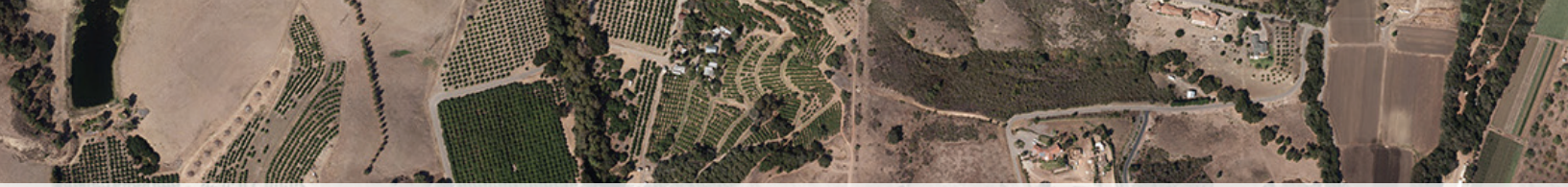
Sustainability Plan Progress Report

An Update on Implementation of the
Goleta Water District Sustainability Plan

2015-2016

GOLETA WATER DISTRICT



District Mission

To provide an adequate supply of quality water at the most reasonable cost to the present and future customers within the Goleta Water District.

ACKNOWLEDGEMENTS

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Sustainability *is commonly defined as the responsible management of economic, environmental and social resources to meet the needs of present and future generations.*

INTRODUCTION AND BACKGROUND

A sustainable approach to service delivery is a fundamental component of upholding the Goleta Water District (District) mission to provide quality water at reasonable costs for present and future customers. Recognizing this, the Board of Directors adopted the District's first Sustainability Plan on June 12, 2012. Since the Sustainability Plan was adopted, the District has completed 28 initiatives. This progress report highlights an additional 3 recently completed initiatives, and provides an update on the 40 remaining initiatives. Importantly, five years of historic drought conditions have changed the way the District is managing its water supplies and prioritizing activities that support local supply sustainability and reliability. As such, no new initiatives are identified in this Progress Report; instead, the emphasis is on the continued implementation of existing Sustainability Initiatives. As discussed throughout this report, there is a strong focus on infrastructure and programmatic investments that support sustainable water service delivery to the community now, and into the future.

A Multi-Year Effort to Protect and Extend Water Supplies

The District has long been at the forefront of conservation, and has been actively managing the current drought since it began in 2012 with a number of initiatives:

- **Moratorium on issuing new water allocations under the SAFE Water Supplies Ordinance.**
- **Adoption of a Drought Preparedness and Water Shortage Contingency Plan.**
- **Declaration of a Water Shortage Emergency (currently escalated to Stage III).**
- **A variety of rebate programs to help businesses and residents implement water conservation projects.**
- **Mandatory water use restrictions for all customer classes.**
- **Early update of the Infrastructure Improvement Plan to reflect changing water supply conditions.**
- **Active investment in the District well program, which includes 7 active wells, with 2 under rehabilitation and plans to drill 2 more.**
- **Sophisticated supply and demand model to project 12 and 24 month supply.**
- **Drought surcharge.**
- **Free water conservation checkups.**
- **Active investigation and enforcement of water waste reports.**
- **Lawsuit to defend the Goleta Groundwater Basin and protect customer water supply.**
- **Customer Scorecard Program to work with large users to detect leaks and reduce usage.**
- **Targeted public information campaign to all customers.**

LAKE CACHUMA: THEN AND NOW

Typically the District's principal supply source, Lake Cachuma is now serving mainly as a conveyance facility for water supplies imported from other areas of the state. Declining lake levels necessitated the relocation of the pumping barge to deeper waters over the summer. The lake remains a lifeline for the community, but Lake Cachuma is on life support, and conservation remains critical to sustaining the Goleta Valley and entire Santa Barbara County South Coast.

Winter 2011 - 100%

Summer 2016 - Less Than 11%

Dry Cachuma Lake Bed

PERTINENT DROUGHT INFORMATION

When the District first developed its Sustainability Plan, local water supplies were plentiful, with Lake Cachuma having filled and "spilled" the year before the Plan was adopted (2011). Groundwater levels were at record highs, and the District was not depending on imported water through the State Water Project to meet customer demands. Since that time, Santa Barbara County has experienced five consecutive years of record low rainfall, resulting in no runoff to refill the Lake and increased temperatures, which in turn lead to increased customer water use. California Governor Jerry Brown declared a state of emergency on January 17, 2014, and asked all Californians to reduce their water use. The District Board of Directors declared a Stage I Water Shortage Emergency in March of 2014, Stage II in September 2014, and Stage III in May 2015.

The Goleta Valley is now facing the worst drought in its recorded history. As of September 2016, Lake Cachuma is below 8% and projected to decline further. For the second year in a row, the District anticipates receiving a zero percent allocation from the United States Bureau of Reclamation for Water Year 2016-17. For the remainder of the drought the District cannot depend on Lake Cachuma, traditionally the primary source of water for the community. Instead, the Goleta Groundwater Basin now serves the majority of water to our customers. The basin is critical to meeting the needs of the Goleta Valley, and provides assurance that water will continue to be available for indoor health, and public safety requirements.

As a provider of a lifeline resource, the District plays an essential role in maintaining a functional community. The delivery of safe, reliable water supplies is critical to supporting public health and safety, such as local hospitals and medical centers, the local fire suppression system, and drinking and domestic water for local residents.

To adapt to changes in its water supply portfolio, the District is continuing proactive supply and demand management practices that will help mitigate the effect of the drought on the local community, economy, and environment. This includes conservation outreach, education, and rebates, and new tools to help all District customers conserve water. As the District continues implementing the infrastructure improvement projects necessary to deliver groundwater to customers, there are opportunities to minimize the increased energy needs associated with groundwater pumping and distribution, which are detailed in this report.

Many of the initiatives contained in this report strengthen the resiliency of the water supply system, ensuring the District can protect and sustain the Goleta Valley's water supplies during times of drought, and for current and future generations.

DEVELOPING ALTERNATIVE WATER SUPPLY SOURCES

The drought has reminded the community how fragile Lake Cachuma and the State Water Project are and how long term sustainability requires vigilance to protect and develop local water sources. Even as the District manages through the current drought, long term strategies are being pursued to secure and extend water supplies into the future. Many of the initiatives described in this plan address the health, management, and sustainability of the groundwater basin as a valuable water resource for the Goleta Valley.

The Potential of Stormwater Capture

There is an increasing awareness of the importance of capturing stormwater to provide local communities with additional water supplies. The District is developing a Stormwater Resources Plan that will explore the potential for stormwater capture by determining hydrologically optimal project locations and required infrastructure. Other benefits of stormwater capture, including open space preservation and water quality improvements, will also be examined. By determining the most sensible projects, the District will be well-positioned to take advantage of local, state and federal funding designed to help communities create new local sustainable water sources.

Recycled Water Expansion

Recycled water plays a critical role in drought planning as it remains available even during periods of low rainfall. In February 2016, the District was awarded a $75,000 grant to conduct a feasibility study to explore opportunities to expand recycled water use in the Goleta Valley. The study will evaluate advanced treatment technologies, such as microfiltration, reverse osmosis, and ultra violet light with advanced oxidation. Depending on the treatment recommendations, the study will also determine the best use of expanded recycled water, including potential groundwater replenishment projects, or even augmenting drinking water supplies. Programs such as these already exist and have been permitted in California, and represent the next generation of drought planning.

Protecting the Health of the Basin

The District remains vigilant in protecting and caring for the groundwater basin and will take all necessary steps to ensure its continued health and viability. The 1989 Wright Judgment and 1991 voter-approved SAFE Ordinance set forth a complex set of management rules for the Goleta Basin, including defined limits on extraction, storage requirements, allowed uses, and the establishment and maintenance of a drought buffer for use in times of drought emergency. The drought buffer is the key source of supply sustaining the community through the current drought. The District is committed to protecting the community's groundwater by monitoring sources of contaminants, taking legal action to prevent the illegal exportation of water, and supporting State and Federal legislation to protect groundwater.

The District has a court-determined right to pump 2,350 acre feet per year under normal conditions, and more during drought. During wet winters when excess water is available, the District uses the wells to replenish the basin by injecting excess water from Lake Cachuma into the basin. At the end of 2015, the District had accumulated over 45,500 acre feet of water stored in the basin. The District is now drawing from this stored water at the capacity which existing infrastructure allows.

The District completed an extensive Groundwater Management Plan in 2010. This document is currently being updated to reflect changed conditions since 2010.

Groundwater: Goleta Valley's Lifeline Supply Source During Drought

Challenges of Extracting Groundwater

The District's main water delivery system was designed to treat water coming from Lake Cachuma and feed it into 270 miles of pipeline via gravity to customers throughout the Goleta Valley. In contrast, accessing the water in the District's groundwater basin involves maintaining nine active wells and a complex distribution network, containing a vast array of mechanical equipment. The extraction and movement of groundwater is energy intensive, and requires that water be pumped across 23 unique pressure zones to serve customers at all elevations. To meet demand under drought conditions, a number of modifications to the District's network of valves, pressure regulators, pumps, motors and booster stations have been necessary. The longer the drought persists, the more investment is needed to keep the system running and able to meet demand.

Investment in Well Infrastructure

District wells can currently produce 6,000 acre feet per year. To increase capacity, the District has identified those wells that can be quickly modified to increase production to meet seasonal increases in demand. Work is underway to bring two of the District's inactive wells, Berkeley and Shirrell, online for the first time since the early 1990s. New, larger pumps are also being installed at the San Marcos, San Antonio, El Camino and Airport wells to increase capacity.

Conditions in the groundwater basin are dynamic and change over time. Meeting short-term production targets and long-term sustainability goals requires strategically balanced investment in both routine maintenance and capital activities. The well program has been designed to be flexible and adaptable so that the District is ready to react to unforeseen mechanical issues, declining groundwater levels, and unanticipated changes to water quality. Investments being made now will go far to help ensure the wells will be there to serve customers long into the future.

Sustainability Plan Overview

The Sustainability Plan includes three fundamental components:

- **Guiding Principles,**
- **District Initiatives, and**
- **Periodic Progress Reports**

Together, these components help inform decisions that benefit both current and future customers.

Guiding Principles

The Sustainability Plan Guiding Principles align the District's mission and activities as a public water utility with the economic, environmental, and social benefits resulting from initiatives included in the Plan. The Guiding Principles assist the District in considering the full range of costs and benefits of actions authorized by the District's Fiscal Year Budget and Infrastructure Improvement Plan, as well as ongoing District management practices. As a result, the principles provide a basis for evaluating and prioritizing initiatives undertaken by the District.

