COASTAL CONSERVANCY

Staff Recommendation
October 27, 2005

MATILIJA DAM ECOSYSTEM RESTORATION PROGRAM
ENGINEERING PLANS AND DESIGNS

File No. 99-099
Project Manager: Neal Fishman/Carol Arnold

RECOMMENDED ACTION: Consideration and possible Conservancy authorization to disburse up to $1,000,000 for preparation of engineering designs to implement the Matilija Dam Ecosystem Restoration Program, including but not limited to disbursement to the Ventura County Watershed Management District, for services provided by the United States Army Corps of Engineers.

LOCATION: Ventura River Watershed, Ventura County (Exhibit 1 and 2).

PROGRAM CATEGORY: Resource Enhancement and Coastal and Marine Resources Programs

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EXHIBITS

Exhibit 1: Regional and Vicinity Map

Exhibit 2: Watershed Map

Exhibit 3: Project Elements

Exhibit 4: a. Draft Environmental Impact Statement
b. Final Environmental Impact Report

Exhibit 5: Design Cost Estimates

Exhibit 6: Letters of Support

Exhibit 7: Ventura County Statement of Overriding Considerations

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RESOLUTION AND FINDINGS:

Staff recommends that the State Coastal Conservancy adopt the following resolution pursuant to Sections 31220 and 31251-31270 of the Public Resources Code:

"The State Coastal Conservancy hereby (1) adopts the Mitigation Monitoring Program attached to the accompanying staff recommendation as Exhibit 4b, Appendix A, and (2) authorizes disbursement of an amount not to exceed one million dollars ($1,000,000) for preparation of

detailed engineering designs and specifications, and for related activities to implement the Matilija Dam Ecosystem Restoration Program, including but not limited to disbursement to the Ventura County Watershed Protection District (District), as a portion of the non-federal share of the project. This authorization is subject to the conditions:

1. That prior to the disbursement of any funds to the District, it shall submit for review and approval of the Executive Officer of the Conservancy: A detailed work program, budget, and schedule, and the names and qualifications of any contractors or subcontractors that the District intends to employ to implement the project.

2. That the mitigation measures identified in the mitigation and monitoring plan are integrated into the design of the project."

Staff further recommends that the Conservancy adopt the following findings:

"Based on the accompanying staff report and attached exhibits, the State Coastal Conservancy hereby finds that:

1. The proposed project is consistent with Chapter 6 of Division 21 (Sections 31251-31270) regarding enhancement of coastal resources, and Chapter 5.5 (Section 31220) regarding coastal and marine resource protection, of the Public Resources Code.
2. The proposed project is consistent with the Project Selection Criteria and Guidelines adopted by the Conservancy on January 24, 2001.
3. The Conservancy has independently reviewed and considered the information contained in the EIS/EIR pursuant to its responsibilities under California Code of Regulations Sections 15090, 15162, and 15221. The EIS/EIR identifies potential significant impacts from the project in the areas of earth resources, hydrological and water resources, biological resources, cultural resources, aesthetics, air quality, noise, socioeconomics, transportation, land use, and recreation. With regard to these impacts, the Conservancy finds as follows:

    a. Based upon substantial evidence in the record, changes have been made to the proposed project to avoid, reduce or mitigate the above possible significant environmental effects to a level of insignificance;

    b. Such changes have been adopted by the United States Army Corps of Engineers, are within the responsibility and jurisdiction of the Corps of Engineers and should be implemented as part of the projects and its Mitigation Monitoring Program, Appendix A to the Exhibit 4b attached to this staff recommendations

4. The EIS/EIR identifies potentially significant impacts in the areas of biological, aesthetics, air quality, noise, transportation, and recreation for which no mitigation may be feasible, due to specific economic, technological or other considerations, as detailed in the attached staff recommendation and the EIR/EIS. However, the Conservancy finds that the environmental benefits of the Matilija Ecosystem Restoration Program as described in the accompanying staff recommendation and EIS/EIR outweigh and render acceptable these unavoidable adverse economic impacts. The Conservancy concurs and adopts Ventura County's

statement of overriding considerations, exhibit 7, attachment 3 attached to this staff recommendation."

PROJECT SUMMARY:

This project is the engineering design phase of the Matilija Dam Ecosystem Restoration Program, the culmination of which will be the removal of the Matilija Dam, a 190 foot high concrete barrier located approximately 16 miles from the Pacific Ocean and just over half a mile upstream from the Matilija Creek confluence with the Ventura River. The primary focus of this Program is the restoration of the federally endangered southern steelhead trout. Steelhead trout are an indicator species for the watershed; if the river successfully supports viable populations of these fish, other native wildlife populations will likely thrive as the result of healthy conditions within the ecosystem. This phase of the Program will produce detailed planning, engineering and design documents for the removal of the Dam and other related projects to support restoration of the Ventura River Watershed.

