VENTURA COUNTY STAR

Friday

July 16, 2004

Partly sunny
Highs 84 coast, 95 inland. **C10**

ARTS & LIVING

"I, Robot" goes through routine motions, Roger Ebert writes. **E1**

STATE

"Angels in America" and "The Sopranos" lead in Emmy nominations. **A6**

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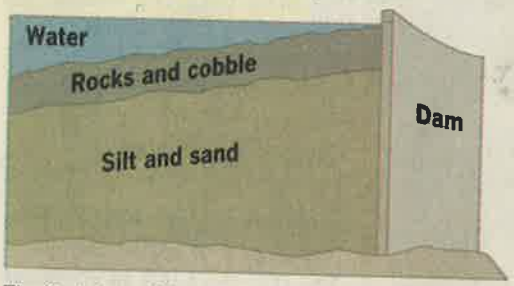
Dam removal plan released

Restoring Matilija Creek

The reservoir behind Matilija Dam is 93 percent filled with accumulated silt, sand and rocks, to the point where the dam is virtually useless.



The first step of the dam teardown and creek restoration plan is to pipe out approximately 2.1 million yards of silt and sand mixed with water, called slurry, and dispose of it further downstream along the Ventura River.

Ventura County Star. July 16, 2004

Dam removal plan released

Restoring Matilija Creek

The reservoir behind Matilija Dam is 93 percent filled with accumulated silt, sand and rocks, to the point where the dam is virtually useless.

alternatives were considered, and the cheapest one was picked by a group of local, state and federal officials as well as nonprofit groups.

The recommended plan calls for removal of the dam at once and for the silt to be slowly deposited downriver. Other alternatives called for taking the dam down piecemeal, or allowing the built-up sediment to come downstream at once.

A wide, deep swath will be carved through the 6.6 million cubic yards of silt behind the dam — enough to cover 400 football fields a foot deep — where a new creek will form over time. Although about two-thirds of the silt will remain until it is carried moved through a slurry pipeline, a process that will take nine months of continuous pumping. That silt will slowly move into the Ventura River, from where it will be deposited near Highways 150 and 33.

Immense piles of rocks will be placed along the banks of the swath, which allows a natural streambed to form over time.

Three-year project anticipated

The entire project is expected to take three years.

Though the Senate has approved $130 million for the project, the plan still has to survive a committee and a full vote in the Senate, and get the president's signature. Still, officials are hopeful the dam will come down.

ing down the dam it restores beaches and the ecosystem and becomes a model for other jurisdictions and agencies," Ventura Mayor Brian Brennan said.

By removing the dam, endangered steelhead trout will have more habitat in which to spawn, Jenkin said. The silt once trapped behind the dam will flow downstream, shoring up eroding riverbanks and providing sand for Ventura's receding beaches, he said. On a larger scale, an entire river ecosystem, which was choked when the dam was built to provide a water supply and flood control, will return to its natural state.

Officials at the Casitas Municipal Water District said they support the idea of removing the dam but have concerns. T wonder how the existing st head trout will fare during dam's deconstruction and if water coming out of the dam

To comment

The 45-day public review period for this proposal ends Aug. 30. Send comments to: Jon Vivanti, U.S. Army Corps of Engineers, Los Angeles District, 915 Wilshire Blvd., Los Angeles, CA 90017-3401 A public meeting will be held 6:30 p.m. July 28 in the Board of Supervisors' Hearing Room, Ventura County Government Center, Hall of Administration, 800 S. Victoria Ave., Ventura.

L.A. Times - Saturday, July 17, 2004

(1)

SPENCER WEINER *Los Angeles Times*

AU REVOIR, RESERVOIR? *Tearing down the Matilija Dam, built in 1948 but clogged with silt, would benefit steelhead trout and Ventura's sand-starved beaches, an environmental report said.*

Dam Demolition Is Put at $130 Million

The three-year Matilija project poses challenges, but environment would benefit, a report says.