Economic Principle: Enhanced value creation for District customers

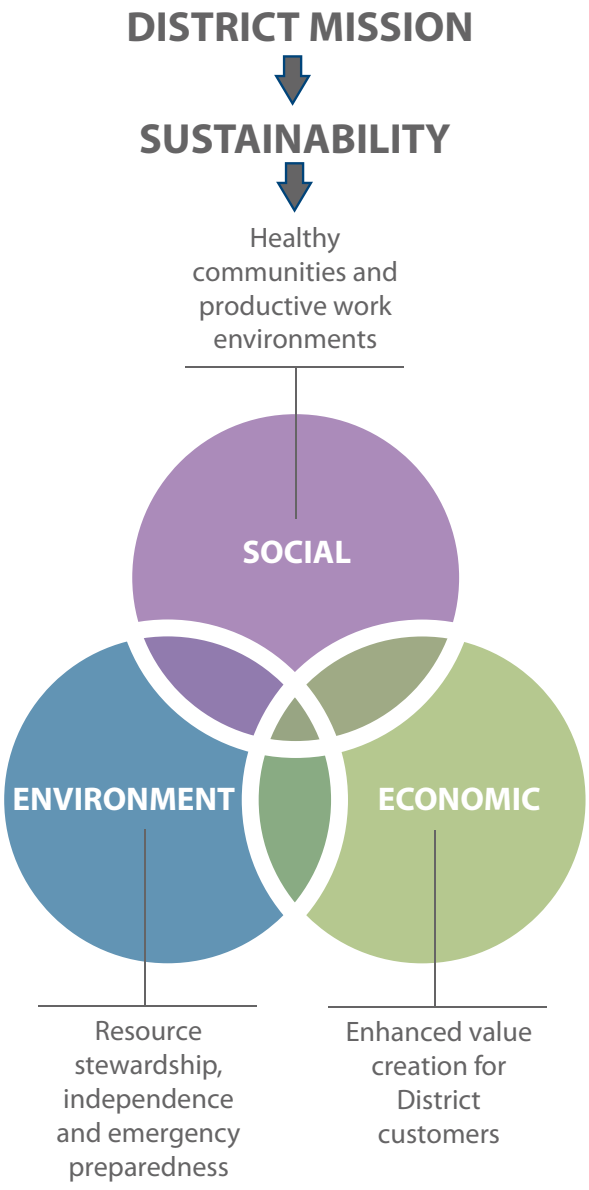
The District's water service delivery and daily decision-making will consider sustainable approaches that create value for District customers now and into the future. In doing so, strategic infrastructure investments, cost-effective business operations, and water supply management will help ensure the highest level of reliable service for District customers.

Environment Principle: Resource stewardship, independence and emergency preparedness

The District will understand the resources it uses and manage them in a sustainable manner. This will position the District for greater resilience and emergency preparedness by mitigating reliance on uncontrollable inputs including electricity, natural gas and gasoline. Additionally, sustainability actions will help the District plan for and adapt to impacts related to climate change, weather variability, and regulations on water suppliers.

Social Principle: Healthy communities and productive work environments

The District will support healthy communities through the provision of quality water to the public and a governance structure that supports civic involvement and public transparency. Additionally, daily actions and work environments will consider the enhancement, productivity and safety of the District workforce while making positive contributions to the well-being of the community in which it operates.



Initiatives

Initiatives are the specific projects and programs the District implements to achieve the outcomes and benefits described by the Guiding Principles. Accordingly, a strong emphasis is placed on infrastructure and programmatic investments that support the District's ability to provide reliable, cost-effective service well into the future. In addition, the implementation of many of the sustainability initiatives is critical to ensure adequate water supplies remain available for all District customers during this historic drought. Initiatives have been identified in the Sustainability Plan as well as the related Progress Reports and are organized by categories of District service delivery to highlight the traditional aspects of operating a public water utility. Service delivery categories include:

Category #1: Customer Service and Business Operations

Category #2: Administration Buildings and Fleet Management

Category #3: Water Supply, Treatment and Distribution System Investment

Progress Report: Purpose and Approach

The Sustainability Plan was designed as an active, adaptable management tool, capable of adjusting to changing conditions and new information related to the District's service delivery environment. The dramatic shift in local water supply availability over the course of the Sustainability Plan implementation and the resulting projects and programs the District is currently implementing is illustrative of the adaptive management approach. Existing initiatives are tracked and evaluated based on previously established targets or goals, and updates or adaptive responses are incorporated as appropriate. For example, groundwater infrastructure improvements are among the highest priority initiatives during the current drought, whereas four years ago, well projects were not prioritized. Accordingly, this approach allows the District to identify incremental adjustments that may be needed through the course of project management, shift the priorities of initiatives based on current conditions, and adapt plans and projects where needed.

Given that many initiatives in the Sustainability Plan anticipate multi-year project schedules, this Progress Report does not attempt to "grade" or "rate" District accomplishments, as doing so may present an incomplete review of the results associated with projects that have not reached completion. Where adjustments or new initiatives are needed, this Progress Report recommends related actions. Progress in implementing initiatives, as well as the status of current initiatives that are underway or ongoing, will be included in subsequent Sustainability Plan Progress Reports. For purposes of progress reporting, a five point scale (1-5) was established to gauge the status of initiatives included in the Sustainability Plan and subsequent Progress Reports, as illustrated below.

1	Planning	Project scope, work plan, and design under development
2	Implementation Underway	Work on initiative is in progress; implementing work plan
3	Initiative Deferred	Work on initiative has been slowed down or postponed
4	Initiative Complete	Initiative is complete and is now in maintenance phase
5	Ongoing	Program implementation is continuous

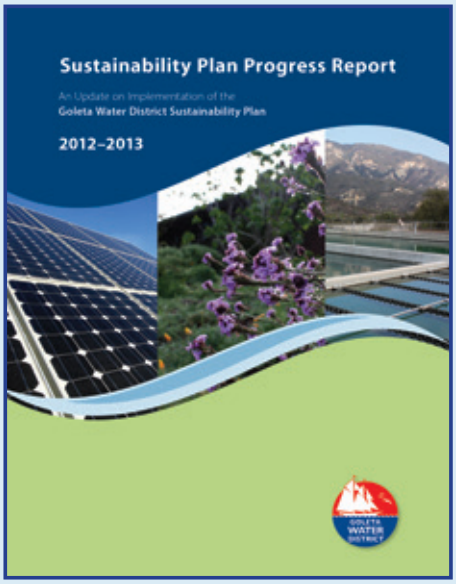
Sustainability Plan Progress Report: 2015-2016

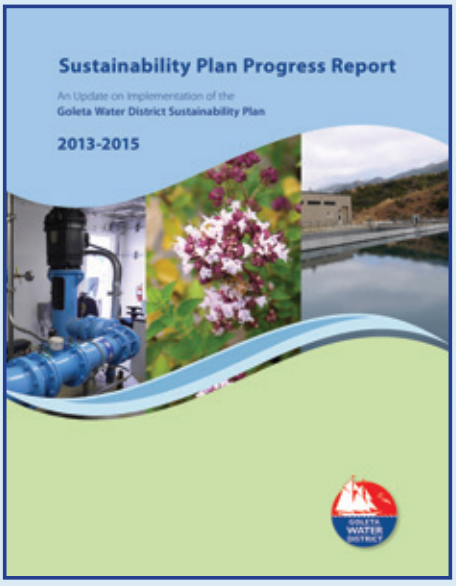
The progress described in the sections that follow is organized by the three service delivery categories described throughout this report: 1) Customer Service and Business Operations, 2) Administration Buildings and Fleet Management, and 3) Water Supply, Treatment, and Distribution System Investment. The District has continued to make steady progress on initiatives across all categories. Overall, 80% of the initiatives included in the Sustainability Plan and subsequent Progress Reports have been completed or are underway. In some cases, regulatory requirements or critical projects such as unscheduled infrastructure repairs and drought related activities, have necessitated rescheduling of Sustainability Plan Initiatives. Thirteen of the 43 initiatives included in this report have been deferred due to the drought and the resulting shift in operational priorities. Such adjustments do not diminish the importance of these initiatives; rather, they reflect the fact that some reprioritization is necessary to ensure the continued delivery of quality water to District customers, especially during the current Board-declared water shortage emergency. Deferred initiatives are identified in the respective service delivery category section in which they were originally categorized.

Waterwise District Edible Demonstration Garden with blooming drought tolerant Aloe Vera and mulch being applied.

Finally, while the annual identification of new initiatives each year is an important component of the ongoing implementation of the Sustainability Plan, this year's progress report does not include the incorporation of new initiatives. Instead, the District is concentrating its efforts on completing the 23 initiatives identified in past progress reports. The following table provides a summary of the status of Sustainability Initiatives included in the Sustainability Plan and subsequent Progress Reports.

The District issues periodic updates to the Sustainability Plan, reporting on progress of the various initiatives included in the Sustainability Plan and subsequent progress reports.





District Sustainability Highlights

In addition to the specific initiatives identified in the Sustainability Plan and/or subsequent Progress Reports, the District has undertaken various other activities during the reporting period that provide sustainability benefits. Noteworthy sustainability-related activities and achievements during the reporting period are highlighted below.

The District proactively removed two of the lawns in its Demonstration Gardens by mulching over them. The project saves approximately 4,000 gallons of water per month and provides interested customers with an example of how to remove turf. A video featuring two mulching techniques was produced and posted on the District's website.

District customers have reduced water use by approximately 25% since declaration of a Water Shortage Emergency. That amounts to approximately 4,000 acre feet, or 1.3 billion gallons of water saved.

Installation of Variable Frequency Drives (VFDs) throughout the District's recycled water distribution system minimize energy consumption due to soft starts and adjustable motor speeds. VFDs sequence pump operations based on demand, prolonging facility life, reducing maintenance costs, and minimizing unanticipated malfunctions.

The Santa Barbara County Fire Department performed pumper truck certification training at the District's Corona Del Mar Water Treatment Plant in an effort to save water. Water used in training activities was directed to a backwash basin to be recollected and treated as an alternative to being discharged to storm drains.

