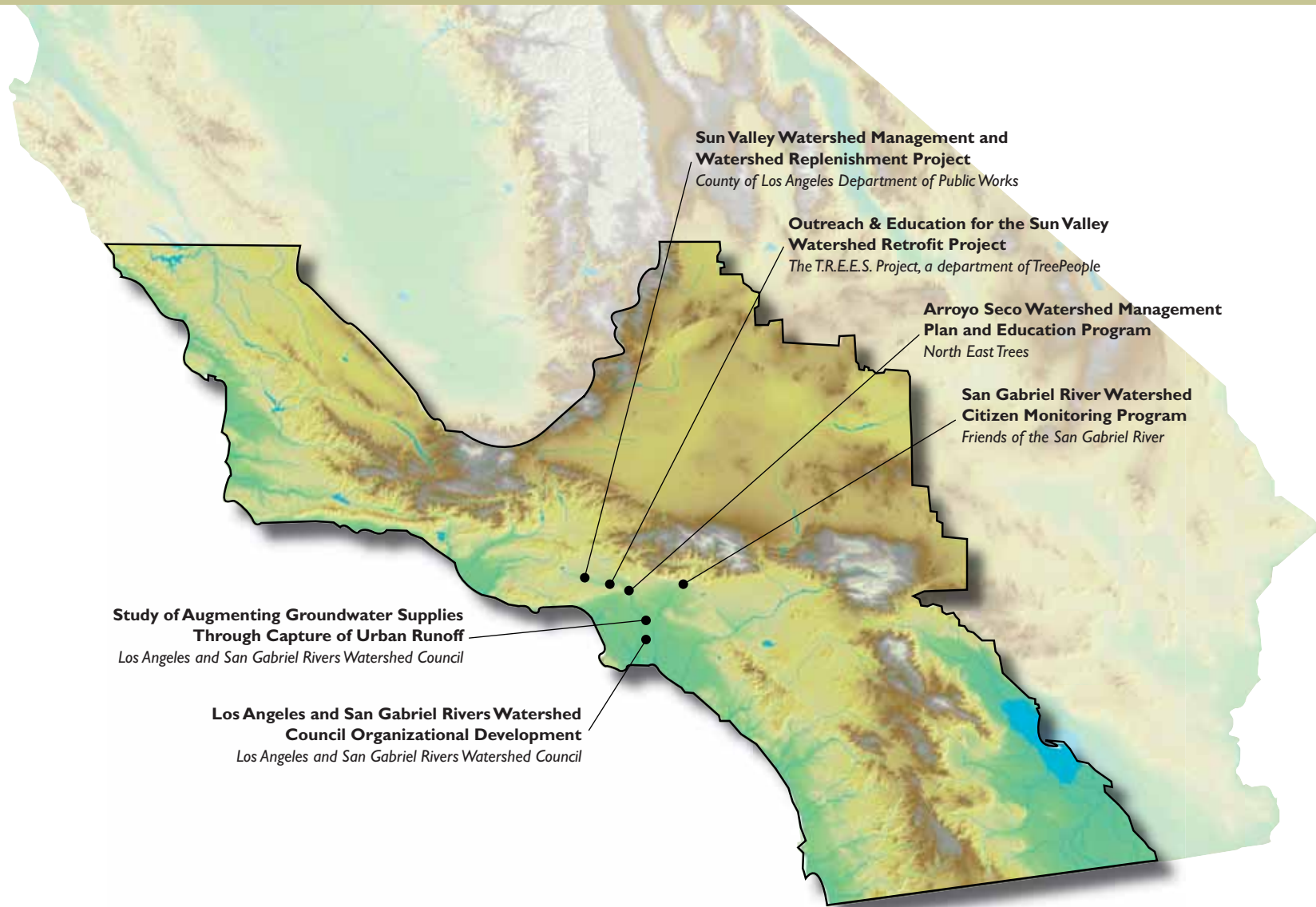


Southern California Region



Southern California Region Projects

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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.

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.

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

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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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 elsewhere, 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.



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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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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Photo courtesy of SCCWRP

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.



Photo courtesy of SCCWRP

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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