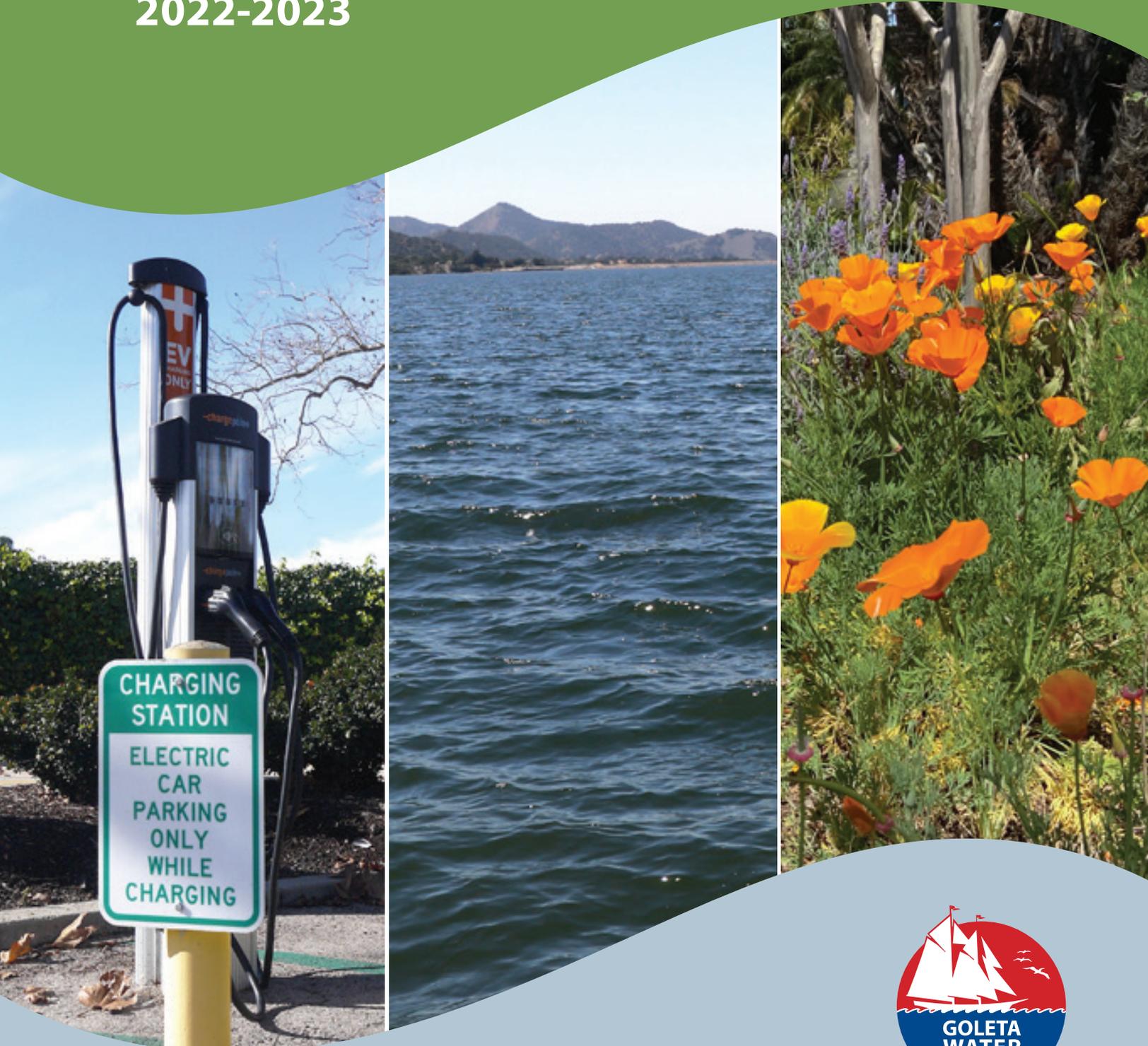


# Sustainability Plan Progress Report

Goleta Water District Sustainability Plan

2022-2023



# ***District Mission***

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



## **ACKNOWLEDGEMENTS**

### **Board of Directors**

**Farfalla Borah**, President  
**Lauren Hanson**, Vice President  
**Tom Evans**  
**Bill Rosen**  
**Kathleen Werner**

### **Staff Contributors**

**David Matson**, General Manager  
**KK Holland**, Assistant to the General Manager  
**Ryan Drake**, Water Supply & Conservation Manager  
**Laura McKenzie**, Administrative Manager/CFO  
**Daniel Brooks**, Engineering and Infrastructure Manager  
**Brooke Welch**, Principal Analyst  
**David Cowan**, Chief Communications Administrator

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### KEY INITIATIVES

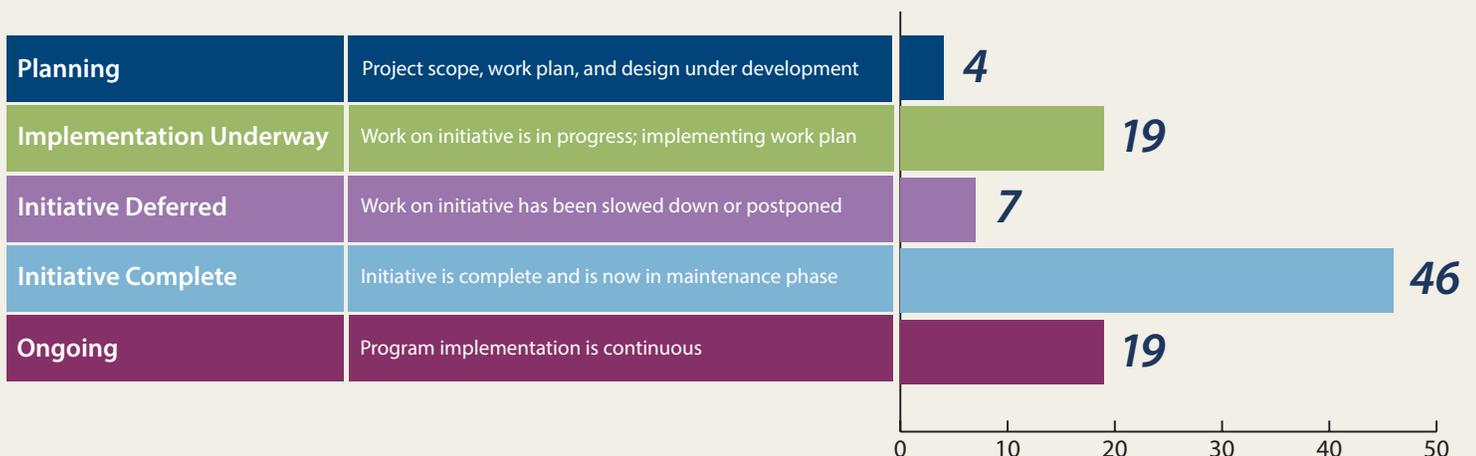
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### 33 LOOKING FORWARD

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

## Initiative Implementation Progress Status Overview

The bar graph below provides a snapshot of the 95 Goleta Water District Sustainability Plan initiatives in each stage of progress.\*



\*A comprehensive list of the initiatives that have been included in the 2022-2023 Sustainability Plan and their relative status is provided on pages 30-33.

# INTRODUCTION

## Laying the Groundwork

This Sustainability Plan Progress Report provides an update on District sustainability efforts over the 2022-2023 Fiscal Year (FY 2022-23). Many of the projects highlighted, including design work for the District's first new well in 40 years, the Supervisory Control and Data Acquisition (SCADA) system upgrade, and the new Net Zero Initiative, lay the groundwork for projects that will be reported on in the next progress report. In many ways, FY 2022-23 was a year that paves the way for the District to break ground on a number of ambitious projects decades in the making; projects that will play a transformative role in positioning the District for the future.

