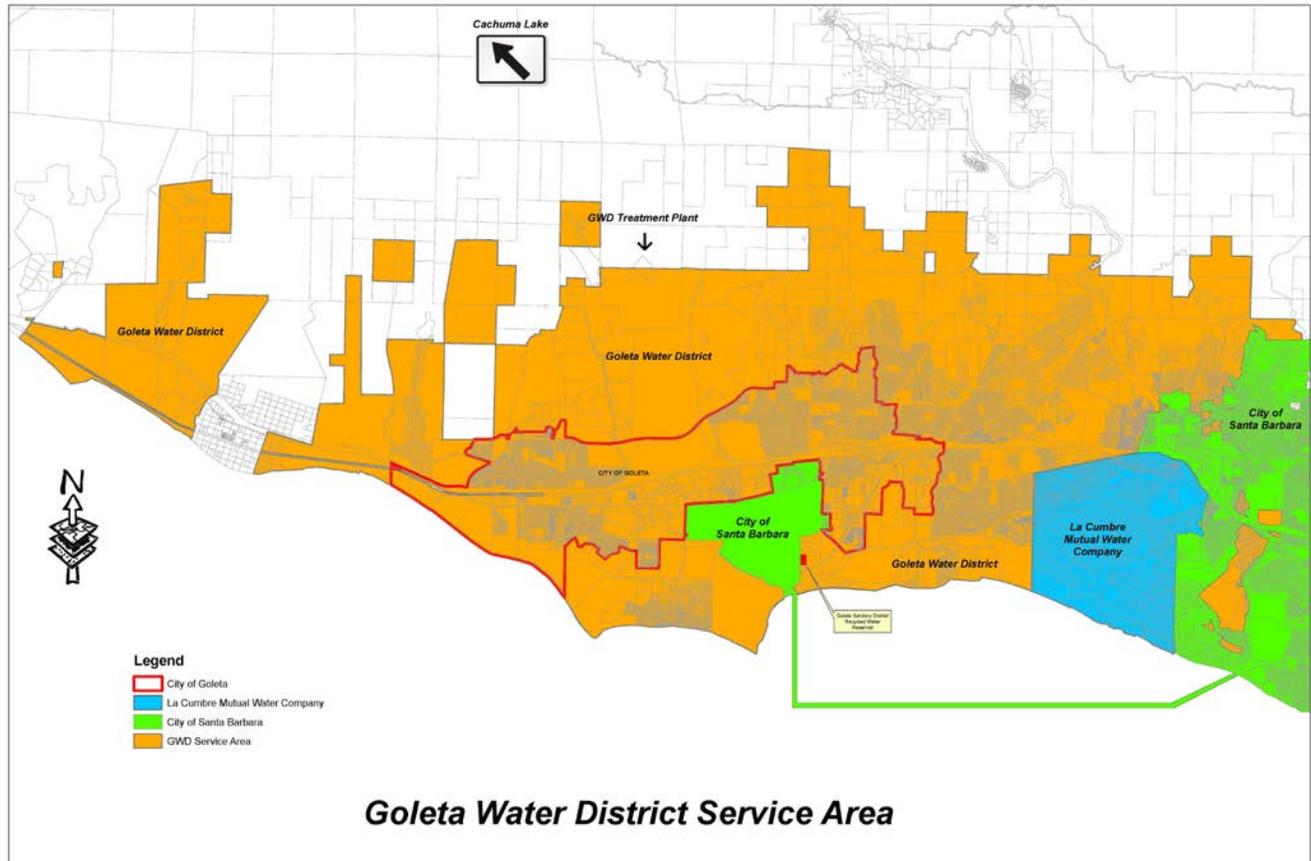


Goleta Water District Smart Landscape Rebate Program

Work Plan

System Map



The proposed rebate program area of benefit includes the District service area (in orange).