Over the last 50 years, studies have documented serious declines in the population of southern steelhead. In the Ventura River alone, the population declined from about 4,000 to 5,000 spawning steelhead to less than 100. These declines have been attributed in large measure to numerous dams and diversions that have blocked fish access into historic habitat in the tributaries of major river systems and the degradation of habitat quality due to agricultural and urban impacts. Removal of the Matilija Dam and the opening of the upper reaches of the Watershed will create conditions that could result in the recovery of the southern steelhead trout and the potential removal of this species from the state and federal endangered species lists.

In addition to barring fish migration, the Dam causes other problems in the Ventura River Watershed related to flow and sedimentation issues. Alluvial floodplain downstream of the Dam has drastically diminished, the result of changed flow characteristics and a reduced sediment supply. Reduction in floodplain habitat has significant impacts on riparian species. Sediment deprivation also impacts estuarine areas, home to the federally endangered tidewater goby. Habitat concerns and reduced sediment flow have contributed to beach erosion along much of the coastline. Over the last 50 years, for instance, Emma Wood State Beach, west of the mouth of the Ventura River, has eroded approximately 150 feet, indicating an erosion rate of two to three feet per year. Surfer's Point just down coast of the river mouth, is now mostly cobble.

Built in 1947 to provide water storage for agricultural needs and limited flood control, Matilija Dam has lost all but seven percent of its storage capacity due to the formation of sediment behind the dam. The reservoir behind the dam, currently at about 500 acre feet (down from its original 7,000 acre feet) is expected to disappear completely around the year 2020 as sedimentation continues. Thus, the Dam currently provides little, and will soon cease to provide any, of its originally intended benefits.

As a result of these and other concerns, in 1999 resource agencies and environmental groups began discussions regarding the potential removal of Matilija Dam and other restoration measures. Led by the Bureau of Reclamation, the owners of the Dam, these discussions stimulated field studies and research to evaluate the feasibility of Dam removal. The Conservancy helped the Bureau to conduct sediment and related studies to assist with this evolving effort. Additionally, in 2000, the U.S. Army Corps of Engineers (COE), now the lead

federal agency, completed a reconnaissance study prior to beginning a feasibility study in 2001. The COE requires a local lead for the project which the District assumed.

In September, 2004, the District and the COE completed the Matilija Dam Ecosystem Restoration Feasibility Study, funded in part by the Conservancy as part of the federally required local cost share. Many other agencies and organizations contributed to the study. The study identified this project as one of the largest dam removal projects in the country, and one of the largest ecosystem restoration efforts ever undertaken by the COE west of the Mississippi River.

The Feasibility Study presented alternative analyses and the selection of a preferred plan for the removal of Matilija Dam as well as related restoration projects. The Study focused on ecosystem restoration in the Ventura River Watershed to benefit native fish and wildlife, most specifically the southern steelhead trout, and improvement to the natural hydrologic and sediment transport regime to support both biological resources and coastal beach sand replenishment.

In September 2004, the COE and County completed the final EIS/EIR for the project which was approved by the County of Ventura on December 14, 2004 (Exhibit 4b). Five alternatives were evaluated, including a "No Action Alternative". The agencies selected the alternative that provides for full Dam removal in one phase, slurrying of fine sediments behind the Dam (about one-third of the total sediment load) to downstream disposal sites, excavation of a channel through coarser sediments upstream of the Dam, and natural erosion of remaining sediments at a controlled rate to minimize downstream impacts (Exhibit 3). Mitigation measures were incorporated into the project which are described in the Mitigation Monitoring Program (Exhibit 4, Appendix A); The design phase of the project, labeled by the COE as the "Pre-Construction, Engineering and Design" (PED) phase, is separated into several components. These are:

1. **General Detailed Design Report (GDDR):** A GDDR will be prepared that addresses additional modeling, environmental and general design needs for the Matilija Dam Ecosystem Restoration Program. Numerous issues will be addressed in this phase, the most significant of which is the further analysis of sediment transport potential and impacts, particularly as related to ecosystem benefits, induced flood damage and impacts to water supply and quality. The purpose of the GDDR is to provide documentation for those features of the overall project not specifically limited to one of the projects described below.
2. **Feature-specific Detailed Design Reports (DDRs):** DDRs will be prepared for five project components, as follows:
    a. **Foster Park Wells:** Two groundwater wells will be constructed at Foster Park to reduce impacts to the water supply facilities in this area that will result from increased sediment flows downstream of the dam.
    b. **Levees and Floodwalls for Meiners Oaks, Live Oak and Casitas Springs:** Levees will be modified or constructed in these areas to provide additional flood protection downstream of the dam.
    c. **Santa Ana and Camino Cielo Bridge Modifications:** The Santa Ana Bridge will be widened and extended and an old bridge will be demolished and a new one constructed to provide additional flood protection downstream of the dam.
    d. **Robles Diversion Dam High Flow Bypass:** The Robles Diversion Dam will be modified to include a high-flow bypass for the purpose of allowing sediment to

move beyond the Robles Diversion, preserving the ability to divert water to the Casitas Reservoir and keeping intact the ability of fish to use the new fish passage structure currently under construction.

