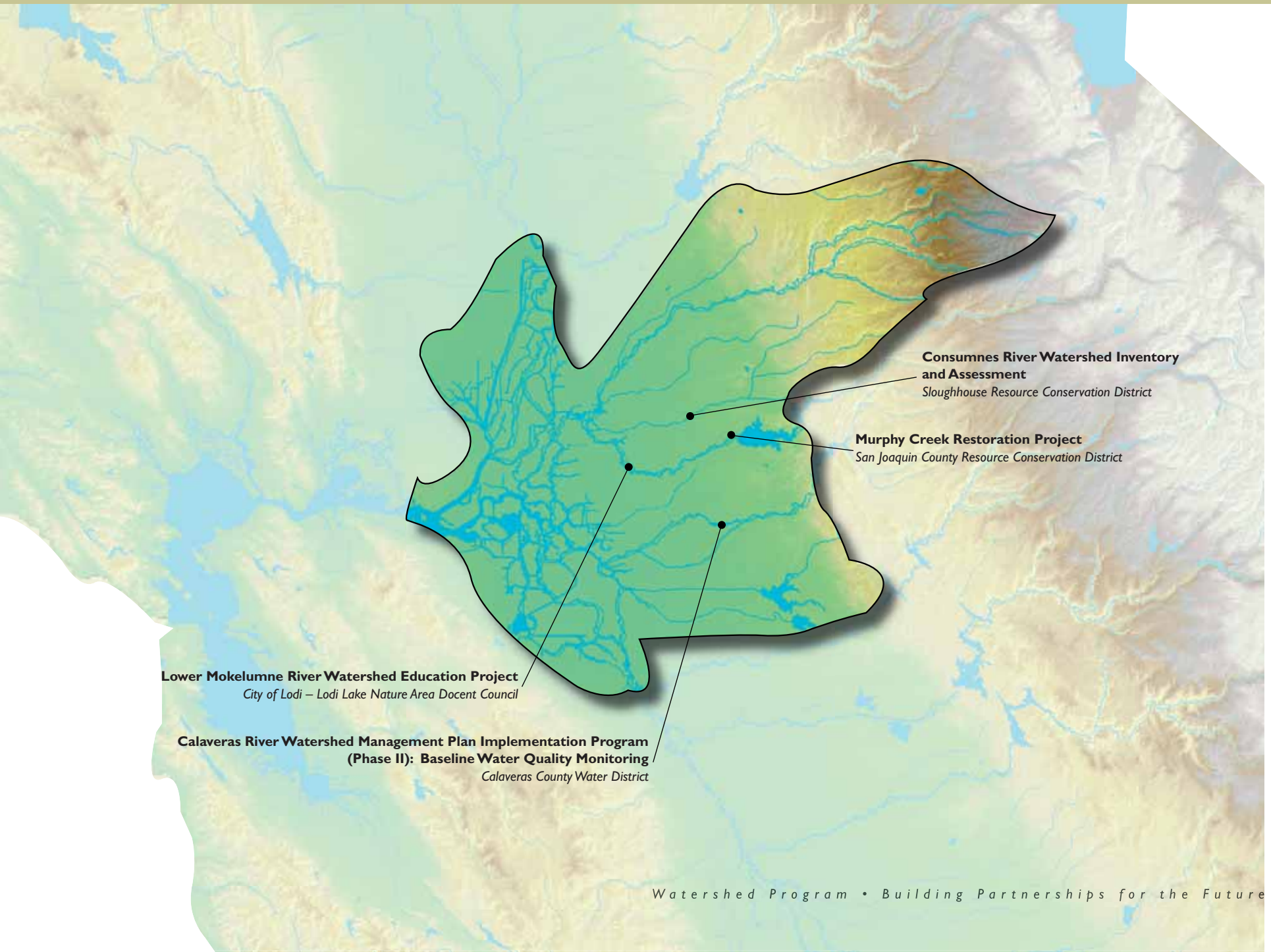
Consumnes River Watershed Inventory and Assessment
Sloughhouse Resource Conservation District
Murphy Creek Restoration Project
San Joaquin County Resource Conservation District
Lower Mokelumne River Watershed Education Project
City of Lodi – Lodi Lake Nature Area Docent Council
Calaveras River Watershed Management Plan Implementation Program (Phase II): Baseline Water Quality Monitoring
Calaveras County Water District

Delta Region Projects

Calaveras River Watershed Management Plan Implementation Program (Phase II): Baseline Water Quality Monitoring

Calaveras County Water District

An Adopt-a-Watershed program field trip is conducted on the Calaveras River at Monte Vista Recreation Area, just below New Hogan Dam.

Award Amount
$300,000

Watershed
Calaveras River Watershed

County
Calaveras and San Joaquin Counties

CALFED Region
Delta Region

Legislative Districts
US Congress: 3
State Assembly: 25
State Senate: 1

Purpose

The purpose of this project is to conduct water volume and water quality monitoring that will lead to improvements in the Calaveras River Watershed.

Project Goals

- Design and implement a baseline water quality, stream condition, habitat, and best management practice (BMP) monitoring program.
- Coordinate development of watershed management policies and oversee project implementation.
- Continue public outreach programs aimed at building a more informed and involved stakeholder group.
- Use data collected during baseline monitoring to identify protective and restorative measures.

Benefits to the CALFED Program

The Calaveras River Watershed is a component of the Ecosystem Restoration Program Plan's Eastside Delta Tributaries Ecological Management Zone and supports fall-run Chinook salmon and other fish, wildlife, and plant resources. Rapid growth and land use changes are threatening water quality and ecosystem resources in the watershed, as well as water supply to the San Joaquin River and the Bay-Delta. The Ecosystem Restoration Program's vision for the Calaveras River watershed is to restore and maintain important ecological processes that support a sustainable migration corridor for fall-run Chinook salmon. This project conserves and protects water volumes and water quality in the Calaveras River, which aids in restoring instream flows and makes the area less dependent on alternative sources of water.

Project Overview

The Calaveras River is located in Calaveras, Stanislaus, and San Joaquin Counties and flows downstream directly into the San Joaquin River System and then on to the Bay-Delta. The Calaveras River watershed is experiencing degradation of water quality and impairments to the ecosystem because of increased population and land use intensity.

It is the responsibility of the Calaveras County Water District (CCWD) to provide clean, contaminant-free drinking water for residents and visitors to the CCWD service district. To do this and also ensure that the Calaveras River remains in a state that supports the beneficial uses of the Bay-Delta system, this project addresses future availability of sufficient water supply and water quality by monitoring baseline water quality and supply volumes to ensure they are adequate and of high quality. To do this, the project monitors baseline water quality and monitors water supply volumes to ensure they are adequate and of high quality. Conducting monitoring now will help avoid the need for expensive treatment in the future and ensure there is enough water for human consumption as well as for fish and wildlife. The project uses citizen monitoring groups to conduct much of the water quality monitoring.

The project will help manage water supply and water quality in the watershed, which is critical to the health of the Calaveras and San Joaquin Rivers and the Bay-Delta system.