PROJECT DESCRIPTION

The Goleta Water District (District) Smart Landscape Rebate Program (SLRP) offers monetary rebates to commercial and residential customers to make pre-authorized improvements to their outdoor landscaping that will increase water use efficiency. The SLRP is a critical tool for reducing water use since the residential per capita usage among District customers is only 64 gallons per person per day. Outdoor landscaping, which accounts for 50% of residential use in the Santa Barbara region, thus provides the biggest source of potential water savings for many customers.

By reducing the amount of water used for irrigation the SLRP also significantly reduces energy use and greenhouse gas emissions since water is energy intensive to transport. Maintenance for waterwise landscaping also tends to be less energy intensive compared to caring for a traditional lawn as these landscapes eliminate the need for mowing, and tend to produce less green waste that must be trucked off-site, to potentially release methane as it decomposes.

The existing SLRP, funded by the District and grant funding from the United States Bureau of Reclamation (USBR), was approved by the District Board of Directors in October 2014 due to ongoing drought conditions and high customer demand for the program. The SLRP includes rebates for replacement of water-thirsty plants with drought tolerant, native, and/or water efficient plants and groundcover; efficient irrigation systems; permeable artificial turf; limited landscape design costs; costs associated with materials for “laundry-to-landscape” irrigation systems; and pool covers. The rebate is limited to up to \$1,000 for single family residential customers, and \$2,000 per meter for multi-family (HOA), commercial, and dedicated landscape irrigation meter customers (up to 2 meters).

The SLRP as currently implemented builds on a previous District program. As a result of analysis from the previous program the District now includes landscape design costs and other additionally approved materials as eligible reimbursable expenses, since these were key factors customers identified as roadblocks to participation, or analysis showed these services and materials were correlated with larger water savings. Over half of the existing SLRP budget has been allocated to commercial, multi-family residential, and large landscape customers in order to maximize water savings since analysis of data collected from the District’s previous rebate program showed that these users realized larger water savings. Residential demand for the program is also high, with over 260 households on the interest list without the District conducting any significant public outreach advertising the program. Under current funding levels and based on past rebate data, approximately 120 single family households are anticipated to participate in the existing program. Due to the high demand and unmet needs among single family residential customers, this proposal focuses primarily on this customer segment, though commercial customers will still be eligible. In order to ensure higher water and energy saving returns typically associated with multi-family and commercial properties the District will focus funds toward turf removal and laundry-to-landscape irrigation systems.

The funding requested in this proposal would both fill the funding gap to allow additional customers to participate in the program, and target incentives toward two distinct high water and energy saving project components:

1. Turf reduction type improvements that remove turf and replace it with California-friendly landscaping, and
2. Laundry-to-landscape irrigation systems that would produce a steady supply of water year-round for irrigation.

Both of these components have proven popular in this latest round of rebates, and provide the greatest opportunities to improve water and energy savings within the SLRP. This is particularly important when focusing on single family residential customers as water and energy savings are typically lower due to smaller lot size. The laundry-to-landscape irrigation systems in particular provide a great opportunity for further increasing water use efficiency for customers who already have low water using landscapes and would not otherwise qualify for to participate in the SLRP. Additionally, laundry-to-landscape irrigation systems do not require additional energy to pump water beyond what is already being used for laundry.

Rebates:**Turf Reduction and Laundry-to-Landscape Rebates**

Since the existing SLRP interest list is large and the program is over-subscribed, customers on the interest list that propose to remove turf or install and laundry-to-landscape irrigation system would be prioritized for the funding under this grant. To be consistent with the existing SLRP, rebates would be calculated similar to the existing SLRP and would have the same funding limits. Rebates could not exceed the cost of pre-approved equipment and materials, up to \$1,000 for single family residential customers. To maximize water and energy savings and program efficiency, a minimum project conversion area would be established.

For laundry-to-landscape rebates, a customer can receive a rebate for 50% of system design costs, up to \$250, within the \$1,000 rebate. Rebates will not be provided for general labor. The inclusion of graywater system design assistance is meant to help customers receive expert advice to plan and design their system, overcome knowledge barriers a customer may have, and increase the number of customers who install laundry-to-landscape irrigation systems. A pre-authorization review of customer water use history and existing landscape will determine program eligibility, and projects that are not expected to conserve water would not be eligible for any rebate.

