# Ventura River Watershed

# Management Plan



## PART 1

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## 1.1 Introduction

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Aerial View of Lower Ventura River Watershed and Estuary

Photo courtesy of Rick Wilborne

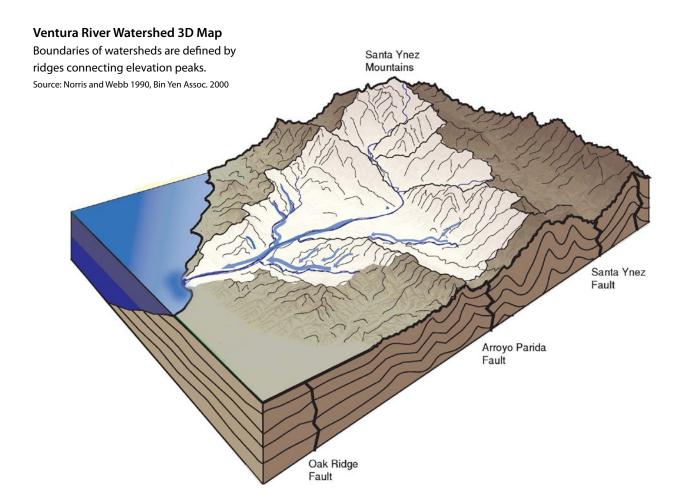


## 1.1 Introduction

# 1.1.1 Watersheds and Watershed Management

Watersheds are basins that catch rain and snow and drain into a central waterbody. Every area of land is part of a watershed; each one separated from the next by ridges between elevation peaks. Watersheds come in all shapes and sizes and usually contain smaller "subwatersheds."

Mountain ridges in the Topatopa and Santa Ynez Mountains and the Transverse Ranges form the boundaries of the Ventura River watershed; and all of the watershed's tributaries ultimately drain to the Ventura River.



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The web of interconnected processes that permeate watersheds do not correspond to the fragmented patchwork of land and water regulatory jurisdictions. The recognition of these interrelationships is the essence of watershed-level planning.

Each watershed has a unique mix of topography, climate, geology, habitats, and land development, which affects the amount of water available, the nature of flooding, the quality of water, and ecosystem health in that watershed.

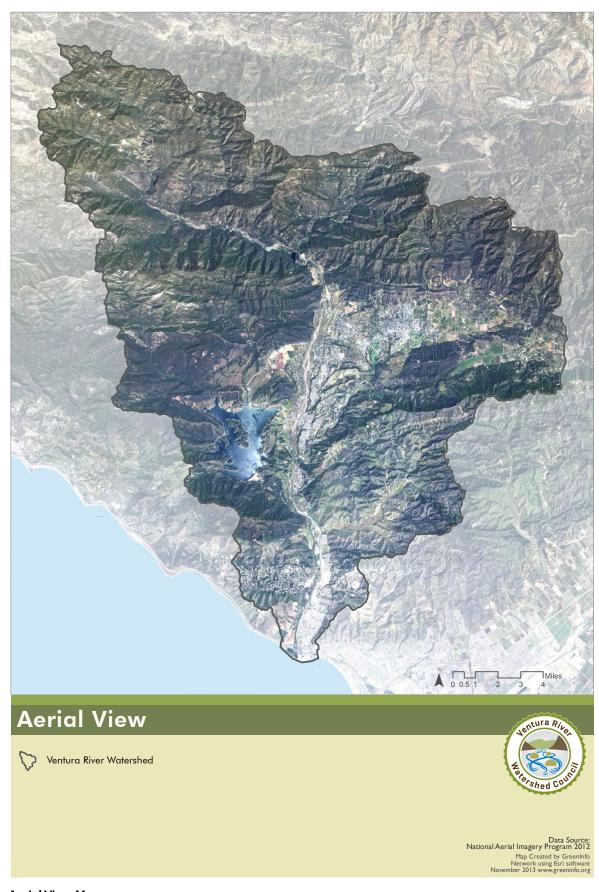
Ventura County has three major watersheds—Santa Clara River, Calleguas Creek, and Ventura River, all of which drain to the ocean. At 226 square miles, the Ventura River watershed is the smallest of the three.

There are complex interrelationships among the streams, aquifers, lakes, habitats, people and economies that make up a watershed system, such that changes or impacts to one part of a watershed can ripple through and affect other parts. Pollutants that enter the stream network in Ojai can affect the estuary in Ventura, for example. Modifications to stream channels upstream can cause streambank erosion downstream. The water available to each groundwater pumper can depend upon activity at neighboring wells. Arundo infestations can decrease streamflow and aquatic habitat and increase flooding hazards. A dam erected to address a water supply concern can deprive the downstream riverbed and local beaches of sand. The interrelationships go on and on.

The web of interconnected processes that permeate watersheds do not correspond to the fragmented patchwork of land and water regulatory jurisdictions. The recognition of these interrelationships is the essence of watershed-level planning. Collaborating across jurisdictional boundaries, sharing the wider watershed perspective, can increase the effectiveness and efficiency of managing water supplies, keeping water clean, managing flood flows, and maintaining habitat for sensitive species.

There is no one agency responsible for watershed management planning. The plans are sometimes initiated, lead and funded by citizens, sometimes by local governments, resource conservation districts, or watershed councils.

When the plan development process is inclusive of the broad base of stakeholders, watershed plans are a rare example of a planning effort that places considerable emphasis on what the stakeholders actually care about. Each watershed management plan offers a unique vision for a specific watershed that is rooted in the local community.



**Aerial View Map** 

## 1.1.2 Plan Organization

The plan starts with an Executive Summary—a quick overview of the entire plan.

#### Part 1. About this Plan

Part 1 starts with this introductory plan overview chapter, followed by a chapter which chronicles the history and structure of the Ventura River Watershed Council, and a chapter detailing the development process for this management plan.

## Part 2. Watershed Plan, Projects, and Programs

Part 2 contains the product of the Council's consensus:

- 2.1 Plan Guiding Framework describes the purpose and values that guided the development of the plan, and outlines the plan's goals and associated objectives and key findings.
- 2.2 Existing Projects, Programs, and Recent Accomplishments summarizes existing projects and programs and stakeholder accomplishments over a three-year period between 2011 and 2013.
- 2.3 Campaigns presents the Watershed Council's proposed projects and programs organized into six focused "campaigns," which present desired new projects and programs framed in the context of watershed management work already underway.

Each section includes a list of the key documents on that topic where readers can find more detailed and technical information.

#### Part 3. Watershed Characterization

Part 3—the Watershed Characterization—starts with an Overview and Quick Facts summary of the watershed's physical features, followed by six more detailed characterization sections which describe and illustrate the watershed's physical features, geology and climate, surface water and groundwater hydrology, flooding, water supplies and demands, water quality, habitat and species and related issues, opportunities for access to nature, and demographics and local regulations. Characterization sections contain topic history, relevant statistical data, and assessment of current conditions. Each section includes a list of the key documents on that topic where readers can find more detailed and technical information.

## Part 4. References and Supporting Material

Part 4 provides a key to the acronyms that appear in the plan, a glossary of technical and local terms, a listing of the source documents used to develop this plan, and a number of appendices that provide data and information that expand on information provided in the body of the plan.

## 1.2 Ventura River Watershed Council

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Paul Jenkin, Surfrider Foundation, Leads Tour of Surfers' Point Managed Shoreline Retreat Project



## 1.2 Ventura River Watershed Council

## 1.2.1 Participants

The Ventura River Watershed Council is a stakeholder group for watershed planning in the Ventura River watershed. It is an open group with active participation by local, state, and federal government agencies, water and sanitation districts, environmental and educational nonprofits, agricultural organizations, community volunteer groups, as well as engineers, biologists, businesses, students, and other private citizens.