e. **Dam and Sediment Removal and Recreation:** Following relocation of sensitive species and removal of non-native plants, fine sediment deposited beneath the reservoir will be slurried to downstream disposal sites using water imported from another site. The Dam will be removed concurrent with fine sediment removal. A channel will be constructed through coarser sediments behind the Dam. Excavated sediments will be stockpiled upstream. Slope protection will be provided to permit a controlled rate of erosion. Downstream disposal sites will be revegetated using native plants. Hiking trails and a multi-use trail will be constructed along the slurry pipeline and access road.

The COE and the District expect that the design phase of the project will be completed in three years, with some elements taking less than that, at an approximate cost of $8,000,000 (Exhibit 5). When each DDR is completed, construction will begin for that project. Thus, some construction will be underway for specific components while other DDRs are being completed. The County and COE estimate that full implementation of the Matilija Dam Ecosystem Restoration Program will be completed by the end of 2012 and that the river system will reach a state of equilibrium resembling its pre-Dam condition by 2020. The expected cost of the construction phase is approximately $130,000,000, with the COE providing sixty percent of the project costs using funds authorized by Congress under the Water Resources Development Act (WRDA).

Site Description: Located in western Ventura County, the Ventura River Watershed comprises an area of approximately 223 square miles of which almost half is within the Los Padres National Forest (Exhibit 2). With a maximum elevation of 5,457, the Watershed is characterized by rugged mountains in the upper basins transitioning to relatively flat valleys in the lower downstream areas. The Watershed lies within the western Transverse Ranges, an active tectonic region that contributes some of the highest sediment yields in the United States.

The Ventura River flows in a southerly direction through several constricting canyons and wider floodplain areas for a total of about 16 miles where it emerges into the Ventura River Estuary and the Pacific Ocean. The river has several major tributaries including Matilija, North Fork Matilija, San Antonio, Coyote and Canada Larga Creeks. Matilija Creek drains steep foothills and mountains of the Santa Ynez Mountains as it flows to the Matilija Reservoir about a half a mile above the confluence with the mainstem of the Ventura River.

Lake Casitas Reservoir and Matilija Reservoir are located within the Watershed, both serving the purpose of water supply, though to a much lesser extent for Matilija Reservoir due to excessive sedimentation. Matilija Reservoir was also constructed for flood control function although its capacity to perform this function has been greatly reduced.

Matilija Dam and Reservoir is located approximately 16 miles northwest of the coast on Matilija Creek. The structure is a relatively large concrete arch dam with an average height of 190 feet and a length of 616 feet. Casitas Lake is filled via a 4.5 mile-long Robles-Casitas Diversion Conduit that moves water from the Ventura River at the Robles Diversion Dam located approximately 1.5 miles downstream of the Matilija Creek confluence with the mainstem.

The diversity of aquatic and upland community types within the Ventura River Watershed provide habitat for a wide variety of resident and migratory wildlife species, including 35 special-status wildlife species. The latter includes the federally endangered southern steelhead and tidewater goby. Recent fish and wildlife surveys documented 275 vertebrate species from the Ventura River Estuary and 160 vertebrate species from locations throughout the watershed.

Although much of the Ventura River Watershed is undeveloped, pockets of urbanized areas are found throughout the middle and lower watershed, in particular the cities of Ojai and Ventura. The bulk of the Watershed lies within unincorporated Ventura County. The upper reaches lie within the Los Padres National Forest and contain some of the least impacted stream and riparian habitat within the Watershed.

Project History: The Chumash Indians occupied the Ventura River Watershed for over 4,000 years. These were a hunter-gatherer-fisher people who had minimal impact on natural resources. With the arrival of the Spanish missions in the 1700s and the Spanish rancheros in the early 1800s, cattle grazing and vineyard production were the most noticeable alterations on the landscape.

Homesteading began in earnest in the late 1800s, as did small hard rock mining operations and oil exploration. During this period, ranches and small communities began to divert surface waters from the mainstem Ventura River. This began a trend toward steelhead and other native species decline as more people migrated into the area and human populations grew. Overfishing became a problem due to steelhead bycatch in commercial seining operations within the ocean and lagoon. Recreational and subsistence fishing also had a noticeable impact on steelhead populations.