Preparing to celebrate the 80th Anniversary of its founding, the District is well aware of its aging infrastructure and the important role this reality will play in future capital planning. Many of the pipes customers rely on to deliver water have been in the ground since the Goleta Valley's rapid population growth in the 1970s. While the District has been replacing critical infrastructure components to maintain current levels of service, the reality is that over half of the District's water infrastructure is now beyond or approaching the end of its expected lifespan. Balancing the costs associated with maintaining and replacing critical assets against the risk of service interruptions is key to ensuring reliable service and long-term sustainability.

One of the ways the District manages this risk is through its Asset Management Program, as well as active maintenance of equipment that is integral to system performance. You can read about the District's new fire hydrant program, which for the first time included inspection and testing of all 1,520 hydrants and the replacement of 111 hydrants, as well as installation of solar charged battery back-up power to critical distribution facilities. These projects were designed to enhance District disaster preparedness and resiliency. The prioritization of District projects is guided by the Board-adopted Infrastructure Improvement Plan (IIP) and Annual Budget, which evaluate risk and direct investment to prolong the useful life of physical assets.

The Sustainability Plan Progress Report offers an important lens through which readers can step back and take a holistic view of the District's overall approach to addressing the challenge of aging infrastructure that is facing water systems as well as public infrastructure across the United States. Prioritizing and investing in solutions that address these challenges is central to fulfilling the District's mission to provide a reliable supply of quality water at the most reasonable cost to present and future customers.



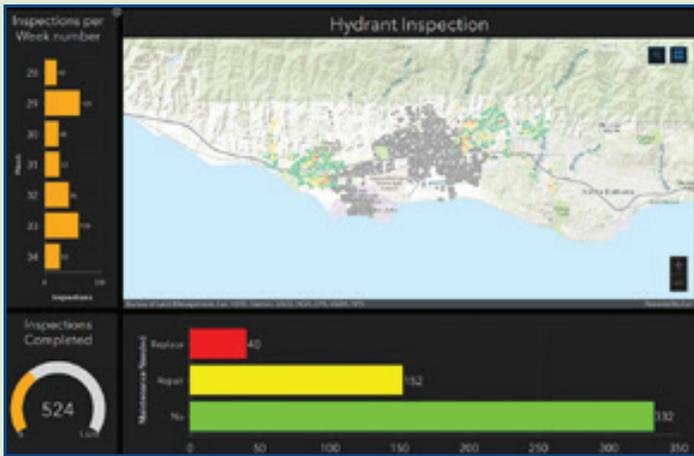
# Decisions made today to invest in critical projects and forward-thinking initiatives will support sustainable water service into the future.



## Plan Organization

- **Introduction** reflects on the District’s progress implementing the Sustainability Plan, including highlights of sustainable outcomes from initiatives implemented over the last year.
- **Guiding Principles** describes how the three original Guiding Principles have taken on new meaning in a changing service delivery environment, and identifies District strategies for producing outcomes consistent with the Principles going forward.
- **Strategic Investment Across the District** illustrates how District initiatives produce sustainable benefits, including annual performance highlights from previously established initiatives, and new initiatives planned or underway. This section is organized under three distinct service delivery categories:
  1. **Customer Service and Business Operations**
  2. **Administration Buildings and Fleet Management**
  3. **Water Supply, Treatment, and Distribution System Investment**
- **Progress at a Glance** provides a summary of all District Sustainability initiatives, organized by service delivery category, as well as the Guiding Principle(s) with which initiative outcomes align (i.e., economic, environmental, social).

# 2022-2023 HIGHLIGHTS AT A GLANCE



**SCADA Upgrades** – The District made significant progress on a once-in-a-generation overhaul of its Supervisory Control and Data Acquisition (SCADA) system. Over the last year, design and installation of critical radio communications upgrades at all District facilities were completed. These upgrades enhance the ability of system operators to make real-time operational decisions that are essential to the District’s automated operations and continued regulatory compliance in water quality. Design of the new SCADA system will continue over the next year and, once installed, will significantly enhance operational efficiencies and capabilities.

**Asset Management** – Asset management remains a top priority for the District. To ensure data collected can be used to better inform decision making, the District is building in-house expertise and dedicated resourcing. Digital tools currently under development will enhance data analysis and support the District’s ability to monitor and maintain an aging distribution system. Keeping pace with technological advancements will support asset management implementation and planning, while ensuring smart investment and reliable delivery of quality water to the community.



**Fire Hydrant Maintenance** – The District inspects over 1,500 fire hydrants, all of which are repaired or replaced to maintain operability. In FY 2022-23, the District replaced 111 poorly functioning hydrants, and repaired 194 aging hydrants to improve operating efficiency or prevent rust, ensuring emergency services personnel have continued access to reliable hydrants with sufficient water pressure and flow rates to fight fires.

# LAKE CACHUMA BEFORE AND AFTER

## 200%

Santa Barbara County received 30.5 inches of rain in the winter of 2022-23, which is **200% of normal rainfall**. This led to **Lake Cachuma** filling from 31% to 100% by February 2023.



Fall 2022 - 31%



Spring 2023 - 100%

## 2011

For the **first time since 2011**, the significant rainfall and inflow from the Santa Ynez River resulted in Lake Cachuma spilling at **Bradbury Dam**.



Fall 2021

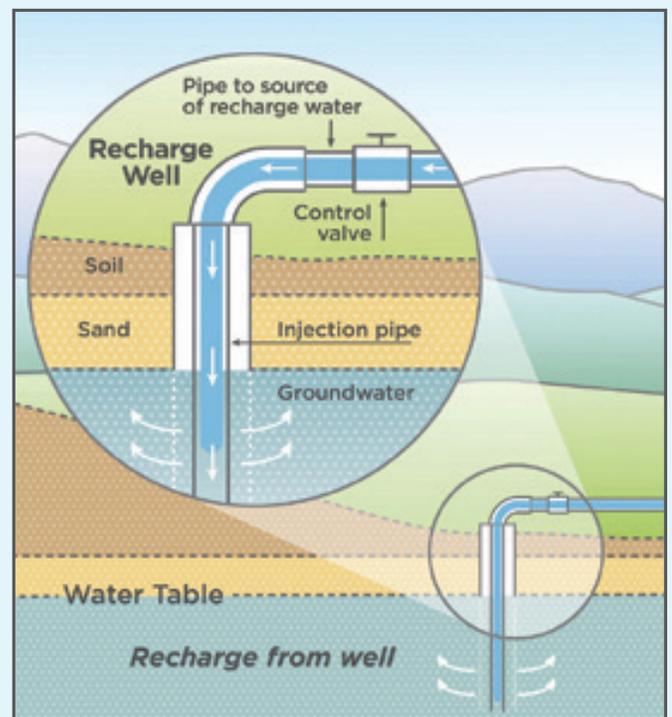


Spring 2023

## AQUIFER STORAGE AND RECOVERY PROGRAM

The District was among the first agencies in the state to implement an Aquifer Storage and Recovery (ASR) Program by injecting treated water from Lake Cachuma into the Goleta Groundwater Basin to enhance natural recharge when surface water was plentiful, and store it in the ground for use during dry periods. The ASR Program allows for the coordinated management of surface water and groundwater supplies, maximizing the availability and reliability of the District's water resources.

In February-June 2023, following a series of atmospheric rivers that delivered historic rainfall across the state, Lake Cachuma spilled for the first time since 2011. The District used its permitted wells to inject 815 acre-feet (AF) (228 million gallons) of surplus water that would otherwise have spilled over the dam into the groundwater basin. Prior to that, the District had not injected water in over a decade, the last time Lake Cachuma spilled. Injection resumed in November 2023 and, as of December 31, 2023, the District had injected a total of 860 AF for the calendar year.