The Calaveras River just below New Hogan Dam at the Jenny Lind Water Treatment Plant intake.

Contact Information

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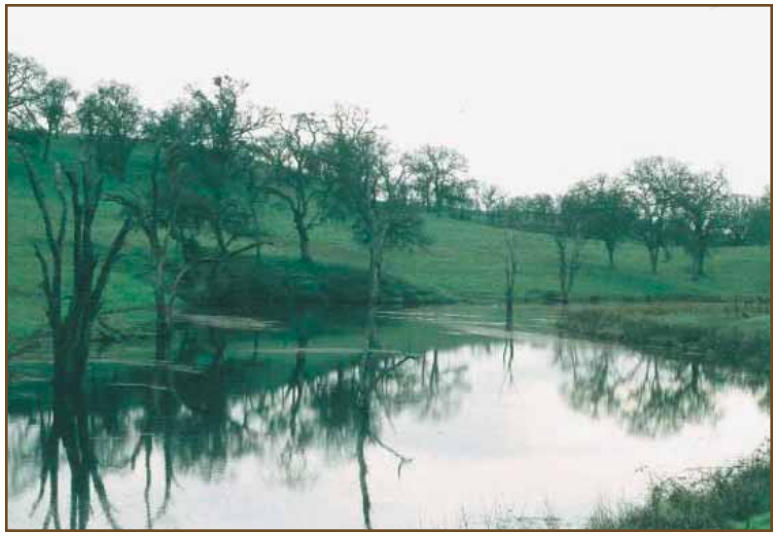

View above a livestock dam that will be breached in the Murphy Creek project.

Award Amount
$282,500

Watershed
Murphy Creek Watershed

County
San Joaquin and Amador Counties

CALFED Region
Delta Region

Legislative Districts
US Congress: 11
State Assembly: 26
State Senate: 14

Purpose

This project improves fish passage for salmonids and restores ecosystem processes, along with aquatic and terrestrial habitats in the Murphy Creek Watershed.

Project Goals

- Restore rearing and/or spawning habitat for Chinook salmon and steelhead.
- Restore native riparian vegetation to encourage the reestablishment of neotropical migratory birds and other special-status wildlife species.
- Improve water quality and improve water flows within the creek.
- Promote sustainable agricultural practices that continue to support livestock and vineyard production within the watershed.

Benefits to the CALFED Program

Benefits of this project include greater collaboration and coordination between landowners and agencies. Improved coordination is leading to better management of the Murphy Creek Watershed and lower Mokelumne River Watershed. This project contributes directly to CALFED Program goals, including recovery of at-risk species through restoration of rearing and spawning habitat for salmonids, rehabilitation of ecosystem processes by restoring in-channel flow, gravel recruitment to the Mokelumne River, and restoration of native riparian vegetation. This project restores a free-flowing stream and improves water quality by controlling erosion and improving the riparian environment. These actions provide direct benefits to the Murphy Creek Watershed, the Mokelumne River, and the Bay-Delta system.

Project Overview

Murphy Creek is a 5-mile-long tributary of the Mokelumne River that traverses Amador and San Joaquin Counties, entering the Mokelumne River immediately below the Camanche Dam. The Murphy Creek Watershed encompasses approximately 3,100 acres and forms the northernmost boundary of the lower Mokelumne River Watershed. The Mokelumne River is an important tributary of the Bay-Delta System and provides valuable habitat for Chinook salmon and steelhead. Restoration of Murphy Creek will provide the opportunity for landowners, agencies, and other interested parties to implement elements of the Lower Mokelumne River Watershed Stewardship Plan, developed in 2002. Implementation activities include measures to:

- remove barriers to fish passage,
- increase canopy cover to improve habitat for coldwater fish species,
- remove nonnative plant species and replace with native vegetation,
- reduce livestock access to riparian zones,
- repair minor erosion/bank instability to reduce creek sedimentation, and
- promote sustainable agriculture within the watershed through the use of best management practices.

Expected outcomes of the project are the restoration of historical salmon and steelhead spawning and rearing habitat in Murphy Creek with an associated increase in populations of neotropical migratory birds and other special-status species through the maintenance of sustainable agricultural practices, increased water flows, and improved water quality.

A portion of Murphy Creek located below a dam and in need of riparian restoration and removal of invasive plant growth.

Contact Information

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A geomorphologist classifies an eroding area at the head of Clear Creek.

Award Amount
$556,325

Watershed
Cosumnes River Watershed

County
Amador, El Dorado, and Sacramento Counties

CALFED Region
Delta Region

Legislative Districts
US Congress: 3 and 4
State Assembly: 4 and 10
State Senate: 1

Purpose

Gather information necessary to develop a long-range management plan for the Cosumnes River Watershed.

Project Goals

- Inventory and characterize stream channel erosion by subwatershed.
- Develop a map of unsurfaced roads in the entire watershed.
- Estimate relative sediment yield by subwatershed and land-cover/land-use type.
- Monitor and characterize sediment transport.
- Assess watershed conditions and identify resource problems.
- Prepare a watershed assessment report.
- Develop an extensive community outreach program.

Benefits to the CALFED Program

The Ecosystem Restoration Program has targeted the Cosumnes River Watershed for restoration of seasonally flooded habitat, tidal wetlands, splittail and Chinook salmon rearing habitat, sandhill crane habitat, and riparian plant communities. The inventory produced by the Cosumnes River Watershed Inventory and Assessment will be used to promote the CALFED Program's mission to restore ecosystem health by identifying problems in the Cosumnes River Watershed and by providing an information base for future watershed planning efforts. This project also supports water quality improvement and fish and wildlife habitat enhancement by prioritizing and recommending areas and resources for treatment to reduce erosion, sediment, and flood damage.

Project Overview

The Cosumnes River extends upstream from the marshes and valley oak riparian forests of the Delta to the coniferous forest at Plummer ridge in the Sierra Nevada above 7,600 feet. The Sloughhouse Resource Conservation District (RCD), in coordination with the Cosumnes River Task Force (CRTF), is completing a resource inventory of the Cosumnes River watershed. The inventory will be used to develop a watershed management plan. The resulting watershed management plan will guide resource planning, restoration, enhancement, and water quality improvements in the watershed.

The RCD uses information collected from previous studies, ongoing studies, and new data collection efforts to develop a watershed conditions assessment identifying resource problems throughout the watershed. Based on stakeholder meetings led by the CRTF, there is a strong local desire to complete a comprehensive watershed plan for the Cosumnes River Watershed. Other ongoing studies are collecting some, but not all, data necessary to specifically support a watershed planning effort. This project provides the additional information needed to fully support the development of a watershed management plan.

To ensure extensive stakeholder involvement, the RCD and the CRTF conduct extensive public outreach and education with continued coordination and facilitation by CRTF. CRTF has demonstrated successful integration of watershed efforts over the past 5 years. Outreach activities include coordination with related watershed organizations, such as the Mokelumne-Cosumnes Watershed Alliance, monthly updates on the CRTF website regarding project progress, a quarterly newspaper, and public meetings to present preliminary and final conclusions and to get public input.

