

III. VENTURA COUNTY GAPS REPORT¹

County-Wide Executive Summary

Overall Results of Survey

Watershed planning is an active and participative process throughout Ventura County. From local, regional, state and federal agency personnel to businesses, individuals, educational institutions, nonprofits and other NGOs, people are engaged in planning and management efforts to preserve and restore the wetlands, watersheds and habitats that make the county so unique.

Across the county people are involved in planning or implementing the following watershed initiatives:

- Matilija Dam Ecosystem Restoration Feasibility Study
- Ventura River Habitat Conservation Plan
- Ventura River Steelhead Restoration and Recovery Plan
- Ventura River Estuary Enhancement Plan
- Santa Clara River Enhancement and Management Plan
- Santa Clara River Parkway Acquisition Plan
- Santa Clara River Reconnaissance Study
- McGrath State Beach Natural Resources Management Plan
- Calleguas Creek Watershed Management Plan
- Calleguas Creek Watershed Wetland Restoration Plan
- U.S. Forest Service Plan, Los Padres National Forest

There are still other planning documents and efforts that may not fall under the definition of watershed planning but definitely impact the overall health of wetlands and watersheds in the county. These include, for example, the Calleguas Regional Salinity Management Project, the Regional Water Quality Control Board's Watershed Management Initiative Chapter, and efforts to establish a Weed Management District to address invasive plant species.

There are, however, some critical planning and management gaps that are listed here in the executive summary. These planning gaps are defined in greater detail later in this report. The gaps fall into one of five identified categories. These are 1) gaps in watershed planning, 2) gaps in plan implementation and management 3) education and outreach gaps, 4) organizational capacity gaps, and, 5) research and information system gaps.

County-wide Perspective on Gaps

The following list provides a summary of the county-wide watershed planning and management gaps identified through the research questionnaire and personal interviews with planning and management lead agencies and organizations throughout Ventura County:

¹ Prepared by Greg Gauthier, Watershed Coordinator, Ormond Beach Observers/Ventura County WRP Task Force.

Funding for this project has been provided in full or part through a contract with the State Water Resources Control board (SWRCB) pursuant to the Costa-Machado Water Act of 2000 (Proposition 13) and any amendments thereto for the implementation of California's Nonpoint Source Pollution Control Program. The contents of this document do not necessarily reflect the views and policies of the SWRCB, nor does mention of trade names or commercial products constitute endorsement or recommendation for use.

- Santa Clara River watershed plan beyond the 500 year flood plain and including the Santa Clara River estuary.
- Restoration and enhancement plan for Ormond Beach wetlands.
- Ventura River watershed plan that includes entire watershed (tributaries).
- Education, outreach and interpretive programs.
 - Interpretive program for Ormond Beach wetlands.
 - Watershed and wetlands education outreach program for coastal cities.
 - Calleguas Creek Watershed Management Plan outreach to general public and agricultural community.
- Rincon Creek watershed enhancement and management plan.
- Lack of organizations/nonprofits to implement projects identified in various plans.
- Monitoring plans for most watersheds throughout the county.
- Implementation of existing plans.
- A comprehensive project inventory of completed, current and future project needs.
- A comprehensive bibliography and centralized information source for studies, data bases and GIS information.

In general there is widespread appreciation of the need for watershed scale planning coupled with local project implementation. There is also commitment to preserving the unique landscape and ecosystems of Ventura County and a sense of urgency due mainly to development and increasing county population growth projections.

Priorities for Watershed Coordinator Action

General County Wide

- Support the development and capacity building of new or existing NGOs within Ventura County to provide resources for project development and implementation.
- Develop additional sources of project volunteers and training through coordination with CALPIRG.
- Develop a comprehensive project inventory to be entered into the Wetland Recovery Project's Information Station Web site.
- Compile information and a bibliography of studies, data bases and GIS information that can be linked to or identified on the Information Station Web site.

Ventura River

- Actively participate in the Matilija Dam Ecosystem Restoration Feasibility Study process.
- Identify projects that can move forward during the planning phase of the Feasibility Study.
- Support the implementation of existing plans including the Ventura River Estuary Enhancement and Management Plan.
- Support the development and capacity building of new or existing NGOs within the Ventura River watershed to provide resources for project development and implementation. The Ventura County Flood Control District has submitted a 205j grant to begin a watershed council for the Ventura Watershed. If awarded, efforts should be expended to support its development.

Santa Clara River

- In cooperation with the Wetlands Task Force Watershed Coordinator for Los Angeles County, support the development of a committee of stakeholders committed to expanding the planning process for the Santa Clara River to include the entire watershed. This should entail supporting existing efforts underway and exploring other means to accomplish this goal.
- Support a coordinated planning process for the Santa Clara River Estuary Working Group. Encourage participation by Wetlands Task Force member stakeholders. Provide input into the three existing initiatives (City of San Buenaventura studies, McGrath State

Beach Resources Management Plan, City of San Buenaventura Public Art program) and help determine what other needs exist.

Calleguas Creek

- Actively participate in the Calleguas Creek Watershed Management Plan process.
- Support and foster outreach to residents and the agricultural community about the Calleguas Creek Watershed Management Plan.
- Support implementation of projects identified in the Calleguas Creek Wetlands Restoration Plan.

Ormond Beach

- Support development and implementation of a restoration and enhancement plan.
- Support development of an interpretive program for the Ormond Beach wetlands area.

Rincon Creek

- Work in cooperation with the Santa Barbara County Wetlands Recovery Project Task Force watershed coordinator to initiate and support a planning process for the Rincon Creek watershed.

Ventura County Overview

Setting

Ventura County consists of nine watersheds that cover an area of 1,873 square miles. This includes 43 miles of coastline of which 7.5 miles of shoreline are public beaches. The Los Padres National Forest encompasses 860 square miles of the northern portion of the county (46% of the county's land mass) and 411 acres are State beach parks. Elevation ranges from sea level to the highest point on Mount Pinos at 8,831 feet. The county is the gateway to the Channel Islands National Park.

The nine Ventura County watersheds are Rincon (Pitas Point), Ventura River, Cuyama, Hall Canyon/Arundell (Buenaventura), Santa Clara River, Ormond Beach (Oxnard Plain), Calleguas Creek, South Coast (Ventura Coastal Streams) and Malibu Creek watersheds.

The three largest of the above listed watersheds within Ventura County are the Ventura River, Santa Clara River and Calleguas Creek watersheds. The Ventura River watershed contains high quality steelhead habitat that may once again become accessible to anadromous fish. The Santa Clara River watershed spans Ventura and Los Angeles counties forming the largest and one of the most natural watersheds in Southern California. The Calleguas Creek watershed spans the Oxnard Plain and is predominantly agricultural in the south while the steep uplands remain undeveloped.

The Ventura River watershed encompasses 228 square miles and is 31 miles long from upper Matilija Canyon to the Pacific Ocean. The Ventura River ecosystem supports 23 species of concern. These include steelhead trout, the California condor, California red-legged frog and California brown pelican. The major issue within this watershed is the dramatic historical decline of the southern steelhead. A planning process to remove dams and other barriers for steelhead passage within the upper watershed is ongoing. Removal of the Matilija Dam would provide fish passage to historic breeding areas and would present opportunities for improving habitat for other species.

The Santa Clara River is the largest unchannelized river system in the South Coast. The watershed encompasses approximately 1,600 square miles. Extensive reaches of high quality habitat are found along the river and its tributaries. The Santa Clara River watershed provides habitat for a wide range of threatened and endangered species. Encroaching development,

channelization and other flood control activities threaten the health and integrity of this ecosystem.

