Regional Landscape Water Use Efficiency Program

West Basin Municipal Water District
17140 S. Avalon Blvd., Suite 210
Carson, CA 90746

Project Manager: Gus Meza
17140 S. Avalon Blvd., Suite 210
Carson, CA 90746
gusm@westbasin.org
(P) 310-660-6209
(F) 310-516-1576

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Date: January 23, 2015
Applicant Name: West Basin Municipal Water District

City, County, State: Carson, Los Angeles County, California

Contact: Gus Meza, Senior Water Efficiency Specialist/Project Manager
Email:gusm@westbasin.org
Phone: 310-660-6209
Fax: 310-516-1576

Estimated Construction Completion: December 31, 2017
Reclamation District: No

The West Basin Municipal Water District (West Basin) is proposing the ***"Regional Landscape Water Use Efficiency Program"*** (Regional Landscape WUE Program) which aims to meet the goals and criteria set forth in Reclamation's Funding Opportunity Announcement (R15AS00002). The Regional Landscape WUE Program will assist West Basin's member agencies to better improve regional water management practices by converting a total of 450,000 square feet of grass turf with water conserving landscape alternatives. West Basin has observed a high demand in water consumption stemming from over irrigation at golf courses, commercial landscaping, parks, and residential lawns. This high use consumption is not only dependent on the ETo of turf grass but also on the misapplication by consumers (i.e. overwatering), particularly during the dry summer months. The Regional Landscape WUE Program's goals are to curtail the use of imported water, energy consumption, and greenhouse gas emissions within West Basin's service area through the implementation of this project and better manage these critical resources, as is the objective of the solicitation set forth by Reclamation.

Technical Project Summary

The Proposed Project will provide the following benefits:

Estimated Water Savings: 1,500 acre-feet over the course of 25 years averaging 60 acre-feet per year (AFY).

Estimated Water Better Managed: 1,500 acre-feet over the course of 25 years averaging 60 AFY.

Estimated Water Conserved: < 1% of the total West Basin's Water Supply

Estimated Energy Savings: 36,636 kWh Annual Energy Savings
915,903 kWh –Energy savings over the course of 25 years

Estimated Green House Gas (GHG) Savings: Annual GHG Reduction = 25Tons CO_2
632 Tons CO_2over the course of 25 years

The Regional Landscape WUE Program will include 450,000 square feet (or 10 total acres).

As severe and sustained drought conditions in the Colorado River Basin and the State Water Project (SWP) continue to threaten water supplies and delivery systems, water conservation has become a critical tool in helping to ensure a safe and reliable drinking water supply for Southern California. Although the overall emphasis of this turf replacement project is that of water conservation and better management of water supplies, the West Basin Regional Landscape WUE Program can also achieve a water quality-water conservation nexus through project implementation.

In this case, water that has been applied for purposes of landscape irrigation throughout the West Basin Region is typically in contact with pesticides and/or fertilizers that are applied to landscaping. Subsequently, the potential for increased loading (i.e. nitrates) and leaching into the soil and groundwater basin exists and thereby can affect groundwater quality conditions within the West Basin Region. Drought resistant and native plant species require no fertilizers, pesticides, mowing and reduces urban runoff caused by irrigation. The West Basin Region hopes to also improve the overall condition of the basin in terms of water reliability and water quality.

This Proposed Project presents the opportunity for the furtherance of its current "conservation footprint" within the West Basin service area, in the Southwestern area of Los Angeles County which serves more than 900,000 people.

The Proposed Project fits within several task areas associated with this FOA resulting in quantifiable and sustained water savings or improved water management. The Project will provide both a financial incentive for property owners, realized through lower water bills, to replace lawn with water-efficient landscaping. The Region, particularly West Basin, has previously demonstrated these types of projects to be an effective way to achieve significant and

long lasting conservation gains, providing water savings that directly extend the Region's existing supplies.

Task Area A: "Water Conservation and Improved Water Management": The West Basin's Regional Landscape WUE Program will conserve approximately 60 AFY of water within the Region (1,500 AF over the life of the project).

A recent analysis of the water balance within West Basin's service area revealed that the West Basin Region is expected to have an average annual population growth of 0.5% through 2030. Therefore, West Basin's service area is planning for an increase in water demand of 0.5% per year. The most recent water use for FY 2013-14 was 184,358 AF. The water demand for 2015 and 2020 is expected to be 200,000 AFY and 230,000 AFY, respectively.

In addition, West Basin initiated their Water Reliability 2020 Program in 2008 which implements the goal of reducing imported water supplies by 50%. The goal is to achieve this by doubling the use of recycled water and conservation efforts, and bringing seawater desalination to the service area as a new potable water supply source. While drought is a persistent water supply challenge, existing conservation and recycled water programs are in place to ameliorate the impact of future supply shortfalls.

This Proposed Project helps to achieve the target of conservation in West Basin's Water Reliability 2020 Program. In addition, West Basin is mandated by the State of California to reduce water use by 20% on a per capita basis by 2020. The Regional Landscape WUE Program helps to achieve this State mandated goal, if funding is awarded.

Task B: "Energy Water Nexus": The West Basin Regional Landscape WUE Program will help improve the efficacy of water and energy management by helping to reduce the use of imported water supplies, thereby reducing energy demands associated with importing water from the California State Water Supply and Colorado River.

a) Of total current supplies for the West Basin Region, 62% is imported water, 18% is groundwater, 19% is recycled water, and less than 1% of the water can be classified as other, which includes sources such as desalted groundwater.

b) In addition to the water-energy nexus achieved through reduced importation, groundwater pumping can also be curtailed if water usage is optimized. This can result in further energy savings through reduced pumping.

c) Water-Energy savings are also obtained through the reduced use of fossil fuels needed for maintenance of turf.

The State of California is currently working diligently to encourage cities to use local water resources rather than relying on imported water sources. This is because it is estimated to take an average 2,544 kWh of energy to pump just one acre foot of water over the mountain ranges

from the California Bay-Delta and the Colorado River via the Aqueduct into southern California. The West Basin's Regional Landscape WUE Project will help reduce the Region's cumulative burden on the State-wide energy demands.

Task C: "Benefits to Endangered Species": The West Basin Regional Landscape WUE Program will help reduce the reliance on imported water resources and as a result there will be a need for less imported water. This reduction in demands on imported water supplies will help contribute to the protection of endangered species in the Bay Delta Estuary, such as the Delta Smelt and the Chinook Salmon that are endangered due to the effects of drought and the powerful demand on the pumps to carry State Project Water supply to customers throughout the State. It will also help protect four endangered species in the Colorado River.

In addition to State Endangered Species protection, the proposed project aims to create habitat for local South Coast Bioregion species. Some of these rare species include the Monarch Butterfly, the California Least Tern, Least Bell's Vireo and other endemic and endangered species in the South Coast Region.

All in all, the project is well aligned with the Bureau of Reclamation's (Reclamation's) overarching goals to manage, develop, and protect water and other resources in an environmentally and economically sound manner. This project proposal seeks $300,000 from the Reclamation WaterSMART Water and Energy Efficiency Grants to support the West Basin and the Southern California Region's continued water conservation efforts.

Task D: "Water Marketing": The project will provide access to additional water supplies, via conservation, that will assist the Region in accumulating water supplies that can be applied towards a "new user" or a "new water market." West Basin will be able to identify potential "new" users of "conserved" water that will later translate into new water markets. This noteworthy project benefit will become key to creating additional supplies, which will have the potential to provide further net water savings for the use of this potential "new market."

Task E: "Other Contributions to Water Supply Sustainability": The Colorado River Watershed is a symbol of the West and sustains life in the dry states through which it passes. The vitality of the Colorado River depends on healthy water flows. These flows are being compromised by current water management practices (i.e. growing demands) and policies, as well as by a warming climate. This Proposed Project will reduce the amount of imported water transported from the Bay-Delta and the Colorado River in an amount of 1,500 AF. Approximately 62% of the imported water that is delivered to the West Basin service area is both from the Bay-Delta and the Colorado River.

Figure 5-1 below illustrates the location of West Basin MWD in relation to the Basin States that receive Colorado River water. As illustrated, West Basin is located within one of those areas.

The challenges and complexities of ensuring a sustainable water supply and meeting future demand in an over-allocated and highly variable system such as the Colorado River have been recognized and documented in a recent *Colorado River Basin Water Supply and Demand Study (2012).*

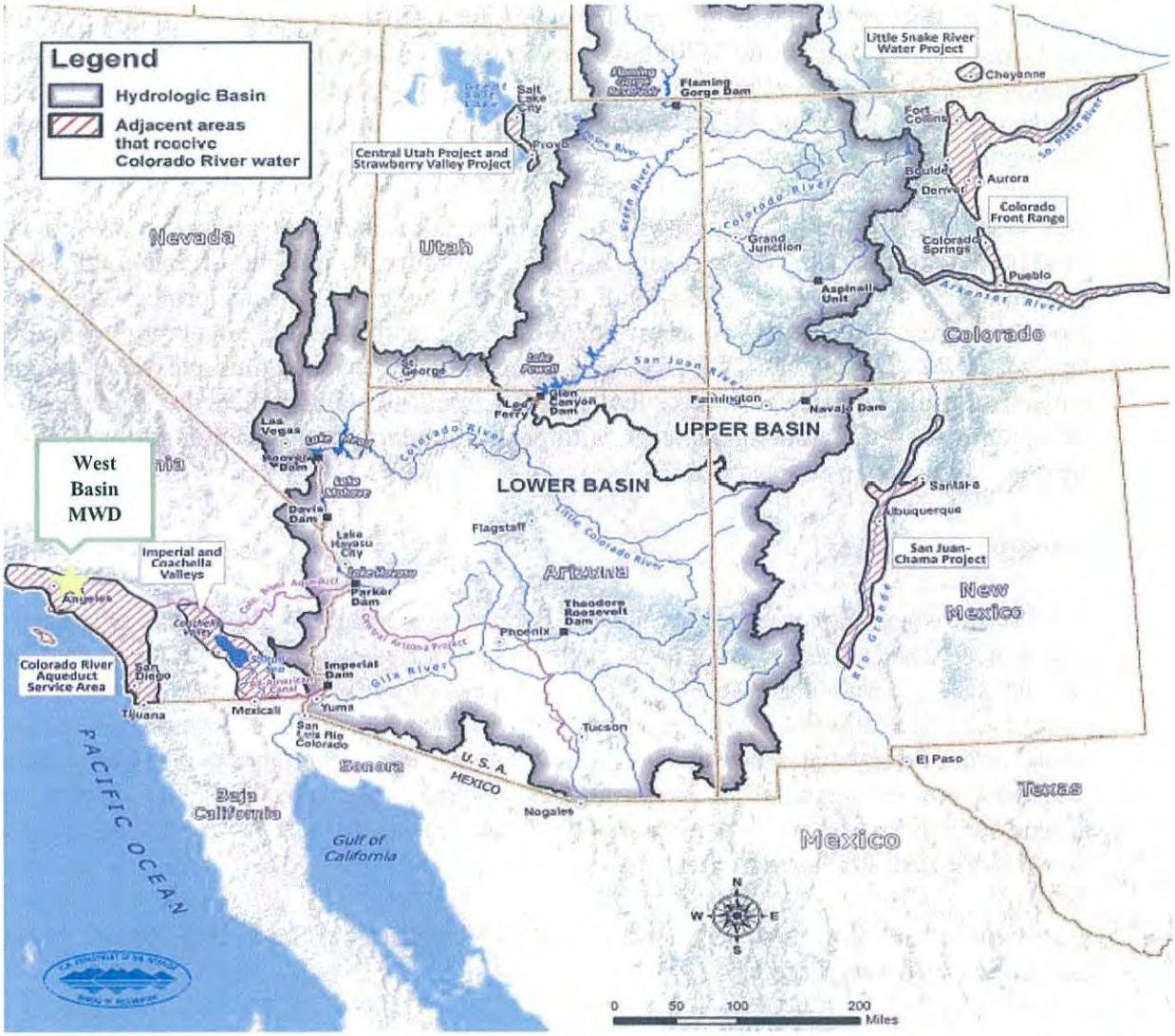


Figure 5-1.The hydrologic boundaries of the Basin within the United States, plus the adjacent areas of the Basin States that receive Colorado River water.

The West Basin Regional Landscape WUE Program will contribute towards better management and sustainability of the Colorado River water supplies. The Proposed Project will implement adaptive water sustainability practices, as identified within the Colorado River Basin Plan, by preserving water, through conservation, within the Colorado River Watershed. The additional water conserved through implementation of this project will facilitate Reclamation activities such as flooding and scouring of the Colorado River that helps to build and maintain habitat for sensitive and endangered species.

During investigations in preparation of the Operation of Glen Canyon Dam Final EIS, Reclamation identified the need for beach/habitat building and maintenance flows. These high flows are over short duration and are intended to move sediment through the Colorado River in order to build and maintain beaches and habitats used by the flora and fauna of the river.

West Basin submits this application for funding to the Bureau of Reclamation's WaterSMART: Water and Energy Efficiency Grant Program for FY2015 specific to Funding Opportunity Announcement (FOA) No.R15AS00002 for Federal Funding in Category 1. This application is seeking federal funding assistance of $300,000 for implementation of the West Basin Regional Landscape WUE Program. It is expected that project benefits will be realized immediately after completion of this project.

The West Basin funding request is for 29 percent of the total project costs amounting to $300,000 dollars. The West Basin, in turn, commits 71 percent of the total project cost amounting to $743,428.82. The funding request supported by this project application will provide the resources needed to assist the West Basin with the implementation of this Regional Landscape WUE Program. This project is an important step in a multiple-year program. The project schedule is expected to take less than 24-months, as allowed by the FOA, start to finish (from the date of the grant agreement), with project implementation beginning in early 2016 and all work completed by December 2017.

5.b Background Data

West Basin is an innovative public agency that provides drinking and recycled water to its 185-square mile service area. West Basin purchases imported water from the Metropolitan Water District of Southern California (MWD) and wholesales the imported water to cities and private companies in southwest Los Angeles County. West Basin is a recognized leader in the production of recycled water and its conservation, education and ocean-water desalination programs are fundamental to West Basin's diverse water portfolio. To protect our local groundwater basin from seawater intrusion, West Basin provides water for injection into the South Bay's seawater barriers.

Geographic Location and Map- West Basin is located in the South Bay Region of Southwest Los Angeles County (Figure 5-2).

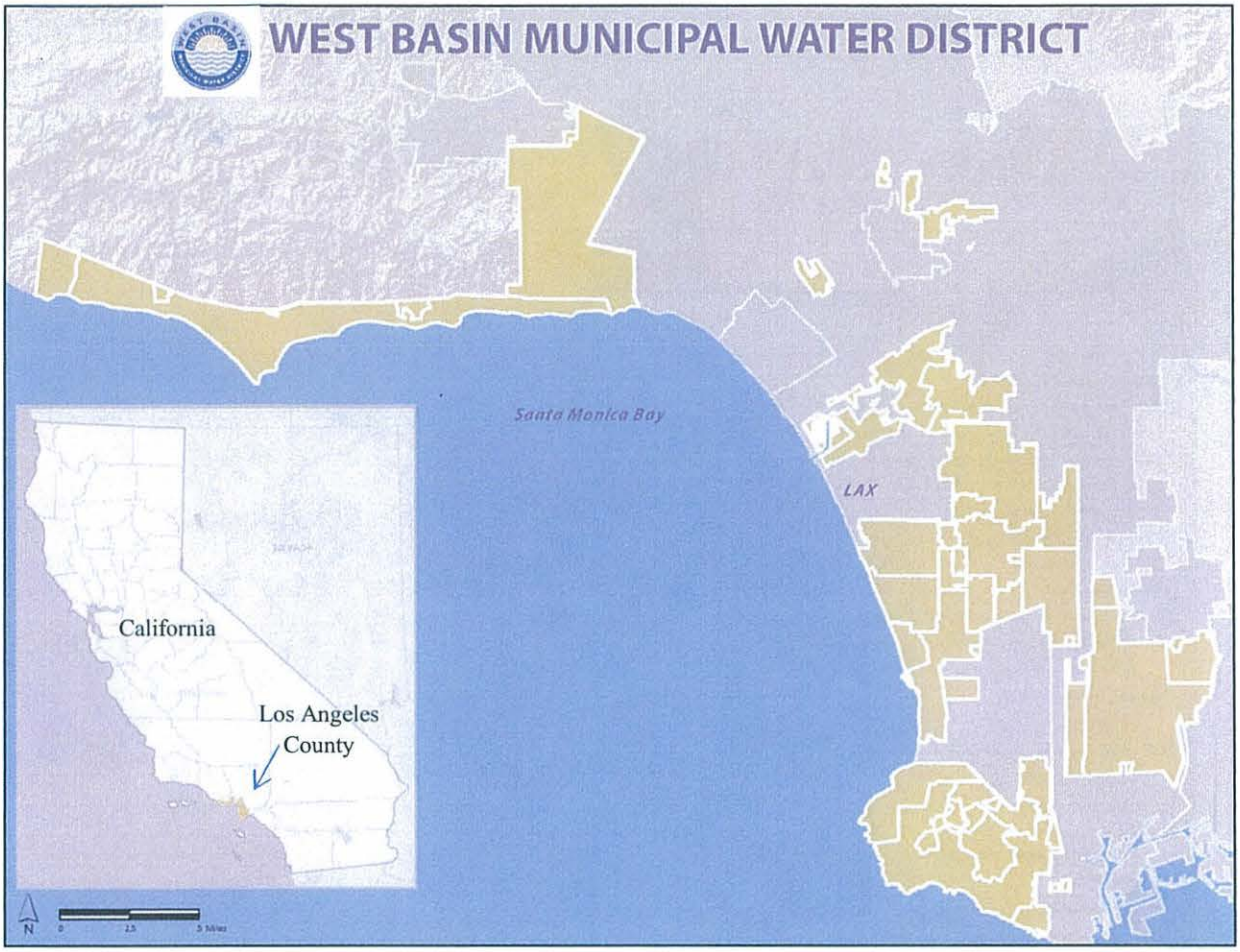


Figure 5-2. West Basin service area relative to the County of Los Angeles and the State of California.

Figure 5-3 illustrates the proposed project location within West Basin's service area. This map shows the 17 cities and 8 retail water purveyors that West Basin serves imported water to, as a water wholesale agency.