These well-vegetated banks provide bank stability on the Cosumnes River.

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Lower Mokelumne River Watershed Education Project

City of Lodi-Lodi Lake Nature Area Docent Council

Local high school students participate in the "Storm Drain Detectives" program.

Award Amount
$70,140

Watershed
Lower Mokelumne River Watershed

County
San Joaquin County

CALFED Region
Delta Region

Legislative Districts
US Congress: 11 and 18
State Assembly: 17 and 26
State Senate: 5 and 14

Purpose

This project will establish the Lower Mokelumne River Watershed Education Project to expand and enhance monitoring and community outreach activities of the Lower Mokelumne River Citizen Monitoring Program.

Project Goals

- Continuation of Citizen Monitoring work on the Mokelumne River and the City of Lodi stormwater system, staffed by high school students and the general public.
- Research and painting of two Mokelumne River Watershed murals at the Lodi Lake Park.
- Feasibility study of the Lodi Lake Park area for a larger building to house environmental studies work.

Benefits to the CALFED Program

The Mokelumne River is the largest eastside Delta tributary and, therefore, an important element of the CALFED Program. The Ecosystem Restoration Program has targeted this watershed for habitat improvements, and the Water Quality Program is working toward improvements in dissolved oxygen levels and sedimentation in the Mokelumne River. This education project improves coordination and collaboration among agencies, organizations, and groups in the watershed. It validates and strengthens existing monitoring protocols, which aid decision-makers in making informed choices for water management. The project also expands an existing education and outreach program and helps define the relationship between watershed processes and the goals and objectives of the CALFED Program.

Project Overview

Funds were awarded in 2000 to the Lodi Lake Nature Area Docent Council for start-up activities of the Lower Mokelumne River Citizen Monitoring Program (Program) and to refurbish a part of the Lodi Lake Discovery Center for office space. This project will continue and expand on the work of the Program. The Program is a collaborative effort of the City of Lodi Public Works Department, the California Regional Water Quality Resources Board, Central Valley Region, and the Lodi Lake Nature Area Docent Council. It trains local students and citizens to serve as monitoring team members and also trains local high school science teachers to serve as monitoring team leaders. The Program established protocols and began regular sampling and testing of river, lake, and storm drain waters for certain physical and chemical parameters. Students use their field experiences to augment their classroom education and to satisfy their senior project requirements. The water quality data collected by the monitoring teams are made available to educators, agencies, and the public on a web site.

This project will expand the Program to augment the capabilities and activities of the Program to:

- Continue and expand storm drain and river water monitoring activities, including recruitment, training, and deployment of four additional monitoring teams.

- Diversify and expand Lodi Lake Nature Area Docent Council activities related to water quality and stewardship education, including the creation of two watershed murals and the initiation of a feasibility study for remodeling the current Lodi Lake Discovery Center.

Student volunteers clean the storm drain path to enhance water quality.

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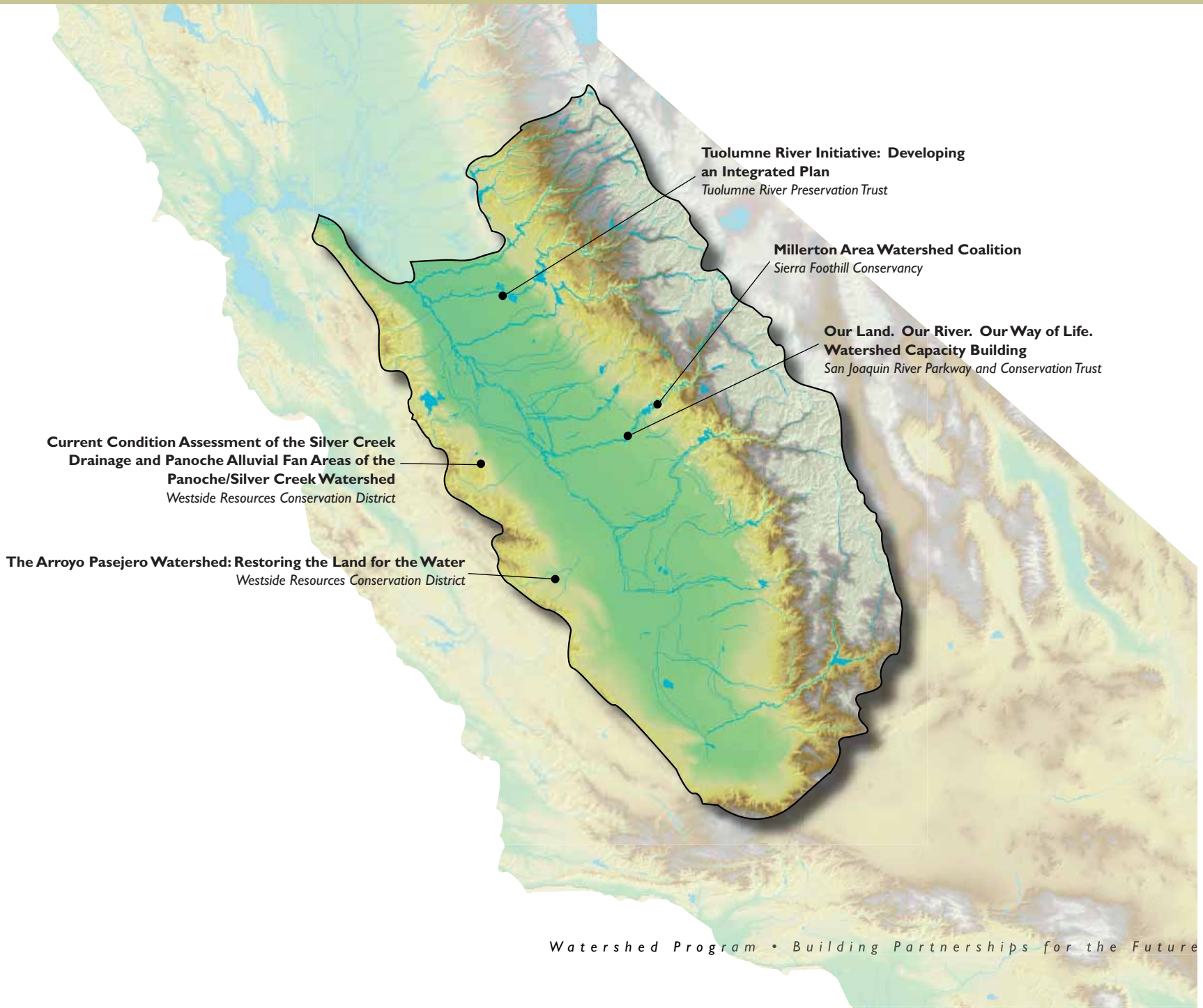
San Joaquin Valley Region



San Joaquin Valley Region Projects

A view of the Upper San Joaquin River, which is part of the Millerton Area Watershed.

Award Amount
$102,154

Watershed
Portions of San Joaquin River and tributaries, above Millerton Lake

County
Fresno and Madera Counties

CALFED Region
San Joaquin Valley Region

Legislative Districts
US Congress: 19
State Assembly: 25
State Senate: 14

Purpose

This project expands a small watershed group-the Millerton Area Watershed Coalition-into a broad-based coalition of property owners, policymakers, and other stakeholders in the Millerton Area Watershed.