Calleguas Creek originates in the Santa Monica Mountains and drains a predominantly agricultural area in southern Ventura County. Development within the watershed has caused severe erosion and has significantly increased downstream sedimentation. The aquatic habitats and species that depend on Mugu Lagoon remain threatened by water quality concerns associated with Calleguas Creek.

In addition to the three watersheds described above, the Ormond Beach watershed represents an important geographic area for Ventura County. Historically, Ormond Beach and Mugu Lagoon were part of one large wetlands complex. The majority of wetlands at Ormond Beach are no longer tidally influenced except during winter storms. Although fragmented and highly degraded, the wetlands continue to provide valuable habitat for many species. Poor water quality, inappropriate recreational usage, and development pressures make acquisition and restoration a top priority for this area.

Watershed Organizations

A wide range of organizations, government agencies at the local, regional, state and federal levels, businesses, special districts and individuals are actively involved in watershed planning throughout Ventura County. Lead organizations for specific watersheds are identified in the detailed watershed sections of this report. Appendix A to this report also contains a list of organizations and agencies involved in watershed planning.

Planning Activities

Major watershed planning initiatives in process or completed in Ventura County are listed below. An expanded explanation of each follows the list, organized by watershed. For more complete detail and additional planning initiatives see the individual watershed sections of this report.

In Process:

- Matilija Dam Ecosystem Restoration Feasibility Study
- Ventura River Habitat Conservation Plan
- Santa Clara River Enhancement and Management Plan
- Santa Clara River Parkway Acquisition Plan
- Santa Clara River Reconnaissance Study
- McGrath State Beach Natural Resources Management Plan
- Calleguas Creek Watershed Management Plan
- U.S. Forest Service Plan, Los Padres National Forest

Completed:

- Ventura River Steelhead Restoration and Recovery Plan, 1997.
- Ventura River Estuary Enhancement Plan, 1994.
- Calleguas Creek Watershed Wetland Restoration Plan, 2000.

Ventura River Watershed Plans

ENTRIX, Inc., and Woodward Clyde Consultants for Casitas Municipal Water District, City of San Buenaventura, Ventura County Flood Control District, Ventura County Transportation Department, Ventura County Solid Waste Management Department, Ojai Valley Sanitary District, Ventura River County Water District, Ojai Basin Ground Water Management Agency, Meiners Oaks County Water District, and Southern California Water Company, *Ventura River Steelhead Restoration and Recovery Plan*, December 1997. Objectives of the Restoration and Recovery Plan are twofold: 1) identify measures to mitigate impacts of ongoing operations and maintenance

activities and of future projects; 2) identify and evaluate opportunities to promote recovery and restoration of steelhead in the watershed. This document provides a general overview of the watershed and provides the foundation for the HCP process. Status: completed.

Wetlands Research Associates, Inc., Philip Williams and Assoc., Ltd, Hyden Assoc., L. Hunt & P. Lehman for the City of San Buenaventura, California Department of Parks and Recreation, and the California State Coastal Conservancy, *Ventura River Estuary Enhancement Plan*, 1994. Objectives of the plan are to define alternate flood control measures to protect physical and biological systems, define eradication methods for non-native plants and methods to reestablish native plants, identify possible measures to enhance water quality and define appropriate public access for recreation and education. Status: completed.

Ventura River Habitat Conservation Plan

This group, comprised of resource agencies, cities, and water districts began meeting in 2000. The cities and water districts involved all operate and maintain facilities that may affect sensitive resources or their habitats in the river. In order to comply with the Endangered Species Act they are engaging in consultation with the National Marine Fisheries Service and the U.S. Fish and Wildlife Service and are in the process of developing an HCP that, with a monitoring program and implementation agreements would serve as the basis for an Incidental Take Permit. Status: in draft.

Matilija Dam Ecosystem Restoration Feasibility Study

The U.S. Army Corps of Engineers (USACE), Ventura Flood Control District (VCFCD), U.S. Bureau of Reclamation, other agencies and organizations began discussions in 2000 on the possible removal of Matilija Dam as part of an ecosystem restoration. An USACE and VCFCD sponsored feasibility study will consider the benefit to the ecosystem from various alternatives. The project targets the creation of a watershed management plan for the Ventura River watershed. The purpose of the effort is to develop a comprehensive watershed management plan for the Ventura River watershed. Status: in process and due for completion in 2004.

U.S. Forest Service. Forest Plan, Los Padres National Forest. Status: update in process.

Santa Clara River Watershed Plans

Santa Clara River Enhancement and Management Plan Steering Committee, 2002. *Draft Santa Clara River Enhancement and Management Plan*. The Management Plan development process began in 1991. The project is directed by a 26-member Project Steering Committee consisting of representatives of the counties, communities, state and federal agencies, property owners, aggregate producers, water agencies and Friends of the Santa Clara River. The Steering Committee, in early 1999, approved a set of river-wide and reach-by-reach recommendations which are to be incorporated into the Plan. A five-member Consultant Coordinating Committee has been established to hire a consultant to prepare the Draft Plan.

U.S. Army Corps of Engineers, Los Angeles District. *Santa Clara River Reconnaissance Study*. This study is being conducted to determine if there is sufficient interest for the federal government to engage in a watershed-wide feasibility study. Status: in process.

California State Parks and Recreation, *McGrath State Beach Natural Resources Management Plan*. An Administrative Draft of the plan was produced in May 2002. A Public Draft will be ready in July 2002. The Plan will include the impact of McGrath and agricultural lands on the Santa Clara River Estuary.

Santa Clara River Estuary Working Group. This group meets monthly to discuss issues of the Santa Clara River Estuary.

U.S. Forest Service, Los Padres National Forest. *Forest Plan, Los Padres National Forest*. Status: update in process.

Calleguas Creek Watershed Plans

Calleguas Creek Watershed Management Plan

The Calleguas Creek Watershed Management Plan development process began in 1996. An executive steering committee oversees four subcommittees. The subcommittees consist of:

- 1) water resources/water quality
- 2) habitat/natural resources/recreation
- 3) flood protection and sedimentation
- 4) public outreach/education

The subcommittees generally meet monthly or bimonthly. A draft of the Management Plan was produced for review by the various committees in June 2002. A draft for external review will be available in September 2002. The purpose of the plan is to provide a management plan balancing the needs of all stakeholders and to assure a healthy and sustainable watershed.

David Magney Environmental Consulting for the California State Coastal Conservancy and the U.S. Environmental Protection Agency, October, 2000. *Calleguas Creek Watershed Wetland Restoration Plan*. The primary goal of this plan is to preserve, maintain, restore and improve wetland functions. The plan identifies site specific projects as well as general recommendations for improvement of wetland function throughout the watershed. Status: completed.

Padre Associates, Inc. for Calleguas Municipal Water District, May 2002. *Program Environmental Impact Report Environmental Assessment for the Calleguas Regional Salinity Management Report*. Status: in draft.

Ormond Beach Watershed Plans

Romberg Tiburon Center and Phillip Williams and Assoc., Ltd. for California State Coastal Conservancy, August, 2001. *Scoping Document – Ormond Beach Wetlands Restoration Feasibility Plan*. This document details areas to be included in developing a comprehensive enhancement/restoration feasibility study for the Ormond Beach area. It provides background information and restoration criteria for a feasibility plan. Status: Complete

Planning/Management Gaps and Opportunities

Major watershed planning and management gaps for Ventura County are listed below. The list is followed by a brief explanation of the identified gap. For more complete detail see the individual watershed sections of this report.