2015-16 Progress Report Summary

Service Delivery Category #1 – Customer Service and Business Operations

REF	CATEGORY #1 INITIATIVES	STATUS
1.8	Technology Improvement and Integration	Complete
1.9	Alternative Revenue Sources	Underway
1.10	Introduction of Lifeline Discount Program	Deferred
1.12	Community Demonstration Garden Outreach	Deferred
1.14	Asset Management Implementation Plan and Pilot Study of the Recycled Water System - Phase I	Deferred
1.15	Coordinated Energy Management	Deferred
1.16	Drought Supply and Demand Model	Ongoing
1.17	Groundwater Management Plan Update	Underway
1.18	Water Supply Management Plan Update	Underway
1.19	Urban Water Management Plan Update	Underway
1.20	Drought Outreach Plan	Underway
1.21	Sustainable Groundwater Management Act Implementation	Underway
1.22	Groundwater Model	Underway
1.23	Agricultural Water Efficiency Action Plan	Underway
1.24	Conservation Incentive Programs	Ongoing

Service Delivery Category #2 – Administration Buildings and Fleet Management

REF	CATEGORY #2 INITIATIVES	STATUS
2.2	Renewable Energy (Solar) Feasibility and Permitting	Deferred
2.3	Green Business Certification	Deferred
2.4	Building Envelope Improvements	Ongoing
2.5	Fleet and Construction Equipment Replacement Program	Ongoing
2.6	Field Operations	Ongoing
2.10	Solar Trellis System at Administrative HQ – Phase I	Deferred
2.13	Stormwater Headquarters Improvements/Master Plan (Phase I)	Underway
2.14	Board Room Remodel	Complete
2.15	Recycled Water Hauling Program	Ongoing

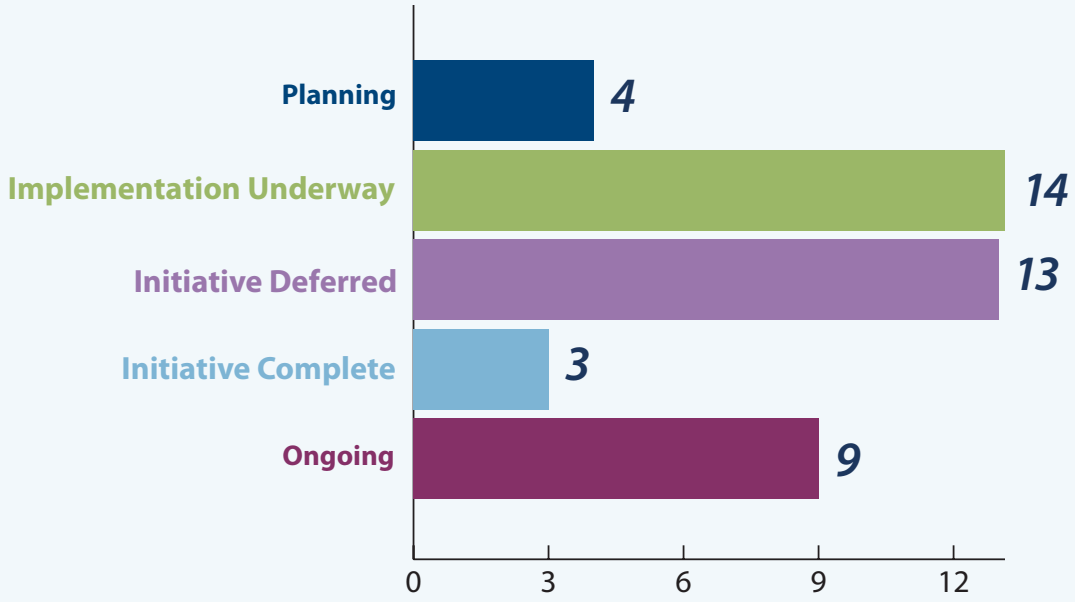
Initiatives not listed here can be found in prior years' Sustainability Plan Progress Reports.

Service Delivery Category #3 – Water Supply, Treatment and Distribution System Investment

REF	CATEGORY #3 INITIATIVES	STATUS
3.5	Grant Application Readiness	Ongoing
3.6	Goleta Beach Recycled Waterline Relocation	Deferred
3.8	Corrosion Protection Program	Ongoing
3.9	Neighborhood Compatibility of District Facilities	Deferred
3.10	Meter Replacement Program	Ongoing
3.13	Water System Evaluation and Submetering Program – Phase I	Underway
3.15	Corona Del Mar WTP Infrastructure Improvement Construction	Underway
3.16	Hydroelectric Turbine Installation at Patterson Reservoir	Deferred
3.17	Goleta Water District – City of Santa Barbara Interconnect	Deferred
3.18	San Antonio Well Rehabilitation Project	Underway
3.19	Berkeley Well Rehabilitation Project	Underway
3.20	Shirrell Well Rehabilitation Project	Underway
3.21	Oak Grove Well Rehabilitation Project	Deferred
3.22	SB Corporation Well Rehabilitation Project	Deferred
3.23	Hollister Recycled Water Pump Replacement	Complete
3.25	New Well Project #1	Planning
3.26	New Well Project #2	Planning
3.27	Monitoring Wells	Planning
3.28	Injection Wells	Planning

Pre-existing Initiative Implementation Progress Status Overview

The bar graph below provides a snapshot of the number of Goleta Water District Sustainability Plan initiatives in each stage of progress.



Service Delivery Category # 1

Customer Service and Business Operations

Including sustainability considerations in the administrative policies of the District enhances the safety, well-being and productivity of the workforce, as well as customer relations. Investments in this service delivery category focus on management practices, risk mitigation, information technology and personnel development to guide day-to-day decision-making. Progress made during the reporting period on the Customer Service and Business Operations initiatives identified in the Sustainability Plan is summarized below.

Summary of Progress and Results

Technology Improvement and Integration (Initiative 1.8)

GOAL: Update various District software and hardware systems.

Complete

This project addresses the need to update various District software and hardware systems so that District staff has the tools necessary to maintain and operate the District's water system as efficiently and cost effectively as possible. By updating software on an annual basis, the business operations systems remain responsive, intuitive, and user friendly. Maintenance of accurate facility records, billing, and customer information within various computer systems is also vital to the efficient operation of the District's water system and customer service functions by supporting the District in collecting and tracking revenue, managing asset records, operating at industry standards, and accounting for expenditures appropriately.

Since 2015, the following technology updates have been implemented:

- Upgrade of the Geographic Information System (GIS) Server due to age, and the phasing out of ArcIMS which is no longer supported. GIS is critical to the work of the District. New features and functionalities lending to better efficiency and quality of work teams and products include an internet-based viewer application displaying real time up to date data for staff in any location, as well as new tools to complete time sensitive tasks quickly and effectively. Benefits include an array of new tools to create custom maps using existing District data and layers independently for analysis and presentations.

- Launch of the Data Warehouse. Utilization of Diamond System, an in-house customer and account record system will be used in concert with our billing provider Global Water to enhance efficiency and customer service. In addition, the District switched from paper-centered record and retention to a database-centered process.

Alternative Revenue Sources (Initiative 1.9)

GOAL: Research, identify and pursue financing for sustainability initiatives and related capital planning goals.

Ongoing

In order to fund sustainability initiatives, the District actively pursues grant opportunities on an ongoing basis. Grant activity during the reporting period includes:

- Water Recycling Funding Program – In February 2016, the District was awarded $75,000 in grant funding through the Water Recycling Funding Program (WRFP), which is administered by State Water Resources Control Board (SWRCB). The project, "Goleta Potable Reuse Facilities Plan," will identify viable options for expanding and maximizing the use and increasing the long-term sustainability of recycled water in the Goleta Valley, as discussed in more detail on page 16.

- Conservation Grant with the County – In January, 2016, The Santa Barbara County Water Resources Agency applied for a $1,154,977 grant on behalf of the District and other local water purveyors for funding of local landscape rebate programs. If awarded, the grant will provide matching funds for the District's highly successful Smart Landscape Rebate Program, which provides rebates for replacing high water use landscapes with permeable, low water use landscaping and efficient irrigation systems. The grant provides an additional $40,000 in landscape rebates for District customers, supplementing the $140,000 in District funding budgeted for the 2014/15 fiscal year.

The District is also pursuing potential grant funding opportunities through Proposition 1, a $7.5 billion bond measure passed by state voters in 2014. Proposition 1 provides funds for investments in water projects and programs as part of a statewide, comprehensive water plan for California. Seeking alternative revenue sources will help offset costs to the District of pursuing and implementing planned initiatives and infrastructure projects, with a focus on projects that make the most efficient use of recycled water and stormwater catchment, while expanding conservation programming.

Introduction of a Lifeline Discount Program (Initiative 1.10)

GOAL: Deliver potential water service discounts to economically disadvantaged customers.

Deferred

Due to legal restrictions under proposition 218, the District would need to identify an alternative source of revenue to fund the program, which is not currently feasible. The District may reconsider this initiative in the future.

Community Demonstration Garden Outreach (Initiative 1.12)

GOAL: Conduct garden-focused public outreach.

Deferred

Development of garden-focused public outreach elements has been delayed due to reprioritization of drought-related projects. Progress to date has included the design of large site signs, which feature illustrated maps and plant lists for each of the garden rooms, and development of information sheets for each garden room Additionally, as part of the District website redesign, a dedicated website subsection for the Demonstration Gardens will feature a link to subpages for each of the seven garden rooms, with a description of various water saving features and advice on planning, installing, and maintaining a garden.

This project will resume when the necessary resources and District water supplies return to normal. In the meantime, the garden remains open and available to the public.

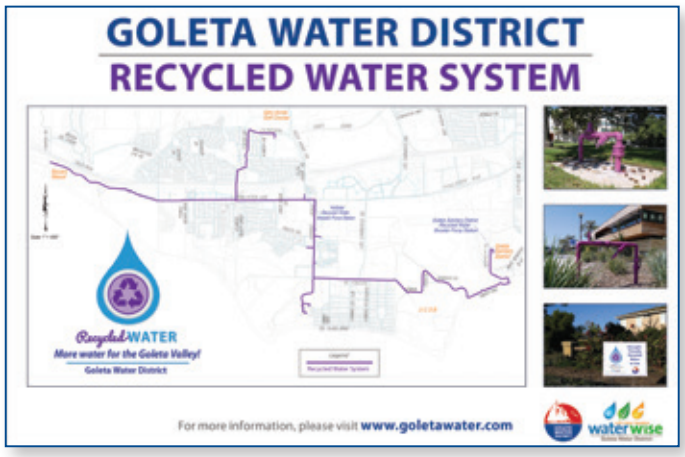
Asset Management Implementation Plan and Pilot Study of the Recycled Water System - Phase I (Initiative 1.14)

GOAL: Complete initial AM system assessment.

