air Quality Goal 9	
	The City shall encourage vehicle trip reduction and other transportation demand management programs (TDM)	Transportation Goal 3	
City of Oxnard	The City shall consider requiring Transportation Management Associations for multiple projects that may have adverse air quality impacts related to mobile sources, and contributions to off-site	Policy VIIIC.50	

TABLE 4.2
CONSISTENCY ANALYSIS WITH GENERAL PLAN AIR QUALITY GOALS AND POLICIES

Jurisdiction	Applicable Goals, Policies, and Programs	General Plan Reference	Project Consistency
	TDM funds to reduce residual impacts that cannot be mitigated on a project-specific basis.		*(continued from previous page)*
City of Port Hueneme	Improve air quality by influencing transportation choices of mode, time of day, whether to travel, and to establish a jobs/housing balance.	Air Quality Goal 2	
	Promote modified work schedules which reduce peak period auto travel.	Air Quality Policy 2-2	
City of Santa Paula	Encourage the implementation of programs and strategies which reduce air emissions. For example, emission reduction measures may include: Provision of on-site employee services and preferential parking for carpools; parking lot design to reduce vehicle queuing; provision of transit services and pedestrian/bicycle access; Transportation Demand Measures (TDM); energy efficient building materials and lighting; ozone precursor control measures; and dust control measures.	Conservation and Open Space Implementation Measure 21b	
City of Simi Valley	Land use shall be planned to minimize vehicle miles traveled. Such uses should be balanced with the preservation of other important qualities of life.	Policy IV-1.4.2	
USE OF VEHICLES TO MINIMIZE IMPACTS TO AIR QUALITY			
City of Ojai	Encourage the use of clean fuel, electric, and zero emission vehicles (ZEVs).	Air Quality Goal 4, Clean Fuels in Fleet Vehicles Goal 1	The District is continuously addressing changes in the use of vehicles to minimize impacts to air quality over time, and as revenue permits. The proposed BMPs do not affect these changes that the District is implementing.
	The City shall require a 30 percent use of light-duty and 50 percent of heavy duty (trucks) alternative fueled vehicles in public and private business by model year 1998 to comply with the provisions contained in the federal Clean Air Act Amendments of 1990.	Clean Fuels in Fleet Vehicles Goal 2	

TABLE 4.2
CONSISTENCY ANALYSIS WITH GENERAL PLAN AIR QUALITY GOALS AND POLICIES

Jurisdiction	Applicable Goals, Policies, and Programs	General Plan Reference	Project Consistency
	The City shall encourage the use of alternative fueled vehicles via provision of cash incentives to individuals, agencies, and/or corporations who volunteer to participate in the program.	Clean Fuels in Fleet Vehicles Goal 3	*(continued from previous page)*
City of Oxnard	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 operation modifications shall be required on all construction equipment operating pursuant to City permits.	Policy VIII.C.53	
City of Port Hueneme	Encourage the use of low-pollution vehicles including alternative fuel and electric vehicles.	Air Quality Policy 2-7	
CONSTRUCTION/BUILDING PRACTICES TO MINIMIZE IMPACTS			
County of Ventura	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.	Air Resources Policy 5	BMP 24 includes measures that 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. Therefore, the proposed project is consistent with these policies.
City of Fillmore	Land use decision shall be consistent with the Ventura County Air Quality Management Program.	Open Space/Conservation Policy IV-7	
City of Ojai	To the extent possible, the City shall enforce the following at construction sites to reduce fugitive dust emissions: require trucks hauling soil, dirt, sand, or other emissive materials to cover their loads; require grading to occur only when wind conditions do not exceed 30 miles per hour; enclose, cover, water when necessary, or apply approved soil binders, according to manufacturers specifications, to exposed stock piles i.e., gravel, sand, dirt.	Particulate and Building Emissions Goal 3	

TABLE 4.2
CONSISTENCY ANALYSIS WITH GENERAL PLAN AIR QUALITY GOALS AND POLICIES

Jurisdiction	Applicable Goals, Policies, and Programs	General Plan Reference	Project Consistency
	The use of building materials and methods that minimize the emission of reactive organic gases and particulates shall be encouraged.	Particulate and Building Emissions Goal 5	*(continued from previous page)*
	The City shall encourage reduction in particulate emissions from paved and unpaved roads, parking lots, and road and building construction.	Particulate and Building Emissions Goal 6	
City of Oxnard	During smog season (May through October), the construction period should be lengthened to as to minimize the number of vehicles and equipment operating at the same time.	Policy VIII.C.54	

TABLE 4.3
CONSISTENCY ANALYSIS WITH GENERAL PLAN WATER QUALITY GOALS AND POLICIES

Jurisdiction	Applicable Goals, Policies, and Programs	General Plan Reference	Project Consistency
County of Ventura	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.	Goal 1.3.1(2)	The proposed BMPs are consistent with these policies, which encourage measures that maintain and/or improve water quality. As presented in the Initial Study (Appendix A), the proposed project would have no impact on surface or groundwater quantity. BMPs included in Section 3.3 would further minimize the effect that the ongoing maintenance program has on surface and groundwater quality. The proposed BMPs do not include construction of new facilities, only the maintenance of existing facilities. In addition, many District facilities are located in an urbanized setting.
City of Camarillo	Identify and protect natural watersheds, natural drainage beds, and water recharge areas to achieve recovery of local water and the preservation of natural plant and animal habitat.	Conservation and Open Space Policy 7	
	The City will protect the watershed, groundwater sources, fresh water treatment, storage and distribution system, and wastewater collection and treatment system from contamination and damage.	Open Space and Conservation Goal C(i)	
	The City falls under the Ventura County-wide Storm water Quality Management Program, which requires the National Pollutant Discharge Elimination System (NPDES) be applied to new projects to maintain water quality.	Open Space and Conservation Goal C(ii)	
City of Fillmore	Provide for the preservation and wise utilization of the region's natural resources.	Goal 16	
City of Moorpark	Conserve and protect water quality supplies through cooperative efforts with the Ventura Water Conservation Plan and any future regional water quality and water supply plans and programs that may be instrumental in reducing water quality-related problems.	OSCAR Goal 4.2	
	Continue to participate in the Standardized Emergency Management System and the Ventura County Stormwater Program (local enforcer of the National Pollutant Discharge Elimination System (NPDES) program).	Safety Policy 4.1	
City of Ojai	The City of Ojai shall strive to preserve the quantity and enhance the quality of water resources that may affect the Ojai Valley.	Water/Watershed Goal	
City of Oxnard	Maintenance and enhancement of natural resources and open space.	(Development Policy) Goal VIII.A	

TABLE 4.3
CONSISTENCY ANALYSIS WITH GENERAL PLAN WATER QUALITY GOALS AND POLICIES

Jurisdiction	Applicable Goals, Policies, and Programs	General Plan Reference	Project Consistency
	The City should closely monitor proposals for drainage and water supply facilities that may impact potential beach sediment.	(Development Policy) Policy VIII.C (45)	*(continued from previous page)*
City of Port Hueneme	Preserve existing water resources.	Conservation Goal 7	
	Protect the City's interest by continued participation with adjacent and regional jurisdictions to address common issues, including air quality, transportation, water quality and supply, and solid waste disposal.	General Plan Goal 6	
City of Santa Paula	Local watersheds and aquifer recharge areas should be protected and enhanced and standards set for development in those areas.	Objective 9h.h.	
City of Simi Valley	Conserve, enhance, and protect the natural resources of importance to the City of Simi Valley area of interest.	Goal IV-1	
City of Thousand Oaks	Streams and creeks should be preserved as open space and maintained in as natural a state as possible to protect the City's and other downstream communities' water quality, wildlife diversity, native vegetation, and aesthetic value. This will contribute to the regional effort to improve the quality of Calleguas Creek, Malibu Creek, and Mugu Lagoon.	Policy CO-10	
	Protect remaining flood plains in order to help retain stormwater runoff form tributary watersheds and reduce the potential for periodic flooding within downstream reaches of the Arroyo Conejo and Calleguas Creek.	Policy CO-14	
City of Ventura	Follow an approach that contributes to resource conservation.	Policy 5A	
	Use natural features such as bioswales, wildlife ponds, and wetlands for flood control and water quality treatment when feasible.	Action 5.2	
County of Ventura	Maintain and, where feasible, restore the chemical, physical, and biological integrity of surface and groundwater resources.	Goal 1.3.1(3)	

TABLE 4.3
CONSISTENCY ANALYSIS WITH GENERAL PLAN WATER QUALITY GOALS AND POLICIES

Jurisdiction	Applicable Goals, Policies, and Programs	General Plan Reference	Project Consistency
	Protect, and where feasible, enhance watersheds and aquifer recharge areas.	Goal 1.3.1(5)	*(continued from previous page)*
City of Oxnard	The City should encourage measures that maintain clean air and water.	(Development Policy) Policy VIII.C (6)	
City of Oxnard	The City should support anti-pollution measures and seek to control activities and developments that improve air and water quality.	(Development Policy) Goal VIII.C.7	
City of Simi Valley	Watersheds, watercourses, and underground aquifers in outlying areas shall be maintained in their natural state to the fullest extent possible.	Policy IV-1.1.1	
City of Thousand Oaks	Use of concrete for flood control improvements in natural drainage courses should occur only when no reasonable alternatives can be found that would maintain natural hydrological and ecological functions.	Policy CO-13	
City of Ventura	Prohibit placement of material in watercourses other than native plants and required flood control structures, and remove debris periodically.	Action 1.9	
	Remove concrete channel structures as funding allows, and where doing so will fit the context of the surrounding area and not create unacceptable flood or erosion potential.	Action 1.10	
City of Camarillo	Protection for drainage channels and flood plains will be encouraged to minimize watershed erosion.	Open Space and Conservation Goal B(ii)	
City of Ojai	The City shall strive to protect natural watersheds, drainage beds and water recharge areas and rebuild those damaged to achieve recovery of local water and the preservation of water systems.	Water/Watershed Policy	

TABLE 4.4
CONSISTENCY ANALYSIS WITH GENERAL PLAN BIOLOGICAL RESOURCES GOALS AND POLICIES

Jurisdiction	Applicable Goals, Policies, and Programs	General Plan Reference	Project Consistency
GENERAL PRESERVATION AND ENHANCEMENT			
County of Ventura	Plan for the preservation, conservation, efficient use of, enjoyment of, and access to resources, as appropriate, within Ventura County for present and future generations.	Resources Goal 1.1.1-2	The proposed BMPs are consistent with these policies, which encourage measures to protect sensitive biological resources. BMPs included in Section 3.4 would further minimize the effect that the ongoing maintenance program has on sensitive biological resources. The proposed BMPs include measures to minimize the removal of vegetation (whenever possible) and prevent the spread of invasive species as a result of maintenance activities. The proposed BMPs do not include construction of new facilities, only the maintenance of existing facilities to ensure
City of Fillmore	Provide for the preservation and wise utilization of the region's natural resources.	Goal 16	
City of Moorpark	Preserve and maintain the physical and biological environment from future growth-related degradation. In those areas where degradation is inevitable, ensure the restoration of affected areas.	OSCAR Goal 4	
	Conserve, preserve, and enhance the quality of biological and physical environments throughout the City of Moorpark. Require restoration of those areas unsatisfactorily maintained or subsequently degraded.	OSCAR Policy 4.3	
	The City will encourage the development of only those facilities that preserve and/or enhance visual, biological, and physical resources.	OSCAR Implementation Program 29	
	Public and private projects shall be designed so that significant vegetation shall be maintained and protected, including riparian and oak woodland vegetation and mature trees (as defined in the City Code).	Land Use Policy 15.1	
City of Ojai	The overall goal of the City of Ojai shall be to protect and enhance all significant biological resources.	Biological Resources Goal	
	Allow no loss of existing resource value, with the intention of protecting resources that are unique and/or irreplaceable in the region.	Biological Resources Objective 1	

TABLE 4.4
CONSISTENCY ANALYSIS WITH GENERAL PLAN BIOLOGICAL RESOURCES GOALS AND POLICIES

Jurisdiction	Applicable Goals, Policies, and Programs	General Plan Reference	Project Consistency
	Allow no net loss of in-kind resource value (while minimizing loss of existing resource value), intending to protect resources which are relatively scarce, or are becoming scarce on a regional basis.	Biological Resources Objective 2	flood protection.
	Minimize loss of resource value, intending to protect resources which are relatively abundant, but are important or are of moderate value to regional ecosystems.	Biological Resources Objective 3	
	It shall be the policy of the City of Ojai to allow no loss of existing resource value for rare, endangered, and unique species habitat, except to provide for the maintenance of flood control facilities.	Biological Resources Policy (4)	
City of Oxnard	Maintenance and enhancement of natural resources and open space.	(Development Policy) Goal VIII.A	
City of Port Hueneme	Protect the remaining native and non-native plant and animal species in the City.	Conservation Goal 1	
City of Santa Paula	Rare and endangered plants and animals and their habitat should be protected as required by Federal and State law.	Goal 5.1, Policy 5.f.f	
	Hazards to natural resources should be controlled or eliminated, including but not limited to: invasive non-native plants and animals, pollution, and incompatible activities or land uses.	Goal 5.3	
	Public environmental awareness, sound environmental practices, and a healthy environment should be promoted.	Goal 5.4	
	Environmental decision, mitigation measures, and practices should be based on documented information about the local and specific environment.	Goal 5.9	
	Preserve important natural environments including barrancas, tree rows, wetlands, and wildlife movement corridors.	Objective 5(b)	
	Prevent the misuse and/or degradation of natural resources.	Policy 5.a.a	

TABLE 4.4
CONSISTENCY ANALYSIS WITH GENERAL PLAN BIOLOGICAL RESOURCES GOALS AND POLICIES

Jurisdiction	Applicable Goals, Policies, and Programs	General Plan Reference	Project Consistency
	The diversity of native plant species and their habitats should be encouraged.	Goal 5.7	*(continued from previous page)*
	The diversity of native plant species and their habitats should be protected and invasive, non-native species, such as the false bamboo (Arundo donax) should be eradicated whenever possible and form upstream and downstream to reduce reestablishment.	Policy 5.e.e	
City of Thousand Oaks	Biologically significant plant and animal habitats should be preserved wherever feasible.	Policy CO-15 Implementation Measure (ii)	
	The City shall encourage and promote the preservation and protection of all rare, threatened, endangered, or sensitive species listed by State and Federal agencies (United States Fish and Wildlife Service and California Department of Fish and Game), the California Native Plant Society (CNPS) and the City of Thousand Oaks.	Policy CO-31	
City of Ventura	Improve protection for native plants and animals.	Policy 1C	
PROTECTION OF RIPARIAN HABITATS			
City of Camarillo	Identify and protect natural watersheds, natural drainage beds, and water recharge areas to achieve recovery of local water and the preservation of natural plant and animal habitat.	Natural Resources Policy 7	The proposed BMPs are consistent with these policies, which encourage measures to protect sensitive biological resources, including riparian habitats. BMPs included in Section 3.4.2 would further minimize the effect the ongoing maintenance
City of Ojai	The City will prohibit modification of significant water sources.	Biological Resources Program (2)(iii)	
	The City shall allow no loss of the existing resource value or regionally significant riparian habitat.	Biological Resources Policy (6)	
	The City will prepare a riparian preservation and management plan	Biological	

TABLE 4.4
CONSISTENCY ANALYSIS WITH GENERAL PLAN BIOLOGICAL RESOURCES GOALS AND POLICIES

Jurisdiction	Applicable Goals, Policies, and Programs	General Plan Reference	Project Consistency
	to identify/delineate the extent of existing habitat and to provide specific guidelines for their preservation as permanent open space. Preparation of the plan should include consultation with DFG through required notification process, if applicable, to determine additional protective actions, such as: ii) Diversions or control of increased flood runoff from adjacent and upstream urban developments to prevent the scouring of bottom and bank vegetation; iii) Maintenance of existing water supply for the continued support of habitats.	Resources Program (6)(i)	program on riparian habitat. The proposed BMPs include measures to conduct surveys for threatened or endangered species at facilities that may support those species (refer to Catalog of Facilities, Appendix C).
City of Oxnard	The City should encourage the preservation and enhancement of the riparian habitat along the Santa Clara River and in the McGrath Lake vicinity.	Policy VIII.C (1)	
City of Port Hueneme	Conserve marine and animal/plant life in the Bubbling Springs Recreation Corridor.	Conservation Policy I-4	
	Protect and enhance natural qualities of riparian habitat (i.e. Bubbling Springs Creek).	Conservation Policy 7-8	
City of Santa Paula	Riparian habitat should be protected and enhanced.	Goal 5.5	
	Fisheries and habitat in the Santa Clara River and Santa Paula Creek should be maintained.	Objective 5(a)	
	Fish and their habitat in the river and creek must be protected.	Policy 5.d.d	
City of Simi Valley	Riparian habitat outside of the valley floor or adjacent to the western end of the Arroyo Simi should be preserved and protected to the fullest extent practical, consistent with the public health, safety, or general welfare.	Policy IV-2.6.3	
City of Thousand Oaks	Every effort shall be made to design and construct stormwater retention and debris basins to minimize any potentially adverse impacts to significant landform features, aquatic resources, and	Policy CO-15	

TABLE 4.4
CONSISTENCY ANALYSIS WITH GENERAL PLAN BIOLOGICAL RESOURCES GOALS AND POLICIES

Jurisdiction	Applicable Goals, Policies, and Programs	General Plan Reference	Project Consistency
	associated native plant and animal communities.		*(continued from previous page)*
	Contour grading and landscaping with native plant species shall be utilized in stormwater retention and debris basin design.	Policy CO-15 Implementation Measure (i)	
	Encourage the restoration and enhancement of degraded wetland and riparian habitats in order to preserve and protect native plant and animal species, increase biological diversity and productivity, and maintain permanent access for wildlife to surrounding open space.	Policy CO-30	
City of Ventura	Require projects near watercourses, shoreline areas, and other sensitive habitat areas to include surveys for State and/or federally listed sensitive species and to provide appropriate buffers and other mitigation necessary to protect habitat for listed species.	Action 1.19	
INTERAGENCY COORDINATION			
County of Ventura	Identify and work with all entities responsible for the protection, management, and enhancement of the County's resources.	Resources Goal 1.1.1-3	The District coordinates with local jurisdictions to ensure the provision and maintenance of adequate flood control facilities, which is consistent with these policies and with state and federal agencies to comply with their directives.
City of Ojai	Coordinate with local and regional agencies, organizations and citizens to preserve to the maximum extent feasible, the Ojai Valley's biological diversity and natural health.	Biological Resources Program (1)(iii)	
City of Port Hueneme	Consider marine resources in coordination with state and federal agencies.	Conservation Policy 1-2	
City of Ventura	Comply with directives from regulatory authorities to update and enforce stormwater quality and watershed protection measures that limit impacts to aquatic ecosystems and that preserve and restore the beneficial uses of natural watercourses and wetlands in the city.	Action 1.16	

TABLE 4.4
CONSISTENCY ANALYSIS WITH GENERAL PLAN BIOLOGICAL RESOURCES GOALS AND POLICIES

Jurisdiction	Applicable Goals, Policies, and Programs	General Plan Reference	Project Consistency
WILDLIFE COMPATIBILITY WITH LAND USE			
County of Ventura	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.	Goal 1.5.1	The proposed BMPs are consistent with these policies, which encourage measures to protect sensitive biological resources. The proposed project does not include changes in land use or the expansion of District facilities. BMPs included in Section 3.4.1 would further protect threatened or endangered species during maintenance activities. As an example, the proposed BMPs include measures to conduct surveys for threatened or endangered species at facilities that may support those species prior to initiating work.
City of Camarillo	Preserve the natural features and general environmental characteristics of the hillside areas with minimum disturbance to native plants and animals. Establish open space areas that maintain and enhance the hillsides and provide a buffer between developments and open space and agriculture.	Natural Resources Policy 8	
City of Thousand Oaks	The City shall encourage the proper management, conservation, and protection of native plant communities throughout the City's Planning Area, including developed areas and remaining undeveloped open space lands.	Policy CO-21	
City of Thousand Oaks	Critical wildlife habitat resources such as movement corridors, surface water impoundments, streams and springs should be given special consideration for preservation, restoration, or enhancement, in order to maintain the biological productivity and ecological integrity of natural open space areas.	Policy CO-23	
WILDLIFE PASSAGE			
County of Ventura	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.	Policy 1.5.2 (6)	The proposed BMPs are consistent with these policies, since they include recommendations to ensure aquatic wildlife passage during
City of Thousand Oaks	Whenever such [stormwater retention and debris] basins are located adjacent to or near natural open space, unrestricted access by	Policy CO-15 Impl. Measure	