Panning and management gaps:

- Santa Clara River watershed plan beyond the 500 year flood plain and including the Santa Clara River estuary.
- Restoration and enhancement plan for Ormond Beach wetlands.
- Ventura River watershed plan that includes entire watershed (tributaries).
- Education, outreach and interpretive programs.
 - Interpretive program for Ormond Beach wetlands.
 - Watershed and wetlands education outreach program for coastal cities.
 - Calleguas Creek Watershed Management Plan outreach to general public and agricultural community.
- Rincon Creek watershed enhancement and management plan.
- Lack of organizations/nonprofits to implement projects identified in various plans.
- Monitoring plans for most watersheds throughout the county.

- Implementation of existing plans.
- A comprehensive project inventory of completed, current and future project needs.
- A comprehensive bibliography and centralized information source for studies, data bases and GIS information.

Gaps Explanation

Gap: Santa Clara River watershed plan beyond the 500 year flood plain and including the Santa Clara River estuary.

The Santa Clara River Enhancement and Management Plan (SCREMP) is limited to the 500 year flood plain. The lack of a plan that includes the entire watershed is the single most significant planning gap. Additionally, members of the SCREMP planning group identified three planning gaps. These consist of: 1) a gap in wetland identification and project design, 2) a need for streambank biostabilization demonstration projects to test various methods suitable for the flow regime of the Santa Clara River (past projects have failed during storm events), and 3) a sediment transport study.

Gap: Restoration and enhancement plan for Ormond Beach wetlands.

The scoping document for the Ormond Beach Wetland Restoration Feasibility Plan identifies the need for “a comprehensive enhancement/restoration and management plan...to develop recommendations that address: habitat needs of the coastal landscape ecosystem, habitat needs directed toward special status species, priority and timing of restoration activities, identifying potential stakeholder partnerships and funding support, potential acquisition of private lands, and costs for restoration, acquisition and long term management.”

Gap: Ventura River watershed plan that includes entire watershed (tributaries).

Most planning efforts the Ventura River watershed to date have been centered on issues of water supply and as the basis for an Incidental Take Permit due to listing of Southern California steelhead as endangered in 1997. Additionally, the largest watershed planning effort underway is centered on possible removal of the Matilija Dam. Participants in the planning process have expressed concern that the planning efforts are not addressing tributaries to the Ventura River, in particular the San Antonio Creek which is under development pressure and has prime steelhead habitat.

Gap: Education, outreach and interpretive programs.

There are several education gaps in watershed planning and management throughout the county. Many professionals working on the development and implementation of watershed plans expressed the need for an outreach program to coastal cities. Additionally, the Ormond Beach wetlands are singled out as having great potential for development of an interpretive program.

Participants in the Calleguas planning process also noted that even though public and stakeholder outreach is a component of the planning process, additional outreach is necessary. In particular, outreach to the agricultural community and their involvement in the planning process is lacking. Education of this community and the general public regarding the need for and importance of a watershed plan is needed.

Gap: Rincon Creek watershed enhancement and management plan.

There are several groups interested in becoming involved in a watershed planning process for Rincon Creek. Although the issues of concern are diverse, cross-county efforts should help initiate a planning process.

Gap: Lack of organizations/nonprofits to implement projects identified in various plans.

The lack of qualified groups outside of local, regional and federal agencies and governmental entities that have the capacity and staff to seek funding and implement projects represents one of the most critical gaps for Ventura County. Programs and grants to help develop this capacity

must be a priority. There also is a lack of organizations with the capacity to assume management of lands once acquired.

Gap: Monitoring plans for most watersheds throughout the county.

There is an active water quality monitoring program underway for the Ventura River watershed. While the Ventura County Flood Control District conducts monitoring throughout the county, additional monitoring programs are needed for other watersheds in the county. When entering the implementation phase of the watershed plan, a monitoring program will be necessary to measure project effectiveness and impacts.

Gap: Implementation of existing plans.

Continued implementation of existing plans is another planning gap. Continued vigilance and dedication to transitioning plans into action is required. The Ventura River Estuary Enhancement and Management Plan is an example of a worthwhile plan needing more complete implementation.

Gap: A comprehensive project inventory of completed, current and future project needs.

A comprehensive project inventory is needed to allow interested parties to easily access information about what has been accomplished, what projects are being implemented and what needs to be done within a given watershed.

Gap: A comprehensive bibliography and centralized information source for studies, data bases and GIS information. A bibliography and information source for studies, data bases and GIS information is needed. The Information Station Web site of the Wetlands Recovery Project will serve as the repository and access point for this information.

Watershed Management Priorities

The following is a list of management priorities organized by watershed. This list of priorities was developed by the Ventura County Wetlands Task Force with additional input from respondents to the organizational questionnaire utilized in researching this report.

Ventura River

- Develop and implement a watershed management plan for the Ventura River.
- Restore steelhead habitat in the river, in particular by removing or modifying Matilija Dam and other fish passage barriers.
- Preserve the existing floodplain and reconnect the river to its floodplain where feasible.
- Complete the Matilija Dam Ecosystem Restoration Feasibility Study, and subsequent Matilija Creek and Ventura River watershed ecosystem restoration in a timely fashion.
- Develop a watershed council for Ventura River that can act as the lead on project implementation for planning efforts.

Santa Clara River

- Complete and Implement the Santa Clara River Enhancement and Management Plan
- Expand the Santa Clara River Enhancement and Management Plan, resource studies, and GIS beyond the 500 year floodplain to include tributaries and the entire watershed.
- Preserve the existing floodplain and reconnect the river to its floodplain where feasible. Establish a continuous corridor from the Santa Clara Estuary to Santa Paula/Fillmore.
 - Prepare and implement an enhancement plan for the lower Santa Clara River.
 - Enhance steelhead habitat in the river.
 - Remove fish passage barriers.
 - Address exotic species in the watershed.
- Complete the Santa Clara River Parkway and Wildlife Preserve and Acquisition Project to create a 20 mile-long parkway and wildlife preserve that will restore and enhance estuarine and riparian habitat and protect it into the future.

- Coordinate and expand efforts in the Santa Clara River Estuary including the City of San Buenaventura Public Art interpretive project, Public Works estuary studies, and McGrath State Beach Natural Resources Management Plan.

Calleguas Creek

- Complete and implement the Calleguas Creek Watershed Management Plan.
- Implement projects identified in the Calleguas Creek Wetlands Restoration Plan.
- Address impacts on Mugu Lagoon of watershed inputs, including inflows of sediment, nutrients, and contaminants.
- Study effects of stormwater runoff on wetlands.
- Preserve small streams and tributaries.

Ormond Beach

- Acquire Ormond Beach wetlands properties.
- Develop and implement a restoration plan for the area.
- Develop an interpretive program for the area.

Ventura River Watershed

Setting

The Ventura River watershed lies within the Transverse Ranges in western Ventura County. The watershed covers a fan shaped area of 228 square miles and is 31 miles long from upper Matilija Canyon to the Pacific Ocean. The Ventura River is the watershed's primary waterway. Matilija Creek and the North Fork of Matilija Creek converge to form the Ventura River approximately 15 miles from the Pacific Ocean. Its two principal tributaries are San Antonio Creek from the east and Coyote Creek from the west. With 89 river miles in designated wilderness areas and 30 river miles designated Wild and Scenic, the watershed provides some of the best wildlife habitat in Southern California.

Topography in the watershed is rugged with steep gradients ranging from 40 feet per mile at the mouth to 150 feet per mile at the headwaters. The watershed experiences high flow velocities with most runoff reaching the ocean. The annual average flow of the Ventura River is 13,600 acre-feet. It is a highly fluctuating, intermittent stream. Annual precipitation averages 14 inches, with a range from 5 to 40 inches. Groundwater basins composed of alluvial aquifers are highly interconnected with the surface water system and are quickly recharged or depleted, according to surface flow conditions.