Deferred

The Goleta Water District owns and operates an expansive portfolio of infrastructure and other assets that are critical to providing reliable water service to customers. Planning, managing and accounting for full life cycle infrastructure expenditures reduces costs to current and future customers by reducing risk of failure while determining the most efficient approach for asset improvement and replacement.

Phase I of the project consists of a Pilot Study of the Recycled Water Distribution System. The Pilot Study will provide an inventory of assets, a framework for future data collection, and a basis for budgeting and programming of future maintenance and replacement activities. This study will provide an opportunity to test asset management methodologies and approaches, and will include recommendations for implementing future AM studies on the potable system. This project has been delayed due to the drought.



Coordinated Energy Management (Initiative 1.15)

GOAL: Implement an Energy Management Program.

Deferred

Energy management is a critical part of the District's sustainability plan. Current year-over-year electricity costs increased by 44% in FY 2014-15 and by 20% in FY 2015-16 with the majority of increases attributable to the operations and maintenance of transmission and distribution and booster pumps. With the new energy-efficient AFDs operating pumps and motors, the District is able to better coordinate the system to maximize electricity savings. Solar panels installed at the San Ricardo Well Site have also offset the District's electricity demands (See Initiative 2.2, Renewable Energy [Solar] Feasibility and Permitting). Full implementation of this initiative will include utilization of software and management practices that facilitate accurate data tracking, monitoring of energy usage, and other performance metrics, more efficiently and effectively. This element of the initiative has been deferred due to prioritized drought-related activities; however, energy management activities at the District are ongoing.

Drought Supply & Demand Model (Initiative 1.16)

GOAL: Create and maintain a water supply and demand model to project the potential for and severity of shortages in District water supply.

Ongoing

In times of drought, or if a water supply shortage is imminent, the District utilizes a water supply and demand model to determine the potential for a supply shortage early in the planning process. In late 2012, the District began maintaining a detailed model that utilizes supply and demand inputs to produce supply availability percentage outputs for the following 12 and 24 month periods. This allows the District to determine whether a water supply shortage is anticipated for any given year, and the severity of a shortage based on the availability of the different sources of supply and trends in demand. The model is updated on a regular basis with actual customer demand data, and to reflect changes in the delivery timing or quantity of water supplies. The Drought Supply and Demand Model will remain an ongoing initiative as long as the drought continues and water supplies are below normal.

Groundwater Management Plan Update (Initiative 1.17)

GOAL: Update the 2010 Groundwater Management Plan.

Underway

The Groundwater Management Plan (GMP) enhances the District's ability to manage its groundwater supply effectively and sustainably while also meeting State groundwater planning requirements and maintaining District eligibility for State grant funding. The GMP will provide updated projections on water levels in the basin through 2017, refine recoverable groundwater storage estimates, incorporate Salt and Nutrient Management planning requirements, address groundwater quality, outline new management strategies for the basin, and recommend future tasks and timelines.

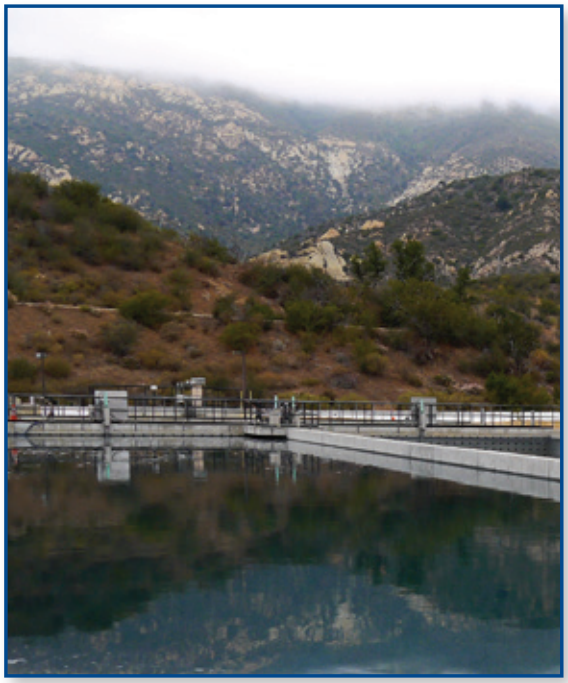
According to the 2014 Sustainable Groundwater Management Act (SGMA), agencies, such as the District, are not permitted to adopt a GMP or renew an existing one after January 1, 2015. The GMP update will, therefore, act as an interim basin management plan before a Groundwater Sustainability Plan is adopted. It is also being used to inform the Water Supply Management and Urban Water Management Plans, also under development. The GMP update commenced in late 2015 and is currently scheduled to be reviewed completed in the fall of 2016.

Water Supply Management Plan Update (Initiative 1.18)

GOAL: Update the 2011 Water Supply Management Plan.

Underway

The District Water Supply Management Plan (WSMP) is one of the District's foundational planning documents and serves as a critical management tool and operating plan guiding the relative priority of use of District water supplies. While the original 2011 WSMP includes analysis of supplies under drought conditions, the severe drought of the last four years has resulted in unprecedented water supply conditions locally and statewide, considerably impacting the District's supply portfolio. An update of the WSMP is necessary to reflect current data on Lake Cachuma and State Water reliability during severe dry periods. The WSMP Update will also incorporate groundwater availability projections based on the results of an updated Groundwater Management Plan, as well as updated demand projections based on the Urban Water Management Plan, both of which are currently under development. These updated scenarios will be incorporated into the analysis of the District's water supply portfolio to develop an updated optimum water supply management method for the next five years, and forecasting over a 20-year planning horizon. The WSMP Update is scheduled to be completed by the end of 2016.

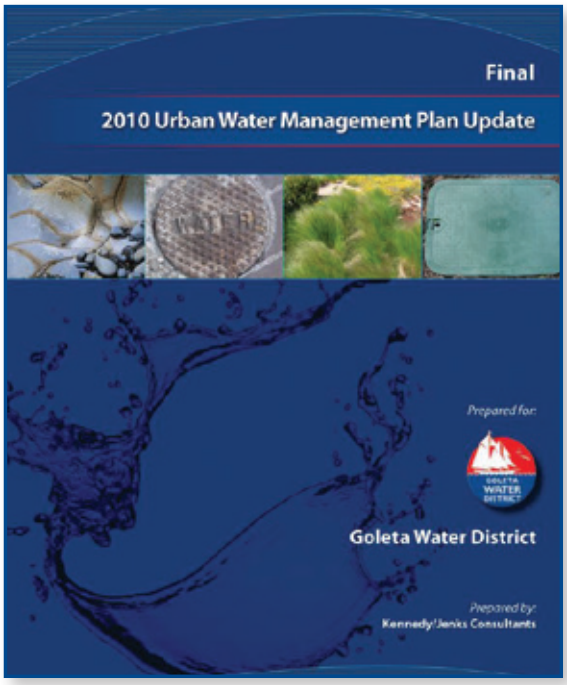


Urban Water Management Plan Update (Initiative 1.19)

GOAL: Update the 2010 Urban Water Management Plan.

Underway

Updating the Urban Water Management Plan (UWMP) is an important sustainability initiative, as maintenance of a long-term, general planning document is necessary for ensuring a sustainable water supply. The District has been actively engaged in the UWMP development process since 2015. While substantial progress has been made, critical components have not been completed due to an unforeseen delay in the Groundwater Management Plan and related analyses. As groundwater is a critical supply source for the District, incorporation of the most updated groundwater analysis results is essential for the long-term planning analysis required in the UWMP. The UWMP is currently scheduled to be reviewed at the November 2016 WMLRP Committee meeting and the December 2016 Board meeting. Once adopted by the District Board of Directors and approved by the State, the UWMP 2015 Update will replace and supersede the District's existing 2010 UWMP.



Drought Outreach Plan (Initiative 1.20)

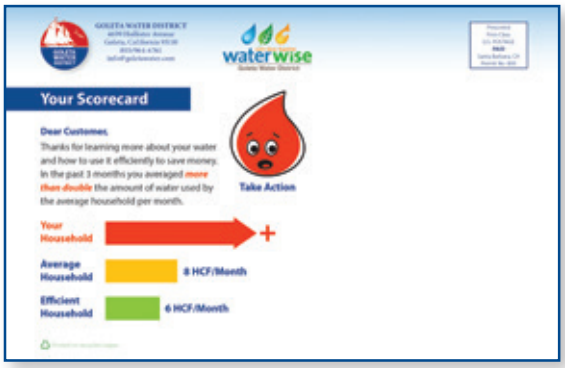
GOAL: Implement a Drought Outreach Plan to guide public outreach activities during a declared water shortage.

Underway

The Drought Outreach Plan is a critical component of the District's overall water shortage planning strategy. Public education and outreach enhances civic engagement in water-related efforts and activities, and supports the District's response strategy during a drought. The outreach plan will continue to be implemented during the ongoing water shortage, and periodically updated as necessary to address current public information needs. Aggressive public outreach campaigns continue to maximize conservation efforts in the District's service. The following outreach campaigns have been implemented:

- The Customer Class Scorecard Program Outreach Plan was approved by the Public Information Committee in the fall of 2015. This targeted outreach program reaches high water users across all customer classes and subcategories to increase water use awareness and provide information on District rebate and conservation programs to increase water conservation. The program has increased rebate enrollment and conservation checkups, and has identified a number of leaks.

- Outreach at public events such as the Lemon Festival and Earth Day distributed an estimated 150 toilet leak testing tablets, 150 showerhead shutoff valves, 50 showerheads, 200 aerators, 150 toilet flappers, and 5 garden hose nozzles. These items were distributed at no cost to encourage and enhance water use efficiency in the Goleta Valley. During the 2016 Earth Day Festival, the District distributed native Narrow Leaf Milkweed seeds, which are waterwise native plants and also help support the Goleta Valley monarch butterfly population.



- A number of new materials have also been developed, including a Customer Thank You postcard sent to SFR customers an average of 6 HCF or less each month, postcards explaining how much water an average family uses, and how much of that use is for indoor needs versus outdoor landscaping.

Additional outreach during the reporting period included production and online posting of a lawn removal and mulching instructional video, newsletter messages, regular social media updates, billing statement messages, and press releases on supplemental water purchases and recycled water deliveries.

Sustainable Groundwater Management Act Implementation (Initiative 1.21)

GOAL: Comply with California's new Sustainable Groundwater Management Act.