# Toward Net Zero

## Solar Power Systems

1,950

The total number of solar panels in five solar power systems that are being installed at three District properties, including carport and rooftop systems at the District Headquarters and ground-mounted systems at the Corona Del Mar Water Treatment Plant and Ellwood Reservoir.



Estimated kilowatt hours (kWh) of clean energy that will be produced annually by the completed solar power systems, which is equivalent to the District's baseline average annual electricity use.

1.8M

PPA

The District is collaborating with a private company through a Power Purchase Agreement (PPA) financial arrangement that will allow the new solar power systems to be designed, constructed, owned, operated and maintained at lower cost to the District than commercial power.

**The District is installing solar energy systems throughout its facilities that will be capable of generating enough clean power to offset its baseline average annual energy use, making the District a net zero energy user. Once completed, this important initiative will reduce reliance on traditional non-renewable energy, thereby improving energy independence and reliability, enhancing emergency resiliency and reducing greenhouse gas emissions.**

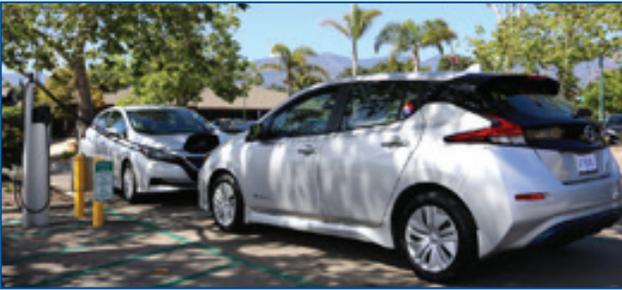


# Toward Net Zero

## Electric Vehicles

11

Number of electric vehicles (EV) in the District's fleet as of the end of 2023, seven of which were acquired in FY 2022-23, including a new electric truck. Electric vehicles will continue to replace standard engine fleet vehicles, saving fuel and related costs and reducing greenhouse gas emissions. The District will add another eight EVs to its fleet by the end of FY 2023-24.



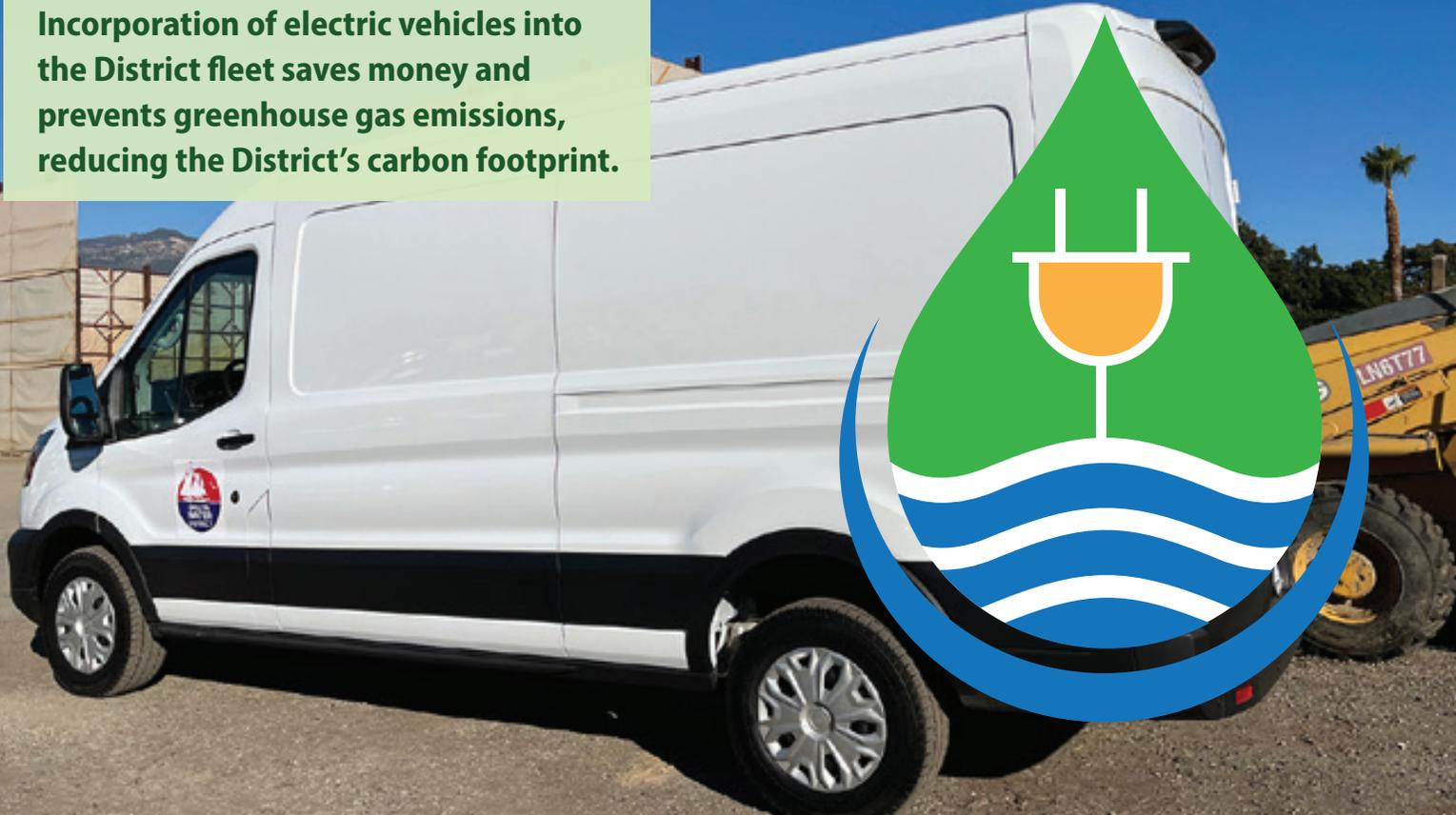
Number of EV charging ports that have been installed at both the Corona Del Mar Water Treatment Plant and at the District Headquarters. To support the District's growing EV fleet, an additional 20 charging ports will be installed in FY 2023-24.

12

\$68K

Amount of grant funding acquired to offset District costs related to acquisition of EV charging stations for the District Headquarters and the Corona Del Mar Water Treatment Plant.

**Incorporation of electric vehicles into the District fleet saves money and prevents greenhouse gas emissions, reducing the District's carbon footprint.**



# Guiding Principles

The District's Sustainability Guiding Principles are a central component of upholding the District's mission to provide a reliable supply of quality water at the most reasonable cost to present and future customers. Developed to embrace the three components of sustainability – economic, environmental and social – the guiding principles provide the foundation for actions that support a sustainable service delivery model. Even as the District faces new challenges and opportunities in an evolving service delivery environment, key initiatives that put the Guiding Principles into action will help the District continue to achieve outcomes that provide economic, environmental, and social benefits.



## Economic Principle

### Enhanced value creation and service reliability 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. Strategic infrastructure investments, cost effective business operations, and water supply management can help ensure the highest level of reliable service.



## Environmental Principle

### Resource stewardship, adaptability, independence, and emergency preparedness

The District will position itself for greater independence and emergency preparedness by reducing reliance on external business inputs including electricity, natural gas, and petroleum-based fuels, while simultaneously increasing reliance on locally controlled sources of water. These actions will help protect the District from impacts associated with global climate change, local weather extremes and other hazards, and will help the District move toward carbon neutrality.