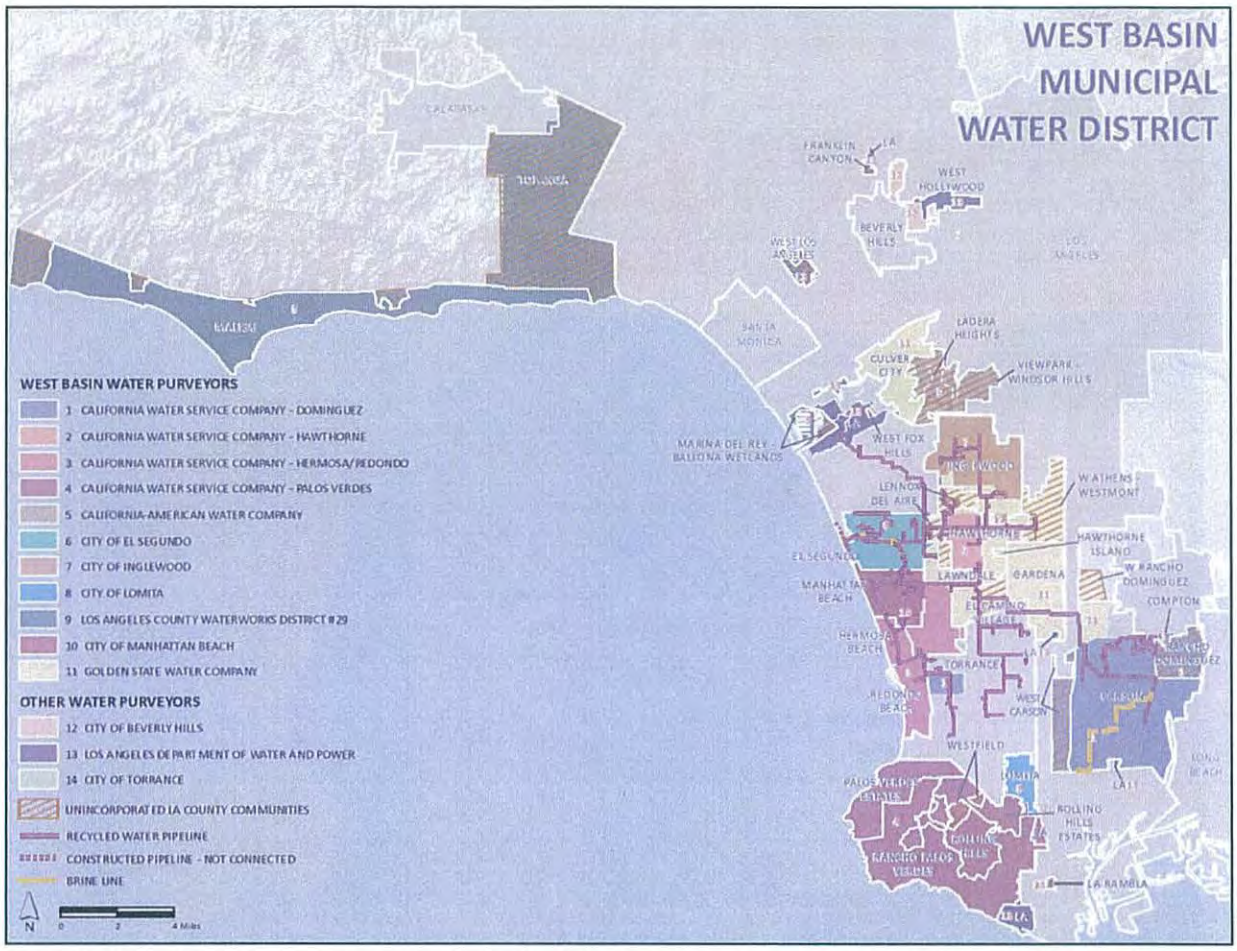


Figure 5-3. West Basin's service area including the retail water purveyors, cities, and recycled water distribution lines.

West Basin Municipal Water District (West Basin) Purpose–West Basin is currently comprised of 17 cities. Their mission statement is "To provide a safe and reliable supply of high quality water to the communities we serve."

Benefits to the Community of the West Basin

- Provide the access to imported supplies that member agencies would not otherwise have access to;
- Work with individuals/groups to promote their needs;
- Tailor legislative and advocacy work to the needs of the communities, especially disadvantaged communities;
- Support of Federal legislators for West Basin projects (funding);
- Eligible for grant funds; and
- Share information and develop regional best water management practices.

Sources of Water Supply – West Basin's sources of water supply includes imported water, groundwater, brackish groundwater and recycled water. It imports water through the southern California regional wholesaler, MWD. MWD imports water via both the State Water Project from the Bay-Delta and the Colorado River Aqueduct.

The table below summarizes West Basin's water portfolio (5-year average).

Imported water supply	119,000 AFY
Recycled water supply	37,000 AFY
Groundwater supply	34,000 AFY
Brackish groundwater	1,500 AFY
Total	**191,500 AFY**

West Basin's water use is for municipal, irrigation, and industrial purposes. The irrigated water use is for outdoor irrigation with very little agricultural irrigation. West Basin's service area is highly urbanized (83%), approximately 0.5% agricultural lands and the balance (16.5%) comprised of open space habitat.

Surface Water

As an imported water wholesaler and a MWD member agency, West Basin sells approximately 119,000 AFY of imported water, approximately half from the State Water Project (SWP) and approximately half from the Colorado River. MWD receives an annual water allocation as determined by DWR and receives an allocation from the Colorado River water as appropriated by the Colorado River Compact. These variable amounts are dependent on hydrologic conditions (i.e. rainfall and runoff) and conditions of reservoirs along the State Water Project. In 2014, due to the State Water Project allocation of only 10% due to the drought and reduced pumping allowed, the West Basin Region has been receiving almost 100% Colorado River water and will continue to do so in 2015 so long as the current State Water Project allocation remains at 10%.

West Basin as the water wholesaler does not own any of the potable water distribution lines. MWD owns the imported water supply distribution system which is the backbone system for southern California. Local water purveyors own the local potable water distribution system that provides a mix of both imported water supplies and groundwater supplies. West Basin has 43 imported water connections to the MWD backbone system.

Groundwater

The West Basin is an adjudicated basin with a fixed allocation, with provisions for carry-over. On average, West Basin's use is 34,000 AFY. The Department Water Resources' (DWR) Southern Division acts as the Watermaster for the West Basin. The Watermaster is charged with managing the groundwater basin by tracking pumping of the basin and the sales and leases of basin groundwater rights.

Groundwater Basin *- Coastal Plain of Los Angeles County Groundwater Basin, West Coast Sub-basin*

- Groundwater Basin Number: 4-11.03
- County: Los Angeles
- Surface Area: 91,300 acres (142 square miles)

Basin Boundaries and Hydrology

The West Coast Subbasin of the Coastal Plain of the Los Angeles Basin is adjudicated and commonly referred to as the "West Coast Basin." It is bounded on the north by the Ballona Escarpment, an abandoned erosional channel from the Los Angeles River. On the east it is bounded by the Newport-Inglewood fault zone, and on the south and west by the Pacific Ocean and consolidated rocks of the Palos Verdes Hills (DWR 1999). The surface of the subbasin is crossed in the south by the Los Angeles River through the Dominguez Gap, and the San Gabriel River through the Alamitos Gap, both of which then flow into San Pedro Bay. Average precipitation throughout the subbasin is 12 to 14 inches.

Groundwater Quality

Characterization. The character of water in the Gaspur zone of the subbasin is variable. Seawater intrusion has produced deterioration of water quality over time. Early tests indicated that the water was sodium bicarbonate in character. It is questionable whether this is representative of the entire zone, because the higher quality water residing outside the subbasin is calcium bicarbonate in nature (DPW 1952).

The Gardena water-bearing zone exhibits a calcium-sodium bicarbonate character and is of good quality. In the Silverado zone, the character of water varies considerably. In the coastal region of this zone, the water is calcium chloride in character, and then transitions into sodium bicarbonate moving inland. The Pico formation is sodium bicarbonate in nature and is of good quality (DPW 1952). Data from 45 public supply wells shows an average TDS content of 720 mg/L and a range of 170 to 5,510 mg/L.

Impairments. Seawater intrusion occurs in the Silverado zone along the Santa Monica Bay and in the Gaspur zone in the San Pedro Bay. Two seawater barrier projects are currently in operation. The West Coast Basin Barrier Project, which runs from the Los Angeles Airport to the Palos Verde Hills, and the Dominguez Gap Barrier Project which covers the area of the West Coast Basin bordering the San Pedro Bay. Injection wells along these barriers create a groundwater ridge, which inhibits the inland flow of saltwater into the subbasin to protect and maintain groundwater elevations (DWR 1999).

Alternative Supplies

West Basin has an extensive water recycling program including the state-of-the-art Edward C. Little Water Recycling Facility located in El Segundo, California. This facility provides approximately 37,000 AFY of recycled water for irrigation, industrial and municipal purposes. Recycled water also is injected into the West Coast Basin Seawater Barrier along the west coast of the service area preventing sea water intrusion into the groundwater basin. Included in the

recycled water system is approximately 100 linear miles of pipeline in place and 25 linear miles of pipeline planned to be installed within the next 5 years.

West Basin also has a brackish groundwater desalter facility which allows extraction of up to 2,000 AFY. This water goes through a reverse osmosis process to remove the salts and is then injected into the potable water supply for municipal uses. In October 2010, an Ocean Water Desalination Demonstration Facility came online with the purpose of testing the technological processes involved with a full-scale ocean water desalination facility. This demonstration facility continues to run tests with the full-scale facility planned to be online by the year 2020.

Current Water Uses- Current water supplies for the West Basin Region consist of groundwater, imported water, and alternative supplies. West Basin, as a whole, is heavily dependent on imported water. That said, there is still a large dependence on groundwater supplies. Of total current supplies for the West Basin Region, 20% is groundwater (including brackish groundwater production), 63% is imported water, 12% is recycled water, and 5% of the water can be classified as conservation, or demand reduction. Forecasting to 2030, the average water supply distribution is anticipated to increase in terms of their alternative supplies.

See Figure 5-4 for a comparison in current and future water supplies.

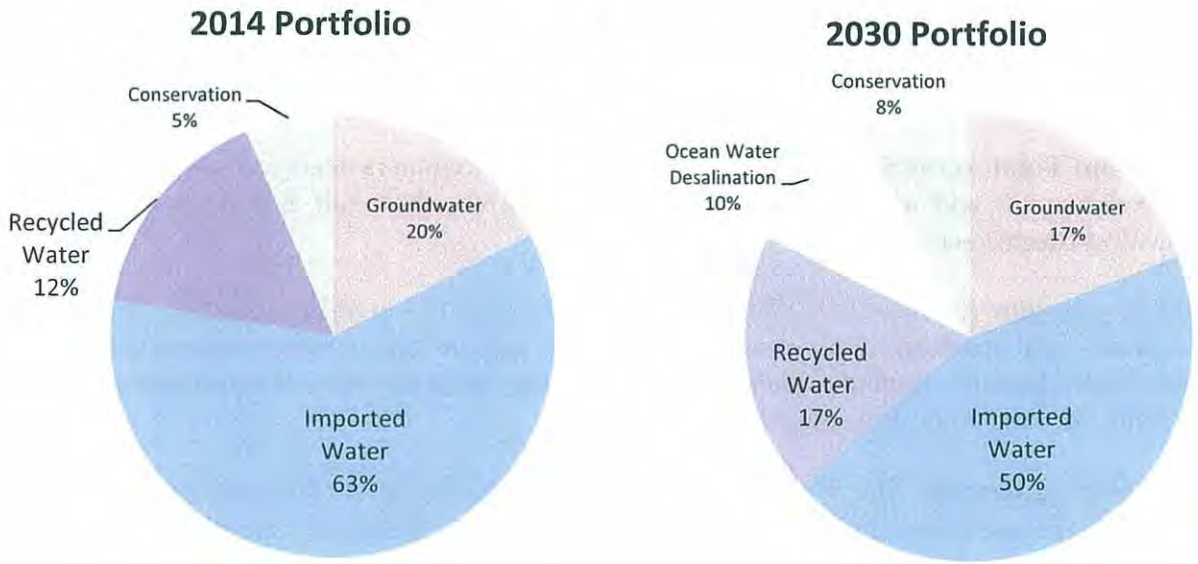


Figure 5-4.Current and Planned Water Supply Portfolio

Current and Projected Water Demand- The current water supply scenario includes three sources of water supplies and demand reduction through conservation efforts. West Basin considers this part of its supply portfolio because of the annual financial investment it makes as well as the dedication of this supply to offsetting current and future demands as a result of population growth. West Basin feels that a well-balanced portfolio is key to sustainability and reliability for its residents.

Potential Shortfalls in Water Supply- Southern California is vulnerable to potential shortfalls in water supply for various reasons. Plausible scenarios include: unplanned interruptions resulting from levee failure or pipeline rupture, natural disasters (earthquakes), hydrology (low rainfall), and homeland security concerns (terrorist acts).

The loss of any one of the three major sources of imported supply (California, Colorado River or Los Angeles Aqueducts) would place additional and unendurable stress on the entities dependent on these supplies. Should a situation arise where the aqueducts are unable to meet the demand, southern California will need to rely heavily on either surface storage (i.e., Diamond Valley Lake) or on groundwater supplies, and supplemented with conservation. SWP deliveries throughout California could also be temporarily or permanently reduced by up to 100 percent under stringent environmental restrictions.

West Basin's Regional Landscape WUE Program will help reduce the Region's use of SWP and Colorado River Water resources and will assist in conserving water in line with the goals of this WaterSMART: Water and Energy Efficiency Grant Program. To further stress the necessity for conservation, California has experienced three significant periods of severe drought in the past century. As of recent, January 17, 2014, a California drought emergency has been declared by California Governor Jerry Brown. The state struggles with the least amount of rainfall in its 153-year history, and reservoirs are demonstrating water levels that are at an all-time low.

"California's dry weather is expected to last for another three months according to federal scientists. The Obama administration declared 27 California counties, including most of the Bay Area, as natural disaster areas."

Major Crops and Total Acres Served- The entire South Coast Region is nearly all urban, comprised of residential, commercial, and industrial. That said, there is less than half a percent of agricultural uses/land in West Basin's service area.

Water Delivery System-As mentioned, West Basin is comprised of 9 member agencies. Each of these agencies operates and maintains their own water delivery system that is comprised of potable water distribution system pipeline, groundwater wells and pumping facilities. West Basin owns and operates the non-potable, recycled water transmission lines.

Energy Efficiency Elements- The West Basin Regional Landscape WUE Program will help improve the efficacy of water and energy management by helping to reduce the use of imported water supplies, thereby reducing energy demands associated with importing water from the California State Water Supply and Colorado River.

- Of total current supplies for the West Basin, 63% is imported water, 20% groundwater, 12% is recycled water, and 5% of the water of the water can be classified as conservation, or demand reduction.

- In addition to the water-energy nexus achieved through reduced importation, groundwater pumping can also be curtailed if water usage is optimized.

- The State of California is currently working diligently to encourage cities to use local water

resources rather than relying on imported water sources. This is because it is estimated to take more than 2,500 kWh of energy to pump just one acre foot of water over the mountain ranges and into Southern California. The West Basin Regional Landscape WUE Program will help reduce the Region's cumulative burden on the State-wide energy demands.

Past Working Relationships with Reclamation- West Basin has completed six (6) conservation-related programs that have been funded through Reclamation's past grant programs. They include:

1. Green Garden Program
    a. Duration: August 2007 – December 2010
    b. Description: The Green Garden Program was a 4-step program designed to provide residents with information and free irrigation devices to develop a water-efficient landscape that not only looks beautiful, but also conserves water and reduces water runoff. Through this program, qualifying residents received a landscape survey conducted by a professional landscape technician and also qualified to receive a "smart" irrigation controller and rotating irrigation nozzles, all of which help conserve water and minimize water runoff. This program will continue in the future if funding becomes available.
    c. This program included the completion of 788 residential surveys, and distribution of 575 irrigation controllers and 4,785 irrigation nozzles. The water savings that will result from these devices is estimated at 32 AFY for the irrigation controllers and 16 AFY for the irrigation nozzles, for a total lifetime savings of 480 AF.

2. Local Water Use Efficiency Plans
    a. Duration: June 2008 – December 2011
    b. Description: West Basin assisted its water purveyors in developing their own local water conservation master plans. In 2006, West Basin adopted a Water Conservation Master Plan (Plan) that analyzed several different programs for their ability to be implemented over a five-year period. The Plan included the projected amount of water to be conserved through implementation of each program and the associated cost savings. This Plan has brought tremendous value to West Basin in terms of its conservation planning efforts and projected water and cost savings. This project benefits Reclamation because it reduces imported water supplies from the Colorado River and northern California. Southern California is heavily reliant on imported supplies and imported water comprises 66% of West Basin's total water supplies. Projects that benefit these ecologically fragile areas are desirable to implement within our service area. A qualified consultant provided technical expertise and developed new plans for each water purveyor and also updated West Basin's Plan with this grant received by Reclamation. The consultant used the conservation modeling tool developed by the Alliance for Water Efficiency. When aggregating all eight local plans and West Basin's Plan, the projected water savings are estimated at over 12,000 AF of active and passive water savings over a five year period. This Program has contributed immensely to the conservation efforts by West Basin and its local water purveyors.

3. Commercial, Industrial and Institutional Program
    a. Duration: June 2007 – December 2012
    b. Description: This innovative program provided businesses and facilities with incentives, resources, and technical assistance to install water efficient equipment. The program focused

on two target customer categories: businesses and institutions that have facilities with cooling towers, and those industries using water for the development of their products or services. The contractor inspected as many as 200 cooling tower sites and 200 industrial sites to determine potential participation of the business or industry. Of those targeted sites, new water efficient cooling tower conductivity controllers were installed by the customer at an estimated 20 sites, and process water equipment installed at roughly 15 industrial sites. Participating facilities were eligible for a $5,000 rebate on equipment and a $5,000 reimbursement for installation expenses. A metered monitoring program established pre-installation baseline water use though existing water use records which was compared to post installation use to verify water savings.

c. The Program has saved approximately 23 AFY or a minimum of 115 AF over the lifetime of the process improvements.

4. ET Controller Installation Program
   a. Duration: September 2008 – September 2012
   b. Description: This project involved the installation of evapotranspiration (ET) irrigation controllers for urban landscapes that were one acre or greater in size. Locations included schools, parks, business parks, facility landscapes, street medians, multi-family greenbelts within complexes and single-family residential sites. Through the installation of 558 ET controllers, 20 to 50 percent of irrigation water will be conserved, thus reducing the need to import water to the region. In addition, this project reduced excess water runoff up to 70%.
   c. Although the program duration shows September 2008 as the start date, the program actually began in late 2009 due to the State bond freeze. This program was leveraged by a larger program that is funded by the Department of Water Resources and so when the bond freeze hit in 2008, the program stopped. Since it began in late 2009, over 470 controllers have been installed, and once all 558 irrigation controllers are installed, the water savings will be 31 AFY, or 613 AF, over the device lifetime.

5. Complete Restroom Retrofit Program, Phase II
   a. Duration: September 2010 – December 2012
   b. Description: Water use in restrooms accounts for more than 60% of total water consumption in many businesses. The program replaced water-wasting devices with high-efficiency toilets (HET), high-efficiency urinals (HEU), and self-closing low-flow sensor faucets (faucets) to maximize water and energy savings. This program continued the Complete Restroom Retrofit Program that began in 2006 that installed HEUs, faucets, and HETs. The Reclamation grant leveraged the existing investment in the program with additional funding and initiated Phase 2 of the program to increase the number of HETs available for business owners who were already pursuing the direct install of HEUs through our existing program.
   c. The estimated water savings from the installation of these devices is 87 AFY or 1,711 AF over the 20 year lifetime of the devices.

6. Landscape Irrigation Efficiency Program
   a. Duration: October 2011 – October 2014
   b. The program provides landscape surveys and high-efficiency irrigation nozzles to residents and the Commercial, Industrial and Institutional (CII) sector throughout West Basin's service area, saving a projected 1,478 AF over the life of the devices at a total program cost of

$378,195. The program is made available to interested participants via various marketing efforts. Qualified participants receive a site survey, a list of recommended improvements, an appropriate water budget and an irrigation watering schedule. This helps the user understand how much water their site actually needs to remain healthy and attractive.

c. The program is expected to improve water efficiency by 59,855,000 gallons per year or 184 AFY in the first five years and then 36,495,000 gallons per year or 112 AFY in the last five years. The nozzles have an estimated lifetime of ten years and the behavior changes from the site survey recommendations have a lifetime water savings of five years. If the nozzles were all functioning properly and the site survey recommendations were implemented, after ten years the estimated total water savings is 1,478 acre-feet of water.

5.c Technical Project Description

General Scope- The West Basin is proposing the ***"Regional Landscape Water Use Efficiency Program"*** which aims to meet the goals and criteria set forth in Reclamation's Funding Opportunity Announcement (R15AS00002). The Regional Landscape WUE Program will assist West Basin's member agencies to better improve regional water management practices by converting a total of 450,000 square feet of grass turf with water conserving landscape alternatives. West Basin has observed a high demand in water consumption stemming from over irrigation at golf courses, commercial landscaping, parks, and residential lawns. This high use consumption is not only dependent on the ETo of turf grass but also on the misapplication by consumers (i.e. overwatering), particularly during the dry summer months. The Regional Landscape WUE Program's goals are to curtail the use of imported water, energy consumption, and greenhouse gas emissions within West Basin's service area through the implementation of this project and better manage these critical resources, as is the objective of the solicitation set forth by Reclamation.