Underway

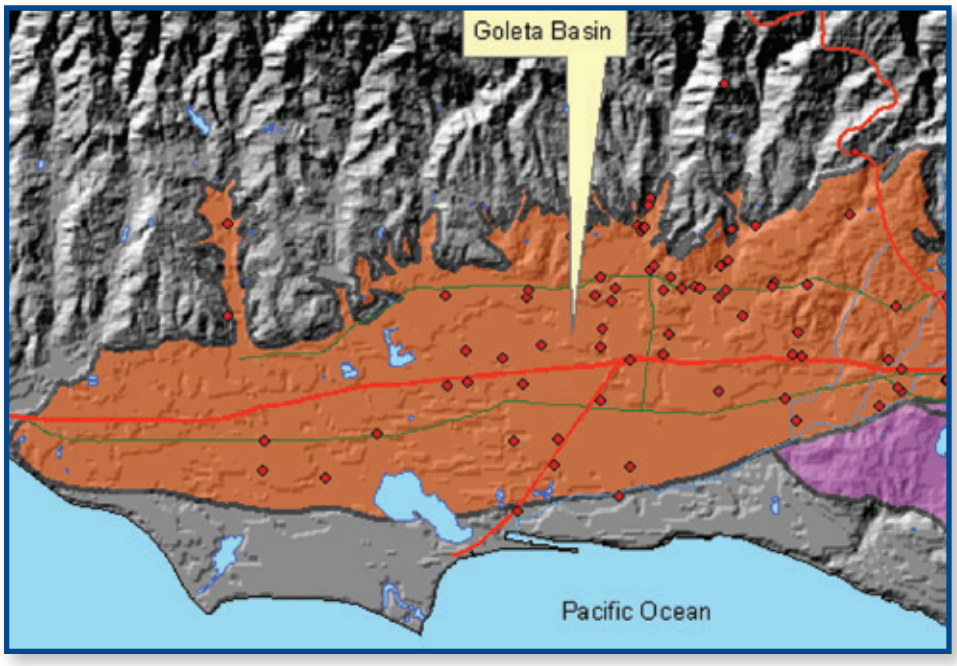
To ensure the ongoing sustainable management of the Goleta Groundwater Basin in full compliance with the 2014 Sustainable Groundwater Management Act (SGMA), the District is undertaking the required steps to becoming a locally-controlled Groundwater Sustainability Agency (GSA) and has formulated essential elements of a future Groundwater Sustainability Plan for the Goleta Valley. The District will propose a GSA for the unadjudicated North and West subbasins of the Goleta Groundwater Basin, which are not covered under the Wright Judgment. As a GSA, the District will have the ability to preserve groundwater supplies and groundwater quality for sustainable, long term use, as well as to help forecast potential customer demand. Although the District already monitors the Basin's groundwater levels, this Initiative further supports the long term sustainability and reliability of local groundwater supplies available to serve the needs of the Goleta Valley, through the use of a number of new groundwater management tools to achieve sustainability in all areas of the Basin.

Groundwater Model (Initiative 1.22)

GOAL: Complete an update and training on the Goleta Groundwater Basin Numerical Model.

Underway

The Goleta Groundwater Basin Numerical Model (Model) was created in 2007 to serve as a repository for modeling and monitoring data, and a platform capable of producing reports about historical data and the wells to interested parties as required by the Wright Judgment and SAFE Ordinance. Although an update to the Model has been delayed due to legal reasons, the District continues to monitor the basin and anticipates utilizing the Model in the Groundwater Management Plan, Urban Water Management Plan, and the Water Supply Management Plan. Moving forward, the District plans to use the Model to determine the most eligible sites for new production, injection and monitoring wells to increase the long-term sustainability of the aquifer. A Training Manual for the Model will be created to ensure District staff can routinely update and run scenarios independently on a permanent basis and to be aid in responsible resource management planning. Based on the best available information, work on the Model is expected to begin the fall of 2016.



Agriculture Water Efficiency Action Plan (Initiative 1.23)

GOAL: Distribute surveys to agricultural water users in the District service area and develop a strategic agricultural water use efficiency action plan by Spring 2018.

Underway

The project involves distributing surveys to local farmers to assess existing efficiency practices and identify barriers to efficient water management practices on farms in the District service area. Information provided by growers will inform the development of a ten-year action plan for improved agricultural water use efficiency. Currently, the Agricultural Customer Class represents approximately one percent (1%) of District customer accounts and 20% of total water deliveries in a "normal" year (up to 30% in a dry year). During typical years, efficient irrigation systems produce the biggest water savings in agriculture. Goleta Valley farmers are already leaders among the State in on-farm efficient water use with eighty-five percent (85%) of farmed acreage in the District service area having efficient irrigation systems such as drip or micro-spray irrigation. The ultimate goal of the project is to further reduce water needed for agricultural irrigation and position the region for future funding opportunities to achieve on-farm water use efficiency. The project will also help the District design and target its conservation and rebate programs to achieve the highest water conservation results with the most effective program, while helping customers reduce operational costs related to water use.

Conservation Incentive Programs (Initiative 1.24)

GOAL: Continue to implement a suite of conservation incentive programs to promote water conservation by District customers.

Ongoing

Following the declaration of the Stage II and III Water Shortage Emergencies, the District developed and implemented a diverse set of rebate programs to provide all customer classes with resources and incentives to conserve water both indoors and outdoors. Programs developed and currently being implemented include:

- Smart Landscape Rebate Program (SLRP) – SLRP is aimed at reducing water use in residential and commercial landscapes through various replacements and upgrades. Qualified water-wise landscape upgrades include low water use plants, mulch, artificial turf, smart irrigation controllers, rain sensors, and laundry to landscape systems. Since initiation of the program in October, 2014 the District has distributed rebates to 21 commercial customers, 25 multi-family customers and homeowners' associations, and 300 single-family residential customers, totaling $225,000. Based on observed savings of past rebate programs, anticipated total savings resulting from the current program will be approximately 290 AF per year. The District will continue administering the rebate program to help incentivize the removal of water-intensive landscaping and encourage the implementation of irrigation efficiency upgrades.

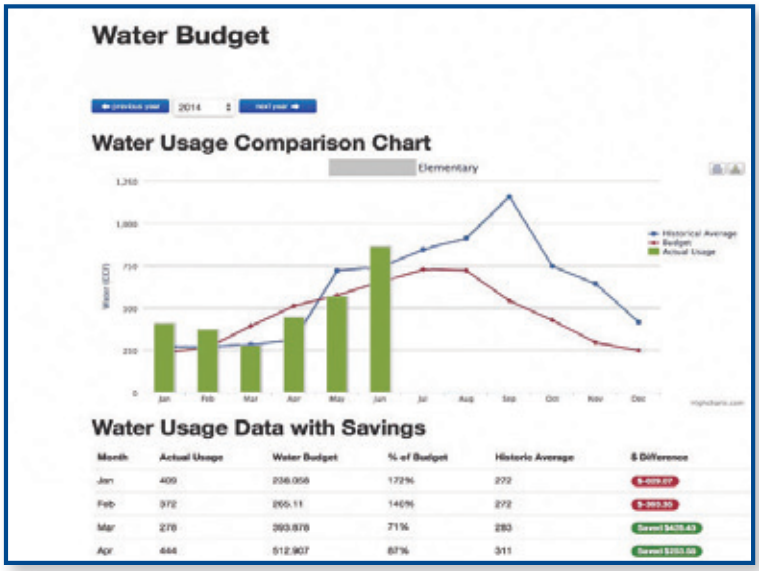
- Water Saving Device Distribution Program – The District provides complimentary water saving devices to customers, including automatic shutoff hose nozzles, low flow sink aerators, low-flow showerheads, shower shutoff valves, toilet leak detector tablets, and toilet flappers. While customers are informed about available devices online and in newsletters, the District distributes them at customer conservation check-ups, the annual Earth Day and Lemon Festivals, and other community or outreach events.

- Water Saving Incentive Program (WSIP) – WSIP is intended to encourage large customers, such as commercial and agricultural operations, to evaluate and achieve potential water savings through the implementation of site-specific, individualized projects. The District has qualified a variety of large water saving projects including the replacement of inefficient toilets with low-flow toilets, and single pass cooling condensers with recirculating cooling condensers. Other notable projects include large landscape drip irrigation conversions and water efficient washing machine upgrades.

- Cash for Crops Program – An incentive-based program modeled after popular "Cash for Grass" rebates, but was targeted specifically to agricultural customers. The FY 2015-16 program provided direct financial assistance to commercial agricultural operations that agreed to temporarily take crops out of production in. In particular, the program targeted agricultural water used for permanent crops and orchards, such as avocados and lemons, which represent approximately 3,670 acres, or 92%, of farmed acreage in the District service area.

Conservation Programs currently in planning stages include:

- Water Budgets and Surveys Program – The program includes the utilization of online software to craft and send monthly customized water budgets to customers with a dedicated landscape meter. The Water Survey Assistance Program covers the cost of a Cachuma Resources Conservation District (CRCD) irrigation consultation with District customers who have one or more acres of irrigated area. The Landscape Irrigation customer class represents approximately 2.5% of customers and water use in the District.



Service Delivery Category # 2

Administration Buildings and Fleet Management

Incorporating sustainability considerations into the management of administration facilities at the District Headquarters and water treatment plant, as well as fleet management, provides opportunities for reductions in energy usage and operational costs, and creates a healthy workplace for District employees. Specific projects include optimization of field operations, building envelope retrofits, renewable energy installations, and replacement of standard-engine fleet vehicles with gas-electric hybrids. Progress made during the reporting period on Administration Buildings and Fleet Management initiatives identified in the Sustainability Plan is summarized below.

Summary of Progress and Results

Renewable Energy (Solar) Feasibility and Permitting (Initiative 2.2)

GOAL: Complete an initial study of renewable energy installation options.

Deferred

This project includes exploring opportunities for solar installations on District-owned properties such as at the administration offices and the Corona Del Mar Water Treatment Plant (CDMWTP). While this initiative is delayed due to the drought, the District has identified two properties for solar installations, which will be further researched and implemented when able:

- Solar Trellis System at Administrative Headquarters (Initiative 2.10). A solar trellis system installation at District Administrative Headquarters would provide protection for District vehicles and equipment, helping to extend their useful life by reducing wear and tear while offsetting energy use and related expenses. At the CDMWTP, solar can also serve a dual purpose by generating energy and covering the settling basins, which would then limit algae growth and effectively decrease the cost of operation.