TABLE 4.4
CONSISTENCY ANALYSIS WITH GENERAL PLAN BIOLOGICAL RESOURCES GOALS AND POLICIES

Jurisdiction	Applicable Goals, Policies, and Programs	General Plan Reference	Project Consistency
	wildlife should be incorporated in the project design.	(iv)	maintenance activities (refer to Water Diversion Guide, Appendix E).
	Since natural stream drainages often serve as important movement corridors for wildlife, they should be preserved wherever it is feasible to do so.	Policy CO-26	
TREE PROTECTION			
County of Ventura	Removal, damaging, or destruction of protected trees shall be in compliance with the County's "Tree Protection Regulations."	Policy 1.7.2 (2)(2)	Vegetation management includes measures to avoid the removal of mature trees as much as possible. Routine maintenance activities do not include tree removal or pruning unless a tree is growing within a facility and affecting the operation or maintenance of the facility. In cases when removal of trees is necessary, the proposed BMPs recommend replacement (BMPs 10 and 16).
City of Ojai	The City shall preserve to the extent feasible all oak and sycamore trees within and adjacent to the community.	Biological Resources Policy (3)	
	It shall be the policy of the City of Ojai to allow no loss of existing resource value for regionally significant Oak Woodland/Savannah.	Biological Resources Policy (5)	
	It will be the policy of the City of Ojai to allow in Woodland/Brushland Ecotone areas no loss of existing resource within "core" oak woodland and sycamore tree areas while minimizing/limiting loss of remaining existing resource value.	Biological Resources Policy (7)	
	The City will preserve 60 percent of its brushland habitats, according to the following guidelines: i) Retain brushland habitats in large (40 acre min), contiguous habitat configurations; ii) Retain corridor/links of native vegetation between habitat enclaves; iii) Include oak/riparian buffer zones as a portion of the area preserved; and iv) Place lowest intensities of use, greenbelts or recreation open space adjacent to preservation areas.	Biological Resources Program (7)(i)	
	It will be the policy of the City of Ojai to minimize loss of resource value of locally significant stands of oak and sycamore trees.	Biological Resources Policy (8)	

TABLE 4.4
CONSISTENCY ANALYSIS WITH GENERAL PLAN BIOLOGICAL RESOURCES GOALS AND POLICIES

Jurisdiction	Applicable Goals, Policies, and Programs	General Plan Reference	Project Consistency
	The City will retain for aesthetics and cultural value significant stands of oak and sycamore trees. Following are guidelines for developing in and around such trees: i)The area within the dripline of oak trees should not be disturbed; ii) No impervious surfaces should be placed beneath these trees that will prevent soil aeration and root respiration; iii) To avoid root-rot and disease, no landscape ground covers requiring year round irrigation shall be planted on new development parcels; iv) Grading around oak and sycamore trees should not change the ground grade and drainage patterns in order to avoid the impoundment of water and subsequent root rot; v) Heavy equipment should not be operated beneath oaks and sycamores in order to avoid soil compaction and root suffocation; and vi) Trenching for installation of utilities should avoid the root zone of oak and sycamore trees.	Biological Resources Program (8)(i)	*(continued from previous page)*
City of Ojai	It shall be the policy of the City of Ojai to minimize the loss of resource values of locally significant stands of native brushland consistent with the best practices methods for fire protection.	Biological Resources Policy (9)	
	The city will retain 20 percent of brushland areas as natural open space in the form of a network of contiguous corridors, preferably around and along drainage courses. Individual corridors to be retained in natural condition must be no less than 100 feet wide in order to be effective.	Biological Resources Program (9)(i)	
City of Santa Paula	Native woodlands should be protected and preserved for their aesthetic value and for wildlife habitat.	Goal 5.6	
	Oak woodlands shall be protected and preserved for their own value and for wildlife habitat and aesthetic purposes.	Policy 5.b.b	
	Native trees should be protected. For the removal of trees that	Policy 5.h.h	

TABLE 4.4
CONSISTENCY ANALYSIS WITH GENERAL PLAN BIOLOGICAL RESOURCES GOALS AND POLICIES

Jurisdiction	Applicable Goals, Policies, and Programs	General Plan Reference	Project Consistency
	cannot be avoided, trees shall be replaced at a specific replacement ratio to be defined by the City.		*(continued from previous page)*
City of Simi Valley	Public and private projects should be planned so that significant trees will not be damaged or destroyed.	Policy IV-2.1.1	
	Mature trees as defined in the Tree Preservation Ordinance and tree rows of significant aesthetic or historic quality should be preserved consistent with public health and safety.	Policy IV-2.1	
	Public and private projects should be planned so that significant trees will not be damaged or destroyed.	Policy IV-2.1.1	
City of Thousand Oaks	Whenever avoidance of mature specimen trees is not feasible, such trees should be considered candidates for transplanting or replacement.	Policy CO-15 Impl. Measure (iii)	
	Continue to protect oak and other landmark trees in recognition of their historic, aesthetic, and environmental value to the citizens of Thousand Oaks.	Policy CO-28	
	To ensure protection of oak trees, continue to implement the City's Oak Tree Ordinance (Section 5-14.01 et seq. of the Thousand Oaks Municipal code) and Oak Tree Preservation and Protection Guidelines (Res. 87-93).	Policy CO-28 Implementation Measure (i)	
	Continue to implement the City's Landmark Tree Ordinance (Section 5-24.01 et. Seq. of the Thousand Oaks Municipal Code).	Policy CO-28 Impl. Measure (ii)	
	Where certain species of declining oaks are scheduled for removal, every effort should be made to replace with like trees when possible. In order to offset the continuing decline of Valley Oaks within Southern California, the City shall increase the planting ratio of these trees wherever it is determined to be feasible.	Policy CO-28 Implementation Measure (iii)	

TABLE 4.4
CONSISTENCY ANALYSIS WITH GENERAL PLAN BIOLOGICAL RESOURCES GOALS AND POLICIES

Jurisdiction	Applicable Goals, Policies, and Programs	General Plan Reference	Project Consistency
	All tree pruning on city land not being undertaken by City crews shall be approved by City staff. All pruning shall comply with International Society of Arboriculture and City maintenance standards. Pruning should not be performed solely to reduce canopy coverage except as determined appropriate by the Community Development Director.	Policy F-16	*(continued from previous page)*

TABLE 4.5
CONSISTENCY ANALYSIS WITH GENERAL PLAN HAZARDS GOALS AND POLICIES

Jurisdiction	Applicable Goals, Policies, and Programs	General Plan Reference	Project Consistency
GENERAL PROTECTION FROM POTENTIAL HAZARDS			
County of Ventura	Protect public health, safety, and general welfare from identified hazards and potential disasters.	Goal 2.1.1(2)	Two of the District objectives for the proposed project are to reduce delays in operation and maintenance activities due to delays in permit process times and to maintain current levels of flood protection within the District jurisdiction to protect life and property. Therefore, the proposed BMPs would contribute to public health, safety, and general welfare from flood hazards and is consistent with these policies.
	Shield public and private property and essential facilities from identified hazards and potential disasters.	Goal 2.1.1(3)	
	Minimize loss of life, injury, damage to structures, and economic and social dislocations resulting from identified hazards and potential disasters.	Goal 2.1.1(4), Goal 2.10.1(1)	
City of Fillmore	Protect the environmental resources of the City and surrounding area for the long-range health, safety, and general welfare of all citizens.	Goal 1	
	Minimize the risk of exposure by the public to natural and man-made hazards.	Goal 18	
City of Moorpark	Minimize the potential damage to structures and loss of life that could result from earthquakes.	Safety Goal 1.0	
	Protect public and private properties from geologic hazards associated with steep slopes, unstable hillsides, and subsidence.	Safety Goal 3.0	
City of Ojai	A City whose development is planned in consideration of major hazards and other physical constraints so as to minimize loss of life, injury, and damage to property resulting from hazards and disasters.	Safety General Goal (2)	
City of Oxnard	Maintenance and enhancement of a safe community.	Safety Goal A	
City of Santa Paula	Hazards to natural resources should be controlled or eliminated, including but not limited to pollution.	Hazardous Materials Goal 5.1	
City of Simi Valley	Minimize the hazards to public health, safety, and welfare, and prevent the loss of life, bodily injury, and property damage resulting from natural and man-made hazards.	Goal VIII-1	

TABLE 4.5
CONSISTENCY ANALYSIS WITH GENERAL PLAN HAZARDS GOALS AND POLICIES

Jurisdiction	Applicable Goals, Policies, and Programs	General Plan Reference	Project Consistency
	The City shall continue to cooperate with and support the federal, state, and county agencies responsible for the enforcement of federal, state, and local health, safety, and environmental laws.	Policy VIII-1.1	*(continued from previous page)*
City of Ventura	Minimize risks from geologic and flood hazards.	Policy 7B	
DESIGN CONSIDERATIONS FOR GEOLOGIC HAZARDS			
County of Ventura	Minimize the risk of damage to structures form the effects of expansive soils.	Goal 2.8.1	The proposed BMPs would not have adverse impacts relating to geologic hazards, including subsidence, expansive soils, or landslides/mudslides because the BMPs would be incorporated into the current maintenance program for existing facilities. The project does not propose construction of new facilities in areas subject to subsidence, expansive soils, and landslide/mudflow hazards. Therefore, these policies are not applicable to the proposed project.
	Construction must conform to established standards of the Ventura County Building Code, adopted from the California Building Code.	Policy 2.8.2(1)	
	Structural design of buildings and other structures shall recognize the potential for hydro-compaction subsidence and provide mitigation recommendations for structures that may be affected.	Policy 2.9.2 (2)	
City of Camarillo	No buildings or other structures whose failure could result in damage to life and property to be placed over any fault lines should be allowed, unless detailed geologic seismic investigation proves that the fault is inactive)has not experienced displacement within about the last 11,000 years.	Fault Displacement, Recommendation 2	
City of Camarillo	Require the design of buildings, major utilities, and other facilities, which need to remain operable after an earthquake, to be built or retrofitted to resist strong ground-shaking forces.	Earthquakes and Ground Shaking, Recommendation 7	
City of Moorpark	Minimize damage form earthquakes and other geologic activity.	Safety Implementation Program A.1	
	Undertake a comprehensive program to reduce use of local groundwater resources and to recharge basins to guard against future subsidence. Measures to be implemented include use of	Safety Implementation Program A.7	

TABLE 4.5
CONSISTENCY ANALYSIS WITH GENERAL PLAN HAZARDS GOALS AND POLICIES

Jurisdiction	Applicable Goals, Policies, and Programs	General Plan Reference	Project Consistency
	reclaimed water for landscaping, capture of storm water runoff for beneficial reuse (including recharge), and ordinances requiring low-water-use plumbing fixtures in new developments.		*(continued from previous page)*
City of Ojai	Structural design of buildings and other structures shall recognize the potential for differential settlement and subsidence.	Subsidence Policy (2)	
	In landslide/mudslide hazard areas, there shall be no avoidable 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 steepening of slopes or undercutting of the bases of slopes.	Landslide Policy (3)	
	Encourage planting of vegetation on unstable slopes to protect structures at lower elevations. Utilize native plants for landscaping in the hills to eliminate the need for supplemental watering which can promote earth movement/erosion.	Erosion Policy (2)	
City of Simi Valley	The City should enforce laws and promote policies which ensure the maximum feasible seismic stability of structures and critical facilities.	Goal VIII-6	
City of Santa Paula	Remove or rehabilitate structures which may be expected to collapse in the event of an earthquake including, but not limited to unreinforced masonry buildings pursuant to Government Code Section 78875 et seq., bridges, and critical facilities.	Seismic Safety Policy 1.f.f	
	Existing risks from earthquakes should be reduced.	Seismic Safety Goal 1.3	
	Corrective measures should be taken to mitigate or eliminate the risk of loss of life or to existing structures due to geologic hazards.	Geologic Safety Objective 2(b)	
	Existing risks form mudslides, landslides, subsidence, radon gas infiltration, and other geologic hazards should be reduced.	Geologic Safety Goal 2.2	

TABLE 4.5
CONSISTENCY ANALYSIS WITH GENERAL PLAN HAZARDS GOALS AND POLICIES

Jurisdiction	Applicable Goals, Policies, and Programs	General Plan Reference	Project Consistency
	The City shall require the design and construction of mud and debris flow diversion basins and/or walls for sites subject to mud or debris flows, or rock falls.	Geologic Implementation Measure 26g	*(continued from previous page)*
PROTECTION FROM FLOOD HAZARDS/FLOOD CONTROL DESIGN			
County of Ventura	Design and construct appropriate surface drainage and flood control facilities as funding permits.	Goal 2.10.1 (2)	The proposed project would implement BMPs during routine maintenance activities for existing flood control. No new flood control facilities are proposed as part of the project. The proposed BMPs would not substantially change the flow rate (i.e., increase runoff), velocity, erosion potential, or capacity of flood control channels. The proposed BMPs would have a beneficial impact to the maintenance of flood control and drainage facilities. Therefore, the proposed project is consistent with these policies.
	The design of any structures which are constructed in flood plain areas as depicted on the Hazards Protection Maps shall be governed by Federal regulations as well as the County Flood Plain Management Ordinance and shall incorporate measures to reduce flood damage to the structure and to eliminate any increased potential flood hazards in the general area due to such construction.	Policy 2.10.2(4)	
	Provide adequate and appropriate flood control and drainage facilities to protect life and property from damage or destruction from flood and storm waters.	Goal 4.6.1	
	All necessary flood control and drainage facilities shall be constructed to meet the minimum standards of the Public Works Agency and the County Flood Control District consistent with the goals, polices, and programs of the General Plan.	Policy 4.6.2(1)	
City of Moorpark	Reduce the risk to the community from hazards related [to] flooding.	Safety Goal 5.0	
	Consider floodway management design that includes areas where stream courses are left natural or as developed open space.	Safety Policy 5.3	
	Improve flood control structures, including modification of the Walnut Canyon and Gabbert Canyon debris basins, addition of new detention basins, channel reconstruction, and diversion systems.	Safety Policy 5.4	

TABLE 4.5
CONSISTENCY ANALYSIS WITH GENERAL PLAN HAZARDS GOALS AND POLICIES

Jurisdiction	Applicable Goals, Policies, and Programs	General Plan Reference	Project Consistency
	Ensure that new critical facilities are not permitted in floodplains unless they are elevated above the projected inundation depths and/or otherwise protected.	Safety Policy 7.4, Safety Implementation Program E.3	*(continued from previous page)*
	Continue to improve flood control structures throughout the city. Retrofit any flood control structures at risk of structural failure to minimize damage from earthquakes.	Safety Implementation Program C.5	
City of Oxnard	Minimize damage to public and private property from flooding.	Safety Objective B.3	
City of Port Hueneme	Protect Port Hueneme's residents, workers, and visitors from flood hazards.	Safety Goal 1	
City of Santa Paula	Existing risks from floods should be reduced.	Flood Protection Goal 3.2	
	Santa Paula should support flood control projects on the Santa Clara River and Santa Paula Creeks, and on other waterways, to eliminate or reduce flood hazard zones.	Flood Protection Objective 3(a)	
	New construction and substantial improvements to existing construction should comply with the City's floodplain management ordinance.	Flood Protection Objective 3(b)	
	New development projects and new and replacement flood control projects should be constructed in accordance with appropriate hydrologic and hydraulic design standards.	Flood Protection Objective 3(e)	
	Santa Paula should continue to actively participate in the Ventura Countywide Stormwater Quality Management Program and to implement the measures recommended by that program.	Flood Protection Objective 3©	
	Santa Paula should continue to participate in the Ventura County Flood Control District's flood warning system.	Flood Protection Objective 3(d)	

TABLE 4.5
CONSISTENCY ANALYSIS WITH GENERAL PLAN HAZARDS GOALS AND POLICIES

Jurisdiction	Applicable Goals, Policies, and Programs	General Plan Reference	Project Consistency
	If not already developed, Storm Drainage and Flood Control Programs should be developed and implemented.	Flood Protection Implementation Measure 30	*(continued from previous page)*
City of Simi Valley	Adopt programs and promote actions that will minimize loss of life, injuries, and property damage resulting from flooding.	Goal VIII-3	
	The City of Simi Valley should encourage the provision of new flood control facilities where they are appropriate or necessary.	Policy VIII-3.4	
	Drainage channels that do not create an unacceptable flood risk or public safety hazard should be retained in their natural state. Required flood improvements, where feasible, shall incorporate aesthetic design treatments.	Policy VIII-3.5	
City of Thousand Oaks	Protect remaining flood plains in order to help retain stormwater runoff form tributary watersheds and reduce the potential for periodic flooding within downstream reaches of the Arroyo Conejo and Calleguas Creek.	Policy CO-14	
City of Ventura	Prohibit grading for vehicle access and parking or operation of vehicles within any floodway.	Policy 7.11	
City of Camarillo	Encourage the construction of major flood control projects by the appropriate agency to protect existing developments.	Flooding, Recommendation 5	
City of Ojai	Support measures for the abatement of flooding hazards, including but not limited to: (1) removal or relocation of development from flood hazard areas; (2) construction of impoundments or channel diversions provided that adequate mitigation of environmental impacts can be demonstrated; and (3) debris clearance and silt removal programs conducted by Ventura County Flood Control District in a manner so as not to disrupt existing riparian	Flood Hazard Policy (2)	

TABLE 4.5
CONSISTENCY ANALYSIS WITH GENERAL PLAN HAZARDS GOALS AND POLICIES

Jurisdiction	Applicable Goals, Policies, and Programs	General Plan Reference	Project Consistency
	communities to the extent feasible.		*(continued from previous page)*
City of Ojai	The City should monitor and participate in County Flood Control District No. 1 policy-setting and budgeting, and should advocate preventative maintenance programs and capital improvements aimed at reducing flood hazards.	Flood Hazard Policy (7)	
SOLID WASTE MANAGEMENT			
County of Ventura	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.	Waste Disposal Goal 4.4.1	As stated in the Initial Study, the proposed BMPs would not have a significant impact on solid waste management. The Ventura County Integrated Waste Management Division states that any discretionary development project that could generate solid waste would have an impact on the demand for solid waste disposal capacity. However, unless the County of Ventura has reason to believe that there is less than 15 years of disposal capacity available for the disposal of waste generated by in-county projects, no individual project of this type and magnitude would have a significant impact on the demand for
City of Port Hueneme	Provide necessary control and reduction of solid waste generation and disposal.	Safety Goal 9	
City of Port Hueneme	Implement the City's Source Reduction and Recycling Element.	Safety Policy 10-1	

TABLE 4.5
CONSISTENCY ANALYSIS WITH GENERAL PLAN HAZARDS GOALS AND POLICIES

Jurisdiction	Applicable Goals, Policies, and Programs	General Plan Reference	Project Consistency
			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." Therefore, the proposed project will have less than significant impacts to solid waste management and is consistent with these goals and policies.
HAZARDOUS MATERIALS			
County of Ventura	Minimize the risk of loss 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.	Goal 2.15.1(1)	The proposed environmental BMPs would not involve the routine transport, handling, or application of any hazardous materials. However, certain ongoing maintenance activities involve the use of hazardous materials, such as solvents, fuel, lubricants, and pesticides/herbicides. The transport, storage, and use of
	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.	Policy 2.15.2(1)	
City of Moorpark	Protect residents and business employees from potential hazards associated with the use, storage, manufacture, and transportation of hazardous materials in and through the City.	Safety Goal 4.0	