Project Goals

- Build a community-based watershed group to focus on issues of concern in the Millerton Area Watershed.
- Collect and analyze data for a watershed assessment.
- Develop a proposal for a comprehensive watershed management plan.
- Provide education programs to landowners and local stakeholders.
- Create a repository for information about the Millerton Area Watershed.

Benefits to the CALFED Program

The Millerton Area Watershed is located in the foothills of the Sierra Nevada and includes multiple tributaries to the San Joaquin River. The primary uses for the land and water in the Millerton area are ranching and recreation, both of which affect water quality and the quality of the ecosystem. The Millerton Area Watershed Coalition focuses much of its attention on these land and water uses and coordinates citizen management of ranching and recreation to lessen sedimentation and improve water quality and ecosystem health, thus contributing to an objective of the Water Quality Program to reduce sediment in the San Joaquin River region. This project is also furthering CALFED Program goals by improving coordination and collaboration among government agencies, other organizations, and local landowners.

Project Overview

The Millerton Area Watershed consists of approximately 100,000 acres on both sides of the San Joaquin River. The majority of the watershed is privately owned and ranges from large cattle ranches to small-parcel home sites. The area also provides important recreational opportunities. Both ranching and recreation have potential to affect water quality as well as quality of the ecosystem. The formation of the Millerton Area Watershed Coalition is uniting local stakeholders to address issues of concern in their watershed. The Coalition is broad-based and inclusive of all interests with the ultimate goal of ensuring that water quality and quantity are sustainably managed with due consideration of economic and social issues.

Initial steps in the formation of the Millerton Area Watershed Coalition include informing all landowners and other stakeholders about the development of the Coalition. Their participation is encouraged and their input is solicited on key issues. Within the 2-year timeframe of the grant, the Millerton Area Watershed Coalition will be a fully functioning and effective body that will have accomplished the following:

- Begin collecting and analyzing data for a watershed assessment to identify existing and potential stressors that affect water quality and quantity.
- Create a plan to fund and implement a comprehensive watershed management plan.
- Provide a minimum of four education programs to landowners and the local community focused on issues related to watershed protection and best management practices.
- Create a repository for information related to the Millerton Area Watershed.

Finegold Creek is an important water source for the San Joaquin River.

Contact Information

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This project is helping to enhance management of the San Joaquin River so it can be enjoyed for generations to come.

Award Amount
$373,875

Watershed
San Joaquin River Watershed

County
Fresno and Madera Counties

CALFED Region
San Joaquin Valley Region

Legislative Districts
US Congress: 19
State Assembly: 25 and 29
State Senate: 14

Purpose

To improve watershed planning and management along the San Joaquin River by building local community capacity.

Project Goals

- Gage the level of public awareness and interest in San Joaquin River related issues.
- Conduct a balanced outreach program to increase awareness and provide public information on the San Joaquin River and watershed activities.
- Measure the success of the outreach program.
- Identify approaches to improve stakeholder awareness and participation in San Joaquin River watershed management.

Benefits to the CALFED Program

The Ecosystem Restoration Program Plan (ERPP) states that the ecological integrity of the San Joaquin River is critical to the ecological health of the Bay-Delta system. The ERPP vision for the river includes increased streamflows, reduction of salts and other contaminants, and maintaining a diverse, self-sustaining riparian zone. Achieving this vision is largely dependent upon the landowners and residents living in the San Joaquin River Watershed. This project increases public awareness of the dynamics of the San Joaquin River and watershed processes and increases support of improved watershed management. This project provides multiple benefits, including improved habitat and water quality, and forms the foundation needed to make improvements in the health and productivity of the San Joaquin River Watershed.

Project Overview

Although interest in restoring the San Joaquin River is increasing, there remains a lack of public awareness and understanding of the watershed. This project provides important baseline data on public awareness of San Joaquin River watershed issues to enable local watershed groups and government agencies to identify and collaboratively address issues of common concern.

The project has four phases. The first phase includes conducting a poll, in both English and Spanish, in a geographically representative area of the watershed, to gage the level of public awareness and interest in San Joaquin River watershed issues. The second phase is the development of a multimedia outreach program to increase awareness and provide public information on the San Joaquin River, CALFED Program, and watershed activities. The program includes signage, radio, television, and printed brochures. The next step is to conduct a second poll to measure the success of the outreach program and provide a feedback loop for further action. Results of the tracking survey will be evaluated and presented in a report. Lastly, the fourth phase includes providing a media training session to assist San Joaquin River Management Program members in understanding the key watershed messages that have been developed as part of the project and to practice clear and effective communication.

Education of the public on water-related issues is crucial to bringing balanced planning to the San Joaquin River.

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Current Condition Assessment of the Silver Creek Drainage and Panoche Alluvial Fan Areas of the Panoche/Silver Creek Watershed

Westside Resources Conservation District

Taking notes at a new automatic recording rain gauge in Griswold Hills.

Award Amount
$200,000

Watershed
Panoche/Silver Creek Watershed

County
Fresno and San Benito Counties

CALFED Region
San Joaquin Valley Region

Legislative Districts
US Congress: 21
State Assembly: 29
State Senate: 14

Purpose

Assess the condition of the Silver Creek drainage and a portion of Panoche Creek drainage to determine current resource conditions and help to develop best management practices (BMPs).

Project Goals

- Gather baseline information on the natural resource conditions of the two sub-watersheds.
- Incorporate the baseline data into a geographic information system (GIS).
- Issue a final baseline data report.
- Develop BMPs for the two sub-watersheds and continue monitoring resources.

Benefits to the CALFED Program

The Panoche/Silver Creek Watershed has some of the most dramatic resource concerns in the state and flows directly into the Delta via the San Joaquin River. The Ecosystem Restoration Program's vision for the Westside San Joaquin Basin includes improved water quality and floodplain processes. The Water Quality Program specifically targets improvement in selenium and sedimentation levels in the San Joaquin Valley. This project fosters a clearer understanding of the geology, geomorphology, soils, and hydrology of this watershed through a coordinated resource management plan program that engages landowners and other local stakeholders. This effort is vital to the establishment of proper selenium and sediment standards, as well as to properly designing a floodway and wildlife corridor.

Project Overview

Runoff from Panoche and Silver Creek Watershed (PSCW) has historically created flooding and sedimentation problems for the City of Mendota and surrounding agricultural lands. The PSCW is a principal source of selenium, salts, and other trace elements, contaminating the soils and groundwater in the Panoche alluvial fan and San Joaquin River. The PSCW Coordinated Resource Management and Planning team (CRMP) is working toward a comprehensive, collaborative watershed program. The program uses a consensus process to encourage improvement in beneficial uses and minimize damage to the watershed. The PSCW CRMP's objectives include decreasing flood damage and erosion, increasing channel stability, enhancing riparian areas and wildlife habitat, and preventing the impairment of high quality water.