Project Work- The project's critical goal is to expand, protect and conserve local water resources and contribute to the direct preservation of native fauna and rare local species.

This project will target the removal of 450,000 square feet (ft^2) of high water and energy consumption lawns in West Basin's service area. West Basin will be leveraging its partnership with the MWD and its existing vendor, EGIA, to provide increased rebates that will motivate the public to make changes to their landscapes. MWD is currently providing a \$2 ft^2 rebate through its regional rebate program, and through this new program, West Basin will add an additional \$1 ft^2, for a total of \$3 ft^2.

West Basin implemented a similar program in 2014 in which \$1 ft^2 was added to MWD's \$2 ft^2. The first 1,000 ft^2 received the \$3 ft^2, then the MWD \$2 ft^2 funded the remaining if greater than 1,000 ft^2. For example: If a resident applied for 1,500 ft^2, they would receive the following:

- \$3ft^2 x 1,000 ft^2 = \$3,000 (this included West Basin's \$1 and MWD's \$2)
- 500 ft^2 x \$2ft^2 = \$1,000 (this only included MWD's \$2ft^2)
- Total = \$4,000 rebate

It is evident that when the higher incentive that is offered to the public, the greater the number of participants. Figure 5-5 below shows that as the incentive increased from \$0.30 ft^2 to \$1 ft^2, \$2 ft^2 and then \$3 ft^2, the larger number of participants.

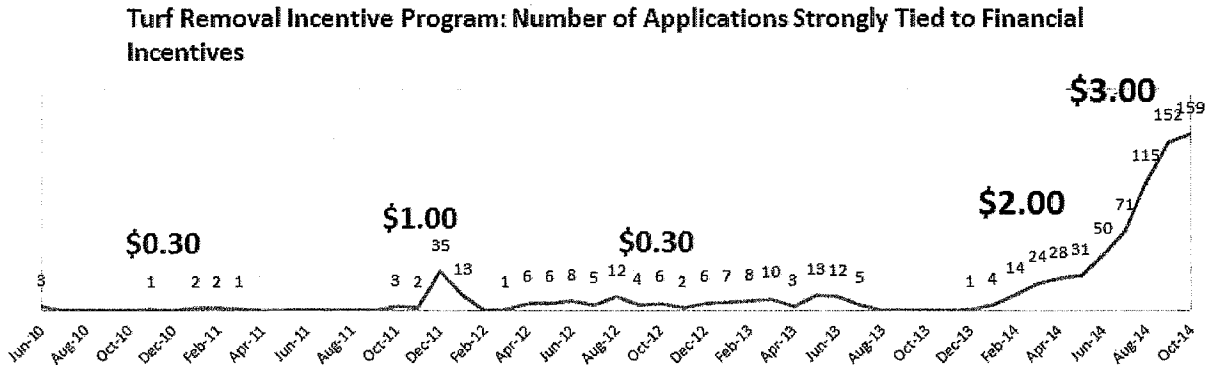


Figure 5-5. Number of participants in turf removal incentive program and the level of incentive offered.

Between September 1, 2014 and October 10, 2014, a total of 129 residents applied for a turf removal rebate through MWD's program. Figure 5-6 below shows the locations of these residents within the West Basin service area. Several of these residents showed pre and post photos of their retrofits and are included in Exhibit A.

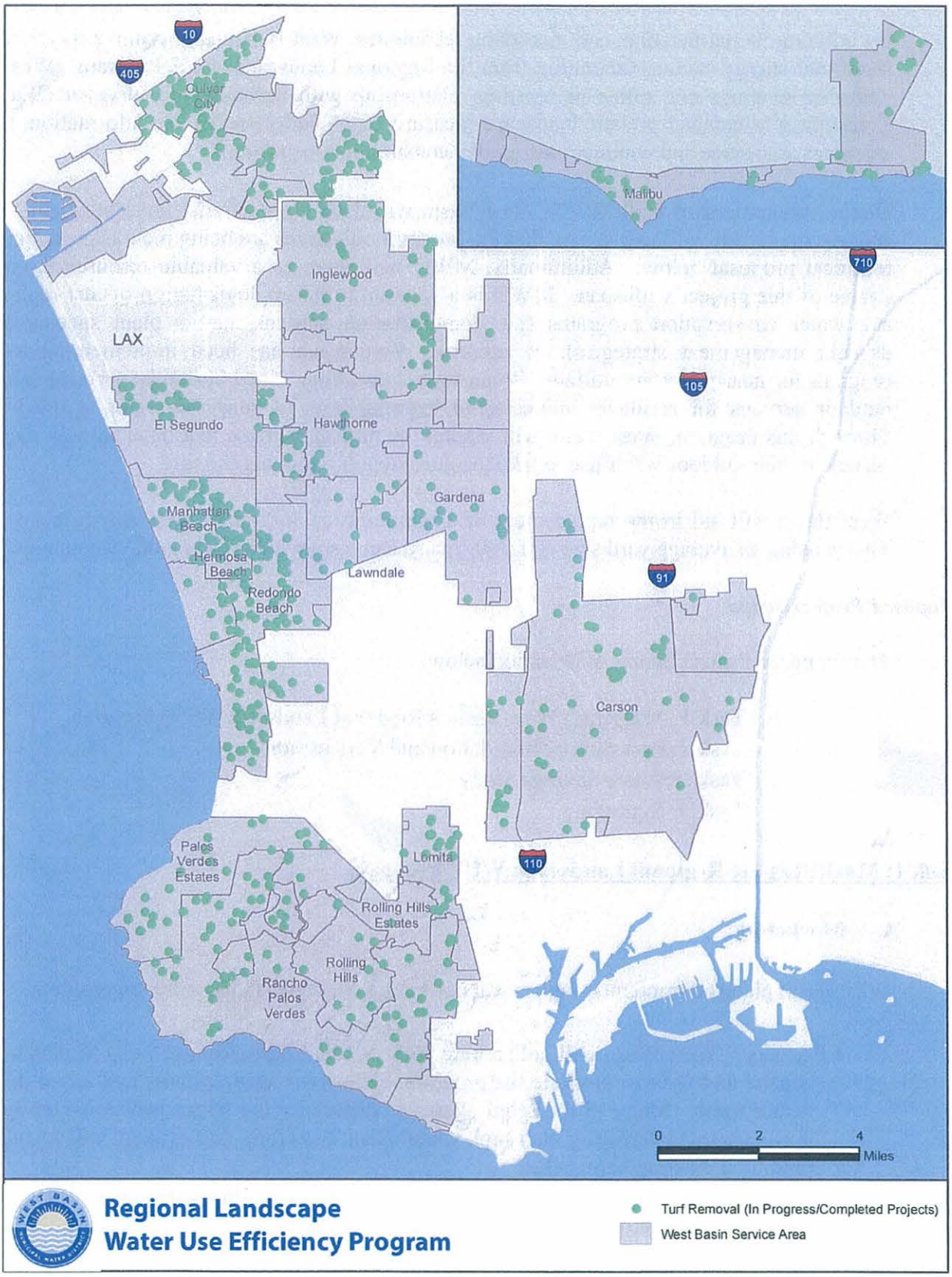


Figure 5-6. Locations of residents that applied for a turf removal rebate.

By utilizing its partnerships and marketing techniques, West Basin can optimize the anticipated water and energy savings stemming from the Regional Landscape WUE Program. West Basin will also leverage and utilize its existing relationship with its landscape surveyor (Waterwise Consulting) to conduct pre-site landscape measurements, collect water use information, provide customer assistance and conduct post-garden construction inspections.

Due to its partnership with MWD, West Basin will have an additional level of quality control and assurance that will help ensure that the program objectives are being met, as described in the technical proposal below. Additionally, MWD will serve as a valuable resource through the course of this project's lifespan. MWD is a veteran in the implementation of turf replacement and water conservation programs (i.e. demonstration gardens, native plant species experts, drought management strategies). In addition, West Basin has been implementing a survey program for nearly 2 years utilizing Waterwise Consulting. They currently perform residential outdoor surveys for residents interested in learning how to conserve water at their homes. Through this program, West Basin will market the project to those that have already received a survey of their outdoor water use to take the next step in removing the turf.

West Basin will aid in the replacement of a minimum of 300 yards with this proposed effort. This is using an average yard size of 1,500 square feet, as per MWD's standards and experience.

Proposed Project Scope

The Proposed Project Scope is identified below:

- Task 1: Marketing West Basin's Regional Landscape WUE Program
- Task 2: Post-Survey Installation and Verification
- Task 3: Water Savings Study
- Task 4: Reporting

Task 1: Marketing the Regional Landscape WUE Program

A. Marketing:

West Basin plans on implementing several marketing strategies to promote the program.

- Partners – West Basin will collaborate with its retail agencies and cities to develop a bill stuffer and flyer to promote the program. The retail agencies will first target their high water users. Many of the retail agencies, especially the larger private water agencies, have programs targeting their high water users; therefore, this strategy will be integrated into their existing approaches.
- SBCCOG / SBESC – West Basin is currently in partnership with the South Bay Cities Council of Governments / South Bay Environmental Services Center to promote West Basin's programs. The SBCCOG / SBESC will use its e-mail lists, e-blast newsletters and web site to promote the program.

- Outreach/Media – West Basin will use its social media to promote the program:
    - West Basin Web site,
    - Facebook,
    - Twitter,
    - Youtube,
    - Press releases and articles.
- LIEP Program – West Basin will use its customer participation database from the residents who participated in the Landscape Irrigation Efficiency Program or (LIEP). Valuable information was obtained regarding landscape size, plants, etc. Information will continue to be collected that will feed into this new Regional Landscape WUE Program.

B. Pre-Survey Analysis Process:

Step 1:
In order to participate in the Regional Landscape WUE Program, residents will be required to participate in West Basin's free LIEP Program. This survey will provide the square footage information required by MWD's current turf rebate program.

Once the survey is completed, the applicant will be given a survey number that will be provided to MWD's regional turf rebate administrator (EGIA). This will ensure MWD's vendor has accurate landscape information. Exhibit B provides an example survey that will be used by the surveyor for this project.

During the survey process, West Basin's existing contractor (Waterwise Consulting) will provide the applicant with the following:

- Information regarding MWD's current rebate program;
- Information regarding any city or water retail requirements (i.e. no synthetic turf allowed or that at least 50% of the garden must have native or drought tolerant plants.);
- Measure landscape, turf, plant, shrub and tree areas;
- Identify the current irrigation system, run times, sprinkler heads and sprinkler controller;
- Obtain water use information;
- Check for system leaks;
- Educate the resident about converting to drip irrigation where possible;
- Information about native gardens and native plants;
- Up to (2) free rain barrels;
- Information on:
    - Rain water capture and water redirect (Slow it, Spread it and Sink it); and
    - Creating rain gardens and permeable areas.

This site visit will also provide an opportunity for the surveyor to discuss rain capture and infiltration techniques that the homeowner can incorporate as part of their landscape

project. Information about rain capture and runoff reduction will be provided. Also during this site survey, the surveyor will see if the resident qualifies to receive up to 2 free rain barrels, provided during the site visit.

Step 2:
The resident will apply to MWD's regional rebate program. MWD's vendor reviews the submitted applications and garden designs and will approve the residential applications. The resident is also required to submit pre-construction photos to demonstrate pre-existing turf and landscaping conditions.

Upon completion of Steps 1 and 2, the applicant will have a clear understanding of how to supplement water-savings with additional water conservation measures. This will culminate in supplemental water savings above and beyond the quantifiable water savings associated with the Proposed Project.

C. Receive Project Approval:

Once the customer meets all the requirements, MWD's vendor (EGIA) will approve the application and provide the resident with a confirmation number and green light to begin their project. Residents are allowed 120 days to complete their project. By removing the turf, the owner may replace it with the plant choices listed on MWD's turf removal web site. Also, overhead drip must be converted to low water use drip irrigation. As part of leveraging MWD's turf removal rebate program, it will also drive residents to their web site, www.socalwatersmart.com where the resident can learn about the program guidelines and restrictions and also to access the on-line application for the new \$3 ft^2 rebate. In addition, West Basin will be launching its own landscape microsite in spring 2015 where residents will be able to find resources on drought-tolerant landscapes, including pre and post photos for residents who have already taken advantage of the rebate incentive from MWD, plant palettes, sample designs, locations of where to purchase plants, ability to register directly on the website for landscape classes that West Basin conducts, and much more, see Figure 5-6 for example homepage.

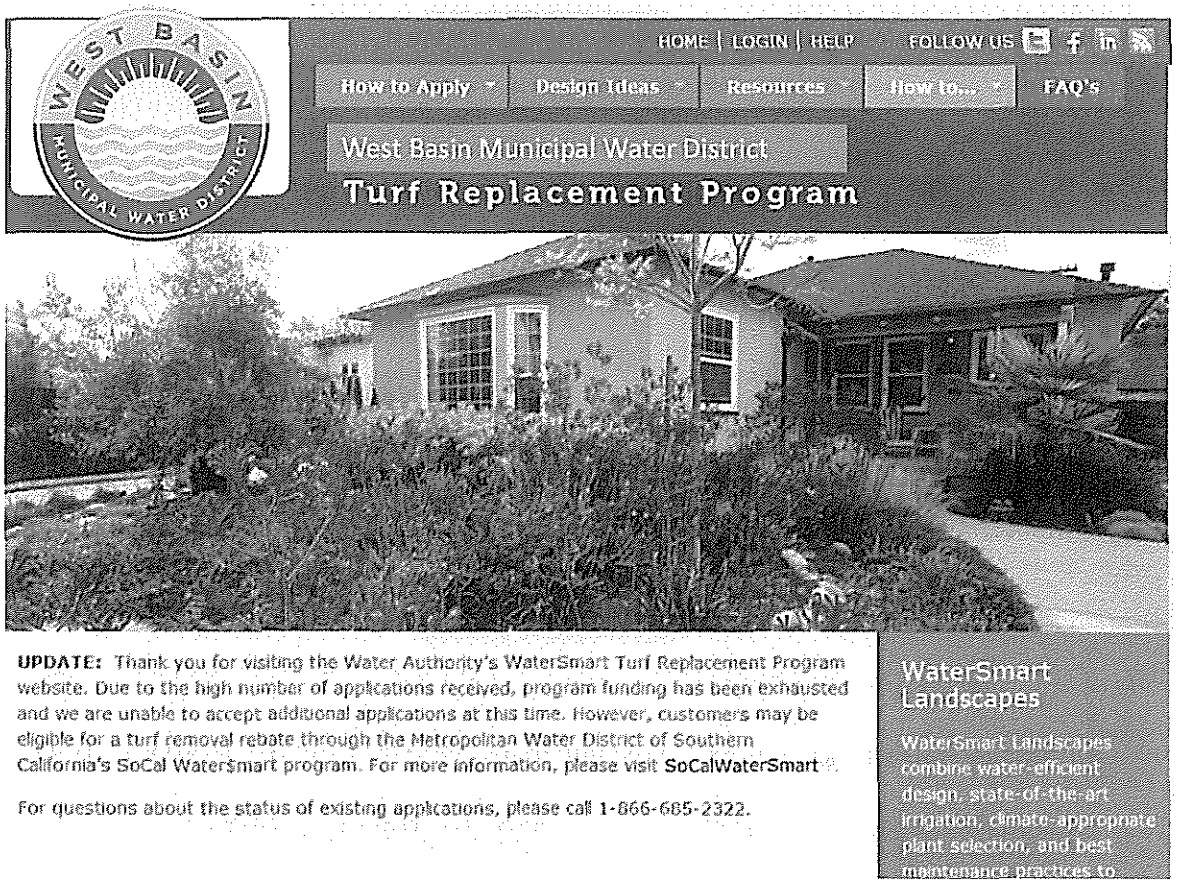


Figure 5-6. Example West Basin landscape microsite homepage.

The goal is to assist the resident in achieving their garden transformation within a timely manner.

Task 2. Post-Survey Installation and Verification

Once the replacement of drought tolerant landscaping has been installed, Waterwise Consulting will provide a follow-up site visit to ensure that the applicant's project is complete. This will be documented with photos.

Once Waterwise Consulting has signed-off on the project, the applicant will then relay this information to MWD's rebate vendor. Once the project has been deemed complete by EGIA, the applicant will receive the rebate. The incentive program will equate to \$3/ft^2: MWD's \$2/ft^2 coupled with West Basin's \$1/ft^2.

A helpful way of visually describing the relationships of the various entities involved in the project is to show an applicant process lifecycle, as shown in Figure 5-7.

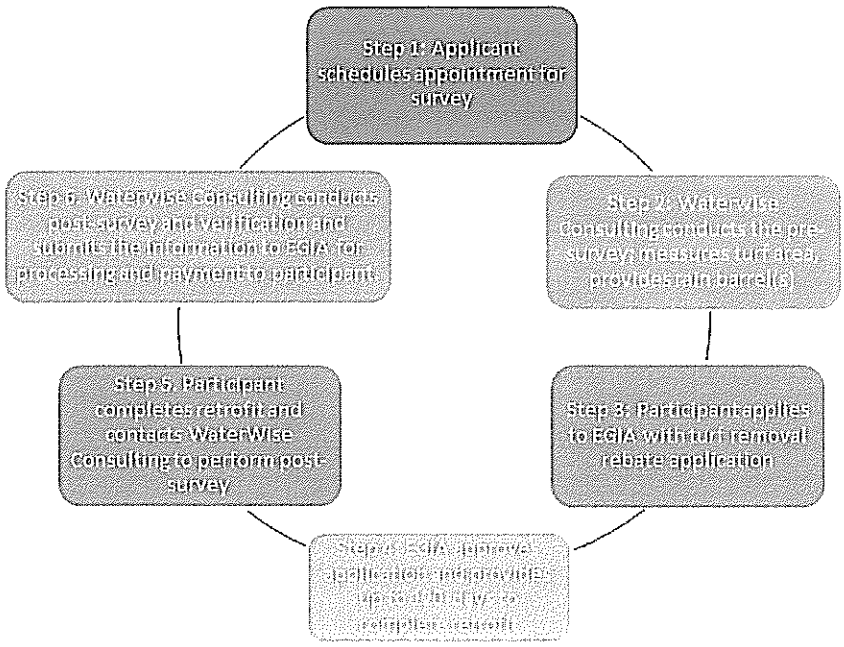


Figure 5-7. Applicant Process Lifecycle.

Below is a flowchart showing the project implementation structure of the entities involved in this project.

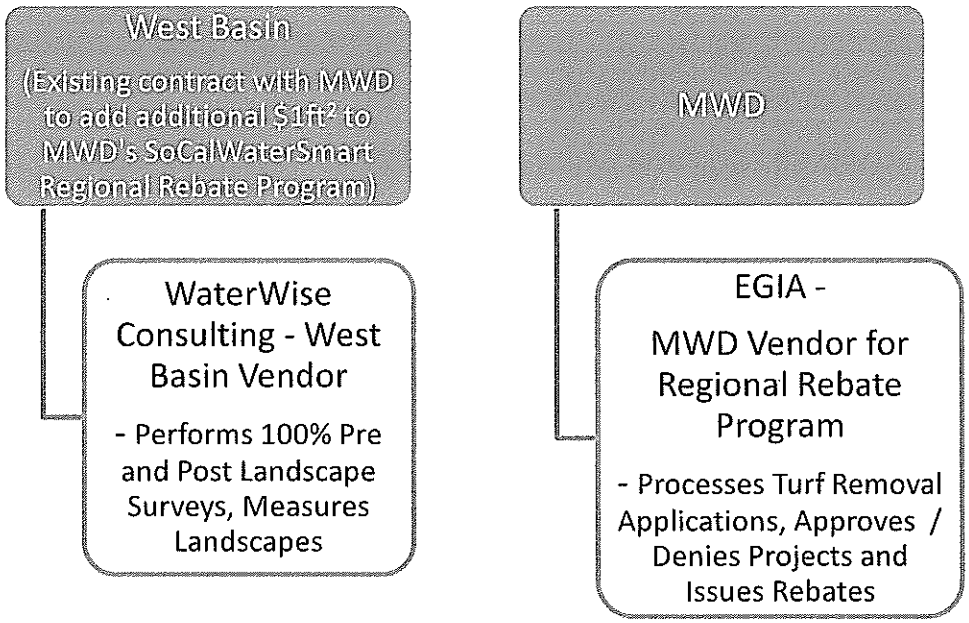


Figure 5-8. Project Implementation Structure

Task 3. Water Savings Study

As part of this project, West Basin will hire a third party consultant to study the program. The consultant will analyze pre and post water usage for a minimum of 10% of the participants. The study will also discuss the key socioeconomic differences that may contribute to differences in participation

rates. The study will also capture changes in water usage pre and post participation using regression methods that control for seasonal and time trends as well as economic factors.