The Matilija Reservoir Dam is the largest dam in the Ventura watershed. It was constructed on Matilija Creek in 1948 for water supply and flood control purposes. By 1952 much of the reservoir was filled in with sediment, and by 1965 a Bechtel study condemned the dam's safety and it was notched to 65 percent capacity. A feasibility study is underway to examine dam removal options and to identify opportunities for habitat restoration.

The Lake Casitas Reservoir Dam, completed in 1959, is located on Coyote Creek about 2 miles above the confluence of the creek and the Ventura River. The Robles Diversion Dam is located on the Ventura River about 1.5 miles downstream from the confluence of Matilija Creek and the North Fork of Matilija Creek. The dam diverts water into the Robles-Casitas Canal which transports water to Lake Casitas.

The Ventura River ecosystem supports 23 species of special concern. In August, 1997 the National Marine Fisheries Service listed steelhead trout in Southern California as endangered under the Federal Endangered Species Act. This immediately raised the importance of the

Ventura River due to the valuable steelhead habitat in its upper reaches and helped generate support for removal of the Matilija Dam.

Removal of the dam would provide fish passage to historic breeding waters in the upper watershed, and greatly enhance the opportunities for restored habitat for many other species of concern. Before the dam was built more than 5,000 steelhead migrated up the Ventura River and Matilija Creek. Now, less than 100 fish make their way up the river. The dam blocks access to more than 20 miles of some of the best remaining steelhead habitat in southern California. In addition to steelhead trout, species found along the river include the California condor, California red-legged frog, and California Brown pelican.

Watershed Organizations

The following is an abbreviated list of organizations active in Ventura River watershed planning with contact information and their current involvement in watershed planning activities.

Ventura County Flood Control District
800 South Victoria Avenue
Ventura, CA 93009-1610
Jeff Pratt, P.E., Deputy Director of Public Works
Contact: Darla Wise, Stormwater Engineer, Water Quality Section
805.654.3942 darla.wise@mail.co.ventura.ca.us
-collaboration on all watershed planning

City of San Buenaventura
City Hall, P.O. Box 99, Ventura, CA 93002
Contact: Brian Brennan, Deputy Mayor
805.652-1902 bbrennan@ci.ventura.ca.us
-collaboration on all watershed planning within the City of San Buenaventura

Matilija Coalition
230 W. Main Street
Ventura, CA 93001
Contact: Paul Jenkin, Environmental Director
805.648.4005 paul@matilija.org
-collaboration on all watershed planning

Friends of the Ventura River
63 So. Olive Street
Ventura, CA 93001
Contact: Mark Capelli
805.682.5240 mark.capelli@noaa.gov
-collaboration on all watershed planning

California Department of Parks and Recreation
1933 Cliff Drive, Suite 27
Santa Barbara, CA 93109
Contact: Virginia Gardner
805.899.1412 VGARD@parks.ca.gov
-lead with the City of San Buenaventura on the Ventura River Estuary Enhancement Plan implementation.

Other groups active in watershed planning in the Ventura River watershed include: congressman Gallegly's office, National Park Service, National Marine Fisheries Service, U.S. Fish and Wildlife Service, United States Geological Survey, Forest Service (Los Padres National Forest), Bureau of Reclamation, State Senator Jack O'Connell's office, California Department of Fish and Game,

California Regional Water Quality Control Board, California Coastal Conservancy, National Fish and Wildlife Foundation, City of Ojai, Casitas Municipal Water District, Surfrider Foundation, ChannelKeeper, Ventura County Supervisors Flynn, Long and Bennett.

Watershed Plans and Planning Activities

The following is an annotated bibliography of completed and anticipated planning documents pertaining to the Ventura River watershed, along with their current status.

ENTRIX, Inc., and Woodward Clyde Consultants for Casitas Municipal Water District, City of San Buenaventura, Ventura County Flood Control District, Ventura County Transportation Department, Ventura County Solid Waste Management Department, Ojai Valley Sanitary District, Ventura River County Water District, Ojai Basin Ground Water Management Agency, Meiners Oaks County Water District, and Southern California Water Company, *Ventura River Steelhead Restoration and Recovery Plan*, December 1997. Objectives of the Restoration and Recovery Plan are twofold: 1) identify measures to mitigate impacts of ongoing operations and maintenance activities and of future projects; 2) identify and evaluate opportunities to promote recovery and restoration of steelhead in the watershed. This document provides a general overview of the watershed and provides the foundation for the HCP process. Status: completed.

Wetlands Research Associates, Inc., Philip Williams and assoc., Ltd, Hyden Assoc., L. Hunt & P. Lehman for the City of San Buenaventura, California Department of Parks and Recreation, and the California State Coastal Conservancy, *Ventura River Estuary Enhancement Plan*, 1994. Objectives of the plan are to define alternate flood control measures to protect physical and biological systems, define eradication methods for non-native plants and methods to reestablish native plants, identify possible measures to enhance water quality and define appropriate public access for recreation and education. Status: completed.

ENTRIX, Inc. for Casitas Municipal Water District, City of San Buenaventura, County of Ventura, Ventura County Flood Control District, Ojai Valley Sanitary District, Meiners Oaks County Water District, Ventura River County Water District, Southern California Water Company, Ojai Basin Groundwater Management Agency, *Ventura River HCP Habitat Evaluation*, 2001. The purpose of this document is to 1) understand baseline conditions, 2) determine where the best habitat or potential habitat is located, 3) determine where the best opportunities for mitigation or conservation measures might be, and 4) achieve a better understanding of the Ventura watershed system. This is a component of the larger development of an HCP for the watershed. Status: completed.

Ventura River Habitat Conservation Plan

This group, comprised of resource agencies, cities, water districts began meeting in 2000. The cities and water districts involved all operate and maintain facilities that may affect sensitive resources or their habitats in the river. In order to comply with the Endangered Species Act they are engaging in consultation with the National Marine Fisheries Service and the US Fish and Wildlife Service and are in the process of developing an HCP that, with a monitoring program and implementation agreements would serve as the basis for an Incidental Take Permit. Status: in draft.

U.S. Department of the Interior Bureau of Reclamation, prepared by the Technical Service Center, Denver, Colorado, *Matilija Dam Removal Appraisal Report*, 2000. The three main project objectives are 1) to improve aquatic and terrestrial habitat to benefit fish and wildlife species (including endangered steelhead) along Matilija Creek and the Ventura River, 2) restore hydrologic and sediment transport regime in support of downstream coastal beach sand replenishment to pre-dam conditions, and 3) enhance recreational opportunities along Matilija Creek (including U.S. Forest Service land) and the downstream Ventura River. A demonstration project to commence decommissioning of the dam occurred in the fall of 2000, before the Secretary Babbitt left office. Status: completed.

United States Army Corps of Engineers, Los Angeles District, *Matilija Dam Ecosystem Restoration Feasibility Study Ventura County, CA - Project Management Plan*, 2001. The Project Management Plan is an attachment to the Feasibility Cost Sharing Agreement (FCSA) which defines the planning approach, activities to be accomplished, schedule, and associated costs that the Federal Government and the local sponsor(s) will be supporting financially. Status: completed.