Participation in the Smart Landscape Rebate Program is voluntary on the part of customers. Rebate amounts must be approved by the District before the start of each project as part of a water conservation evaluation by the District. Rebates will require supporting documentation such as sales receipts, invoices, and/or before and after photos to verify project completion. Particularly for the "laundry-to-landscape" component of the program, the District may rely on pre and post photo inspection instead of site visits. Two devices that can be used to maximize the efficiency of program administration are included in the budget:

1. Tablet type computer, which will allow staff to look up information in the field, enter data directly into the database (as opposed to writing it and relying on later data entry in the office), and take pictures of the site.
2. An electronic measuring tool used by many landscape companies will help staff verify square footage and measure in the event the view from photos is obscured by trees.

The District has successfully improved the SLRP over the years through extensive data collection and analysis. For this reason the purchase of a second laptop system to aid in onsite data entry and recordkeeping is budgeted. The District uses an Excel database to store data. Consistent data collection is essential to program oversight and monitoring.

WORK PLAN TASKS**Task 1: Direct Program Administration and Reporting**

Ryan Drake, Water Supply and Conservation Manager, will be responsible for managing the grant agreement in compliance with grant requirements, and preparation and submission of supporting documents. The District will send progress reports and cost/rebate data to DWR according to

guidelines once they are issued, in the specified forms and format. Depending on DWR's grant reporting needs, the District anticipates providing the following information:

- Water and energy savings data with associated GHG reductions
- Cost/rebate data for financial reporting
- Documentation as needed

Activities for this task include:

- ✓ Progress Reports and Invoicing
- ✓ Management of grant for compliance
- ✓ Draft and Final Project Report

Deliverables: Invoices, reports, and other deliverables as required.

Task 2: Program Outreach

Upon approval of the grant a separate interest list, an updated application, outreach materials specific to the turf reduction and laundry-to-landscape irrigation systems, and other collateral materials will be made available to customers on the current SLRP website. Outreach will build on successful past practices, including:

- Identifying and contacting high water using customers;
- Compiling information on water usage and costs incurred by those customers;
- Communicating water usage and cost information directly with residents, commercial property owners, and school and park administrators;
- Promoting the program through landscape designers, who can help clients address typical roadblocks and see projects to completion;
- Posting information on the SLRP on the regional water efficiency website.

In order to ensure that customers are successful with the SLRP in creating gardens that also conserve water and energy, the District offers its Demonstration Gardens on the grounds of the District Office. The plants in the garden are grouped according to water use in a series of "rooms" including: Perennial Border, Mediterranean Garden, Exotic Garden, Traditional Garden, Southern California Native Garden, Desert Garden, and the new Edible Landscape Garden. A variety of water and energy saving techniques are modeled for customers to consider. As part of the SLRP outreach, customers are encouraged to visit the gardens, explore information about the gardens on our website, and utilize the virtual garden tour and plant lists featured on the WaterWiseSB.org site.

Activities for this task include:

- ✓ Interest List maintenance and follow-up
- ✓ Outreach (materials, website, etc.)
- ✓ Promotion of District Demonstration Gardens and virtual garden tour feature for design ideas

Deliverables: Interest list, updated application, and outreach materials (digital and *print versions*).

Task 3: Site Visits and Application Processing

The District Board of Directors has already authorized the SLRP program, so staff will begin processing applications for the turf reduction and laundry-to-landscape irrigation systems under this grant as soon as the applications are submitted. The site visits and application processing will be done by Senior Water Resources Analyst Misty Williams, who currently administers the SLRP and conducts site visits, with support from a trained Water Conservation Intern.

Activities for this task include:

- ✓ Maintaining and processing interest list
- ✓ Calculating customer baseline water usage
- ✓ Scheduling and conducting on-site visit/evaluation or photo/ written assessment of property
- ✓ Approval of the customer's landscape plan with list of eligible water conserving items/actions and dollar amount(s) for possible rebates, subject to verification that the water-efficient items or actions are implemented
- ✓ Scheduling of a post-inspection

Deliverables: Baseline water and energy usage data, data from site visits, photos, and approved eligible water conserving items/actions list with approved dollar amounts.

