

COASTAL CONSERVANCY

Staff Recommendation
December 2, 2004

Arroyo Grande Creek Watershed Planning and Restoration

File No.04-071
Project Manager: Timothy Duff

RECOMMENDED ACTION: Authorize disbursement of an amount not to exceed \$285,000 to the Coastal San Luis Resource Conservation District to plan and implement erosion control projects, and to prepare a watershed enhancement and flood management plan for Arroyo Grande Creek.

LOCATION: Arroyo Grande Creek watershed, San Luis Obispo County (Exhibits 1 and 2)

PROGRAM CATEGORY: Watershed Restoration

EXHIBITS

Exhibit 1: Project Location

Exhibit 2: Site Map

Exhibit 3: Photos of 2001 Flood Event

Exhibit 4: Letters of Support

RESOLUTION AND FINDINGS:

Staff recommends that the State Coastal Conservancy adopt the following resolution pursuant to Section 31220 of the Public Resources Code:

“The State Coastal Conservancy hereby approves disbursement of an amount not to exceed two hundred eighty-five thousand dollars (\$285,000) to the Coastal San Luis Resource Conservation District (CSLRCD) to implement erosion control projects and to prepare a watershed enhancement and flood management plan for Arroyo Grande Creek that will identify existing conditions and additional priority projects for implementation, subject to the following conditions:

1. Prior to the disbursement of any funds the CSLRCD shall submit for the review and approval of the Executive Officer of the Conservancy separate work programs, schedules, budgets and the names of any subcontractors to be employed in preparation of the

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watershed enhancement and flood management plan, and in the planning and implementation of erosion control projects.

2. Prior to the disbursement of any funds for implementation of erosion control projects, the CSLRCD shall submit for the review and approval of the Executive Officer of the Conservancy:
 - a. Evidence that it has obtained all permits and approvals required to implement the enhancement actions authorized above.
 - b. A landowner agreement between the CSLRCD and the owner of the land on which a project is to be undertaken, by which the owner authorizes the work and agrees to maintain the improvements for a minimum ten year period following installation of the improvements.

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 Public Resources Code Section 31220, regarding the Conservancy’s mandate to restore watersheds.
2. The proposed project is consistent with the Project Selection Criteria and Guidelines adopted by the Conservancy on January 24, 2001.
3. The proposed project is consistent with local watershed management plans and water quality control plans.”

PROJECT SUMMARY:

The project proposal includes authorization to disburse \$285,000 to the Coastal San Luis Resource Conservation District (CSLRCD) to plan and implement erosion control projects and to prepare a watershed enhancement and flood management plan for Arroyo Grande Creek.

Erosion Control Projects

The CSLRCD and its funding partners, State Water Resources Control Board (SWRCB) and Natural Resources Conservation Service (NRCS), propose to construct erosion control projects on privately owned farmland to reduce soil loss and sedimentation into lower Arroyo Grande Creek. The proposed installation of improvements that constitute agricultural best management practices (BMPs), such as fencing of riparian areas, development of creek buffer strips to capture sediment, development of off-stream water storage facilities, and the repair of erosion gullies and eroding stream banks using low-impact bioengineering techniques, would reduce erosion and thereby protect productive farmland, reduce nutrient and pathogen loads, and improve water quality. These improvements would also serve to enhance instream and riparian habitat for the southern steelhead and other listed and sensitive species. Each of the proposed erosion control projects will involve less than five acres. In addition, each project will be designed to assure the

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maintenance, restoration, enhancement, or protection of habitat for fish, plants, or wildlife. Conservancy funding will not be used for any project directly affecting endangered, rare or threatened species or reducing recognized habitat for these species.

With match funding provided by the Conservancy, the SWRCB and private landowners, staff from the CSLRCD and NRCS would provide technical assistance and construction management to participating landowners to complete priority projects. To meet state and federal monitoring requirements, direct measures of effectiveness and the success of both individual BMPs and the overall program would be provided through pre- and post- installation photo monitoring, and the calculation of sediment load reduction using the USDA's Revised Universal Soil Loss Estimator methodology. In addition, project success would be quantified by such measures as feet of riparian fencing installed and stream bank revegetated. Landowner maintenance agreements would also be required to ensure that the BMPs are maintained over time.

