

Southern California Area Office Water Conservation Field Services Program Grants
 (based on original awarded amount)



Year	Recipient	Project Title	Description	Reclamation Contribution	Water Savings	Water Savings
2003	Metropolitan Water District	California Friendly Pilot Program	The project incentivizes builders to install California Friendly plants in new developments	\$262,000	40 acre-feet	40
2005	Inland Empire Utilities Agency	Chino Basin Water Efficient Demo Projects	The project demonstrated water efficient landscape technologies	\$50,000	0 acre-feet	0
2006	California Urban Water Conservation Council	Market Research Survey for Landscape Task Force	The project will create a market research survey for implementation by the Landscape Task Force.	\$ 50,000	0 acre-feet	0
2006	City of San Diego	Mapping Interface Enhancements to Urban Vegetation Satellite Imagery	The project will increase landscape efficiency through water audits with an estimated savings of 15% by using satellite imagery.	\$ 14,151	200 acre-feet	200
2006	Eastern Municipal Water District	California Friendly Median/Large Landscape Irrigation System Rebate Program	<i>California Friendly Median/Large Landscape Irrigation System Rebate Program</i> will target landscape water use in medians, parkways and large landscapes Multiple benefits include an estimated 20% reduction in water use totaling 50.4 afy; runoff reduction; knowledge transfer; and reduced demand for imported water supply.	\$ 50,000	50 acre-feet	50
2006	Lake Arrowhead Community Service District	Automatic Meter Read	The project proposes to install an Automatic Meter Reading (AMR Project) to increase water use efficiency to offset future demands on the District's limited water supplies.	\$ 50,000	2,500 acre-feet	2500
2006	Long Beach Water Department	eWaterUpdate	The purpose of this project is to help people use irrigation timers more efficiently by notifying them, via email, when their timer should be adjusted and by how much.	\$ 23,636	0 acre-feet	0
2006	Long Beach Water Department	Outdoor Water Use Efficiencies	The purpose of this project is to implement three activities within an urban school: (1) replace irrigation system , (2) purchase and install of weather-based irrigation controller and (3) the design and construct a demonstration garden.	\$ 92,000	0 acre-feet	0
2006	Mission Resource Conservation District	Irrigation Technology Demonstration Project	The purpose of the project is to achieve water savings by changing the attitudes and behaviors of residential and agricultural water users with regard to the decisions they make about how to manage and conserve water outdoors.	\$ 42,938	1,155 acre-feet	1.155
2006	Metropolitan Water District	World Water Forum	The purpose of the program is to underscore the importance of water quality and conservation issues, Metropolitan Water District of Southern California (MWD) along with other partners will establish a grant competition for community colleges and universities. Grants will be offered for research and development on the implementation of water-use efficient concepts or technology that can be cost-effectively implemented in water-stressed regions, locally or internationally.	\$ 50,000	0 acre-feet	0

2006	Metropolitan Water District	Innovative Conservation Program	The ICP provides grant funding to explore the water and energy savings potential and practicality of new water conservation technologies. The ICP projects will enhance existing data and/or generate new data on innovative water/energy conservation technologies.	\$ 300,000	0 acre-feet	0
2006	Otay Water District	Cash to Grass	The Cash to Grass Project will focus on working with a developer to install water-wise landscapes in front yards within a development or directly with the new homeowners. The more visible the water-wise landscape, the better chance it has of catching on with the developer community as well as with the new homeowner.	\$ 50,000	8 acre-feet	8
2006	County of Riverside	Wood Crest Library Water Wise Garden	The purpose of this funding is toward construction of a Water-Wise Garden as an educational and conservation resource for public in the County of Riverside.	\$ 30,000	0 acre-feet	0
2006	City of San Fernando	Conservation Garden - Heritage Park	Heritage Park will be constructed on a vacant City 3 acre parcel to include a conservation garden with native plantings, riparian plantings, dry stream bed system to retain storm water, and the installation of an irrigation water management system using CIMIS, and educational signage identifying plant material.	\$ 30,000	20% annually	0
2006	San Jacinto Basin Resource Conservation District	Forage Crop Irrigation Demo	This project provides for the demonstration of precision irrigation management and scheduling strategies for dairymen growing forage crops (primarily alfalfa) in the San Jacinto Valley of western Riverside County. The project will improve irrigation efficiency and application uniformity, improve crop yields and prevent crop stress.	\$ 50,000	0 acre-feet	0
2006	West Valley Water District	Conservation Study and Plan Development	The District will develop a water conservation plan for its service area and conduct a pilot study to identify whether ET controllers or moisture sensing irrigation controllers generate significant water savings within the two microclimate zones	\$ 26,012	0 acre-feet	0
2007	California Urban Water Conservation Council	Smart Urban Landscapes	The Council will develop guidelines and residential landscape design templates that will facilitate the installation of more water efficient landscapes, promote the use of innovative irrigation technologies, and improve the public's understanding of good water management, thus achieving the highest potential outdoor water savings at the lowest practical cost.	\$ 50,000	0 acre-feet	0
2007	Elsinore Valley Municipal Water District	Multi-Stream Rotor Sprinkler Head Retrofit Program	The District intends to run a sprinkler retrofit program that will reduce the need for imported water, save customers money, and reduce irrigation runoff in their service area. EVMWD will supply Multi-stream rotor sprinkler heads (MP rotor) to customers, verify installation and scheduling, and then track water savings.	\$ 20,000	320 acre-feet	320
2007	Joshua Basin Water District	Desert Water Conservation Demo Project	The District proposes to develop a set of professional residential landscape plans unique to the High Desert. The landscape plans will be developed to meet the requirements of the model landscape ordinance for single family homes. The model landscape ordinance will limit water usage in new development.	\$ 25,000	0 acre-feet	0