Increasing agricultural and municipal water demands expanded water diversions and changes to surface water supply became evident in the 1940s. Most diversions were unscreened, causing loss of countless steelhead juveniles and smolts. Then, in 1948, the construction of Matilija Dam, built primarily for water storage, and in 1958, the completion of Robles Diversion Dam and Casitas Dam, effectively cut-off steelhead access to greater than 50 percent of their historic spawning habitat. From an estimated pre-Dam population of 4,000 to 5,000 fish in a typical spawning run, numbers have declined to less than 200, a threshold associated with a high risk of extinction. Alarmed by these numbers, the U.S. Fish & Wildlife Service listed the southern steelhead as endangered under the federal Endangered Species Act in 1997. The Matilija Dam was identified as a major impediment to steelhead migration.

The Ventura River Watershed dams also captured much of the supply of sand and gravels, beginning a process that drastically altered downstream channels, floodplains and the coastline. Sediment loads have reduced the water storage capacity of Matilija Dam and Reservoir from its initial 7,000 acre feet to less than 500 acre feet, about seven percent of its original capacity. About 6,000,000 cubic yards of sediment is trapped in the Reservoir. The Matilija Dam has substantially reduced the normal flow of sediment from the system, resulting in shrinkage of floodplain resources and the loss of sand beaches in the coastal zone.

As a result of these and other concerns, in 1999 resource agencies and environmental groups began discussions regarding the potential removal of Matilija Dam and other watershed

restoration measures. Led by the Bureau of Reclamation, these discussions stimulated field studies and research to evaluate the feasibility of Dam removal and Watershed restoration.

In October 2000, the Conservancy authorized $1,750,000 for consultant services to study the feasibility of removing Matilija Dam. Most of these funds were used by the Bureau of Reclamation to conduct sediment analyses and related studies, with a small amount provided as a grant to the Institute for Fisheries Resources to research and report on the public and permitting processes necessary to allow the project to move forward. Also in 2000, the COE became the lead federal agency for the Dam removal and ecosystem restoration project with the District serving as the local lead.

In February 2003, the Conservancy authorized $311,000 of the original funds to be used as a grant to the District to participate as the local lead. The COE had completed a Reconnaissance Study and begun a feasibility analysis, building upon the work completed by the Bureau of Reclamation. In May 2004, the Conservancy authorized an additional $200,000 to the District to help with the local cost share for the COE Feasibility Study.

PROJECT FINANCING:

California Ocean Protection Council	$ 400,000
Coastal Conservancy	$ 600,000
U.S. Corps of Engineers	$ 6,000,000
Other State and Local Funds	$ 1,000,000
Total Project Cost	$8,000,000

The total cost of the design/engineering phase is expected to be approximately $8,000,000. Of this amount, $6,000,000 will come from the federal government. The remaining $2,000,000 will come from State or local sources. At its September meeting, the Ocean Protection Council (Council) found the Matilija Dam Project to be of high priority and authorized the use of up to $2,000,000 of State funds pledged for Ocean protection activities to be used for the project. The proposed Conservancy resolution would authorize disbursement of $1,000,000 of these funds that are administered by the Conservancy, including $600,000 from the FY '04 appropriation to the Conservancy from the Water Security, Clean Drinking Water, Coastal and Beach Protection Act of 2002 (Proposition 50) and $400,000 from tidelands oil revenues appropriated to the Resources Agency and subsequently allocated to the Conservancy through an interagency agreement. The remaining $1,000,000 is expected to come from the Wildlife Conservation Board (WCB). This funding would be authorized at a subsequent WCB meeting. The County of Ventura may also allocate funds to this project. This funding would either substitute for WCB funding or would be used for project contingencies. Proposition 50 funds are appropriated to the Conservancy to restore and protect coastal watersheds through projects undertaken pursuant to the Conservancy's enabling legislation (Division 21 of the Public Resources Code) to acquire, restore or protect water and land resources (Water Code Section 79570). These funds may also be used for planning, permitting and administrative costs associated with projects of this type. *Id.* The tidelands oil funds are appropriated to the Resources Agency for ocean protection purposes

through the Ocean Protection Council. These funds are administered by the Conservancy pursuant to an interagency agreement with the Resources Agency.

Both the Conservancy and WCB have reserved up to $5,000,000 for the purposes of the Ocean Protection Council from available funding. The Conservancy's Proposition 50 allocation for this project would be credited to both its reservation and the Council's authorization of up to $2,000,000 for the Matilija project. Any funds authorized by WCB would be credited to its reservation and the Council's authorization. The tidelands oil funds are credited as part of the Council's overall authorization of $2,000,000 for the project.