By CATHERINE SAILLANT
Times Staff Writer

The 190-foot-high Matilija Dam in Ventura County can be removed over three years at an estimated cost of $130 million, according to a new study that examines the environmental benefits and challenges involved in demolishing the aging structure.

To minimize the possibility of downstream flooding, levees would have to be built or made taller in Meiners Oaks, Live Oak Acres and Casitas Springs; bridges would have to be altered; and in a few areas, structures and land purchased, according to the environmental report.

To maintain water quality at nearby Lake Casitas, a complex silt diversion and filtering system would have to be constructed.

Fish and animals along the 17-mile-long Ventura River watershed would be temporarily stressed by the demolition, the report found. But the dam's removal would improve the Ventura River's ecosystem in the long run, said the study, prepared by the U.S. Army Corps of Engineers and the Ventura County Watershed Protection District.

The Matilija project is the largest and most ambitious of a fledgling movement by environmentalists to remove federal dams that are no longer needed for power, water storage or flood control.

"On a national level, no past or planned dam removal project matches the Matilija project," said Steve Rothert, associate director of the environmental group American Rivers.

Chief among the benefits from the dam's removal would

[*See Dam, Page B11*]

Ventura County Star, Thurs. July 15, 2004 Section B, pg. 8

Rectifying old mistakes

Matilija is one of many useless dams in the West

John **Krist**

Pasadena's Rose Bowl stadium is 895 feet long, 660 feet wide, 100 feet deep and seats 90,000 people. The combined populations of Camarillo and Moorpark could gather there at once to munch hot dogs and watch football.

Now imagine the cavernous stadium packed from turf to brim with sand, silt, gravel and cobbles. And then imagine 13 more Rose Bowls similarly filled. That will give you some idea of the technical challenge facing those who would like to tear down Matilija Dam, a concrete relic of America's dam-building heyday slowly disintegrating in a rugged canyon 16 miles north of Ventura.

Essay

Fourteen Rose Bowls' worth of lithic dandruff shed by the steep slopes of rapidly rising mountains. That's what hides behind one of the most pointless big dams ever built in the West, a region that has seen plenty of river-blocking boondoggles. Had the dam never been built, that rocky material would have been distributed downstream over the past half century by Matilija Creek and the Ventura River. Instead, it has piled up nearly to the dam's crest, becoming an expensive headache for those who would like to see the dam removed to aid imperiled steelhead and rebuild beaches.

Strategies for taking out the dam and dealing with the estimated 6 million cubic yards of sediment it has captured are detailed in a technical analysis released June 29 and will be examined further in a draft environmental impact report due out this week. Although focused on a single dam and a single watershed, the documents may be also read as a general primer on the West's recent past, when politicians and planners often failed to recognize the dynamic complexity and value of living river systems. They also foreshadow its future, when thousands of other dams will reach the end of their useful lives and force a public discussion of what to do with them.

Although hundreds of dams in the United States have faced the wrecking ball in recent years, their symbolic dimensions generally have exceeded their physical ones. Edwards Dam on the Kennebec River in Maine is a prominent example, barely two stories high, breached in July 1999 to restore spawning grounds for striped bass, shad, Atlantic salmon and sturgeon. More than 250 lesser dams, mostly serving small irrigation districts and water agencies, have been removed nationwide since then.

The campaign to remove Matilija Dam has drawn national attention because it is the largest such structure ever to face likely demolition, originally 190 feet tall. (It is now 30 feet shorter, structural flaws having forced engineers to notch its concrete crest in 1965.) Although there have been proposals to demolish or decommission far larger dams, including 710-foot-tall Glen Canyon Dam on the Colorado River in Arizona and 312-foot-tall O'Shaughnessy Dam on the Tuolumne River in Yosemite National Park, no comparable proposal has proceeded as far down the planning path as the one to dismantle Matilija.