Task 4: Reporting

Reports on the financial status and project progress on a quarterly basis. Significant development reports and a final project report will be prepared. In addition, the project will comply with any other reporting requirements specified in the Grant Agreement.

West Basin will begin work on the final report in Q3 2017 and will submit to Reclamation thereafter.

Project Approach:

Several tasks, listed below, are defined to accomplish the aforementioned Project Work and organized to track with Budget and Schedule items. A start date of January 2016 is anticipated with an estimated completion date of December 2017.

Administration

Activities include coordination of all Project activities, including budget, schedule, communication, and grant and cost-share administration (preparation of invoices and maintenance of financial records).

Deliverables: Preparation of invoices and other deliverables as required.

Reporting

Report on the financial status and project progress on a quarterly basis. Significant development reports and a final project report will be prepared. In addition, the project will comply with any other reporting requirements specified in the Grant Agreement.

Deliverables: Submission of quarterly, annual, and final reports as specified in the grant agreement.

Design

None required.

Deliverables: None.

Environmental Documentation

None required.

Deliverables: None.

Permitting

None Required.

Deliverables: None.

Installation

This involves the installing of all Project works, which includes a total of 450,000 square feet. Installation will occur on an individual applicant basis.

Deliverables: Pre- and Post-Survey Analysis.

Construction Management

This task involves everything from coordinated site inspections to contract administration with outside vendors/contractors involved in the pre- and post-surveying process. This task includes many items, such as the Notice to Proceed, pre-contractor conference, correspondence with the Contractor, submittal review, progress payments, Contract Change Orders, etc.

Deliverables: Field Inspection support needed for this effort.

The Project will be performed under the direction of West Basin, in conjunction with MWD. Gus Meza will have responsibility of Project Manager. The sequencing of work is addressed in the next section which presents and discusses the Project schedule.

Project Schedule- Based on the above-described tasks, a Project schedule has been prepared. Table 5-3 summarizes the anticipated tasks to be completed. Final reporting and grant closeout would occur within months following the completion of the installation.

Table 5-3: Project Schedule

	Item	Timing
1	Marketing the Regional Landscape WUE Program	Completed by October 2017
2	Post-Survey Installation and Verification	Completed by October 2017
3	Water Savings Study	Completed by December 2017
4	Reporting	Semiannual, Annual and Final Reports as required; Completed by December 2017

Project Mechanism- The mechanism behind this project is to capture and conserve as much water supply and energy as possible through the following: reduction of runoff/wasted irrigation water, reduced application of water related to higher water consuming vegetation, and overall improvement of water quality due to less contact with chemicals present in fertilizers and pesticides. As is evident in Figure 5-9, drought tolerant vegetation will allow for minimal runoff as compared to other impervious cover alternatives. The goal of this project is to capture that 10% runoff, thereby reducing water consumption even further.

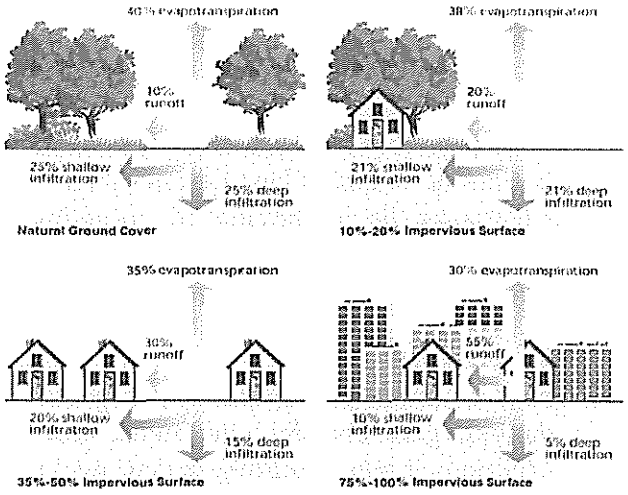


Figure 5-9. Relationship between Impervious Cover and Surface Runoff (FISRWG 1998).

The proposed landscape/turf alternatives will have an extremely low water usage/demand rate, as is evidenced below in Figure 5-10.

Water-Savings Potential

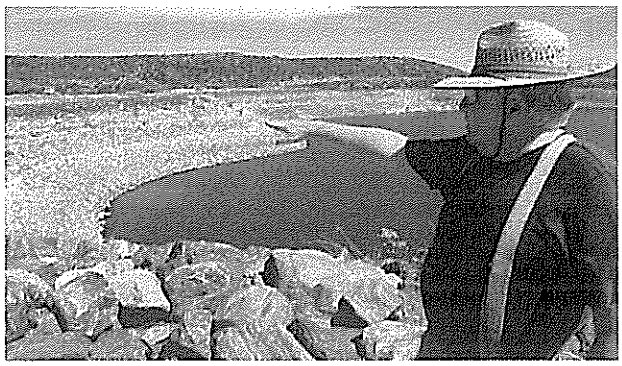
Perennials and shrubs require less frequent watering than lawns. For areas where natural turf is desired, select grass species that use less water.

Water-Thrifty Turf Varieties		
Warm-Season Grasses Ks = 60% of ETo	Cool-Season Grasses Ks = 80% of ETo	
Bermudagrass	Annual bluegrass	Kentucky bluegrass
Kikuyugrass	Annual ryegrass	Meadow fescue
Seashore paspalum	Colonial bentgrass	Perennial ryegrass
St. Augustine	Hard fescue	Red fescue
	Highland bentgrass	Tough-stalked bluegrass

Process or Equipment Alternatives	Water-Savings Potential
Use water-thrifty shrubs, trees, and ground cover instead of turf	High
Use water-thrifty shrubs, trees, and ground cover instead of high water-use shrubs, trees, and ground cover	High
Use warm-season instead of cool-season grasses for turf	Medium

Figure 5-10: Water Savings Potential of Drought Tolerant Plant Species (EBMWD 2008).

Importance of Project- The need for additional water storage south of the Sacramento-San Joaquin Delta (Delta) is widely recognized by all stakeholders in California water. As will be reflected in the California Water Plan Update 2013, DWR recognizes the importance of groundwater to the overall water supply and quality portfolio in California.



In addition to low levels within the Delta, the Colorado River Basin system is experiencing similar imminent threats and impacts. Colorado River flows are being compromised by multiple-year drought conditions, current management practices and policies, as well as a warming climate, resulting in detrimental impacts on endangered and sensitive species.

As a result, the water conservation benefits of this project are particularly important in light of the following factors:

a) Restrictions on California's use of water from the SWP increasing. In January of 2015, a 10 percent SWP allocation was announced for 2015. This means that only 10 percent of the annual amount of water under contract with 29 water agencies with long-term SWP contracts was available for allocation.

   Because the SWP has not completed facilities to meet its contract obligation, a reduction in allocations can result in water shortages at the local level. As a local and regional effort, this project helps increase water supply reliability in drought years to close the shortfall in the State's contract obligations.

b) The impact of global warming on snowpack and surface water storage capacity.

c) Predicted population growth trends.

d) Protection of the groundwater basin from future overdraft.

Engineering Plans- Not applicable

Improved System Operation Flexibility for Deliveries- The project will increase the operational flexibility for delivery of SWP water to other Southern California SWP contractors as a result of reduced demands, stemming from the Regional Landscape WUE Program, of imported water demands from the Delta.

In addition, through increased water conservation achieved by coupling this proposed project with other water conservation efforts in the West Basin Region, this project lends the opportunity for increased operational flexibility for all 9 water purveyors within the West Basin Region, and allows for each one to optimize water operations and management actions to achieve conservation and water supply goals.

Identify funding sources- West Basin will provide $743,428.82 in matching funds and in-kind services, and is seeking a partnership with Reclamation for $300,000, for a total program cost of $1,043,428.82.

This contribution is derived from funds already identified within West Basin's Infrastructure Fund, annual budget, and in-kind services. The remaining 28 percent of the project funding will come from Reclamation grant funding. Documentation supporting West Basin's funding sources is provided in Section 11, Funding Plan and Letters of Commitment.

As described in Section 11, if Reclamation is unable to provide the total funding request, West Basin may consider scaling back the scope of the project to match the available funds. However, West Basin will continue to implement the proposed project elements as funding becomes available.

5.d Evaluation Criteria

Evaluation Criterion A: Water Conservation

Subcriterion No. A.1(a) – Quantifiable Water Savings

Water Saved: It is expected that West Basin will conserve approximately 60 acre feet of water per year (over 19.5 million gallons) as a direct benefit of the proposed Regional Landscape WUE Program.

This savings is obtained using the following estimates and calculations:

Approximately 60 AF of water will be saved per year, or 1,500 AF over the course of the project (25-year useful life of the sustainable landscape).

Total Water Savings					
Measure/Device	**Gallons Saved Per Year / Sq. Ft.**	**Total Sq. Ft.**	**Total Annual Gallons Saved**	**Total Annual AF**	**25-Year Life**
Turf Replacement	44	** 450,000	19,500,000	60 AF	1,500 AF

** Total Sq. Ft. – In the fall of 2014, West Basin added an extra $1 ft^2 to MWD's Turf Removal Program and targeted the removal of 100,000 or $100,000. An analysis was conducted on the actual square footage removed, and the finding showed that 150,000 square feet were actually removed, a 150% benefit.

By capping West Basin's (DWR IRWMP Funding) additional $100,000 to 1,000 ft^2, it allowed more residents to participate in the program (see figure 5-5). This model worked very well. The $100,000 investment generated a total of 150,000 ft^2 of water-wasting turf removed.

For this new Regional Landscape WUE Program, West Basin will follow the same model. West Basin is requesting $300,000 from Reclamation and is estimating that this $300,000 investment will generate 450,000 ft^2 (150%) of turf removed (see example calculation below).

Square Footage of Turf Removed Calculation:

Reclamation Investment: $300,000
Capped to first 1,000 ft^2 per application
300 Customers/landscapes ($300,000 / 1,000 ft^2)
300 x 1,500 ft^2 (avg. project size of turf removal)
= 450,000 ft^2 removed

Therefore, Reclamation's investment of $300,000 will generate an estimated 450,000 ft^2 of turf removed.

Maximum Applied Water Allowance (MAWA) Calculation

West Basin used the Maximum Applied Water Allowance (MAWA) Calculation developed for the Model Water Efficiency Landscape Ordinance that is located on the California Department of Water Resource's web site to develop the 44 gallons per year per square foot estimation (http://www.water.ca.gov/wateruseefficiency/landscapeordinance/).

ETo = Reference Evaporation (inches per year)
0.7 = ET Adjustment Factor
LA = Landscape Area (Square Feet)
0.62 = Conversion Factor (to gallons per square foot)
0.3 = Runoff Factor (30% of water applied is assumed to run off the landscape)

MAWA = (Reference Evaporation) x (ET Adjustment Factor) x (Landscape Area) x (Conversion Factor) x (Runoff Factor)
MAWA = ETo (0.7)(LA)(0.62)(0.3)

Below are the assumptions made to justify the water savings.

West Basin is estimating that most people over-water their landscapes by 2 or 3 times the amount that the landscape requires. But to be conservative, West Basin is estimating the following 2 scenarios: for 1 square foot of turf:

Scenario 1:

- 50% of the population is watering at 100% of ET, or at the annual water needs of cool season turf.

$$MAWA = (ETo) \times (0.62) \times [(0.7 \times LA) + (0.3 \times LA)]$$
$$MAWA = (50.1) \times (0.62) \times [(1.0 \times 1ft^2) + (0.3 \times 1ft^2)]$$
$$MAWA = (31.06) \times (1.3)$$
$$MAWA = 40.38 \text{ gallons per year / sq. foot}$$

Scenario 2:

- The other 50% is watering at 125% of the watering needs.

$$MAWA = (ETo) \times (0.62) \times [(0.7 \times LA) + (0.3 \times LA)]$$
$$MAWA = (50.1) \times (0.62) \times [(1.25 \times 1ft^2) + (0.3 \times 1ft^2)]$$
$$MAWA = (31.06) \times (1.55)$$
$$MAWA = 48.14 \text{ gallons per year / sq. foot}$$

Average of both Scenarios:

1: MAWA = 40.38 gallons per year / sq. foot
2: MAWA = 48.14 gallons per year / sq. foot

40.38 + 48.14 = 88.52 / 2 = 44.26 gallons per year / sq. foot

Therefore, West Basin is estimating that it will save 44 gallons per year / per square foot by having the public remove their high-water wasting turf.

- **What is the applicant's average annual acre-feet of water supply?**

Over the last 5 years, the applicant's average water supply portfolio has been 191,500 AFY.

5-Year Average

Imported water supply	119,000 AFY
Recycled water supply	37,000 AFY
Groundwater supply	34,000 AFY
Brackish groundwater	1,500 AFY
Total	**191,500 AFY**

- **Where is the water currently going?**

The water is currently being applied to high water consumption landscaping. This is contributing to over-saturation of soil, evaporation, or runoff into the storm drains ultimately being released to the ocean.

- **Where will the conserved water go?**

The conserved water supplies achieved through this project will be applied locally, regionally, or statewide. This Proposed Project will contribute to the reduction of increased demands on both the California Bay-Delta and the Colorado River Watershed systems.

- Remain in the Colorado River Watershed
- Remain in the SWP
- Banked for future water demands
- Made available for beneficial use within MWD's service area

Please address the following questions according to the type of project you propose for funding:

(6) Landscape Irrigation Measures:

a. Turf Removal:

(i) How have average annual water savings estimates been determined? Please provide all relevant calculations, assumptions, and supporting data.

Average annual water savings have been determined by a consumptive rate based on a range of measured and estimated savings from programs implemented within MWD's Service Area.

West Basin has also used the Model Water Efficiency Landscape Ordinance (*as described in Subcriterion A.1 Quantifiable Water Savings*). West Basin developed two water using scenarios and used DWR's Maximum Applied Water Allowance (MAWA) to develop a realistic estimation using the current areas ETo rate.

Part of the goal of this program is to gather "actual" data on turf removal in this region, in order to compare against our assumptions for the post conversion data for both commercial and residential sectors. Through this program, West Basin will determine water savings on 10% of the sites by analyzing the water consumption on the participant's water bills pre and post turf removal.

(ii) What is the total surface area of turf to be removed and what is the estimated average annual turf consumptive use rate per unit area?

The total surface area of turf to be removed is 450,000 ft^2 throughout the 17 cities and unincorporated Los Angeles County areas in West Basin's service area. The annual average turf consumption use rate per unit is 44 gallons per ft^2.

(iii) Was historical water consumption data evaluated to estimate average annual turf consumptive use per unit area? If so, did the evaluation include a weather adjustment component?

The historical water consumption data was not used to estimate annual turf consumptive use per square foot. Alternatively, assumptions were used based on a calculation provided by the Department of Water Resources.

(iv) Will site audits be performed before applicants are accepted into the program?

Yes. West Basin will implement pre-project landscape surveys as a baseline for the Regional Landscape WUE Program. In addition, a post-project site audit will be conducted by West Basin to ensure the accuracy of the data of the projects that have been completed.

(v) How will actual water savings be verified upon completion of the project?

In year two of the program, West Basin will hire a qualified and experienced consultant to analyze the pre and post water usage for a minimum of 10% of the participants (30 participants).

Subcriterion No. A.2 – Percentage of Total Supply

Describe the percentage of total water supply conserved.

This project is estimated to conserve less than 1% of West Basin's annual water supply, calculated as follows:

Average annual water supply: 191,500 AFY
Estimated water conserved as result of project: 60 AFY

Calculation:

$$\text{Total Water Supply Conserved} = \frac{\text{Estimated Water Conserved}}{\text{Avg. Annual Water Supply}}$$

$$\frac{60 \text{ AFY}}{191{,}500 \text{ AFY}} = 0.0003\%$$

Total Water Supply Conserved = <1%

Note: Although the water savings compared to annual water demand is not significant, this program has the likelihood of creating greater indirect water savings impacts. In prior turf removal projects, West Basin noticed that project participants inspired other neighbors to implement similar changes.

Evaluation Criterion B: Energy-Water Nexus

Subcriterion No. B.1 – Increasing Energy Efficiency in Water Management

Describe the efficiencies that are expected to result from implementation of the water conservation or water management project

Reducing reliance on Imported Water. In the State of California, it is estimated that the SWP pumps water almost 2,000 feet over the Tehachapi Mountains. The SWP Project is the largest single user of energy in California. It consumes an average of 5 billion kWh/yr., accounting for roughly two to three percent of all electricity consumed in California (http://www.epa.gov/region9/waterinfrastructure/waterenergy.html.).

The proposed project will result in increased energy efficiency in water management and water conservation practices by reducing the amount of water currently being imported. West Basin receives approximately 63% of its water from the MWD. As noted previously, this water is drawn from the Colorado River Aqueduct and the State Water Project.

With an estimated 1,500 AF of potable water that will be saved by this project, the end result is a significant measurable energy savings (see calculations below).

Based on energy consumption of an average of 2,500 kWh to pump one AF over the mountains from the California Bay Delta and the Colorado River Aqueduct, the fiscal energy savings is calculated to be $496,500 based on energy costs of .1324 per kWh.

Energy Cost Savings ($) = Actual Water Savings * Energy Consumption ($/AF pumped) * Energy Costs ($)

= 1,500 AF X 2,500 kWh *0.1324/kWh

Total Energy Fiscal Savings =$496,500

Kilowatt-hours required were determined based on the Natural Resources Defense Council report entitled, Energy Down the Drain: The Hidden Costs of California's Water Supply, (page 9). Average cost of kWh in California was derived from the U.S. Energy Information Administration Form EIA-861 Annual Electric Power Industry Report, 2009.

Lastly, by reducing the use of landscape maintenance (i.e. lawnmowers), this will contribute to decreased energy use and improved air quality.

Device/ Measure	Energy Savings (Not Quantifiable)	Energy Savings (Quantifiable)
Turf Removal	Reduced air emissions from lawn mowers, blowers and weed whackers on lawns, reduced vehicle mileage for landscape professionals to mow lawns, reduced yard waste hauled to landfill, reduced human energy on maintenance	Reduced gasoline usage from lawn mowers (See calculations below)

Reduced gasoline usage from lawn mowers

- 450,000 sq. ft. removed / 1,500 sq. ft. per average yard = 300 yards

  300 yards x 5 gallons/year gasoline* = 1,500 gallons per year for 300 yards

  1,500 gallons of gasoline per year = **54,900 kWh** x 25 years = 1,372,500 kWh savings over 25 years.**

* Source: http://awmowe.com/average-gallons-of-fuel-per-year-in-lawn-mower/
** Source: http://www.convertunits.com/from/gallon/to/kilowatt-hours

Energy Savings – Carbon Emissions
The conserved water would otherwise be conveyed hundreds of miles from the Colorado River and Northern California, and so conserving this water allows 6,703,726 kilowatt-Hours of embedded energy to remain unused. Conservation of this energy avoids equivalent Green House Gas emissions of 3,646,827 kg of CO2 – the amount that would be generated by a coal-fired power plant producing that power.(http://www.carbontrust.co.uk/cut-carbon-reduce-costs/calculate/carbon-footprinting/pages/conversion-factors.aspx).