Matilija Dam Ecosystem Restoration Feasibility Study

The U.S. Army Corps of Engineers (USACE), Ventura Flood Control District (VCFCD), U.S. Bureau of Reclamation, other agencies and organizations began discussions in 2000 on the possible removal of Matilija Dam as part of an ecosystem restoration. An USACE and VCFCD sponsored feasibility study will consider the benefit to the ecosystem from various alternatives. The project targets the creation of a watershed management plan for the Ventura River watershed that can provide a framework for dealing with a wide range of issues on public and private lands. The plan will also tie together a number of on-going, separate resource management programs (e.g., estuary restoration, steelhead management, recreation trail, among others). The purpose of the effort is to develop a comprehensive watershed management plan for the Ventura River watershed. Status: in process and due for completion in 2004.

Los Angeles Regional Water Quality Control Board, Shirley Birosik, *State of the Watershed – Report on Surface Water Quality, The Ventura River Watershed*, 2002. The report expands on a preliminary report prepared by Regional Board staff in 1996. The emphasis of the report is an overview of the watershed, infrastructure, history and a broad look at data from a number of surface water sampling programs. It includes recommendations for focused water quality monitoring. Status: completed.

U.S. Forest Service. Forest Plan, Los Padres National Forest. Status: update in process.

Planning/Management Gaps and Opportunities

The Ventura River watershed has a large number of committed stakeholder groups that are actively involved in watershed planning activities. From the Ventura River Estuary to the headwaters, studies are underway or have already been completed that will provide an up-to-date and detailed picture of the state of the watershed.

However, most planning efforts to date have been centered on issues of water supply and as the basis for an Incidental Take Permit due to listing of Southern California steelhead as endangered in 1997.

Additionally, the largest watershed planning effort underway is centered on possible removal of the Matilija Dam. It remains to be seen whether the recommendations, opportunities for restoration and projects identified through the feasibility study process are broad enough in scope to constitute what truly can be considered a watershed wide plan. Participants in the planning process have expressed concern that the planning efforts are not addressing tributaries to the Ventura River, in particular the San Antonio Creek which is under development pressure and has prime steelhead habitat.

NGO participation in the feasibility study is achieved through the Matilija Coalition. Groups involved in the Coalition are actively involved in water quality monitoring throughout the watershed. Additional monitoring needs must be identified as part of the watershed planning process to accurately assess and measure the effectiveness of restoration projects and efforts. An expansion of volunteer outreach and training will be necessary to meet the needs of future monitoring programs.

Although the groups mentioned above fill a vital need in monitoring, they are not equipped to take on physical restoration projects. The lack of qualified groups outside of local, regional and federal agencies and governmental entities that can seek funding and implement projects represents perhaps the most critical gap for the Ventura River watershed.

Continued implementation of existing plans is another planning gap. Continued vigilance and dedication to transitioning plans into action is required. The Ventura River Estuary Enhancement and Management Plan is an example of a worthwhile plan needing more complete implementation.

Watershed Management Priorities

The watershed planning initiatives in the Ventura River watershed have good momentum and broad stakeholder participation. The following priorities are needed to address the planning gaps and opportunities identified in the previous section of this report.

- Develop and implement a watershed management plan for the Ventura River.
- Restore steelhead habitat in the river, in particular by removing or modifying Matilija Dam and other fish passage barriers.
- Preserve the existing floodplain and reconnect the river to its floodplain where feasible.
- Complete the Matilija Dam Ecosystem Restoration Feasibility Study, and subsequent Matilija Creek and Ventura River watershed ecosystem restoration in a timely fashion.
- Develop a watershed council for Ventura River that can act as the lead on project implementation for planning efforts.

To support the priorities listed above the following WRP Watershed Coordinator efforts should focus on the following actions:

- Actively participate in the Matilija Dam Ecosystem Restoration Feasibility Study process.
- Identify projects that can move forward during the planning phase of the Feasibility Study.
- Support the implementation of existing plans including the Ventura River Estuary Enhancement and Management Plan.
- Support the development and capacity building of new or existing NGOs within the Ventura River watershed to provide resources for project development and implementation. The Ventura County Flood Control District has submitted a 205j grant to begin a watershed council for the Ventura Watershed. If awarded, efforts should be expended to support its development.

Santa Clara River Watershed

Setting

The Santa Clara River watershed is Southern California's largest watershed and is one of the last wild rivers in the region to remain in a relatively natural state. Historic runs of steelhead trout are estimated at more than 9,000 fish. Most of the river and its tributaries have not been channelized for flood control purposes. The main river lies between the Los Angeles basin and the transverse ranges. This makes it an important link between the basin and the mountains. It also positions the watershed as one of the last places for potential urbanization northwest of Los Angeles.

The Santa Clara River originates in the San Gabriel Mountains of Los Angeles County and flows west through the primarily agricultural valley of Ventura County to the Pacific Ocean. It is approximately 100 miles long and drains an area of 1600 square miles. Several small rivers come together to form the headwaters of the river in Soledad Canyon. Beneath this area the river expands into a broad flood plain where most development is occurring. It flows west across Los Angeles County and through the cities of Acton and Santa Clarita, where 6 miles of the river have

been channelized. Downstream of Santa Clarita lies Newhall Land and Farming properties. Newhall is largest landowner in the region and was previously involved mostly in farming. They are now concentrating on development of their properties. The Newhall Ranch project at the Los Angeles and Ventura County boarder will build 22,000 homes and dramatically alter the watershed ecosystem.

The cities of Piru, Fillmore and Santa Paula are located along the river in Ventura County. Most of the land along the river through Ventura County is still used for agricultural purposes, largely citrus and avocado orchards. The Santa Clara enters the ocean between the cities of San Buenaventura and Oxnard. The estuary is frequently isolated from tidal influence by a sand bar that is breached during winter storms. McGrath State Beach is the main point of public access to the estuary.

Most tributaries to the Santa Clara River originate in the Los Pares National Forest to the north. Piru Creek and Sespe Creek are the major tributaries with the Sespe contributing up to two thirds of the river's flow during storm events. The Sespe is 55 miles long with 31miles designated as Wild and Scenic. The Forest Service is in process of completing a management plan for the Los Padres Forest that will include management measures for the Sespe. While 18.5 miles of the headwaters are not currently protected, Senator Boxer has introduced legislation to include this portion of the Sespe as Wild and Scenic.

The Freeman Diversion and Piru Dam are located in Ventura County. The Freeman Diversion is the first major barrier to steelhead migration on the Santa Clara River. The Piru Dam is due for relicensing in 2004.

The Santa Clara River is home to several threatened and endangered species. Endangered unarmored three spine stickleback fish utilize the river's headwaters. A recent Forest Service letter to the Regional Water Quality Control Board raised new concern about reduced surface flows in the headwaters and the impact to this species.

Sespe Creek provides habitat for the California red-legged frog, arroyo toad and the southwestern pond turtle. The main river corridor provides critical habitat for the least Bell's vireo and efforts to increase the number of breeding pairs have met with success. The Santa Clara River Estuary area supports tidewater goby, the California least tern and the western snowy plover.

Watershed Organizations

Friends of the Santa Clara River
660 Randy Drive
Newbury Park, CA 91320
Contact: Ron Bottorff, Chair
805.498.4323 bottorffm@vcss.k12.ca.us
-involved in all aspects of watershed planning

California Department of Parks and Recreation
1933 Cliff Drive, Suite 27
Santa Barbara, CA 93109
Contact: Virginia Gardner
805.899.1412 VGARD@parks.ca.gov
-lead on McGrath State Beach Resources Management Plan, actively involved in Santa Clara River Estuary Working Group.