CONSISTENCY WITH CONSERVANCY'S ENABLING LEGISLATION:
This project would be undertaken pursuant to Chapter 5.5 of the Conservancy's enabling legislation, Division 21 of the Public Resources Code, regarding integrated coastal and marine resources protection and Chapter 6 of Division 21 of the Public Resources Code regarding coastal resource enhancement.

Under Chapter 5.5, Section 31220(a), the Conservancy has consulted with the State Water Resources Control Board in the development of this project to ensure consistency with Chapter 3 (commencing with Section 30915) of Division 20.4 of the Public Resources Code. Under Section 31220, the Conservancy may undertake projects that meet any of the objectives specified in subsection (b) of that section. Consistent with Section 31220(b), the proposed project will (1) help protect fish and wildlife habitat within coastal and marine waters and coastal watersheds by preparing engineering plans to restore riverine habitat for southern steelhead which spend part of its lifecycle in coastal waters; (2) reduce unnatural erosion and sedimentation of a coastal watershed by preparing engineering plans to remove Matilija Dam, a major obstacle to natural sediment flows; and (3) restore riparian areas, floodplains, and other sensitive watershed lands draining to sensitive coastal or marine areas by preparing engineering plans to remove Matilija Dam and other ecosystem restoration projects within the Ventura River Watershed.

As required by Section 31220(c), the project will include an evaluation component which will be required through the permitting process and through the adoption of a Mitigation Monitoring Program. As also required by Section 31220(c), the project is consistent with state and regional watershed planning as described below under "Consistency with Local Watershed Management Plan/State Water Quality Control Plan."

Under Chapter 6, Section 31251.2(a) the Conservancy may award a grant to enhance a watershed resource that is partly outside of the coastal zone. The project will result in engineering designs, plans and specifications to enhance the Ventura River Watershed which is partly inside and partly outside the coastal zone. Southern steelhead trout and other wildlife to be enhanced by this project utilize the entire river system. Consistent with Section 31253, this project is intended to help fund engineering designs, plans and specifications and represents a small component of the overall cost of the project.

CONSISTENCY WITH CONSERVANCY'S
STRATEGIC PLAN GOAL(S) & OBJECTIVE(S):

The proposed project is consistent with the Goals and Objectives of the Conservancy's Strategic Plan, as follows:

Consistent with **Goal 5 Objective A**, the proposed project involves the restoration of Ventura River by removing the Matilija Dam and undertaking enhancement projects within the watershed.

Consistent with **Goal 5 Objective B**, the proposed project will restore a habitat corridor between upstream spawning habitat of the southern steelhead trout on the Ventura River and related coastal and ocean habitats.

Consistent with **Goal 6 Objective A**, the proposed project will restore a coastal watershed and improve habitat for anadromous fish and other aquatic and riparian wildlife species.

Consistent with **Goal 6 Objective C**, the proposed project will result in the removal of the Matilija Dam. The Dam serves as a barrier to sediment transport in the Ventura River and its removal will restore sediment flows and help rebuild coastal beaches.

CONSISTENCY WITH CONSERVANCY'S PROJECT SELECTION CRITERIA & GUIDELINES:

The proposed project is consistent with the Conservancy's Project Selection Criteria and Guidelines adopted January 24, 2001, in the following respects:

Required Criteria

1. **Promotion of the Conservancy's statutory programs and purposes:** See the "Consistency with Conservancy's Enabling Legislation" section above.
2. **Consistency with purposes of the funding source:** See the "Project Financing" section above.
3. **Support of the public:** Removal of the Matilija Dam and restoration of the watershed is a high profile project, the largest ecosystem restoration effort ever undertaken by the COE west of the Mississippi River. The project is supported by numerous legislators, agencies, and environmental organizations. Letters of Support are attached as Exhibit 6.
4. **Location:** Matilija Dam and Reservoir is located approximately 16 miles northwest of the coast on Matilija Creek, a tributary to the Ventura River. The Ventura River Watershed is located in western Ventura County, partly in and partly out of the coastal zone. The project will benefit both coastal and inland resources, in that the removal of the Dam will help restore the endangered southern steelhead trout which migrate from the ocean to spawning grounds upstream. Additionally, removal of the Dam will restore the river to more natural sediment transport conditions which will help rebuild coastal beaches.
5. **Need:** The project will be largely funded by the U.S. Corps of Engineers which requires a local cost share. The District is the local partner, but does not have the resources to fund the

entire required local cost share. Thus, Conservancy funds are needed for this part of the funding package. Without the Conservancy, this project could not move forward.

6. **Greater-than-local interest:** The Matilija Dam project has generated interest throughout the United States. It is the largest dam removal project now being planned and, when completed, is expected to restore populations of southern steelhead to levels that could result in recovery of the species. Additionally, the project will be a model for similar restoration projects, including those that involve replenishment of sand beaches in coastal areas.