Assessments have been completed in other parts of this watershed. However, owing to the size of this watershed (approximately 300,000 acres), these were done on a sub-watershed basis. This project completes the assessment of the entire watershed. It enables the CRMP and its participants to continue development and implementation of a collaborative, comprehensive watershed management plan that will address the program's objectives.

Monitoring to assess current resource conditions measures vegetative cover and rangeland use, estimates erosion from streambanks and upland areas, and delineates flood and sediment damage areas. Citizen monitoring, including areas of streambank erosion and historical flood and sediment damage, is also incorporated. These data are then incorporated into a geographic information system (GIS). Evaluation of the collected data facilitates characterization of current resource conditions that will contribute directly to improved management and decision-making regarding PSCW soil and water resources.

Surveying a channel cross section for crest stage gauge setup on Panoche Creek.

Contact Information

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Students learn what permitting and equipment might be needed to remove invasive tamarisk.

Award Amount
$200,000

Watershed
Arroyo Pasajero Watershed

County
Fresno and Kings Counties

CALFED Region
San Joaquin Valley Region

Legislative Districts
US Congress: 20
State Assembly: 30
State Senate: 16

Purpose

Develop ranch plans and implement best management practices (BMPs) to improve conditions in the Arroyo Pasajero Watershed

Project Goals

- Provide assistance to landowners in southwestern Fresno and Kings Counties for the development and implementation of farm and ranch plans.
- Decrease grazing impacts on the watershed.
- Reduce erosion through implementation of BMPs, including protecting stream channels and banks.
- Reduce flooding that enters the California Aqueduct and lowers water quality and threatens the integrity of the aqueduct.

Benefits to the CALFED Program

The Ecosystem Restoration Program Plan states that stressors to ecological processes, habitats, and species in the West San Joaquin Basin include livestock grazing, nonnative species, and agricultural practices. Through the implementation of BMPs, this project aims to address these stressors. Individually tailored ranch plans include a description of BMPs such as removal of invasive plant species, improvement of grazing patterns to decrease erosion and improve water quality, implementation of measures to control agriculture runoff, and stabilization of streambanks. Implementation of this project helps acheive the Ecosystem Restoration Program goals for the West San Joaquin Basin. The project will also reduce flooding, which impairs water quality and threatens the integrity of the California Aqueduct.

Project Overview

The 529-square-mile Arroyo Pasajero watershed is located in central San Joaquin Valley. The watershed is substantially impaired as a result of natural geologic erosion, which is accelerated by the decline of grassland and riparian vegetation. The area is prone to flooding, which moves massive amounts of sediment containing naturally occurring asbestos, salts, and other constituents to the valley floor. Floodwaters may enter the California Aqueduct, impairing water quality and threatening the integrity of the aqueduct. As a result, landowners in the watershed have formed the Stewards of the Arroyo Pasajero Coordinated Management Program (CRMP), whose goal is to reduce flooding and sedimentation through the implementation of best management practices (BMPs) in the Arroyo Pasajero Watershed.

The CRMP is working with farmers and ranchers to implement BMPs through individual ranch plans in an effort to address the flooding and sedimentation problems in the watershed. This project focuses on "low-infrastructure" solutions related primarily to drainage control, rangeland management, and cropland modifications that can be consistently implemented on a watershed-wide basis and uphold the traditional land usage. The process for obtaining a farm or ranch plan consists of a landowner submitting an application to the CRMP to have a plan designed. All infrastructure construction is done according to Natural Resource Conservation Service specifications and is administered through the Westside Resources Conservation District.

The implementation of BMPs through individual ranch plans will result in improved ranch and farm operations, including better distribution of cattle. Improved ranch operations will decrease grazing impacts and better stream channel and bank protection, which will reduce erosion and flooding.

Joe DiTomasso of UC Davis leads a session on weed identification and management.

Contact Information

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A riffle on the Tuolumne River in Stanislaus County.

Award Amount
$250,000

Watershed
Tuolumne River Watershed

County
Stanislaus County

CALFED Region
San Joaquin Valley Region

Legislative Districts
US Congress: 18
State Assembly: 17 and 26
State Senate: 12

Purpose

Integrate existing plans, activities, and projects into a single comprehensive Integrated Plan for the Tuolumne River Initiative.

Project Goals

- Maintain the Lower Tuolumne River Coalition as a forum for stakeholder coordination of projects.
- Integrate existing plans and projects with multiple objectives into a single integrated plan to improve the opportunity to maximize the benefits of each project and plan.
- Build local networks and capacity by engaging members of the community in watershed management.

Benefits to the CALFED Program

The Tuolumne River is the largest tributary in the San Joaquin River Basin and supports fall-run Chinook salmon and steelhead trout. The Ecosystem Restoration Program Plan (ERPP) states that an investment in the Tuolumne River Watershed during initial implementation will provide direct benefits to the river and dependent fish and wildlife resources, and help set the stage for subsequent implementation phases. Implementation of this project is successfully coordinating watershed management activities for the lower Tuolumne River. This coordinated effort will help to ensure success for individual organizations and for the ERPP and CALFED Program.

Project Overview

Many entities have developed plans and are implementing projects related to ecosystem restoration, recreational opportunity enhancement, and flood management of the Tuolumne River. Although these plans are generally mutually supportive, the Tuolumne River Initiative (Initiative) is working to ensure coordination of the various efforts and create one overall plan that will provide guidelines for future related projects. The Tuolumne River Technical Advisory Committee's Habitat Restoration Plan for the Lower Tuolumne River Corridor forms the scientific and technical basis for this integrated plan.

The Tuolumne River Watershed presently offers the surrounding community limited opportunities to learn about the river, its habitats, and its watershed. Energy and ideas for watershed management lie untapped within the community because of the lack of a forum to engage individuals or entities. This project creates a forum to share ideas and coordinate efforts.

The project has several goals. The first goal is to maintain the Initiative as a forum for coordination of projects along the river and collaborate with the involved entities and individuals for support and guidance in implementing projects. The second goal is to engage more members of the community in watershed management in the Lower Tuolumne River Watershed and in this way to build local networks and capacity.

The most tangible outcome of this project is the integrated plan itself, which contains a "roadmap" for ongoing and potential projects and management in the Tuolumne River corridor. It also creates a functional network of local entities with interests and responsibilities related to the Tuolumne River and its watershed. The network and connections also include other watersheds that are undertaking similar processes or addressing similar goals.

Cranes on the San Joaquin River National Wildlife Refuge, where 12,887 acres have been set aside as year-round wetland habitat.