2007	Los Angeles Department of Water and Power	Residential High Efficiency Clothes Washer Instant Rebate Program	The District proposes to implement a pilot project to assess the effectiveness and determine the relative strengths/weaknesses associated with offering a high efficiency clothes washer (HECW) point-of-sale (instant) rebate to LADWP customers.	\$ 50,000	30 acre-feet	30
2007	Los Angeles San Gabriel Rivers Watershed Council	Residential Landscape Retrofit Demonstration for Water Conservation and Water Supply	The Project will demonstrate how Low Impact Development Strategies can be applied to existing urban infrastructure to address runoff management, water conservation pollution reduction and treatment, flooding, and habitat creation by retrofitting a residential street with state-of -the-art Best management Practices (BMP's).	\$ 75,000	2 acre-feet	2
2007	Municipal Water District of Orange County	Water Loss Management Program	MWDOC's goals for the project are to quantify municipal water system losses and identify the source of those losses. The investigation will use international methods adopted by the AWWA/IWA in water auditing and water balance, and utilize spreadsheet software prepared and adopted by the AWWA/IWA Water Loss Control Committee.	\$ 65,000	4,754 acre-feet	4754
2007	San Diego County Water Authority	Residential Water Budget Pilot Program	This pilot program will provide landscape water budgets to the top 25% of single family residential lots using aerial imagery to measure the landscape.	\$ 67,400	125 acre-feet	125
2007	West Basin Municipal Water District	Water Efficiency Equipment Installation	The District will implement an innovative CII Program that provides business and facilities with incentives, resources, and technical assistance to install water efficient equipment. The program will inspect as many as 100 cooling tower sites and 100 industrial sites to determine potential participation of the business or industry.	\$ 66,000	120 acre-feet	120
2007	Western Municipal Water District	Water Conservation Demonstration Project	The Demonstration Program includes several focused activities intended to increase efficiency and reduce outdoor water use for residential and high water commercial/industrial/institutional (CII) consumers with the District's retail service area. The Demonstration Program activities include irrigation retrofits for large landscapes and preparation of educational tools for residential landscaping.	\$ 74,085	75 acre-feet	75
2008	City of Corona	Residential Pilot Program	The City proposes to coordinate and administer the direct installation of Weather Based Irrigation Controllers – a Residential Pilot Program that will reduce the need for imported water, save customers money, and reduce irrigation runoff in their service area.	\$ 30,000	240 acre-feet/year	240
2008	Metropolitan Water District	Innovative Conservation Program	The ICP provides grant funding to explore the <u>water and energy</u> savings potential and practicality of new water conservation technologies. The ICP projects will enhance existing data and/or generate new data on innovative water/energy conservation technologies.	\$ 228,000	200 acre-feet	200
2008	Municipal Water District of Orange County	Industrial Process Expansion Program	The program provides businesses with engineering surveys to identify water saving process improvements and offers financial incentives to help implement the recommended changes. The Program targets the following four industry sectors: Food Processing, Textile Manufacturing, Metal Plating, and Electronics Manufacturing. Reclamation funding will assist MWDOC in continuing this program effort.	\$ 115,000	603 acre-feet	603