TABLE 4.5
CONSISTENCY ANALYSIS WITH GENERAL PLAN HAZARDS GOALS AND POLICIES

Jurisdiction	Applicable Goals, Policies, and Programs	General Plan Reference	Project Consistency
	Continue to participate in the Standardized Emergency Management System and the Ventura County Stormwater Program (local enforcer of the National Pollutant Discharge Elimination System (NPDES) program).	Safety Policy 4.1	such substances follow local, state, and federal regulations to ensure public safety and prevent spills. Hence, the proposed project would have less than significant impacts on the risk of upset related to the handling of hazardous materials/waste. The proposed BMPs would not include excavation that would affect below ground hazardous materials. Therefore, the proposed project is consistent with these goals and policies.
City of Oxnard	Provide for the safe use and transportation of hazardous materials and waste.	Safety Objective B.4	
City of Port Hueneme	Ensure that life and property in Port Hueneme are not endangered by the use, storage, or transport of hazardous materials.	Safety Goal 3	
	Support the enforcement of State and Federal safety standards for the transportation of hazardous materials.	Safety Policy 3-4	
City of Santa Paula	City policies concerning the use, storage and transportation of hazardous materials, and regarding underground or above ground storage tanks, should reflect the County of Ventura Environmental Health Division and the State Regional Water Quality Control Board policies and requirements.	5.b.b	
City of Simi Valley	The City should take appropriate actions to reduce and control the use, generation, storage and transport of hazardous materials, substances, and waste, and to minimize accidental exposure of humans and wildlife to these substances.	Goal VIII-5	
	The City should work cooperatively with and actively encourage other agencies to monitor and enforce hazardous material management regulations.	Policy VIII-5.12	

TABLE 4.6
CONSISTENCY ANALYSIS WITH GENERAL PLAN NOISE GOALS AND POLICIES

Jurisdiction	Applicable Goals, Policies, and Programs	General Plan Reference	Project Consistency
SAFE NOISE ENVIRONMENT FOR COMMUNITY			
County of Ventura	To protect the health, safety, and general welfare of County residents by elimination or avoidance of adverse noise impacts on existing and future noise sensitive uses.	Goal 2.16.1	The proposed BMPs are consistent with these goals and policies, because they would not increase the amount or geographic extent of maintenance work involving noise generating heavy equipment or vehicles, or create a substantial increase in equipment use and vehicle trips. Hence, no significant increase in noise-or vibration-generating equipment and vehicle use is anticipated. Maintenance activities that require the use of heavy equipment, such as sediment removal, could temporarily increase the ambient indoor and outdoor noise levels for noise-sensitive receptors located in close proximity to flood control facilities where maintenance work is conducted. This impact is
City of Camarillo	The City [should] develop measures to control community noise impacts.	Noise Goal 3	
	The City [should] seek to limit the impact of nuisance noise sources upon residential, commercial, and noise-sensitive areas.	Noise Policy 13	
City of Fillmore	Maintain an acceptable noise environment throughout the community through protection of noise-sensitive areas from the harmful effects of noise pollution.	Goal 17	
City of Moorpark	Protect the health, safety, and general welfare of the public from adverse noise impacts.	Noise Goal N-1	
	Limit the impact of nuisance noise sources upon residential areas.	Noise Policy N-1.6	
City of Ojai	A City that maintains a quiet acoustical environment.	Noise Goal (1)	
City of Oxnard	A quiet environment for the residents of Oxnard.	Noise Goal A	
	Provide acceptable noise levels for residential and other noise-sensitive land uses consistent with State guidelines.	Noise Objective B.1	
City of Port Hueneme	Protect the public's health and welfare from adverse noise levels.	Noise Goal 1	
City of Santa Paula	Existing exposure of citizens to excessive noise sources should be reduced.	Noise Goal 1.1	
City of Simi Valley	The City shall maintain its character as a quiet suburban community.	Goal X-1	
	The City shall seek to limit the impact of nuisance noise sources upon residential areas.	Policy X-.7	

TABLE 4.6
CONSISTENCY ANALYSIS WITH GENERAL PLAN NOISE GOALS AND POLICIES

Jurisdiction	Applicable Goals, Policies, and Programs	General Plan Reference	Project Consistency
City of Thousand Oaks	Achieve and maintain and environment in which noise-sensitive uses are not disturbed by noise that exceeds exposure guidelines established in this Noise Element.	Goal N-1	limited to weekdays between 7 AM and 7 PM, with a limited duration of several hours to days at any one location. In addition, the proposed BMPs include the recommendation for noise abatement measures according to the County's guidelines.
	Preserve quiet and diminish existing noise levels in area of noise-sensitive uses to the extent reasonable and feasible while permitting development in accordance with the Land Use and Circulation Elements of the General Plan.	Goal N-2	
City of Ventura	Minimize the harmful effects of noise.	Policy 7E	
NOISE CONTROL MEASURES - GENERAL			
County of Ventura	The priorities for noise control shall be as follows: (1) Reduction of noise emissions at the source. (2) Attenuation of sound transmission along its path, using barriers, landforms modification, dense plantings, and the like. (3) Rejection of noise at the reception point via noise control building construction, hearing protection, or other means.	Policy 2.16.2(3)	The proposed BMPs are consistent with these goals and policies, as they would not increase the amount or geographic extent of maintenance work involving noise generating heavy equipment or vehicles, or create a substantial increase in equipment use and vehicle trips.
City of Camarillo	Prevent, reduce, or eliminate noise pollution.	Open Space and Conservation Goal B(iii)	
The City of Moorpark	Enforcement of the Noise Ordinance shall be the responsibility of the Code Enforcement staff of the Community Development Department. The most effective method to control community noise impacts form non-transportation sources is through application of the community Noise Ordinance. It shall be the Policy of the City to notify applicants for building permits that include mechanical equipment, of the existence of the Noise Ordinance. Typical examples would include commercial and	Noise Implementation Program N-1.4.1	

TABLE 4.6
CONSISTENCY ANALYSIS WITH GENERAL PLAN NOISE GOALS AND POLICIES

Jurisdiction	Applicable Goals, Policies, and Programs	General Plan Reference	Project Consistency
	industrial areas near residential development. The City may require as a condition of project approval, that noise measurement data be provided to the City after construction, demonstrating compliance with the Noise Ordinance.		*(continued from previous page)*
City of Ojai	The City shall enforce the State Uniform Building Code which specifies that the indoor noise levels for residential living spaces not exceed 45 dB dn/CNEL due to the combined effect of all noise sources. The State requires implementation of this standard when the outdoor noise levels exceed 60 dB Ldn/CNEL. However, the City should implement a 55 dB outdoor noise standard.	Noise Policy (1)	
City of Oxnard	The City should promote maximum efficiency in noise abatement efforts through intergovernmental coordination and public information programs.	Noise Policy C.2	
City of Simi Valley	The City shall require noise sources to limit noise to levels that do not interfere with adjacent uses.	Policy X-1.2	
	The City shall require noise-sensitive uses locating in noise impact areas to provide appropriate protection.	Policy X-1.3	
	The City shall regulate times and days of the week that any temporary noise-generating use may occur.	Policy X-1.5	
	The City shall work with those public agencies which have jurisdiction within the planning area of the City of Simi Valley to ensure that the programs of those agencies are consistent with the policies of the City as they relate to noise control.	Implementation Measure X-L	
City of Thousand Oaks	In evaluating projects for significant adverse environmental effects under the California Environmental Quality Act, the City will consider substantial increases in community noise level to be a potentially significant effect even if these increases do not result in a	Policy N-2.1	

TABLE 4.6
CONSISTENCY ANALYSIS WITH GENERAL PLAN NOISE GOALS AND POLICIES

Jurisdiction	Applicable Goals, Policies, and Programs	General Plan Reference	Project Consistency
	violation of the City's guidelines for normally acceptable noise levels for noise-sensitive land uses.		*(continued from previous page)*
NOISE CONTROL APPLICATIONS ADDRESSING TRAFFIC			
City of Camarillo	The City shall provide for continued evaluation of truck movements and routes in the City to plan for their effective separation from residential or other noise-sensitive land uses, where legally possible.	Noise Measure 7	The proposed environmental BMPs would not increase the amount or geographic extent of maintenance work involving vehicle trips or create a substantial increase in vehicle trips in order to implement the BMPs. Hence, the proposed project is consistent with these goals and policies.
	The City shall encourage enforcement of the State Motor Vehicle Code noise standards for cars, trucks, and motorcycles through coordination with the Ventura County Sheriff's Department, the California Highway Patrol (CHP), the State Department of Health Services, and the Camarillo Police Department. Both the CHP and the State Department of Health Services are able to assist the City in code enforcement and enforcement training.	Noise Measure 8	
City of Moorpark	Identify sound attenuation measures that can be applicable to transportation-related noise impacts.	Noise Policy N-1.1	
	The City shall seek to minimize transportation noise through the use of sound attenuation design features and coordination of transportation routing. As part of the evaluation of commercial and industrial projects, truck movements and routes in the city shall be evaluated to provide effective separation from residential or other noise sensitive land uses. (For example: adding truck traffic to an arterial with adjacent commercial and/or industrial development along the roadway creates less of a relative noise impact than adding the truck traffic to a smaller roadway, such as a collector, where the land use is predominantly residential.	Noise Implementation Program N-1.1.2	
City of Ojai	The City should enhance efforts to enforce vehicle noise emission regulations and speed limits.	Noise Policy (5)	

TABLE 4.6
CONSISTENCY ANALYSIS WITH GENERAL PLAN NOISE GOALS AND POLICIES

Jurisdiction	Applicable Goals, Policies, and Programs	General Plan Reference	Project Consistency
	The City should discourage nighttime traffic, particularly truck traffic, on streets in residential areas and schedule trash pickups between 7 a.m. and 5 p.m. in residential areas.	Noise Policy (6)	*(continued from previous page)*
	Strengthen enforcement of vehicle noise emissions regulations and vehicle speeds.	Noise Program (2)	
City of Port Hueneme	Identify mobile noise sources affecting the community, and establish effective noise abatement measures.	Noise Goal 2	
	Prohibit through truck traffic in noise-sensitive areas, such as the four school sites located in Port Hueneme.	Noise Policy 2-1	
	Minimize through vehicular traffic in the City's residential areas.	Noise Policy 2-2	
	Enforce the State Motor Vehicle noise standards for cars, trucks, and motorcycles.	Noise Policy 2-4	
City of Santa Paula	Minimize the adverse effect of traffic-generated noise on residential and other noise sensitive land uses from noise and highways.	Traffic Noise Objective 1(a)	
	Minimize noise attributable to vehicular travel in pedestrian oriented areas and residential neighborhoods by inhibiting through trips through the use of diagonal parking, one-way streets, road dips, cul-de-sacs, and other traffic controls.	Traffic Noise Policy 1.d.d	
	Require that new equipment and vehicles purchased by the City comply with noise performance standards consistent with the best available noise reduction technology.	Traffic Noise Policy 1.f.f	
City of Simi Valley	The City shall require projects to contribute to the mitigation of off-site traffic noise impacts to the extent that these impacts are generated by the project.	Policy X-1.6	

TABLE 4.6
CONSISTENCY ANALYSIS WITH GENERAL PLAN NOISE GOALS AND POLICIES

Jurisdiction	Applicable Goals, Policies, and Programs	General Plan Reference	Project Consistency
	The City should continue to regulate truck movements and routes in the City to provide effective separation from residential or other noise-sensitive land uses.	Implementation Measure X-G	*(continued from previous page)*
	The City should encourage the enforcement of State Motor Vehicle noise standards for cars, trucks, and motorcycles through coordination between California Highway Patrol and the Simi Valley Police Department.	Implementation Measure X-H	
NOISE CONTROL APPLICATIONS ADDRESSING CONSTRUCTION			
City of Camarillo	The adopted City Noise Ordinance should include regulations limiting construction activity to weekdays and Saturdays only between the hours of 7 a.m. and 7 p.m. and prohibiting such activity entirely on Sundays and legal holidays unless special permits are issued by the City where it can be shown such construction activity will not interfere with noise sensitive areas.	Noise Measure 13	The BMPs are consistent with these goals and policies, because they would not increase the amount or geographic extent of maintenance work involving noise generating heavy equipment or vehicles, or create a substantial increase in equipment use and vehicle trips. Maintenance activities that require the use of heavy equipment, such as sediment removal, could temporarily increase the ambient indoor
City of Moorpark	The City shall enforce the Municipal Code provision relating to the time that limitations that construction activity in or adjacent to residential areas may occur in order to reduce the intrusion of noise in the early morning and late evening hours, on weekends, and holidays. At the time of development project approval, the city shall ensure, through conditions of approval, that adequate noise control measures at all construction sites are provided (through the provisions of mufflers and the physical separation of machinery maintenance areas from adjacent residential uses).	Noise Implementation Program N-1.4.1	
City of Ojai	Restrict hours of operation and days of the week of construction activities.	Noise Program (5)	

TABLE 4.6
CONSISTENCY ANALYSIS WITH GENERAL PLAN NOISE GOALS AND POLICIES

Jurisdiction	Applicable Goals, Policies, and Programs	General Plan Reference	Project Consistency
City of Santa Paula	Minimize the impacts of construction noise on adjacent uses.	Construction Noise Objective 7(a)	and outdoor noise levels for noise-sensitive receptors located in close proximity to flood control facilities where maintenance work is conducted. This impact is limited to weekdays between 7 AM and 7 PM, with a limited duration of several hours to days at any one location. In addition, the proposed BMPs include the recommendation for noise abatement measures according to the County's guidelines.
	Require that construction activities adjacent to residential units be limited as necessary to prevent adverse noise impacts.	Construction Noise Policy 7.a.a	
	Require that construction activities employ feasible and practical techniques which minimize the noise impacts on adjacent uses.	Construction Noise Policy 7.b.b	
City of Simi Valley	The adopted City Noise Ordinance shall include regulations limiting the hours of construction activity in residential areas in order to reduce the intrusion of noise in the early morning and late evening hours and on weekends and holidays. The Noise Ordinance shall also include requirements for noise control measures for machinery on construction sites.	Implementation Measure X-M	
City of Camarillo	The adopted City Noise Ordinance should regulate the hours permitting operation of engine-powered yard and gardening equipment, excessively noisy vehicles on private property and outdoor use of power tools in residential and noise sensitive areas.	Noise Measure 14	
City of Ojai	Restrict hours of operations of leaf blowers and other power gardening activities.	Noise Program (4)	
City of Port Hueneme	Ensure that equipment, machinery, fan, and air-conditioning noise does not exceed specified levels, established in the City's Noise Ordinance.	Noise Policy 3.8	

TABLE 4.7
CONSISTENCY ANALYSIS WITH GENERAL PLAN TRAFFIC GOALS AND POLICIES

Jurisdiction	Applicable Goals, Policies, and Programs	General Plan Reference	Project Consistency
GENERAL GOAL/OBJECTIVE TO IMPROVE TRAFFIC IN EXISTING INFRASTRUCTURE			
County of Ventura	Promote measures to reduce vehicle mile traveled and disperse peak traffic to better utilize the existing transportation infrastructure	Public Services Goal 4.2.1(5)	The proposed BMPs are consistent with these policies as they would not increase the amount or geographic extent of maintenance work involving vehicle trips or create a substantial increase in vehicle trips in order to implement the BMPs. Vehicle use associated with routine maintenance throughout the County contributes to the regional traffic volumes and localized congestion. However, the cumulative impact of the implementation of the proposed BMPs is considered to be less than significant due to the small volume and intermittent nature of the traffic. In addition, the proposed BMPs also recommend that if maintenance activities would result in substantial vehicle
City of Camarillo	Encourage ways to reduce vehicle miles traveled and disperse peak traffic in order to reduce impacts on existing transportation facilities.	Circulation Goal (iii)	
City of Moorpark	Provide a circulation system which supports existing, approved, and planned land uses throughout the City while maintaining a desired level of service on all streets and at all intersections.	Circulation Goal 2	
City of Ojai	Help reduce regional traffic.	Circulation Objective (iv)	
City of Oxnard	Reduce congestion at major intersections within the City of Oxnard.	Circulation Objective B.2	
	Minimize vehicle miles traveled.	Circulation Objective B.3	
City of Port Hueneme	Reduce existing congestion at critical intersections, including Channel Islands Boulevard and Ventura Road, and Ventura Road and Bard Road.	Circulation Policy 1-1	
City of Santa Paula	The City should maintain acceptable operations of the City streets and intersections during peak weekday commute periods.	Circulation Objective 1(a)	
City of Simi Valley	The primary concern of the City's traffic efforts should be to improve conditions on State Route 118.	Circulation Policy VII-1.1	
City of Thousand Oaks	To provide an integrated circulation and transportation system consistent with the Valley's form and needs.	Circulation Goal	
City of Ventura	Ensure that the transportation system is safe and easily accessible to all travelers.	Policy 4A	
	Increase transit efficiency and options.	Policy 4C	
	Require project proponents to analyze traffic impacts and provide	Action 4.13	

TABLE 4.7
CONSISTENCY ANALYSIS WITH GENERAL PLAN TRAFFIC GOALS AND POLICIES

Jurisdiction	Applicable Goals, Policies, and Programs	General Plan Reference	Project Consistency
	adequate mitigation in the form of needed improvements, in-lieu fee, or a combination thereof.		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.
	DESIGNATION OF LOS		
County of Ventura	Facilitate the safe and efficient movement of persons and goods by designing, constructing, and maintaining a *Regional Road Network* and *Local Road Network* that is consistent with the County road standards and that will function at an acceptable *Level of Service (LOS).*	Public Services Policy 4.2.1(1)	As the proposed BMPs would not increase the amount or geographic extent of maintenance work involving vehicle trips, the effect of their implementation on LOS would be less than significant. In addition, one of the BMPs recommends that 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. Therefore, the proposed project is consistent with these goals and policies.
	The minimum acceptable *Level of Service (LOS)* for road segments and intersections within the *Regional Road Network* and *Local Road Network* shall be as follows: (a) *LOS-'D'* for all *County thoroughfares* and *Federal highways* and *State highways* in the unincorporated area of the County, except as otherwise provided in subparagraph (b); (b) *LOS-'E'* for State Route 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 State Route 34 north of the City of Camarillo; (c) *LOS-'C'* for all County-maintained *local roads*; and (d) 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 (similar to Policies 4.2.2-3 through 4.2.2-6) respecting	Public Services Policy 4.2.2(3)	

TABLE 4.7
CONSISTENCY ANALYSIS WITH GENERAL PLAN TRAFFIC GOALS AND POLICIES

Jurisdiction	Applicable Goals, Policies, and Programs	General Plan Reference	Project Consistency
	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. At any intersection between two roads, each of which has a prescribed minimum acceptable *LOS*, the lower *LOS* of the two shall be the minimum acceptable *LOS* for that intersection.		*(continued from previous page)*
City of Moorpark	Level of service "C" shall be the system performance objective for traffic volumes on the circulation system. For roadways and interchanges already operating at less than level of service "C", the system performance objective shall be to maintain or improve the current level of service.	Circulation Policy 2.1	
City of Ojai	Provide for the efficient movement of vehicles by designing, constructing, and maintaining a roadway circulation network which will function at an acceptable level of service (LOS). The City will strive to achieve and maintain LOS C, where it is economically and environmentally feasible to achieve that objective in a manner consistent with community character and the non-transportation provision of the General Plan, but will accept lower levels of service where necessary to: (i) Protect Ojai's unique community character or the quality of the area's natural environment; (ii) Provide for the safety of pedestrians and bicyclists and to avoid gaps in the City's trails system; and (iii) Conduct major community events that are important to the City's cultural, community, and economic health.	Circulation Policy Cir-1	
City of Oxnard	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.	Circulation Goal A.1	