In addition to citizens, landowners, and consultants, the following organizations and businesses regularly participate on the Council:

Aera Energy

California Coastal Conservancy

California Conservation Corps

California Regional Water Quality Control Board

Casitas Municipal Water District

City of Ojai

City of Ventura (Ventura Water)

Farm Bureau of Ventura County

Friends of the Ventura River

Friends Ranch

Meiners Oaks Water District

Ojai Basin Groundwater Management Agency

Ojai Valley Green Coalition

Ojai Valley Land Conservancy

Ojai Valley Sanitary District

Santa Barbara Channelkeeper

Surfrider Foundation

University of California Santa Barbara

Ventura Citizens for Hillside Preservation

Ventura County Agricultural Irrigated Lands Group

Ventura County Cattlemen's Association

Ventura County Coalition of Labor, Agriculture, and Business



Ventura River Watershed Council, 2012

Photo courtesy of Lisa Brenneis

Ventura County Environmental Health Division

Ventura County Resource Conservation District

Ventura County Supervisor Steve Bennett's Office

Ventura County Watershed Protection District

Ventura Hillsides Conservancy

Ventura River Water District

Watersheds Coalition of Ventura County

# 1.2.2 **Council History, Structure,** and Governance

The Council was formed to provide a framework for enhancing communication and collaboration among diverse stakeholders in order to better address the Ventura River watershed's many complex and cross-jurisdictional issues.

The Council is also one of three watershed planning subcommittees that comprise the Watersheds Coalition of Ventura County (WCVC). The others are the Santa Clara River Watershed Committee and the Calleguas Creek Watershed Steering Committee.

#### 1.2.2.1 **History**

The Ventura River Watershed Council has been in existence since May, 2006. The Wetlands Recovery Task Force of Ventura County, a program of the California Coastal Conservancy, had the original idea to form the Council. At the same time, the WCVC was working on developing the countywide Integrated Regional Water Management Plan and needed a stakeholders group from each of the County's three major watersheds

for that process. And so it happened that WCVC's program manager was able to serve as the Council's coordinator during its first five years.

In 2011, the Council was successful in securing grant funding, for three years, for a watershed coordinator. The Ojai Valley Land Conservancy agreed to host the position. The Council's watershed coordinator began in the fall of 2011.

#### 1.2.2.2 Mission Statement

The mission of the Ventura River Watershed Council is to facilitate and support efforts by individuals, agencies, and organizations to maintain and improve the health and sustainability of the Ventura River watershed for the benefit of the people and ecosystems that depend upon it.

#### 1.2.2.3 Strategies

The Council seeks to use the following strategies to accomplish its mission:

- Collaborate on the development of a comprehensive, integrated watershed management plan to guide priorities and implementation strategies.
- 2. Facilitate communication between public, private, and nonprofit stakeholders.
- 3. Provide a forum for collecting, sharing, and analyzing information about, and creatively responding to, watershed issues.
- 4. Refine understanding—among Council members, decision-makers, and the general public—of the watershed's conditions, processes, interrelationships, and challenges from a variety of perspectives, including scientific, cultural, economic, and regulatory.
- 5. Identify opportunities for Council members to leverage resources and work together toward common goals.
- 6. Serve as a subcommittee of the Watersheds Coalition of Ventura County and a contributor to the County's Integrated Regional Water Management Plan.
- 7. Promote the priorities and projects of the watershed management plan to local, state, and federal officials.
- 8. Seek funding and other support to implement priority watershed management projects.
- 9. Monitor the effectiveness of, and regularly update, the watershed management plan.
- 10. Facilitate coordination of watershed education activities.

#### 1.2.2.4 Governance

In May 2012, before launching work on development of a watershed management plan, the Watershed Council adopted its first governance charter. The charter is intended to ensure that the Council fairly represents the different stakeholders in the watershed, and that a balance of perspectives and interests are represented in its decisions.

As stated in the charter, the Council is a voluntary organization and has no powers or authorities other than those already possessed by its member agencies. The agencies, organizations, and interests represented on the Council are not obligated to adopt or carry out the recommendations of the Council, but have agreed to give due consideration to the recommendations and take actions they consider appropriate.

The charter outlines two categories of members: general members and Leadership Committee members, with the primary difference being that Leadership Committee members are voting members. The Council strives to make its decisions and recommendations by consensus, but when consensus cannot be reached on a given issue, the charter calls for a vote by the Leadership Committee to resolve the issue.

#### **Leadership Committee**

The Leadership Committee of the Ventura River Watershed Council comprises the Council's voting members. The Leadership Committee, which has 21 members, was established to ensure that a balance of perspectives and interests are represented in the Council's decisions. Leadership Committee membership is reviewed annually. There are five categories of members: government, water and sanitary, land management/recreation, environmental, and business/landowner.

Profiles of the current members of the Leadership Committee are provided below, organized by category.

(Some of the background information below on the water agency members was taken directly from the *Draft Ventura River Habitat Conservation Plan* produced by Entrix, Inc. and URS Corp. in 2004.)

#### Government



805/654-2703

www.ventura.org/board-of-supervisors

Ventura County is one of the three local governments in the watershed. About half of the Ventura River watershed is under the jurisdiction of Ventura County. The Ventura County Board of Supervisors is the



five-member governing body that governs Ventura County. Members of the board are elected by members of their respective districts. Supervisor Steve Bennett represents the First Supervisorial District, which includes the entirety of the Ventura River watershed (except for the small piece in Santa Barbara County).

In addition to being the governing body of Ventura County government, the Board of Supervisors also governs the Ventura County Watershed Protection District. Supervisor Bennett is a member of the Board of Directors of the Fox Canyon Groundwater Management Agency.



#### **Ventura County Watershed Protection District**

805/654-2001

http://portal.countyofventura.org/portal/page/portal/PUBLIC\_WORKS/Watershed\_Protection\_District

The Ventura County Watershed Protection District (VCWPD), originally named the Ventura County Flood Control District, was formed by state approval of the Ventura County Flood Control Act of 1944.

The primary purposes of the VCWPD as indicated in the Act (as amended) are to: 1) provide for the control and conservation of flood and storm waters; 2) protect watercourses, watersheds, public highways, life, and property from floods; 3) prevent waste or loss of water supply; 4) import water into the district, retain and recycle storm and flood flows, and conserve all such water for beneficial uses; and 5) provide for recreational use and beautification as part of the flood control and water conservation objectives by acquiring or constructing recreational facilities or landscaping as part of any VCWPD project.

The district is organized into five divisions to administer these broad purposes: Water and Environmental Resources; Design and Construction; Planning and Regulatory; Operations and Maintenance; and Administration. Although VCWPD is a separate legal entity from the County of Ventura, the Ventura County Board of Supervisors also serves as VCWPD's board.

The district is funded through property taxes, benefit assessments, and land development fees paid by property owners within Ventura County. The district is divided into four zones, roughly corresponding to the major watersheds within the County (including Cuyama watershed), and monies raised within a zone support district studies and projects in that zone. Benefit assessment monies collected from each zone are dedicated to support operations and maintenance and NPDES (National Pollutant Discharge Elimination System) permit activities within that zone. Property tax monies raised within a zone are spent on construction projects and to support district planning studies within that zone. The boundaries

of the district's Zone 1 roughly follow the boundaries of the Ventura River watershed.