2008	Rancho California Water District	Demo Study-Avocado Groves	The District is proposing the use of weather-based smart irrigation controllers at avocado groves in the Rancho California Water District service area.	\$ 100,000	20% reduction	
2008	San Diego County Water Authority	Smart Landscape Retrofit Program	The project will consist of researching, developing, and implementing a comprehensive and integrated water-efficient landscape retrofit program targeting common interest developments. The project will integrate several ongoing elements from SDCWA's landscape conservation program.	\$ 100,000	441 acre-feet	441
2008	West Basin Municipal Water District	Water Conservation Plans	The District will assist its water purveyors in developing their own local water conservation plans.	\$ 100,000	0 acre-feet	0
2009	City of Long Beach	Drought Resistant Garden	The Department is proposes to develop a water conservation education and sustainable drought-resistant landscaping technology demonstration garden on the site of the Aquarium of the Pacific in Long Beach.	\$ 80,000	0 acre-feet	0
2009	Eastern Municipal Water District	Landscape Information Database	The District proposes developing a Landscape Information Database that will update and improve the accuracy of landscape areas estimated for over 130,000 of EMWD's customers. When used in the implementation of the allocation based water rate it is estimated that this program could improve water efficiency approximately 5% over the implementation of the rate without this database.	\$ 10,000	400 acre-feet	400
2009	Inland Empire Utilities Agency	California Friendly Landscape Program	The Agency is proposing to provide rebates for 33 or more residential landscape sites and 36 or more residential landscape audits as funding becomes available. The Agency proposes to provide a workshop series for residents and professionals and develop and distribute a landscape manual.	\$ 30,000	25 acre-feet	25
2009	Los Angeles San Gabriel Rivers Watershed Council	Green Alleyway Landscape Retrofit	The project will retrofit an alleyway using state of the art Best Management Practices (BMP's) to demonstrate how Low Impact Development strategies can be applied to retrofit urban infrastructure. The purpose of the study is to explore the potential for increasing local water supplies and reducing urban runoff pollution by increasing infiltration of storm water runoff.	\$ 25,000	4 acre-feet	4
2010	Metropolitan Water District	Conservation Market Study	The District is evaluating its urban incentive programs to determine the most efficient use of financial resources to achieve maximum water savings. The results of the study will provide a direction for Metropolitan's future conservation programs.	\$ 150,000	10,000 acre-feet	10,000
2010	Metropolitan Water District	World Water Forum	The purpose of the program is to underscore the importance of water quality and conservation issues, Metropolitan Water District of Southern California (MWD) along with other partners will establish a grant competition for community colleges and universities. Grants will be offered for research and development on the implementation of water-use efficient concepts or technology that can be cost-effectively implemented in water-stressed regions, locally or internationally.	\$ 100,000	0 acre-feet	0

2011	City of Anaheim	Water Use Efficiency Master Plan	The project will develop and adopt a forward-thinking Plan that will outline specific program concepts and optimal delivery methods for each water-saving technology under consideration. Using a board economic analysis, the costs and benefits for each program concept will be provided in order to establish the recommended program mix and implementation options. The City will develop performance measures to evaluate progress and monitor timing and resource requirements of the recommended programs to ensure water use efficiency can be achieved in a cost effective manner.	\$ 72,000	\$ 5,000	5,000
2011	West Basin Municipal Water District	Landscape Irrigation Program	The program will provide landscape surveys and high-efficiency irrigation nozzles to residents and the Commercial, Industrial and Institutional (CII) sectors throughout the District's service area.	\$ 100,000	1,478 acre-feet	1,478
2011	City of Corona	Water Use Efficiency Master Plan	The plan will identify the large water consumers in the City and create strategies it improve their efficiency. The Plan will also identify cost-effective and innovative capital improvement projects that will help conserve water including increasing reclaimed water use, groundwater recharge, and updating inefficient and outdated infrastructure. One of the most important objectives of the plan is to pave the way to identify and prioritize water conservation projects that will help the City achieve their 20% by 2020 State mandated target. The plan is estimated to reduce per capita use by 16 gallons per day.	\$ 100,000	0 acre-feet	0
2011	Upper San Gabriel Municipal Water District	Water Conservation Master Plan	The purpose of the proposed project is to develop a Water Conservation Master Plan for the Upper District with the objective of utilizing it as a tool for effectively implementing conservation measure to augment water use efficiency and achieve increased water savings.	\$ 95,000	0 acre-feet	0
2011	Municipal Water District of Orange County	Water Use Efficiency Master Plan	The purpose of the Water Use Efficiency Master Plan is to develop a written plan defining how MWDOC will comply with the new state goal of a 20-percent reduction in municipal and industrial water use by the year 2020.	\$ 75,000	0 acre-feet	0
2011	Los Angeles Department of Water and Power	Power Distribution System Water Audit and Component Analysis	The purpose of this project is to conduct a Distribution System Water Audit and Component Analysis that will examine the efficiency of the LADWP's water distribution system to evaluate real and apparent losses. The project is expected to save 12, 600 acre-feet per year.	\$ 100,000	12,600 acre-feet	12600

2011	Municipal Water District of Orange County	Water Smart Landscape Program Enhancement	The program is designed to provide short-term and long-term training, on-site assessment and certification by providing educational workshops, and cost/benefit measurement tools in combination with site specific assessment. It is estimated that 6,700 acre-feet per year will be saved by this program.	\$ 100,000	6,700 acre-feet	6700
2011	Metropolitan Water District of Southern California	Landscape Water Use Efficiency Research	The Landscape Water Use Efficiency Applied Research Project will conduct field research and analyses to encourage the development of innovative outdoor water management technologies and practices. MWD seeks to leverage its research funding by cost sharing with Reclamation to (1) conduct water savings analysis for smart controllers that have been installed for more than four years using regional data, and (2) identify water savings opportunities by surveying conditions for landscape water use behaviors and use of irrigation devices within MWD's service area.	\$ 60,000	0 acre-feet	0
2011	Irvine Ranch Water District	Joint Energy and Water Pilot Program	The purpose of the pilot program is to determine the effectiveness of integrating a water component into Southern California Edison's existing small and medium-sized business non-residential audit program. Success integration will benefit the water and energy utility customers by offering them an integrated, water and electric energy audit.	\$ 73,500	31 acre-feet	31
2011	Eastern Municipal Water District	Water Efficient Guidelines for New Development	The goals of the program are to 1). Discover and review water use efficiency practices, 2). Recommend applicable portions, 3). Develop water savings potential, 4). Publish a guidebook.	\$ 50,000	154 acre-feet	154
2011	National Water Research Institute	Quantify Urban Water Use and Costs due to Salinity	The program will focus on the assessment and development of potential mitigation strategies to respond to high concentrations of salinity in imported water from the Colorado River and local water.	\$ 100,000	3 acre-feet	3