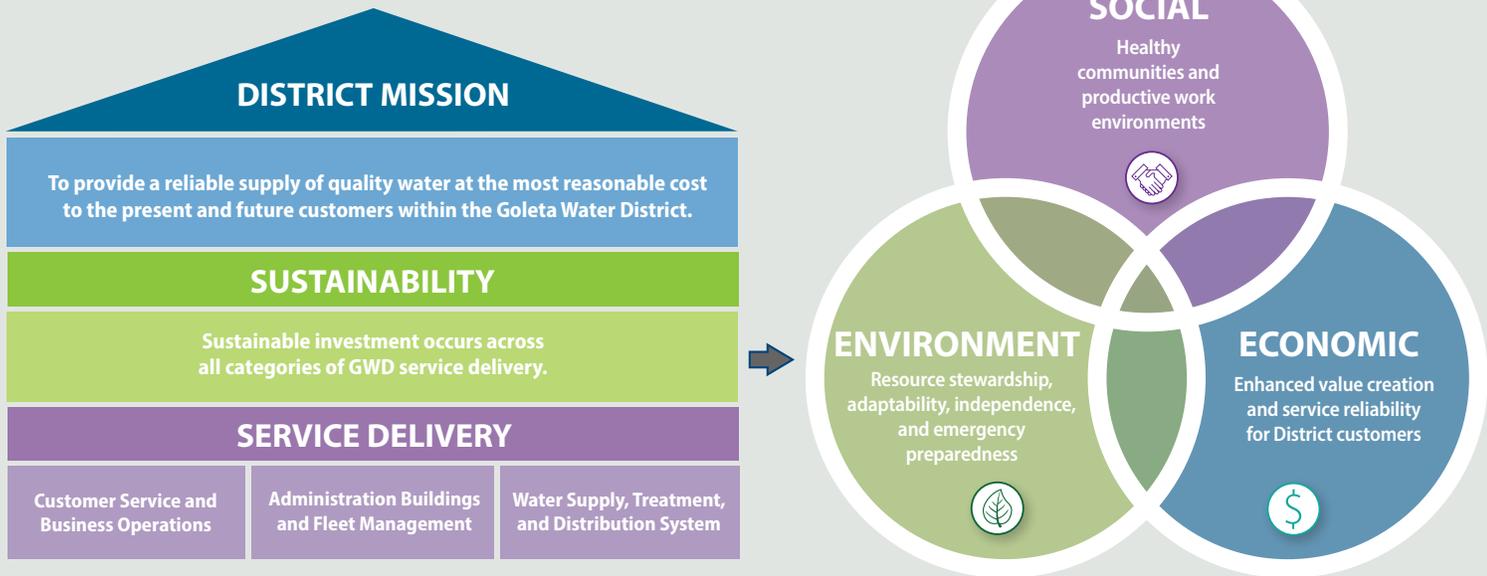


## Social Principle

### Healthy communities and productive work environments

As a provider of a lifeline resource, 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.

# How it Works



## Strategies for producing outcomes consistent with the Economic Guiding Principle include:

- Create pathways for alternative revenue sources and funding streams.
- Maintain, rehabilitate and improve infrastructure and processes at the CDMWTP.
- Target critical investment in the groundwater basin and well infrastructure.
- Mitigate water supply risks, preserve potable supplies, and seek out alternative sources of local water supplies.
- Implement programs that minimize water loss, maximize accounting of water use, and keep pace with technological advances.

## Strategies for producing outcomes consistent with the Environmental Guiding Principle include:

- Maintain, replace, and improve the efficiency of the District's water distribution system and mechanical equipment.
- Improve the sustainability of the District fleet and heavy equipment.
- Minimize the environmental impacts of District administrative operations through employee education, building retrofits, and other property improvements.
- Explore and invest in renewable energy installations including solar and hydropower.
- Ensure the District's preparedness for natural disasters and other unplanned emergencies.

## Strategies for producing outcomes consistent with the Social Guiding Principle include:

- Ensure the ongoing delivery of safe, clean water supplies to protect the health and safety of the community.
- Maintain community education and public engagement.
- Offer a suite of rebate and incentive programs to promote water conservation by District customers.
- Enhance the safety, well-being, and productivity of the District workforce.
- Continuously enhance customer service and provide customers with convenient ways to interact with the District.

# DISASTER PREPAREDNESS

## READY FOR ANY CIRCUMSTANCE

The Goleta Valley is no stranger to natural disasters and emergencies. Whether it be frequent wildfires, water shortage emergencies, record-breaking storms, or power outages, the District continuously invests in projects and programs that enhance emergency resiliency and ensure water service levels can be maintained under a variety of circumstances.

**Fire Hydrants** - The District inspects over 1,500 fire hydrants, all of which are repaired or replaced to maintain operability. Going forward, the District plans to replace hydrants identified for repair that are also over 50 years old, ensuring emergency services personnel have access to reliable hydrants with sufficient flow rates to fight fires.



**Pressure Regulating Valves** - Regular maintenance and replacement of pressure regulating valves throughout the distribution system ensure proper pressure is consistently maintained for fire fighting.



**Backup Power Systems** - The District has installed backup power systems at its eight reservoirs, two pump stations, the Corona Del Mar Water Treatment Plant, and District Headquarters, ensuring service levels are maintained during and after disasters or other emergencies while also reducing reliance on traditional energy sources.

**Interconnections** - The District maintains three interconnects with the City of Santa Barbara that can provide a backup supply of water and mutual assistance to and from neighboring agencies in the event of an emergency, such as a transmission line break, earthquake, wildfire, or planned system outage.

**Diverse Water Supplies** - A diverse mix of surface water, groundwater, imported state water, and recycled water allows the District to successfully navigate and overcome various challenges, including fires, severe water shortages, and changing water quality. If one source of supply becomes unavailable, an alternative source can be utilized.



**Water Quality Technology** - Investment in new and improved water treatment technologies at both the Corona Del Mar Water Treatment Plant for surface water treatment and District wells for groundwater treatment, enhances the District's ability to adapt to changing conditions at Lake Cachuma and within the groundwater basin to ensure the continued availability of these supply sources.





# Strategic Investment Across the District

## Key Initiatives

Meeting short-term production targets and long-term sustainability goals requires strategically balanced investment in all areas of District service delivery. As a water provider, an obvious area of focus and investment priority is the **water supply, treatment, and distribution system** that delivers water to over 87,000 people in the Goleta Valley. In addition to water supplies, smart investments are made across all categories of District operations, from its daily **business operations and customer service** to the long-term maintenance of its **administration buildings and fleet** of vehicles and heavy equipment. The pages that follow provide summaries of initiatives the District is undertaking that fit within the framework of the Sustainability Plan, as well as notable outcomes from existing initiatives that align with the Guiding Principles. Looking ahead, new projects and ongoing activities associated with existing initiatives will provide improvements needed to meet new regulatory requirements, while offering economic benefits in the form of reduced energy costs, minimizing impacts to natural resources, and supporting a healthy community.