Ventura County Flood Control District
800 South Victoria Avenue
Ventura, CA 93009-1610

Jeff Pratt, P.E., Deputy Director of Public Works
Contact: Jayme Laber, Hydrologist IV
805.662.6737 jayme.laber@mail.co.ventura.ca.us
-collaboration on all watershed planning

City of San Buenaventura
1400 Spinnaker Dr., P.O. Box 99
Ventura, CA 93002-0099
Contact: Karen Waln, Management Analyst II
805.677.4128 kwaln@ci.ventura.ca.us

Keep the Sespe Wild
P.O. Box 715
Ojai, CA 93024
Contact: Alasdair Coyne
805.921.0618 sespewild@earthlink.net

A listing of organizations involved in the development of the Santa Clara River Enhancement and Management Plan can be found in the next section of this report.

Watershed Plans and Planning Activities

Santa Clara River Enhancement and Management Plan Steering Committee, 2002. *Draft Santa Clara River Enhancement and Management Plan*. The Management Plan development process began in 1991. In excess of \$1 million in funding and in-kind services have been spent to date. The project is directed by a 26-member Project Steering Committee consisting of representatives of the counties, communities, state and federal agencies, property owners, aggregate producers, water agencies and Friends of the Santa Clara River. The Steering Committee identified the river's critical issue areas. Reports were developed by subcommittees covering biology, water resources, flood control, agriculture, aggregate mining, and recreation that provide background information, goals and recommendations for the river. A series of computer-based maps covering the entire river were produced, and have been used in a Geographic Information Systems overlay process to identify conflicts and opportunities, and to facilitate decisions regarding uses of the river floodplain. The Steering Committee, in early 1999, approved a set of riverwide and reach-by-reach recommendations which are to be incorporated into the Plan. A five-member Consultant Coordinating Committee has been established to hire a consultant to prepare the Draft Plan.

An abbreviated list of organizations involved in development of the Enhancement and Management Plan not listed in the previous section include: California Department of Fish and Game, Castaic Lake Water Agency, California Department of Transportation - District 7, California State Coastal Conservancy, United Water Conservation District, U.S. Fish and Wildlife Service, L.A. County Department of Public Works, U.S. Army Corps of Engineers, City of Santa Clarita, Los Angeles County Sanitation District, City of Fillmore, Regional Water Quality Control Board – L.A. Region, National Marine Fisheries Service, Wildlife Conservation Board, City of Santa Paula, and California Trout.

U.S. Army Corps of Engineers, Los Angeles District. *Santa Clara River Reconnaissance Study*. This study is being conducted to determine if there is sufficient interest for the federal government to engage in a watershed wide feasibility study. Status: in process.

California State Parks and Recreation, *McGrath State Beach Natural Resources Management Plan*. An Administrative Draft of the plan was produced in May 2002. A Public Draft will be ready in July 2002. The Plan will include the impact of McGrath and agricultural lands on the estuary.

Santa Clara River Estuary Working Group. This group meets monthly to discuss issues of the Santa Clara River Estuary. The City of San Buenaventura has been funded to study copper

contamination of sediment and to conduct bioassessment of benthic macroinvertebrates. Participation in the group varies and a more cohesive planning effort is required.

City of Santa Clara. *Santa Clara River Corridor Plan*. Status: completed.

U.S. Forest Service, Los Padres National Forest. *Forest Plan, Los Padres National Forest*. Status: update in process.

Planning/Management Gaps and Opportunities

The Santa Clara River Enhancement and Management Plan (SCREMP) is limited to the 500 year flood plain. The lack of a plan that includes the entire watershed is the single most significant planning gap. Given the extreme development pressures within the watershed, in particular in Los Angeles County, the need for a total watershed plan is critical. Additionally, members of the SCREMP planning group identified three planning gaps. These consist of: 1) a gap in wetland identification and project design, 2) a need for streambank biostabilization demonstration projects to test various methods suitable for the flow regime of the Santa Clara River (past projects have failed during storm events), and 3) a sediment transport study.

The U.S. Army Corps of Engineers, Los Angeles District is conducting a Reconnaissance Study to determine if there is sufficient interest for federal involvement in conducting a watershed-wide feasibility study. The lengthy timeline for the feasibility study process will render many of parts of the watershed beyond restoration or preservation before a plan would be developed.

While the general condition of the watershed in Ventura County is presently in comparatively good condition, development in the upper watershed will have an immediate and negative impact on downstream portions of the watershed. Increased flow regimes due to impervious surfaces and disruption of wildlife migration corridors will detrimentally impact this last wild river of Southern California.

An active acquisition plan in the Ventura County portion of the watershed by The Nature Conservancy and the California State Coastal Conservancy is achieving success in preserving important parts of the watershed. However, there is a lack of organizations with the capacity to assume management of these lands once acquired.

The draft of the California State Parks and Recreation, *McGrath State Beach Natural Resources Management Plan* indicates that the current status appears that resources are on decline. There is a need to change some management practices and relocate some facilities. The first step needed is a field meeting to discuss resources with interested agencies and stakeholders.

Finally, the Santa Clara River Estuary Working Group needs to expand regular participation in their planning efforts. Several planning efforts are underway around the estuary. These include the McGrath State Beach Management Plan, the City of San Buenaventura studies, and a public art education and interpretive project also through the city. The nexus of these planning efforts provides an opportunity for a coordinated effort to improve the function of the estuarine system.

Watershed Management Priorities

The following priorities are needed to address the planning gaps and opportunities identified in the previous section of this report:

- Complete and Implement the Santa Clara River Enhancement and Management Plan
- Expand the Santa Clara River Enhancement and Management Plan, resource studies, and GIS beyond the 500 year floodplain to include tributaries and the entire watershed.
- Preserve the existing floodplain and reconnect the river to its floodplain where feasible. Establish a continuous corridor from the Santa Clara Estuary to Santa Paula/Fillmore.

- Prepare and implement an enhancement plan for the lower Santa Clara River.
- Enhance steelhead habitat in the river.
- Remove fish passage barriers.
- Address exotic species in the watershed.
- Complete the Santa Clara River Parkway and Wildlife Preserve and Acquisition Project to create a 20 mile-long parkway and wildlife preserve that will restore and enhance estuarine and riparian habitat and protect it into the future.
- Support a coordinated planning process in the Santa Clara River Estuary including the City of San Buenaventura Public Art interpretive project, Public Works estuary studies, and McGrath State Beach Natural Resources Management Plan.

To support the priorities listed above the following WRP Watershed Coordinator efforts should focus on the following actions:

- In cooperation with the Wetlands Task Force Watershed Coordinator for Los Angeles County, support the development of a committee of stakeholders committed to expanding the planning process for the Santa Clara River to include the entire watershed. This should entail supporting existing efforts underway and exploring other means to accomplish this goal.
- Support a coordinated planning process for the Santa Clara River Estuary Working Group. Encourage participation by Wetlands Task Force member stakeholders. Provide input into the three existing initiatives (City of San Buenaventura studies, McGrath State Beach Resources Management Plan, City of San Buenaventura Public Art program) and help determine what other needs exist.

Ormond Beach Watershed

Setting

Ormond Beach wetlands are located in the City of Oxnard east of Port Hueneme and west of Mugu Lagoon. The area consists of 217 acres in ten fragmented sites along one mile of coast. It occupies an intermediate position between the Santa Clara River and Calleguas Creek.

The wetlands support many species of birds, fish and plants. Special status species found in the area include the California least tern, Western snowy plover, Belding's savannah sparrow, tidewater goby and others.

Historically the wetlands contained sandy beaches, coastal lagoons, fore and back dune areas, brackish and seasonal fresh water marshes, and grass and traditional uplands. The site also formed an important stop on the Pacific flyway and provided spawning and nursery grounds for local and coastal fish. Marine mammals also used the beach for haul-out sites and pupping.