Additional Criteria

7. **Urgency:** Funds for the design phase of this project are contained in both the House and Senate versions of the Army Corps of Engineers Budget for 2006. The project is also included in both the House and Senate version of the proposed Water Resources Development Act. In order to help ensure federal money for this program over the long-term, State funds are urgently needed to match these federal dollars and to demonstrate a continuing State commitment to the program.
8. **Resolution of more than one issue:** Removal of the Matilija Dam would help to resolve loss of wetland and riparian habitat, declines in population of the endangered southern steelhead and other sensitive species, and shrinkage of coastal beaches.
9. **Leverage:** See the "Project Financing" section above.
10. **Conflict resolution:** The project will help resolve conflicts between the needs of endangered species, water users, sport fisherman and beach users.
11. **Innovation:** Removal of a large dam such as the Matilija Dam is an innovative project and the largest currently underway in the United States. The project design team, led by the Corp has received national recognition. As such, this project will serve as a model for other large Dam removal projects in the country, and potentially around the world.
12. **Readiness:** As described under the Financing Section above, the Congress is expected to fund this project later this year. Additionally, the District and the Bureau of Reclamation are committed to the project at this time. All CEQA/NEPA documents have been completed and the momentum to move ahead with this project from all fronts is in place.
13. **Realization of prior Conservancy goals:** The Conservancy has funded the Bureau of Reclamation, the District, and the Fisheries Institute to undertake the necessary studies to move ahead with this project. The next phase is the preparation of engineering plans and specifications, the focus of this project. Additionally, the project will help to further the goals of the Southern California Wetlands Recovery Project which was created by the Resources Agency and administered by the Conservancy.
14. **Cooperation:** The design phase of the project will be carried out by the COE and the District. The Bureau of Reclamation will also help on this phase of the project. All elements are in place for this kind of cooperative effort to proceed.

CONSISTENCY WITH LOCAL COASTAL PROGRAM POLICIES:

The project is consistent with the Ventura County Local Coastal Program which requires the County of Ventura to "work in close cooperation with other agencies and jurisdictions to provide

comprehensive and biologically sound management of coastal wetlands." This project will have positive impacts on the water quality and biological productivity of the Ventura River, including the wetlands at and near the river mouth.

CONSISTENCY WITH LOCAL WATERSHED MANAGEMENT PLAN/STATE WATER QUALITY CONTROL PLAN:

The inherent intent of local coastal watershed management plans is to prevent water quality degradation and to protect the beneficial uses of coastal waters. Water quality control plans adopted by the State Water Resources Control Board are designed to focus resources on key issues, promote the use of sound science, and promulgate cooperative, collaborative efforts in coastal areas to protect and enhance coastal waters. As a collaborative program the preparation of engineering designs, plans and specifications for the Matilija Dam Ecosystem Restoration Program will contribute to the scientific information pool that supports the development of water quality standards in coastal areas.

COMPLIANCE WITH CEQA:

History:

The U. S. Army Corps of Engineers, as lead agency under the National Environmental Policy Act (NEPA), and the Ventura County Watershed Protection District, as lead agency under the California Environmental Quality Act (CEQA), prepared an Environmental Impact Statement/ Environmental Impact Report (EIS/EIR) to analyze potential environmental impacts of the Matilija Dam Ecosystem Restoration Project options at Matilija Dam in Ventura County (Exhibit 4). The purpose of the project as identified in the EIR/EIS is the restoration of the Matilija Creek and Ventura River ecosystem. (Final EIR/EIS at ES-2) The EIR/EIS includes a Mitigation Monitoring Program (Exhibit 4b, Appendix A).

Pursuant to the Administrative Supplement to the CEQA Guidelines, a public review period was established from July 16, 2004 through August 30, 2004. The COE and the District accepted written comments on the draft EIS/EIR during the public review period. Comments, including those made by the Conservancy, were reviewed by COE and District staff and changes were made to the EIR/EIS accordingly (Exhibit 4b § 4**).**

The Ventura County Environmental Report Review Committee (ERRC) held public meetings on the draft EIS/EIR on October 13 and October 20, 2004. The ERRC members reviewed the document for technical adequacy in relation to CEQA and found that the EIS/EIR was completed in compliance with CEQA and was technically adequate. The ERRC approved a motion recommending the Ventura County Board of Supervisors certify the document.

The final EIR/EIS was presented to the Ventura County Board of Supervisors. On December 14, 2004, the Board unanimously approved the EIS/EIR, the Mitigation and Monitoring Program, and a Statement of Overriding Considerations (Exhibit 7) outlining its position that the environmental benefits of the project outweigh unavoidable significant impacts (described below). This began a 30-day legal challenge period that ended January 15, 2005. There were no legal challenges to the EIR/EIS.