TABLE 4.7
CONSISTENCY ANALYSIS WITH GENERAL PLAN TRAFFIC GOALS AND POLICIES

Jurisdiction	Applicable Goals, Policies, and Programs	General Plan Reference	Project Consistency
	Where environmentally feasible, all intersections in the City of Oxnard should operate at Level of Service "C," with the exception of Oxnard Blvd. (State Route 1), which will experience higher levels of congestion until a bypass expressway is constructed.	Circulation Policy C.1	*(continued from previous page)*
City of Santa Paula	Provide for a high level of service and safety and an adequate, efficient circulation pattern on the City' street system.	Circulation Goal 1.3	
	The City should adopt level of service (LOS) "C" as the minimum acceptable LOS for City streets and intersections (weekday P.M. peak period).	Circulation Policy 1.a.a	
City of Simi Valley	The vehicular circulation system shall be designed to operate with intersections at Level of Service C (LOS C), or better during peak traffic periods. Streets intersections may operate on an interim basis at LOS D during peak hours around major industrial and Regional and District commercial centers where the short-term attainment of LOS C may be impractical or not attainable without mitigation which has a far greater negative impact than allowing for a greater level of service. Projected LOS E or F operation at any time of day with cumulative traffic volumes and projected ultimate intersection improvements will not be accepted.	Circulation Policy VII-1.10	
City of Thousand Oaks	The City shall maintain a Level of Service C on all roads and at all intersections. Lower levels of service may be tolerated to preserve or enhance landscaping and aesthetic integrity.	Circulation Policy (xi)	
PROVIDE SAFE TRANSPORTATION SYSTEM FOR THE PEOPLE AND COMMUNITY			
County of Ventura	Facilitate the safe and efficient movement of persons and goods by designing, constructing, and maintaining a *Regional Road Network* and *Local Road Network* that is consistent with the County road standards and that will function at an acceptable *Level of Service (LOS).*	Public Services Policy 4.2.1(1)	The proposed BMPs recommend that if maintenance activities would result in substantial vehicle

TABLE 4.7
CONSISTENCY ANALYSIS WITH GENERAL PLAN TRAFFIC GOALS AND POLICIES

Jurisdiction	Applicable Goals, Policies, and Programs	General Plan Reference	Project Consistency
City of Camarillo	Discourage commercial, industrial, and through traffic from traveling on local residential streets. Discourage the parking of non-residential vehicles on residential streets.	Circulation Principle 5(iii)	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, the BMPs also state that District staff shall avoid stacking of maintenance trucks on public roads during maintenance activities. Therefore, the BMPs would not conflict with these goals and policies.
City of Fillmore	Vehicular traffic within residential areas shall be directed wherever possible to arterials to improve neighborhood safety and living quality.	Circulation Policies II-1	
	Provide for the efficient and safe movement of people goods, and services within and through the City.	Goal 11	
City of Moorpark	Provide a transportation system that supports the land use plan in the General Plan and provides for the safe and efficient movement of people, goods, and services within, into, out of, and through the City of Moorpark.	Circulation Goal 1	
City of Ojai	It is the goal of the City of Ojai to develop and maintain a transportation system that is protective of the community's unique character and living environment; maximizes freedom and safety of movement for pedestrians, bicycles, and automobiles; and that maintains a balance between mobility and the cost-efficiency of maintenance.	Circulation Goal	
City of Ojai	Facilitate the efficient delivery of energy, water, and storm water, as well as the disposal of sewage in a manner consistent with protecting Ojai's environmental quality and small town character.	Circulation Objective (vii)	
City of Port Hueneme	Provide a comprehensive transportation system for the movement of persons and goods with maximum safety, efficiency, and convenience, and with a minimum delay and cost.	Circulation Goal 1	
	Encourage the routing of through traffic to designated arterial streets and discourage through traffic to residential neighborhoods.	Circulation Policy 2-1	

TABLE 4.7
CONSISTENCY ANALYSIS WITH GENERAL PLAN TRAFFIC GOALS AND POLICIES

Jurisdiction	Applicable Goals, Policies, and Programs	General Plan Reference	Project Consistency
City of Santa Paula	Ensure the safe and efficient movement of people and goods.	Circulation Goal 1.2	*(continued from previous page)*
City of Thousand Oaks	Local traffic should be moved through the City on arterial streets to protect collector and neighborhood streets from traffic impacts.	Circulation Policy (vi)	
City of Ventura	Identify, designate, and enforce truck routes to minimize the impact of truck traffic on residential neighborhoods.	Action 4.9	
	Establish a parking management program to protect the livability of residential neighborhoods, as needed.	Action 4.26	
TRIP REDUCTION STRATEGIES			
City of Moorpark	Develop and encourage a transportation demand management system to assist in mitigating traffic impacts and in maintaining a desired level of service on the circulation system.	Circulation Goal 7	No pedestrian/bicycle facilities, parking, bus stops, active railroads right of way, airports, or harbors, will be affected by the implementation of the proposed BMPs. The proposed project will have no impact on the use of different modes of transportation. Therefore, these goals and policies are not applicable to the proposed project.
	State and national legislation directed at encouraging the use of carpools and vanpools shall be supported.	Circulation Policy 7.5	
	The Ventura County Air Pollution Control District shall be supported in its effort to implement transportation demand management strategies.	Circulation Policy 7.6	
City of Oxnard	The City shall develop and adopt a Transportation Demand Management (TDM) ordinance to encourage new and existing employers of 25-50 employees, and employment centers to reduce the number of single occupant work trips.	Circulation Policy 10	
City of Port Hueneme	Promote the use of alternative forms of transportation (other than single passenger cars) to reduce congestion, traffic, noise, and air quality impacts.	Circulation Policy 3 -1	
City of Simi Valley	Traffic system management measures such as high occupancy company-sponsored vehicles, ride-sharing programs, development features to encourage bicycle use, or utilizing the labor force close to	Circulation Policy VII-2.6	

TABLE 4.7
CONSISTENCY ANALYSIS WITH GENERAL PLAN TRAFFIC GOALS AND POLICIES

Jurisdiction	Applicable Goals, Policies, and Programs	General Plan Reference	Project Consistency
	the workplace should be developed to reduce vehicle miles traveled.		*(continued from previous page)*
	The City shall pass an ordinance requiring all employers of 100 or more employees to develop a transportation management plan.	Implementation Measure VII-CC	
City of Santa Paula	Traffic congestion and air pollution should be reduced by decreasing the number and length of motor vehicle trips.	Circulation Goal 4.1	
	The growth of the number and length of motor vehicle trips should be reduced.	Circulation Objective 4(a)	
City of Thousand Oaks	A variety of transportation modes should be encouraged.	Circulation Policy (iv)	
City of Ventura	Develop a transportation demand management program to shift travel behavior to alternative mode and services.	Action 4.20	
	Develop incentives to encourage City employees and local employers to use transit, rideshare, walk, or bike.	Action 4.29	
	Help reduce dependence on the automobile.	Policy 4B	

5.0 ALTERNATIVES

5.1 NO PROJECT ALTERNATIVE (STATUS QUO)

Under this alternative, the proposed Best Management Practices (BMPs) would not be incorporated into the ongoing maintenance program. Hence, environmental effects of this program would persist at their current levels and the beneficial impacts of the BMPs would not be realized. In addition, the District would continue to experience difficulty and the need to devote substantial staff time in acquiring the necessary state and federal permits to conduct critical channel and basin maintenance. Without such permits, many of the drainages and basins in the County would be maintained less frequently and potentially repaired or reconstructed only after conditions arise in which there is an imminent and substantial threat to life and property.

This alternative is included pursuant to the requirements of CEQA, however this alternative does not meet the project objectives, which are shown below and discussed in detail in Section 2.1.

1. Reduce delays in operation and maintenance activities due to delays in permit response time
2. Improve environmental protection during maintenance activities
3. Maintain current levels of flood control protection within its jurisdiction to protect life and property

This alternative could result in increased flood hazards and risks to public health and safety if flood control facilities are not maintained in a timely manner due to difficulty acquiring permits for individual maintenance activities.

5.2 NO MAINTENANCE ALTERNATIVE

Another type of "No Project" alternative is the "No Maintenance Alternative." Under this alternative, the current maintenance program would be terminated. Flood control facilities would not be maintained, and over time they would no longer operate properly. This alternative would eliminate the need for permitting, and vegetation would develop within the District's facilities. This alternative is considered undesirable because it would not meet the project objective to provide flood control. This alternative would result in increased flooding and loss of bank protection due to lack of maintenance, resulting in increased property damage and possibly loss of life due to increased flood hazard.

5.3 DEFERRED MAINTENANCE ALTERNATIVE

Under the deferred maintenance alternative, vegetation and sediment would be allowed to develop and accumulate within District facilities for some time before maintenance. Increased vegetation within District facilities would reduce the function and capacity of the facilities and cause delays in permitting because of agency concerns over habitat protection. Furthermore, development of vegetation and habitat within facilities, which would be removed by maintenance activity, would likely trigger costly mitigation requirements for the District. This alternative does not meet the

project objectives, would potentially result in substantial delays and expense to the District due to mitigation requirements, and would not allow the District to protect life and property.

5.4 ALTERNATIVES THAT AVOID SIGNIFICANT IMPACTS

The proposed project addressed in the Program EIR is to incorporate feasible environmental protection measures into the current maintenance program for existing facilities. One of the objectives of the proposed project is improve environmental protection during ongoing maintenance activities to the extent feasible without compromising the overall objectives of the maintenance program. The District is proposing to adopt these measures as part of the routine maintenance program to improve environmental protection and to facilitate acquisition of long-term state and federal permits.

Pursuant to CEQA Guidelines Section 15126.6(a), alternatives must be considered that would avoid or reduce significant environmental impacts. The implementation of the proposed environmental BMPs would not result in any significant impact. Hence, there is no need to develop alternatives for this purpose.

5.5 ALTERNATIVE ENVIRONMENTAL PROTECTION MEASURES

The District recognizes that there may be additional environmental protection measures that could further improve environmental protection during maintenance activities. The applicability and feasibility of alternative environmental protection measures are addressed below.

5.5.1 Greater Seasonal Restrictions

Under the ongoing maintenance program, the following activities occur during the winter months (1 November to 1 April) when water is likely to be present in the work areas of channels and basins:

- Unimproved channel cleanouts
- Earthen channel bank and bed repairs
- Bank protection repair
- Herbicide spraying
- Access road repairs and surfacing
- Rodent Control

Rainfall and runoff generally occur between December and March in Ventura County. However, there are typically many dry days and weeks during these months. Changing the time when maintenance work is conducted from the winter to a period when water is not present would reduce the potential for erosion and sedimentation. Under this alternative, no in-channel or in-basin work would be performed during the winter months to avoid or further reduce the effects of the existing maintenance program on water quality.

This alternative is not considered feasible for all facilities for the following reasons. The winter work is partially scheduled to maximize staff resources and take advantage of dry days and weeks. Critical maintenance work occurs in the summer and fall, placing a high demand on staff and requiring additional contracting support to meet the District's needs. Maintenance demands in low rainfall years are much less in the winter and early spring. Many of the above activities are purposely deferred to winter when staff resources are available. If such work were restricted to the summer and fall, the District would need to reduce permanent staff levels and rely more on seasonal contract labor. This is not considered feasible because the additional costs of contract labor cannot be covered by the District.

The application of herbicides all year is critical to the successful control of vegetation in channels and basins. A large amount of vegetation growth occurs in the winter months in southern California. Delaying the application of herbicides to the summer and fall would result in a greater amount of herbicide being applied than under current conditions because of the greater biomass at the time of application. Therefore, this change would increase environmental impacts compared to the Proposed Project.

The District has a zero tolerance policy for the presence of rodents that could damage its critical facilities. Currently the District does not apply rodenticides to flowing water or when rain is forecast. Nonetheless, the potential for rodent damage exists year round, so actions to prevent the potential migration of rodents and burrowing ground squirrels from adjacent areas to the District flood control facilities must be carried out on an as needed basis throughout the year. Therefore, seasonal restrictions on rodent control would not meet the project's objective of maintaining the function and structural integrity of flood control facilities, in order to maintain current levels of flood protection within its jurisdiction to protect life and property.

5.5.2 No Herbicide Use

Under this alternative, all vegetation management in channels and basins would occur by mechanical means (i.e., mowing, discing) or by hand crews using hoes and shovels. This alternative would eliminate the discharge of herbicides to the environment. This alternative is considered infeasible because using mechanical means only for vegetation management would be more labor intensive and the District could not cover the additional labor cost.

5.5.3 No Rodenticide Use

Under this alternative, the District would refrain from using rodenticides at existing facilities. Rodents would be removed using alternative means such as traps. This alternative is not considered feasible due to the high labor cost and the limited efficacy of controlling rodent populations without the use of rodenticides. A decrease in the effectiveness of the District's rodent control program would potentially result in inadequate maintenance of critical facilities and damage that could result in catastrophic facility failure.

5.5.4 Onsite Habitat Restoration

Under this alternative, the District would implement habitat restoration on the banks of existing flood control channels and in basins, rather than at suitable sites outside flood control facilities. This alternative is not considered feasible because creating habitat at flood control facilities would reduce conveyance and storage capacity, potentially compromise structural integrity, and impair the function of the facilities. In addition, there would be conflicts between maintenance of the channel or basin and protection of the restored habitat. The proposed approach to habitat restoration provides flexibility for the District to locate suitable restoration sites that would not have such conflicts.

5.6 ENVIRONMENTALLY SUPERIOR ALTERNATIVE

In considering all of the environmental analysis presented in this document, the evaluation of alternatives above, and the project objectives, the environmentally superior alternative is the proposed project.

6.0 GREENHOUSE GAS EMISSIONS AND GLOBAL CLIMATE CHANGE

6.1 BACKGROUND

In 2006 the California State Legislature adopted Assembly Bill No. 32 (AB 32), the California Global Warming Solutions Act of 2006 and the Governor signed it into law. AB 32 focuses on reducing greenhouse gas (GHG) emissions in California. GHG as defined under AB 32 include: water vapor, carbon dioxide, methane, nitrous oxide, hydrofluorocarbons, perfluorocarbons, and sulfur hexafluoride. AB 32 requires the California Air Resources Board (CARB), the State agency charged with regulating statewide air quality, to adopt rules and regulations that would achieve GHG emissions equivalent to statewide levels in 1990 by 2020. In addition, two State-level Executive Orders have been enacted by the Governor of California (Executive Order S-3-05, signed June 1, 2005, and Executive Order S-01-07, signed January 18, 2007) that mandate reductions in GHG emissions.

AB 32 also required CARB to publish a list of discrete early action GHG emission reduction measures (CARB 2007). The list will become part of California's strategy for achieving GHG reductions under AB 32. The measures include:

- A low carbon fuel standard
- Reduction of HFC-134a emissions from non-professional servicing of motor vehicle air conditioning systems
- Improved landfill methane capture

CARB estimates that by 2020, the reductions from these three measures alone would be approximately 13 to 26 million metric tons of carbon dioxide equivalent (CO_2 e).

In August 2007 the Governor approved Senate Bill No. 97 which requires the Office of Planning and Research to prepare, develop, and transmit to the Resources Agency guidelines for the feasible mitigation of GHG emissions or the effects of GHG emissions as required by CEQA for projects including, but not limited to, those evaluating transportation or energy consumption. These guidelines and mitigation measures are due in July 2009 and are to be adopted by the Resources Agency no later than January 2010.

The evaluation of GHG emissions and a project's individual and cumulative impact on global climate change (GCC) in CEQA documents is a rapidly emerging trend and currently driven by existing laws and legal challenges to CEQA documents. While GHG emissions are not new phenomena, the impact evaluation method and thresholds with regard to GCC impacts have not been defined or adopted at the state or local level. In the absence of such guidelines, air quality impact thresholds may be used as the basis for individual and cumulative GHG analysis.

Ventura County's Air Quality Management Plan (AQMP 1979, as amended), the Resources Appendix of the Ventura County General Plan, and the Ventura County Initial Study Assessment

Guidelines provide information on the County's air quality attainment status within the South Central Coast Air Basin and the environmental thresholds of significance. The Ventura County Air Pollution Control District (APCD) has prepared Air Quality Assessment Guidelines (Guidelines 2003) for the preparation of air quality analyses in CEQA documents and has also adopted a Climate Action Plan (October 2007) which identified five initial actions it will take to reduce GHG emissions locally. The Guidelines indicate that a project would have a significant impact on the environment if it would:

- Result in daily emissions exceeding 25 pounds of reactive organic compounds (ROC) or oxides of nitrogen (NO_x);
- Cause a violation or make a substantial contribution to a violation of an ambient air quality standard;
- Directly or indirectly cause the existing population to exceed the population forecasts in the most recently adopted Ventura County Air Quality Management Plan (AQMP); or
- Be inconsistent with the AQMP and emit greater than 2 pounds per day of ROC or NO_x.

Currently, Ventura County exceeds the state and National Ambient Air Quality Standards for ozone, and the state standard for particulate matter (PM_{10}) in some areas. Based on past CEQA analyses, GHG emissions associated with many District capital improvement construction projects exceed one or more of the aforementioned significance thresholds, and some operation and maintenance (O&M) activities at some facilities are similar to capital projects in terms of the types of equipment used and the duration of the work. However, the APCD generally considers construction emissions temporary and less than significant, but requires standard emissions reduction measures to address PM_{10}.

In response to AB 32 and because of the lack of guidance on CEQA analysis from the state, the Association of Environmental Professionals (AEP 2007) published a white paper summarizing the legal background, legislative history and alternative approaches to addressing GHG emissions and GCC in CEQA documents. This guidance and the references therein together with the District's vehicle fleet data were used to estimate the District's annual baseline GHG emissions and evaluate the cumulative baseline contribution of the District's existing O&M program given the regional setting of this program in Ventura County and Southern California. However, because there are no adopted thresholds of significance for GCC or accepted methodologies for determining GCC significance, a determination of the project level impact on regional, statewide, or continental resources of concern affected by GCC (i.e., regional water supply and hydrology, plant and wildlife species range expansions or contractions, Sierra snowpack, extent of polar ice caps, sea level rise, etc.) would be speculative.

6.2 ANALYSIS OF IMPACTS

Currently the District's O&M Division annually maintains several hundred existing flood control facilities as described in Section 2 of this document (see also the Catalog of Facilities, Appendix C and the Debris and Detention Basin Manual, Appendix D). Maintenance activities are completed using light and heavy duty vehicles including light duty passenger trucks, and heavy duty haul trucks,

dozers, loaders, excavators, graders, and other typical equipment. Maintenance is conducted by District staff using County owned equipment or by contractors, and maintenance occurs throughout the year; however, peak work periods are in the fall, prior to the onset of the rainy season. In addition to the inspections and maintenance work, the District currently implements several Best Management Practices (BMPs) to address environmental issues such as stormwater management and water pollution control. Additional BMPs are proposed in this EIR (the proposed project) to address O&M effects on species and habitat, traffic, and noise.

To assess impacts in the absence of adopted significance thresholds, the GHG emissions from the existing O&M program (the baseline) from representative 2007 data were calculated.[1] The specific GHG contributions resulting from the proposed BMPs (project level contributions over the baseline) are unknown at this time, but the order of magnitude of the increase is expected to be small because the BMPs will add few vehicle trips per year to the program. Over time, the number of facilities requiring annual maintenance will increase, also increasing the emissions from BMP implementation. To assess whether GHG emissions associated with the current O&M program together with the proposed BMPs may be cumulatively considerable, GHG emissions are discussed below in the context of Ventura County's attainment status with local air quality standards. These data are then compared to other regional entities who have reported mobile combustion emissions in the Southern California region[2]. Finally, feasible and applicable GHG reduction strategies from the CARB (2007) and AEP (2007) reports are presented below and will be considered by the District's Board of Directors during this CEQA process.

To calculate the GHG emissions resulting from the District's O&M program (Table 6-1), fuel type, annual fuel consumption (representative data sample from 2007) and annual miles traveled (representative data sample from 2007) for each fleet vehicle[3] was tabulated using data from the Ventura County General Services Agency. Equations and emission factors were obtained from the California Climate Action Registry General Reporting Protocol (March 2007)[4]. Emissions calculations were completed for mobile combustion sources of carbon dioxide. The carbon dioxide equivalent (CO_2 e) is also presented as an estimate of methane and nitrous oxide emissions. Carbon dioxide and CO_2 e are reported in metric tons per year. Emissions factors for light duty and heavy duty trucks assumed model year 2000-present and 1996-present, respectively.