That power, totaled in the same manner as the cost of water, is valued at $696,822 in present dollars.

The table below shows the life cycle impacts from the Program and the back-up calculations are shown in Exhibit C.

Project Life Cycle Impacts	
Total Project Life Water Savings (Acre-feet)	1,500
Conserved Water Present Value ($)	$836,045
Conveyance-related Energy Savings (kW-Hr)	6,703,726
Conveyance-related avoided GHG emissions (kg CO2)	3,646,827
Avoided MWD Variable Costs Present Value ($)	$696,822

The energy savings estimate is based upon the point of origin and treatment and conveyance costs for importing water to the region. The calculation in the Conveyance-related Energy Savings does include the energy required to treat the water.

The program does not result in reduced vehicle miles driven or renewal energy components.

Evaluation Criterion C: Benefits to Endangered Species

Addressing Endangered Species Concerns

It has been identified that projects *resulting in reduced demand on imported water supplies* will play a key role in resolving the problem of the Delta, which is the number one infrastructure problem in California.

By implementing this Regional Landscape WUE Program, water users can be more flexible in the timing of water deliveries so that they may aid the restoration of the Delta habitats. The project will provide a mechanism to meet water demands (during environmentally sensitive windows) while allowing the endangered Delta fish (Delta Smelt/Salmon) species to recover. The project is a critical way of meeting the State's co-equal goals, as defined in the Amended Memorandum of Agreement Regarding Collaboration on Planning, Design and Environmental Compliance for the Delta Habitat Conservation and Conveyance Program in Connection with the California Bay Delta Conservation Plan (December 13, 2013). The implementation of co-equal goals is a way of providing reliable water supply for California while enhancing, protecting, restoring, and enhancing the Delta ecosystem and habitat (SB1, Steinberg- Section 85054).

Similarly, conserved water will contribute to the health and restoration of sensitive habitat within the Colorado River Watershed system. In order to preserve sensitive species within the Colorado River system, healthy water flows need to be maintained. This project will contribute to maintaining additional water supplies (via conservation) that are critical to an already overcommitted water system.

In addition, by converting turf to native landscapes, you introduce plants species that are host to many types of wildlife including birds, bees, and insects, including the Monarch butterfly. As of late, this species of butterfly is under consideration for endangered species status by the U.S. Fish and Wildlife Service and a determination of this will be made in 2015. By some estimates, the monarch butterfly population has declined by 90 percent over the past two decades due to its loss of habitat. By bringing in native plants to the region, these butterflies can find habitat where they can thrive. We have seen first-hand the impacts that native landscapes have on the local wildlife and the re-introduction of species such as the Monarch butterfly.

As the urgency of rebuilding the State's water infrastructure increases, and in the face of issues such as climate change, the ability to implement water management strategies such as water banks will help to ease the stress on California's water resources.

The project will provide a mechanism to meet water demands (during environmentally sensitive windows) while allowing the Delta fish species to recover. The project is a critical way of meeting the State's co-equal goals, as defined in the California Bay Delta Conservation Plan.

Evaluation Criterion D: Water Marketing

Briefly describe any water marketing elements included in the proposed project.

Estimated Amount of Water to be Marketed –This project will not specifically open new external water markets, but will provide a unique opportunity for West Basin to closely track landscape water usage and identify new needs for conserved water markets in the future. With large Region-wide sport parks, golf courses and schools located in the West Basin Region, water purveyors can anticipate the ability to expand future phases of this project resulting in additional water supplies for application in the future.

Evaluation Criterion E: Other Contributions to Water Supply Sustainability

Subcriterion E.1: Address Adaptation Strategies in a Water SMART Basin Study

The West Basin Regional Landscape WUE Program will contribute towards better management and sustainability of the Colorado River water supplies. The proposed project will implement adaptive water sustainability practices (water conservation), as identified within the Colorado River Basin Plan, by preserving water, through conservation, within the Colorado River Watershed. The additional water conserved through implementation of this project will facilitate Reclamation activities such as flooding and scouring of the Colorado River that helps to build and maintaining habitat for sensitive and endangered species.

Will the project make water available to address a specific concern?

Southern California is facing an unprecedented water crisis spurred by climate change, drought, court decisions and new restrictions to protect a failing Delta ecosystem, and a weakened economy. Stored water resources and the ability to recover and distribute these resources will play an important role in dealing with this crisis.

The project will serve to:

a) Meet water supply shortages resulting from climate variability;

b) Reduce competition for limited water supplies through the Delta;

c) Provide a reliable local water supplies to users; and

d) Generally make more water available in the basin and improve the overall health of the basin where the proposed work is located.

The Regional Landscape WUE Program will provide benefits as a result of the objectives listed above. The project, as defined in this grant application, aims to implement water conservation/management strategy that will help to achieve water reliability, conservation, and improved efficiency, all crucial elements to ensuring future water supply sustainability. In a time of shrinking budgets, growing water demands and uncertain supply reliability, cooperative regional planning mechanism, a water conservation project, presents a viable solution to meeting those challenges.

This project also contributes to the collaboration and formation of regional and local partnerships which will enhance water supply reliability, promote a regional common goal and add flexibility to water portfolios and distribution systems.

Drought conditions, diminished water storage levels, and regulatory restrictions on water deliveries from northern California have combined to severely limit water supplies in much of California. The challenge to meet water supply demand is greatest during dry years and droughts, which California experienced in 2007, 2008, 2009, 2010, 2011, 2013, and 2014. In addition to typical climate variability, climate change is reducing snowpack storage in the Sierra Nevada Mountains[1]. The 2015 allocation has initially been set at 10%[1].

Many water agencies around the state are grappling with the supply shortages. The project is specifically designed to help alleviate those impacts on water agencies due to shortages related to climate variability and Delta pumping restrictions.

Specifically, the project, if funded, would provide a place to regulate an additional 1,500 AF. Without the project that increment of supply would be lost and unavailable.

The Regional Landscape WUE Program will make significant contributions to the sustainability of local water supplies and help ensure that West Basin has the ability to prevent water supply shortages when the time arises.

Subcriterion E.3: Building Drought Resiliency

Water Year 2014, overlapping with California's driest calendar year, ended on September 30th as the state's third driest in 119 years of record. The state's aggregated precipitation in calendar year 2013 was a mere 7 inches, followed by 12.08 inches in Water Year 2014 (October 1, 2013 – September 30, 2014). California's deepening drought continues to contribute to the severe water supply deficiencies experienced today. In addition to diminishing supplies, climatic factors are also impacting water resources. According to NOAA's National Climatic Data Center, the first nine months of 2014, California temperatures averaged 63.7° F, or 4.1° F above the 20th century average of 59.6 °F. Temperatures from April to September averaged 70.0° F, breaking the old record of 69.4° F set in 2013. In late July 2014, the U.S. Drought Monitor classified 58 percent of California was experiencing "exceptional" drought conditions, the worst category, and that percentage remained unchanged through September. More than 80 percent of California was in "extreme" drought.

DWR is closely monitoring California's reservoir storage which is being drawn down daily to meet California's water supply demands. On January 17, 2014 Gov. Edmund G. Brown Jr. declared a drought state of emergency. On April 25, 2014 Governor Brown asked all Californians to redouble their efforts to conserve water, instructed agencies to cut red tape to get water to farmers more quickly, ensure that people have safe drinking water, protect vulnerable wildlife species and prepare for an extreme fire season.

At the local level, MWD continues to face water supply challenges in both of its imported water sources in Northern California and the Colorado River. As of December 2014, the Southland is receiving the smallest allocation in the 43-year history of SWP deliveries from Northern California after three years of drought. State deliveries, which normally account for about a third of the Southland's annual supplies, stand at only 5 percent of a full allocation. Although snowpack in the Colorado River watershed is

[1] DWR news release (http://www.water.ca.gov/swpao/docs/notices/14-10.pdf)

above average this year, the river system is recovering from 12 years of drought. Storage in the system's two main reservoirs, Lake Mead and Lake Powell, is just above 60 percent.

To adjust to these conditions, particularly the record-low deliveries from Northern California, Metropolitan has taken extraordinary actions this year, including maximizing Colorado River deliveries throughout its six-county service area and deferring maintenance so that the aqueduct system can run at nearly full capacity.

Southern California has already started drawing heavily on its stored reserves. MWD withdrew nearly a million AF to meet demands in 2014, the most the district has taken from reserves in a year. For example, Diamond Valley Lake, its largest storage reservoir located in southwest Riverside County, has been lowered to meet demand, and supplies from Castaic Lake, in Los Angeles County, have also been drawn down.

MWD is also calling on their retail water agencies to do their part to enforce conservation measures and ordinances to bring down demands. MWD has cautioned that a "wet year" does automatically equate to water supply surplus. Supplies from Northern California will continue to be severely limited because of pumping restrictions in the Sacramento-San Joaquin Delta due to environmental conditions impacting fisheries, estimating the region has lost access to about 1.5 million acre feet since 2008.

West Basin and the other MWD member agencies are preparing for reduced water allocations and mandated rationing. In December 2014, the MWD's Board of Directors approved an updated Water Supply Allocation Plan that can become "triggered" at any time. In addition, MWD has invested an additional $20 million to their already $80 million spent in FY 14-15 on water conservation efforts for the region. This Regional Landscape WUE Program will utilize a portion of this recently-approved funding to aid in the removal of turf in the region to conserve water. The more water that is conserved by removing lawns, the less impact it has on the residents that will be forced to conserve when rationing is triggered.

Subcriterion E.4: Other Water Supply Sustainability Benefits

Southern California is facing an unprecedented water crisis spurred by climate change, drought, court decisions and new restrictions to protect a failing Delta ecosystem, and a weakened economy. Stored water resources and the ability to recover and distribute these resources will play an important role in dealing with this crisis.

The project will serve to:

a) Manage water supply shortages resulting from climate variability;

b) Reduce competition for limited water supplies through the Delta;

c) Provide a reliable local water supplies to users (through increased conservation); and

d) Generally make more water available in the basin and improve the overall health (improved water quality) of the basin where the proposed work is located.

The Proposed Project will provide benefits as a result of the objectives listed above. The project, as defined in this grant application, aims to implement a water conservation/management strategy that will help to achieve water reliability, conservation, and improved efficiency all crucial elements to ensuring future water supply sustainability. In a time of shrinking budgets, growing water demands and uncertain supply reliability, cooperative regional planning mechanism, a water conservation project, presents a viable solution to meeting those challenges.

This project also contributes to the collaboration and formation of regional and local partnerships which will enhance water supply reliability, promote a regional common goal and add flexibility to water portfolios and distribution systems. The proposed project is built upon collaboration with our retail agencies and the regional water agency-MWD. West Basin's retail agencies are supportive of our water conservation efforts within their jurisdictions and have expressed this support through letters of support included in Section 8.

Collaborating with our retail agencies is vital to the success of the program. Funding from outside West Basin is a key component of these types of programs being implemented within our service area. Our retail agencies have money to spend on water conservation projects because of the avoided cost of importing new supplies to the region and creating new water infrastructure to meet a growing population. It is more cost-effective for West Basin to implement a conservation program on a regional basis than the retail agency implementing it only within their service area, which is why they continue to partner with us and provide funding for our programs.

Additionally, West Basin's involvement with the South Bay Environmental Services Center [(SBESC) is a local non-profit organization which functions as the "environmental" arm of the South Bay Cities Council of Governments (SBCCOG)] will help to support this program by marketing the rebates for turf removal and surveys, through their e-mail distribution list of over 10,000 people in our service area as well as at various workshops and venues throughout the year. In brief, the SBESC is an organization that was originally formed by Edison and the Gas Company in partnership with the SBCCOG to function as a clearing house of information regarding energy efficiency and environmental sustainability. West Basin has been involved with this partnership since 2006 and proposes to leverage their efforts with the cities to promote this program.

Drought conditions, diminished water storage levels, and regulatory restrictions on water deliveries from northern California have combined to severely limit water supplies in much of California. The challenge to meet water supply demand is greatest during dry years and droughts, which California experienced in 2007, 2008, 2009, 2010, 2011, 2012, 2013, and 2014. In addition to typical climate variability, climate change is reducing snowpack storage in the Sierra Nevada Mountains[1]. As of January 2015 the allocation has initially been set at 10%[2].

Many water agencies around the state are grappling with the supply shortages. The project is specifically designed to help alleviate those impacts on water agencies due to shortages related to climate variability and Delta pumping restrictions.

This program will provide benefits to the community by encouraging the changing of typical turf landscapes to sustainable landscapes that conserve water and reduce runoff. The more landscapes that

[2] DWR news release (http://www.water.ca.gov/swpao/docs/notices/13-11.pdf)

are converted the greater likelihood of additional landscapes following suit, especially in the residential sector.

West Basin believes that this program will increase the capability of future water conservation and energy efficiency because it is a pilot program that can create momentum in the community. The intent of this program is not only to conserve water and avoided energy use but also to encourage neighbors to learn from other neighbors that have received a turf removal incentive and implemented a sustainable landscape. The more that is created, the greater likelihood that additional landscapes will be converted. This program could also be a model for other water agencies to follow. West Basin often looks to the success of programs that have been implemented by other water agencies to determine the viability of a similar program within our service area, such as this program which has been implemented successfully by the City of Long Beach and the Southern Nevada Water Authority.

The project could potentially make water available to Indian tribes, with water rights on the Colorado River. Those tribes part of the Ten Tribes Partnership include:

- Northern Ute
- Jicarilla Apache
- Navajo Nation
- Southern Ute
- Ute Mountain Ute
- Fort Mojave Indian
- Chemehuevi
- Colorado River Indian Tribes
- Quechan Indian
- Cocopah Indian

These conserved water resources are also available to local communities that are considered to be Disadvantaged.

The Regional Landscape WUE Program will serve as a tool to teach the importance of water conservation and educate residential clients about how to take a proactive role in their water usage. The Region plans to implement an educational outreach program to help reach out to residents to actively engage them in taking part in water conservation strategies.

Evaluation Criterion F: Implementation and Results

Subcriterion No. F.1 – Project Planning

Does the project have a Water Conservation Plan, System Optimization Review (SOR), and/or district or geographic area drought contingency plans in place?

Identify any district-wide, or system-wide, planning that provides support for the proposed project – West Basin's Water Use Efficiency Master Plan (2015) is in place and is in the process of being updated for the next five years. The Water Use Efficiency Master Plan includes a list of programs to be implemented over a 5 year period and an excel-based tracking tool that provides water savings data for each program.

In addition, West Basin's Water Reliability 2020 Program includes aggressive goals for reducing dependence on imported water by half through the efforts of recycled water, ocean water desalination and water conservation. This program helps meet the water conservation targets set forth in this program as well as meeting the state's 20% by 2020 reduction in water use. This program helps meet the State's AB 32 goals by reducing greenhouse gas emissions as a result of the reduction in water treatment and delivery from imported water supplies.

The 2020 Program also helps West Basin to meet the conservation goals identified within these resource planning documents:

- West Basin's 2010 Regional Urban Water Management Plan,
- California Water Plan, Update 2013,
- Greater Los Angeles County Integrated Regional Water Management Plan (IRWMP), and
- MWD's 2010 Integrated Resources Plan (IRP).

Water use efficiency and energy efficiency are two of the main goals in all of these plans that will enable the region to manage water supplies and resources for future generations.

The Project will also help in achieving the Bureau of Reclamation's overall planning objectives of:

a) Increasing water supply reliability;

b) Providing groundwater resource protection by reducing the groundwater overdraft to the greatest extent possible in the Region; and

c) Facilitate conjunctive water management in Los Angeles County, as well as in participating agency's respective counties.

Subcriterion No. F.2 – Readiness to Proceed

The Regional Landscape WUE Program is ready to proceed. Assuming a grant agreement is executed in September 2015, West Basin will begin marketing the project effective immediately and will have the entire project completed prior to the allocated 24- month period, or by December 2017.

All project activities are expected to be closed out by end of 2017. West Basin will comply with all BOR reporting requirements including filing the SF-425, Federal Financial Report, on a semi-annual basis, submitting semi-annual performance reports and a final report.

Permits and Process: West Basin does not anticipate that permits will be required for the replacement of turf on residential private property.

Subcriterion No. F.3 – Performance Measures

Provide a brief summary describing the performance measure that will be used to quantify actual benefits upon completion of the project

West Basin will use the following performance measures to evaluate the performance of the proposed

project after project completion as follows:

a) **Amount of water conserved**. This will be measured by having West Basin's Contractor (Waterwise Consulting) and MWD staff review pre-existing and post water consumption data pertinent to each applicant. This will allow West Basin to determine actualized amount of acre feet per year saved as directly correlated with the project implementation.

Direct and indirect qualitative project benefits

Qualitatively, when the project is implemented and better water management is achieved it will bring more water into the area, improve water supply reliability, improve water quality, mitigate short-term water supplies and emergencies, and provide an economical alternative to spot market where it makes economic sense. While all of these benefits cannot be quantified at this time, they will become obvious in time from the records of the use, monitoring data, and costs of this project going forward.

Evaluation Criterion G: Additional Non-Federal Funding

The non-federally funded portion of this project will be financed by West Basin through monetary and in-kind contributions. West Basin's portion of the costs is compared to the total project cost below.

$$\frac{\text{Non-Federal Funding}}{\text{Total Project Cost}}$$

$$\frac{\$743,428.82}{\$1,043,428.82}$$

$$=$$

$$71\%$$

Evaluation Criterion H: Connection to Reclamation Project Activities

Reclamation manages the Colorado River system from which MWD imports water. West Basin purchases 63% of its supply from MWD. Approximately half of the water imported is from the Colorado River and blended with the other half from northern California. Water savings associated with this program translate to more water remaining in these two fragile systems. This program directly supports Reclamation's current efforts to further advance efficiencies in the landscape and Commercial, Industrial and Institutional sectors.

West Basin receives a mixture of Colorado River water (approx. 57%) and State Water Project water (approx. 43%) through Metropolitan Water District. Recently, due to the 10% allocation of State Water Project water allocated to Southern California in 2014 and coupled with the extreme drought conditions, a heavier burden has been placed on the Colorado River system that is already overextended and in its own 12 year drought. One side or the other is stressed more and although the typical mix of imported water supplies is 57%/43%, as of mid-2014, it has been 100% Colorado River water and will continue to

be until drought conditions improve or the State Water Project allocation increases.

The Program does not take place on Reclamation lands or involving Reclamation facilities.

The Program is not in the same basin as a Reclamation project or activity.

The water savings will be shared by both the imports from the Bay-Delta and the Colorado River. By reducing the amount of water imported, this water in effect remains in the basin from which it originates or it is made available to meet demands in other areas of the State.

Performance Measures

a. Turf Removal

West Basin will use the following performance measures to evaluate the performance of the proposed project after project completion as follows:

The amount of water conserved will be measured by having West Basin's Contractor (Waterwise Consulting) and MWD staff review pre-existing and post water consumption data pertinent to each applicant. This will allow West Basin to determine actualized amount of acre feet per year saved as directly correlated with the project implementation.

Direct and indirect qualitative project benefits

Qualitatively, when the project is implemented and better water management is achieved it will bring more water into the area, improve water supply reliability, improve water quality, mitigate short-term water supplies and emergencies, and provide an economical alternative to spot market where it makes economic sense. While all of these benefits cannot be quantified at this time, they will become obvious in time from the records of the use, monitoring data, and costs of this project going forward.

6 Potential Environmental Impacts

To allow Reclamation to assess the probable environmental impacts and costs associated with each application, all applicants must respond to the following list of questions focusing on the requirements of the NEPA, ESA, and NHPA.