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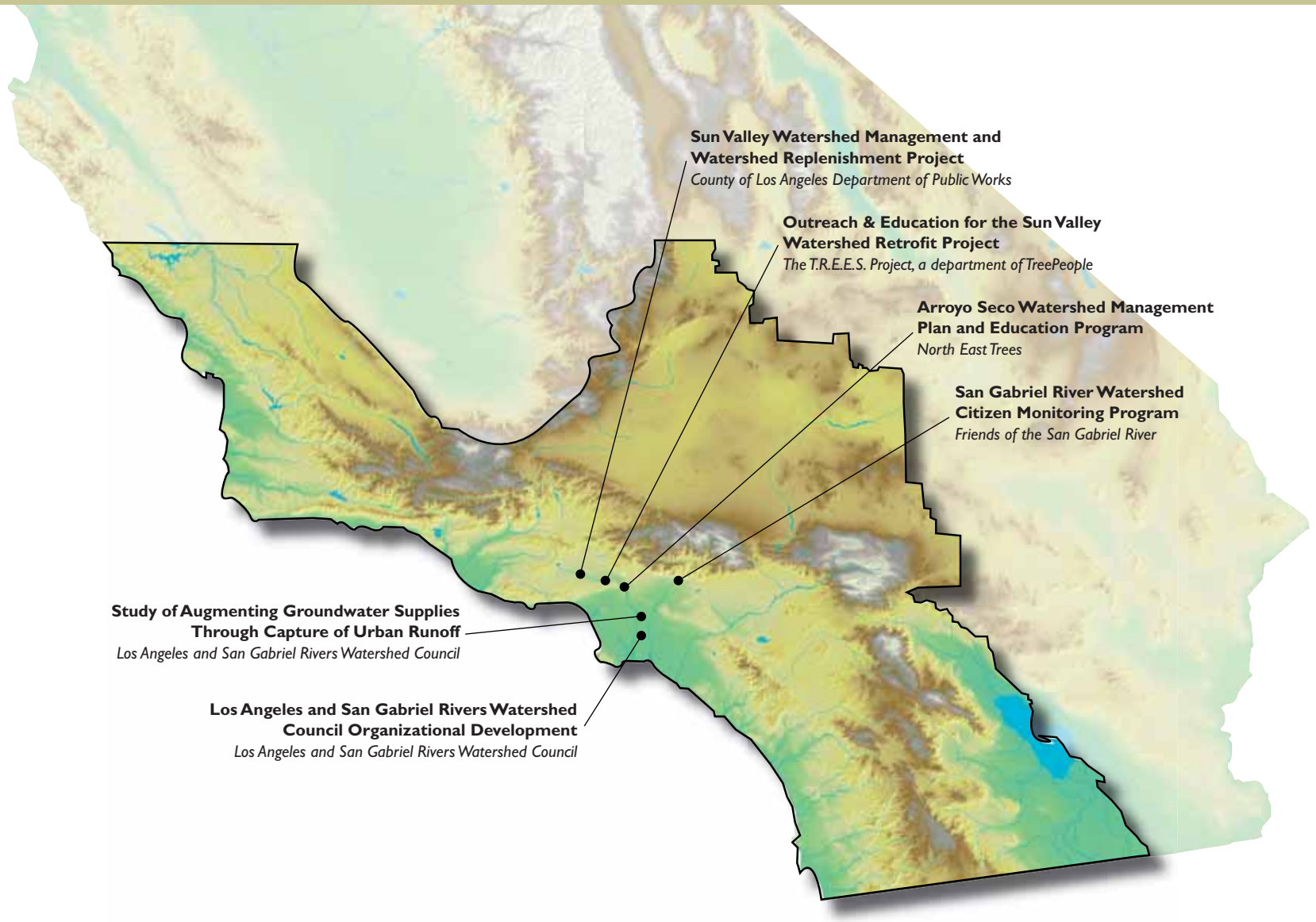
Southern California Region



Southern California Region Projects

Outreach & Education for the Sun Valley Watershed Retrofit Project

The Trans-agency Resources for Environmental and Economic Sustainability (T.R.E.E.S.) Project, a Department of TreePeople

Home Forester workshop teaches Sun Valley residents hands-on landscaping techniques that will conserve water and reduce stormwater runoff.

Award Amount
$350,000

Watershed
Sun Valley Watershed

County
Los Angeles County

CALFED Region
Southern California Region

Legislative Districts
US Congress: 26
State Assembly: 36
State Senate: 17

Purpose

Expand education and outreach to encourage the implementation of best management practices (BMPs) to control and capture stormwater runoff and reduce demand for water.

Project Goals

- Demonstrate, at the watershed level, the economic, environmental, and social benefits of BMPs and cooperative watershed management to sustain communities in this urban watershed.
- Use outreach and education to increase environmental literacy in community households.
- Organize and support a neighborhood steward network to create an environmentally sustainable vision.
- Support families as they evaluate their properties, prescribe changes, and implement BMPs.

Benefits to the CALFED Program

The Sun Valley Watershed is part of the CALFED Program's solution area and receives the majority of its water supply from imported sources. This project promotes BMPs to control and capture stormwater runoff and promote water conservation through a public outreach and education program. Retaining stormwater runoff can significantly augment the local water supply, thereby reducing the demand for imported Bay-Delta water. The education component fosters awareness of the ever-increasing demand on California's water supply and expands public awareness in Southern California of the area's dependence on imported water from the Bay-Delta. The project is intended as a pilot for the retrofit of the entire Los Angeles basin, which will eventually reduce demand on a much larger scale.

Project Overview

The Sun Valley project area is a 2,700-acre, 8,000-household urban watershed composed of multi-ethnic communities located in Los Angeles County's northeast San Fernando Valley. The area is a flat and near-treeless community located within the City of Los Angeles, prone to flashfloods because of the lack of storm drains. Unfortunately, the Los Angeles River Watershed is not engineered to capture this briefly abundant resource for local use. Instead, rain falls mostly on impervious surfaces, creating serious flood control challenges and eventually carrying a heavy pollutant load into stormdrains and the ocean. At the urging of T.R.E.E.S., Los Angeles County decided to favor an area-wide retrofit in accordance with best management practices (BMPs) that includes promoting ecological principles and water conservation rather than constructing stormdrains throughout Sun Valley.

This new vision allows regional stakeholders to pool their resources and retrofit the watershed with retention basins, cisterns, strategic tree planting, permeable pavement, groundwater infiltrators and other BMPs. These will help:

- eliminate flooding,
- promote conservation,
- reduce demand for water imports from the Bay-Delta,
- capture water,
- green the community,
- increase recreational opportunities,
- create jobs, and
- improve the quality of life for residents.

This project expands existing public outreach and education to promote the broad-scale adoption of water conservation BMPs in the Sun Valley Watershed. This project includes school education programs, community outreach, information sharing.

Zev Yaroslavsky, Maria Chong-Castillo, and Terri Grant at a recent Sun Valley Watershed Stakeholders Group Town Hall meeting.

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Sun Valley Watershed Management and Water Replenishment Project

County of Los Angeles Department of Public Works

Community residents view displays at a town hall meeting.

Award Amount
$430,000

Watershed
Sun Valley Watershed

County
Los Angeles County

CALFED Region
Southern California Region

Legislative Districts
US Congress: 27 and 28
State Assembly: 38, 39, and 43
State Senate: 17, 20, and 21

Purpose

To develop a Watershed Management Plan and a Programmatic Environmental Impact Report for the Sun Valley Watershed to assist in a pilot flood control and rainfall capture program.