# Customer Service and Business Operations

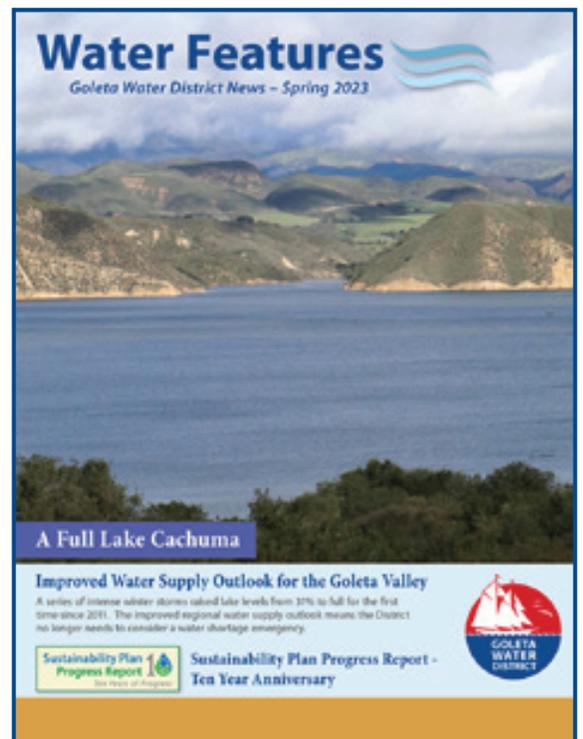
This category incorporates sustainability into everyday operations, policy development, and decision-making, presenting opportunities to reduce costs and inefficiencies, streamline operations, and increase revenue. The following summaries highlight the sustainable outcomes associated with District customer service and business operations activities, organized by the central project benefits that are consistent with the Sustainability Guiding Principles.

## Annual Performance Highlights



### ENCOURAGED COMMUNITY EDUCATION AND PUBLIC ENGAGEMENT

- The District’s user-friendly website continued to serve as an important resource for customers, with nearly 100,000 page views in the last year. In addition to regular informational updates, the District posted updated landers to the home page including Sign Up for AutoPay, Consumer Confidence Report and Open a New Account Online.
- Two new videos were produced and published on the District’s YouTube channel. One video featured the District’s WaterSmart Portal for tracking water use and making payments, and the other focused on ways to pay your bill electronically. The videos were developed in-house using existing resources and posted on the District’s website for easy access. In total, the District has produced over 20 videos.
- District employees talked to more than 2,500 customers at conservation outreach events—the Goleta Lemon Festival 2022, Earth Day 2023, and the City of Goleta’s Public Works Week (pictured below)—as well as 450 students via school presentations at area schools to educate the community on where their water comes from and current state-wide and local water supply conditions.
- Outreach on the District’s sustainability efforts accelerated, including last year’s Sustainability Plan Progress Report celebrating the 10-year anniversary of adoption of the original visioning Sustainability Plan, along with a conservation-themed display at the Goleta Library highlighting the many ways in which customers are continuing to save water.
- Reached over 66,000 District customers and residents with the Summer 2022 and Spring 2023 Newsletters via mailboxes, email, the District website, and social media accounts.



# Customer Service and Business Operations



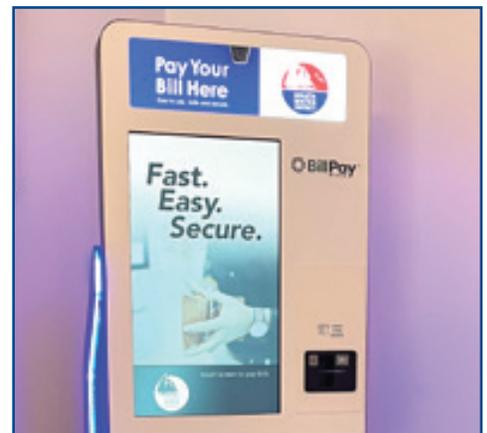
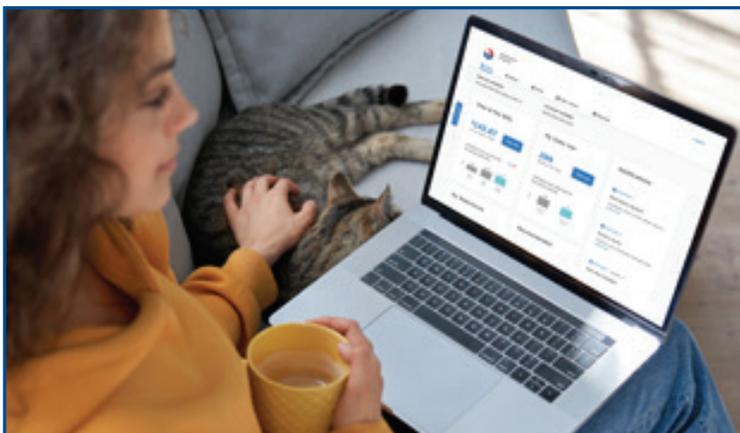
## CREATED PATHWAYS FOR ALTERNATIVE REVENUE SOURCES AND FUNDING STREAMS

- Applied for a \$2 million federal grant through the WaterSmart Program (awarded in July 2023) to help fund the District's new replacement groundwater well project planned for the fall of 2023.
- Submitted an application to the Air Pollution Control District (awarded in November 2023) to help fund the acquisition of additional vehicle charging stations for District properties in support of the transition to an electric vehicle fleet.
- Submitted a Seismic Vulnerability grant application to the California Office of Emergency Services (awarded in December 2023) that will offset 90% of the costs of a Seismic Vulnerability Assessment the District will undertake in FY 2023-24.
- Continued to participate in the State of California's Low Income Household Water Assistance Program (LIHWAP) and promote the availability of this direct assistance to customers experiencing financial hardship. Created outreach materials and engaged customers via phone, email, and flyers to promote bill payment assistance for which they might be eligible.



## ENHANCED CUSTOMER SERVICE AND CONVENIENCE OF INTERACTING WITH THE DISTRICT

- Continued to increase customer enrollment in the District's WaterSmart Portal. To date, about 52% of the District's customers are using this internet-based website, a 10% increase over the previous year, and one of the highest rates of online enrollment among water providers using its software.
- Installed a self-service kiosk to allow customers to make payments on their own at the District Headquarters. This increases efficiency by allowing the front desk staff to help customers in need of support for non-routine issues while providing increased convenience.

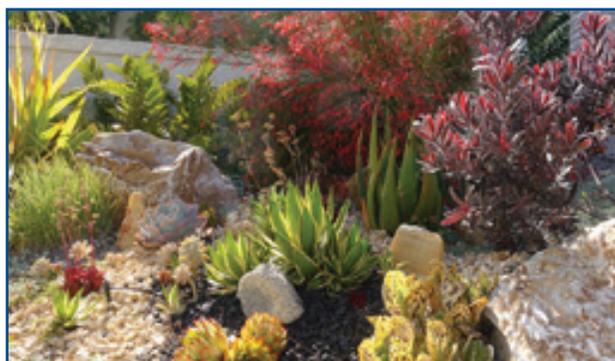


# Customer Service and Business Operations



## IMPLEMENTED INCENTIVE PROGRAMS TO PROMOTE CONSERVATION BY DISTRICT CUSTOMERS

- Completed 53 virtual conservation check-ups for Single Family Residential customers with complimentary analysis of water use on their account, a review of landscaping via aerial imagery, assistance with programming sprinkler timers and a list of personalized water use efficiency suggestions.
- The District's water conservation incentive programs, which help customers save water and money, continued over the past year. The District distributed over 100 rebates through the Smart Landscape Rebate Program (SLRP) and the Mulch Rebate Program via virtual meetings and site visits. (Initiative 1.24)
- Customers saved a total of 11 AF of water through a combination of billing system outreach and the District's Customer Scorecard Program, which provides real-time automated meter reading data through the District's Advanced Metering Infrastructure (AMI) Program.
- Under the District's Meter Replacement Program (Initiative 3.10), investigated and replaced more than 880 malfunctioning water meters with new meters. Studies show that meters lose accuracy over time, and new meters can measure water more precisely at both high and low flow rates, providing more reliable data for both the customer and the District. This also allows the District to better account for all water use, thereby reducing unaccounted water loss and related revenue.