- San Ricardo Well site (solar panels were a component of Initiative 3.11, San Ricardo Well Site Enhancement). The solar system at San Ricardo was commissioned in Spring of 2015 and is currently in operation. It has an annual production capacity of approximately 2,045 kWh, avoiding 1.4 tons of CO2 per year.

Once implemented, money saved through these revenue generating projects can support District operations and offset increasing energy costs, while assisting in the overall District goal of reducing carbon emissions. The estimated cost of the project is $2.9 million.

Green Business Certification (Initiative 2.3)

GOAL: Achieve certification as a Santa Barbara County Green Business.

Deferred

The District has completed or is conducting approximately 80% (59 of 75) of the required measures for Green Business Certification and continues to work towards full implementation. The remaining measures are not currently being implemented and the final six would be conducted during the actual Green Business Program certification process, which include audits with various agencies and utilities. Measures that have yet to be implemented include small electricity upgrades and implementing training opportunities to encourage management and employee participation in sustainable programs and procedures. The District will work with the Green Business Program administrators to implement these remaining measures; however, implementation of this initiative is delayed and will be continued once the drought and related activities have concluded. The District is an official program partner.

Building Envelope Improvements (Initiative 2.4)

GOAL: Create healthy work environments while reducing energy use and operational costs.

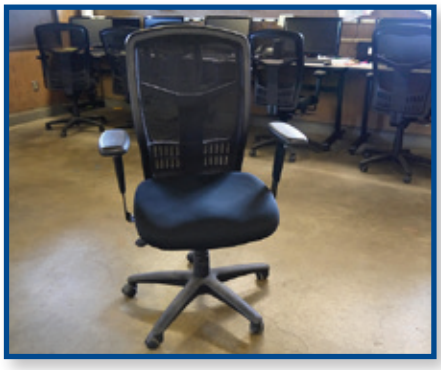
Ongoing

The District continues to identify and pursue opportunities to improve the energy efficiency and general sustainability of the administrative offices. However, due to the drought, priorities have shifted and the full implementation of this initiative has been delayed. Building improvements that have been implemented during the reporting period, including:

- Upgrades in the Warehouse and Meter Shop to improve energy efficiency and workers' health. Lighting fixtures were replaced with T5 light bulbs and improved work stations (i.e. desks and chairs) were installed.
- Installation of three stand-up desks, including in the customer service counter. Benefits of stand-up desks include improved ergonomics and reduced risk of obesity by avoiding prolonged sitting, helping to support healthy work environments for District employees.

A lighting survey report completed in 2012 and an energy audit completed in 2013 identified and recommended several improvements to lighting in and around the buildings that would increase energy efficiency, reduce energy costs, improve design, and comply with industry standards. Progress on this initiative has included lighting upgrades in the Operations Department and Board of Directors Hearing Room (BDHR).

Phase 2 of the lighting upgrades at the District Headquarters is not yet scheduled but is included in the District's 2015-2020 Infrastructure Improvement Plan. The upgrades include adding lighting to unlit areas, surrounding gardens, and pedestrian walkways, and installation of motion sensors and intuitive controls to increase functionality and lighting efficiency. In addition to reducing energy use, these upgrades will generate cost savings over time due to the improved energy efficiency of the lighting.



Fleet and Construction Equipment Replacement Program (Initiative 2.5)

GOAL: Improve the sustainability of the District fleet and construction equipment.

Ongoing

To maintain District field operations, aging heavy equipment and vehicles are periodically replaced to reduce operational costs and ensure that failing equipment does not jeopardize employee or public safety. An in-house Vehicle Replacement Study was conducted within the last year to determine various options and schedules for vehicle replacements. The study looked at options for electric, hybrid, gas, and whether there was an opportunity to downgrade certain gas vehicles to electric/hybrid vehicles. The study recommended a replacement schedule for District vehicles based on age, mileage, and use.

In compliance with the California Air Resource Board (CARB) regulations, which requires off road diesel equipment such as backhoes, to be upgraded to reduce emissions, the District purchased a new vacuum excavator. The excavator's new tier 4 engine is designed to reduce particulate matter and nitrogen oxide emissions by 90% compared to older engines, like those in backhoes. The excavator uses high pressure water to break up compacted soil without hitting or damaging in-ground pipes and other utilities. Not only would this avoid harm done to the District or other agency in-ground facilities, the excavator allows for more efficient work and less staff time. The Replacement Program improves fleet and equipment sustainability, increases productivity, and keeps pace with new environmental technologies and regulatory requirements.

Field Operations (Initiative 2.6)

GOAL: Identify optimal routes to minimize miles traveled, and expand the use of electronic devices and technology in the field.

Ongoing

The use of technology designed to optimize field work yields higher productivity and efficiency for District staff and allows the District to respond to operational needs more quickly. The Operations team utilizes a Work Order Management System, and specifically leverages its applications for the Meter Replacement Program (Initiative 3.10). These programs, which are accessible on mobile devices such as iPads and iPhones, allow staff to update, edit, and add pictures of District facilities and assets while in the field. These real-time updates in combination with the GIS upgrade (Initiative 1.8, Technology Improvement and Integration) have significantly improved the District's GIS System, allowing the District to make informed decisions based upon accurate information.

To improve operational efficiency, the implementation of advanced metering infrastructure (AMI) technology for over 1,500 meters has been approved and is currently underway. For more details, please refer to Initiative 3.10, Meter Replacement Program.

Solar Trellis System at Administrative HQ – Phase I (Initiative 2.10)

GOAL: Commence work on first phase of Solar Trellis.

Deferred

This project is deferred due to the drought, but will be pursued when resources are available. A solar trellis system installation at District Administrative Headquarters would provide protection for District vehicles and equipment, helping to extend their useful life by reducing wear and tear while offsetting energy use and related expenses.

Storm Water Headquarters Improvements/ Master Plan (Phase I) (Initiative 2.13)

GOAL: Implement improvements to storm water management at the District Administrative Headquarters.

Underway

The State Water Resources Control Board's (SWRCB) new Industrial General Permit (IGP) regulations for regulating storm water discharge became effective on July 1, 2015. To comply with these regulations and help manage storm water in accordance with the Federal Clean Water Act and the EPA's National Pollutant Discharge Elimination System (NPDES) requirements, the District created the Storm Water Headquarters Master Plan.

The Plan includes four phases for carrying out the implementation of conceptual designs that are intended to slow, detain, or infiltrate storm water runoff before leaving District property to reduce the impact on neighboring creeks, groundwater, and the ocean.

The first of four phases of the Plan is currently underway and involves relocating the bulk materials storage area, removing the non-permeable ground material, and adding modifications to the District's fueling area. By doing so, the District is able to better protect the bulk material storage area while also adding mitigations to minimize offsite storm water runoff impacts that are monitored under the District's NPDES permit. Phase I will also install bulk material storage bin cover pulltarps and new protective metal bollards around the existing fuel tank. Construction is scheduled to start this summer and Phase I will be completed by Fall, 2016. All of these activities will reduce, temporarily detain, slow down, and/or remove pollutants from storm water runoff from the District headquarters into local creeks and waterways.

Board Room Remodel (Initiative 2.14)

GOAL: Remodel the Board of Directors Hearing Room.

Complete

Remodeling of the Board of Directors Hearing Room (BDHR), located at the District Headquarters at 4699 Hollister Avenue in Goleta, was completed in Spring of 2015 and was designed to enhance its service ability as a public meeting facility. The remodel increased the number of seats for the public and is equipped with upgraded audio/visual equipment making the room more suitable for presentations. Additional features were incorporated to reduce noise and increase usable space. Sustainable and recycled content materials were used for the carpet, chairs, and desk, non-VOC paint was used for the walls, and energy efficient LED lighting was installed.

Recycled Water Hauling Program (Initiative 2.15)

GOAL: Implement a Recycled Water Hauling Program.

Ongoing

As an important element of the District's supply portfolio and in response to the drought, the District developed a Recycled Water Hauling Program (RWHP) in collaboration with the Goleta Sanitary District (GSD). On June 9, 2015, the District and GSD received approval of their joint request to expand recycled water distribution and uses from the Regional Water Quality Control Board (RWQCB), Central Coast Region. Since permit approval, the District has developed the program and staff has received the necessary training to deliver recycled water. The RWHP is available to interested parties within and outside of the District service area where recycled water is otherwise not available. Delivery boundaries are Refugio Beach to the west, Carpinteria to the east, and the base of the Santa Ynez mountains to the north.

New recycled water deliveries are made by a District water truck, which is capable of hauling between 2,000-4,000 gallons of recycled water. Currently, the District is delivering recycled water to Santa Barbara County road medians within the District service area, which will save approximately 7,000 gallons of potable water per year during its implementation, while maintaining the health of trees and valuable landscaping that enhance the beauty of the community. RWHP delivered recycled water for fire cleanup. Recycled water is a critical component of the District's water supply portfolio, particularly during drought, as every drop of recycled water used conserves potable water supplies.

Service Delivery Category # 3

Water Supply, Treatment and Distribution System Investment

The natural topography and gravity-fed distribution system provide unique opportunities for investment in alternative energy technology, such as hydroelectric generators, while improving and rehabilitating the built infrastructure already in place to improve overall system performance. Additionally, as the District increases reliance on the groundwater basin as supplies shift, the need to offset energy usage increases. Planning, managing and accounting for full life cycle infrastructure expenditures will pay-off over time by resulting in reduced costs to the District and its current and future customers. Progress made in this category during the reporting period is summarized below.

Summary of Progress and Results

Grant Application Readiness (Initiative 3.5)

GOAL: Ensure readiness for potential grant funding by completing analytical studies necessary to compete for grant funding for smart infrastructure projects.

Ongoing

Grant funding available through various local, state and federal agencies has the potential to offset costs of planned infrastructure investment, studies, and projects. The District continues to undertake activities that maintain readiness for grant applications, including presentation of analysis on a number of critical projects:

- Preliminary/Basis of Design for Low Flow Conditions at CDMWTP – Ongoing analysis of existing processes and development of recommendations for modifications to plant operations under low flow conditions (1 – 5 mgd), which becomes particularly important during periods of low demand or when groundwater is the primary source of supply.
- Sludge Handling Process Design Study – Provides the basis of design for the sludge handling processes at the CDMWTP, including design of the third sludge drying bed and the overflow basin for normal to high plant flow conditions.
- Siting New Production Well(s) – Hydrological evaluation and recommendations for potential sites for two new groundwater wells that will increase the District's ability to extract stored water from the groundwater basin.
- Distribution System Improvements and Basis of Design for Three Pump Stations – Evaluation of groundwater conveyance through the distribution system and identification of upgrades and improvements (booster stations, piping, etc.) that improve the ability to distribute groundwater from lower elevations to higher elevations within the District distribution system.
- Facility Design for Water Treatment at University Well – Design of an iron/manganese removal facility to enhance the quality of treated water produced at the University Well.
- Groundwater Production/ Capacity Increase Analysis - Hydrological evaluation and pumping tests of three of the District's existing wells to identify the potential for increased production rates above the current well capacity.