Project Goals

- Develop a watershed management plan through a community process.
- Recharge and reuse an annual average of 2,100 acre-feet of rainfall from a 2,800-acre urban watershed tributary to the Los Angeles River.
- Reduce flooding and provide greater open space and recreational opportunities in this underserved community in the east San Fernando Valley.
- Reduce pollutant loading from urban runoff to the Los Angeles River.

Benefits to the CALFED Program

The CALFED Water Use Efficiency Program identifies implementation of water conservation and reuse measures as a primary focus in Southern California, a region that imports large amounts of Bay-Delta water. This project addresses chronic flooding problems in the Sun Valley Watershed by capturing, recharging, and/or reusing rainfall in the watershed and will result in conserving an annual average of approximately 2,100 acre-feet of water. In addition, the development of a watershed management plan with the local citizens empowers the community to develop solutions for a chronic flooding problem and increases local understanding of the importance of water conservation. As a pilot project that could be replicated eslewhere, this project stands to provide a large cumulative benefit to the CALFED Program.

Project Overview

The Sun Valley Watershed Management and Replenishment Project is a pilot watershed management project by the County of Los Angeles Department of Public Works (Department). The objective of the project is to retrofit a developed urban watershed with nontraditional structural best management practices (BMPs) to solve severe flooding conditions while retaining rainfall (approximately 2,100 acre-feet per year), increasing water conservation, recreational opportunities and wildlife habitat, and reducing stormwater pollution. The purpose of the current phase of this project is to develop a watershed management plan and a Programmatic Environmental Impact Report through a comprehensive community outreach and education program.

The Sun Valley Watershed is a 2,800-acre urban watershed tributary to the Los Angeles River, located northwest of downtown Los Angeles. The watershed includes the community of Sun Valley and portions of North Hollywood. The community is subject to chronic flooding conditions that have been present in the watershed for more than 30 years. Traditionally, flood control agencies like the Department have addressed these types of flooding conditions by constructing single purpose storm drains, which carry rainfall, a valuable resource, straight to the ocean. In the past, such a solution was proposed to address the flooding conditions in the watershed at an estimated construction cost of $40 to $45 million. In lieu of constructing storm drains, this pilot project implements the following structural BMPs to reduce flooding and capture rainfall in the watershed: dry wells, enhancement of rainfall absorption into the soil through mulching, multi-use of rainfall retention basins, pavement removal in areas such as schoolyards and parking lots, porous pavement, shallow grassy on-site retention systems (swales, basins, etc.), tree planting, underground municipal rainfall storage facilities, and underground residential cisterns.


the Sun Valley Watershed Stakeholders Group

Watershed Events

Volume 2, Number 3

Good reviews for SV plan

There wasn't any popcorn, but if it had been a movie, it would have gotten two thumbs up. "Residents like water plan," the *Daily News* announced. "This is a great thing," said Sun Valley resident Hugo Escobar.

Both reporter and resident were talking about an innovative plan to solve Sun Valley's chronic flooding problem. They were in the audience at a town hall meeting convened by the Sun Valley Watershed Stakeholders Group on Wednesday, November 20. For them, and most of those gathered in the Sun Valley Middle School auditorium, the biggest (and best) news was that the Sun Valley project has moved from the talking to the planning stage.

Community members heard from County Supervisor Zev Yaroslavsky and the project's managers about recent progress in designing sustainable solutions to the flooding, and about implementation schedules. They also had a chance to look at exhibits, ask questions and comment on the proposals that were presented.

Supervisor

Sun Valley residents are kept apprised of watershed news
and project developments through public meetings and newsletters.

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Study of Augmenting Groundwater Supplies through Capture of Urban Runoff

Los Angeles and San Gabriel Rivers Watershed Council

A worker implements the CALFED-funded Water Augmentation Study.

Award Amount
$971,800

Watershed
Los Angeles River and San Gabriel River Watersheds

County
Los Angeles County

CALFED Region
Southern California Region

Legislative Districts
US Congress: 30, 36, and 40
State Assembly: 41, 53, and 54
State Senate: 23, 25, and 27

Purpose

Assess the feasibility of capturing a currently wasted resource in urban stormwater that is associated with environmental problems and using it to augment groundwater supplies.

Project Goals

- Assess water quality implications of infiltrated urban runoff.
- Assess the effectiveness of various infiltration best management practices (BMPs) in reducing or eliminating pollutants.
- Quantify the amount of stormwater that could be realistically secured.
- Develop an implementation plan to deploy infiltration devices in appropriate locations and settings, along with guidelines for sustainability.

Benefits to the CALFED Program

This water augmentation study furthers the goals of the Water Use Efficiency Program by identifying and implementing new and innovative measures to improve the efficiency of local urban water use. The ultimate objective of this project is to reduce the impacts of water diversions on the Bay-Delta system through demand-side management and enhancement of available local water supplies. This study is a landmark endeavor that increases organizational collaboration and social capacity. It is a locally led effort that brings together ten federal, state, and local agencies to achieve a sustainable program for efficient water use. Local benefits are not limited to the Los Angeles and San Gabriel River Watersheds, as the results of the study and its design standards will be shared with other urban watershed groups.

Project Overview

This groundwater augmentation study is a pilot project with collaborative oversight of ten federal, state, and local agencies. The idea for an urban runoff capture program was conceived by these agencies as a possible way to reduce the amount of polluted stormwater runoff entering local streams. The project increases groundwater reserves by using infiltration best management practices (BMPs) to recharge groundwater with urban runoff. This study researches many unknowns about urban runoff retention in order to develop a sustainable stormwater capture program. Some of the research topics under study include:

- assessment of potential impacts on groundwater quality,
- identification of land uses that may have different impacts on contaminants found in runoff,
- determination of effectiveness of various recharge BMPs,
- identification of areas appropriate for installation of recharge BMPs,
- quantification of the amount of additional drinking water that could be harvested,
- assessment of the economic value of harvested water,
- development of design standards for BMPs, and
- identification and assessment of any institutional barriers to requiring or encouraging widespread installation of infiltration BMPs.

This water augmentation study grew out of the Los Angeles and San Gabriel Rivers Watershed Council's vision for their watersheds within the next generation (20-30 years). The vision statement includes a principal goal of "using all water resources efficiently," including increased use of reclaimed water, groundwater recharge, and detention of stormwater. When the vision is realized, the Los Angeles region, while still dependent on imported water, will be able to provide a far greater proportion of its own water needs.

A volunteer gets her hands dirty testing an urban stormwater supply area.

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Los Angeles and San Gabriel Rivers Watershed Council Organizational Development

Los Angeles and San Gabriel Rivers Watershed Council

Local citizens participate in the Volunteer Water Quality Sampling Event on the San Gabriel River.

Award Amount
$288,000

Watershed
Los Angeles and San Gabriel River Watersheds

County
Los Angeles

CALFED Region
Southern California Region

Legislative Districts
US Congress: 30, 36, and 40
State Assembly: 41, 53, and 54
State Senate: 23, 25, 27, and 28

Purpose

Provide a watershed coordinator to facilitate expansion of community capacity to effectively manage the Los Angeles and San Gabriel River Watersheds.