## IMPLEMENTED PROGRAMS THAT MAXIMIZE OPERATIONAL EFFICIENCY AND KEEP PACE WITH TECHNOLOGICAL ADVANCES

- Commenced work on the development of an in-house work order management system in conjunction with its GIS system. The program will better communicate work orders and tasks from customer service to meter and distribution operators, eliminating the need for additional paperwork and paper record keeping. (Initiative 1.8)
- Implemented several new system integrations with the District's financial systems that reduce manual data entry and automate payment processing to increase efficiency of administrative staff and enhance customer engagement.

# Customer Service and Business Operations

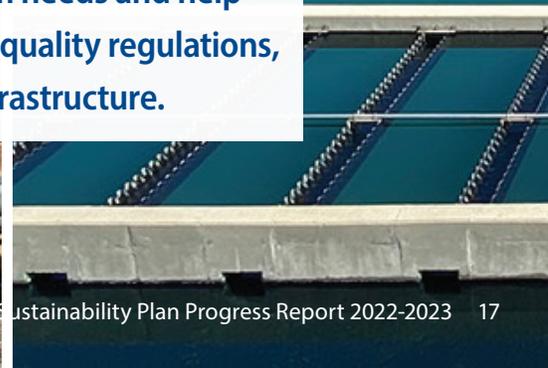


## ***ENSURED THE ONGOING DELIVERY OF SAFE, CLEAN WATER SUPPLIES ADEQUATE TO PROTECT THE HEALTH AND SAFETY OF THE COMMUNITY***

- Completed a comprehensive update of the Groundwater Management Plan (GWMP) to reflect the status of the Goleta Basin based on results of the concurrent update of the Goleta Groundwater Basin Numerical Model (see below), and recommended management strategies that support the ongoing sustainability of the basin. The updated analysis plays a critical role in evaluating the long-term availability and reliability of groundwater supplies, which will help inform the update of the District's Water Supply Management Plan, planned for FY 2023-24. (Initiative 1.17)
- Updated the District's Groundwater Numerical Model. Originally developed in 2007 and last updated in 2014, the District's Model provides a comprehensive accounting of groundwater pumping, evapotranspiration, inflow from both subsurface and above-ground sources, and injection. Critical to effective management of the Goleta Basin, the updated Model allows the District to assess basin-wide impacts of drought and pumping, predict basin drawdown levels and storage, and develop strategies for groundwater recovery, as outlined in the updated GWMP.



**Regularly updated water management plans and comprehensive studies and conditions assessments evaluate water and system needs and help the District plan initiatives to coincide with new water quality regulations, system reliability, operational efficiency, and aging infrastructure.**



# Customer Service and Business Operations

## Featured Story

### *Reopening the Customer Service Counter*

*In March 2023, after three years of closure due to the COVID-19 Pandemic, the District reopened the Customer Service counter to in-person visitors.*

District Customer Service provides the initial point of contact for the community. To protect the health and safety of its workforce and the public during the global COVID-19 pandemic, the District closed its physical Customer Service counter to in-person visits in March 2020. In March 2023, the Customer Service counter reopened to assist customers on-site. A new remodeled counter installed ahead of the reopening will help protect health and safety. Additionally, a self-service kiosk was placed into service in the Customer Service lobby in June 2023, while a suite of web-based tools allows customers to perform a variety of functions online.

There has been a steady increase in online traffic volumes since the pandemic, which also correlates with the launch of several self-service web-based tools, and the WaterSmart Portal in January 2020. While District Customer Service has seen some significant changes as a result of the COVID-19 pandemic, the role of supporting customers will always remain a core function of the District.



### ***Sustainable Outcomes and Benefits:***



The digitization of District operations and increase in customer use of electronic account management processes has helped streamline customer service operations, enhance staff productivity, and improve operational efficiency, which reduces the cost of doing business.



Since the reopening, the number of in-person visitors to the Customer Service counter has remained significantly below pre-pandemic levels, ranging from one to ten per day, compared to the previous average of 26 per day. This has reduced vehicle miles traveled and related fuel-use and greenhouse gas emissions.



New features of the customer service area protect the health and safety of staff and the public, while web-based tools and the newly installed kiosk provide customers with convenient options for paying their bills and managing their accounts.

# Customer Service and Business Operations

## Looking Ahead

### *ENSURE THE ONGOING DELIVERY OF SAFE, CLEAN WATER SUPPLIES ADEQUATE TO PROTECT THE HEALTH AND SAFETY OF THE COMMUNITY*

**Seismic Vulnerability Assessment (NEW Initiative 1.35)** – Critical District infrastructure, including the Corona Del Mar Water Treatment Plant (CDMWTP) and eight reservoirs, was constructed decades ago and was not designed to meet current seismic standards. As the District’s service area lies in a high seismic hazard zone, a Seismic Vulnerability Assessment will be completed to identify risks to these critical facilities and potential upgrades to mitigate the risk of earthquake damage. Information developed from this plan will inform the upcoming 5-Year Infrastructure Improvement Plan (IIP) 2025-2030. The District was recently awarded a grant from the California Office of Emergency Services (CalOES) to offset 90% of the costs of this critical work.

**Water Supply Management Plan Update (Initiative 1.18)** – The District will update its Water Supply Management Plan (WSMP), last updated in 2016, to adequately plan for District water needs now and into the future. The Plan formulates a water supply strategy that prioritizes use of the District’s various sources of supply, evaluates their reliability, and develops drought scenarios for current and future demand. The WSMP update is scheduled to be completed in mid-2024.

### *PROVIDE SAFE AND HEALTHY WORK ENVIRONMENTS FOR DISTRICT STAFF*

**Arc Flash and Electrical Upgrades (Initiative 1.30)** – New electrical and controls equipment will be installed at the District’s Hollister Booster Pump Station to protect workers against potentially unsafe conditions identified in a recent arc flash study. While short-term electrical upgrades made over the years have mitigated some of these risks, recent evaluations have concluded that replacement of aged equipment is needed to ensure the continued safety of personnel.

# Administration Buildings and Fleet Management

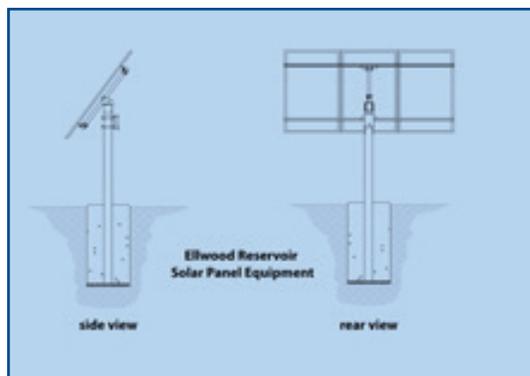
This category incorporates sustainability considerations into District investments and initiatives to increase the financial predictability of operating and maintaining District-owned buildings, facilities, and heavy equipment. The following summaries highlight the sustainable outcomes associated with District administration buildings and fleet management activities, organized by the central project benefits that are consistent with the Sustainability Guiding Principles.

## Annual Performance Highlights



### **MINIMIZED THE ENVIRONMENTAL IMPACTS OF DISTRICT OPERATIONS AND FACILITIES**

- The District repaved its Equipment Yard to repair degraded asphalt with crack sealing, paving fabric at the entry driveway, and chip seal. Combined with continued implementation of best management practices included in the District's Storm Water Management Program, these improvements helped minimize stormwater runoff and maintain baseline status for oils and grease at the District's Headquarters. These efforts protect water quality by reducing the amount of potential sediment runoff into storm drains and neighboring creeks while maintaining regulatory compliance.
- Installed new roof systems at three CDMWTP buildings to prolong the useful lives of the buildings. Keeping up on maintenance of District buildings supports healthy work environments, reduces energy use and operational costs, and increases the long-term sustainability of District facilities. Roof system repairs and replacements will continue over the coming year.
- Purchased seven electric vehicles to replace aged, standard engine vehicles and installed additional electric vehicle charging stations at the District Headquarters and the CDMWTP.
- Entered into a Power Purchase Agreement (PPA) with a private contractor for the design, installation and management of the District's new solar power systems that are scheduled for construction in 2024. The PPA is a public-private partnership that will allow the District to achieve Net Zero energy use at minimal cost, and eventually spend less on solar power than is currently spent on traditional fossil fuel power.
- Completed designs and procurement for net zero solar power generation at multiple District sites, including Ellwood Reservoir, the CDMWTP, and the District Headquarters.