2012	City of Corona	Centralized Irrigation Controllers for Targeted District Schools	The purpose of the project is to conserve water. The City request grant funds to purchase and install centralized weather-based irrigation controllers at five separate elementary school sites. Installation of state-of-the-art, wireless weather-based centralized controllers will create a centralized network throughout and existing irrigation system. Overall, the City estimates that he proposed project will save an estimated 400 AF over the next 20 years.	\$ 50,000	400 acre-feet	400
2012	Municipal Water District of Orange County	California Sprinkler Adjustment Subscription System	The proposed California Sprinkler Adjustment Subscription System (CSASS) seeks to encourage and promote implementation of water efficiency measures. The system will email an ET index to subscribed homeowners or businesses with automatic sprinkler systems that have a percent adjust feature. The proposed SCASS will streamline access to the Sprinkler Adjustment Index by pushing the information out to subscribers who request voluntary participation. The proposed program will save an estimated 260 AF over 5 years.	\$ 34,800	260 acre-feet	260
2012	Mesa Consolidated Water District	Water Use Efficiency Benchmarking and Master Plan	The purpose of the proposed Water Use Efficiency Benchmarking and Master Plan for Mesa Consolidated Water District is to quantitatively benchmark Mesa Water's water use efficiency program and activities, and to develop a written plan defining how Mesa Water will comply with the new State goal of a 20-percent reduction in municipal water use by the year 2020. The objective is to implement the Master Plan to achieve the water savings goal at the lowest possible cost while maintaining a balance of quality programs desired by customers and the general public throughout Mesa Waters' service area.	\$ 50,000	0 acre-feet	0
2012	Chino Basin Water Conservation District	Chino Basin Residential Weather Based Irrigation Controller Install Program	The Chino Basin Residential Weather Based Irrigation Controller Install Program (Program) will install 300 Weather Based Irrigation Controllers (WBIC's) to residential homes within the District's service area and provide two years of data monitoring. The Program will provide better irrigation management for 300 residential accounts and the reduction of approximately 225 acre feet per year (AFY) of water supply year-round. Indirect benefits from reduced water use include reduced energy costs and greenhouse gas emissions from water conveyance, deferred generation of new water sources, and water quality benefits from reduced urban runoff.	\$ 91,889	225 acre-feet	225

2012	Rancho California Water District	Residential Irrigation Efficiency Program	The Residential Irrigation Efficiency Implementation Program (RIEIP) shares the goals for improving local and regional water supply reliability through water conservation efforts that are outlined in both the District's Integrated Resources Plan and the Upper Santa Margarita Watershed's Integrated Regional Water Management Plan. These local and regional Plans are both consistent with the California Water Plan. The RIEIP is estimated to reduce water consumption at participating sites by 5,490 acre feet over a ten-year period.	\$ 55,000	549 acre-feet	549
2012	Municipal Water District of Orange County	Spray-to-Drip Conversion Pilot Project	The Spray-to-Drip Conversion Pilot Project (Project) will demonstrate water savings and increased efficiency of irrigation systems. The outcome is an anticipated water savings benefit of 188 acre-feet per year. The statistically quantified water savings established through the Project will contribute to setting rebate rates for a broader program within the MWDOC and Metropolitan Water District of Southern California's (MWD) service areas. The Project can be used as a template for new irrigation conversion programs and its structure can be emulated by any agency thereby making implementation more efficient.	\$ 67,017	188 acre-feet	188
2013	Municipal Water District of Orange County	CII Performance Based Water Use Efficiency Program	The Commercial/Institutional/Industrial (CII) Performance-Based Water Use Efficiency Program (Program) protects surface, groundwater, and ocean quality by reducing dry weather runoff and pollution from existing landscapes; employing landscape water use techniques that promote the infiltration and beneficial use of water; and reducing treating CII wastewater discharged into the ocean. The Program promotes region-wide utilization of BMPs that are appropriate to non-point source pollutants to prevent potential pollutants from entering municipal storm drain systems and aquatic ecosystems during wet/dry weather. The Program water savings goal is 113 acre-feet-per year (AFY).	\$ 97,889	113 acre-feet	113

