

Ventura County Watershed Protection District

Jeff Pratt
 Director
 800 South Victoria Avenue #1610
 Ventura, California 93009

Phone: 805-654-2040
 Fax: 805-654-3350
 Email: jeff.pratt@mail.co.ventura.ca.us



Project Stakeholders:



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Ventura County Watershed Protection District



A Dam Past Its Prime

How do you go about dismantling a 198-foot-high dam? What do you do with more than six million cubic yards of sediment trapped behind the dam? How do you return a river to a state where it will support spawning steelhead? These are just some of the questions currently being discussed by a coalition of federal, state and local agencies, environmental organizations and the public.

flow of sand and sediment from the mountains to the beaches and blocking the endangered steelhead trout from reaching their ancestral spawning and rearing. Today, more than half of the original steelhead spawning habitat lies locked behind the dam.

Federal interest in the deconstruction of Matilija Dam and the restoration of its related ecosystem.

In November 2000, a Reconnaissance Report for the Matilija Dam Ecosystem Restoration Feasibility Study was completed by the US Army Corps of Engineers (Corps). The reconnaissance study reviewed and assessed past and current activities and trends within the Ventura River and Matilija Creek in the vicinity of Matilija Dam and identified opportunities for addressing ecosystem restoration and dam deconstruction issues.

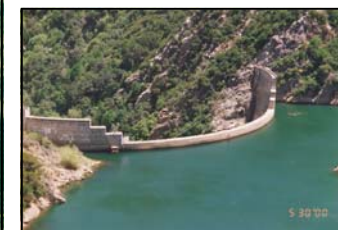


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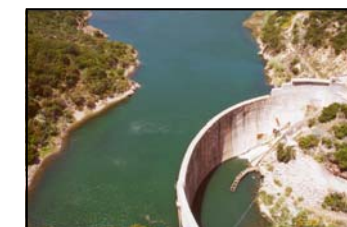
Constructed in 1947 by the Watershed Protection District, Matilija Dam was intended to provide a local water supply while offering flood protection for downstream communities. Over its 50 years of life, the build-up of sediment behind the dam wall has undermined both of those original functions. Currently an estimated six million cubic yards of sediment now lie behind the dam wall.

Realizing that the dam no longer serves a useful purpose and in response to an outpouring of community interest, a multi-stakeholder effort was launched in the spring of 1999 to assess the viability of dam deconstruction and ecosystem restoration. This effort was led by the US Bureau of Reclamation. On October 12, 2000, then Secretary of the Interior Bruce Babbitt participated in a demonstration project at Matilija Dam to evaluate the effectiveness of various concrete removal techniques. With more than 250 people in attendance, this event propelled the project into the national consciousness and began the discussion on the

In June 2001, the Corps, in partnership with Ventura County Watershed Protection District, initiated a feasibility study to assess the extent of Federal interest in the project. In an effort to reach a consensus among the many stakeholders, work groups were formed to address environmental concerns, public outreach, recreation, plan formulation, technical studies, and funding opportunities.



In addition, the presence of the dam has adversely impacted the ecosystems of the Matilija Creek and the Ventura River, preventing the natural



Matilija Dam at a Glance

- Owner: Ventura County Watershed Protection District
- Design by: Donald R. Warren Company
- Date Completed: 1947
- Construction by: Guy F. Atkinson Company, Bressie and Bevanda Construction Inc., and W.E. Kier Construction Company
- Type of Structure: Variable radius concrete arch
- First notching: 1965 (center section 30 feet deep and 285 feet wide at bottom)
- Second notching: 1977 (center section notch widened to 358 feet at bottom)
- Deconstruction Demonstration: October 12, 2000
- Elevation above sea level: to highest spillway—1138 feet; to lowest spillway—1095 feet
- Length of Crest: 620 feet
- Original thickness of concrete arch: top—8 feet; bottom—50 feet
- Concrete yardage: 51,000 cubic yards
- Original height of dam above streambed: to highest crest—198 feet; to lowest spillway—168 feet
- Original reservoir area (at elevation of 1125 feet): 126.8 acres
- Original reservoir storage capacity: 7,018 acre feet
- Current reservoir storage capacity: 500 acre feet (estimated 1999)
- Drainage area of Matilija Creek above dam site: 55 square miles
- Original spillway capacity: 60,000 cubic feet/second (at water elevation 1137 ft)
- Date Board of Supervisors approved Feasibility Study: June 5, 2001



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Matilija Dam & Reservoir (looking upstream)



Matilija Dam and Reservoir



Courtesy of Matilija Coalition

Artist's Rendition of a Restored Ventura River Watershed

Funding the Effort

The Matilija Dam Ecosystem Restoration Project continues to be a high priority for the Ventura County Board of Supervisors and their represented communities. The Board has requested, through its 2004 Ventura County Federal Legislative Agenda and Platform, support for a Fiscal Year '05 appropriation of \$1 million to begin the U.S. Army Corps of Engineers' design work of the Matilija Dam Ecosystem Restoration Project.

Agency	FY	Match	Purpose	2001												2002												2003												2004												TOTAL
				Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	
Army Corps of Engineers	2001	None Required	Reconnaissance	\$100,000																																																\$ 100,000
Bureau of Reclamation	2001-03	None Required	Appraisal Study	\$200,000 (in-kind services)												\$50,000 (in-kind services)												\$50,000 (in-kind services)																								\$ 300,000
Bureau of Reclamation	2001-03	None Required	Appraisal Study	\$50,000												\$200,000												\$150,000																								\$ 400,000
Army Corps of Engineers	2001-04	1:1	Feasibility Study	\$150,000												\$523,000												\$696,000												\$931,000 US Army Corps												\$ 2,300,000
California Coastal Conservancy	2001-04	Matching Funds	Feasibility Study													\$1,625,000																																				\$ 1,625,000
Ventura County Watershed Protection District	2001-04	Matching Funds	Feasibility Study													\$200,000												\$200,000												\$100,000												\$ 500,000
DOJ/National Fish & Wildlife Foundation	2001-04	TBD	TBD																									\$500,000 (FY2001-2004)																								\$ 500,000
National Park Service	2002-03	Yes	Technical Services																									\$12,000 (in-kind)												\$12,000 (in-kind)												\$ 24,000
US Geological Survey	2001-02		Sediment Transport Study	\$150,000												\$100,000																																				\$ 250,000

2005	President's Budget \$375,000	House Appropriations \$ TBD	Senate Appropriations \$ TBD
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Currently, the storage capacity of Matilija Reservoir is estimated at less than 500 acre-feet.