The list of watershed-related programs and services that the district administers/supports is far too long to enumerate here; below are just some highlights:

- Lead role in the Ventura Countywide Stormwater Quality Management Program, a group of partners that work together to improve stormwater quality, monitor watershed health, and comply with water quality requirements;
- Design, construction, and maintenance of levees, debris basins, channels, and other drainage and flood control structures;
- Lead role in monitoring and collection of precipitation, weather, and streamflows data;
- Management, permitting, and planning of floodplain activities;
- Flood emergency planning and response;
- · Hydrologic modeling and forecasting;
- Environmental restoration efforts, including removal of Matilija
   Dam and invasive species;
- Lead grant applicant/administrator in support of watershed partner projects;
- Groundwater well permitting, groundwater data, and basin condition assessments; and
- Public education on watershed issues.

#### City of Ventura (Ventura Water)

805/667-6500

www.cityofventura.net/water

The City of Ventura is one of the three local governments in the watershed. The western part of the City (1,798 acres) lies within the watershed, including the Ventura River estuary and adjacent beaches, the Ventura Avenue area, and downtown Ventura to Oak Street.

Ventura Water is the name of the City of Ventura's department that treats and supplies water, collects and treats wastewater, supplies recycled water, and collaborates with the Public Works Department to manage stormwater. This department has historically been most engaged with the Council. Ventura Water's service area encompasses the incorporated land of the City, with a population of over 109,000 people.



#### **Water Supplies**

The City of Ventura obtains water supplies from five sources: Casitas MWD, Ventura River Foster Park facilities, Mound Groundwater Basin, Oxnard Plain Groundwater Basin, and Santa Paula Groundwater Basin. Ventura also produces recycled water from the Ventura Wastewater Reclamation Facility.

The City of Ventura has been using water from the Ventura River watershed since its founding in 1782. The Foster Park Subsurface Diversion, built on the Ventura River in 1906, was acquired by Ventura in 1923. When Casitas Municipal Water District was originally formed, its service area included the entire City of Ventura boundary, as it existed at that time. The City also operates shallow groundwater wells in the Foster Park area. The Ventura Avenue Treatment Plant is owned and operated by the City to treat water from the Foster Park facilities. The City has approximately 31,000 service connections; about 3,500 of these connections are within the Ventura River watershed; however, water from the watershed is served to City residents outside of the watershed.

#### Wastewater Treatment

Ventura Water provides wastewater treatment services to approximately 98% of the City's residences. In the Ventura River watershed, the City's sewer lines begin at the City limits on upper Ventura Avenue, and deliver wastewater to the Ventura Water Reclamation Facility located in the Ventura Harbor area near the mouth of the Santa Clara River. The facility uses a tertiary, or advanced, treatment method. In the past, most of the treated wastewater was discharged into the Santa Clara River estuary after flowing through a series of wildlife ponds for about four days; however, a legal settlement will change how the City uses its reclaimed water in the future.

#### **Stormwater Management**

The City of Ventura is a member of the Ventura Countywide Stormwater Quality Management Program, a group of partners that work together to improve stormwater quality, monitor watershed health, and comply with water quality requirements. The City responds to illicit discharges to storm drains, inspects construction sites and commercial and industrial facilities to insure implementation of stormwater pollution prevention controls, reviews development plans for stormwater mitigation control, conducts outreach to residents and school-age children, and maintains the City's storm drains and flood control conduits.





805/646-5581 www.ci.ojai.ca.us

The City of Ojai is one of the three local governments in the watershed. The entire City, comprising 2,795 acres, is within the watershed.

The City's Public Works department, which addresses stormwater management and water quality issues, is engaged with the Council. The City of Ojai is a member of the Ventura Countywide Stormwater Quality Management Program, a group of partners that work together to improve stormwater quality, monitor watershed health, and comply with water quality requirements. The City responds to illicit discharges to storm drains, inspects construction sites and commercial and industrial facilities to insure implementation of stormwater pollution prevention controls, reviews development plans for stormwater mitigation controls, conducts public outreach, and maintains the City's storm drains and flood control conduits.



#### **California Coastal Conservancy**

510/286-4092

http://scc.ca.gov

The California Coastal Conservancy, established in 1976, is a state agency that uses entrepreneurial techniques to purchase, protect, restore, and enhance coastal resources, and provide access to the shore.

The Legislature created the Conservancy as a unique entity with flexible powers to serve as an intermediary among government, citizens, and the private sector in recognition that creative approaches would be needed to preserve California's coast for future generations. A seven-member board of directors, appointed by the Governor and Legislature, governs the Conservancy.

#### The Conservancy:

- Protects and improves the quality of coastal wetlands, streams, watersheds, and near-shore ocean waters;
- Helps people get to coast and bay shores by building trails and stairways and acquiring land and easements. The Conservancy also assists in the creation of low-cost accommodations along the coast, including campgrounds and hostels;
- Revitalizes urban waterfronts;
- Helps to solve complex land-use problems;
- Purchases and holds environmentally valuable coastal and bay lands;
- Protects agricultural lands and supports coastal agriculture;

• Accepts donations and dedications of land and easements for public access, wildlife habitat, agriculture, and open space.

The Conservancy also administers state park and water bond funds (e.g., Propositions 50 and 84) and awards these funds in the form of grants.

Millions of dollars in grant funding have been awarded by the Conservancy for projects in the watershed. For example, the Conservancy has played a key role in funding projects related to the removal of Matilija Dam and has funded a number of land acquisitions in support of a Ventura River Parkway.

#### **Water and Sanitary**

#### **Casitas Municipal Water District**

805/649-2251

www.casitaswater.org

Casitas Municipal Water District is a special district formed in 1952 to develop and supply water for agricultural and urban uses in the Ojai Valley and Ventura areas. Casitas is the largest water supplier in the watershed, serving close to 70,000 people and hundreds of farms. Their service area encompasses 150 square miles and includes the City of Ojai, Upper Ojai, the Ventura River Valley area, the City of Ventura south to about Mills Road, and the coastal Rincon area to the Santa Barbara County line. Casitas has approximately 3,200 service connections, including 300 agricultural connections; for a number of these connections Casitas is the "backup" supply, used only when groundwater supplies become depleted. A five-member elected board of directors governs the district.

The primary source of Casitas's water is Lake Casitas, built by the U.S. Bureau of Reclamation in 1959 along with Robles Diversion and Robles Canal.

Nine public and private water agencies use Casitas water, including the City of Ventura, Golden State Water Company, Ventura River Water District, and Meiners Oaks Water District. All of these water agencies rely on water from Casitas when their groundwater supplies are depleted.

In addition to operating and maintaining the reservoir and associated facilities, Casitas also operates and maintains a fish passage facility at the Robles Diversion and the Lake Casitas Recreation Area. Lake Casitas Recreation Area is a popular destination site with over 750,000 visitors each year. Recreational facilities at the lake include a lazy river water park, camping, picnicking, motor boating, sailing, canoeing, and fishing. Swimming or other body-contact recreational activities are not





permitted in the lake. In the past Casitas also managed releases of water from Matilija Dam, but this practice was discontinued in 2011.

#### **Ventura River Water District**

805/646-3403

www.venturariverwd.com

The Ventura River Water District (VRWD) is a special district formed in 1956 to provide water in the neighborhoods from Casitas Springs to the City of Ojai at the Vons shopping center. The district is governed by an elected five-member board of directors. VRWD's service encompasses about 2,220 acres, and includes residential and commercial customers. VRWD has approximately 2,100 service connections and serves a population of about 5,700 people.