Project Goals

- Manage the watershed for sustainable economic vitality, environmental health, and sustainability.
- Assist the communities in efficient use of water resources.
- Restore the watershed habitats for wildlife.
- Improve water quality to support boating, fishing, and swimming.
- Maintain current levels of public outreach.
- Expand activities in ways that would establish an ongoing relationship with the CALFED Watershed Program.

Benefits to the CALFED Program

The Los Angeles and San Gabriel River Watersheds are located in the Los Angeles area, a large-volume water importer from the Bay-Delta System. This project provides resources to the Los Angeles and San Gabriel River Watershed Council to develop long-term partnerships with communities in the watersheds to help educate citizens about groundwater protection and water conservation, develop watershed management plans, and promote better stewardship of the watersheds. The CALFED Water Use Efficiency Program identifies implementation of water conservation and reuse measures as a primary focus in urban Southern California. Reducing the amount of imported water to the watershed provides a direct benefit to the Bay-Delta System by leaving more water in the system for a variety of beneficial uses.

Project Overview

This project is located within the Los Angeles River and San Gabriel River coastal watersheds of Los Angeles County, a densely populated and urbanized area in southern California. Communities in the Los Angeles and San Gabriel River Watersheds import large quantities of water from the Bay-Delta system and also rely on groundwater for domestic water supplies.

The Los Angeles and San Gabriel River Watershed Council provides ongoing outreach and education to diverse communities in the watershed. Their work includes educational material and building community involvement to improve watershed stewardship practices in the watersheds. Their efforts have helped produce several watershed management plans in the area.

This project supports the Watershed Council to expand activities and to transition from volunteer staff to paid professional staff. The Watershed Council is expanding long-term partnerships with various communities in the watershed to promote improved watershed management. Their work results in more efficient use of water and reduction of contamination of groundwater resources.

Volunteers monitor water quality in the San Gabriel River.

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Volunteers gathering samples from storm drains entering the San Gabriel River.

Award Amount
$51,120

Watershed
San Gabriel River Watershed

County
Los Angeles County

CALFED Region
Southern California Region

Legislative Districts
US Congress: 25 and 26
State Assembly: 36 and 59
State Senate: 17 and 29

Purpose

Develop a citizen monitoring plan for the San Gabriel River Watershed and its tributaries.

Project Goals

- Develop a comprehensive Citizen Monitoring Plan through a stakeholder-driven process.
- Educate members of the community of the need to protect and conserve groundwater resources.
- Become a forum for community members to become involved in management of the watershed.
- Generate financial and community support and attract volunteers to implement the plan through outreach efforts.

Benefits to the CALFED Program

The San Gabriel River Watershed is located in the Los Angeles area, which imports large volumes of water from the Bay-Delta system. The Water Use Efficiency Program Plan states that improvements in urban water use efficiency and associated reductions can result in water savings that can be reallocated to meet other water uses resulting in benefits to water quality and the ecosystem. This project is implementing a citizen monitoring program that educates citizens in the watershed about groundwater protection and conservation, leading to better management of the groundwater in the San Gabriel River Watershed. Direct benefits will ensue, as imports to the watershed can be reduced, resulting in greater water supplies available for beneficial uses in the Bay-Delta system.

Project Overview

The project is located within the San Gabriel River Watershed, a largely urbanized coastal watershed of Los Angeles. The San Gabriel River Watershed imports water from the Bay-Delta system and also relies on groundwater for domestic water supplies. Capturing stormwater and diverting it into spreading basins recharges much of the groundwater, but there is still contamination by urban runoff in the watershed.

This project is developing a citizen monitoring plan to educate the San Gabriel River Watershed community about protection and conservation of their ground water resources. The plan includes a description of the watershed, existing monitoring efforts, evaluation of existing information, identification of data gaps, and other watershed information. Outreach materials are also being developed as a component of the project. The outreach materials are leading to an increased community awareness regarding water conservation and groundwater supply reliability.

Implementation of the citizen monitoring plan is providing a forum for the community and promoting community involvement in watershed management. The Plan includes the evaluation of the water quality impacts of different land uses, effectiveness of non-point source best management practices and landowner education. The monitoring plan will allow the success of different watershed measures to be evaluated.

Overall, the development and implementation of a citizen monitoring plan for the San Gabriel River Watershed is improving the education of community members about groundwater protection and conservation. This will provide an arena for the local communities to become involved in effective management of groundwater resources of the San Gabriel River Watershed.

Sampling kits await volunteers for a day of sampling in the San Gabriel Watershed.

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A view of the Arroyo Seco project area.

Award Amount
$237,656

Watershed
Arroyo Seco Watershed

County
Los Angeles County

CALFED Region
Southern California Region

Legislative Districts
US Congress: 25, 26, and 32
State Assembly: 36, 37, and 59
State Senate: 17 and 29

Purpose

Research and develop a long-term implementation plan for the 47-square-mile Arroyo Seco Watershed, a major tributary of the Los Angeles River.

Project Goals

- Restore a more natural hydrologic function to the watershed, including stream restoration.
- Better manage, optimize, and conserve water resources, and improve water quality.
- Improve habitat quality, quantity, and connectivity.
- Improve recreational opportunities.
- Foster long-term agency and organizational support and collaboration for better watershed management.
- Educate and involve the public in watershed stewardship.

Benefits to the CALFED Program

The Arroyo Seco Watershed flows from the San Gabriel Mountains to the urbanized Los Angeles area, an importer of large volumes of water from the Bay-Delta system. This project builds from the Arroyo Seco Watershed Restoration Feasibility Study to develop a watershed resources plan. It also implements a citizen monitoring program to educate citizens about groundwater protection and water conservation to support better management of groundwater. This project creates a more informed citizenry and better management of water resources. Conservation of local water resources will make the watershed less dependent on water from the Bay-Delta, contributing to the Water Use Efficiency Program's goal of increasing urban water conservation, and leaves more water in the system for other beneficial uses.

Project Overview

The Arroyo Seco Watershed is drained by the Arroyo Seco River, a major tributary of the Los Angeles River, which extends from the San Gabriel Mountains above Pasadena to downtown Los Angeles. The watershed begins in the erosion-prone slopes of the San Gabriel Mountains and extends to the heavily urbanized setting of the lower watershed in Los Angeles. The Arroyo Seco Watershed community imports water from the Bay-Delta system and also relies on groundwater for domestic water supplies. The watershed is experiencing problems related to growth, including erosion and flood risks, degraded wildlife habitat, and polluted urban runoff and stormwater contaminating groundwater resources.

This project involves collaboration and support from diverse communities in the watershed to develop a Watershed Resources Plan. This plan integrates watershed management and education to inform citizens about groundwater conservation and protection of resources within the watershed. Outreach materials focus on increasing community water conservation and improving groundwater supply reliability. This project is also developing a citizen monitoring program to assess ecosystem improvements and water quality in the watershed. The long-term goal of the Arroyo Seco Watershed project is to implement projects that improve water conservation and water supply reliability, restore natural function to the Arroyo Seco River, and make other ecosystem improvements in the watershed.

A dry water channel in the Arroyo Seco Watershed.

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