2013	Rancho California Water District	Blueprint for Water Use Efficiency	<p>The Blueprint for Water Use Efficiency (Blueprint) project will provide a thorough analysis of urban and agricultural water use efficiency within the District's services area, and will propose implementation of urban conservation measures and agricultural water use efficiency strategies, resulting in a clear direction of programs and activities to meet the District's water efficiency goals and objectives through a balanced set of proposed programs.</p>	\$ 54,680	0 acre-feet	
2013	Metropolitan Water District of Southern California	Innovative Conservation Program	<p>The Fiscal Year 2013 Innovative Conservation Program (Program) has multiple anticipated benefits including finding new water conservation devices that help advance water use efficiency over current practices and technologies. The Program is one of the few opportunities where all applicants can apply for funding to test water savings and reliability of new devise.</p> <p>The long-term benefits of the Program include making more water available due to improved managements, reduced energy costs due to reduced pumping from the Colorado River and Bay-Delta, reduced per capita use due to conservation and efficiency in landscape irrigation, improved water supply reliability due to reduced irrigation demand during warmer months when reservoir levels are lower, delayed construction of new supplies due to reduced demand, improved water quality due to reduced landscape runoff, and assistance with endangered species efforts in the Colorado River and Bay-Delta due to reduced diversions.</p> <p>The Program also meets the objectives of Reclamation's Water Conservation Field Services Program and helps meet the Secretary's High Priority Water Conservation Goal.</p>	\$ 100,000	50 acre-feet	50

2013	City of Burbank	Johnny Carson Park Irrigation Retrofit	<p>The Johnny Carson Park Irrigation Retrofit (Retrofit) project has multiple benefits associated with it including: making potable water available for other uses, reducing the amount of wastewater discharged to the Los Angeles River, improving water reliability, and improving landscape irrigation efficiency.</p> <p>The Retrofit project will save an estimated 30 acre-feet per year of water and \$38,778 in operation costs per year. Additionally, the Retrofit project will save an estimated 19,560 kWh reducing energy costs by \$2,934 per year.</p> <p>The Retrofit project also meets the objectives of Reclamation's Water Conservation Field Services Program and helps meet the Secretary's High Priority Water Conservation Goal.</p>	\$ 100,000	30 acre-feet	30
2013	City of Upland	Smart Median Water Efficient Irrigation System Retrofit	<p>The SmartMedian Water Efficient Irrigation System (Retrofit) project will improve water management and result in quantifiable water savings through water conservation. The Retrofit project will save an estimated 7 acre-feet (AFY) with an estimated lifespan of 10 years. Additionally, the Retrofit project will assist the City with SBX7-7 water-use reductions goals, as stated in the City's 2010 Urban Water Management Plan.</p>	\$ 31,240	7 acre-feet	7
2013	City of Long Beach	Coin/Operated High-Efficiency Clothes Washers for Laundromats and Multi-Family Buildings	<p>The Coin/Card Operated High-Efficiency Clothes Washers For Laundromats and Multi-Family Buildings (Program) will be a large potential source of overall water savings. It is estimated at least one-third of all Long Beach residents use coin/card operated laundry facilities. The Program will lead to a direct water savings estimated at 25.7 acre feet (AF) of water per year for a total of 257 AF over the life of the Program. The Program could also result in an energy savings of 1.6 million kWh per year. The Program expands several established water use efficiency programs in place, and encourages Long Beach residents to continue their excellent conservation principles of using less water in the community.</p>	\$ 75,000	25.7 acre-feet	25.7

2014	Eastern Municipal Water District	Water Use Efficiency Master Plan	Since the 2010 Urban Water Management Plan (UWMP) was developed, EMWD has seen demand drop lower than projected. The Water Use Efficiency Master Plan (WUEMP) will evaluate the assumptions made about active conservation in the 2010 UWMP. It will identify and update the targets for saving water through active conservation and provide portfolio of projects and actions that can meet or exceed the SB7x-7 targets. The WUEMP is expected to save 0 acre-feet per year (AFY) since this is a planning document.	\$ 50,000	0 acre-feet	0
2014	Metropolitan Water District of Southern California	World Water Forum	The World Water Forum College Grants Program – Fiscal Year 2014 (WWF) stimulates and advances new and innovative ideas on water conservation and use efficient technologies, applied research concepts and communications strategies that have the potential to enhance water savings, quality and supply sources. The WWF also increase equitable access to improved drinking water and sanitation for Southern California and internationally, water-stressed regions, including developing nations. The research of the WWF Colleges contributes to several core conservation initiatives, including the 20x2020 law.	\$ 100,000	0 acre-feet	0
2014	Municipal Water District of Orange County	Online Irrigation Base Schedule Calculator	The Online Irrigation Base Schedule Calculator (Calculator) Project will result in water savings and runoff reduction, yielding improved water reliability and reduction on the reliance on imported water within the Project area. Anticipating that the Calculator will be utilized by at least 50 new people per month, the associated water savings goal is 26 acre-feet per year (AFY) or 131 lifetime acre-feet (AFL) over the anticipated five-year life. This will, in turn, result in savings of in 0.4 million kilowatt-hours over the project life and a reduction of 60 metric tons of CO2 emissions per year.	\$35,497.47	26 acre-feet	26