In the case of most large dams in the West, small but disproportionately influential interests still profit from their existence and the political barriers to removal loom large. That's not the case with Matilija, however: Because of the dam's uselessness and decrepitude, it is a political orphan, there being no significant constituency for a structure that controls no floods, generates no power and stores but a teacup of water. In contrast, a broad coalition of local interests has coalesced around the cause of removal. That is why $79 million in federal funding for the project has survived committee scrutiny and made it into this year's Water Resources Development Act, which is headed for a Senate vote later this month.

Yet, the quick demise of Matilija Dam and its reservoir, which was half-filled with sediment within two decades of its 1947 completion, offers a preview of the fate awaiting most dams, even popular ones. By some estimates, the average life expectancy of dams is 50 years, meaning the majority of the approximately 75,000 large dams in the United States are operating on borrowed time. Someday, even Glen Canyon Dam will become useless, its reservoir filled with sediment.

It will not always make sense to demolish a dam, even when it is both useless and ecologically harmful, like Matilija. The process is time-consuming and terribly expensive — 14 Rose Bowls take a long time to empty once they've been filled with rocks — and there may be cheaper ways to accomplish the same ecological goals. But as more dams age, and as the social and economic assumptions upon they were built erode like a storm-washed beach, many communities will find themselves grappling with the same question now facing Ventura County: How best to rectify a 60-year-old mistake?

— John Krist is a senior reporter and Opinion page columnist for The Star. His e-mail address is jkrist@VenturaCountyStar.com.

Sunday, July 25, 2004

Eye on the Environment

Matilija Dam removal necessary

By Sherri Dugdale and Sue Hughes
Guest writers

Constructed in 1947 by the Ventura County Watershed Protection District (then known as the Ventura County Flood Control District), Matilija Dam was intended to provide a local water supply for agricultural needs, while offering limited flood protection for downstream communities.

What started out as a good idea, however, would soon present a series of monumental challenges.

Large volumes of sediment began to accumulate behind Matilija Dam, eventually leaving only a small, shallow reservoir that currently provides less than 600 acre-feet of water annually to the Robles Diversion Dam, which sends the water through a 5-mile canal to Lake Casitas.

The sediment cripples Matilija Dam's capacity for water storage and undermines its ability to provide flood protection.

Deteriorating dam

Cracks in the dam face reveal its deteriorating condition. Endangered steelhead trout are blocked from reaching prime spawning and rearing habitat.

The dam prevents the natural flow of sediments from the mountains to the ocean, depriving Ventura County beaches of much-needed sand.

Because of a host of obstacles by a dam that had outlived its usefulness, an effort was launched in 1999 to assess the viability of dam removal and ecosystem restoration.

Officials with federal, state and local agencies, as well as non-governmental organizations and community members, dedicated the next five years to formulating a plan to remove the dam and sediment, restore the ecosystem and mitigate potential impacts of the project.

The effort resulted in seven spawning habitat would continue to be blocked.

The diverse group of project officials agreed "no action" was not the answer and instead chose a proposal to remove Matilija Dam and the accumulated sediment while restoring the ecosystem and providing extensive mitigation for the impacts.

Project needed

With or without a project, Matilija Dam will have impacts on water supply, sediment transport, flooding and fish passage. Only with a project will those impacts be mitigated.