West Basin's Regional Landscape WUE Program is categorically exempt and will simply remove existing high water demand grass turf and replace with native drought tolerant plant species and/or other drought resistant landscaping. This turf exchange will occur on residential property. As a result, West Basin does not anticipate environmental impacts associated with the proposed project.

a) *Will the project impact the surrounding environment (i.e., soil [dust], air, water [quality and quantity], animal habitat, etc.)? Please briefly describe all earth-disturbing work and any work that will affect the air, water, or animal habitat in the project area. Please also explain the impacts of such work on the surrounding environment and any steps that could be taken to*

minimize the impacts.

No. The Proposed Project is a turf removal program and will have only a positive impact on the surrounding environment.

b) *Are you aware of any species listed or proposed to be listed as a Federal endangered or threatened species, or designated Critical Habitat in the project area? If so, would they be affected by any activities associated with the proposed project?*

No. There are no endangered or threatened species located within or around the program area and no activities associated with the program will affect endangered or threatened species because the Proposed Project is a turf removal program.

c) *Are there wetlands or other surface waters inside the project boundaries that potentially fall under Federal Clean Water Act Jurisdiction as "waters of the United States?" If so, please describe and estimate any impacts the project may have.*

No. The Proposed Project is a turf removal program and will have no impact on wetlands or other surface waters.

d) *When was the water delivery system constructed?*

The potable water delivery system within the West Basin service area was constructed in the early 1940s. MWD owns and maintains the imported water distribution system which is the backbone of the supply system in southern California. The cities and water companies that have distribution lines that serve the water to the consumers own and maintain the distribution lines that feed off of the backbone pipeline and directly to the consumers. Groundwater was the only source of water supply in the West Basin service area until the groundwater basins started to become overdrafted; hence West Basin was created. West Basin was created in 1947 as the area realized that it needed a more reliable supply. West Basin became a member agency of MWD to ensure a reliable source of water.

e) *Will the project result in any modification of or effects to, individual features of an irrigation system (e.g., headgates, canals, or flumes)? If so, state when those features were constructed and describe the nature and timing of any extensive alterations or modifications to those features completed previously.*

This project does not affect individual features of an irrigation system. The Proposed Project is a turf removal program and will have no impact on an irrigation system.

f) Are any buildings, structures, or features in the irrigation district listed or eligible for listing on the National Register of Historic Places? A cultural resources specialist at your local Reclamation office or the State Historic Preservation Office can assist in answering this question.

No. The Proposed Project is a turf removal program and will have no impact on the National Register of Historic Places.

g) *Are there any known archeological sites in the proposed project area?*

No. The Proposed Project is a turf removal program plan and will have no impact on any known archeological site.

h) *Will the project have a disproportionately high and adverse effect on low income or minority populations?*

No. The project will not have a disproportionately high and adverse effect on low income or minority populations. On the contrary, this program can help the disadvantaged community reduce their water usage and their water bills by receiving \$3 ft^2 finding to remove their water-wasting turf.

i) *Will the project limit access to and ceremonial use of Indian sacred sites or result in other impacts on tribal lands?*

No. The Proposed Project is a turf removal program plan and will have no impact on any ceremonial use of Indian sacred sites or result in other impacts on tribal lands as the retrofits will take place on private residential properties.

j) *Will the project contribute to the introduction, continued existence, or spread of noxious weeds or non-native invasive species known to occur in the area?*

No. The planting material that the resident uses to replace the turf grass will be from a pre-approved list. This will be verified at the post-survey site visit.

7 Required Permits and Approvals

Applicants must state in the application whether any permits or approvals are required and explain the plan for obtaining such permits or approvals.

West Basin does not anticipate that permits will be required for the Regional Landscape WUE Program. This is due to the fact that all turf replacement will be installed in and around previously landscaped areas. Modifications will be installed on residential property and will therefore not require advanced permits or specialty approvals. All project-related approvals will be handled by West Basin staff and will be executed in a timely and efficient manner.

8 Letters of Project Support

The West Basin will partner with MWD to help fund the Regional Landscape WUE Program. Commitment has been expressed by the MWD this project via, Official Board Resolution (to be executed on February 23, 2015) and demonstration of funding commitment through both Non-Federal Funding Match and In-Kind Contributions. The letters of support received and pending for the Project are listed below.

Letters received or pending are listed here:

a) **State and Federal Electeds**:

a. Representative Ted Lieu, 33rd District (pending)
b. California State Senator Ben Allen, 26th District (pending)
c. Representative Janice Hahn, 44th District (pending)
d. Assemblymember Richard Bloom, 50th District (pending)
e. Assemblymember David Hadley, 66th District (pending)

b) **West Basin Municipal Water District Member Agencies:**

a. California American Water Company (received)
b. Golden State Water Company (received)
c. City of Malibu (received)
d. City of Inglewood (received)
e. Los Angeles County Waterworks District #29 (received)

c) State and Regional Agencies:

a. Santa Monica Bay Restoration Commission (received)
b. Metropolitan Water District of Southern California (received)
c. Resource Conservation District of the Santa Monica Mountains (received)
d. South Bay Cities Council of Governments (received)
e. Lennox Coordinating Council (received)

d) **Environmental Groups:**

a. Surfrider Foundation (received)
b. Ballona Creek Renaissance (received)
c. Heal the Bay (received)

AMERICAN WATER

January 07, 2015

Mr. Shaun Wilken
United States Bureau of Reclamation
Acquisition Operations Branch
P.O. Box 25007
Denver, CO 80225

Re: In support of West Basin Municipal Water District's Grant Application for the "Turf's Up" Water Use Efficiency Program

California American Water is pleased to support West Basin Municipal Water District (West Basin) in their efforts to implement the project titled, "Turf's Up" Water Use Efficiency Program. As a stakeholder in this project, we encourage Reclamation to award grant funding to West Basin to help conserve water and energy throughout West Basin's service area.

West Basin has demonstrated years of commitment to local supply reliability as evidenced through their progressive water use efficiency program. Their ability to leverage grant funds with local funds has proven to be a successful model; for every $6 dollars spent, $5 is provided by local funds. These grant funds will be put to good use within the West Basin service area enabling many residents to remove their water-wasting turf and replacing them with landscapes that not only conserve water, but provide habitat for local species, capture stormwater for groundwater infiltration and reduce stormwater runoff into the storm drains and out to the Santa Monica Bay.

The benefits that this project will provide to Reclamation prove that the grant funds will be wisely spent in the area where water is used most, outside on water-wasting turf. This project will ensure water reliability to the West Basin service area by utilizing a local supply instead of less reliable, imported water supplies. We strongly urge Reclamation to provide grant funds for this project.

Sincerely,

Kimberly Smith
Water Conservation Specialist
California American Water

Golden State
Water Company
A Subsidiary of American States Water Company

January 20, 2015

Mr. Shaun Wilken
United States Bureau of Reclamation
Acquisition Operations Branch
P.O. Box 25007
Denver, CO 80225

Re: In support of West Basin Municipal Water District's Grant Application for the "Turf's Up" Water Use Efficiency Program

The Golden State Water Company is pleased to support West Basin Municipal Water District (West Basin) in their efforts to implement the project titled, "Turf's Up" Water Use Efficiency Program. As a stakeholder in this project, we encourage the U.S. Bureau of Reclamation to award grant funding to West Basin to help conserve water and energy throughout West Basin's service area.

West Basin has demonstrated years of commitment to local supply reliability as evidenced through their progressive water use efficiency program. Their ability to leverage grant funds with local funds has proven to be a successful model; for every $6 dollars spent, $5 is provided by local funds. These grant funds will be put to good use within the West Basin service area enabling many residents to remove their water-wasting turf and replacing them with landscape that not only use less water, but provide habitat for local species, capture storm water for groundwater infiltration and reduce storm water runoff into the storm drains and out to the Santa Monica Bay.

The benefits that this project will provide to Reclamation prove that the grant funds will be wisely spent in the area where water is used most, outside on water-wasting turf. This project will ensure water reliability to the West Basin service area by utilizing a local supply instead of less reliable, imported water supplies. We strongly urge Reclamation to provide grant funds for this project.

Sincerely,

Edwin deLeon
Water Use Efficiency Manager
Golden State Water Company

1920 West Corporate Way, Anaheim, CA 92801
Tel: (714) 535-7711 Fax: (714) 535-8616

City of Malibu

23825 Stuart Ranch Road · Malibu, California · 90265-4861
Phone (310) 456-2489 · Fax (310) 456-3356 · www.malibucity.org

January 20, 2015

Mr. Shaun Wilken
United States Bureau of Reclamation
Acquisition Operations Branch
P.O. Box 25007
Denver, CO 80225

Re: In support of West Basin Municipal Water District's Grant Application for the "Turf's Up" Water Use Efficiency Program

The City of Malibu is eager to support West Basin Municipal Water District (West Basin) in their efforts to implement the project titled, "Turf's Up" Water Use Efficiency Program. As a stakeholder in this project, we encourage Reclamation to award grant funding to West Basin to help conserve water and energy throughout West Basin's service area. Malibu still houses many large, sprawling lawns and we've discovered through past programs that our residents need greater incentives to remove their turf.

West Basin has demonstrated years of commitment to local supply reliability as evidenced through their progressive water use efficiency program. Their ability to leverage grant funds with local funds has proven to be a successful model; for every $6 dollars spent, $5 is provided by local funds. These grant funds will enable our residents to remove their water-wasting turf and replace it with landscapes that not only conserve water, but provide habitat for local species, capture stormwater for groundwater infiltration and reduce stormwater runoff into storm drains and out to the Santa Monica Bay. The City of Malibu is confident that West Basin understands the unique challenges of successful programing in Malibu. West Basin consistently participates in the monthly Malibu Area Conservation Coalition (MACC) meetings, which successfully caters similar conservation programs to Malibu residents and businesses through local coordination and promotion. This grant program would transition seamlessly into the existing network created by the MACC partners to maximize participation in Malibu.

The benefits that this project will provide to Reclamation prove that the grant funds will be wisely spent in the area where water is used most, outside on water-wasting turf. This project will ensure water reliability to the West Basin service area by utilizing a local supply instead of less reliable, imported water supplies. We strongly urge Reclamation to provide grant funds for this project.

Sincerely,

Vic Peterson
Environmental Sustainability Director / Building Official
City of Malibu

Inglewood California

Public Works Department
ONE MANCHESTER BOULEVARD / INGLEWOOD, CA. 90301 / P.O. BOX 6500 / INGLEWOOD, CA. 90312
Telephone (310) 412-5333 / Fax (310) 412-5552
www.cityofinglewood.org

LOUIS A. ATWELL, P.E.
PUBLIC WORKS DIRECTOR

January 15, 2015

Mr. Shaun Wilken
United States Bureau of Reclamation
Acquisition Operations Branch
P.O. Box 25007
Denver, CO 80225

Subject: Letter of Support for West Basin Municipal Water District's Grant Application for the "Turf's Up" Water Use Efficiency Program

The City of Inglewood is pleased to support West Basin Municipal Water District (West Basin) in their efforts to obtain funding to implement the "Turf's Up" Water Use Efficiency Program. As a stakeholder, we encourage the United States Bureau of Reclamation to award grant funding to help conserve water and energy throughout the West Basin service area.

The requested funds will allow residents within West Basin's service area to remove turf lawns and replace them with water-efficient landscaping. In addition to conserving water, the program provides a habitat for local species, increases the capture stormwater for groundwater infiltration, and reduces stormwater runoff into the storm drains and out to the Santa Monica Bay.

We strongly urge the United States Bureau of Reclamation to approve the funding request for the Turf's Up Program.

Sincerely,

Louis A. Atwell, P.E.
Public Works Director
City of Inglewood

COUNTY OF LOS ANGELES

DEPARTMENT OF PUBLIC WORKS

"To Enrich Lives Through Effective and Caring Service"

GAIL FARBER, Director

900 SOUTH FREMONT AVENUE
ALHAMBRA, CALIFORNIA 91803-1331
Telephone: (626) 458-5100
http://dpw.lacounty.gov

ADDRESS ALL CORRESPONDENCE TO:
P.O. BOX 1460
ALHAMBRA, CALIFORNIA 91802-1460

January 20, 2015

IN REPLY PLEASE
REFER TO FILE: WW-3

Mr. Shaun Wilken
United States Bureau of Reclamation
Acquisition Operations Branch
P.O. Box 25007
Denver, CO 80225

Dear Mr. Wilken:

LOS ANGELES COUNTY WATERWORKS DISTRICT NO. 29, MALIBU SUPPORT OF WEST BASIN MUNICIPAL WATER DISTRICTS GRANT APPLICATION FOR THE "TURF'S UP" WATER USE EFFICIENCY PROGRAM

The Los Angeles County Waterworks District No. 29, Malibu, is pleased to support West Basin Municipal Water District's (West Basin) efforts to implement the project titled, "Turf's Up" Water Use Efficiency Program. As a stakeholder in this project, we encourage the Bureau of Reclamation to award grant funding to West Basin to help conserve water and energy throughout West Basin's service area.

West Basin has demonstrated years of commitment to local supply reliability as evidenced through its progressive water use efficiency program. West Basin's ability to leverage grant funds with local funds has proven to be a successful model. These grant funds will be put to good use within the West Basin service area, enabling many residents to remove water-wasting turf and replace it with landscapes that not only conserve water but provide habitat for local species, capture stormwater for groundwater infiltration, and reduce stormwater runoff.

The benefits that this project will provide to the Bureau of Reclamation prove that the grant funds will be wisely spent in the area where water is used most, outside on water-wasting turf. This project will ensure water reliability to the West Basin service area by utilizing a local supply instead of less reliable, imported water supplies. We strongly urge the Bureau of Reclamation to provide grant funds for this project.

Very truly yours,

GAIL FARBER
Director of Public Works

for ADAM ARIKI
Assistant Deputy Director
Waterworks Division

TC:dvt\LTS941

bay restoration commission

STEWARDS OF SANTA MONICA BAY

santa monica bay restoration commission ✐ 320 west 4th street, ste 200; los angeles, california 90013
213/576-6615 phone ✐ 213/576-6646 fax ✐ santamonicabay.org

January 16, 2015

Mr. Shaun Wilken
United States Bureau of Reclamation
Acquisition Operations Branch
P.O. Box 25007
Denver, CO 80225

Re: Support for West Basin Municipal Water District's Grant Application for the "Turf's Up" Water Use Efficiency Program

Dear Mr. Wilken:

On behalf of the Santa Monica Bay Restoration Commission I am pleased to support West Basin Municipal Water District (West Basin) in their efforts to implement the project titled, "Turf's Up" Water Use Efficiency Program. As a stakeholder in this project, we encourage the Bureau of Reclamation to award grant funding to West Basin to help conserve water and energy throughout West Basin's service area.

The Santa Monica Bay Restoration Commission was established by the California Legislature in 2002 to monitor, assess, coordinate, and advise the activities that affect the beneficial uses, restoration and enhancement of Santa Monica Bay and its watersheds, in which the West Basin's service area is located. Conserving water and increasing local water supply in the Bay watershed is an important part of our organization's mission. To achieve our mission, we have worked with West Basin on many issues and are very pleased with our collaborative working relationship.

West Basin has demonstrated years of commitment to local supply reliability as evidenced through their progressive water use efficiency program. Their ability to leverage grant funds with local funds has proven to be a successful model; for every $6 dollars spent, $5 is provided by local funds. These grant funds will be put to good use within the West Basin service area enabling many residents to remove their water-wasting turf and replacing them with landscapes that not

bay restoration commission
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only conserve water, but provide habitat for local species, capture storm water for groundwater infiltration and reduce storm water runoff into the storm drains and out to the Santa Monica Bay.

The benefits that this project will provide are well in-line with the objectives of this grant program. If awarded to this project, the grant funds will be wisely spent in the area where water is used most, outside on water-wasting turf, and will ensure water reliability to the our region by utilizing a local supply instead of less reliable, imported water supplies. We strongly urge the Bureau of Reclamation to provide grant funds for this project.

Sincerely,

Tom Ford
Executive Director
Santa Monica Bay Restoration Commission

THE METROPOLITAN WATER DISTRICT
OF SOUTHERN CALIFORNIA

Office of the General Manager

January 20, 2015

Mr. Shaun Wilken
United States Bureau of Reclamation
Acquisition Operations Branch
P.O. Box 25007
Denver, CO 80225

Dear Mr. Wilken:

West Basin Municipal Water District's
Grant Application for the "Turf's Up" Water Use Efficiency Program

The Metropolitan Water District of Southern California is pleased to support West Basin Municipal Water District (West Basin) in their efforts to implement the project titled, "Turf's Up" Water Use Efficiency Program. As a stakeholder in this project, we encourage United States Bureau of Reclamation (Reclamation) to award grant funding to West Basin to help conserve water and energy throughout West Basin's service area.

West Basin has demonstrated years of commitment to local supply reliability as evidenced through their progressive water use efficiency program. Their ability to leverage grant funds with local funds has proven to be a successful model; for every $6 spent, $5 is provided by local funds. These grant funds will be put to good use within the West Basin service area enabling many residents to remove their water-wasting turf and replacing it with landscapes that not only conserve water, but provide habitat for local species, capture stormwater for groundwater infiltration and reduce stormwater runoff into the storm drains and out to the Santa Monica Bay.

The benefits that this project will provide to Reclamation prove that the grant funds will be wisely spent in the area where water is used most, outside on water-wasting turf. This project will ensure water reliability to the West Basin service area by utilizing a local supply, which will also reduce demand on imported water supplies. We strongly urge Reclamation to provide grant funds for this project.

Sincerely,

William P. McDonnell
Metropolitan Water District of Southern California
Water Use Efficiency Manager

DC:vsm

RESOURCE
CONSERVATION DISTRICT
OF THE
SANTA MONICA MOUNTAINS

818.597.8627 phone
818.597.8630 fax
info@rcdsmm.org

540 S. Topanga Canyon Blvd., Topanga, CA 90290

January 15, 2015

Mr. Shaun Wilken
United States Bureau of Reclamation
Acquisition Operations Branch
P.O. Box 25007
Denver, CO 80225

Re: In support of West Basin Municipal Water District's Grant Application for the "Turf's Up" Water Use Efficiency Program

The Resource Conservation District of the Santa Monica Mountains is pleased to support West Basin Municipal Water District (West Basin) in their efforts to implement the project titled, "Turf's Up" Water Use Efficiency Program. As a stakeholder in this project, we encourage Reclamation to award grant funding to West Basin to help conserve water and energy throughout West Basin's service area.

West Basin has demonstrated years of commitment to local supply reliability as evidenced through their progressive water use efficiency program. Their ability to leverage grant funds with local funds has proven to be a successful model; for every $6 dollars spent, $5 is provided by local funds. These grant funds will be put to good use within the West Basin service area enabling many residents to remove their water-wasting turf and replacing them with landscapes that not only conserve water, but provide habitat for local species, capture stormwater for groundwater infiltration and reduce stormwater runoff into the storm drains and out to the Santa Monica Bay.

The benefits that this project will provide to Reclamation prove that the grant funds will be wisely spent in the area where water is used most, outside on water-wasting turf. This project will ensure water reliability to the West Basin service area by utilizing a local supply instead of less reliable, imported water supplies. We strongly urge Reclamation to provide grant funds for this project.

Sincerely,

Clark Stevens
Executive Officer

SOUTH BAY CITIES
COUNCIL OF GOVERNMENTS

20285 S. Western Ave., #100
Torrance, CA 90501
(310) 371-7222
sbccog@southbaycities.org
www.southbaycities.org

January 6, 2015

Mr. Shaun Wilken
United States Bureau of Reclamation
Acquisition Operations Branch
P.O. Box 25007
Denver, CO 80225

Re: In support of West Basin Municipal Water District's Grant Application for the "Turf's Up" Water Use Efficiency Program

The South Bay Cities Council of Governments is pleased to support the West Basin Municipal Water District (West Basin) in their efforts to implement the project entitled, "Turf's Up" Water Use Efficiency Program. As a stakeholder in this project, we encourage the Bureau of Reclamation to award grant funding to West Basin to help conserve water and energy throughout West Basin's service area.