2014	Santa Ana Water Project Authority	LIDAR/Infrared Imagery Landscape Mapping Demonstration Project	<p>The Santa Ana River Watershed LIDAR/Inferred Imagery Landscape mapping Demonstration Project (Project) will improve water use efficiency by providing an accurate ground picture of irrigated landscaping vs. non-irrigated landscaping when applying budget based tiered water rates. Irrigation of landscaping within the Santa Ana Watershed accounts for approximately 70% of the water delivered to average customer.</p> <p>The direct anticipated benefit is to prove in concept that agencies can use the infrared photogrammetry and LiDAR data to accurately measure the areas of irrigated vs non-irrigated ion in the watershed. A secondary benefit is that this study can lay the ground work for a watershed wide, infrared photogrammetry and LiDAR data collection effort that would benefit all government agencies within the watershed. Future benefits of this watershed wide project would be in water conservation. With the use of this technology the watershed agencies will know the outdoor water needs of individual customers and can notify the customer of over watering. Additional benefits are: identification of turf area in the watershed for turf reduction programs; identification of impervious pavement for pervious pavement replacement; and identification of invasive plant species for removal.</p>	\$38,448.33	0 acre-feet	0
2014	San Diego County Water Authority	WaterSmart Turf Replacement Program	<p>The WaterSmart Turf Replacement Program (Program) plans to provide incentives for conversion of approximately 267,000 square feet of turf to water-efficient landscaping. At a savings of 0.00014 acre-feet per year (AFY) per square foot, this would result in water savings of approximately 37 AFY or 373 acre-feet (AF) over a 10-year project lifespan.</p>	\$ 100,000	37 acre-feet	37

2015	Elsinore Valley Municipal Water District	Instant Hot Water System Rebate Program	<p>Elsinore Valley Municipal Water District will expand its current rebate program to include Instant Hot Water Recirculating Systems. These systems cost approximately \$180-\$200 at local hardware stores and can be installed directly onto an existing traditional water heater by the homeowner or a plumber. The installation of an Instant Hot Water Recirculating System will enable hot water to run almost immediately from faucets and showers, when needed, reducing the amount of cold water being lost. Performance will be measured by comparing baseline water usage numbers of each pre-qualified home against water usage after installation of the hot water recirculation unit. The District anticipates being able to review data monthly for each household, with upwards of 6-8 months of data. Water conserved is the primary benefit of this program. Through implementation of the rebate program among approximately 700 homes, the District anticipates an estimated water savings of 24.6 AFY. Performance will be measured by comparing baseline water usage numbers of each pre-qualified home against water usage after installation of the hot water recirculation unit.</p>	\$ 75,000	24.6 acre-feet	24.6
2015	West Basin Municipal Water District	Water Use Efficiency Master Plan	<p>West Basin Municipal Water District will update their Water Use Efficiency Master Plan to include water conservation measures through 2020. The plan will 1) analyze current water conservation targets; 2) analyze current Gallons Per Capita per Day (GPCD) per retail water agency; 3) adjust or develop new water conservation targets if needed; 4) review current conservation programs; 5) analyze, explore and incorporate new conservation programs; 6) evaluate West Basin's current rate structure and provide recommendations; and 7) evaluate West Basin ability to meet their targets as identified in their current 20x2020 water conservation goals.</p>	\$ 60,000	0 acre-feet	0

2015	Upper San Gabriel Municipal Water District	Large Landscape Survey and Retrofit Program	<p>Upper San Gabriel Valley Municipal Water District proposes to provide quantifiable water savings by reducing outdoor water usage through enhanced landscape irrigation measures through Phase 3 of this Large Landscape Survey and Retrofit Program. The project will evaluate landscape efficiency and retrofits to large landscape sites that currently use high water consuming devices, and replacing them with high efficiency devices. Devices identified for retrofits include Smart irrigation controllers and high efficiency sprinkler nozzles. Phase 3 will provide an average annual water savings of approximately 80 acre feet per year (AFY), with an estimated lifespan of 10 years. Total water savings over the lifespan of the Project is 800 AF. The Program targets parks and schools, the highest water users within the commercial, industrial and institutional classification, that are located within Upper District's service area.</p>	\$ 100,000	80 acre-feet	80
2015	Municipal Water District of Orange County	California Friendly Technical Design Assistance Project	<p>Municipal Water District of Orange County (MWSOC) will demonstrate a California Friendly Technical Design Assistance (Project) component to the MWDOC Turf Removal Incentive Program (Program) aimed at optimizing landscape conversion benefits to reduce outdoor water consumption and irrigation runoff. This Project involves MWDOC providing technical assistance, as a pilot, to 125 residential and commercial sites as a means to promote landscape renovations by providing turf removal tutorial and detailed site design template resources. Based on past Program participant follow-up, the predominant barrier to turf removal project completion was the need for technical assistance. Providing technical assistance will ensure the comprehensive California Friendly landscape includes selecting a climate appropriate plant palette, encouraging onsite infiltration, and implementing efficient irrigation design and management. California Friendly plantings require less than half the irrigation required by turfgrass. The proposed Project will target the removal of 250,000 square feet of non-functional turfgrass and installation of California Friendly landscapes with climate appropriate greenscapes and permeable hardscapes. The landscape improvements will yield 34 AFY (336 lifetime-AF) of water savings.</p>	\$ 98,965	34 acre-feet	34