On December 22, 2004, the Chief of the COE signed the final document signifying to the U.S. Congress that all internal questions and concerns had been addressed and that the plan had the full support of the COE. This is the last step before Congress can authorize and fund the project.

Project Alternatives:

The EIR/EIS examined seven project alternatives (including sub-alternatives) for the removal of both Matilija Dam and accumulated sediment, plus a No Action Alternative. Removal of the Dam would eliminate a barrier to fish passage on Matilija Creek, a tributary to the Ventura River, and facilitate the migration, spawning, and rearing of endangered southern steelhead. Accumulated sediment would be removed or re-configured to improve the Matilija Creek flow regime, and ultimately restore the Creek to a more natural pre-dam streambed configuration.

The alternatives examined in the EIR/EIS are:

No Action Alternative: Under this alternative, the Dam would not be removed and there would be no action to restore the ecosystem, including the removal of Matilija Dam. At a future time, the Dam would need to be demolished due to age and structural deterioration and methods to remove sediment behind the Dam would need to be investigated.

Alternative 1: Full Dam Removal/Mechanical Sediment Transport – Dispose of Fines, Sell Aggregate: The entire Dam and the majority of the sediment behind the Dam would be removed. The Dam would be removed in one continuous process. Sediment removal would be accomplished mechanically with most of the fine sediment slurried or trucked to a disposal area off site.

Alternatives 2a and 2b Full Dam Removal/Slurry and Natural Sediment Transport: This alternative is designed to fully remove the Dam in one continuous process and allow sediment removal by river hydraulic forces. The two sub-alternatives differ in how fine sediments are transported. In alternative 2a sediment would be excavated and slurried to an off-site disposal area, and in 2b, sediment would be excavated and stockpiled upstream. All sediment would then erode by storms and naturally transport downstream.

Alternatives 3a and 3b: Incremental Dam Removal/slurry and Natural Sediment Transport: This alternative is similar to 2a but the Dam would be removed in two episodes, with an interval of an estimated two years. In alternative 3a the fine sediments would be excavated and slurried to an off site disposal area. In alternative 3b a quantity of sediment immediately behind the Dam sufficient to allow safe removal would be excavated and stockpiled upstream. All sediment would then erode by storm and naturally transport downstream.

Alternatives 4a and 4b (preferred): Full Dam Removal/On-Site Sediment Stablization: Long-Term Transport Period and Short-Term Transport Period: In this alternative, a channel would be excavated through the sediments upstream of the Dam. The fine sediment in the reservoir would be slurried to an offsite disposal area. Both alternatives 4a and 4b would involve the full removal of the Dam in one continuous process. In alternative 4a, remaining sediments would be stabilized and erode by storm events over a 50 to 100 year time period. In alternative 4b, the remaining sediments would be stabilized to allow natural erosion, which would occur at a controlled rate in order to minimize downstream impacts

The COE evaluated all alternatives by examining hydrologic input, downstream sediment and turbidity, flooding flood protection improvements, beach nourishment and ocean sediment yield, environmental resources, topography, groundwater impacts, completeness, effectiveness, efficiency, acceptability, costs, benefits, and contributions to national Natural Ecosystem Restoration goals. The results of these analyses led the COE to choose Alternative 4b as the recommended plan for he proposed action.

The COE and the District determined that alternative 4b would result in the largest overall increase in habitat value when measuring benefits to steelhead, riparian habitat, and natural hydrologic and sedimentation processes. It would also return a greater amount of sediment to the Ventura River and Ventura County beaches than the other alternatives.

The COE and the District determined that alternative 4b does not have greater impacts than the other action alternatives, and that most of its adverse impacts, particularly air quality and noise impacts related to construction, are short term in nature. The COE also determined that the application of all required regulations and permitting requirements and the implementation of mitigation measures recommended in the EIR/EIS would resolve nearly all environmental issues. Impacts that would remain significant despite regulatory requirements and proposed mitigation measures are summarized below.

Unavoidable Significant Impacts:

Impacts from the project that are significant and cannot be reduced to less-than-significant levels through the application of feasible mitigation measures have been characterized as Class I impacts (see Executive Summary 6-8). These impacts are discussed in section 6 of the EIR/EIS (Exhibit 4b), and are summarized below:

Biological Resources:

- Significant impacts to wildlife as a result of increased human disturbance may include species avoidance of preferred habitat areas and reduced reproductive success in local wildlife populations, including special status species such as red-legged frogs. Indirect effects to terrestrial fauna using habitats adjacent to the area may result from reduced food sources, increased predation, increased noise, and decreased habitat.