VRWD obtains water from four wells adjacent to the Ventura River within the Upper Ventura River Groundwater Basin. Casitas Springs customers are always supplied from Lake Casitas. VRWD also has an agreement to purchase water from Casitas during emergencies and drought conditions.

#### **Meiners Oaks Water District**

805/646-2114

http://meinersoakswater.com

Meiners Oaks Water District (MOWD) is a special district formed in 1949 to provide water in the Meiners Oaks community on the east side of the Ventura River. The district is governed by an elected five-member board of directors. MOWD's service area encompasses approximately 1,300 acres, and includes residential, commercial, and agricultural customers. MOWD has approximately 1,200 service connections, serving about 4,200 people.

MOWD obtains water from five wells located adjacent to the Ventura River and within the Upper Ventura River Groundwater Basin. The district has an arrangement to purchase water from Casitas during emergencies and drought conditions.

#### Ojai Valley Sanitary District

805/646-5548

www.ojaisan.org

The Ojai Valley Sanitary District (OVSD) was formed in 1985 to provide sewer-related services to much of the urban areas of the watershed—from the City of Ojai and the Ojai Valley down to Ventura city limits. The district was created as a consolidation of the Ventura Avenue, Oak View, and Meiners Oaks Sanitary Districts, and the Sanitation





Department of the City of Ojai. They are governed by an elected sevenmember board of directors.

The service area of the OVSD is approximately 5,660 acres and includes about 20,000 residents. The district maintains 120 miles of sewer mainlines, five pump stations, and the treatment plant. Wastewater is collected and delivered to the OVSD Treatment Plant located five miles from the ocean, and one mile downstream from Foster Park on the east bank of the Ventura River. The treatment plant has the capacity to treat three million gallons a day.

The facility uses a tertiary, or advanced, treatment method, typically using no chemicals—just microbes, oxygen, and ultraviolet light. Treated effluent is discharged into the Ventura River and provides water to the lower Ventura River and the river ecosystem. Biosolids, the byproduct of the treatment process, are composted onsite by OVSD and the compost is made available free to the public.



805/646-1207

www.obgma.com

The Ojai Basin Groundwater Management Agency (OBGMA) was created to manage the groundwater within the Ojai Groundwater Basin for the protection and common benefit of agricultural, municipal, and industrial water users.

Creation of the Ojai Basin Groundwater Management Agency required a special act of the state legislature. The act became law in 1991 in the fifth year of a drought, amidst concerns of local water agencies, water users, and well owners about potential overdraft of the basin. The OBGMA is one of only 13 special act districts with legislative authority to manage groundwater in California (CDWR 2003).

There are five seats on the OBGMA board, which are filled by representatives from the City of Ojai, Casitas Municipal Water District, Golden State Water Company, Ojai Water Conservation District and mutual water companies (one director is elected to represent three mutual water companies).

The OBGMA oversees the management of the Ojai Basin, and is required by law to have a groundwater management plan to guide its operations. Elements of OBGMA's Groundwater Management Plan are implemented in the form of policies, rules, regulations, and ordinances. Water drawn from the basin is divided roughly equally between urban and agricultural users.





#### Land Management/Recreation

#### Ojai Valley Land Conservancy

805/649-6852 www.ovlc.org

The Ojai Valley Land Conservancy (OVLC) is a nonprofit organization formed in 1987 to protect the Ojai Valley's views, trails, water, wildlife, and working agricultural lands. The OVLC also provides educational enrichment for the community on its open space preserves. OVLC has roughly 1,200 members and is governed by an 11-member board of directors.

OVLC receives funding from member dues and donations, as well as grants and mitigation fees. Working only with willing landowners on a voluntary basis, OVLC protects land in perpetuity through purchase or by donation of either land or conservation easements (which convey only the development rights to the OVLC, not the title). OVLC has permanently protected 13 properties totaling over 2,300 acres, including roughly 1,900 acres of publically accessible open space preserves, and several conservation easements totaling over 200 acres. The Ventura River Preserve, OVLC's largest property, protects nearly 1,600 acres in and adjacent to the Ventura River, including three miles of the river. Over 25 miles of trails are maintained for the public's enjoyment on the six preserves that are open for public access.

Habitat restoration and enhancement is ongoing on many of OVLC's properties, including *Arundo* removal; and native grassland, oak woodlands, and wetland habitat restorations.

OVLC offers a number of ongoing education programs, leads hikes and hosts docents on its preserves, provides hands-on volunteer opportunities for students and interested community members of all ages, and is actively engaged with local partners for watershed protection. OVLC hosts, on behalf of the Ventura River Watershed Council, the Ventura River watershed coordinator—a grant-funded staff position serving the Watershed Council.



805/643-8044

www.venturahillsides.org

Formed in 2003, the Ventura Hillsides Conservancy (VHC) is a land trust operating in the Ventura region to protect and conserve open space resources through acquisition of land and easements, stewardship of protected lands, and public education about local natural resources. VHC has over 700 members and is governed by a 10-member board of trustees.



VHC receives funding from member dues and donations, grants, and events. VHC owns seven properties totaling nearly 30 acres; 25 of these acres are located in or adjacent to the Ventura River.

VHC's most recent land acquisition, the Willoughby Preserve, located near downtown Ventura, had been known for decades as "hobo jungle." With lots of help from volunteers, social service organizations, local government, and businesses, VHC has reclaimed the property to make it a clean and safe place where the community can enjoy rare access to the lower Ventura River.

VHC enjoys a strong volunteer base, organizes many community events, and is especially dedicated to creating opportunities for youth to experience and connect with nature.



805/764-5130 www.vcrcd.org

The Ventura County Resource Conservation District (RCD) is a special district that provides assistance to help rural and urban communities in Ventura County conserve, protect, and restore natural resources. A seven-member board of directors governs the RCD; directors must be landowners or agents of landowners residing within the district. The RCD is one of 99 resource conservation districts in California, and is primarily funded by grants.

The RCD's function is to make available technical, financial, and educational resources, whatever their source, and focus or coordinate them so that they meet the needs of the local land managers for the conservation of soil, water, and related natural resources.

Priority issues for the RCD include preservation of agriculture, open space advocacy, outreach and education on water resources, watershed protection, watershed restoration, control and/or eradication of invasive species, evaluating the potential impacts of loss of wildlife habitat, and maintaining air quality.

Some of the RCD's programs in the Ventura River watershed include the Mobile Lab Irrigation Efficiency Evaluation Program and the Stormwater Quality Best Management Practices Program, which includes staff support for the Horse and Livestock Watershed Alliance, and horse and livestock property best management practice education.





#### **Environmental**

#### Surfrider Foundation, Ventura County Chapter

http://ventura.surfrider.org www.venturariver.org

The Surfrider Foundation, formed in 1984, works for the protection and enjoyment of oceans, waves, and beaches through an activist network. The Ventura County chapter was formed in 1991 by local ocean enthusiasts who were concerned by the threat of beach armoring at Surfers' Point, which would have destroyed the surf break and the beach. The local chapter is governed by a five-member board of directors.

With over 800 members, many volunteers, and dedicated and persistent leadership, the local chapter is known for effectively working on integrated solutions to a number of local issues threatening the ocean, waves, and beaches.