Watershed Enhancement and Flood Management Plan

Match funding from the Coastal Conservancy is also being requested to prepare a comprehensive watershed enhancement and management plan for erosion control, flood management, and habitat enhancement that would lead to specific recommended implementation actions for "on-the-ground" physical improvements. Conservancy funds would be used to evaluate the geomorphological behavior of the entire stream system with the understanding that developing a viable flood management plan for the lower watershed requires analysis of the upper watershed as well. The final plan would contain a summary of current conditions in the watershed, including information on land use, fish populations and habitat, benthic populations, water quality, existing and potential sediment problems, stormwater facilities, and an overview of hydrologic, hydraulic and flooding conditions. Most important, the plan would provide a set of actions and proposed projects to reduce erosion and sedimentation such as levee modifications and setbacks and vegetation management, while ensuring protection and enhancement of habitat for listed and sensitive species, including southern steelhead. For each option identified, the financial costs, environmental benefits, human benefits, and implementation feasibility would be quantified. The preferred options would then be developed into an implementation plan that would include stakeholder responsibilities, a financing plan, implementation timelines and goals for each aspect of the plan.

The CSLRCD and its project partners believe a watershed-scale analysis of key erosion sources and their impact on creek stability is critical to the understanding of erosion processes in the lower watershed where a 40-year old levee system protecting farmland and nearby homes from periodic flooding constrains creek flows for three miles along the lower valley floor. Due to a lack of maintenance over the decades, the lower portion of the levee system has filled with sediment. Today, the channel can only carry 15 percent of its original design capacity which has been reduced over the decades from managing a 100-year flood event to managing only a 2-year to 5-year flood event. In March 2001, the levee breached, flooding over two hundred acres of farmland and several homes (Exhibit 3). The proposed plan would serve as a first step in implementing projects to reduce or eliminate the potential for this type of impact in the future.

With Coastal Conservancy assistance over the past two decades, the CSLRCD has taken a primary role in San Luis Obispo County on major watershed planning and restoration projects. The CSLRCD has been responsible for implementing the Conservancy's successful Morro Bay

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Watershed Enhancement Plan, including the onsite management during construction of a major floodplain restoration project along Chorro Creek. In partnership with the NRCS, the CSLRCD continues to manage several Conservancy projects in the Morro Bay watershed, including the design and construction of agricultural BMPs on private rangeland. The CSLRCD has proven to have the capacity to effectively manage major watershed planning and restoration projects, and is ideally positioned to manage the planning and restoration work proposed in the Arroyo Grande Creek watershed. The CSLRCD intends to coordinate preparation of the plan with qualified technical consultants, other agencies and nonprofit groups that have been actively engaged in the project area including the San Luis Obispo County Flood Control and Water Conservation District, NRCS, California Conservation Corp, City of Arroyo Grande, Central Coast Salmon Enhancement, and landowners.

Site Description: The Arroyo Grande Creek watershed is located in the southwest portion of San Luis Obispo County (Exhibits 1 and 2). The watershed covers roughly 150 square miles and extends 16 miles inland. Located 9 miles upstream of the ocean, Lopez Dam captures runoff from the upper 60 square miles of the watershed for storage in Lopez Lake. At its Pacific Ocean terminus, the watershed is approximately 6 miles wide and drains through the northern end of the Guadalupe-Nipomo Dunes complex at Pismo State Beach and Oceano Dunes. Located in the lower watershed, the 70-acre Pismo Lake Ecological Reserve is an important resting and feeding area for birds migrating on the Pacific Flyway, providing a relatively undisturbed area for wildlife within an urban environment. The centerpiece of the reserve is the 30-acre Pismo Lake where 250 bird species, mammals, reptiles, and amphibians find suitable habitat despite adverse impacts caused by sediment and other pollutants from upstream urban and agricultural activities. The lake is unique because it has both salt and fresh water. Overflow from Pismo Lake works its way downstream along Meadow Creek to the Oceano Lagoon, before eventually joining Arroyo Grande Creek roughly 1000 feet upstream of the Pacific Ocean. The watershed provides habitat for the listed southern steelhead up to Lopez Dam.

The lower reach of Arroyo Grande Creek is named the La Cienega Valley where an estimated 2,500 acres of prime farmland and a mild climate combine to produce high quality vegetables, including broccoli, Brussel sprouts, celery, cabbage, endive, lettuce, onions, peppers, spinach, squash, tomatoes, and strawberries. To address periodic flooding of this farmland and nearby homes, three miles of levees were constructed along the valley floor in 1958.