Goleta Beach Recycled Waterline Relocation (Initiative 3.6)

GOAL: Commence work to relocate the Goleta Beach recycled waterline.

Deferred

On May 13, 2015, the CA Coastal Commission approved a 20-year conditional permit to keep the Goleta Beach rock revetment in place to protect park facilities and utilities, including the District's Recycled Waterline, from erosion. As a result, relocation of the pipe is not necessary at this time so the project will be deferred indefinitely.

Corrosion Protection Program (Initiative 3.8)

GOAL: Protect steel distribution waterline from corrosion damage.

Ongoing

There are approximately 125 miles of steel pipeline comprising 50% of the District's distribution system that are susceptible to external corrosion. Cathodic Protection (CP) is considered the industry's best method for the prevention of steel pipe corrosion. This project maintains and upgrades the District's CP system in order to preserve a cost-effective distribution system that provides regular and consistent water service to the approximately 8,000 District customers served through these pipelines. The project minimizes unplanned water main breaks, helping to reduce costs associated with emergency repairs while avoiding unnecessary water loss and service disruptions. Over the next five years, the District will conduct annual field tests to confirm the condition of the pipeline, perform maintenance to the CP system, and construct additional deep well anodes, rectifiers, and CP test stations. Additionally, CP data within the District's GIS system will be updated. This project is ongoing.

Neighborhood Compatibility of District Facilities (Initiative 3.9)

GOAL: Improve aesthetics of District facilities.

Deferred

Since the last reporting, there have been no aesthetic improvements to the District's facilities due to the increased priority of water supply related capital projects. Moreover, drought conditions have resulted in a lack of water to irrigate new plants or landscaping. Ultimately, potential upgrades to features at 20 District facilities, located in residential areas, will improve neighborhood appearance and increase the security of District assets by making them less noticeable to the public.

Meter Replacement Program (Initiative 3.10)

GOAL: Replace 530 meters annually.

Underway

In February 2014, the District Board of Directors (Board) voted to expedite the Meter Replacement Program (Program) under a two phase approach:

Phase I (Large Meter Replacement), which replaced 800 large existing mechanical water meters with electronic meters and digital registers, was completed in 2015. The new electronic meters detect both high and low flow water use, allowing the District to more accurately account for all water use while preventing water loss among the largest customers. They are also compatible with all metering technologies, providing the District with the flexibility to upgrade to more advanced data collection technologies in the future if so directed by the Board.

Phase II (Small Meter Replacement), which will replace 16,000 aging water meters (1½-inch and smaller) is being implemented over a multi-year period. Phase II is estimated to save 350 AF of water each year, or 7,000 AF over the life of the meters.

Upon full implementation, the ongoing Program may generate an estimated $800,000 to $1.3 million in additional revenue per year due to current under-registering of water usage by aged meters, and provides an opportunity to upgrade meters and keep pace with technological advancements and associated industry best-practices. More accurate water metering aids in more precise analysis of District demand and water supply projections, leading to responsible resource management for present and future generations.

An Advanced Metering Infrastructure project was approved on December 8, 2015 by the Board to upgrade 1,558 meters, including 100% of the recycled water system, and 100% of the Goleta West Conduit. These meters register 65% of total usage across the District and were selected because they exhibit the highest variability in usage on a daily basis, thereby providing the District with the most effective opportunity to increase control and monitoring of operational and water quality issues within the distribution system that have arisen during the drought.

Water System Evaluation and Submetering Program – Phase I (Initiative 3.13)

GOAL: Complete an evaluation of the distribution system and first phase of submeter installations.

Underway

The Water System Evaluation, completed in early 2015, revealed 31 distribution leaks and eight customer leaks, resulting in an annual water savings of approximately 70 acre-feet per year and a reduction in system water loss. Since then, all detected distribution leaks have been repaired and the District has notified all customers with identified leaks and offered water audits, conservation programs, and tools to assist them in reducing their water use.

Submetering and Supervisory Control and Data Acquisition (SCADA) system integration, which improve water resource planning and reduce unaccounted-for water use and loss, are ongoing. Submeters have been installed on four interconnections and have been connected into a SCADA system allowing for remote monitoring. Through the new SCADA-connected submeters, the District staff can more accurately and efficiently monitor interconnect flows and calculate productions. Eventually, submeters can be utilized to better monitor activity between the 22 pressure zones within the District's service area.

Corona Del Mar Water Treatment Plant Infrastructure Improvement Construction (Initiative 3.15)

GOAL: Commence construction on improvements.

Underway

A Process Design Study was performed for the Corona Del Mar Water Treatment Plant (CDMWTP) in December, 2013 to review existing data, and evaluate conditions and treatment process efficiency. Specific recommendations from the study focus on the backwash recovery system, filter performance and replacement schedule, and the solids handling system. Improvements and upgrades since May 2015 have included:

- Construction of a Backwash Basin Baffle Wall to help remove turbidity more efficiently by allowing more time for the water to settle. The District can then reuse the higher quality water, conserving potable water supplies.
- Replacement of filter media more effectively deodorizes and removes turbidity, helping to maintain high quality drinking water.
- Installation of a low-flow bypass influent line to CDMWTP increases the flexibility of the plant's production, particularly during times of drought, by providing it with the ability to control flow rates as low as 1 mgd, versus the previous 5 mgd. The District is able to provide more a consistent, higher quality drinking water supply as a result.
- Repaving/patching of the access roadways improves access to critical facilities, ensuring the safety of staff, contractors, and vendors who deliver supplies and chemicals. Additionally, maintaining these roads is more cost-effective than completely replacing deteriorated surfaces.
- Update to SCADA system operator terminals at the CDMWTP that were becoming obsolete. By improving control at various stages along the water treatment process, the updated SCADA operator terminals allow the District to better control the water treatment system as a whole.
- Addition of total trihalomethanes (TTHM) reduction blowers reduce the need for water treatment chemicals by blending water in reservoirs, thus ensuring the consistency of water quality.
- Addition of SCADA controls on Corona del Mar Reservoir, eliminating the need to perform field measurements by allowing staff to monitor and control the reservoir remotely. This can help to increase operator efficiency and improve reservoir management.

Upcoming activities associated with this initiative include:

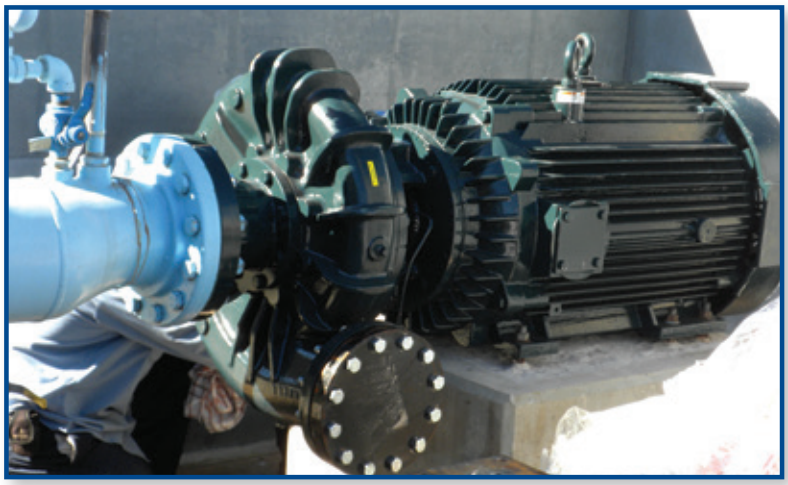
- Sludge drying beds (SDB) and sludge handling improvements (50% complete) – Because dried material is easier to handle and less expensive to transport, one of three SDB will be put out of service during the summer to ensure removal of moisture from the underdrain piping system. Adding storage and operational capacity to the remaining two SDB's will allow for continuous operation. This project will improve the plant's immediate operational flexibility and increase the efficiency of the sludge handling and drying processes. The design is scheduled for completion next year with construction to follow in the years after.
- Overflow Basin Construction Project: 2019-2020 – Additional storage capacity achieved by this project is critical to many plant operations during heavy rainfall events when the turbidity of the water delivered from Lake Cachuma greatly increases, and the plant's capacity to process high turbidity water can be exceeded.
- Ongoing Water Treatment Equipment Replacements: 2015-2020 – The project involves yearly replacement of defective water treatment equipment on an as-needed basis.

Hydroelectric Turbine Installation at Patterson Reservoir (Initiative 3.16)

GOAL: Design, permit and purchase necessary equipment for hydroelectric turbine installation.

Deferred

The electricity generated from a hydroelectric turbine could result in up to $95,000 per year of additional revenue depending on the type of system selected. The additional revenue would help support District operations and offset increasing energy costs, while assisting in the overall goals of the District to reduce carbon emissions. However, due to reduced flows associated with the drought, this project will move forward when normal water supply conditions return.



Goleta Water District – City of Santa Barbara Interconnect (Initiative 3.17)

GOAL: Construct interconnect.

Deferred

This project involves construction of a new connection (interconnect) between the water distribution systems of the District and the City of Santa Barbara. In the event of an emergency, such as a transmission line failure, earthquake, wildfire, or for a planned system shut down for repairs or maintenance, the District would be able to either provide or receive water supply assistance, improving the reliability of the system. The project would be particularly competitive for state grant funding under the Integrated Regional Water Management Program. As such, it will move forward if and when grant funds are leveraged.

San Antonio Well Rehabilitation Project (Initiative 3.18)

GOAL: Upgrade and retrofit aging San Antonio Well infrastructure.

Underway

The second largest producing well in the District, San Antonio was constructed in 1973 to produce 700 gallons per minute (gpm), or 1,130 AFY, but its productivity declined to 550 gpm as the infrastructure aged over time. During the first phase of the project, the well casing was cleaned and a new pump and motor were installed in Spring of 2015 to reestablish well production to the original capacity of 700 gpm. The next phase of the project will focus on implementing well inspection and cleaning, well testing to identify the potential for higher production, expanding the current production by installing larger well equipment and expanding the capacity of the onsite treatment facility. Operational flexibility will be increased by upgrading the electrical system to support installation of a VFDs, and integration into the SCADA system, allowing for remote monitoring of system conditions.