2+81:88+81:88015	Metropolitan Water District of Southern California	Innovative Conservation Program	<p>Metropolitan Water District of Southern California will evaluate the water savings potential and reliability of innovative water savings devices and technologies. Metropolitan will expand opportunities and enable broad participation in the program by leveraging its funding with Reclamation to multiply the number and/or scope of the devices evaluated. Since the establishment of the Innovative Conservation Program in 2001, Metropolitan has received over 280 applications requesting \$29.8 million of funding from six solicitations showing public interest in the program. The Innovative Conservation Program (ICP) promotes the study of implementing new technologies through a competitive grant process. The water savings and estimated project life for 2015 ICP will depend on the types of projects chosen and their experimental designs. Demonstrating these new technologies will support the acceptance and implementation of these new water use efficiency devices or strategies throughout the region. In 2013, the Innovative Conservation Program selected 13 new devices and technologies. Included in these 13 projects were a diverse range of field or lab studies such as new soil amendments, irrigation devices, water audit applications, agricultural irrigation technology, rain water harvesting strategies, and grey water recycling systems.</p>	\$ 100,000	0 acre-feet	0
2016	City of Torrance	Torrance Schools Recycled Water Retrofit Project	<p>The City of Torrance proposes to convert existing irrigation systems at two local schools (South High School and Calle Mayor Middle School) to use reclaimed water, saving 48 acre-feet of potable water per year. The proposed project will enable two schools in the project area to use recycled water to irrigate the football, soccer, and baseball fields, and open play green spaces for a total of 16 acres that are available year-round for use by all residents and community groups.</p>	\$ 79,867.00	48 acre-feet	48

2016	Metropolitan Water District of Southern California	Demonstration of Innovative Conservation and Water Use Efficiency (World Water Forum)	The primary purpose for the program is to allow college teams to identify and demonstrate water conservation and use-efficiency technology prototypes that can be cost-effectively implemented in water-stressed regions, locally or globally. The program provides an essential role in the lifecycle of implementing innovative water conservation and management technologies. The key objectives include: 1) Create a cost effective technology prototype that could be implemented in local communities or water stressed regions around the world; 2) Establish real-world baseline water use data; 3) Increase equitable access to fresh water and sanitation that could contribute to a more sustainable environment; 4) Increase knowledge of water savings potential and reliability of innovative devices, technologies, and strategies; 5) Support the development and implementation of innovative projects that make more effective use of existing water supplies through conservation and efficiency; 6) Assist agencies in complying with SBX7-7 (California's goal to reduce per capita water use 20% by 2020) and fulfilling requirements of the California Urban Water Conservation Council Memorandum of Understanding <u>Regarding Urban Water Conservation in California</u> .	\$ 100,000	0 acre-feet	0
2016	Pasadena Water and Power	Laundry to Landscape Grey Water Recycling Expansion Program	PWP proposes to expand their L2L Greywater Recycling Program by: 1) offering 250 \$80 vouchers for greywater kits; 2) offering a direct install option for 50 income-qualified customers; 3) performing site evaluations and installs at 50 eligible multiple-family properties; 4) offering 50 streamlined permits for simple greywater systems (which include showers, bathtubs, and bathroom sinks); and 5) offering on-site technical assistance to 150 customers as needed.	\$ 100,000	13.5 acre-feet	13.5
2016	Rancho California Water District	Integrating Innovative Technologies for Enhanced Outdoor Water Use	RCWD will conduct a demonstration project that models the integration of three specific water conservation devices, including Wi-Fi enabled weather based irrigation controllers (Wi-Fi WBIC's), pressure regulating sprinkler stems (PRS's), and high-efficiency sprinkler nozzles (HEN's) at five strategically selected residential landscape irrigation sites within the District's service area. The three devices will work together at each of the five sites to address the two main components of overall irrigation efficiency including <i>irrigation system efficiency</i> , which is a measure of an irrigation system's ability to distribute water to its outlet points at uniform pressures and to apply water evenly over an irrigated area; and <i>irrigation scheduling efficiency</i> , which is a measure of the efficiency with which water is applied at precise points in time for appropriate durations according to the needs of landscape.	\$ 79,204.70	1.9 acre-feet	1.9
2017	Elsinore Valley Municipal Water District	Water Conservation Business Plan Development	Elsinore Valley Municipal Water District is receiving \$90,000 to develop a Water Conservation Business Plan (Plan) that will be included in District's water conservation planning efforts in the District's 2020 Urban Water Management Plan. The Plan will include the evaluation of fundamental water management measures.	\$ 90,000.00	0 acre-feet	0