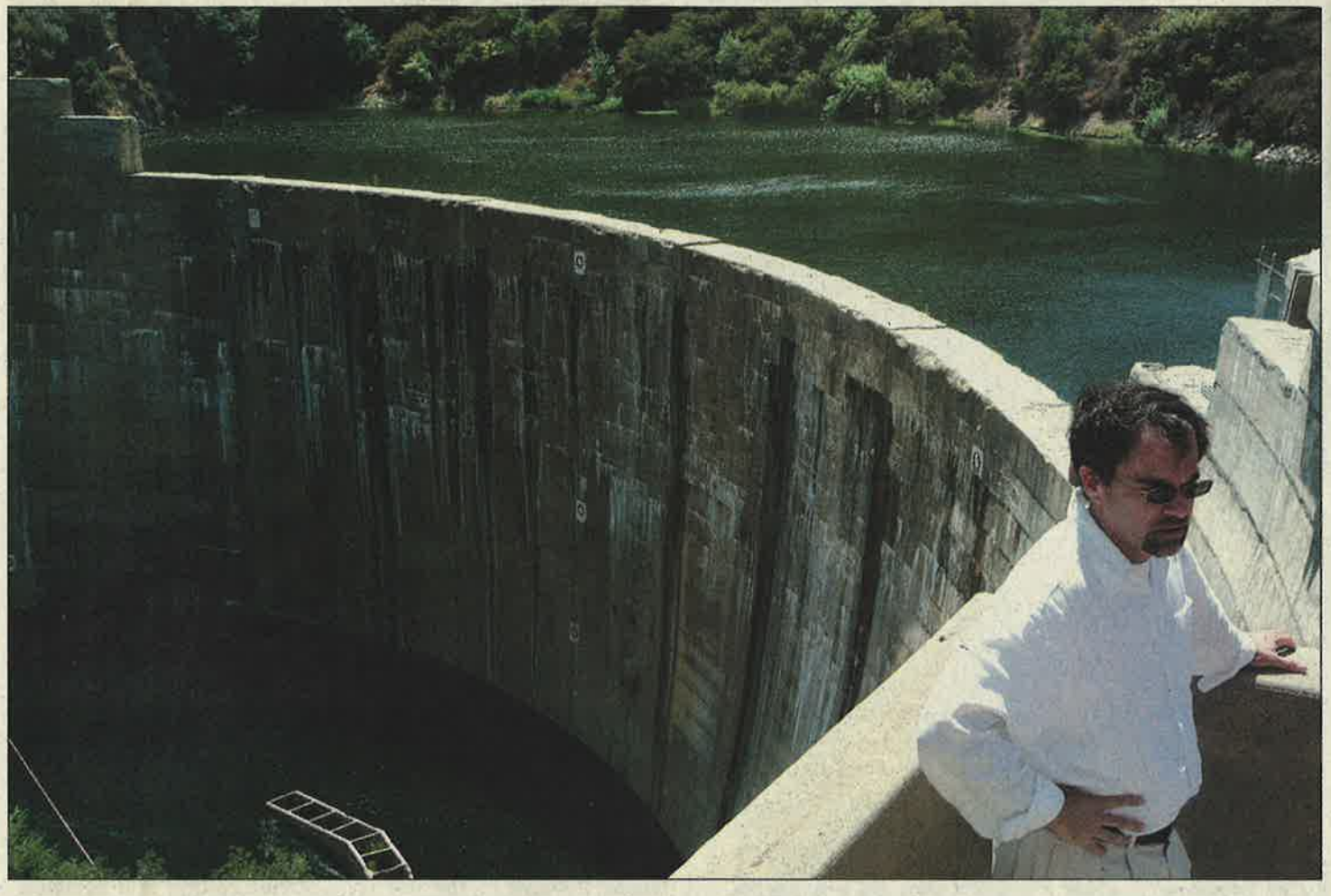
The Army Corps of Engineers, in partnership with the county Watershed Protection District, will present the preferred alternative during a public meeting at 6:30 p.m. Wednesday in the Board of Supervisors Hearing Room, Hall of Administration, 800 S. Victoria Ave., Ventura.

Come and learn about the Matilija Dam Ecosystem Restoration Project, the plans for dam decommissioning, and a detailed description of mitigation measures. Your active participation in the process is encouraged.

On the Net:
http://www.matilijadam.org

Sherri Dugdale is the grant coordinator for the Ventura County Watershed Protection District. Sue Hughes is the county's legislative analyst. For more information on the public meeting, contact Hughes at 654-3836 or susan.hughes@mail.co.ventura.ca.us. Government or nonprofit agencies that would like to submit an article on an environmental topic for this column can contact Terri Thomas at 289-3117 or terri.thomas@mail.co.ventura.ca.us.