- Wildlife movement in Matilija Canyon and along Matilija Creek would be temporarily disrupted by dam and sediment removal activities for a period of up to ten years. Vegetation, including the non-native giant reed, would be removed during the early stages, thereafter disrupting wildlife habitat and movement corridors for the duration of the construction. Impacts to wildlife movement would be significant.
- The project would result in the removal of approximately 46 acres of open water and emergent wetland habitat artificially created by development of the Matilija Reservoir. Impacts to wetlands and open water would be long-term, permanent and significant.
- Direct impacts to steelhead may result from the dispersion of sediments into the water column during dam removal and sediment stabilization activities. The majority of fine sediments of silt and clay would be transported to the downstream 94-acre slurry site and stabilized to a 50-year event, and it is expected that after two or three storms the turbidity levels would be no more than twice the natural levels. However, the short-term effects of aggradation during the first two storm events may result in significant impacts to steelhead.
- Allowing sand and gravel to be sold as aggregate over an approximate ten year period would require the removal of vegetation, including giant reed, during the early stages. Aggregate sales would disrupt wildlife habitat and movement corridors. Impacts to wildlife during the ten-year duration would be significant.
- The demolition and construction activities associated with dam removal, sediment slurrying, and aggregate sale activities would result in the potential loss of individuals within populations of protected and sensitive wildlife species inhabiting the Matilija Dam reservoir area. Impacts would occur for a period of up to 12 years and would be considered significant.

Scenic Resources:

- The levees and floodwall along the Live Oaks portion of the river would be raised between 4 and 13 feet. Increasing the height of the levee to nearly 13 feet would result in a substantial blockage of views for a small number of property owners. Because there is little flexibility in shifting the location of the proposed levee and floodwall further from the property lines, the levee and floodwall at this location would result in significant immitigable impacts.
- The flood control improvements along Casitas Springs would cross through the west end of a mobile home park. An increase in the levee height to over 13 feet would substantially impact view for the residents of the mobile home park. Due to the proximity of the residences to the river channel, it is unlikely that the alignment of the levee and floodwall could be moved to avoid substantially damaging views from the back of the park, resulting in significant and immitigable impacts.
- Activities associated with the excavation and sale of aggregate materials from the reservoir area would result in temporarily obstructed views to the Ventura River and temporary deterioration in the aesthetic value of the project area for a period of up to ten years. Users of Matilija Road, particularly residents of Matilija Canyon, would contend with approximately 420 trips by large haul trucks per day, degrading the scenic value of

this two-lane road that winds through largely pristine wilderness. Temporary impacts resulting from project activities would be significant and immitigable.

Air Quality:

- The project would create certain emissions that could potentially cause new or contribute substantially to existing air quality violations. On-site emissions would be generated from construction equipment and vehicles, as well as fugitive dust generated by earth movement and the operation of vehicles transporting workers to and from the job site and from heavy diesel truck trips required to haul equipment and materials to and from the various project construction sites. The air quality impacts from these emissions are considered to be significant and unavoidable.

Noise:

- Noise generated from construction, trucking and giant reed removal activities, as well as operation and maintenance activities, would impact potentially sensitive receptors located upstream of Matilija Dam, along the truck routes, in the vicinity of the flood protections control measures, along the slurry and fresh water pipeline routes, and nearby Robles Diversion Dam, Foster Park, the disposal site, and the desilting basin. Impacts from noise would be significant and unavoidable.

Transportation:

- The project would require hauling dam demolition debris with the use of large heavy trucks. All haul trips would be routed on SR 33 through Ojai. The daily and morning peak hour trips estimated for heavy-duty vehicles would violate Ventura County Level of Service standards, resulting in significant and immitigable traffic impacts.

Recreation:

- The use of the Rice Road site for slurry disposal could require a closure of the East/West River Bottom Loop Trails and Riverview Trailhead for at least 12 months. These facilities would likely remain closed to the public until the completion of re-vegetation activities, thereby resulting in significant and immitigable impacts to recreation facilities.

Staff has reviewed the EIR/EIS and recommend that the Conservancy find the environmental benefits of the Matilija Dam and Ecosystem Restoration Program outweigh and render acceptable the above significant unavoidable adverse impacts. Unavoidable adverse environmental impacts may be considered acceptable under provisions of CEQA where the lead agency finds that the project's specific economic, legal, social, technological or other benefits outweigh the unavoidable adverse impacts. In view of the outstanding benefits of removing Matilija Dam and undertaking restoration projects in the watershed, staff recommends that the Conservancy find EIR/EIS adequate, adopt the Mitigation Monitoring Program and approve a Ventura County's statement of overriding considerations concurring that the environmental benefits outweigh the unavoidable adverse impacts.

Upon approval, staff will file a notice of determination.