Task 4: Rebates

Several restrictions govern the rebate funds to ensure that the money results in water and energy savings, and that spending complies with the grant and program requirements. Projects must be approved in advance and landscapes for new construction are not eligible. The program is not retroactive. Sales receipts and/or contractor invoices are required for all rebates. Rebates are only issued for the pre-approved list of eligible expenses provided by the District to the customer when an application is approved. Customers have 120 days to make the preapproved upgrades and call to schedule the post-inspection. The District has 60 days to review receipts and issue a check to the customer for qualifying design and materials.

Activities for this task include:

- ✓ Goleta Water District performs a post-installation inspection to ensure appropriate installation of pre-approved products/items. In certain cases, staff may perform the evaluation and verification via submitted photographs and landscape plans
- ✓ At the post-inspection, GWD staff confirms upgrades, collects receipts, and takes an "after" picture
- ✓ GWD then has 60 days to review receipts and issue a check to the customer for qualifying design and materials
- ✓ The District reviews receipts to determine amount eligible for rebates

Deliverables: Photos, invoices and receipts.

Task 5: Data Analysis and Monitoring Plan

Data analysis and monitoring are key components of the District's SLRP, both to monitor funds, ensure water and energy savings are realized, and for modifying subsequent rounds of funding to improve water and energy savings and cost effectiveness. Program oversight for the SLRP includes an application from the customer, with a site visit, photographs and receipts, and the right for the District to inspect landscaping both before and after approval and installation.

Project benefits will be thoroughly analyzed by assessing pre and post project water use for each project to calculate water and energy saved and to compare pre-project estimates vs. actual savings. These water savings will also provide the inputs for the energy calculations to determine total GHG reductions.

To accomplish this, the District will review monthly water use history for all applicants to compare pre- and post-project water use. The District will analyze monthly water use records, identifying each project implementation date and establishing a period prior to implementation that will create 12 months of baseline water use. 12 months of post project water use data will also be analyzed to compare against the initial baseline data. Comparing pre and post project 12 month periods with similar weather will be attempted as much as is practical. Energy savings will be calculated based on the water savings verified in the water savings analysis, and converted to estimate total GHG reductions using the tool provided by DWR for the 2014 Water Energy Grant Program.

Since water use during the initial plant establishment period is often higher, water and energy savings estimates are likely be conservative relative to the 15-year project savings. Plant irrigation needs will decline over time, including after our post project analysis and reporting. The focus on turf removal and laundry-to-landscape projects intends to help offset this trend since these components are associated with higher and more immediate water savings. These projects will likely result in additional water and energy savings over the expected life of these projects that may not be captured within the grant reporting window.

The consistent collection of onsite data is critical to monitoring the use of funds and informing the final analysis that quantifies the water and energy savings relative to the costs of the program. For example, detailed site data has been instrumental in the past in analyzing why savings may be higher or lower than anticipated. For this reason an electronic measuring tool, and a second laptop are included in the budget to ensure that site data is collected to run analysis for incorporation into future programs.

Activities for this task include:

- ✓ Data analysis
- ✓ Review receipts and issue rebates

Deliverables: Water and energy savings data and analysis.

Task 6: Readiness to Proceed

Upon entering a financial assistance agreement in the spring of 2015, the District will begin the

necessary steps to ensure the additional program elements (turf reduction program and laundry-to-landscape irrigation systems) can proceed immediately. The following timeline will be considered and adjusted as needed:

#	Task	Schedule	2014				2015												
			Sep.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.	
1	Smart Landscape Rebate Program (existing)	September '15 - May '15																	
1.1	Development of program guidelines and informational materials	August '14 - September '14	■																
1.2	Board of Directors approval of program	October 14, 2014	◆																
1.3	Contact customers on interest list to gauge interest and schedule pre-inspections, if applicable	October '14 - December '14	■																
1.4	Implementation (pre- and post-inspections, process rebates, program analysis and reporting, etc.)	November '14 - May '15					■												
2	Smart Landscape Rebate Program - Turf Reduction & Laundry-to-Landscape Systems	May '15 - March '18										→ Through 3-2018							
2.1	Board of Directors authorization to submit grant application and enter into an agreement with the State of CA.	February 10, 2015					◆												
2.2	Submit authorizing documentation to CA DWR (by March 2, 2015)	February 2015					■												
2.3	Draft awards announced by DWR	March 2015					■												
2.4	Final awards announced by DWR	April/May 2015					■												
2.5	Finalize guidelines for Turf Reduction & Laundry-to-Landscape program components	May - June 2015					■												
2.6	Development of additional informational and outreach materials	May - June 2015					■												
2.7	Outreach to customers on SLRP interest list who have expressed desire to remove turf or install graywater system; targeted outreach to customers with large turf areas	June '15 - July '15					■												
2.8	Implementation (pre- and post-inspections, process rebates, program analysis and reporting, etc.)	June '15 - March '18										→ 3-2018							

The District already has an active SLRP interest list which is oversubscribed despite minimal public outreach. Program logistics and reporting tools, advertising, and other components will help ensure applicants can proceed through the process smoothly, and that the grant program can be implemented quickly. Since the District’s SLRP is already underway, we do not anticipate significant learning curves for the turf reduction program and laundry-to-landscape systems to slow completion of projects early in the grant window.

Due to the small footprint of these individual water conservation projects, no major construction permits are anticipated by project participants, reducing permitting delays typical of larger projects. Water and energy savings will materialize quickly under the proposed project.

CEQA Compliance

The District has reviewed the SLRP and found it is categorically exempt under CEQA (14 CCR Section 15300-15331) for the following reasons:

- (1) The proposed program will take place in the built urban environment on residential and commercial properties and will not cause disturbance to native habitats or other natural resources. Additionally, the scale of the small projects (turf removal) is not expected to exceed the level of earth disturbance that would require permitting within the Land Use Development Code (>2500 Sq Ft for CII or >5000 Sq Ft for residential properties).
- (2) The proposed program will take place on existing residential and commercial properties within the built urban environment and are not expected to encounter or have project boundaries overlap with any critical habitat for listed or proposed federally threatened or endangered species. Therefore, Goleta Water District does not expect any negative impacts on federally listed or proposed threatened or endangered species.
- (3) No wetlands or other surface waters are expected to be encountered by the proposed program.
- (4) Built in the early 1950's, the USBR-operated Bradbury Dam and associated Lake Cachuma on the Santa Ynez River has a 6.4 mile long tunnel that delivers water to Goleta Water District, as well as other communities on Santa Barbara's south coast. Once water flows through the tunnel, it continues along the South Coast Conduit, where it is distributed to the providers. This project will not alter or modify the existing water delivery system in any way.
- (5) This program may upgrade many individual residential and commercial irrigation systems. The age of these systems vary considerably but according to water conservation field crews, are usually on the order of 20-30 years old and are either very inefficient or failing in some way (leaking valves, broken spray heads, inefficient equipment, etc.).
- (6) No buildings, structures, or listed National Register of Historic Places are expected to be participating in this program.
- (7) Given that the program will take place in a variety of residential and commercial properties, we expect no known archeological sites will be affected.
- (8) We do not expect any disproportionately high and adverse effects on low income or minority populations. We hope that the landscape rebates will allow those who may not be able to otherwise afford it, to make important changes to their irrigation and landscaping.
- (9) These projects are not expected to limit access to and ceremonial use of Indian sacred sites or result in other impacts to tribal lands.
- (10) We do not expect this project to contribute in a significant way to the introduction, continued existence, or spread of noxious weeds or non-native invasive species known to occur in the area. Water conservation staff will review project plans and plant lists prior to approval of each project. We expect staff to review for some of the common invasive species present on lists such as WUCOLS and advise applicants to avoid these species.