Current programs and campaigns include Ocean Friendly Gardens, an education program that uses conservation, permeability, and retention to protect the environment and reduce polluted runoff; Rise Above Plastics, an education program aimed at reducing the impact of plastics in the marine environment by raising community awareness about the dangers of plastic pollution and presenting alternatives; Matilija Dam Ecosystem Restoration, an effort to remove the dam that is blocking sediment flow to local beaches and preventing migration of anadromous steelhead to their historic spawning grounds; Ventura River Parkway, an effort to restore the Ventura River ecosystem and recreate the human connection to the river that once existed; and Surfers' Point Managed Retreat, an ecosystem-based approach to managing the erosion at Surfers' Point as an alternative to building a seawall.



#### Santa Barbara Channelkeeper

805/563-3377 www.sbck.org

Santa Barbara Channelkeeper is a grassroots nonprofit organization, founded in 1999, whose mission is to protect and restore the Santa Barbara Channel and its watersheds through science-based advocacy, education, field work, and enforcement. Channelkeeper is advised by a 13-member board of directors.

Channelkeeper works on the water and in the communities along the Santa Barbara Channel to monitor water quality, restore aquatic ecosystems, advocate for clean water, enforce environmental laws, and educate and engage citizens in implementing solutions to water pollution and aquatic habitat degradation.

A member of both the international Waterkeeper Alliance and the California Coastkeeper Alliance, Channelkeeper is part of a large network of groups working to patrol and protect watersheds and defend their communities' right to clean water.

In the Ventura River watershed, Channelkeeper collects and analyzes surface water samples from the Ventura River on a monthly basis with their Ventura River Stream Team. Over a decade's worth of data have been collected and studied thus far, representing one of the best long-term datasets that exists on the river's water quality. These data are used by regulators to inform regulations (such as TMDLs) for the watershed. Channelkeeper also acts as a watchdog for environmental impacts in the watershed, engages many volunteers through their water sampling program, and educates hundreds of local students about the Ventura River watershed and water quality testing techniques.



#### Ojai Valley Green Coalition, Watershed Council

805/669-8445

http://ojaivalleygreencoalition.com

The Ojai Valley Green Coalition (OVGC) is a nonprofit organization established in 2007 to advance a green, sustainable and resilient Ojai Valley. OVGC has over 800 members and is governed by a nine-member board of directors.

OVGC works on a variety of fronts, with three separate issue-focused councils: renewables, energy efficiency, and appropriate lighting; local food; and watershed literacy and water security.

Education about ecological issues and sustainable practices is central to the work of OVGC. The group organizes an annual Green Home and Building Tour; hosts numerous educational meetings, films, and events; and maintains a green resources lending library.

OVGC advocates for changes in local policy, including initiatives to ban plastic bags and reduce excessive nighttime lighting. OVGC facilitates environmental responsibility by making it easier: it organizes waste collection and recycling events, secures discounts on solar systems, and provides bicycle valet parking at events. OVGC also works on restoring creekside habitats.



#### Friends of the Ventura River

805/620-7001

http://friendsofventurariver.org

Friends of Ventura River has a long history of advocating for the Ventura River. The group was established in 1974 to provide an independent organized means of addressing the multitude of threats to the Ventura River and to actively promote the preservation and restoration of its natural resources, including its unique fish and wildlife resources, for the benefit of present and future generations.

Since its inception, the Friends have actively participated in a wide variety of planning and regulatory processes affecting the Ventura River watershed at the local, state, regional, and federal levels. They have also pursued and supported research of the botanical and fishery resources of the Ventura River, producing important studies of the estuary and steelhead habitats of the Ventura River watershed. These reports have stimulated further scientific investigations, which have contributed to the management of the river's biological resources.

Through active participation in land-use and water management programs, the Friends, in collaboration with other local groups, have helped shape local, state, and federal plans, including the Ventura County General Plan, Ojai General Plan, city and county Local Coastal Plans, Ventura County Water Management Plan, and the Ventura River Trail Plan. Over the years, the Friends have reviewed countless land use decisions affecting the Ventura River.

The Friends contributed to the establishment of the U.S. Bureau of Reclamation's Teague Memorial Watershed to protect the Lake Casitas water supply, and to both the Ventura River Preserve and the Confluence Preserve, which are now owned and managed by the Ojai Valley Land Conservancy.

In 1999, with support from Patagonia and the Environmental Defense Center, the Friends organized the first multi-agency symposium to consider the removal of Matilija Dam.

The Friends were also instrumental in getting the Tidewater goby and the southern California steelhead listed as endangered under the U.S. Endangered Species Act in 1994 and 1997.

Recent work includes advocating for a Ventura River Parkway to advance protection and public enjoyment of the Ventura River, developing a watershed resources document library, and ongoing advocacy and education about the river and its watershed.



#### **Business/Landowner**

#### Farm Bureau of Ventura County

805/289-0155

www.farmbureauvc.com

Founded in 1914, the Farm Bureau of Ventura County is an independent, nonpartisan organization that is not affiliated with any government entity. It acts as an advocate for Ventura County's agricultural industry, promoting policies and fostering community action intended to preserve that industry's sustainability and vitality.

For decades, the Farm Bureau has played an important role in the effort to ensure an adequate, reliable, and affordable supply of water for Ventura County. It has worked with local water agencies to manage rivers, reservoirs, and aquifers equitably and efficiently, and to defend local water supplies against degradation and depletion.

In recent years, the Farm Bureau has taken a leadership role in helping farmers and ranchers comply with water-quality regulations aimed at agriculture. The most prominent of these efforts has been the creation and administration of the Ventura County Agricultural Irrigated Lands Group, or VCAILG. VCAILG is a program that allows participating growers to achieve compliance with state and federal water quality requirements by working collectively as a "discharger group" a much more cost-effective approach than individual farm compliance. The Farm Bureau administers the VCAILG program, with input and assistance from a VCAILG Steering Committee. It also partners with numerous public agencies, including municipalities, water purveyors, and state and county entities to coordinate watershed-wide initiatives to address water-quality issues.



#### Friends Ranch, Emily Ayala

808/646-2871

http://friendsranches.com

The Friends Ranch family has been growing citrus in the Ojai Valley for over 100 years. Five generations of the Friends family have lived and farmed in the valley.

Friends Ranch owns the roadside packinghouse familiar to travelers up Highway 33 near the mouth of the Ventura River. They pack citrus for wholesale markets and pack fruit and juices for farmers' markets. Friends Ranch is a member of the Ojai Pixie Growers Association, a group of almost 40 family-scale tangerine growers in the Ojai Valley who get together to share information about growing and selling the specialty Pixie tangerine—a exceptionally sweet, off-season tangerine particularly well suited to the Ojai Valley's climate.

In addition to serving on the Ventura River Watershed Council, Emily Ayala of Friends Ranch sits on the Ojai Valley Water Conservation District and is active with other growers in the valley in educating about protection of the agricultural industry in the Ojai Valley.



#### Oil Extraction – Aera Energy

661/665-5000

www.aeraenergy.com/ventura.asp

Aera Energy LLC is one of California's largest oil and gas producers, accounting for over 25% of the state's production. Formed in June 1997 and jointly owned by affiliates of Shell and ExxonMobil, it is operated as a stand-alone company through its own board of managers.

The Ventura County oil and gas operations of Aera cover approximately 4,300 acres located largely in the Ventura River watershed just to the northwest of the City of Ventura. Production averages 13,900 barrels per day of crude oil and 7.8 million cubic feet per day of natural gas. Oil is transported to refineries in the Los Angeles basin. Natural gas is shipped to Southern California Gas Co.

Aera and its forerunner companies have been actively producing crude oil in Ventura County since the 1920s. Much of the operation is now in secondary recovery water injection. Aera is the largest onshore oil producer in Ventura County.