# Administration Buildings and Fleet Management



## ***ENSURED THE ONGOING DELIVERY OF SAFE, CLEAN WATER SUPPLIES ADEQUATE TO PROTECT THE HEALTH AND SAFETY OF THE COMMUNITY***

- Completed design and procurement for large-scale battery storage at CDMWTP to prevent system shutdowns in the case of an electric grid overload or extreme weather conditions. As weather grows increasingly unpredictable with climate change, backup battery power will be critical in ensuring District facilities remain reliable in serving customers under any condition.



*Aerial photo of the Corona Del Mar Water Treatment Plant*



**The Corona Del Mar Water Treatment Plant was constructed in 1973 and achieved LEED Gold Certification in January 2010 following extensive renovations. Ongoing improvements to the property, including water treatment upgrades, roof repairs and replacements, backup battery installations, and new solar power systems will ensure this state-of-the-art facility continues to remain a leader in energy and environmental design.**

# Administration Buildings and Fleet Management

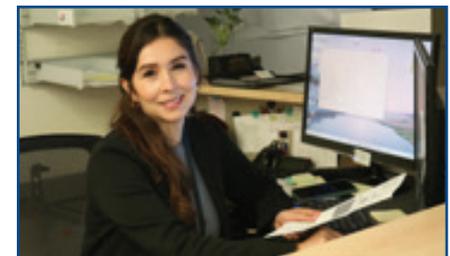
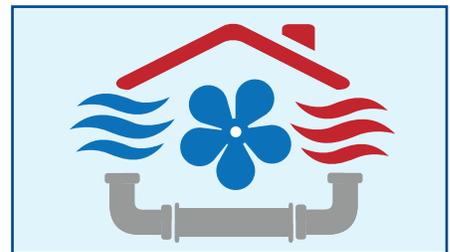
## Featured Story

### Building Improvements

*Building upgrades focused on providing safe and healthy work environments while maximizing the sustainability of District buildings.*

A variety of improvements were made to District buildings and the Customer Service area over the past year. The goal has been to maximize the health and safety of the workforce and the public visiting District offices, while also improving the sustainability of administration buildings that were originally built over fifty years ago.

- Modification of the Customer Service counter to include an Americans with Disabilities Act (ADA) accessible service counter and a transparent partition.
- Upgrades to the existing Heating, Ventilation and Air Conditioning (HVAC) system to include advanced air purification technology.
- Workstation improvements, including new offices, adjustable desks that can be raised for standing or lowered for sitting, and replacement of aged furniture.
- Roof repairs and replacements using materials that are lighter in weight and a reflective color.
- Termite repair and painting of the Headquarters buildings, most of which are constructed entirely from wood.
- Repairs and enhancements to the security fencing.
- Pavement maintenance to the parking lot and Equipment Yard.



### *Sustainable Outcomes and Benefits:*



The District will realize cost benefits from more efficient equipment, proactive building and pavement maintenance and protection, improved security of District assets and equipment in the Equipment Yard, and improved staff productivity resulting from workspace improvements.



The reduced electricity needs resulting from various improvements, including new roofing that will help maintain indoor temperatures and efficient HVAC systems, will help reduce the District's carbon footprint.



Increase in effective and face-to-face customer service, open collaboration among new and returning staff, and more ergonomic and healthy working environments.

# Administration Buildings and Fleet Management

## Looking Ahead

### *MINIMIZE THE ENVIRONMENTAL IMPACTS OF DISTRICT OPERATIONS AND FACILITIES*

**Energy Efficiency Improvements** – The District is exploring opportunities for additional energy efficiency improvements at its facilities to reduce its overall electricity demand. Potential options include pursuing additional sources of sustainable energy, shifting the timing of operations to non-peak hours (when possible), or upgrading aging equipment to higher efficiency models.

**Building improvements (Initiative 2.4)** – Improvements in the year ahead will include new carpeting throughout the headquarters building, remodeling and relocating workspaces to maximize existing building space, installation of fogged glass partitions between workspaces to maximize natural lighting, and painting of several offices and areas of the building that haven't been painted in nearly 20 years. The improvements will support healthy, comfortable work environments for staff while reducing energy use and related costs.

# Water Supply, Treatment, and Distribution System

Initiatives in this category support the core mission of the District. Comprehensive infrastructure planning and investment ensure the ongoing reliability of the distribution and treatment systems. Investment in sustainable infrastructure that is resource efficient, cost effective, replicates natural hydrology, and can adapt to a changing climate and other conditions provides multiple benefits to the District and its customers.

## Annual Performance Highlights



### ***MAINTAINED, REPLACED, AND IMPROVED THE EFFICIENCY OF THE WATER DISTRIBUTION SYSTEM***

- Began construction of a third solids drying bed at CDMWTP to improve treatment operations, increase the efficiency of the solids handling process, and allow for greater operational flexibility. The additional drying bed helps to expand the use of existing sustainable solids handling facilities rather than constructing an energy-intensive mechanical dewatering system. (Initiative 3.15)
- Installed new granular activated carbon (GAC) filter media in multiple filters at CDMWTP for improved water quality. GAC filters remove organic material from water and can improve the taste of treated water delivered to customers. The installation of new filter media increases the effective lifespan of the treatment filters, preventing the need for more frequent maintenance and related expenditures. (Initiative 3.34)



### ***ENSURED THE ONGOING DELIVERY OF SAFE, CLEAN WATER SUPPLIES TO THE COMMUNITY***

- Made significant progress on the second phase of the Transmission Main Relocation project (Initiative 3.36). Work in FY 2022-23 included relocation of a key segment of the District's 42-inch transmission main away from an eroded creek bank to a more geologically stable area. The final phase of the project will relocate the remaining segment of the line to a more stable rock formation to avoid sloping terrain and provide for easier access for inspections, maintenance, and repairs. Scheduled for completion in FY 2023-24, this critical project will significantly reduce the risk of landslide-related damage to this transmission main, which conveys treated water to a majority of the District's distribution system. (Initiative 3.36)
- Constructed a distribution main tie-in at Castilian Drive as part of the District's efforts to eliminate pipeline "dead-ends" in the system. A more connected network of pipelines improves water quality by preventing low flows and accumulation of water at pipeline ends, while increasing the District's flexibility in operating the system. (Initiative 3.40)



### ***PROTECTED AND PROLONGED SERVICE LIFE OF INFRASTRUCTURE***

Made several water facility infrastructure improvements that preserve the integrity of District facilities and protect critical infrastructure while enhancing employee safety:

- Cleaned all reservoirs, including the recycled water reservoir at Goleta Sanitary District, which was the first time in its 30-year existence. Cleaning of reservoirs protects water quality by reducing the build-up of organic material and other constituents.
- Completed emergency pipeline repairs on the Goleta West Conduit following a series of large rainstorms. This work helped prevent pipeline failure, which could have resulted in the sudden release of water and potentially significant property damage downstream, costly emergency repairs, and an unplanned service outage to some District customers.
- Performed routine operations to keep groundwater wells in good condition. The District has invested in continued mechanical maintenance of its wells to maintain high production and injection capacity to ensure that sufficient groundwater is available to meet public health and safety needs during a water shortage or unplanned emergency.