Project History:

In response to severe flooding of prime farmland in the La Cienega Valley in the 1950's, the Arroyo Grande Creek Flood Control Project was constructed in 1958 as a joint effort of the CSLRCD, NRCS, and the County Flood Control and Water Conservation District. Due to a combination of increased erosion and decreased maintenance over the past several decades, the flood control channel has become so clogged with sediment that its original 100-year flood event capacity has been reduced to an estimated 2-year to 5-year capacity. Maintenance of the channel has been the responsibility of the San Luis Obispo County Flood Control and Water Conservation District and administered through the County Public Works Department with funding provided by an assessment of landowners benefiting from the levee system. However, although a maintenance and operation agreement signed in 1959 requires the county to maintain the channel's original design capacity, more recent environmental regulations and maintenance costs have made adherence to this agreement difficult.

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In June 2004, the county committed \$150,000 in matching funds toward preparation of a comprehensive watershed plan that is intended to lead directly to future project implementation by considering natural resource enhancement opportunities, including habitat for steelhead, which should in turn facilitate implementation funding and permit approvals. The CSLRCD and county have worked together in preparing a budget and scope of work and have recently selected a consultant to begin work on the first phase of the project. Conservancy funds would be directed to the second phase of work consisting of an erosion source and supply assessment, a sediment budget and transport model, habitat and natural resource surveys, identification of permitting requirements, and preparation of a flood management plan.

With respect to the erosion control projects, in 2002 the CSLRCD and its project partners at the SWRCB and the NRCS identified an immediate need to design and install agricultural BMPS on private farmland to stem the loss of soil, reduce sedimentation into the creek, and improve water quality for the benefit of southern steelhead and other listed and sensitive wildlife species. In 2003, the SWRCB awarded the CSLRCD a Clean Water Act grant for this purpose.

PROJECT FINANCING:

Planning

Coastal Conservancy	\$150,000
State Parks, OHV Division	15,000
San Luis Obispo County	<u>150,000</u>
Planning Total	\$315,000

Construction

Coastal Conservancy	\$135,000
SWRCB (319h grant)	102,500
NRCS (in-kind)	88,000
Landowner (cost share)	<u>30,000</u>
Implementation Total	355,500

Total Project Cost **\$655,500**

The expected source of Conservancy funds is a FY 02/03 appropriation to the Conservancy from the "California Clean Water, Clean Air, Safe Neighborhood Parks and Coastal Protection Fund" (Proposition 40). Proposition 40 funds were appropriated to the Conservancy under the Watershed, Clean Beaches and Water Quality Act ("AB 2534"). AB 2534 added Chapter 5.5 to the Conservancy's enabling legislation (Public Resources Code Section 31220) and appropriated funds from Proposition 40 to the Conservancy to carry out projects that are described under Section 31220. As discussed below, Section 31220 authorizes projects that, like the proposed project, serve to protect or restore fish and wildlife habitat within coastal watersheds, reduce unnatural erosion, sedimentation and contamination of coastal watersheds, or protect and restore sensitive watershed lands. Proposition 40 also requires the Conservancy to give priority to grant

projects with matching funds (Public Resources Code Section 5096.651). The proposed project is supported by a commitment from multiple private and public entities to provide substantial matching funds and in-kind services to complete the project work.

CONSISTENCY WITH CONSERVANCY'S ENABLING LEGISLATION:

This project would be undertaken pursuant to Chapter 5.5 (Section 31220) of the Conservancy's enabling legislation, Division 21 of the Public Resources Code, regarding watershed restoration projects. As required by §31220(a), staff has consulted with the State Water Resources Control Board in the development of the project to ensure consistency with Chapter 3 (commencing with §30915) [Clean Beaches Program] of Division 20.4 of the Public Resources Code [Watershed, Clean Beaches, and Water Quality Act].

Consistent with §31220(c), staff has consulted with the State Water Resources Control Board on project selection, checked for consistency with local watershed management plans and water quality control plans adopted by the State Water Resources Control Board and Regional Water Quality Control Boards (see the “Consistency with Local Watershed Management Plan/State Water Quality Control Plan” section below), and has included a monitoring and evaluation component in the project.