Aera and its employees are actively involved in the local community, providing support to programs that benefit local students, charities, police programs, and economic development.

Over 110 employees work directly for Aera in Ventura, and over 600 contractors are employed at Aera's sites for daily operations and development. In addition, the company directly supports many local businesses, such as service providers on Ventura Avenue.



#### Ventura County Coalition of Labor, Agriculture, and Business

805/633-2291

www.colabvc.org

Ventura County Coalition of Labor, Agriculture, and Business, or VC COLAB, is a 501c(6) nonprofit formed in 2010 to work with public agencies and decision makers in Ventura County to provide regulatory solutions that support business and private property owners. VC COLAB is governed by a 14-member board of directors. The local group cooperates with the COLAB groups in Santa Barbara and San Luis Obispo counties.

VC COLAB seeks to provide a balance between environmental, regulatory, and economic concerns. Its goal is to facilitate a coalition of agricultural and other businesses to identify and research issues that impact business, work with regulatory agencies, and propose solutions.

Through active participation in land-use management policy development, VC COLAB has helped shape local policy and regulations, including the Ventura County Initial Study Assessment Guidelines for assessing biological impacts from development projects under the California Environmental Quality Act, the County's grading ordinance, and the Algae TMDL (Total Maximum Daily Load) state-promulgated water quality regulation.

VC COLAB is also working with the Ventura County Resource Conservation District, Horse and Livestock Watershed Alliance, and the Ventura County Cattlemen's Association to draft "Waivers" with the Regional Water Board that will help horse, cattle, and other livestock owners preserve their lifestyles and livelihoods.

### 1.2.3 Council Milestones

The following list includes milestones in the Council's development as an organization, as well as projects and grant awards that depended on the Council's involvement or support.

#### May 2006

Ventura River Watershed Council formed. The California Coastal Conservancy's Wetland Recovery Project launched the Watershed Council. Shortly thereafter leadership transferred to the Watersheds Coalition of Ventura County. A big part of the Council's early work was helping to develop a regional, integrated water management plan for Ventura County. These plans are a prerequisite for receiving water bond funding under Proposition 50 (2002) and Proposition 84 (2006).

#### January 2008

\$3,791,000 in Proposition 50 funding awarded for three projects:

1) a Ventura River Watershed Protection Project (largely surface water hydrology modeling to inform flood control), 2) San Antonio Creek Spreading Grounds Rehabilitation (groundwater recharge), and 3) Senior Canyon Mutual Water Company Equipment Upgrades (to reduce water demand) on Lake Casitas.

#### **April 2010**

"Watershed U – Ventura River" was held, a comprehensive educational series for the community that was coordinated by the University of California's Cooperative Extension office and supported by Watershed Council participants. This popular program provided 18 hours of educational presentations by local experts on a wide variety of watershed topics.

#### January 2011

**\$500,000** in Proposition 84 funding awarded for the Ojai Meadows Ecosystem Restoration Project.

#### February 2011

**\$75,000** in Proposition **84** funding awarded for a Biodigester Feasibility Study as a potential manure management option.

#### September 2011

Watershed coordinator hired. The watershed coordinator position was funded by a grant (\$277,906) from the California Department of Conservation, with additional support provided by several Watershed Council partners. Development of a Ventura River watershed management plan was a key objective of the watershed coordinator position. The Ojai Valley Land Conservancy generously offered to host the staff position.

#### January 2012

**Organizational identity strengthened.** Developed a mission statement, logo, and website for the Council. (www.venturawatershed.org)

#### **April 2012**

**Evening meetings.** The first evening meeting of the Council was held to accommodate the schedules of those who cannot attend daytime meetings. Evening meetings are typically held twice a year, in April and October.

#### May 2012

Governance Charter adopted. A governance charter was adopted, which outlines the organization's purpose, objectives, membership, and decision-making structure. The charter makes explicit the stakeholders' commitment to the work of the Watershed Council and helps give credibility to the Council's work.

An additional \$500,000 in Proposition 84 grant funding received for completion of the San Antonio Creek Spreading Grounds Rehabilitation project.

#### October 2012

**\$48,833 grant awarded** from the Bureau of Reclamation to expand the Watershed Council and help with the development of a watershed management plan.

#### October 2012 - July 2013

Built watershed management plan foundations; expanded information availability. Expanded stakeholder involvement; developed a Council brochure; held a Public Scoping Meeting about the plan; developed the plan's goals and objectives; added an interactive map viewer, map atlas, and video page to the Council's website; added Spanishlanguage materials to the website; compiled a comprehensive Document Inventory of watershed-related documents, reports, plans, and policies; and developed a master list of project and program ideas.

#### **July 2013**

**\$49,687 grant awarded** from the Bureau of Reclamation, a second year of the grant to expand the Watershed Council and help with the development of a watershed management plan.

#### October 2013

**\$1,500,000** in Prop 84 funding awarded for *Arundo* removal and public recreation and access improvements along Ventura River.

#### **April 2014**

Watershed coordinator grant extended. In response to the drought, the California Department of Conservation allowed a six-month extension for the watershed coordinator position (extending the grant to December of 2014). A small amount of additional funding was provided, with the rest coming from unspent grant balances.

#### December 2014

#### \$2.0 million in Proposition 84 drought grant funding awarded:

\$890,000 for an aeration system in Lake Casitas, and \$1.1 million for Arundo removal in San Antonio Creek.

#### March 2015

Watershed management plan completed. After two and half years in development, the Ventura River Watershed Management Plan was completed.

## 1.2.4 Council Funding

Since the fall of 2011, the primary support for the Watershed Council has been from the following two grants:

California Department of Conservation (DOC), Watershed

Coordinator Grant: \$280,844

Bureau of Reclamation, WaterSMART Cooperative Watershed

Mgmt. Program Grant: \$98,520

The required 25% matching funds for the DOC grant were provided by seven local organizations:

Ventura County Watershed Protection District

Casitas Municipal Water District

City of Ventura

Ojai Valley Sanitary District

Ojai Valley Land Conservancy

Ventura Hillsides Conservancy

Surfrider Foundation

These grants and matching funds supported a full-time watershed coordinator, office equipment/supplies, plus contractor support with map development, webpage development, administration, writing, editing, and graphics.

In addition to grant funding, the Watershed Council has been assisted since its inception with staff support by the Watersheds Coalition of Ventura County.



# 1.3 **The Planning Process**

1.3.1	Strengthen Organizational Capacity/Ensure
	Committed Leaders
1.3.2	Expand Stakeholder Involvement/Gather
	Stakeholder Ideas
1.3.3	Define Plan Purpose, Goals and Objectives, and Values 38 $$
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1.3.5	Characterize the Watershed
1.3.6	Develop List of Projects and Programs
1.3.7	Develop Implementation Strategy
1.3.8	Approve the Plan
1.3.9	Implement the Plan44

Clean Water Technical Advisory Committee Meeting, 2014

Photo courtesy of Lisa Brenneis



## 1.3 The Planning Process

The Watershed Council's process for developing the management plan was, by design, very broad, inclusive, and transparent. The Watershed Council's process for developing the management plan was, by design, very broad, inclusive, and transparent. The Council started with a rough idea of what a watershed management plan was and could do. This idea evolved as stakeholder input was received, as the Council grew in understanding, and as the plan took shape. With the guidance of a full-time watershed coordinator, the Council worked together for two and a half years to develop a plan that fits the watershed's and the Council's specific circumstances and constraints, and clearly reflects the voices of its many and diverse stakeholders.