Matilija Dam debate



Photos by Juan Carlo / Star staff

Jim Hutchinson, an engineer with the U.S. Army Corps of Engineers, talked to reporters about the demolition plan at Matilija Dam near Ojai on Wednesday. Part of the plan aims to restore an endangered steelhead trout.

Plan to demolish the structure gets protests, support

...e's a limited life span to a dam, and Matilija ... has become one of those. If the structure does ... just imagine the consequences for those ...ownstream."

Paul Jenkin, member of the Matilija Coalition

Environmental impacts worry plan opponents

MATILIJA

From B1

while steering clean water into Lake Casitas.

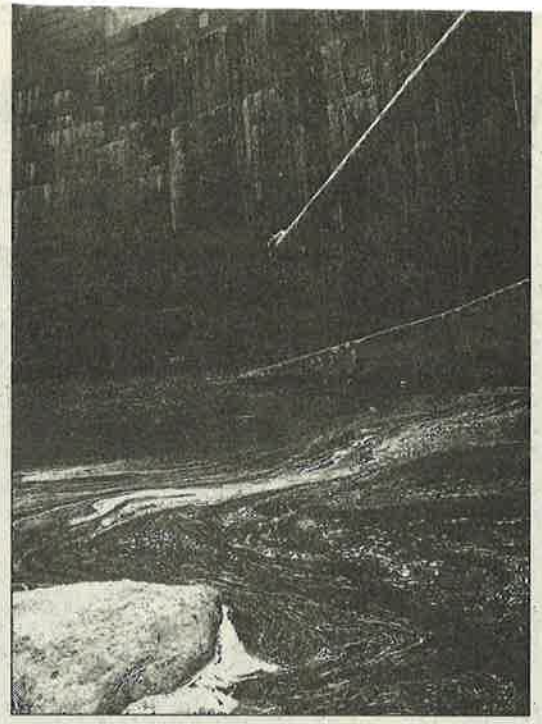
Board members, however, with Ventura River County Water District and Rancho Matilija Mutual Water Co. worry that silt deposited near the river would leach into soil, contaminate groundwater and clog wells, said Lindsay Nielson, an attorney representing both agencies. The environmental report does not address these issues, Nielson said.

Oso Road resident Robert Brown said he worried that demolition would destroy the solitude of his rural downstream neighborhood, where the retired actor and his wife recently moved. "I love trout but not that much," Brown said, criticizing backers of the plan as intellectuals out of touch with downstream residents. "You folks live far away," Brown said. "What about the taxpaying citizens who live there?"

David Pritchett, with the Southern California Steelhead Coalition, said that demolition is the only way to restore the endangered fish. Even though steelhead have been isolated from spawning grounds for 60 years, they instinctively know how to return to those areas, Pritchett said. "It's in their DNA," he said.

Pritchett acknowledged that some existing steelhead could die from the release of sediment, but he chalked that up to "short-term impacts" for "long-term gains."

Paul Jenkin, with the Matilija Coalition, said the plan addressed his organization's concerns over beach erosion. "There's a limited life span to a dam, and Matilija has become one of those," Jenkin said. "If the structure does fail, just imagine the consequences for those downstream."



A plan to demolish Matilija Dam includes moving 6 million cubic yards of silt from behind the dam.

Juan Carlo / Star staff

Los Angeles Daily News

Report backs up dam's removal
Environment would benefit from clear waterway at Matilija Creek

By Kerry Cavanaugh
Staff Writer

Saturday, July 24, 2004 -

OJAI -- In the nation's largest-ever dam removal project, the 15-story Matilija Dam would be dynamited and a vital waterway cleared, restoring the sand-starved Ventura coastline and creating an environment for the endangered steelhead trout to breed, a new report says.

The 2,000-page environmental impact report details the steps for the $110 million project -- tearing down the massive concrete wedge damming Matilija Creek and handling the 6 million cubic yards of sediment that have built up behind the wall since it was built in 1947.

"Pulling this off will be remarkable," said Steve Bennet, chairman of the Ventura County Board of Supervisors, which has championed the dam removal.