West Basin has demonstrated years of commitment to local supply reliability as evidenced through their progressive water use efficiency program. Their ability to leverage grant funds with local funds has proven to be a successful model; for every $6 dollars spent, $5 is provided by local funds. These grant funds will be put to good use within the West Basin service area enabling many residents to remove their water-wasting turf and replacing it with landscapes that not only conserve water, but provide habitat for local species, capture stormwater for groundwater infiltration and reduce stormwater runoff into the storm drains and out to the Santa Monica Bay.

This project will ensure water reliability to the West Basin service area by utilizing local supply instead of less reliable, imported water supplies. We strongly urge the Bureau of Reclamation to provide grant funds for this project.

Sincerely,

James F. Goodhart, SBCCOG Chair
Councilman, City of Palos Verdes Estates

LENNOX
COORDINATING
COUNCIL

President: Ryan Williams
Ryanwilliams@lennox.lr.ca.us

January 15, 2015

Mr. Shaun Wilken
United States Bureau of Reclamation
Acquisition Operations Branch
P.O. Box 25007
Denver, CO 80225

Re: Support of West Basin Municipal Water District's Grant Application for the "Turf's Up" Water Use Efficiency Program

The Lennox Coordinating Council is pleased to support West Basin Municipal Water District's "Turf's Up" Water Use Efficiency Program. As a stakeholder in this project, we strongly encourage Reclamation to award grant funding to West Basin to help conserve water and energy throughout West Basin's service area.

These grant funds will be put to good use within the West Basin service area enabling many residents to remove their water-wasting turf and replacing them with landscapes that not only conserve water, but provide habitat for local species, capture stormwater for groundwater infiltration and reduce stormwater runoff into the storm drains and out to the Santa Monica Bay. West Basin has demonstrated years of commitment to local supply reliability as evidenced through their progressive water use efficiency program. Their ability to leverage grant funds with local funds has proven to be a successful model; for every $6 dollars spent, $5 is provided by local funds.

The benefits that this project will provide to Reclamation prove that the grant funds will be wisely spent in the area where the overwhelming majority of water is used, outside on water-wasting turf. This project will ensure water reliability to the West Basin service area by utilizing a local supply instead of less reliable, imported water supplies. The Lennox Coordinating Council strongly urges Reclamation to provide grant funds for West Basin's project.

Sincerely,

Ryan Williams
Lennox Coordinating Council
President

St. Margaret's Center
10217 Inglewood Ave, Lennox, CA. 90304 • 310. 412-8094

January 13, 2015

Mr. Shaun Wilken
United States Bureau of Reclamation
Acquisition Operations Branch
P.O. Box 25007
Denver, CO 80225

SURFRIDER
FOUNDATION
SOUTH BAY CHAPTER

South Bay Chapter
P.O. Box 3825
Manhattan Beach, CA 90266

Re: In support of West Basin Municipal Water District's Grant Application for the "Turf's Up" Water Use Efficiency Program

The Surfrider Foundation South Bay Chapter is pleased to support West Basin Municipal Water District (West Basin) in their efforts to implement the project titled, "Turf's Up" Water Use Efficiency Program. As a stakeholder in this project, we encourage Reclamation to award grant funding to West Basin to help conserve water and energy throughout West Basin's service area.

West Basin has demonstrated years of commitment to local supply reliability as evidenced through their progressive water use efficiency program. Their ability to leverage grant funds with local funds has proven to be a successful model; for every $6 dollars spent, $5 is provided by local funds. These grant funds will be put to good use within the West Basin service area enabling many residents to remove their water-wasting turf and replacing them with landscapes that not only conserve water, but provide habitat for local species, capture stormwater for groundwater infiltration and reduce stormwater runoff into the storm drains and out to the Santa Monica Bay.

West Basin has been a great partner on the Prop. 50 Integrated Regional Water Management (IRWM) grant and has been a big supporter of our Chapter's Teach & Test Program. Also, they are great to team with at our various education events.

The benefits that this project will provide to Reclamation prove that the grant funds will be wisely spent in the area where water is used most: outside on water-wasting turf. This project will ensure water reliability to the West Basin service area by utilizing a local supply instead of less reliable, imported water supplies. We strongly urge Reclamation to provide grant funds for this project.

Sincerely,

Beth Crosse, Chair
Ocean Friendly Gardens Program
Surfrider Foundation-South Bay Chapter

BALLONA CREEK Renaissance

P.O. Box 843
Culver City CA 90232

January 21, 2015

Mr. Shaun Wilken
United States Bureau of Reclamation
Acquisition Operations Branch
P.O. Box 25007
Denver, CO 80225

Re: In support of West Basin Municipal Water District's Grant Application for the "Turf's Up" Water Use Efficiency Program

Ballona Creek Renaissance is pleased to support West Basin Municipal Water District (West Basin) in their efforts to implement the project titled, "Turf's Up" Water Use Efficiency Program. As a stakeholder in this project, we encourage Reclamation to award grant funding to West Basin to help conserve water and energy throughout West Basin's service area.

West Basin has demonstrated years of commitment to local supply reliability as evidenced through their progressive water use efficiency program. Their ability to leverage grant funds with local funds has proven to be a successful model; for every $6 dollars spent, $5 is provided by local funds. These grant funds will be put to good use within the West Basin service area enabling many residents to remove their water-wasting turf and replacing them with landscapes that not only conserve water, but provide habitat for local species, capture stormwater for groundwater infiltration and reduce stormwater runoff into the storm drains and out to the Santa Monica Bay.

The benefits that this project will provide to Reclamation prove that the grant funds will be wisely spent in the area where water is used most, outside on water-wasting turf. This project will ensure water reliability to the West Basin service area by utilizing a local supply instead of less reliable, imported water supplies. We strongly urge Reclamation to provide grant funds for this project.

Sincerely,

Amy Rosenstein

Amy Rosenstein, President
Ballona Creek Renaissance

Heal the Bay

1444 9th Street
Santa Monica CA 90401

ph 310 451 1500
fax 310 496 1902

info@healthebay.org
www.healthebay.org

January 21, 2015
Mr. Shaun Wilken
United States Bureau of Reclamation
Acquisition Operations Branch
P.O. Box 25007
Denver, CO 80225

Re: In support of West Basin Municipal Water District's Grant Application for the "Turf's Up" Water Use Efficiency Program

Heal the Bay is pleased to support West Basin Municipal Water District (West Basin) in their efforts to implement the project titled, "Turf's Up" Water Use Efficiency Program. As a stakeholder in this project, we encourage Reclamation to award grant funding to West Basin to help conserve water and energy throughout West Basin's service area.

West Basin has demonstrated years of commitment to local supply reliability as evidenced through their progressive water use efficiency program. Their ability to leverage grant funds with local funds has proven to be a successful model; for every $6 dollars spent, $5 is provided by local funds. These grant funds will be put to good use within the West Basin service area enabling many residents to remove their water-wasting turf and replacing them with landscapes that not only conserve water, but provide habitat for local species, capture stormwater for groundwater infiltration and reduce stormwater runoff into the storm drains and out to the Santa Monica Bay.

The benefits that this project will provide to Reclamation prove that the grant funds will be wisely spent in the area where water is used most, outside on water-wasting turf. This project will ensure water reliability to the West Basin service area by utilizing a local supply instead of less reliable, imported water supplies. We strongly urge Reclamation to provide grant funds for this project.

Sincerely,

Meredith McCarthy

Director of Programs

9 Official Resolution – DRAFT

RESOLUTION NO. _____

A RESOLUTION OF THE BOARD OF DIRECTORS
OF WEST BASIN MUNICIPAL WATER DISTRICT
AUTHORIZING THE APPLICATION FOR GRANT FUNDING
TO THE UNITED STATES BUREAU OF RECLAMATION

BE IT RESOLVED, by the BOARD OF DIRECTORS that the GENERAL MANAGER of the West Basin Municipal Water District has the legal authority to enter into a grant funding agreement with the United States Bureau of Reclamation (Reclamation) through the WaterSMART Grant Program for the **Regional Landscape Water Use Efficiency Program**, and

BE IT RESOLVED, that the GENERAL MANAGER has reviewed and supports the application submitted, and

BE IT RESOLVED, that West Basin Municipal Water District has the capability to provide the amount of funding and/or in-kind contributions specified in the funding plan, and

BE IT FURTHER RESOLVED, that West Basin Municipal Water District will work with Reclamation to meet established deadlines for entering into a cooperative agreement.

PASSED, APPROVED, AND ADOPTED on the _____day, February 2015.

_____
President

ATTEST:

_____
Secretary

(SEAL)

I:\direct\resos\wb

10 Funding Plan and Letters of Commitment

Describe how the non-Reclamation share of project costs will be obtained. Reclamation will use this information in making a determination of financial capability. Project funding provided by a source *other than the applicant* shall be supported with letters of commitment from these additional sources.

(1) How you will make your contribution to the cost share requirement, such as monetary and/or in-kind contributions and source funds contributed by the applicant (e.g., reserve account, tax revenue, and/or assessments).

West Basin, in collaboration with MWD, will provide its cost share contribution through the budgetary funds and in-kind labor in the amount of $743,428.82. An estimated $27,278.82 of in-kind contributions will be made in the form of West Basin staff time associated with program management and an additional $80,000 in cash. The remaining $636,150 of our cost-share requirement will be contributed by MWD through their regional rebate program. MWD funds will be available to West Basin agencies through a cooperative agreement between MWD and West Basin. These funds will be available immediately and upon contract signing with Reclamation. Some level of effort will be expended towards this project in the form of in-kind contributions specific to the oversight of contractors and turf replacement facilitation.

Funding commitment letters will provide the following information: the amount of funding commitment, the date the funds will be available to the applicant, any time constraints on the availability of funds, any other contingencies associated with the funding commitment.

Funds for this program have been committed and are available from both entities. The cooperative agreement between MWD and West Basin shows the funding commitment for the rain barrels and surveys. The turf removal incentive is administered through the MWD regional rebate program and therefore, an agreement for the funding is not required; it is available to its member agencies.

(2) Describe any in-kind costs incurred before the anticipated project start date that you seek to include as project costs. Include:

None

(a) What project expenses have been incurred to date:

None.

(3) Provide the identity and amount of funding to be provided by funding partners, as well as the required letters of commitment.

Local Cost Share - Funding Partners	Type of Cost Share	Total
West Basin MWD (in-kind contribution)	Labor (Project Administration)	$ 27,278.82
West Basin MWD (cash contribution)	Landscape Surveys, Marketing and Water Savings Study	$ 80,000
Metropolitan Water District	Incentive	$ 636,150
Total		***$ 743,428.82***

West Basin will collaborate with MWD on this proposed program. As such, West Basin has included the cooperative agreement between West Basin and MWD identifying the funds for the rain barrels and surveys (Exhibit D). The turf removal rebate is provided through MWD's regional rebate program and therefore, no agreement is necessary. Through its conservation partnership agreement, West Basin will collaborate with MWD's regional rebate vendor, EGIA.

Please see the attached Draft Resolution for funding assurances from West Basin. A Final Resolution is expected to be executed at the next scheduled Board Meeting, shortly after the submission of this grant application. As allowable as per the FOA, the *Regional WUE Program Official Resolution* will be submitted at the 30-day allowance after the application deadline.

In addition to the Official Resolution demonstrating support, West Basin has their most current *Comprehensive Annual Financial Reports* (2013-2014) that identify funds, as those associated with the Regional Landscape WUE Program, on its website at www.westbasin.org.

(4) Describe any funding requested or received from other Federal partners. Note: Other sources of Federal funding may not be counted towards the applicant's 50 percent cost share unless otherwise allowed by statute.

None

(5) Describe any pending funding requests that have not yet been approved, and explain how the project will be affected if such funding is denied.

There are no pending funding requests.

11 Project Budget Application

11.a Budget Proposal

Project Completion Costs

The Technical Proposal included in Section 5 identifies and describes four Project tasks, which are listed as follows:

1. Task 1: Marketing the Regional Landscape WUE Program
2. Task 2: Post-Survey Installation and Verification
3. Task 3: Water Savings Study
4. Task 4: Reporting

The total project budget for these tasks is estimated at $1,043,428.82 with $743,428.82 of this to be used for the implementation of the Regional Landscape Water Use Efficiency Program and to aid in funding the turf removal incentive portion of the program. The applicant's portion of the costs will also be applied towards all elements involved in the application process, which includes applicant pre- and post-survey analysis, installation of drought tolerant landscaping and mobilization of related Project elements.

The $300,000 in requested grant funds (Federal cost share) would be allocated to this project funding request would contribute to the additional funding needed for the turf removal incentive. The funding amount received from Reclamation will help in furthering the program's effectiveness.

Reclamation's portion would amount to 29 percent of total Project costs, with the remainder 71 percent funded by the Applicant (non-Federal cost share), through cost-share and In-Kind services. Several tables have been prepared in support of these budget estimates, which immediately follow the text of this section in the order shown below.

Table 11.1 provides a summary of costs broken down by funding source.

Table 11.1

Funding Sources	Funding Amount
Non-Federal entities	
West Basin MWD (in-kind contribution)	$27,278.82*
West Basin MWD (cash contribution)	$80,000
Metropolitan Water District	$636,150
Non-Federal Subtotal:	$743,428.82

Other Federal entities	$0
Other Federal subtotal:	$0
Requested Reclamation funding:	$300,000
Total project funding:	***$1,043,428.82***

Table 11.2 provides the cost breakdown by source with the percent of total project cost.

Table 11.2

Funding Sources	Percent of total project cost	Funding Amount
Recipient funding	71	$743,428.82
Reclamation funding	29	$300,000
Other Federal funding	0	$0
Totals	***100***	***$1,043,428.82***

Table 11.3 provides the budget proposal format.

Table 11.3: Budget Proposal

Budget Item description	Computation			Applicant funding	Reclamation funding	Total Cost
	$/Unit	Unit	Quantity			
SALARIES AND WAGES						
Gus Meza (Sr. Water Use Efficiency Specialist) In-Kind	$ 50.02	hr.	134	$ 6,702.68	$ -	$ 6,702.68
FRINGE BENEFITS						$ -
Gus Meza (Sr. Water Use Efficiency Specialist)	$ 37.75	hr.	134	$ 5,058.50	$ -	$ 5,058.50
TRAVEL	$ 0.56	Mile	1500	$ 840	$ -	$ 840
EQUIPMENT						$ -
Item A - MWD Turf Removal Incentive	$ 3.00	ft2	300000	$ 600,000	$ 300,000	$ 900,000

Item B -MWD Rain Barrel Incentive	$ 75.00	Rain Barrel	450	$ 33,750	$ -	$ 33,750
Item C - MWD - Survey Incentive	$ 8.00	Survey	300	$ 2,400	$ -	$ 2,400
SUPPLIES/ MATERIALS						$ -
Office Supplies						$ -
Construction						$ -
CONTRACTUAL / CONSTRUCTION						$ -
Landscape Consultant						$ -
Marketing	$100.00	hr.	100	$ 10,000	$ -	$ 10,000
Pre and Post Survey Site Visit	$100.00	hr.	600	$ 60,000	$ -	$ 60,000
ENVIRONMENTAL AND REGULATORY COMPLIANCE						$ -
OTHER						$ -
Water Savings Study				$ 10,000	$ -	$ 10,000
Reporting	$ 87.77	hr.	32	$ 2,808.64	$ -	$ 2,808.64
TOTAL DIRECT COSTS				**$731,559.82**	**$ 300,000**	**$ 1,031,559.82**
INDIRECT COSTS - 1%	$ 71.50	hr.	166	$ 11,869	$ -	$ 11,869
TOTAL ACTIVITY/ PROJECT COSTS				**$ 743,428.82**	**$ 300,000**	**$ 1,043,428.82**

Annual O&M Costs- The Project is not expected to increase the annual O&M costs. In fact, general the Proposed Project may realize a reduction in O&M costs because of reduced costs related to less water use within the Project Area.

11.b Budget Narrative

General Description

Salaries and Wages: Gus Meza, Sr. Water Use Efficiency Program Manager, is the representative for the Applicant and will provide overall Project Management. West Basin operates efficiently with minimal professional staff. The budget for Mr. Meza's salaries and wages is $6,702.68. This cost is based on an estimated 134 hours of time devoted to the management of this Program at a rate of $50.02/hour.

For any project work completed by West Basin staff, the fringe benefits are included as part of the hourly rate. If awarded the WaterSMART Grant, West Basin is committed to meeting Reclamation's requirements for Fringe Benefits and Indirect Cost accounting. The main component of this Project focuses on removal and installation of drought tolerant landscape. The Applicant is committed to ensuring that all accounting of Project costs incurred by West Basin conforms to Reclamation's requirements.

There is no proposed salary increases included in the budget.

Fringe Benefits – The fringe benefits for the Program Manager are an estimated $5,058.50 based on 134 hours of time devoted to the management of this program at a rate of $37.75. Fringe benefits include vacation, sick, holiday, FICA expense, Medicare expense, education reimbursement, PERS, life insurance, disability insurance, health insurance, dental insurance, worker's compensation insurance, and out-of-pocket expenses. Fringe benefits are calculated at a rate of 89% for the benefit factor.

Travel – The travel cost for West Basin's Consultant will be charged to the contractual category of the budget. West Basin budgeted a small travel amount in order to perform 10% site inspections to ensure quality control.

Travel expenses will be determined by the number of miles driven for a roundtrip to the project site at the mileage rate of compensation determined by the Internal Revenue Service (currently $0.56 /mile).

West Basin has estimated a round trip of 50 miles x 30 sites x $0.56 / mile = $840. West Basin will provide this as an in-kind cost share to the program.

Equipment – Equipment will be furnished and installed (by West Basin's Contractor) as necessary to complete necessary survey analysis. Other permanent features of the Project, turf replacement landscaping, will be provided individually by each of the residents through the proposed project application process. The following items will be provided:

Item A – MWD Turf Removal Incentive. MWD's regional rebate vendor, EGIA, will provide MWD's $2 ft^2 turf removal rebate and will also provide West Basin's and Reclamation's additional $1 ft^2 as shown in Table 11-3 Budget Proposal.

Item B – MWD Rain Barrel Incentive. West Basin's vendor will provide qualifying residents with up to two (2) free rain barrels. West Basin currently receives a $75 incentive per rain barrel from MWD and will purchase rain barrels that are at or below this cost.

Item C – MWD Survey Incentive. West Basin currently receives $8 per landscape survey from MWD.

Materials and Supplies – Acquisition of supplies for office use is not anticipated.

Contractual –It is anticipated that West Basin will contract with its existing contractor (Waterwise Consulting) who has worked successfully with the applicant on past related activities. This landscape vendor is currently under contract under West Basin's existing LIEP Program that is well equipped to continue their efforts to incorporate this Program into their services. A total of $60,000 has been

budgeted for these services. This assumes an hourly rate of $100 per hour for a total of 600 hours, two hours at each of the 300 sites.

Environmental and Regulatory Compliance Costs – According to the Funding Opportunity Announcement (FOA), "If the amount budgeted is less than 1-2 percent of the total project costs, the applicant must include a compelling explanation of why less than 1-2 percent was budgeted." In this regard, no environmental documentation is anticipated.

Reporting – *Task 4* includes quarterly, annual and final reporting. The reports will provide all information required in the grant funding agreement. A total of eight reports will provided to Reclamation. This will include four hours each, for a total of 32 hours at a rate of $87.77 / hr. (salaries and wages plus fringe benefits) at a total cost of $2,808.64.

Other Costs – West Basin has budgeted funds to hire a third party consultant to study the program and evaluate the water savings. A total of $10,000 has been budgeted for this item.