Pursuant to §31220(b), the Conservancy is authorized to award grants for a project if it accomplishes one or more objectives specified in subsections (b)(1) through (b)(9). Consistent with §31220(b)(1), the proposed project reduces contamination of waters within the coastal zone, including the waters of the Arroyo Grande Creek. Consistent with §31220(b)(2), the proposed project will also serve to protect fish and wildlife habitat within coastal watersheds and coastal waters. Further, consistent with §31220(b)(3), the proposed project will directly lead to reduction of erosion and sedimentation within a coastal watershed. Finally, consistent with §31220(b)(5), the proposed project assists in the protection and restoration of coastal wetlands, riparian areas, floodplains, and other sensitive watershed lands.

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

Goal 5, Objectives A and B: The project would serve to preserve, restore and enhance coastal habitats including coastal wetlands and up to nine miles of stream corridor along Arroyo Grande Creek. The project would also preserve and restore habitat corridors both between core habitat areas along the coast and from coastal habitats to inland habitat areas, including the 70-acre Pismo Lake Ecological Reserve.

Goal 6, Objectives A and B: The project would serve to preserve and restore lands located in a coastal watershed and improve water quality to benefit coastal resources.

Goal 7, Objective B: By installing erosion control measures to reduce loss of soil and sedimentation into Arroyo Grande Creek, and developing a flood management plan, the project would serve to foster the long-term viability of coastal agriculture, including projects to assist farmers and ranchers to reduce impacts of their operations on wildlife habitat and water quality.

**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:** Senator McPherson and Assemblyman Able Maldonado support the proposal, as do landowners in the project area as well as environmental groups, and local, state and federal agencies that are contributing matching funds and technical assistance including the SWRCB, NRCS, State Department of Parks and Recreation, County of San Luis Obispo, City of Arroyo Grande, City of Oceano Community Services District, and the South San Luis Obispo County Sanitation District. (Exhibit 4).
4. **Location:** The proposed project would serve to reduce sedimentation, protect farmland, improve water quality, and enhance steelhead habitat in the Arroyo Grande Creek watershed which is located both inside and outside of the coastal zone. The project activity that may occur or relate to areas outside the coastal zone, nonetheless, would improve and benefit coastal zone resources. In particular, the project would protect water quality and aid in the recovery of the anadromous southern steelhead that utilizes the coastal stream system.
5. **Need:** The farmland of the lower Arroyo Grande Creek watershed produces over \$10 million in crop value annually. The watershed's riparian corridor, including the 70-acre Pismo Lake Ecological Reserve, provides habitat for an estimated 250 bird species, mammals, reptiles, and fishes, including the federally listed southern steelhead. Conservancy match funding is needed to construct erosion control projects to reduce the loss of this prime farmland, and to reduce sediment flows and improve water quality in the creek for the benefit of these wildlife species. In addition, a long range enhancement and flood management plan that identifies specific actions to reduce flooding and flood impacts while ensuring protection and enhancement of sensitive habitat is critical to the future viability of the area's farming operations. Conservancy match funding is needed to complete this plan.
6. **Greater-than-local interest:** Preserving the agricultural lands of the fertile Arroyo Creek Valley, an area that produces fruits and vegetables distributed throughout the state and the

country, is of regional and statewide interest. Funding erosion control projects that would serve to improve water quality and enhance habitat for listed and sensitive species, and which would serve to aid in the recovery of southern steelhead, is of greater than local interest.