The watershed management plan is intended to serve as a guiding document for the Council and also to inform and guide local decision makers, resource managers, public and private organizations, landowners, community members, students, and others about the watershed, the factors that influence its conditions, and the priorities for maintaining and improving its health and sustainability for the benefit of the people and ecosystems that depend upon it.

The plan is just one element of this process, however. The relationships established along the way, together with the ongoing communication and exchange of information that comes with those relationships, are the most valuable legacy of this Watershed Council's first Ventura River Watershed Management Plan. The Council's new strength has already had an impact on watershed management. The following sections describe the steps taken to successfully complete the plan.

# 1.3.1 Strengthen Organizational Capacity/Ensure Committed Leaders

Once the Council had committed to the development of a watershed management plan, they moved to strengthen the organizational capacity of the Council and to ensure the Council had committed leaders. Key aspects of these steps are briefly described below.

Funding for the Watershed Coordinator. Funding for watershed planning is not easy to come by, but the Council succeeded in securing grant funding from the California Department of Conservation in order to hire a full-time watershed coordinator for a three-year term. The Ojai Valley Land Conservancy agreed to host the position and six local agencies provided matching grant funds. The watershed coordinator began in

## Lorraine Walter, Watershed Coordinator, in her office



Ventura River Watershed Council's Logo



the fall of 2011. In October of 2012, the coordinator was able to secure additional funding from the US Bureau of Reclamation to further support the watershed management plan's development. One year of funding was awarded, with the potential for a second year based on performance. In July 2013 the Council was awarded a second year of funding.

Mission Statement, Logo, and Website. As part of building organizational identity, the Council defined its mission statement and approved a logo design that reflected the specific nature and characteristics of the watershed—dry, rocky and mountainous. The Council's website, http://www.venturawatershed.org, was launched in 2012.



Governance Charter. During the first half of 2012, the Council and an ad hoc committee worked on the language of a governance charter. While many in the group liked the informal nature of the group, people understood that development of a watershed management plan was a new undertaking and that there would likely be issues of substance that would benefit from having an established decision-making structure. The governance charter identifies the Leadership Committee—the voting members of the Council; by having participants agree to serve on the Leadership Committee, the Council was assured of the active and ongoing participation of members. The charter, which makes explicit the requirement for fair and balanced representation, lends an important authority and respect to the group. The Council's first charter was approved in May 2012, and is reviewed annually.

# 1.3.2 Expand Stakeholder Involvement/Gather Stakeholder Ideas

In its beginnings, Watershed Council meetings were attended primarily by representatives of public agencies—cities, counties, and water and sanitary districts, along with several long-standing environmental and nonprofit groups. A big focus of the group early on was helping the Watersheds Coalition of Ventura County write the Ventura County Integrated Water Management Plan and related grant proposals in order to secure some of the state's water bond funding.

Before beginning the development of the watershed management plan, considerable effort went in to reaching out to a broader range of stakeholders and inviting them to the table. As a result of the outreach efforts summarized below, Council meeting participation increased from an average of 15 to 20 people per meeting to an average closer to 30 to 40 people per meeting. Watershed Council meetings are held about nine times a year. The Council's email distribution list, which stood at 120 contacts in late 2011, has 370 contacts in late 2014.

One-on-One Outreach. Stakeholders from a much broader range of interests were invited to participate in the Council. Large landholders were approached, including growers, ranchers, and representatives from the oil industry. Personal contact was made with a wide range of agencies, organizations, and interests, including resource agencies, chambers of commerce, local government departments (fire, land use planning, environmental health, parks, public works, flood management, stormwater management), agricultural organizations, environmental groups, universities, consultants, water districts, water organizations, and land managers.

**Evening Meetings.** In 2012, the Council started holding one or two evening meetings per year for the benefit of stakeholders unable to attend daytime meetings. These meetings have been very well received and well attended, and succeeded in getting more participation by interested citizens, landowners, and businesses.

**Stakeholder-Targeted Meetings.** The Council publicized and held several topic-focused Council meetings in order to attract a wider variety of potential stakeholders: a public scoping meeting (to identify issues and concerns) for the watershed management plan, a meeting focused on agriculture, and a bilingual meeting to reach out to the watershed's Spanish speakers. At each of these targeted meetings, as well as at regular meetings of the Council, watershed-related concerns and ideas were gathered for integration into the watershed management plan.



**Public Scoping Meeting.** A public scoping meeting for the watershed management plan was held in October, 2012. Meeting outreach included direct mail invitations to streamside property owners; press releases; newspaper, radio and cable TV announcements; announcements by other groups including Association of Water Agencies of Ventura County, Ojai Valley Land Conservancy, Friends of Ventura River, and Ojai Valley Green Coalition. Sixty people attended, including 28 new participants. At the meeting, participants had the opportunity to provide written input on their five "biggest concerns" and "best ideas" with regard to the watershed. These concerns and ideas were recorded and distributed after the meeting, and were used in the development of the watershed management plan.

# Agriculture-Focused Council Meeting. An agriculture-focused meeting was held in October 2013; 69 people participated.





**Spanish-Speakers Outreach Meeting.** A special meeting was held in January of 2014 to bring information about watershed planning and improvements to Spanish speakers on Ventura's Westside, and to gather their ideas and input. The event was called "Exploring Your Backyard: Healthy Water, Healthy Communities."

The meeting was presented in both English and Spanish. Childcare and children's activities were provided. Topics included an overview of the watershed, where local water comes from, the watershed planning process, the drought, and access to the Ventura River near Ventura's Westside.

A representative from the California Coastal Conservancy described the importance of river parkways to surrounding communities. Representatives from Friends of Ventura River and Ventura Hillsides Conservancy talked about local opportunities to enjoy nature. The new Spanish language version of the Ventura River Parkway map was unveiled, and special guests from the community spoke about their connections with the Ventura River and how they are helping to build a healthy watershed.

# 1.3.3 **Define Plan Purpose, Goals** and Objectives, and Values

The writing of the watershed management plan began with clarifying its purpose, goals and objectives, and the overall values that would guide the development and implementation of the plan. This was done in a series of Council, Technical Advisory Committees (TACs), and ad hoc meetings between May and December of 2012. The process steps included:

- Based on input from the Public Scoping Meeting and research of other watershed management plans, the watershed coordinator prepared draft language for the plan's purpose, goals, objectives, and values as a starting point.
- After a general discussion of the draft language, the Council decided to form a TAC for each goal to refine the language.
- A special Agriculture/Economics Subcommittee meeting was held
  to work out whether supporting local agriculture should be included
  as a separate plan goal. The group recommended the addition of
  language specific to supporting agriculture in the other watershed
  management plan goals and objectives.
- The six TACs met and developed recommended goal and objective language for the Council's consideration.
- The Council approved the purpose, goals, objectives, and values language. See "2.1 Plan Guiding Framework" for this final language.

# 1.3.4 Educate Participants/Compile Reference Information

Much has been done already to understand and manage the watershed; and one of the most important outcomes of the watershed management planning effort was the sharing of that information with and among stakeholders.

The Ventura River watershed might be one of the most studied small watersheds in the nation. At just 226 square miles, the number of reports and studies that analyze watershed-related issues is remarkably large. Much has been done already to understand and manage the watershed; and one of the most important outcomes of the watershed management planning effort was the sharing of that information with and among stakeholders. Making that information readily accessible, translating technical data with visuals and slideshows, providing engaging videos—these efforts, described below, helped elevate the understanding of stakeholders so that discussions about issues could be clearer and more productive. These benefits continue with ongoing Council meetings.