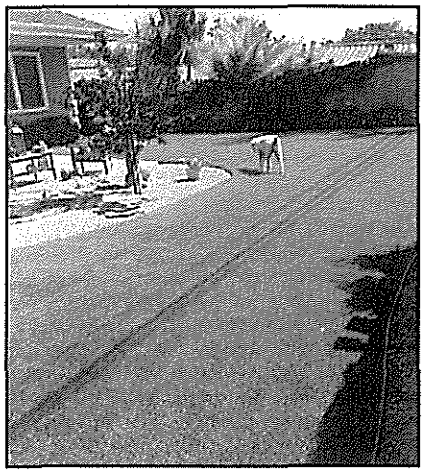
Indirect Costs – The indirect costs associated with this program include overhead and financial services and are estimated to be $11,869. This represents 1% of the Program's total budget and is based on a rate of $71.50/hour for a total of 166 hours. The $71.50 is 143% of the salaries and wages of $50.02/hour.

Total Costs: The program's total cost is $1,043,428.82. The federal cost share amount is $300,000 (29%) and the non-federal cost share amount is $743,428.82 (71%).

Budget Form
This form is included in Form SF-424A.

EXHIBIT A

Address: 707 Bungalow Dr, El Segundo
Area: 2,600 sq ft
Rebate Amount: $2,600

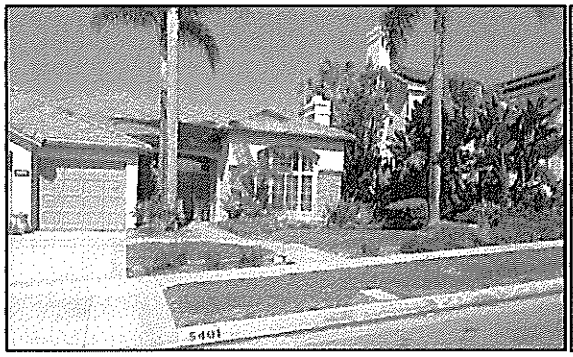


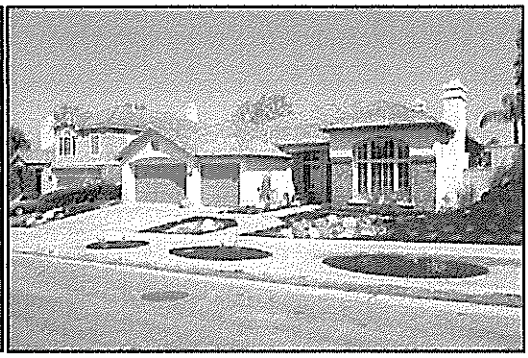

Address: 982 Paseo La Cresta, Palos Verdes Peninsula
Area: 1,490 sq ft
Rebate Amount: $3,980


Address: 11239 Stevens Ave, Culver City
Area: 1,061 sq ft
Rebate Amount: $2,322

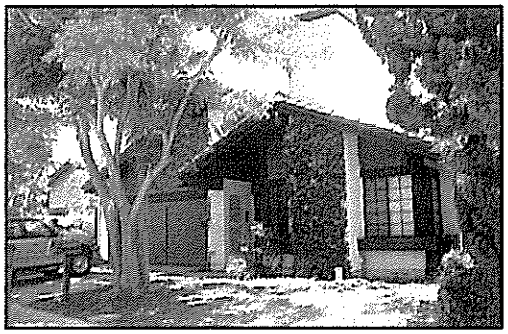

Address: 2101 Manzanita Lane, Manhattan Beach
Area: 600 sq ft
Rebate Amount: $1,800


Address: 5401 Ladera Crest Dr, Los Angeles
Area: 817 sq st
Rebate Amount: $1,634





Address: 10720 Hepburn Cir., Culver City
Area: 1,448 sq ft
Rebate Amount: $2,896




Landscape Water Survey

Provided by West Basin Municipal Water District

Customer ID: _____ Survey Date: _____ Time: _____

Customer Name: _____ Dwelling Type: COM: ☐ IND: ☐ INST: ☐ SFR: ☐ MFR: ☐

Survey Address: _____ Unit #: _____ City: _____ Zip: _____

Phone: _____ Ext: _____ Other Phone: _____ Ext: _____ Owner ☐

Number of Residents: _____ E-mail Address: _____ Rent: ☐ Condo: ☐

Site Name: _____ Site Address (if different): _____

Year Constructed: _____ Years lived at site: _____ Original Fixtures: Yes ☐ No ☐

How did you hear about this program: _____

Would you like to receive information on other water efficiency programs? Yes ☐ No ☐

Water Company: _____ Is landscaper present during survey? Yes ☐ No ☐

Water Use Information

1 Unit = One Hundred Cubic Feet (Ccf) of Water = 748 Gallons
One Cubic Foot of Water Equals 7.48 Gallons

Water Bill Frequency: Monthly ☐ Bi-Monthly ☐ Account Number: _____

Water Leak Check

The WaterWise surveyor will conduct a two-minute leak check at the water meter with all indoor and outdoor water turned off.

Meter Sweep-Hand: 1st Dial Setting:

2nd Dial Setting:

Difference is Leak Amount: _____ Cubic Feet

Water Leak Detected: Yes ☐ No ☐

Water Leak in Gallons per Day: (multiply cubic feet by 5385.6) ☐

Leak is Located:

Water Leak Explanation: _____

Current Water Use

Last Water Meter Reading: Date: _____ Days Since Last Reading: _____ Days

Water Meter Reading Today: _____

Water Use in Gallons per Day: ☐ Average Per Day

(Difference in Ccf between readings divided by number of days and multiplied by 748)

Survey questions? Please contact WaterWise at: (888) 987-9473

Surveyor: _____

ORIGINAL: Customer YELLOW: West Basin PINK: WaterWise

Survey Form 1

Customer ID: _____

Exterior Water Use

SF Square Feet

Pool and Spa Water Use

Item		Covered to Prevent Evaporation:		Item		Covered to Prevent Evaporation:	
Swimming Pool	Yes ☐ No ☐	Yes ☐	No ☐	Hot Tub / Spa	Yes ☐ No ☐	Yes ☐	No ☐

Landscape & Irrigation Information

Total Landscape Area (SF)	Lawn Area (SF)	Soil Type	Lawn Type	Average Lawn Root Depth (in)	Landscape Rating
Front _____	Front _____	Clay ☐ Clay Loam ☐	Cool Season ☐	Front _____	Excellent ☐ Acceptable ☐ Very Poor ☐
Back _____	Back _____	Loam ☐ Sandy ☐ Sandy Loam ☐	Warm Season ☐ Mixed ☐	Back _____	Good ☐ Poor ☐

Type of Irrigation System:		Total Number of Active Stations	Thatch Build-up	Water Pressure	Pressure Reducing Valve (On Site)	Outdoor Leak
Automatic System ☐	Hand Watering ☐	_____	Yes ☐	_____ PSI	Yes ☐ No ☐	Yes ☐ No ☐
Manual System ☐	None ☐		No ☐			

Water Infiltration Rate	Retention Capacity	Based on Current Weather Conditions, the Controller is:		Professional Landscape Service	Irrigation Controller
_____	_____	Extremely Over-Watering ☐	Over-Watering ☐	Yes ☐ No ☐	Brand/Model: _____
		Just Fine ☐	Under-Watering ☐		WSIC: Yes ☐ No ☐

Catch-can test station #: _____

Distribution Uniformity Test (DU)

DU = Condition of the system
WM = How well the system is managed

DU Test Time: _____	
1	
2	
3	
4	
5	
6	
7	
8	
9	
10	
11	
12	
Σ	
Avg.	

Divide total by 12 to get average

Lowest Quarter (LQ)	
1	
2	
3	
Σ	
Avg.	

Divide total by 3 to get average

DU = Avg. of LQ / Avg. of DU Test

DU = _____ Convert to % by moving decimal point two places.

WM = _____ *From page 3*

IE = DU * WM

IE = _____

Reason Distribution Uniformity test not completed

Rain ☐ Denied ☐ Broken ☐ Wind ☐ N/A ☐

ORIGINAL: Customer YELLOW: West Basin PINK: WaterWise

Survey Form 2

Type of Devices, Useful Life and Water Savings

Turf Removal Incentives

Quantity	Average Useful Life (yrs)	Annual Water Savings per unit (gal/year)	Total Water Savings (gal/year)	Acre-Feet Per Year
450,000 ft2	25	44	19,800,000	**60**

Escalation Rates for Savings

COST ESCALATION:		
Power Cost Escalation		0.05
Water Cost Escalation		0.05
MWD Variable Cost		0.05
Inflation Rate		0.02

Total Water Savings

Year	Water Volume Savings of Nozzles (gal)	Water Volume Savings Total (AF)
0	19,800,000	61
1	19,800,000	61
2	19,800,000	61
3	19,800,000	61
4	19,800,000	61
5	19,800,000	61
6	19,800,000	61
7	19,800,000	61
8	19,800,000	61
9	19,800,000	61
10	19,800,000	61
11	19,800,000	61
12	19,800,000	61
13	19,800,000	61
14	19,800,000	61
15	19,800,000	61
16	19,800,000	61
17	19,800,000	61
18	19,800,000	61
19	19,800,000	61
20	19,800,000	61
21	19,800,000	61
22	19,800,000	61
23	19,800,000	61
24	19,800,000	61
25	19,800,000	61
	TOTAL	**1,579**

Cost Savings of Avoidance of Imported Water

Year	Water Volume Savings Total (AF)	Future Water Cost ($/AF)	Water Present Value ($/AF)	Avoided Water Purchase PV ($)
0	61	1,204.00	1,204.00	73,126
1	61	1,264.20	1,239.41	75,277
2	61	1,327.41	1,275.87	77,491
3	61	1,393.78	1,313.39	79,770
4	61	1,463.47	1,352.02	82,117
5	61	1,536.64	1,391.78	84,532
6	61	1,613.48	1,432.72	87,018
7	61	1,694.15	1,474.86	89,577
8	61	1,778.86	1,518.24	92,212
9	61	1,867.80	1,562.89	94,924
10	61	1,961.19	1,608.86	97,716
11	61	2,059.25	1,656.18	100,590
12	61	2,162.21	1,704.89	103,548
13	61	2,270.32	1,755.03	106,594
14	61	2,383.84	1,806.65	109,729
15	61	2,503.03	1,859.79	112,956
16	61	2,628.18	1,914.49	116,279
17	61	2,759.59	1,970.80	119,699
18	61	2,897.57	2,028.76	123,219
19	61	3,042.45	2,088.43	126,843
20	61	3,194.57	2,149.85	130,574
21	61	3,354.30	2,213.09	134,414
22	61	3,522.01	2,278.18	138,368

23	61	3,698.11	2,345.18	142,437
24	61	3,883.02	2,414.16	146,627
25	61	4,077.17	2,485.16	150,939
TOTAL	1,579			836,045

Conveyance-related energy savings (kW-H/MG)	13,022

0.544	kg co2/kwHr

http://www.carbontrust.co.uk/cut-carbon-reduce-costs/calculate/carbon-footprinting/pages/conversion-factors.aspx

Energy-Related Cost Avoidance

Year	Water Volume Savings Total (AF)	Conveyance-related Energy Savings (kW-Hr)	Future Power Cost ($/kWH)	Power PV ($/kWH)	Conveyance-related Energy Purchase Savings PV ($)	Avoided CO2 emissions (Kg)
0	61	257,835.60	0.11	0.11	28,361.92	140,262.57
1	61	257,835.60	0.12	0.11	29,196.09	140,262.57
2	61	257,835.60	0.12	0.12	30,054.80	140,262.57
3	61	257,835.60	0.13	0.12	30,938.76	140,262.57
4	61	257,835.60	0.13	0.12	31,848.73	140,262.57
5	61	257,835.60	0.14	0.13	32,785.45	140,262.57
6	61	257,835.60	0.15	0.13	33,749.73	140,262.57
7	61	257,835.60	0.15	0.13	34,742.37	140,262.57
8	61	257,835.60	0.16	0.14	35,764.21	140,262.57
9	61	257,835.60	0.17	0.14	36,816.09	140,262.57
10	61	257,835.60	0.18	0.15	37,898.92	140,262.57
11	61	257,835.60	0.19	0.15	39,013.59	140,262.57
12	61	257,835.60	0.20	0.16	40,161.05	140,262.57
13	61	257,835.60	0.21	0.16	41,342.26	140,262.57
14	61	257,835.60	0.22	0.17	42,558.21	140,262.57
15	61	257,835.60	0.23	0.17	43,809.92	140,262.57
16	61	257,835.60	0.24	0.17	45,098.45	140,262.57
17	61	257,835.60	0.25	0.18	46,424.87	140,262.57
18	61	257,835.60	0.26	0.19	47,790.31	140,262.57
19	61	257,835.60	0.28	0.19	49,195.91	140,262.57
20	61	257,835.60	0.29	0.20	50,642.85	140,262.57
21	61	257,835.60	0.31	0.20	52,132.34	140,262.57
22	61	257,835.60	0.32	0.21	53,665.65	140,262.57
23	61	257,835.60	0.34	0.21	55,244.05	140,262.57
24	61	257,835.60	0.35	0.22	56,868.87	140,262.57
25	61	257,835.60	0.37	0.23	58,541.49	140,262.57
TOTAL	1,579	6,703,726			1,084,647	3,646,826.73

Imported Water Cost Avoidance

Year	Water Volume Savings Total (AF)	Future MWD Variable Costs ($/AF)	MWD Variable Costs PV ($/AF)	Avoided MWD Variable Costs PV ($)
0	61	300	300.00	18,220.86
1	61	315.00	308.82	18,756.77
2	61	330.75	317.91	19,308.44
3	61	347.29	327.26	19,876.33
4	61	364.65	336.88	20,460.93
5	61	382.88	346.79	21,062.72
6	61	402.03	356.99	21,682.21
7	61	422.13	367.49	22,319.93
8	61	443.24	378.30	22,976.39
9	61	465.40	389.42	23,652.17
10	61	488.67	400.88	24,347.82
11	61	513.10	412.67	25,063.93
12	61	538.76	424.81	25,801.11
13	61	565.69	437.30	26,559.97
14	61	593.98	450.16	27,341.14
15	61	623.68	463.40	28,145.29
16	61	654.86	477.03	28,973.09
17	61	687.61	491.06	29,825.24
18	61	721.99	505.51	30,702.46
19	61	758.09	520.37	31,605.47
20	61	795.99	535.68	32,535.04
21	61	835.79	551.43	33,491.96
22	61	877.58	567.65	34,477.01
23	61	921.46	584.35	35,491.04
24	61	967.53	601.53	36,534.90
25	61	1,015.91	619.23	37,609.45
TOTAL	1,579			696,822

EXHIBIT D

Residential Addendum 15

WATER CONSERVATION FUNDING AGREEMENT

BETWEEN

THE METROPOLITAN WATER DISTRICT OF SOUTHERN CALIFORNIA

AND

West Basin Municipal Water District Agreement No. 70040

The Metropolitan Water District of Southern California (Metropolitan) issues Addenda to provide the West Basin Municipal Water District (Member Agency) with updates or changes to the residential incentive program (Residential Program) that occur after the start of this agreement. This addendum is effective June 1, 2014, and supersedes previous addendums, exhibits, and forms under this agreement.

This addendum includes the following items:

1. **Chronology of Addendums** (Page 3 & 4) – List of all past addendums including issue date and authorization for program changes in each addendum.
2. **Residential Incentive List** (Page 5 & 6) – List of devices and other incentives in the Regional Residential Program and eligible incentives in the MWD-Funded/Member Agency Administered Program. Funding for sprinkler nozzles includes Department of the Interior Grant Agreement No. R12AP35351. Member Agency must comply with all terms and conditions of the grant.
3. **Accept or Forfeit Funds for MWD-Funded/Member Agency Administered Incentive Program** (Page 7) – This form provides the total Member Agency initial reserved amount for the MWD-Funded/Member Agency Administered Incentive Program for Fiscal Year 2014/15. Member Agency must select Option 1, 2, or 3, by checking the appropriate box, sign, date and return this form to Metropolitan by September 30, 2014.
4. **Regional Incentives Not Allowed in Member Agency's Service Area** (Page 8) – This form allows the Member Agency to not allow Metropolitan's regional incentives in their service area. If applicable, Member Agency must check each specific device not allowed, sign, date, and return this form to Metropolitan.
5. **Member Agency Supplemental Funding Authorization** (Page 9 & 10) – This form allows Member Agency to authorize supplemental funding for device incentives through the Regional Program. To provide supplemental incentive funding, Member Agency must complete, sign, date, and return the form to Metropolitan. If the effective date of Member Agency's supplemental funding is July 1, 2014, the authorization form must be submitted to Metropolitan by no later than June 15, 2014.
6. **Member Agency Administered Project Pre-Approval Request** (Page 11) – This form allows Member Agency to submit a device-based or customized project to Metropolitan for pre-approval. Member Agency may use the continuation check box for a previously approved

project. Member Agency must complete, sign, date, and return the form to Metropolitan prior to submitting any invoices for reimbursement.

7. **Requirements for Incentive Reimbursement MWD–Funded/Member Agency Administered Incentive Program** (Page 12-14) – A description of reporting, eligibility, invoicing and payment processing requirements for the MWD-Funded/Member Agency Administered Incentive Program. Specific data requirements are required in order to process invoices and are listed under Requirements for Incentive Reimbursement.
8. **Submitting Invoices and Supporting Databases** - To ensure timely processing of payments, Member Agency must submit monthly invoices and an excel database containing supporting documentation. Invoices may be submitted in two methods: 1) as a scanned invoice signed by the Member Agency's General Manager or Designee prior to submittal or 2) via a member agency web portal which will become available at a future date. Invoices submitted via web portal do not require signatures. Metropolitan will provide upon request a sample invoice or database for Member Agency to receive reimbursement for device-based projects or customized projects under the MWD-Funded/Member Agency Administered Incentive Program in electronic format.
9. **Guidelines for Turf Removal Incentives** (Page 15) – A description of guidelines, requirements and eligibility for turf removal incentives.
10. **Regional Program Turf Removal Additional Requirements Request** (Page 16 & 17) – Member Agency or its retail agency may customize the turf removal application requirements for its service area in the Regional Program subject to approval by Metropolitan. Metropolitan retains the sole discretion to determine if Member Agency's additional requirements are allowable in the Regional Program. If Member Agency wishes to request additional requirements, they must provide the required information, sign, date, and return this form to Metropolitan. Member agency may use the continuation check box to utilize previously approved requirements.
11. **Payment Processing through Water Bill** – Metropolitan will issue credits or debits to Member Agency on the monthly water bill for Metropolitan payments due to Member Agency or to obtain reimbursement from Member Agency for payments due to Metropolitan.

Alice Webb-Cole

Alice Webb-Cole
Agreement Administrator
May 2014

Attachments

References

DPW 1952 and DWR 1999 are referenced in DWR bulletin 118. (http://water.ca.gov/groundwater/bulletin118.cfm)

DPW 1952 - California Department of Public Works (DPW). 1952. West Coast Basin South Coast Hydrologic Region California's Groundwater Coastal Plain of Los Angeles Groundwater Basin Bulletin 118

DWR Southern District, 1999. Watermaster Service in the West Coast Basin, Los Angeles County, July 1, 1998 – June 30, 1999.

SB1, Steinberg – Section 85054 (http://leginfo.ca.gov/pub/13-14/bill/sen/sb_0001-0050/sb_1_bill_20121203_introduced.html)

WaterSMART Guidebook, 2008. "*A Water-Use Efficiency Plan, Review Guide-Landscape Water Use-Efficiency.*" East-Bay Municipal Water District

Federal Interagency Stream Restoration Working Group (FISRWG). 1998 Landscape Water Use Efficiency Baseline Assessments. Riparian Corridor Study.