"You have a completely useless dam that is causing a lot of problems for Ventura County. There are tremendous advantages to taking the dam out and no advantages from leaving the dam in place."

According to the plan, workers would dredge about 2 million cubic yards of fine sediment from the shallow lake north of the dam, mix the sand with water to a gravy-like consistency and pipe the slurry south for spreading on 118 acres near Highway 150 and the Ventura River.

The dam -- 8 feet thick at the top and 35 feet thick at the base -- would be blasted and the concrete trucked to a recycler.

And behind the dam, designers would carve a winding channel through the remaining sand, gravel and rock to re-establish the creek flow.

Razor-wire fences would be removed and a trail installed for walking and biking.

The end result would re-create the Matilija Creek depicted in 1940s-era black-and-white photos, when it meandered through the rocky canyon that drew day-trippers and anglers from nearby cities.

"We want people to be able to access the creek again after 30 years," said Paul Jenkin, coordinator of the Matilija Coalition and environmental director for the Surfrider Foundation's Ventura chapter.

For activists like Jenkin, the new EIR marks a crucial point in the decades-old movement to dismantle the dam. All major interests have agreed the dam should be dynamited, rather than removed piece by piece, condensing a potentially 20-year project into a two-year effort.

While the new EIR outlines the general dam-removal proposal, project managers said there are still details to figure

out. The EIR must be approved by the U.S. Army Corps of Engineers manager in Washington, D.C., and funding must be secured.

Sen. Barbara Boxer, D-Calif., had the project included in the Water Resources Development Act, which, if signed by the president by the end of the year, would allow proponents to apply for federal money next year.

Federal funds are expected to cover 65 percent of the $110 million cost and local or state funds will make up the remaining 35 percent.

The brainchild of Ventura County environmentalists, the dam removal project is now headed up by the Army Corps of Engineers and the Ventura County Watershed Protection District -- marking a shift in philosophy and practice by the agencies.

The Watershed Protection District, formerly the Flood Control District, built Matilija Dam, despite warnings the facility would never live up to its designed purpose. The Army Corps of Engineers has a long history of damming, dredging and pouring cement to contain the nation's rivers.

"In years past we felt we could control nature; now we realize we have to work with nature," said Jay Field, a spokesman with the corps office in Los Angeles.

Matilija Dam was built in 1947, when many of Southern California's creek and rivers were dammed, with the idea that uncontrolled water was dangerous and a waste.

The Flood Control District dammed Matilija Creek about a half-mile before it joined the Ventura River to create a reservoir to store water for irrigation.

But the dam was plagued with problems from the beginning. Designed to hold more than 7,000 acre-feet of water, the reservoir soon filled with sediment and now holds just 500 acre-feet.

That rock and fine sediment once flowed down the river to restock sand on the beaches, which are now retreating from serious erosion.

The cement wall also blocked Southern California steelhead trout from swimming to the ocean to feed and prevented the hearty ocean-matured trout from coming back to the creek's fresh water pools to reproduce.

Once 5,000 adult trout swam the Ventura River. Now there are fewer than 100.

"No other river in Southern California may show such a net gain for fish," said David Pritchett, program director for the Southern California Steelhead Coalition. "It should give the biggest boost to steelhead recovery by far than anything else going on."

Kerry Cavanaugh, (818) 713-3746 kcavanaugh@dailynews.com

IF YOU GO: The Army Corps of Engineers and the Watershed Protection District will hold a public meeting on the Matilija Dam environmental impact report at 6:30 p.m. on July 28 at the Ventura County Government Hall of Administration, 800 S. Victoria Ave., Ventura. The report is available at www.matilijadam.org

AP Photo/Robert F. Bukaty, both

River Renaissance

0885-7024-/04-0007-0052/$18.00 per article

e dismissed as radical, dam removal creasingly being viewed as a viable on for resolving the safety and ronmental concerns associated with g dams. By participating in a growing ber of dam removal projects, neers are helping to influence a ice that could profoundly reshape the n's physical and cultural landscape.