TABLE 6-1
EXISTING O&M ACTIVITIES ESTIMATED EMISSIONS FOR LIGHT AND HEAVY DUTY TRUCKS

Vehicle Type	Fuel Type	Gallons/yr (approx.)	CO_2 (metric tons/yr)	CO_2 e (metric tons/yr)
Light Duty (2000-present)	CA gas	4,408	23.04	23.04
Heavy Duty (1996-present)	Diesel No. 2	2,695	44.30	44.30

[1] GHG emissions estimate includes operation and maintenance activities as well as vehicle trips.
[2] Southern California includes the following counties: Ventura, Santa Barbara, Los Angeles, San Bernardino, Riverside, Orange, San Diego, and Imperial.
[3] Fuel consumption and vehicle mileage data from contractor supplied vehicles was not available and therefore not included in these estimates.
[4] Reports to the registry are voluntary.

For comparative purposes, mobile combustion emissions (CO_2 e) reported to the California Climate Action Registry by the Southern California Gas Company (2006) and the South Coast Air Quality Management District (2005) are 37,216.02 and 633.20 metric tons per year, respectively. While these reports lack specific discussion of these emissions, it is assumed these GHG emissions are associated with the operation and maintenance of regional facilities similar to the District's O&M program.

Since the routine O&M activities described in the EIR are an ongoing program, the proposed BMPs are considered the project level contributions to GHG over the baseline emissions associated with the existing O&M program. Implementation of the proposed BMPs will result in additional use of light duty trucks or passenger vehicles by District staff or consultants who will conduct work in advance of some maintenance activities. Predicting the number of vehicle trips associated with implementation of the proposed BMPs would be speculative, but it is assumed to be a small increase because most facilities are maintained in their design condition (without wildlife habitat), thereby substantially reducing the need for advance work by biological consultants. Further, inspections of each facility by District staff are an important and routine part of the existing program and are not expected to increase above the baseline with implementation of the BMPs. Therefore, project specific impacts are considered less than significant.

Cumulatively, the District has been conducting its routine O&M program since the late 1940's. The scope of this program has grown since its inception due to the addition of new capital facilities that are constructed annually[5]. The addition of capital facilities to the O&M program is expected to continue over time which will result in an increased level of effort, and therefore GHG emissions, as the O&M program responsibilities continue to grow. In conclusion, the impact of the adoption of the BMPs together with the impact of the past, present and future O&M program and other projects causing related impacts on GHG emissions could be considerable. Therefore, measures to reduce GHG emissions are presented and their feasibility is discussed below.

6.3 CLIMATE ACTION STRATEGIES

In addition to the discrete early actions proposed by CARB, the AEP 2007 report Appendix A presents a variety of climate action strategies developed by the California Climate Action Team in 2006. These strategies can also reduce emissions from different sources. The CARB discrete early actions and AEP climate action strategies that are relevant to the adoption of BMPs to the O&M program include:

- A low carbon fuel standard. This would require fuel providers (producers, importers, refiners, and blenders) to ensure that the mix of fuels sold in California meets (on average) a declining standard for GHG emissions that result from the use of transportation fuel.
- Reduction of HFC-134a emissions from non-professional servicing of motor vehicle air conditioning systems. This would reduce the availability and use of these refrigerants by non-professionals who purchase and recharge leaking automotive air conditioning systems.

[5] The number of new capital facilities that are constructed and then transferred to the O&M program varies annually. The impacts associated with construction and maintenance of new capital facilities are evaluated under project specific CEQA documents.

- Diesel Anti-Idling: In July 2004, CARB adopted a measure to limit diesel-fueled commercial motor vehicle idling.
- Alternative Fuels – Biodiesel Blends: CARB would develop regulations to require the use of 1 to 4 percent biodiesel displacement of California diesel fuel.
- Alternative Fuels – Ethanol: Increase use of ethanol fuel.
- Achieve 50 percent Statewide Recycling Goal: Statewide a diversion rate of 48 percent has been achieved, therefore an additional 2 percent is needed.

These strategies will be considered by the District's Board of Directors during this CEQA process and may be implemented as alternative and low carbon fuels become more widely available, and some strategies will be required by CARB. Regarding the maintenance of vehicle air conditioning systems and use of refrigerants in District vehicles, vehicle maintenance is done by County automotive professionals and employees are prohibited from servicing District vehicles. Therefore, the improper handling and disposal of refrigerants by County employees is negligible. As the laws governing refrigerants evolves, the County will comply with any new regulation regarding the handling and/or disposal of these products. Regarding recycling of construction waste, this is currently mandated by the County's Integrated Waste Management Division (Ordinance 4357) and is a requirement of all contracts for O&M work within Ventura County.

Additionally, the replacement of fleet vehicles occurs as needed and as directed by the District's Board of Directors in accordance with the County of Ventura Administrative Policy Manual (2005)[6] and the Green Procurement Policy (GSA 2005). As the diversity, availability and performance of alternative fuel and hybrid/electric vehicles improves, it is anticipated that the District will replace older diesel or gas burning vehicles with alternative fuel and/or hybrid/electric vehicles. This effort is currently underway by other divisions within the District as passenger vehicles are replaced. However, this replacement process takes time and is constrained by annual revenue and other spending priorities. Implementation of these strategies are likely to become part of the O&M program over time and thereby reduce the proposed project's contribution to GHG emissions, as funding, technology and equipment become available. Nevertheless, as stated above, while the number of facilities included in the O&M program is not static, reduced GHG emissions as a result of the aforementioned strategies and adopted County policies will offset the addition of new capital facilities to the O&M program and additional trips during implementation of the BMPs over time.

The District will carry out all applicable CARB legally mandated measures regarding: idling, fuels, and recycling. In addition, the District will implement applicable APCD Climate Action Plan actions such as tree planting in addition to vegetation replacement measures that are existing O&M program requirements. The Board's current policies with regard to vehicle replacement, alternative fuels, refrigerants, and recycling must also be implemented by the District. Also, the environmental review for future facilities will include all feasible mitigation measures for project specific and cumulative impacts of individual future projects. These required measures will substantially lessen the potentially significant cumulative effects from the additional trips associated with the BMPs and the increase in facilities over time.

[6] Policy No. Chapter III-6, III-7, III-8, III-9.

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7.0 GROWTH INDUCEMENT

CEQA Guidelines Section 15126-2(d) requires a discussion of the ways in which a proposed project could foster economic or population growth, or the construction of additional housing, either directly or indirectly, in the surrounding environment. The discussion should also include project characteristics which encourage and/or facilitate other activities that, individually or cumulatively, could have a significant environmental impact. CEQA emphasizes that growth in an area should not be assumed to be necessarily beneficial, detrimental, or of little significance to the environment.

In general, a project may be considered growth inducing if it meets one or more of the following criteria: (1) removes an impediment to growth; (2) induces population growth; (3) induces economic expansion; (4) establishes a precedent setting action; and/or (5) results in the development or encroachment in an isolated or adjacent area of open space.

The proposed project is designed to reduce adverse impacts from the District's ongoing maintenance program. It would not reduce flood hazard conditions in selected areas to allow development. The proposed project would not alter floodplain boundaries or create opportunities for new development or increased economic activity in the downstream areas. It would not result in development in an isolated or adjacent area of open space. That is, it would not encroach on an undeveloped or farmed area or cause that area to become developed.

The proposed BMPs (see Section 2.6) would not increase the frequency of ongoing maintenance, expand the geographic area of the maintenance, or affect the level of flooding protection afforded by the existing flood control facilities. Although the proposed project would alter the way in which the ongoing maintenance would occur, it would not affect the intensity of maintenance activities. In addition, the BMPs would not result in construction of new structures or require substantial increase in staffing at the District. Based on these considerations, the proposed BMPs would not induce changes in the pattern of land use or population density and ***are not considered growth inducing.***

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8.0 RESPONSE TO COMMENTS

The Draft Program Environmental Impact Report (Program EIR) was completed and forwarded to the State Office of Planning and Research (OPR) on December 4, 2007 together with a Notice of Completion (NOC). A Notice of Availability (NOA) of the Draft Program EIR for public review was advertised in the Ventura County Star on December 2 and 9, 2007. The NOA, together with a copy of the Draft Program EIR, was forwarded via regular mail to over 95 interested parties, including federal, state, and local agencies potentially having an interest in this project, as well as agency representatives. The Draft Program EIR was also made available for public review at the Ventura County Watershed Protection District (District) and Ventura County Clerk Recorder offices (800 S. Victoria Ave, Ventura) and at the following local public libraries for a period of 45 days (December 4, 2007 through January 17, 2008).

- E.P. Foster Library (651 E. Main Street, Ventura)
- H.P. Wright Library (57 Day Road, Ventura)
- Camarillo Library (4101 Las Posas Road, Camarillo)
- Fillmore Library (502 Second Street, Fillmore)
- Moorpark Library (699 Moorpark Avenue, Moorpark)
- Albert A. Soliz Library (2820 Jourdan Street, Oxnard)
- Oxnard Public Library (251 South A Street, Oxnard)
- Ojai Library (111 E. Ojai Avenue, Ojai)
- Piru Library (3811 Center Street, Piru)
- Ray D. Prueter Library (510 Park Avenue, Port Hueneme)
- Santa Paula Public Library((119 N. 8th Street, Santa Paula)
- Simi Valley Public Library (2969 Tapo Canyon Road, Simi Valley)
- Grant R. Brimhall Library (1401 E. Janss Road, Thousand Oaks)

The public comment period closed on January 17, 2008. A total of 5 letters of comment and 1 email were received on the Draft Program EIR. The following sections contain a summary of the distribution list for the Draft Program EIR, a list of the parties that provided comments during the public review period, and the response to these comments. A copy of the comments letters received is included in Section 9.

8.1 SUMMARY OF DISTRIBUTION LIST

Table 8-1 contains a summary of the distribution list for the Draft Program EIR.

TABLE 8-1
SUMMARY DISTRIBUTION LIST

Agency/Organization	Department
Lead Agency	
Ventura County Watershed Protection District	--
Regulatory Agencies (Trustee and Responsible Agencies)	
California Department of Fish and Game	Attn: Betty Courtney
Los Angeles Regional Water Quality Control Board	Attn: TMDL Unit
Los Angeles Regional Water Quality Control Board	Attn: Valerie Carrillo
U.S. Fish and Wildlife Service	Attn: Rick Farris
U.S. Army Corps of Engineers	Attn: Antal Szijj
National Marine Fisheries Service	Attn: Stan Glowacki
Affected Agencies	
California Coastal Commission	South Central Coast Branch
California Office of Planning and Research	State Clearinghouse
California Department of Conservation	Division of Land Conservation
Ventura County Clerk of the Board	--
Ventura County Agricultural Department	Camarillo District Office
Ventura County Department of Airports	Camarillo Airport
Ventura County General Services Agency	Attn: Theresa Lubin
Ventura County Public Works Agency	Attn: Ray Gutierrez
Ventura County Fire Protection District	Fire Station 54 Headquarters
Ventura County Harbor Department	--
Ventura County Resource Management Agency	Attn: Bruce Smith
Ventura County Integrated Waste Management Div.	Attn: Terri Thomas
Ventura County Air Pollution Control District	Attn: Alicia Stratton
Ventura County Watershed Protection District	Attn: Dave Panaro
Ventura County Clerk Recorder	Attn: Philip Schmit
California Department of Transportation	Attn: Stephen Buswell
ERRC Committee	
Ventura County Fire Dept. – ERRC (L#5400)	Larry Williams
Environmental Health Dept. – ERRC (L#1730)	Melinda Talent
Public Works Agency – ERRC (L#1600)	Ray Gutierrez
VCAPCD – ERRC (L#4951)	Chuck Thomas
RMA – Planning – ERRC (L#1740)	Bruce Smith
Agriculture Commission – ERRC (L#6200)	Julie Bulla
Adjacent Local Government: Cities within Ventura County	
City of Agoura Hills	Planning & Community Development
City of Calabasas	Community Development
City of Camarillo	Planning & Community Development
City of Camarillo	Public Works
City of Carpinteria	Community Development

TABLE 8-1
SUMMARY DISTRIBUTION LIST

Agency/Organization	Department
City of Fillmore	Community Development
City of Fillmore	Public Works
City of Hidden Hills	Planning Department
City of Los Angeles	Planning Dept. Environmental Review
City of Moorpark	Community Development
City of Moorpark	Public Works
City of Ojai	Planning Department
City of Oxnard	Planning & Environmental Services
City of Oxnard	Public Works
City of Port Hueneme	Community Development
City of Port Hueneme	Public Works
City of San Buenaventura	Planning Department
City of San Buenaventura	Public Works
City of Santa Paula	Planning Department
City of Santa Paula	Public Works
City of Simi Valley	Planning Division
City of Simi Valley	Public Works
City of Thousand Oaks	Planning & Community Development
City of Thousand Oaks	Public Works
City of Westlake Village	Public Works
City of Westlake Village	Planning Department
Adjacent Local Government: Legislative Representatives	
Assemblymember Tony Strickland	37th District
Assemblymember Hannah-Beth Jackson	35th District
Congressman Elton Gallegly	24th District
Congresswoman Lois Capps	23rd District
Senator Tom McClintock	19th District
Senator Barbara Boxer	U.S. Senate
Senator Dianne Feinstein	U.S. Senate
Adjacent Local Government: County Supervisors	
Supervisor Steve Bennett	County Board of Supervisors - District 1
Supervisor Linda Parks	County Board of Supervisors - District 2
Supervisor Kathy Long	County Board of Supervisors - District 3
Supervisor Peter Foy	County Board of Supervisors - District 4
Supervisor John K. Flynn	County Board of Supervisors - District 5
Adjacent Local Government: Adjacent Counties	
County of Kern	Planning & Development Services
County of Los Angeles	Regional Planning Dept.
County of Santa Barbara	Planning & Development Dept.

TABLE 8-1
SUMMARY DISTRIBUTION LIST

Agency/Organization	Department
Libraries	
Camarillo Library	--
Fillmore Library	--
Moorpark Library	--
Ojai Library	--
Albert H. Soliz Library	--
Oxnard Public Library Main Branch	--
Piru Library	--
Ray D. Prueter Library	--
Santa Paula Public Library	--
Simi Valley Library	--
Grant R Brimhall Library	--
H.P. Wright Library	--
E.P. Foster Library	--
Interested Parties	
BEACON	Attn: Kevin Ready
California Native Plant Society	Channel Islands Chapter
Ormond Beach Observers	--
Santa Barbara Channel Keepers	Attn: Ben Pitterle
Southern California Wetland Recovery Project	Attn. Bob Thiel
Surfrider Foundation	Attn: Paul Jenkin
Ventura County Environmental Coalition	--
Native American Heritage Commission	Attn: Rob Wood
Sierra Club	Attn: Al Sanders
Mountains Recreation and Conservation Authority	Attn: Paul Edelman
Wishtoyo Foundation	Attn: Paul Westefer

8.2 SUMMARY OF RESPONDENTS

The District received written comments from the following agencies and organizations:

- Ventura County Air Pollution Control District (APCD) – Letter Dated January 14, 2008, received at the District on January 15, 2008
- California Department of Fish and Game (CDFG) – Comment letter dated January 14, 2008, received at the District on January 18, 2008
- Surfrider Foundation, Ventura County Chapter, Matilija Coalition – Letter dated January 15, 2008, received at the District on January 17, 2008
- National Oceanic and Atmospheric Administration, National Marine Fisheries Service (NOAA Fisheries) – Letter dated January 16, 2008, received at the District on January 16, 2008

- U.S. Army Corps of Engineers (USACE) – Email dated January 17, 2008
- Friends of the Santa Clara River – Letter dated January 17, 2008, received at the District on January 17, 2008

8.3 RESPONSE TO COMMENTS

The following matrix (Table 8-2) provides the comments received during the public review period and subsequent responses. It contains a summary of all comments received cross-referenced to the source letter providing the comment, as well as responses to those comments. If any comments included a clarification or revision to the Draft Program EIR, these are also noted in the comment response in Table 8-2.

TABLE 8-2
RESPONSE TO COMMENTS MATRIX

Agency/ Organization	Section	Comment	Response	Change to the Program EIR Text
APCD	Appendix A, Initial Study, Section 4.2.3	"This discussion indicates that the Watershed District operations and maintenance activities currently incorporate practices to minimize temporary adverse air quality effects from fugitive dust generation and ozone precursor production, and nuisance that could arise during maintenance activities. Many of the APCD-recommended air emissions reduction measures are included in the Model Fugitive Dust Mitigation Plan used in Watershed Management District projects are already implemented. In addition, the Watershed Protection District implements standard dust mitigation measures on a per-project basis. We recommend these measures continue to be implemented, with emphasis on APCD Rule 51, Nuisance."	As recommended by the APCD, the District will continue to implement standard dust mitigation measures as part of the operations and maintenance program, as described in Appendix A, Section 4.2.3. In addition, BMP 24 indicates measures that are part of APCD's Model Fugitive Dust Mitigation Plan and which shall be incorporated as needed to reduce fugitive dust emissions during grading, excavation, and construction activities.	No changes required.
CDFG #1	Program EIR Section 2.6.2 Proposed BMPs	**"BMP 4. Habitat Survey work prior to Maintenance Activity.** The Department recommends including moderately dense vegetation as suitable nesting habitat and to survey out to a distance of 400 feet around the project site. For projects scheduled to start February 1, the 400 feet radius around the project site should be surveyed for raptor nest initiation. The raptor surveys should be included in the March 1 to August 1 surveys as well. If active raptor nests are located within 400 feet of proposed project sites, the project should be postponed until the nestlings have	Text for BMP 4 will be modified to include "moderately dense" vegetation as suitable nesting and to state that surveys shall be conducted to a distance of up to 400 feet around the project site. The District agrees that the intent of the BMP is to postpone repair and maintenance activities if native birds or raptors are found nesting within or adjacent to the work area that would be affected by District activities. However, since many District facilities are located within urbanized areas, in some cases the survey may identify nestlings within the survey radius that are physically separated from the work area by urbanization or structures. In these cases,	Text will be changed to read: ***"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 ~~or adjacent to~~ 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*

TABLE 8-2
RESPONSE TO COMMENTS MATRIX

Agency/ Organization	Section	Comment	Response	Change to the Program EIR Text
		fledged. This may be the intent of the BMP but further clarification is needed. If any native birds are found nesting within the survey radius, work should be postponed until nestlings have fledged. The restriction should apply to all native birds. The exception should only be for introduced species."	nestlings may not be affected by maintenance activities. Therefore, the District shall postpone work when native birds/raptors are identified nesting within 200 feet of the work area if the activity will disrupt nesting and foraging behaviors. For nestlings of listed species found within the 200 to 400 feet radius of the project area, the District shall consult with CDFG for applicability of this restriction.	*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 feet 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 ~~song~~ 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."*
CDFG #2	Program EIR Section 2.6.2 Proposed BMPs	**"BMPs 5 & 6. Survey for steelhead migration conditions prior to work and survey for steelhead rearing habitat prior to work.** These surveys occur before work takes place prior to December 1 and should also include surveys for all sensitive aquatic species in the project area (i.e. California red-legged frogs including egg masses and tadpoles, Arroyo chub, Arroyo toad, and Southwestern pond turtle, etc.). The District shall immediately notify the	BMP 22 addresses this issue, with the exception of the recommendation regarding contacting CDFG for input on mitigation. Text in BMP 5 will be revised to incorporate CDFG's recommendation.	Text will be revised to read: ***"BMP 5. Survey for Steelhead Migration Conditions Prior to Routine Maintenance Work.*** *Prior to maintenance and repair activities in a channel during the period 1 December to 1 June that require the diversion of stream flow, work in flowing water, or work within 100 feet of flowing water on the Ventura River, San Antonio Creek, Thacher Creek, Santa Clara River, Santa Paula Creek, Sespe Creek, Hopper Creek, Pole Creek*