Today the wetlands area contains energy production facilities, a wastewater treatment plant, heavy manufacturing facilities, roads, railroad tracks, drainage ditches and flood control channels. The majority of wetlands at Ormond Beach are not tidally connected. Historically there may have been channels linked with Mugu Lagoon.

Water sources used to include surface flows over the Oxnard Plain, Calleguas Creek, freshwater drainages, groundwater and flood flows. Construction of drainage and flood control channels has mostly eliminated the Oxnard Plain as a source of water for the wetlands. The primary source of water for the wetlands is direct precipitation, with high ground water, an artesian well, and leakage from drainage channels.

Runoff to Ormond Beach is generated with an approximately 8,000 acre drainage area consisting of agricultural, industrial, commercial and residential land uses. The wetlands do receive tidal inundation when the beach berm is breached during winter storms. Land use changes also have

altered the delivery of sediment to Ormond Beach. Coastal structures have also impacted sediment transport diverting delivery to submarine canyons.

In spite of the drastic changes to the ecosystem over time, Ormond Beach continues to represent a significant opportunity for restoration and preservation. One of the largest remaining areas of wetlands in Southern California, recent acquisition of 265 acres of the wetlands by the California State Coastal Conservancy has immediately raised the importance of development and implementation of a restoration plan.

Watershed Organizations

Ormond Beach Observers
1151 Shellburn Lane
Ventura, CA 93001-4054
Contact: Roma Armbrust
805.643.3813 armbrustr@vcss.k12.ca.us

California State Coastal Conservancy
1330 Broadway, 11th Floor
Oakland, CA 94612
Contact: Peter Brand
510.286.4162 brand@scc.ca.gov

Planning activities

The City of Oxnard developed a restoration and management plan for Ormond Beach in 1985. The plan was never implemented due to lack of funding.

In 1994 a restoration and enhancement plan was developed for Southern California Edison's undeveloped property at South Ormond Beach. It also was not implemented.

Romberg Tiburon Center and Phillip Williams and Associates, Ltd. for California State Coastal Conservancy, August 2001. *Scoping Document – Ormond Beach Wetlands Restoration Feasibility Plan*. This document details areas to be included in developing a comprehensive enhancement/restoration feasibility study for the Ormond Beach area. It provides background information and restoration criteria for a feasibility plan. Status: Complete

Padre Associates, Inc. for Calleguas Municipal Water District, May 2002. *Program Environmental Impact Report Environmental Assessment for the Calleguas Regional Salinity Management Report*. Status: in draft.

Planning/Management Gaps

The scoping document for the Ormond Beach Wetland Restoration Feasibility Plan identifies the need for “a comprehensive enhancement/restoration and management plan...to develop recommendations that address: habitat needs of the coastal landscape ecosystem, habitat needs directed toward special status species, priority and timing of restoration activities, identifying potential stakeholder partnerships and funding support, potential acquisition of private lands, and costs for restoration, acquisition and long term management.”

Additionally, there is a need to address the gap of an interpretive program for the area.

Watershed Management Priorities

The following priorities are needed to address the planning gaps and opportunities identified in the previous section of this report:

- Acquire Ormond Beach wetlands properties.
- Develop and implement a restoration plan for the area. A top priority for the Ormond Beach wetlands is to develop a restoration and enhancement plan. The Task Force watershed coordinator will work with the lead planning organizations to identify the organization or entity that can take the lead on developing the plan as well as implementation.
- Develop an interpretive program for the area. Initial interest exists and a Bird Festival was recently organized. Fostering this interest and expanding the scope of outreach should be explored.

To support the priorities listed above the following WRP Watershed Coordinator efforts should focus on the following actions:

- Support development and implementation of a restoration and enhancement plan.
- Support development of an interpretive program for the Ormond Beach wetlands area.

Calleguas Creek Watershed

Setting

The Calleguas Creek watershed is home to the fertile agricultural fields of the Oxnard Plain and the expansive wetlands of Mugu Lagoon. The watershed is 30 miles long, 14 miles wide and drains an area of 343 square miles (approximately 224,000 acres). It lies predominantly in southern Ventura County and extends from the Los Angeles County line in the east to Mugu Lagoon and the Pacific Ocean to the south.

The watershed includes Calleguas Creek, Conejo Creek, Arroyo Conejo, Arroyo Los Posas, Arroyo Santa Rosa, Arroyo Simi, along with Revolon Slough and Mugu Lagoon. The northern boundary of the watershed is formed by the Santa Susana Mountains, South Mountain and Oak Ridge Mountains. The southern boundary is formed by the Simi Hills and Santa Monica Mountains.

The Calleguas Watershed includes the cities of Simi Valley, Thousand Oaks, Moorpark, and Camarillo. Approximately 50 percent of the watershed is undeveloped open space, 25 percent is agricultural and the remaining 25 percent is urban land use. The steeper slopes of the watershed remain largely undeveloped. Agricultural uses consisting mainly of orchard and row crops are found in the central and western parts of the watershed on the Oxnard Plain.

Primary habitats within the watershed comprising the 50 percent of undeveloped open space include coastal sage scrub, annual grassland with inclusions of oak savanna, riparian, saltwater marsh and marine. The watershed is home to more than 50 special status species including the California gnatcatcher and Least Bell's vireo.

Mugu Lagoon, located at the mouth of the watershed, is one of the few remaining significant saltwater wetland habitats in southern California and is a vital part of the Pacific Flyway. The Point Mugu Naval Air Base is located in the immediate area of the lagoon. Except for the military base, the lagoon area is relatively undeveloped. The lagoon borders an Area of Special Biological Significance (ASBS) and supports a great diversity of wildlife including several endangered species of birds and one endangered plant species. The lagoon contains approximately 300 acres of marine lagoon and channels, 1,000 acres of mudflats and salt marsh, and 2,000 acres of associated habitats.

Prior to the 1940's, Calleguas Creek and its tributaries provided drainage for storm water and irrigation waters. Year-round flows were rare. Discharges of municipal, agricultural, and urban

wastewaters have increased surface flow in the watershed, which has resulted in increased sedimentation and water pollution in the Mugu Lagoon. The agricultural fields of the Oxnard Plain drain into ditches which enter Mugu Lagoon directly or through Calleguas Creek and its tributaries. This altered hydrology has led to accelerated erosion and sedimentation rates. Projected sedimentation estimates indicate that 430 acres of lagoon salt marsh, or approximately 40 percent, will be converted to upland habitat by the year 2030.

Watershed Organizations

The following is an abbreviated list of organizations active in Calleguas Creek watershed planning with contact information and their current involvement in watershed planning activities. A complete list of organizations participating in Calleguas Creek Watershed Management Plan is included in the planning activities section of this report.

Calleguas Municipal Water District
2100 Olsen Road
Thousand Oaks, CA 91360
Contact: Eric Bergh, Manager of Resources
805.579.7128 ebergh@calleguas.com
Web site: www.calleguas.com
- collaboration on all plans in watershed

Ventura County Resource Conservation District
P.O. Box 147
3380 Somis Road
Somis, CA 93066
Contact Pat Oliver, Executive Director
805.386.4685 poliver_vcrcd@prodigy.net
- collaboration on all plans in watershed
- demonstration projects

Ventura County Flood Control District
800 South Victoria Avenue
Ventura, CA 93009-1610
Contact: Jeff Pratt, P.E., Deputy Director of Public Works
805.654.2040 jeff.pratt@mail.co.ventura.ca.us
Web site:
-collaboration on all watershed planning

A complete listing of organizations involved in the development of the Calleguas Creek Watershed Management Plan can be found in the next section of this report.