Berkeley Well Rehabilitation Project (Initiative 3.19)

GOAL: Rehabilitate Berkeley Well to its maximum production capacity.

Underway

The District's Berkeley Well is the largest of the District's four small wells. Drilled in February 1981, Berkeley was designed to produce 420 gpm and is equipped with an iron and manganese removal treatment facility. The well last operated in the early 1990s during the last drought. Due to the wells condition, production potential, and water quality, Berkeley Well was returned to service in spring 2016. Bringing the well back online increases operational flexibility to access and manage the District's groundwater supply while supporting greater District independence and emergency preparedness.

Shirrell Well Rehabilitation Project (Initiative 3.20)

GOAL: Rehabilitate the Shirrell Well to its maximum production capacity.

Underway

Shirrell Well was drilled in November 1979 and is the second largest of the District's small wells. It was designed to produce 200 gpm, and later equipped with an iron and manganese removal treatment facility. Shirrell Well was last in operation during the last drought in the early 1990s. Due to the condition of the well and its anticipated potential production, the well was returned to service in spring of 2016. This project also provides increased operational flexibility to access and manage the District's groundwater supply when other wells are down for periodic maintenance.

Oak Grove Well #2 Rehabilitation Project (Initiative 3.21)

GOAL: Rehabilitate the Oak Grove Well #2 to maximize its production capacity.

Deferred

Phase 1 activities, including mechanical cleaning and a pump test, were completed for Oak Grove Well in spring of 2016. The preliminary field tests indicate decline in well production rate and, based on analysis of the results, resources will be redirected to other projects within the District well portfolio that can yield higher production and/or increase reliability at the same or lower cost.

SB Corporation Well Rehabilitation Project (Initiative 3.22)

GOAL: Rehabilitate the Santa Barbara Corporate Well (SB Corp Well) to maximize its production capacity.

Deferred

Phase 1 work, including mechanical cleaning of the well and a pump test, were completed in spring of 2016. The preliminary results indicate an anticipated water production up to 240 AFY. The final analysis of the results helped the District determine not to rehabilitate the existing facility at this time, but instead explore the possibility of using this site for one of the planned new wells.

Hollister Recycled Water Pump Replacement (Initiative 3.23)

GOAL: Replace three recycled water pumps and motors at the Hollister Booster Station.

Complete

The three recycled water pumps and motors at the Hollister Booster Station were past their expected service life. Pump replacements were necessary because the maximum number of times the pumps and motors can be rebuilt has been exceeded. These pumps and motors are critical to providing adequate recycled water pressure to customers on the west end of the system, such as the Sandpiper Golf Course and the Bacara Resort, so that their irrigation systems can operate properly. The replacements reduced power requirements, minimized electrical usage, and reduced maintenance costs while providing reliable water supply at varying flow rates to all recycled water customers. This initiative was completed in 2015.

New Well Project #1 (Initiative 3.25)

GOAL: Complete siting study and begin the New Well Project #1.

Planning

This project, formerly the Airport Area New Well Project, will identify a property site and install a new production well that is anticipated to operate at 500 gallons per minute (gpm), providing an additional 720 AF per year. The New Well Project #1 was previously investigating potential sites in the vicinity of the Santa Barbara Airport, in the west basin, but an expanded project area is now being considered. The District continues to investigate sites around the Santa Barbara Airport area.

New Well Project #2 (Initiative 3.26)

GOAL: Complete siting study and begin the New Well Project #2.

Planning

This project, formerly the Transmission Main Area New Well Project, will identify a property site and install a new production well along the District's transmission main. The New Well Project #2 is anticipated to operate at 500 gpm, providing an additional 720 AF per year. The project is expected to be completed in FY 2018-19.

Monitoring Wells (Initiative 3.27)

GOAL: Identify and add ten new monitoring well sites within the Goleta Central Sub-Basin.

Planning

This project would provide the District with ten new monitoring well sites within the Goleta Central Sub-Basin for the purpose of obtaining more accurate data on groundwater levels. More monitoring points will account for any abnormally high or low spots when forecasting aquifer use or injection. As groundwater comprises an increasingly significant portion of the District water supply portfolio, adding new monitoring wells will provide the District with the information necessary for strategic planning to increase the long-term sustainability of the Goleta Groundwater Basin into the future. The new monitoring wells are expected to be added by FY 2019-20.

Injection Wells (Initiative 3.28)

GOAL: Add injection wells to increase groundwater replenishment rates.

Planning

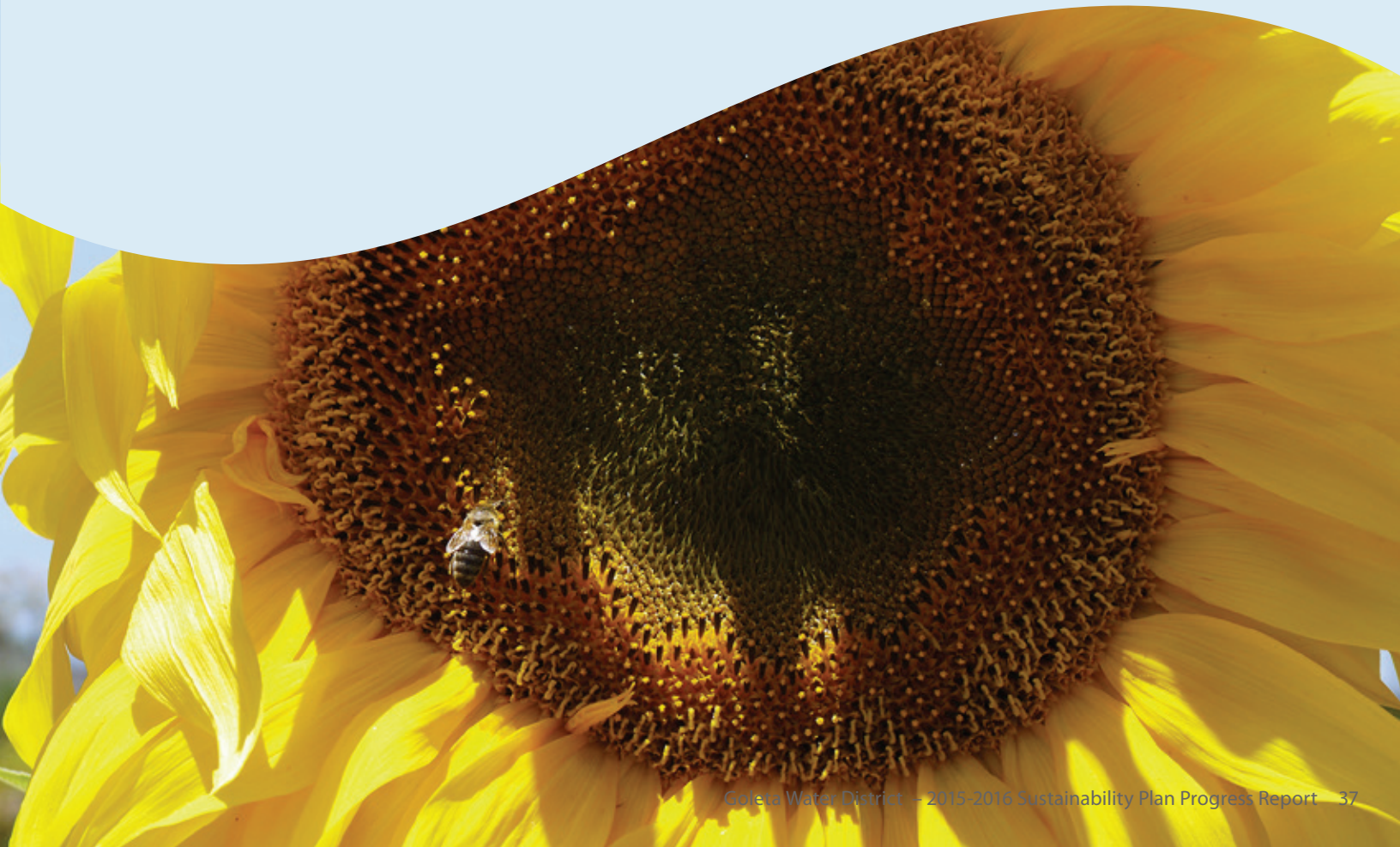
As part of the District's Aquifer Storage and Recovery (ASR) program and groundwater management plan, water is injected back into the basin when available during wet years. The District's current injection capacity is approximately 2.9 mgd, or 10 AF per day (AFD). Additional injection wells will increase replenishment rates for the Goleta Groundwater Basin, and promote the long-term sustainability of the basin and groundwater supplies for future generations. Project design will begin in FY 2015-16 with an expected project completion date of FY 2019-20.

LOOKING AHEAD

The Sustainability Plan is a living document; its ability to remain adaptable and adjustable is important, particularly as the future of District water supplies is uncertain due to drought conditions and impending climate change. As the District enters the fifth year of Sustainability Plan implementation, coinciding with the onset of the 5th year of drought, efforts will concentrate on completing the 15 initiatives identified over the last four years that are underway or in the planning stages. Priority has been placed on initiatives that ensure continued water delivery as the reliability of surface water supplies has declined, and the District water supply portfolio increasingly shifts to groundwater. Maintenance and replacement of aging distribution equipment will also help ensure system reliability during the drought, while also enhancing energy efficiency and minimizing water loss due to distribution line leaks and breaks.

As groundwater constitutes an increasingly critical part of the District's water supply portfolio, upgrading and retrofitting the water supply, treatment, and distribution systems is crucial to ensure reliable service for customers and efficient operations. The District's water treatment and distribution system were designed 70 years ago, when local supplies from Lake Cachuma were planned to constitute the bulk of the District water supply portfolio. Today, groundwater, imported supplies from the SWP, and recycled water round out the balance. Unlike surface water supplies, which flow downhill from Lake Cachuma through a gravity-fed system, groundwater must be pumped through 23 pressure zones and to higher elevations within the District distribution system. This has necessitated significant investment in the District's wells and distribution system. Despite these challenges, progress on the Sustainability Plan has continued.

As illustrated throughout this Sustainability Progress Report, through its daily operations, business practices, and specific initiatives, the District is making significant efforts to preserve natural resources and engage the community while maximizing financial performance to keep costs low for customers. This is particularly important during periods of water shortages, during which the District must be strategically adaptive in order to adjust to major changes in the water supply portfolio and customer demand. Through continued strategic planning, investments and implementation of best practices, the District will continue to foster a model operation for sustainable service today and well into the future.



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