TABLE 8-2
RESPONSE TO COMMENTS MATRIX

Agency/ Organization	Section	Comment	Response	Change to the Program EIR Text
		Department for consultation on specific mitigation actions upon finding sensitive species within or immediately adjacent to any project site."		*(unlined portions), and Piru Creek, qualified District personnel shall determine if flow conditions (i.e., flow, depth, stream continuity) are potentially suitable for the upstream or downstream migration of southern steelhead in the work area. Surveys for all sensitive aquatic species in the project area (i.e. California red-legged frogs including egg masses and tadpoles, Arroyo chub, Arroyo toad, and Southwestern pond turtle) shall also be conducted. The District shall immediately notify CDFG, USFWS, and/or NOAA for consultation on specific mitigation actions upon finding sensitive species within or immediately adjacent to any work area."* *"Channel cleanout shall be postponed to 1 June if flows are sufficient for steelhead migration in the work area or within 100 feet of the work area. Per Section 401 Water Quality Certification requirements, a Water Diversion Plan would be needed for any water diversion activities."*
CDFG #3	Program EIR Section 2.6.2 Proposed BMPs	**"BMP 8. Avoid beach and wetland species impacts.** Please contact the Department when California least terns, snowy plover, or tidewater gobies are observed during the pre-project surveys for consultation in project postponement, avoidance, or relocation procedures. The Department will work with the U.S. Fish and Wildlife Service and the District on site specific mitigation actions."	The District shall contact CDFG when California least terns, snowy plover, or tidewater gobies are observed during the pre-project surveys for consultation.	Text will be revised to read: ***"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*

TABLE 8-2
RESPONSE TO COMMENTS MATRIX

Agency/ Organization	Section	Comment	Response	Change to the Program EIR Text
				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. [It should be noted that vegetation and goby habitat have not been present at access routes and beach storm drain outlets to date.]"
CDFG #4	Program EIR Section 2.6.2 Proposed BMPs	**"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 Management Plan (Board Order No. 00-108; NPDES Permit No. CAS004002, adopted on July 27, 2000) when applying herbicides to channels and basins. The District shall also follow BMPs in its Herbicide Manual." "The Department recommends the District include these District NPDES BMPs and the BMPs in its Herbicide Manual in an additional appendix. Included in the appendix should be a thorough description of each herbicide, approved uses, and	The District's NPDES Stormwater Quality Management Plan is a 150-page document that is available online. The web access link will be added to the EIR text. The Ventura County Application Protocol for Pesticides, Fertilizers, and Herbicides will be added to the EIR as Appendix I.	Text will be revised to read: *"**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 ~~its Herbicide Manual~~ the Ventura County Application Protocol for Pesticides, Fertilizers, and Herbicides (included in Appendix I).*

TABLE 8-2
RESPONSE TO COMMENTS MATRIX

Agency/ Organization	Section	Comment	Response	Change to the Program EIR Text
		related BMPs."		Text in Section 2.3.3 will be revised to read: *"Herbicides are applied in conformance with the ~~District's Herbicide Spray Manual~~ Ventura County Application Protocol for Pesticides, Fertilizers, and Herbicides (included in Appendix I) and with the requirements of the ~~State Aquatic Pesticide Permit, and with State Water Resources Control Board (SWRCB) Water Quality Order Nos. 2004-0008-DWQ and 2004-0009-DWQ."~~ 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).*
CDFG #5	Program EIR Section 2.6.2 Proposed BMPs	**"BMP 15. Mitigate temporary habitat impacts.** Please submit to the Department all habitat restoration plans prior to Implementation. The Department will take no longer than 30 working days to provide constructive comments regarding the native plant reseeding mix and other specific actions of the plan."	The District shall submit all habitat restoration plans to CDFG prior to implementation.	Text will be revised to read: ***"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. (…) 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."*

TABLE 8-2
RESPONSE TO COMMENTS MATRIX

Agency/ Organization	Section	Comment	Response	Change to the Program EIR Text
CDFG #6	Program EIR Section 2.6.2 Proposed BMPs	**"BMP 16. Oak tree mitigation.** Please submit to the Department all oak tree replacement plans for review prior to implementations. The Department will take no longer than 30 working days to provide constructive comments regarding the oak tree mitigation ratio and other specific actions of the plan." "The District's proposed oak tree mitigation BMP is a 5: 1 replacement for oaks over 6" diameter at breast height (DBH). The Department considers any tree species over 3" DBH as significant and that a replacement ratio for oaks can be as high as 15: 1.(…) During discussions with District staff a point was made that most if not all project sites will not contain oaks. However, in the event that oaks or other native tree resources occur, the Department would like the opportunity to comment on tree replacement plans and habitat restoration plans in order provide our expertise in these areas."	The District performs maintenance within its facilities periodically (annually or more frequently when needed). Due to the frequency of routine maintenance no mature oak trees (trees with more than 3-inch diameter at breast height) are expected to be located within a District facility or be affected as part of the vast majority of routine operations and maintenance activities. The proposed 5:1 replacement ratio would be applicable to small oaks, sycamores, cottonwood, alder, and California black walnut. In addition, BMP 15 would provide for mitigation/restoration of native wetland or riparian habitat for repair of in-channel structures that results in temporary disturbance, including mitigation/restoration of trees. In rare cases, if a large oak tree could be affected by routine maintenance, the District shall submit to CDFG the oak tree replacement plans for review. Replacement ratios would be subject to CDFG's specific Streambed Alteration Agreement Conditions.	No changes required.
CDFG #7	Program EIR Section 2.6.2 Proposed BMPs	**"BMP 20. Implement Integrated Pest Management (IPM) Program.** The Department appreciates the significant research the District has conducted to develop a solid IPM Program. The Department understands the need to maintain facility integrity while minimizing impacts to natural resources. While the use of rodenticides may be the most cost	By implementing the IPM Program, the District will minimize the use of rodenticides, which is expected to reduce secondary impacts to non-target species to the extent feasible. As identified in Appendix F, Attachment 2, Section 5 IPM Monitoring Methods, page 9: *"Measures will be taken to avoid and minimize impacts to non-target animals during treatment, depending on site conditions. For example, if burrowing owls occupy burrows within an*	No changes required.

TABLE 8-2
RESPONSE TO COMMENTS MATRIX

Agency/ Organization	Section	Comment	Response	Change to the Program EIR Text
		effective treatment option, the Department understands that the District is motivated to use other options such as habitat modification, trapping, alternative construction methods and materials, and use of raptors. The Department agrees with the District, that minimizing the use of rodenticides, while more expensive, is a better option for the environment." "While the District has a zero tolerance of ground squirrels at it critical facilities, the District understands the Department has zero tolerance for non-target wildlife impacts at rodenticide treatment areas. Therefore, at non-critical facilities the Department recommends the use of non-rodenticide treatment options and wildlife use surveys. If burrowing owls or other raptors are observed within 200 feet of the proposed treatment area, the Department requests the opportunity to review the treatment option. This BMP action will allow the Department to obtain wildlife use data and will facilitate the District's selection of treatment options. Also, the Department would like to receive the annual IPM report of actions."	*area that requires treatment, such treatment would be postponed until regulatory agencies are notified and clearance is provided to relocate animals by trained personnel. More commonly, bait would be applied in a manner and location to reduce bait consumption by birds, such as among large rock rather than in grassland foraging habitat."* The District shall make note of wildlife identified near facilities where rodent control activities need to be implemented, and will notify CDFG as stated in the BMPs. The District shall submit a copy of the annual IPM report of actions to CDFG.	
CDFG #8	Program EIR Section 2.6.2 Proposed BMPs	**"BMP 21. Avoid spills and leaks.** In the event of a spill the Department requests the District to report the spill to the Department's Office of Spill Prevention and Response at 888-334-2258."	The District shall report spills to CDFG's Office of Spill Prevention.	No changes required.

TABLE 8-2
RESPONSE TO COMMENTS MATRIX

Agency/ Organization	Section	Comment	Response	Change to the Program EIR Text
CDFG #9	Program EIR Section 2.6.2 Proposed BMPs	**"BMP 22. Biological surveys in appropriate habitat prior to vegetation maintenance.** The Department recommends that these surveys be conducted in cement lined channels (when appropriate habitat occurs) as well as earthen or earthen-bottom channels due to the potential for native habitat to develop on sediments within cement-lined channels. The Department recommends including these protection measures for all native migratory birds protected by the Migratory Bird Treaty Act, including burrowing owl, western yellow-billed cuckoo, California horned lark, as well as coast (San Diego) homed lizard, coastal western whiptail, and San Diego desert woodrat."	The Regional Water Quality Control Board requires that concrete-lined facilities be maintained annually to address bacteria and other pollutants. Therefore, concrete-lined facilities do not support sediment or vegetation that would be suitable for nesting (see Appendix C for examples of the condition of concrete lined facilities). As such, nesting bird and wildlife surveys in routinely maintained concrete-lined facilities is an inappropriate use of limited public resources.	No changes required.
CDFG #10	Appendix H. Template for Year-End Reporting to Agencies	**"Year End Reporting to Agencies"** "The Department recommends including biological surveys conducted during the reporting year to be included within the report to agencies." "Also, the Department requests that all sensitive species observed during the reporting year be reported to the California Natural Diversity Database (CNDDB) staff using CNDDB reporting forms."	The District agrees with the recommendation. The District shall include the biological surveys conducted during the reporting year in the annual report to agencies. The District shall also report sensitive species observed during the reporting year to the CNDDB staff using the appropriate reporting forms.	No changes required.

TABLE 8-2
RESPONSE TO COMMENTS MATRIX

Agency/ Organization	Section	Comment	Response	Change to the Program EIR Text
NOAA #1	Program EIR Section 2.6.2 Proposed BMPs	"The environmental protection measures and best management practices (BMPs) within the DEIR should provide additional protection for areas occupied by steelhead, and for steelhead critical habitat. NMFS recommends that the zones within the current plan and BMPs be subdivided such that the Plan acknowledges where steelhead and steelhead critical habitat are present, and provides additional protections and BMPs for steelhead, aquatic habitat, and riparian vegetation in these areas."	BMPs 5 and 6 include additional protection measures for areas occupied by steelhead compared to existing conditions. For the purpose of this response, we note that designated critical habitat includes most of the tributaries to, and mainstem of the Ventura River as well as several major tributaries (Santa Paula Creek, Sespe Creek, Piru Creek, Hopper Creek) and the mainstem of the Santa Clara River from the Ocean to the Piru Creek confluence (Federal Register Vol. 70 No. 170, September 2005). BMPs 5 and 6 list potential steelhead habitat (i.e., Ventura River, San Antonio Creek, Thacher Creek, Santa Clara River, Santa Paula Creek, Sespe Creek, Pole Creek [unlined portions], and Piru Creek.). Hopper Creek will be added to the text.	Text will be modified to read: ***"BMP 5. Survey for Steelhead Migration Conditions Prior to Routine Maintenance Work.*** *Prior to maintenance and repair activities in a channel during the period 1 December to 1 June that require the diversion of stream flow, work in flowing water, or work within 100 feet of flowing water on the Ventura River, San Antonio Creek, Thacher Creek, Santa Clara River, Santa Paula Creek, Sespe Creek, Hopper Creek, Pole Creek (unlined portions), and Piru Creek, qualified District personnel shall determine if flow conditions (i.e., flow, depth, stream continuity) are potentially suitable for the upstream or downstream migration of southern steelhead in the work area.(…)"* ***"BMP 6. Survey for Steelhead Rearing Habitat Prior to Routine Maintenance Work.*** *Prior to maintenance and repair activities in a channel during the period 1 December to 1 June that requires the diversion of stream flow, work in flowing water, or work within 100 feet of flowing water on the Ventura River, San Antonio Creek, Thacher Creek, Santa Clara River, Santa Paula Creek, Sespe Creek, Hopper Creek, Pole Creek (unlined portions), and Piru Creek, a District biologist or consulting biologist shall determine if suitable rearing habitat for steelhead is present in the work area or within 100 feet of the work area. (…)"*

TABLE 8-2
RESPONSE TO COMMENTS MATRIX

Agency/ Organization	Section	Comment	Response	Change to the Program EIR Text
NOAA #2	General Comment	"Clearing of riparian vegetation and riparian buffer zones on County levees, detention basins, rock groins, and stabilized banks should be avoided in steelhead bearing streams and in designated critical habitat for steelhead. The DEIR states in several sections that riparian vegetation "compromises the structural integrity of these facilities" but provides no references, peer reviewed studies, County incident reports, or examples from within or outside of Ventura County to substantiate this claim, and no means to adequately mitigate the effects of the habitat loss or destruction on steelhead and steelhead critical habitat. In other sections of the DEIR (i.e., BMP 19) the DEIR states the opposite, such that the "roots of riparian vegetation minimize potential erosion of stream banks". NMFS recommends that the 15-foot Vegetation-Free Zone (BMP 13) be revised to let riparian vegetation establish on the banks of County facilities to provide shade and cover for steelhead and steelhead habitat, with a plan for active management of vegetation that includes periodic trimming by hand crews of larger trees and shrubs to ensure the vegetation is bendable during high flow conditions such that flood conveyance and structural integrity are not compromised. NMFS disagrees with the assertion that riparian vegetation precludes visual inspection of the toe-of bank on	The comment recommends avoiding vegetation clearing on engineered facilities in steelhead bearing streams and in steelhead critical habitat, and suggests the Operations and Maintenance (O&M) program is impacting steelhead and its critical habitat (see NOAA Comment #1 above for response on steelhead critical habitat). The comment also suggests there is an inconsistency in the analysis between BMPs which address stream gage maintenance and the routine practice of clearing riparian vegetation from engineered facilities. O&M activities occur on constructed facilities and therefore are limited to the footprint of the facility. Access to facilities (e.g., rock slope protection and levees) adjacent to natural streams and riparian habitat is sometimes limited, and in some instances temporary impacts to steelhead critical habitat may occur. However, the District respectfully disagrees with NOAA Fisheries that routine O&M activities on the facility and adjacent to critical habitat results in unauthorized take of steelhead, or destruction/adverse modification of critical habitat. Routine O&M activities typically involve actions that affect only the facility (e.g., access roads, fences, and the engineered structure) rather than adjacent habitat. Allowing vegetation to grow on or in maintained facilities would reduce flow/detention/debris capacity, as well as compromise the function and structural integrity of engineered facilities. In addition, vegetation growth on engineered	No changes required.

TABLE 8-2
RESPONSE TO COMMENTS MATRIX

Agency/ Organization	Section	Comment	Response	Change to the Program EIR Text
		these facilities; County workers can inspect the toe of these facilities by getting out of their vehicles to perform the inspections."	facilities (e.g., rock slope protection, levees) destabilizes the compacted fill and rock by allowing water and rodents to enter and colonize voids created by stems and trunks of woody vegetation and riparian trees. Our records show that vegetation is susceptible to scour at velocities above 6 feet per second. Since most of the streams designated as critical habitat flow above 6 fps under design conditions (i.e., the 100-year flow), vegetation and the rock or engineered fill it grows in will be pulled out under design flow conditions and this result can be exacerbated by rodent damage in engineered fill. Regarding BMP 19, the District is proposing to cut vegetation to ground level and leave root masses in the stream banks where stream gage/flow data in natural streams is being collected. The areas in which this type of work would occur is limited since most gages occur in association with engineered channels. Since there is not always an engineered channel associated with a stream gage (gages are typically attached to bridge piers and the like), it is prudent to leave root masses in place on natural earthen stream banks so as to allow for regrowth between data collection events. Lastly, NOAA suggests that inspections can be more effective by staff if they were to leave their trucks. The District respectfully disagrees with NOAAs assertion that inspections would be more effective by staff exiting the trucks. The O&M staff has over 200 miles of linear facilities	

TABLE 8-2
RESPONSE TO COMMENTS MATRIX

Agency/ Organization	Section	Comment	Response	Change to the Program EIR Text
			to inspect and inspections are conducted routinely. Use of trucks to conduct inspections is efficient and a safety consideration. Further, when problems are detected, and providing conditions are safe, O&M staff will exit their trucks to further document, define, and report the problem to District management for resolution.	
NOAA #3	Program EIR Section 2.6.2 Proposed BMPs	"Herbicide spraying of riparian vegetation within steelhead streams and steelhead critical habitat should be minimized and should not occur in or near flowing water."	Herbicide spraying is limited to constructed facilities and a 15-foot buffer (BMP 13). Prior to any vegetation control (including herbicide application) 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 field investigations to determine if sensitive species are present (BMP 22). In addition, all herbicide spraying is required to comply with all applicable Federal and State regulations, NPDES Permit and CDFG maintenance agreement/permit requirements. The District only uses aquatically-approved, EPA-registered herbicides near water, as included in Section 2.3.3.	No changes required.
NOAA #4	Program EIR Section 2.6.2 Proposed BMPs	"The DEIR states that steelhead surveys for rearing steelhead will occur from Dec 1 to June 1 (BMP 6). NMFS recommends that steelhead surveys occur near District maintenance projects on a year-round basis because steelhead, both adults and juveniles, can be present in Ventura County streams at any time of year. Currently, the	NOAA Fisheries recommends year-round surveys for steelhead near maintenance projects. BMP 6 was developed to be similar to past and current requirements for District Capital Improvement projects which limit the steelhead survey period from December 1 to June 1 each year. The District currently completes fish surveys prior to conducting any O&M work if	No changes required.

TABLE 8-2
RESPONSE TO COMMENTS MATRIX

Agency/ Organization	Section	Comment	Response	Change to the Program EIR Text
		District has no incidental take authorization for relocation of steelhead so steelhead relocation should not be performed by District personnel."	water is present in the work area, irrespective of critical habitat designations or potential for steelhead. In addition, the District routinely hires qualified fisheries biologists and obtains necessary authorizations when fish relocations are required.	
NOAA #5	Program EIR Section 2.6.2 Proposed BMPs	"Water diversions should be engineered to allow for unimpeded passage of steelhead both upstream and downstream around the work areas. The current water diversion BMPs do not provide for, or even mention, the possibility of steelhead passage as a requirement or preferred option during water diversion."	Water diversions that would impede fish passage are primarily limited to concrete lined channels, which are typically not steelhead habitat. In addition, Section 3.2 of the Water Diversion Guide (Appendix E) includes steps to assess the potential for aquatic habitat within District facilities and situations when a biological survey is required. If sensitive aquatic species are identified within the work area, BMPs for the protection of aquatic species shall be implemented, as identified in Section 5.6 of the Water Diversion Guide.	No changes required.
Surfrider Foundation #1	General Comment	"Considering the scope of maintenance activities, plus the added footprint of the access and maintenance roads, flood control facilities have a significant effect on the sensitive riparian environment of Ventura County. Turning public waterways into fenced-off flood control facilities has a negative impact on the community. Each facility creates a legacy of impacts, with associated costly maintenance, in perpetuity. (…)"	The proposed project addressed in the Program EIR is the implementation of environmental protection measures as part of the ongoing routine maintenance program for existing facilities. Any proposed new flood control facilities would be subject to CEQA review prior to implementation.	No changes required.

TABLE 8-2
RESPONSE TO COMMENTS MATRIX

Agency/ Organization	Section	Comment	Response	Change to the Program EIR Text
Surfrider Foundation #2	Program EIR Section 5.5.4 Onsite Habitat Restoration	"The **On Site Habitat Restoration** alternative was not adequately analyzed in the EIR. Examples exist from around the State for habitat enhancements for flood control facilities. This may include natural floodplain management, vegetated levees, and multi-purpose projects. Bio-engineered facilities will allow for greatly reduced O&M impacts and associated costs, reduced environmental impacts, and enhanced habitat benefits." "With the combined environmental impacts of flood control facilities, and the substantial long-term maintenance cost, it is in the public interest to ensure that a comprehensive review of any proposed new facility is conducted to ensure that all multi-benefit alternatives are considered prior to construction. And existing facilities should be studied for opportunities to retrofit and modify to restore low flow hydrology, water quality, and habitat function."	See response to NOAA #2 Comment. Prior negotiations with regulatory agencies have revealed that if the District were to maintain most of its facilities as suggested in this comment, it would result in potential fire hazards to adjacent development and potential flood hazards due to maintenance restrictions and the resulting reduced flow capacity. In addition, this would result in the need for the District to mitigate for impacts to temporary habitat within facilities when maintenance becomes necessary. The District has experienced significant difficulty maintaining facilities where vegetation is intentionally planted and allowed to grow (examples: Dos Vientos Debris and Detention Basins in Thousand Oaks; Saticoy Drain and Doris Drain in Oxnard). The District believes it is imprudent to allow facilities to be left in an unmaintained condition for any amount of time, and that the process of mitigating impacts to temporary habitat conditions that may develop within facilities would be an inappropriate use of limited public resources. The District is evaluating retrofit and environmentally compatible alternatives for new and replacement projects, but is constrained by existing development adjacent to maintained facilities.	No changes required.