Watershed Plans and Planning Activities

Calleguas Creek Watershed Management Plan

The Calleguas Creek Watershed Management Plan development process began in 1996. The process has been driven by a diverse group of stakeholders including federal, state and local agencies, landowners, businesses, and nonprofit organizations. An executive steering committee oversees four subcommittees that have changed over time. The current subcommittees consist of:

- 5) water resources/water quality
- 6) habitat/natural resources/recreation
- 7) flood protection and sedimentation
- 8) public outreach/education

The subcommittees generally meet monthly or bimonthly. A draft of the Management Plan was produced for review by the various committees on June 19, 2002. A draft for external review will be available in September, 2002. The purpose of the plan is to provide a management plan balancing the needs of all stakeholders and to assure a healthy and sustainable watershed.

Numerous partners are engaged in the Calleguas Creek Watershed Management Plan development process. These include:

- General Purpose Agencies: Cities of Camarillo, Moorpark, Simi Valley and Thousand Oaks and the County of Ventura Flood Control District.
- Water Suppliers/Wastewater Management: Calleguas Municipal Water District, Camrosa Water District, Pleasant Valley County Water District, United Water Conservation Water District, Ventura County Waterworks District No. 1, and the Zone Mutual Water Company.
- Recreational and Open Space Entities: California Department of Parks and Recreation, Conejo Recreation and Park District, Pleasant Valley Park & Recreation District, and Rancho Simi Recreation & Park District.
- Business Organizations: Business Industry Association and the Ventura County Economic Development Association.
- Regulatory Agencies: Regional Water Quality Control Board – Los Angeles, California Coastal Commission, California Department of Fish and Game, Fox Canyon Groundwater Management Agency, US Army Corps of Engineers, US Environmental Protection Agency, and the US Fish and Wildlife Service.
- Other Agencies and Organizations: Naval Air Warfare Center – Point Mugu, Ventura County Resource Conservation District, California Coastal Conservancy, California Department of Water Resources, California Native Plant Society, California Wildlife Conservation Board, Environmental Defense Center, Natural Resources Conservation Service, Santa Monica Mountains Conservancy, Surfrider Foundation and Caltrans.

David Magney Environmental Consulting for the California State Coastal Conservancy and the U.S. Environmental Protection Agency, October 2000. *Calleguas Creek Watershed Wetland Restoration Plan*. The primary goal of this plan is to preserve, maintain, restore and improve wetland functions. The primary objectives to achieve this goal are to characterize and understand the state of wetland functions in the watershed, and to identify restoration sites that will have local and generalized benefits. The plan identifies site specific projects as well as general recommendations for improvement of wetland function throughout the watershed. Status: completed.

Natural Resource Conservation Service for the Ventura County Resource Conservation District, 1995. *Calleguas Creek Watershed Erosion and Sediment Control Plan for Mugu Lagoon*. The plan was prepared to identify and quantify erosion sources and sediment transport, and to inform the development of a plan to address present and future erosion and sediment related impacts. From this plan the Ventura County RCD implemented the Calleguas Creek Watershed Treatment Phase I-II, a comprehensive effort to protect resources within the Calleguas Creek watershed and at the outlet, Mugu Lagoon. This project demonstrated subwatershed channel stabilization through the use of grade stabilization and streambank restoration. Phase I of the project addressed priority subwatersheds of the Calleguas Creek Watershed. Phase 2 focused on subwatershed channel stabilization through the use of grade stabilization and streambank restoration. Status: completed.

Planning/Management Gaps and Opportunities

Watershed planning for the Calleguas Creek watershed has good momentum, large stakeholder involvement and has achieved a process that promises to deliver a plan for the entire watershed.

However, even though public and stakeholder outreach is a component of the planning process, many participants identify the need for additional outreach as necessary. In particular, outreach to the agricultural community and their involvement in the planning process is lacking. Education of this community and the general public regarding the need for and importance of a watershed plan is needed.

The Ventura County Resource Conservation District is very active in this watershed and has taken a leadership role in project implementation. As in other watersheds throughout Ventura County, there is a lack of other organizations outside of government agencies possessing the capacity to seek funding and implement restoration projects.

Finally, when entering the implementation phase of the watershed plan, a monitoring program will be necessary to measure project effectiveness and impacts.

Watershed Management Priorities

The following priorities are needed to address the planning gaps and opportunities identified in the previous section of this report:

- Complete and implement the Calleguas Creek Watershed Management Plan.
- Implement projects identified in the Calleguas Creek Wetlands Restoration Plan.
- Address impacts on Mugu Lagoon of watershed inputs, including inflows of sediment, nutrients, and contaminants.
- Study effects of stormwater runoff on wetlands.
- Preserve small streams and tributaries.
- Develop outreach to residents and the agricultural community about the watershed planning process.

To support the priorities listed above the following WRP Watershed Coordinator efforts should focus on the following actions:

- Actively participate in the Calleguas Creek Watershed Management Plan process.
- Support and foster outreach to residents and the agricultural community about the Calleguas Creek Watershed Management Plan.
- Support implementation of projects identified in the Calleguas Creek Wetlands Restoration Plan.

WETLANDS RECOVERY PROJECT GAPS REPORT FOR ORANGE COUNTY, CALIFORNIA

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APPENDIX: WATERSHED PLANNING ORGANIZATIONS OF VENTURA COUNTY

Region-Wide

Forest Service, Los Padres National Forest
California Coastal Conservancy
California Department of Fish and Game
California Department of Parks and Recreation
California Department of Transportation
California Department of Water Resources
California Regional Water Quality Control Board
California Trout
National Fish and Wildlife Foundation
Natural Resources Conservation Service
National Marine Fisheries Service
National Park Service
U.S. Army Corps of Engineers
U.S. Bureau of Reclamation
U.S. Environmental Protection Agency
U.S. Fish and Wildlife Service
U.S. Geological Survey
Wildlife Conservation Board

County-Wide

California Native Plant Society, Channel Islands
Environmental Defense Center
Southern California Steelhead Coalition
Southern California Water Company
Southern California Wetlands Recovery Project
Surfrider Foundation
Tri-County Fish Team
Ventura County Arundo Task Force
Ventura County Audubon Society
Ventura CoastKeeper
Ventura County Department of Public Works
Ventura County Flood Control District (Watershed Protection)
Ventura County Planning Department
Ventura County Resource Conservation District
Ventura County Transportation Department
Ventura County Wetlands Task Force

Ventura River Watershed

Casitas Municipal Water District
ChannelKeeper
City of Ojai
City of San Buenaventura
Friends of the Ventura River
Matilija Coalition
Matilija Dam Removal Study Team
Meiners Oaks County Water District
Ojai Basin Groundwater Management Agency
Ojai Valley Land Conservancy
Ojai Valley Sanitation District
The Crew (Ojai)

Ventura River County Water District

Santa Clara River Watershed

Castaic Lake Water Agency
City of Fillmore
City of Piru
City of San Buenaventura
City of Santa Paula
Friends of the Santa Clara River
Keep the Sespe Wild
Santa Paula Creek Task Force
United Water Conservation District

Calleguas Creek Watershed

Business Industry Association
Calleguas Municipal Water District
Camrosa Water District
City of Camarillo
City of Moorpark
City of Thousand Oaks
City of Simi Valley
Conejo Recreation and Park District
Pleasant Valley County Water District
Pleasant Valley Park and Recreation District
Point Mugu Naval Air Base
Rancho Simi Recreation and Park District
Santa Monica Mountains Conservancy
Ventura County Economic Development Association

Ormond Beach Watershed

City of Oxnard
Ormond Beach Observers

Malibu Creek Watershed

City of Malibu
Malibu Creek Watershed Council