Additional Criteria

1. **Urgency:** The flooding of farmland and homes in the watershed's valley floor as recently as 2001 demonstrates the urgent need to reduce soil erosion and minimize additional sediment flows to the levee system. Constructing erosion control projects, and preparing a watershed-scale analysis of sediment sources that identifies specific actions to remedy this loss of soil and subsequent downstream flooding is critical. In addition, the southern steelhead is known to occur in the Arroyo Grande Creek watershed, and enhancing its habitat is urgently needed to advance the survival of the species.
2. **Resolution of more than one issue:** The installation of erosion control projects would reduce erosion, protect farmland, reduce nutrient and pathogen loads, and improve water quality. These improvements would serve to enhance habitat for the southern steelhead and other listed and sensitive species. Preparation of a watershed-scale analysis of key erosion sources with a set of recommendations to reduce sedimentation and lower the risk of severe flooding in the lower reaches of the creek would serve to protect farmland and nearby homes from future flood events.
3. **Leverage:** See the "Project Financing" section above.
4. **Conflict resolution:** Due to a lack of maintenance over the decades, the lower portion of Arroyo Grande Creek's levee system has filled with sediment. In March 2001, the levee breached and flooded farmland and homes. While maintenance of the channel has been the responsibility of San Luis Obispo County with funding provided by landowners benefiting from the system, environmental regulations and maintenance costs have prevented the county from maintaining the channel. As a result, flood risks are high and habitat for listed and sensitive wildlife species, including the southern steelhead, has been degraded. It is expected that preparing a plan that provides specific actions to reduce flooding while ensuring protection and enhancement of wildlife habitat offers the potential to resolve a historic conflict between flood management and natural resource protection.
5. **Readiness:** The CSLRCD has already initiated the first phase of the watershed planning project using funds provided by the county. If Conservancy funding is provided, the CSLRCD would be ready to immediately initiate the second and final phase. The CSLRCD has obtained match funding for the design and construction of erosion control projects, and is ready to initiate project implementation if Conservancy funding is provided.
6. **Realization of prior Conservancy goals:** In 1990, the Coastal Conservancy initiated the Coordinated Agricultural Support Program (CASP) Study to identify and evaluate strategies for preserving agriculture land in the Arroyo Grande Valley. Completed in 1997, the CASP Report recommended a program to purchase conservation and flood easements. Preparation of the proposed watershed and flood management plan would serve to further the Conservancy's prior goals to preserve farmland in the Arroyo Grande Valley. In addition, over the past three years substantial Conservancy funding has been provided to improve

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habitat for the southern steelhead in San Luis Obispo County coastal streams, and Arroyo Grande Creek has recently been identified as a high priority for steelhead recovery efforts.

CONSISTENCY WITH LOCAL COASTAL PROGRAM POLICIES:

The proposed projects are consistent with the San Luis Obispo County Local Coastal Program requiring public action to preserve coastal streams and riparian corridors. LUP Policy 18 on Environmentally Sensitive Habitats states that, “Coastal streams and adjoining riparian vegetation are environmentally sensitive habitat areas and the natural hydrological system and ecological function of coastal streams shall be protected and preserved.” In addition, LUP Policies 1-14 on Coastal Watersheds all address actions to protect watershed resources.

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

Because the projects will facilitate the restoration of fish and wildlife habitat in coastal watersheds and wetlands, including habitat for the state- and federally-listed anadromous steelhead, the project components are also consistent with the Water Quality Control Plan for the Central Coastal Basin (adopted by the Regional Water Quality Control Board Central Coast Region in 1994 and reviewed every three years) in that they will further the following beneficial use objectives: Estuarine Habitat, Wildlife Habitat, Rare, Threatened, or Endangered Species, and Migration of Aquatic Organisms.

COMPLIANCE WITH CEQA:

The proposed preparation of a watershed enhancement and flood management plan is statutorily exempt from review under the California Environmental Quality Act (CEQA) pursuant to 14 California Code of Regulations Section 15262, in that it would involve only planning studies and feasibility analyses. This planning project is also categorically exempt under Section 15306, which exempts basic data collection and resource evaluation activities. Environmental factors will be considered in the studies undertaken pursuant to this authorization.

The proposed erosion control projects to be funded by the Conservancy are also exempt from review under CEQA pursuant to 14 California Code of Regulations Section 15333 (Small Habitat Restoration Projects). As described above, under the “Project Summary” section, each of the restoration projects is a “small restoration project” contemplated by Section 15333. Each is limited in size and scope, and none will exceed five acres. All projects will maintain, restore, enhance, or protect habitat for fish, plants, or wildlife consistent with 15333 (a). There are no known hazardous materials at or around project sites that may be disturbed or removed, as mandated by Section 15333(b). In addition, as required by Section 15333(c), the projects will not result in impacts that 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. While the grantee anticipates that the proposed watershed planning project would, when completed, provide a set of probable future actions such as levee modifications and setbacks and vegetation management, such actions, in conjunction with the other small restoration projects, would not result in significant adverse impacts and would ensure the protection and enhancement of habitat for listed and sensitive species, including southern steelhead. Finally, consistent with Section

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15333(d), examples of the type of small restoration projects that will be implemented include, but are not limited to, revegetation of disturbed areas with native plant species, and stream or river bank stabilization using native vegetation or other bioengineering techniques, the primary purpose of which is to reduce or eliminate erosion and sedimentation.

Upon approval staff will file a Notice of Exemption for this project.