TABLE 8-2
RESPONSE TO COMMENTS MATRIX

Agency/ Organization	Section	Comment	Response	Change to the Program EIR Text
Friends of the Santa Clara River	General Comment	"Proper training of workers is essential for success. The April 1981 Operators Manual for Conducting Flood Control Activities In Ventura County Streams and Rivers, used formerly by the Ventura County Public Works Agency, does not appear to be referenced in the DEIR. We recommend this document as an excellent source of information covering potential effects of flood control activities. Workers doing operations and maintenance work for the VCWPD should be familiar with the material covered in this manual." "If possible, Friends would appreciate being notified when the annual report on maintenance work and BMP use is available for public review."	Reference to the April 1981 *Operators Manual for Conducting Flood Control Activities In Ventura County Streams and Rivers* will be added to the EIR text. The District will add Friends of the Santa Clara River to the mailing list for the annual report on maintenance work.	Text on page 2-45, Section 2.6.1 Overview of BMPs and their application will be revised to read: *"The following is a summary of the existing BMPs that the District currently uses during routine maintenance activities. (…)* • *Local fire abatement requirements are met by conducting annual brush clearance in District right of way adjacent to residential areas.* *In addition, the District developed the Operators Manual for Conducting Flood Control Activities In Ventura County Streams and Rivers (1981), which serves as an additional resource for training of operations and maintenance staff."*
USACE #1	Program EIR Section 2.6.2 Proposed BMPs	USACE suggested that it would be helpful to provide information on facilities that include any designated critical habitat. In addition, USACE commented that it might be necessary to update the BMP 22 to require focused surveys for work in any designated critical habitat.	The Program EIR includes Table 3-2, which shows a list of sensitive species that could potentially occur within or in the vicinity of District facilities (cross-referencing with each facility). The Catalog of Facilities also includes information on sensitive species located within or in the vicinity of each specific facility. In addition, the Water Diversion Guide (Appendix E) includes a list of aquatic sensitive species potentially occurring in the vicinity of District facilities. This information regarding sensitive species would guide maintenance staff in identifying locations that potentially require specific surveys prior to maintenance work that	No changes required.

TABLE 8-2
RESPONSE TO COMMENTS MATRIX

Agency/ Organization	Section	Comment	Response	Change to the Program EIR Text
			could affect sensitive species. Much of the routine maintenance work would not affect sensitive species. Maintenance activities within critical habitat which has the potential to affect sensitive species would be subject to the appropriate field investigations, as included in BMP 22.	
USACE #2	General Comment and Chart 2-6	USACE expects to issue a Notice to Proceed (NTP) within 30 days of receiving the list of planned maintenance (a short authorization letter similar to what USACE issues to verify a Nationwide Permit). In that NTP USACE would indicate if there were any activities that they believe should be excluded. Prior to issuing the NTP, USACE would discuss the issue with the District and any of the agencies that might have a concern. USACE requests a simple update of the text of the EIR and the accompanying flow chart (2-6) to indicate USACE would issue NTP before work begins.	The Program EIR text and Chart 2-6 will be updated to add USACE's NTP to the process.	The Program EIR text and Chart 2-6 will be updated to add USACE's NTP to the process.
USACE #3	General Comment	USACE requested that the District provide an example of what a pre-project submittal would look like (a few typical plans for different types of facilities, such as basin clean-out, unimproved channel clean out, levee repair, etc). USACE expects to receive a binder/report with a list of facilities that need maintenance that year, activity guidelines and BMPs proposed for	USACE's comment is on the permitting procedure. The District will address these comments at the time of permitting.	No changes required.

TABLE 8-2
RESPONSE TO COMMENTS MATRIX

Agency/ Organization	Section	Comment	Response	Change to the Program EIR Text
		each, summary of the site conditions, approximate impact area, and information on pre-construction surveys required.		
USACE #4	General Comment	USACE stated that PTs 72, 74 and 76 (Bank Protection/Stabilizer/Concrete construction & repair) need some limitations or clarification to be included in the RGP.	USACE's comment is on the permitting procedure. The District will address these comments at the time of permitting.	No changes required.
USACE #5	Program EIR Section 2.6.3 Environmental BMPs for Basin Sediment Removal	USACE asked whether there could be some concern at least about potential ESA issues in certain basins that would warrant pre-project surveys.	BMP 22 is applicable to sediment removal and vegetation control in basins that contain native aquatic, riparian, or wetlands habitat suitable for sensitive fish and wildlife species. Therefore, if such conditions apply to the basins, pre-project surveys would be conducted.	No changes required.
USACE #6	General Comment	USACE requested that the District provide access to the Program EIR online, so that USACE could reference the online link in their Public Notice.	The District shall provide online access to the Program DEIR.	No changes required.

9.0 COMMENT LETTERS

STATE OF CALIFORNIA
GOVERNOR'S OFFICE *of* PLANNING AND RESEARCH
STATE CLEARINGHOUSE AND PLANNING UNIT

ARNOLD SCHWARZENEGGER
GOVERNOR

CYNTHIA BRYANT
DIRECTOR

January 18, 2008

Tom Lagier / Pam Lindsey
Ventura County Watershed Protection District
800 South Victoria Avenue
Ventura, CA 93009-1610

Subject: Environmental Protection Measures for the Ongoing Routine Operations and Maintenance Program
SCH#: 2002091107

Dear Tom Lagier / Pam Lindsey:

The State Clearinghouse submitted the above named Draft EIR to selected state agencies for review. The review period closed on January 17, 2008, 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.

Sincerely,

Terry Roberts

Terry Roberts
Director, State Clearinghouse

1400 10th Street P.O. Box 3044 Sacramento, California 95812-3044
(916) 445-0613 FAX (916) 323-3018 www.opr.ca.gov

Document Details Report
State Clearinghouse Data Base

SCH# 2002091107
Project Title Environmental Protection Measures for the Ongoing Routine Operations and Maintenance Program
Lead Agency Ventura County Watershed Protection District

Type EIR Draft EIR

Description The Ventura County Watershed Protection District (District) protects life, property, watersheds, and public infrastructure from the dangers and damages associated with flood and storm waters. This includes the operation and maintenance of various flood control channel and facilities located throughout Ventura County. The District has prepared a Draft Program Environmental Impact Report for the Environmental Protection Measures for the Ongoing Routine Operation and Maintenance Program. The District proposes to incorporate additional feasible best management practices (BMPs) into the current maintenance program to improve environmental protection during maintenance activities and to obtain long-term permits and approvals from various state and federal regulatory agencies.

Lead Agency Contact

Name Tom Lagier / Pam Lindsey
Agency Ventura County Watershed Protection District
Phone 805-672-2106 / 805-654-2036 **Fax**
email
Address 800 South Victoria Avenue
City Ventura **State** CA **Zip** 93009-1610

Project Location

County Ventura
City
Region
Cross Streets County-wide
Parcel No.
Township **Range** **Section** **Base**

Proximity to:

Highways
Airports
Railways
Waterways Various
Schools
Land Use Varies. All work occurs on Ventura County Watershed Protection District right-of-way.

Project Issues Biological Resources; Coastal Zone; Drainage/Absorption; Flood Plain/Flooding; Public Services; Soil Erosion/Compaction/Grading; Vegetation; Water Quality; Wetland/Riparian; Cumulative Effects

Reviewing Agencies Resources Agency; California Coastal Commission; Department of Conservation; Department of Fish and Game, Region 5; Department of Parks and Recreation; Reclamation Board; Department of Water Resources; Caltrans, District 7; State Water Resources Control Board, Division of Water Quality; State Water Resources Control Board, Division of Water Rights; Regional Water Quality Control Board, Region 4; Native American Heritage Commission; Public Utilities Commission

Date Received 12/04/2007 **Start of Review** 12/04/2007 **End of Review** 01/17/2008

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

VENTURA COUNTY
AIR POLLUTION CONTROL DISTRICT
Memorandum

TO: Pam Lindsey, Watershed Ecologist,
Ventura County Watershed Protection District

DATE: January 14, 2008

FROM: Alicia Stratton

SUBJECT: Request for Review of Draft Program Environmental Impact Report (Draft PEIR) for the Environmental Protection Measures for the Ongoing Routine Operation and Maintenance Program

Air Pollution Control District staff has reviewed the subject Draft PEIR, which is a proposal for implementation of best management practices for environmental protection measures for the ongoing routine operation and maintenance program operated by the Ventura County Watershed Protection District. The Watershed Protection District proposes to incorporate feasible best management practices into the current maintenance program to reduce environmental impacts of the ongoing maintenance program and to obtain long-term permits and approvals from various state and federal regulatory agencies. The project objectives are to reduce delays in operation and maintenance activities due to delays in permit response time, improve environmental protection during maintenance activities and maintain current levels of flood control protection within its jurisdiction to protect life and property. The Watershed Protection District operates and maintains flood control channels and facilities throughout Ventura County, including unincorporated Ventura County and the Cities of Camarillo, Fillmore, Moorpark, Ojai, Oxnard, Port Hueneme, Ventura, Santa Paula, Simi Valley and Thousand Oaks. Maintenance activities and implementation of best management practices will occur in these areas.

Section 4.2.3 of the Draft PEIR addresses air quality issues related to the project. This discussion indicates that the Watershed District operations and maintenance activities currently incorporate practices to minimize temporary adverse air quality effects from fugitive dust generation and ozone precursor production, and nuisance that could arise during maintenance activities. Many of the APCD-recommended air emissions reduction measures are included in the Model Fugitive Dust Mitigation Plan used in Watershed Management District projects are already implemented. In addition, the Watershed Protection District implements standard dust mitigation measures on a per-project basis. We recommend these measures continue to be implemented, with emphasis on APCD Rule 51, *Nuisance*. We have no further comments to submit.

If you have any questions, please call me at (805) 645-1426.

State of California - The Resources Agency
Arnold Schwarzenegger, Governor

DEPARTMENT OF FISH AND GAME
http://www.dfg.ca.gov
4949 Viewridge Avenue
San Diego, CA 92123
(858) 467-4201

January 14, 2008

Pam Lindsey, Watershed Ecologist
Ventura County Watershed Protection District
800 South Victoria Avenue
Ventura, CA 93009-1610

Draft Environmental Impact Report
For the Environmental Protection Measures developed for the Ongoing Routine Operation and Maintenance Program for the Flood Control Channels and facilities throughout Ventura County

Dear Ms. Lindsey:

The California Department of Fish and Game (Department) appreciates the opportunity to review the Draft Program Environmental Impact Report (DEIR) for biological resources impacts associated with the Ongoing Routine Operation and Maintenance Program for the flood control channels and facilities throughout Ventura County. The proposed project addressed in the DEIR is to incorporate a particular set of feasible environmental protection measures into the current maintenance program for existing facilities. These measures are called "environmental best management practices (BMPs)" in the DEIR. The District is voluntarily proposing to adopt these measures as part of the routine maintenance program to improve environmental protection during routine maintenance activities, and to facilitate issuance of state and federal agreements/permits. The proposed action addressed in the DEIR includes BMPs to reduce or avoid effects of the following activities on the environment.

• **Routine Operations and Maintenance**. These activities are described in the District's Catalog of Facilities and a Debris Basin Manual, which together, presents a list of all facilities currently maintained by the District, and summarizes each facility by location, characteristics, and current maintenance activities.

• **Water Diversion**. Some of the District's channels support surface flows throughout part or all of the year. At these locations, a water diversion would be necessary proceeding and during maintenance work. The District prepared the Water Diversion Guide to describe standard methods of water diversion with BMPs to be implemented under typical circumstances.

• **Stream Gauge Maintenance**. The DEIR also analyzes the maintenance of stream gauges and stream gauge sites.

• **Rodent Control Alternatives**. An Integrated Pest Management (IPM) Program (included in this DEIR) was created in response to the Ventura County Board of Supervisors direction to reduce the use of anticoagulant rodenticides in the County. The District maintains many critical dam and levee facilities, and prevention of burrow damage protects the structural integrity of critical facilities and thereby protects public safety. The IPM includes methods of rodent control

that reduce primary and secondary wildlife hazards when compared to the current rodent control methods.

The Department appreciates the opportunity to work with the District and we acknowledge your efforts to catalog your facilities, analyze potential environmental impacts, and develop best management practices that will help to conserve natural resources in Ventura County. As the sensitive species lists you developed for each facility within this DEIR illustrates, there are many species throughout the County that are in decline and require extra attention. Your efforts to conserve these species and common native species (individuals and their annual production), and their habitats in areas non-critical to the objectives of your District are sincerely appreciated.

The Department has prepared the following statements and comments regarding specific proposed BMPs pursuant to our authority as Trustee Agency with jurisdiction over natural resources affected by the project under the California Environmental Quality Act (CEQA Section 15386) and Responsible Agency (Section 15381) over those aspects of the proposed project that come under the purview of the California Endangered Species Act (Fish and Game Code Section 2050 et seq.) and Fish and Game Code Section 1600 et seq. regarding impacts to streams and lakes.

Best Management Practices

(4) Habitat Survey work prior to Maintenance Activity. The District's action is to have a qualified biologist conduct a survey for breeding birds 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 March 1 to August 1. The BMP states that a District biologist or consulting biologist shall determine if suitable habitat is present for riparian-dependent breeding birds in or adjacent to the work area. Suitable habitat is generally defined as dense willow or mulefat scrub or woodland with sufficient density and vegetative structure to support nesting and foraging. Channel cleanout shall be postponed to August 1 if such habitat is present in the work area or within 200 feet of the work area, or if the District determines that riparian bird nesting is occurring in the habitat area. This restriction does not apply if the nesting birds are song sparrows, house finches, crows, cowbirds, or other common upland species or introduced species.

The Department recommends including moderately dense vegetation as suitable nesting habitat and to survey out to a distance of 400 feet around the project site. For projects scheduled to start February 1, the 400 feet radius around the project site should be surveyed for raptor nest initiation. The raptor surveys should be included in the March 1 to August 1 surveys as well. If active raptor nests are located within 400 feet of proposed project sites, the project should be postponed until the nestlings have fledged. This may be the intent of the BMP but further clarification is needed. If any native birds are found nesting within the survey radius, work should be postponed until nestlings have fledged. The restriction should apply to all native birds. The exception should only be for introduced species.

(5&6) Survey for steelhead migration conditions prior to work and survey for steelhead rearing habitat prior to work. These surveys occur before work takes place prior to December

1 and should also include surveys for all sensitive aquatic species in the project area (i.e. California red-legged frogs including egg masses and tadpoles, Arroyo chub, Arroyo toad, and Southwestern pond turtle, etc.). The District shall immediately notify the Department for consultation on specific mitigation actions upon finding sensitive species within or immediately adjacent to any project site.

(8) Avoid beach and wetland species impacts. Please contact the Department when California least terns, snowy plover, or tidewater gobies are observed during the pre-project surveys for consultation in project postponement, avoidance, or relocation procedures. The Department will work with the U.S. Fish and Wildlife Service and the District on site specific mitigation actions.

(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 Management Plan (Board Order No. 00-108; NPDES Permit No. CAS004002, adopted on July 27, 2000) when applying herbicides to channels and basins. The District shall also follow BMPs in its Herbicide Manual. The Department recommends the District include these District NPDES BMPs and the BMPs in its Herbicide Manual in an additional appendix. Included in the appendix should be a thorough description of each herbicide, approved uses, and related BMPs.

(15) Mitigate temporary habitat impacts. Please submit to the Department all habitat restoration plans prior to implementation. The Department will take no longer than 30 working days to provide constructive comments regarding the native plant reseeding mix and other specific actions of the plan.

(16) Oak tree mitigation. Please submit to the Department all oak tree replacement plans for review prior to implementations. The Department will take no longer than 30 working days to provide constructive comments regarding the oak tree mitigation ratio and other specific actions of the plan.

- The District's proposed oak tree mitigation BMP is a 5:1 replacement for oaks over 6" diameter at breast height (DBH). The Department considers any tree species over 3" DBH as significant and that a replacement ratio for oaks can be as high as 15:1. Examples from two Streambed Alteration Agreement (SAA) Conditions are as follows:
- Condition 81 SAA - Any coast live oaks, California black walnuts and western sycamores which are damaged/removed during construction operations shall be replaced in kind at a 10:1 ratio. Valley oaks shall be replaced in kind at a 15:1 ratio. Elderberry, cottonwood, and willows shall be replaced at 5:1.
- Condition 82 SAA - Any oaks which must be removed as a part of the project shall be replaced in kind by species The replacement ratios* (using rooted plants in liners or direct planting of acorns) for plants which are to be removed shall be as follows: plants less than 5 inches DBH shall be replaced at 3:1; plants from 5 to 12 inches shall be replaced at 5:1; trees from 12 to 24 inches shall be replaced at 10:1; trees from 24 to 36 inches shall be replaced at 15:1; all oaks greater than 36 inches shall be replanted at a ratio of 20:1. The replacement ratio for damaged trees shall be 2:1 for plants with DBH less than 12 inches. The replacement ratio for damaged trees shall be 5:1 for plants with DBH greater than 12 inches. (The Department recommends that the Operator using

rooted plants in liners, acorns, or one gallon containers for restoration to increase the likelihood of survival of plantings).

The Department appreciates the District's acknowledgement of oak tree habitat value and the proposed BMP. During discussions with District staff a point was made that most if not all project sites will not contain oaks. However, in the event that oaks or other native tree resources occur, the Department would like the opportunity to comment on tree replacement plans and habitat restoration plans in order provide our expertise in these areas.

(20) Implement Integrated Pest Management (IPM) Program. The Department appreciates the significant research the District has conducted to develop a solid IPM Program. The Department understands the need to maintain facility integrity while minimizing impacts to natural resources. While the use of rodenticides may be the most cost effective treatment option, the Department understands that the District is motivated to use other options such as habitat modification, trapping, alternative construction methods and materials, and use of raptors. The Department agrees with the District, that minimizing the use of rodenticides, while more expensive, is a better option for the environment. While the District has a zero tolerance of ground squirrels at it critical facilities, the District understands the Department has zero tolerance for non-target wildlife impacts at rodenticide treatment areas. Therefore, at non-critical facilities the Department recommends the use of non-rodenticide treatment options and wildlife use surveys. If burrowing owls or other raptors are observed within 200 feet of the proposed treatment area, the Department requests the opportunity to review the treatment option. This BMP action will allow the Department to obtain wildlife use data and will facilitate the District's selection of treatment options. Also, the Department would like to receive the annual IPM report of actions.

(21) Avoid spills and leaks. In the event of a spill the Department requests the District to report the spill to the Department's Office of Spill Prevention and Response at 888-334-2258.

(22) Biological surveys in appropriate habitat prior to vegetation maintenance. The Department recommends that these surveys be conducted in cement lined channels (when appropriate habitat occurs) as well as earthen or earthen-bottom channels due to the potential for native habitat to develop on sediments within cement-lined channels. The Department recommends including these protection measures for all native migratory birds protected by the Migratory Bird Treaty Act, including burrowing owl, western yellow-billed cuckoo, California horned lark, as well as coast (San Diego) horned lizard, coastal western whiptail, and San Diego desert woodrat.

Year End Reporting to Agencies

The Department recommends including biological surveys conducted during the reporting year to be included within the report to agencies. Also, the Department requests that all sensitive species observed during the reporting year be reported to the California Natural Diversity Database (CNDDB) staff using CNDDB reporting forms.

The Department appreciates the opportunity to comment and work with District staff on the development of BMPs. The Department is certain that these proposed BMPs will help to minimize the environmental impacts of the District's ongoing routine operations and maintenance when prudently used during project implementation. Questions regarding this letter and further coordination on these issues should be directed to Mr. Dan Blankenship, Staff Environmental Scientist, at 661-259-3750 or dsblankenship@dfg.ca.gov.