2017	Rancho California Water District	Enhancing Conservation and Water Use Efficiency through Incentive Pricing Structures	Rancho California Water District is receiving \$47,400 for their water management planning activities. It will include work designed to thoroughly examine the District's existing water pricing structure for its agricultural and commercial customers and to design a new one that is more effective in promoting water conservation and efficiency.	\$ 47,400.00	0 acre-feet	0
2017	San Gabriel Valley Municipal Water District	San Gabriel Valley Municipal Water District Emerald and Azusa Canyon Hydroelectric Generation Facilities Project	San Gabriel Valley Municipal Water District is receiving \$100,000 to complete the final design of the Emerald and Azusa Canyon Hydroelectric Generation Facilities Project (Project). The Project will design system improvements identified in the Devil- Canyon-Azusa Pipeline Hydroelectric Power Generation Facility Study. When designs are complete, the hydroelectric facilities will enable SGVMWD to capture the energy potential between the Devil's Canyon Power Plant Afterbay and the Azusa Canyon Spreading Grounds. The Project consists of the design of two powerhouses (one upstream and one downstream) that each include a hydroelectric turbine and generator, mechanical appurtenances, electrical and instrumentation, conveyance piping, and electrical transmission facilities.	\$ 100,000.00	0 acre-feet	0
2017	City of Big Bear Department of Water and Power	Water Conservation Management Plan	The City of Big Bear Lake's Department of Water and Power (DWP) will receive \$50,000 to complete a Water Conservation Management Plan (Plan). Through a comprehensive assessment of current and projected supply and demand, the Plan will identify water conservation goals. DWP staff will work with a qualified consultant to evaluate existing and potential water efficiency measures, develop a cost effectiveness analysis, and formulate strategies and tactics used to achieve DWP goals. Together DWP and consultant will review landscape efficiency measures, the cost and pricing of water, efficacy of educational and outreach programs, and the value and saturation of residential and commercial rebates, to determine the most appropriate conservation measures for the region's customers and climate in the future. The goals and measures identified in the Plan will ultimately help to create long term water sustainability for this relatively remote, four-season recreation destination in Southern California.	\$ 50,000.00	0 acre-feet	0
2017	Eastern Municipal Water District	Agricultural Irrigation Systems Optimization Review	Eastern Municipal Water District will receive \$70,000 for the Agricultural Irrigation Systems Optimization Review (AISOR) is to assess the water application efficiency and analyze, identify, and select potential technologies and practices with the potential to improve agricultural water management on farms in EMWD. The AISOR will gather information on crops, soil, irrigation equipment, and water management practices.	\$ 70,000.00	0 acre-feet	0

2017	Western Municipal Water District	Development of a Water Use Efficiency Master Plan	Western Municipal Water District will receive \$80,000 to develop a new approach to develop a Water Use Efficiency Master Plan (Plan). This approach will include detailed customer preferences and attitudes beyond what is typically included in these types of plans. By working with a local university, Western will obtain data that will inform the development of water use efficiency programs and allow for much more detailed and targeted marketing of programs. Traditional plans use basic demographic information about customers, but do not usually ask customers about their beliefs and attitudes toward water use efficiency, nor do they account for cultural differences in messaging beyond a cursory effort. The Plan will combine in-depth information on stakeholder beliefs, attitudes, and cultural differences with a comprehensive outreach plan that will help increase water use efficiency awareness and program participation. The Plan will help Western design more relevant water use efficiency programs and outreach to make more efficient use of existing water supplies.	\$ 80,000.00	0 acre-feet	0
2017	Metropolitan Water District of Southern California	Innovative Conservation Program	Metropolitan Water District will receive \$100,000 to continue their Innovative Conservation Program (ICP) that has been funded under WCFSP in the past. MWD has partnered with USBR since 2001 on the ICP allocating \$250,000 every other year for sponsoring pilot and demonstration projects of innovative water savings devices, technologies and strategies. One main objective of the ICP is supporting the demonstration of innovative water savings devices by establishing real world baselines. The estimated cost of the project is \$350,000.	\$ 100,000.00	0 acre-feet	0
2017	Municipal Water District of Orange County	Distribution System Leak Detection Equipment Lending Library	Municipal Water District of Orange County will receive \$100,000 for their The Distribution System Leak Detection Equipment Lending Library Demonstration Project, which will determine whether a lending mechanism will increase retail water agency technical understanding and use of leak detection equipment and techniques that are not currently widely used by member agencies in Orange County. While leak detection equipment is not new, MWDOC proposes to use the leak detection equipment in a new, more collaborative way that will allow for information sharing on how to use leak detection equipment, as well as interagency collaboration and problem solving. Project funds will be used to purchase leak detection equipment that will be used by all 32 retail water agencies throughout Orange County, California. The types of acoustic leak detection equipment that will be evaluated and may be purchased include, but are not limited to, Sounding Rods, Geophones, Ground Microphones, Leak Correlators, and Leak Noise Loggers.	\$ 100,000.00	0 acre-feet	0
Total Savings				\$ 5,906,619		48216.855