Meeting Presentations. At most Watershed Council meetings, at least one presentation is provided by a watershed stakeholder. This is a means of keeping the meetings relevant and interesting while also increasing understanding and appreciation among Council members of the issues and subtleties involved in different areas of focus. These presentations are a rich source of current information about the watershed that becomes available to the public when they are posted on the Council's website after meetings. Forty-nine stakeholder presentations can now be found on the website.

Document Inventory. As part of research for the watershed management plan, and in order to make watershed data and information more accessible, a comprehensive document inventory was compiled. The inventory spreadsheet includes primarily watershed-specific documents, although some countywide documents are also included where appropriate. Reports, studies, plans, policy documents, and relevant educational materials are included in the inventory. Subjects include agriculture, climate change, coast and ocean, demographics, emergencies/hazards, flood management, geology, groundwater, hydrology, land use, Matilija Dam, recreation, resource conservation, restoration, habitat, San Antonio Creek, sediment, steelhead, water quality, water supply, and watershed-wide concerns.

The inventory spreadsheet includes many fields for convenient sorting, such as subject, date developed, who prepared the document and for whom it was prepared, and spatial area covered. The website URL is also provided when the document is available on the internet.

The document inventory contains over 500 entries, and the file is available for download on the Watershed Council's website.

Interactive Map Viewer
http://venturawatershed.org/
vwatershed-maps



Map Atlas and Interactive Map Viewer. It was important to the Council that the watershed management plan be interesting and user-friendly, so graphics, such as maps, photos and charts, were developed to help tell the story whenever possible. With this in mind, a comprehensive watershed Map Atlas was developed. The atlas is comprised of 36 high-quality maps covering a wide range of topics, all of which are posted on the Council's website and available for download. In addition, an online interactive map viewer was added to the website, which allows users to scroll and zoom in on the watershed map to get finer-scale information on several types of watershed data.

**Video Library.** Many Council stakeholders have produced valuable videos on a variety of topics related to the Ventura River watershed. To ensure that visual and oral information about the watershed is readily available, the Council's website was expanded to include a page devoted to videos about the watershed. Forty-five different videos with a wide variety of topics, from Arundo to water conservation, are featured on the page, along with a few videos produced by and for the Council itself.

**E-Newsletters.** The watershed coordinator assembles and distributes e-newsletters to the Council's distribution list several times each month. E-newsletter content includes Council meeting reminders, along with articles and announcements about other events, news, reports or happenings relevant to the watershed. These e-newsletters are posted to the Council's website as announcements and available for public view.

The newsletters were an important communication tool in development of the plan; they provided updates on the plan's progress and announced the availability of draft sections for review to a wide audience.

Website. In addition to the document archive, map atlas, and map viewer mentioned above, the Council's website contains a variety of other helpful information, such as the "Save More Water" page, a comprehensive reference for water conservation focused on Ventura County, background information about the Council and links to other organizations and data sources. The website was also an important communication tool in the development of the plan; meeting announcements, draft sections for review, and copies of the e-newsletters were posted there.

### 1.3.5 Characterize the Watershed

An important component of this watershed management plan process is the assembly of the watershed characterization. The characterization describes and illustrates the watershed's features such as geology, climate, surface water and groundwater hydrology, flooding, water supplies and demands, water quality, habitat and species and related issues, opportunities for access to nature, and demographics and local regulations.

Water Quality Technical Advisory Committee Meeting



The process for developing these sections varied based on the nature of the topic, but typically involved the watershed coordinator developing a first-pass draft of a section, using all of the existing documents available, and often in collaboration with local experts on the given topic. The first-pass draft was then circulated to the appropriate TAC for comments.

Once comments were integrated, a second-pass draft was sometimes issued to the TAC, or to a larger general list of stakeholders who had registered interest in reviewing drafts. Some topics, such as water quality, were not only technical but also raised sensitive policy issues and required several meetings of the TAC to work out acceptable language. In some cases ad hoc TACs were called for focused work on topic, such as developing a map of priority fish passage barriers.

A password-protected page on the Council's website was established and first-and second-pass drafts were posted there and made available to reviewers. This was especially important for draft files that were too large for emailing.

Work on characterizing the watershed went on simultaneously with work on other parts of the plan.

# 1.3.6 **Develop List of Projects and Programs**

The next step in writing the watershed management plan was developing a preliminary list of the projects and programs that stakeholders would like to see implemented to help achieve the goals and objectives.

As with the development of the goals and objectives, this process began with the watershed coordinating compiling a draft, which the Council's six TACs—one for each of the first six goals—then revised. The TACs met twice during this process. Work on the list started in February of 2013, and a working draft list of projects and programs was approved in June of 2013. The list contains almost 200 potential project and program ideas.

This process is further detailed in "2.4.1 Priority Project and Program List Development."

# 1.3.7 **Develop Implementation Strategy**

Perhaps the most challenging part of developing the watershed management plan was crafting an approach for a loose group of separate organizations—which all report to their own boards/members and are governed by their own budgets/priorities—to agree to some level of collective action and implementation.

Initially, the Council tried to develop a "Short-Term Action Plan" strategy that would prioritize projects and programs that might realistically be completed or worked on within a three-year time frame. In trying to craft

such an approach, the limitations became clear. Specific commitments by individual organizations could not be secured as this would require approval by each organization's governing board on projects/programs would need to be in line with that board's current priorities, etc.

What could be secured, however, was the commitment of each organization to work towards improving the health and sustainability of the watershed—individually, and where feasible, together. This work was in fact already occurring.

In November of 2013, a revised strategy, focused around six "campaigns," was crafted that offered a more realistic approach to the plan's implementation. Instead of focusing on separate individual priority projects or programs, the campaigns widened the perspective and focused on a short list of priority regional issues. Addressing those priority issues would depend upon implementation of a variety of different types of projects and programs, involving many different stakeholders at many different levels of effort. The campaigns were also structured to build upon work already underway.

By presenting the Council's priority projects and programs in this broader perspective, and by starting from work already underway, the campaigns offer a realistic framework for collectively achieving measurable improvements.

The Council's six implementation campaigns are:

- River Connections Campaign
- Resiliency through Infrastructure Campaign
- Extreme Efficiency Campaign
- Water Smart Landscapes and Farms Campaign
- Arundo-Free Watershed Campaign
- Healthy San Antonio Creek Campaign

See "2.3.1 The Campaign Approach" for more background on the campaign idea.

## 1.3.8 Approve the Plan

The Watershed Council approved Parts 1 and 2 of the plan—essentially "the plan" part of the plan—at their November 2014 meeting. Approval of Parts 3 and 4—the watershed characterization and supporting information—was approved in [...to be completedxx].

Instead of focusing on separate individual priority projects or programs, the campaigns widened the perspective and focused on a short list of priority regional issues.

## 1.3.9 Implement the Plan

Implementation of this plan through the six campaigns will be achieved by individuals and organizations working both independently and collectively. The extent of implementation will depend upon the availability of grant funds and the priorities and budget conditions of dozens of different organizations, as well as landowners and businesses.

An important factor in implementation success will be the continuation of the Watershed Council as a group. Council meetings cultivate the collaboration, information sharing, and partnerships that will advance the Council's goals for the watershed. The Council has secured modest programmatic support from 16 different local organizations that will fund part-time staff to keep meetings going through 2015. This will allow the group to maintain its momentum, build on the assets it has established, and continue to demonstrate its value.