Sincerely,

Edmund J. Pert
Regional Manager
South Coast Region 5

Cc: D Blankenship, Newhall
M Mulligan, San Diego
B Courtney, Newhall
M Potter, Ojai
N Lohmus, Santa Barbara
J Humble, Ventura

EP:db

UNITED STATES DEPARTMENT OF COMMERCE
National Oceanic and Atmospheric Administration
NATIONAL MARINE FISHERIES SERVICE
Southwest Region
501 West Ocean Boulevard, Suite 4200
Long Beach, California 90802-4213

JAN 16 2008

In response refer to:
150308SWR2008PR00021:SCG

RECEIVED

JAN 16 2008

WATERSHED PROTECTION DIST.

Ms. Pam Lindsey
Manager of Environmental Services
Ventura County Watershed Protection District
800 South Victoria Avenue
Ventura, California 93009-1600

Dear Ms. Lindsey:

NOAA's National Marine Fisheries Service (NMFS) has reviewed the Ventura County Watershed Protection District's (District) Draft Program Environmental Impact Report (DEIR) outlining the Environmental Protection Measures for the Ongoing Routine Operations and Maintenance Plan (Plan) to be implemented in Ventura County, California. Activities covered in the Plan take place within numerous streams in Ventura County, many of which are within the endangered Southern California Distinct Population Segment (DPS) of steelhead (*Oncorhynchus mykiss*), and are designated critical habitat for this species. At this time NMFS would like to provide the following comments.

- The environmental protection measures and best management practices (BMPs) within the DEIR should provide additional protection for areas occupied by steelhead, and for steelhead critical habitat. NMFS recommends that the zones within the current plan and BMPs be subdivided such that the Plan acknowledges where steelhead and steelhead critical habitat are present, and provides additional protections and BMPs for steelhead, aquatic habitat, and riparian vegetation in these areas.

- Clearing of riparian vegetation and riparian buffer zones on County levees, detention basins, rock groins, and stabilized banks should be avoided in steelhead bearing streams and in designated critical habitat for steelhead. The DEIR states in several sections that riparian vegetation "compromises the structural integrity of these facilities" but provides no references, peer reviewed studies, County incident reports, or examples from within or outside of Ventura County to substantiate this claim, and no means to adequately mitigate the effects of the habitat loss or destruction on steelhead and steelhead critical habitat. In other sections of the DEIR (*i.e.*, BMP 19) the DEIR states the opposite, such that the "roots of riparian vegetation minimize potential erosion of streambanks". NMFS recommends that the

15-foot Vegetation-Free Zone (BMP 13) be revised to let riparian vegetation establish on the banks of County facilities to provide shade and cover for steelhead and steelhead habitat, with a plan for active management of vegetation that includes periodic trimming by hand crews of larger trees and shrubs to ensure the vegetation is bendable during high flow conditions such that flood conveyance and structural integrity are not compromised. NMFS disagrees with the assertion that riparian vegetation precludes visual inspection of the toe-of-bank on these facilities; County workers can inspect the toe of these facilities by getting out of their vehicles to perform the inspections.

- Herbicide spraying of riparian vegetation within steelhead streams and steelhead critical habitat should be minimized and should not occur in or near flowing water.

- The DEIR states that steelhead surveys for rearing steelhead will occur from Dec 1 to June 1 (BMP 6). NMFS recommends that steelhead surveys occur near District maintenance projects on a year-round basis because steelhead, both adults and juveniles, can be present in Ventura County streams at any time of year. Currently, the District has no incidental take authorization for relocation of steelhead so steelhead relocation should not be performed by District personnel.

- Water diversions should be engineered to allow for unimpeded passage of steelhead both upstream and downstream around the work areas. The current water diversion BMPs do not provide for, or even mention, the possibility of steelhead passage as a requirement or preferred option during water diversion.

NMFS appreciates the opportunity to provide comments on the DEIR and BMPs for the District's Environmental Protection Measures for the Ongoing Routine Operations and Maintenance Program. Please contact Stan Glowacki at (562) 980-4061 or via email at Stan.Glowacki@noaa.gov if you have any questions concerning this letter, or if you require additional information.

Sincerely,

for Rodney R. McInnis
Regional Administrator

cc: Mary Larson, California Department of Fish and Game
Chris Dellith, USFWS
Antal Szijj, Corps of Engineers

Surfrider Foundation

Ventura County Chapter – Matilija Coalition
PO Box 1028, Ventura, CA 93002
(805) 667-2222 **www.matilija-coalition.org**

January 15, 2008

RECEIVED

JAN 17 2008

WATERSHED PROTECTION DIST.

Ventura County Watershed Protection District
800 South Victoria Avenue
Ventura, California 93009
Contact: Mr. Tom Lagier

Subject: ENVIRONMENTAL PROTECTION MEASURES FOR THE ONGOING ROUTINE OPERATIONS AND MAINTENANCE PROGRAM Project FC080030

Dear Mr Lagier:

I am writing on behalf of the Matilija Coalition, a group of over 30 environmental and citizen organizations working to restore the Ventura River watershed starting with the removal of Matilija Dam.

Thank you for making the information regarding Flood Control facilities available to the public, and providing an opportunity to comment on ongoing maintenance. I believe the range and scope of maintenance activities is far greater than most people realize.

As the document suggests, *"It is important to note that most of the effects occurred when the flood control facilities were originally constructed:"*

- *Modification of the natural hydrologic functions of watersheds in the County,*
- *Reduction in local beach sand supply,*
- *Increased turbidity and sediment loading of watercourses and waterbodies of the County due to certain maintenance activities,*
- *Increased amount of potentially harmful herbicides in the watercourses and waterbodies of the County,*
- *Increased water temperatures in the watercourses and waterbodies of the County,*
- *Periodic disturbance to wetland and riparian habitats, including coastal habitats,*
- *Periodic disturbance to aquatic habitats, and*
- *Potential disturbance of sensitive species*

And Ongoing Maintenance includes:

- *Removal or reduction of vegetation by herbicide spraying on the surface of access roads and along their perimeters to maintain access and for fire abatement purposes*
- *Removal or reduction in vegetation by herbicide spraying on the dam slope to ensure the integrity of the dam is not compromised by roots or rodents*
- *Removal or reduction in vegetation by herbicide spraying along the perimeter of basins within 100 feet of residences to comply with local Fire Department regulations and fire abatement requirements*
- *Removal or reduction in vegetation by herbicide spraying and/or mechanical clearing around drain inlets, drain outlets, spillways, and other structures associated with the basin*
- *Mechanical removal of obstructive sediment and debris around drain inlets and spillways*
- *Repair of access ramps into the basin, as needed, including filling erosion gullies*
- *Repair of fences and gates, as needed*
- *Repair of stand pipe or bleeder pipe, as needed*
- *Repair of road base and surface, as needed*
- *Repair of erosion on basin slopes by mechanical equipment*

Considering all this, plus the added footprint of the access and maintenance roads, flood control facilities have a significant effect on the sensitive riparian environment of Ventura County. Turning public waterways into fenced-off flood control facilities also has a negative impact on the community. **Each facility creates a legacy of impacts, with associated costly maintenance, in perpetuity.**

The Draft EIR mentions **Alternative Environmental Protection Measures.** In particular:

> • ***Alternative Environmental Protection Measure: On Site Habitat Restoration.*** *Under this alternative, the District would implement habitat restoration on the banks of existing flood control channels and in basins, rather than at suitable sites outside flood control facilities. This alternative is not considered feasible because creating habitat within flood control facilities would reduce conveyance and storage capacity, potentially compromise structural integrity, and impair the function of the facilities. In addition, there would be conflicts between the District's maintenance and agencies preference to protect the restored habitat. The proposed approach to habitat restoration provides flexibility for the District to locate suitable restoration sites that would create conflicts.*

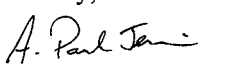
This ***On Site Habitat Restoration*** alternative was not adequately analyzed in the EIR. Examples exist from around the State for habitat enhancements for flood control facilities. This may include natural floodplain management, vegetated levees, and multi-purpose projects. Bio-engineered facilities will allow for greatly reduced O&M impacts and associated costs, reduced environmental impacts, and enhanced habitat benefits.

With the combined environmental impacts of flood control facilities, and the substantial long-term maintenance cost, it is in the public interest to ensure that a comprehensive review of any proposed new facility is conducted to ensure that all multi-benefit alternatives are considered prior to construction. And existing facilities should be studied for opportunities to retrofit and modify to restore low flow hydrology, water quality, and habitat function.

For example, it is now common knowledge that concrete channels designed to convey storm water have a significant impact on water quality and hydrology. Watershed planning should be conducted to identify opportunities for retention and infiltration strategies throughout the watershed, incorporating Low Impact Development (LID) strategies wherever possible.

Integrated watershed management is progressing rapidly throughout the State of California, and good examples can be seen as close as Las Virgenes Creek in Los Angeles County. We hope that these suggestions can provide a starting point for discussion on the modernization of Flood Control in Ventura County.

Sincerely,



A.Paul Jenkin
Coordinator, Matilija Coalition
Environmental Director, Surfrider Foundation - Ventura County Chapter
(805) 648-4005 paul@matilija-coalition.org

Friends of the Santa Clara River

660 Randy Drive Newbury Park, California 91320 (805) 498 –4323

January 17, 2008

Ventura County Watershed Protection District
Attn: Pam Lindsey, Watershed Ecologist
800 South Victoria Avenue
Ventura CA 93009-1610

Re: Program Environmental Impact Report, Environmental Protection Measures for the Ongoing Routine Operations and Maintenance Program

Dear Ms. Lindsey,

Friends of the Santa Clara River offer the following comments on the subject document.

Implementation of the BMPs covered in the DEIR, if carried out by properly trained and conscientious workers, should improve environmental protection during maintenance activities.

Proper training of workers is essential for success. The April 1981 *Operators Manual for Conducting Flood Control Activities In Ventura County Streams and Rivers,* used formerly by the Ventura County Public Works Agency, does not appear to be referenced in the DEIR. We recommend this document as an excellent source of information covering potential effects of flood control activities. Workers doing operations and maintenance work for the VCWPD should be familiar with the material covered in this manual.

If possible, Friends would appreciate being notified when the annual report on maintenance work and BMP use is available for public review.

Thank you for your consideration of these comments.

Sincerely,

Ron Bottorff, Chair

Pam Lindsey - Maint RGP

From: "Szijj, Antal J SPL" <Antal.J.Szijj@usace.army.mil>
To: "Pam Lindsey" <Pam.Lindsey@ventura.org>, "Theresa Stevens" <Theresa.Stevens@ventura.org>
Date: 01/17/2008 3:33 PM
Subject: Maint RGP

A few add'l comments on the maint EIR:

It would be helpful to provide info on facilities that include any desingated critical habitat. If it's in the EIR somewhere can you point me in the right direction (I reviewed Sec 3 and didn't see it). It might be necessary to update the BMP22 to require focused surveys for work in any designated CH.

As we discussed at the meeting last week my expectation is we would issue a Notice to Proceed w/in 30 days of receiving the list of planned maintenance. Basically a short authorization letter along the lines of what we issue to verify an NWP. In that NTP we would indicate if there were any activities that we believe should be excluded (before doing that, we'd try to hash it out with you and any of the agencies that might have a concern). So just a simple update of the text of the EIR and the accompanying flow chart (2-6) to indicate Corps would issue NTP before work begins.

Could you provide an example of what such a pre-project submittal would look like? Not an entire year's worth of work, but perhaps a few typical plans for different types of facilities (basin clean-out, unimproved channel clean out, levee repair, etc). My expectation is we would get a binder/report with a list of each facility needing maintenance that year and the activity guidelines and BMPs proposed for each. Does sound about right? There should also be a summary of the site conditions (e.g. is there riparian habitat present? approx how much would be impacted? are pre-construction surveys are requried? etc). For example, I think Cozy Dell Creek was highlighted during the meeting. CDFG expressed some concerns about the mulefat along the channel in the plan sheet photo and the maint guys said that wouldn't be impacted since they just clear a blade-width centerflow channel. That's fine, but how would we know that? The basic plan sheet for Cozy Dell doesn't provide those details and I don't think the proposed BMP languange would get that level of detail across either.

"Bank Protection Construction" (PT72) needs some limitations put on it if we're going to include it in the RGP. Same with PT 74 & 76 which combine construction & repair. It should at least be clarified that any construction is limited to what would otherwise meet the standards of NWP 3 or 13 (i.e. some allowance for impovements or design changes to meet current standards, some limited bank stabilization, etc).

Section 2.6.3: Couldn't there be some concern at least about potential ESA issues in certain basins that would warrant pre-project surveys?

Finally, I'll need a url to reference in our Public Notice where the Program EIR is available for viewing (I'm trying to keep the PN relatively simple with lots of 'see the Program EIR for details' thrown in).

ps: is it just me or do the pdf files for the various facilities seem to take forever to load?

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10.0 BIBLIOGRAPHY

Alliance Contracting Inc. 2006. Surface Water Diversion Plan for Doris Avenue Drain Riprap and Bank Erosion Repairs. Prepared for the Ventura County Watershed Protection District. December 6, 2006.

Association of Environmental Professionals. 2007. Alternative Approaches to Analyzing Greenhouse Gas Emissions and Global Climate Change in CEQA Documents. June 29, 2007.

California Air Resources Board (CARB). 2007. Proposed Early Actions to Mitigate Climate Change in California. April 20, 2007.

California Climate Action Registry. 2005. Mobile combustion emissions reported to the California Climate Action Registry by the South Coast Air Quality Management District.

2006. Mobile combustion emissions reported to the California Climate Action Registry by the Southern California Gas Company.

2007. General Reporting Protocol. Reporting Entity- Wide Greenhouse Gas Emissions. Version 2.2, March 2007.

California Department of Fish and Game. 2002. Streambed Alteration Agreement #R5-2002-0220 revision 1. Prepared for the Ventura County Watershed Protection District. September 2, 2002.

2004. Streambed Alteration Agreement #1600-2004-0045-R5. Prepared for the Ventura County Watershed Protection District. May 17, 2004.

2006. Preliminary Results of Streambed Alteration Agreement #1600-2006-0238-R5. Prepared for the Ventura County Watershed Protection District. August 22, 2006.

2006. Streambed Alteration Agreement #1600-2005-0634-R5. Prepared for the Ventura County Watershed Protection District. April 3, 2006.

California Regional Water Quality Control Board, Los Angeles Region. 2005. 2005. Waste Discharge Requirements for Ventura Watershed Protection District South Branch Arroyo Conejo – Order No. R4-2003-0111. September 28, 2005.

Water Quality Certification for Proposed Interim Maintenance Permit (USACE Project No. 2005-01805-AJS), Various Waterbodies Ventura County (File No. 05-122). October 3, 2005.

2006. Waste Discharge Requirements for Ventura Watershed Protection District Bus Canyon Tributary – Order No. R4-2003-0111. July 21, 2006.

Camp Dresser & McKee. 1993. California Storm Water Best Management Practices Handbook – Construction Activity. March 1993.

City of Camarillo. City of Camarillo General Plan.

1989. Safety Element. November 29, 1989.

2000. Circulation Element. January 12, 2000

2003. Land Use Element. October 8, 2003.

2006. Noise Element. August 28, 1996.

2006. Open Space and Conservation Element. July 12, 2006.

City of Fillmore. 1988-2010. City of Fillmore General Plan.

1988. Public Facilities Element.

1988. Safety Element.

1998. Conservation and Open Space Element.

1988. Noise Element.

2003. Circulation Element. Adopted May.

2003. Land Use Element. Adopted May.

City of Moorpark. City of Moorpark General Plan.

1986. Open Space, Conservation, & Recreation Element, Adopted August 4, 1986.

1998. Noise Element, March 1998

1992. Circulation Element, Adopted May 13, 1992

2001. 2000-2005 Safety Element, Adopted March 21, 2001

2005. Land Use Element, Adopted May 13, 1992, Amendment Adopted October 5, 2005

City of Ojai. City of Ojai General Plan.

1987. Conservation Element. May 13, 1987.

1987. Open Space Element. May 13, 1987.

1991. Safety Element. September 24, 1991.

1997. Air Quality Element. May 1997.

1997. Circulation Element. May 13, 1997.

1997. Land Use Element. May 13, 1997.

City of Oxnard. 2004. City of Oxnard 2020 General Plan. Adopted October 7, 1990. Amended July 2004.

City of Port Hueneme. 2000. 2015 General Plan and Local Coastal Program. 1997. Effective when Coastal Commission certified in 2000.

City of Santa Paula. City of Santa Paula General Plan. Adopted in April 1998.

2000. Conservation and Open Space Element. Amended June 19, 2000.

2005. Circulation Element. Amended June 6, 2005.

2005. Land Use Element. Amended December 7, 2005.

City of Simi Valley. Simi Valley General Plan. Adopted on October 18, 1988.

City of Thousand Oaks. City of Thousand Oaks General Plan.

1996. Conservation Element. Adopted July 2, 1996.

1996. Open Space Element. January 2000 Edition. Adopted July 2, 1996.

2000. Forestry Element. Adopted December 19. 2000.

2000. Noise Element. Adopted May 16, 2000.

City of Ventura. 2005. Achieving the Vision, 2005 Ventura General Plan. Adopted August 8, 2005.

Los Angeles District, USACE. 2005. Department of the Army – Nationwide Permit Authorization. Correspondence dated September 29, 2005.

Southern California Association of Governments. Regional Transportation Plan, 2004

State of California. 2004. Executive Order S-20-04. July 27, 2004.

2005. Executive Order S-3-05. June 1, 2005.

2007. Executive Order S-01-07. Signed January 18, 2007.

United States Department of Agriculture Forest Service, Pacific Southwest Region. 2003. Comprehensive River Management Plan -Sespe Creek. Los Padres National Forest. R5-MB-038. November 2003.

Ventura County Air Pollution Control District. 2003. Air Quality Assessment Guidelines.

2007. Climate Action Plan. Monthly Report December 2007.

Ventura County Air Pollution Control District. Ventura County's Air Quality Management Plan (AQMP). 1979, as amended.

Ventura County Flood Control District. Stormwater Pollution Control Plan – Calleguas In-Channel Debris Basin 2006. June 9, 2006.

Ventura County Flood Control District. Stormwater Pollution Control Plan – Doris Avenue Drain Riprap and Bank Erosion Repairs. December 6, 2006.

Ventura County. Administrative Policy Manual. Chapter III-6, III-7, III-8, III-9. 2005.

Ventura County. Ventura County General Plan. Last amended by the Ventura County Board of Supervisors, December 6, 2005. Adopted by the Ventura County Board of Supervisors, May 24, 1988.

2000. Resources Appendix. Revised 2000.

2001. Land Use Appendix. Revised 2001.

2002. Coastal Area Plan. Revised 2002.

2002. Public Facilities and Services Appendix. Revised 2002.

2003. Goals, Policies, and Programs. Revised 2003.

2004. Hazards Appendix. Revised 2004.

Ventura County. 2006. Initial Study Assessment Guidelines. Revised 2006.

Ventura County General Services Agency. 2005. Green Procurement Policy.

Ventura County Integrated Waste Management Division. 2007. Ordinance 4357. Approved on January 9, 2007.

Ventura County Planning Division. 2006. Wetland Project Permitting Guide. May 2006.

2006. Guide to Native and Invasive Streamside Plants. May 2006.

Ventura County Watershed Protection District. 1999. Detention dams and debris basins manual. Revised June 1999.

2004. Zone 2 Plans and Specifications of Hueneme Drain Improvements. May 2004.

2006. Rodent Control for Dam and Levee Protection: Evaluation of Current Program and Alternatives. Prepared by Terrel P. Salmon, PhD. December 2006.

2006. Rodent Control for Dam and Levee Protection: Evaluation of Current Program and Alternatives. Prepared by Terrel P. Salmon, PhD. December 2006.

No date. Herbicide manual, Moorpark O&M office.

No date. Herbicide manual, Saticoy O&M office.

No date. Santa Clara River levee.

No date. Ventura River levee.

No date. Photo atlas and inventory of unimproved channel cross sections, Zones 1-4.

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11.0 EIR PREPARERS

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