y Landers

lthough the United States has a long history of constructing dams, the process of removing those structures has until recently generally received scant notice. Dams, of course, have been removed country for many reasons, particularly those relating to nd economics. However, the question of what to do he thousands of aging dams across the nation is begin- receive greater attention, and the scrutiny is prompt- nore thorough examination of the costs and benefits ed with dams, particularly those that no longer serve ctions for which they were built. At the same time, a g awareness of the environmental benefits conferred by oval of a dam is influencing the debate. Together, these are prompting engineers and others to pay greater the positive social, economic, and environmental f a well-designed effort to remove dams of little or no

one knows precisely how many dams exist in the States. The National Inventory of Dams—a list main- by the U.S. Army Corps of Engineers—includes mately 78,000 structures, according to Charles Pearre, ps's dam safety program manager. To be included on a dam must meet at least one of three criteria: it must ast 25 ft (7.6 m) tall; have 50 acre-ft (61,675 m³) or f storage capacity; or have a minimum height of 6 ft and any amount of storage that, if released, could atastrophic. Focusing as it does on large dams, the ry is far from comprehensive. For their part, states imated that they regulate a combined total of approx- imately 90,000 dams, Pearre says. However, this number, which includes the dams included in the national inventory, also is incomplete because states differ in the types of dams they regulate. According to one estimate that attempted to account for even the smallest structures, the nation may have as many as 2 million dams.

For more than 200 years dams have been constructed in the United States to serve a variety of functions. Early dams were often built to power mills, divert water for farming, store water for human consumption, control flooding, and improve navigation. Without such dams, industrial development would have been greatly hampered. By the end of the 19th century, hydroelectric dams were being built to harness the power of many of the nation's waterways. In the 20th century, the United States continued building dams but often on a grander scale, particularly in the arid western states, where the need for electricity was exceeded only by the need for steady water supplies. The Pacific Northwest and the southeastern part of the country—two areas blessed with abundant water resources—also witnessed the construction of many large-scale hydropower projects. But regardless of the region, by the middle of the century a river that flowed freely for its entire length was the exception rather than the rule.

Although the benefits associated with dams were obvious, the costs were not always readily apparent. Of course, the deleterious effects of dams on migratory fish had been observed since colonial times. However, other consequences would take longer to note. For example, by slowing a river's flow a dam can significantly affect water quality within the waterway. Depending on the size and operation of a dam, a river's water temperature and dissolved oxygen levels may be greatly altered, and over time such changes can spell disaster for many species. Other changes in water quality can affect not just the biota that depend on a river but also the river itself. For example, flows from dams that trap large amounts of sediment within their impoundments are often referred to as hungry water because of their increased capacity for transporting sediment. Such flows often result in increased channel scouring and bank erosion downstream of a dam, further degrading or eliminating habitat for wildlife. What is more, dams may alter the timing and volume of flows on a river, again wreaking havoc on habitat and wildlife. In short, dams—even small ones—can significantly disrupt the natural processes normally present in a free-flowing river.

Just as the number of dams in the United States is unclear, no one knows with certainty exactly how many dams have been removed in this country. Molly Pohl, an assistant professor of geography at San Diego State University, has compiled a database of known dam removals. Her research, which builds on the work of American Rivers, a conservation group based in Washington, D.C., and others, has documented more than 400 cases of dams at least 6 ft (1.8 m) tall that have been completely removed. Her research indicates that the pace of dam removal has increased in recent decades, the extent of the practice varying widely from one region of the country to another. It is perhaps not surprising that she also found that

than 160 years, the 24 ft (7.3 m) high, 917 ft (280 m) wide Dam, *opposite top*, on the Kennebec River in Augusta, Maine, pproximately 17 mi (27 km) of upstream habitat. Following the of the dam in 1999, *opposite*, water quality in the former ent has improved significantly and the populations of several idromous fish species have begun to rebound.