# Water Supply, Treatment, and Distribution System



## **IMPLEMENTED PROGRAMS THAT MINIMIZE WATER LOSS AND MAXIMIZE ACCOUNTING OF WATER USE**

- Replaced 72 broken water main valves under the Valve Replacement Program to improve reliability of water delivery. Maintaining and replacing valves allows distribution operators to isolate leaks to minimize property damage during emergency repairs, reduces the number of customers impacted by shutdowns, and protects water resources by minimizing water loss. (Initiative 3.32)

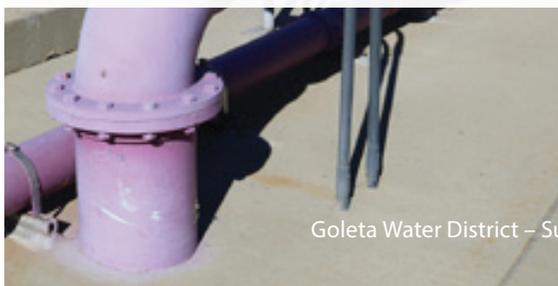


## **ENHANCED SYSTEM-WIDE RELIABILITY AND SAFETY**

- Installed a permanent pump station at Corona Reservoir that replaced a temporary pump station. The new pump station increases water quality and reduces the formation of disinfection byproducts by blending groundwater and surface water at the Corona Reservoir. The pump station includes two 2,800 gallon per minute pumps for redundancy, and a smaller pump for the CDMWTP's domestic water line to improve reliability. (Initiative 3.38)
- Following the annual inspection of all 1,520 fire hydrants in the District's service area for the first time, replaced 111 old hydrants and repaired 194 hydrants to improve operating efficiency and prevent rust. The ongoing fire hydrant replacement project replaces inoperable hydrants identified by routine inspections, flushing activities, and daily operations. Looking ahead, the District plans to replace hydrants that are 50 or more years old to ensure emergency services personnel have access to reliable hydrants with sufficient water pressure and flow rates to fight fires.
- Performed 62 water main shutdowns as part of 44 planned repairs for system improvements and 19 unplanned water main leak repairs. Performed 112 repairs to leaking service laterals.
- Inspected and replaced more than 880 malfunctioning water meters to prevent water loss and ensure accurate billing. (Initiative 3.10)
- Replaced obsolete reservoir hatches at Ellwood and Corona reservoirs with newer, lighter access hatches. The new reservoir components allow the District's operators and contractors to safely access the reservoir interior to perform inspections and maintenance via decreased weight and lift assist mechanisms. Newer hatches also offer significant sanitary seal improvements. This work is part of an ongoing initiative to improve reservoir reliability and enhance worker safety. (Initiative 3.37)



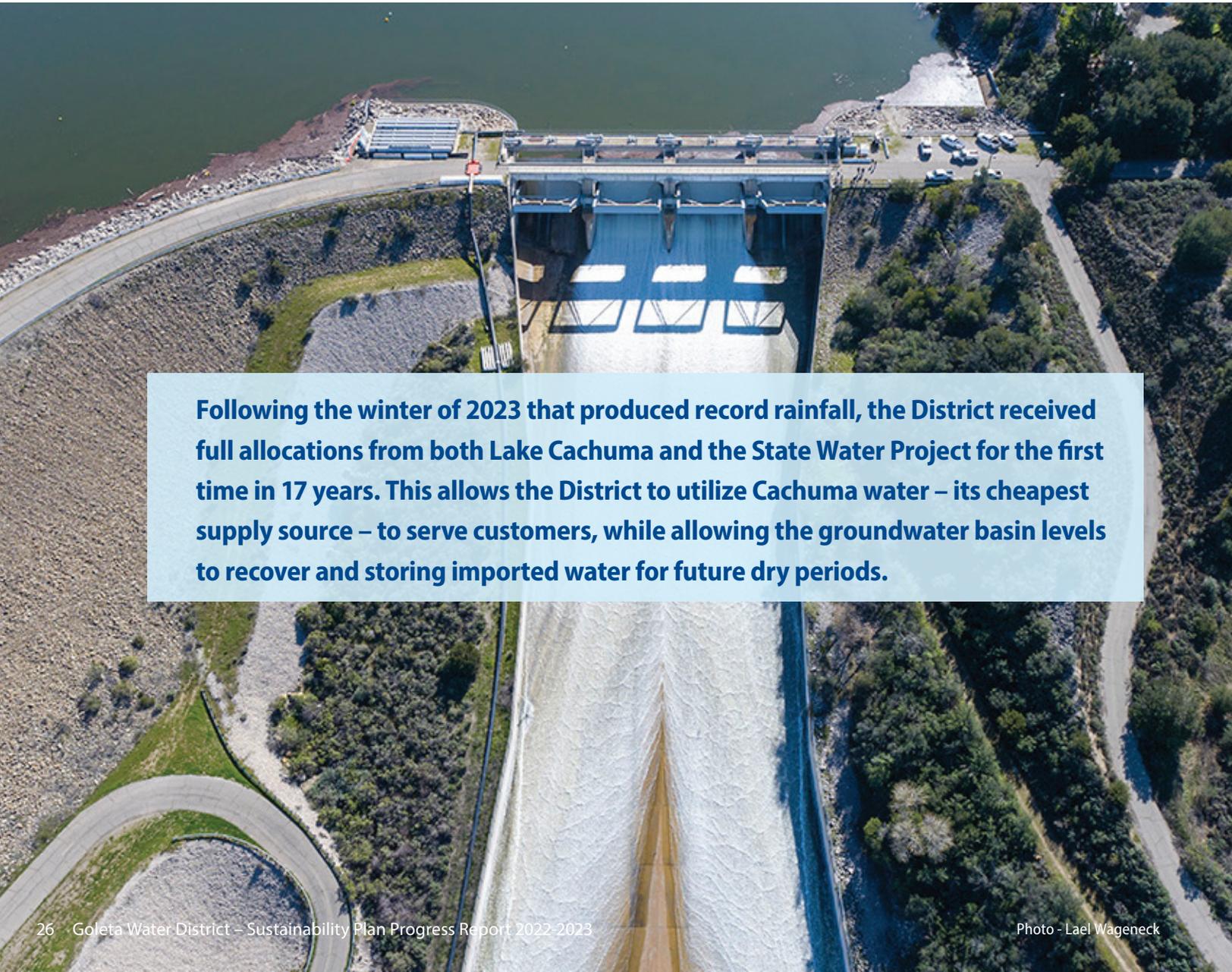
**Over the past decade, the District has invested nearly \$10 million to address the changing water quality conditions of groundwater, surface water, and recycled water.**



# Water Supply, Treatment, and Distribution System

## MITIGATED WATER SUPPLY RISKS AND PRESERVED POTABLE SUPPLIES

- Worked with the United States Bureau of Reclamation (USBR) to successfully extend a key contract related to the State Water Project that allows for continued storage and delivery of imported water via Lake Cachuma, preserving access to this supply source.
- Continued observation of Lake Cachuma using satellite imagery, COMB lake monitoring, and District water quality sampling to proactively detect the presence of naturally occurring algal toxins and other contaminants of concern over the past decade, a series of wildfires in the Lake Cachuma watershed combined with years of historic drought have led to challenging water quality conditions at the lake. The effects of wildfires and drought on water quality can persist for many years. However, the storms of winter 2023 have improved the water quality of the lake significantly.
- Following the filling and spilling of Lake Cachuma for the first time since 2011, the District injected 815 AF of surplus Cachuma water that would otherwise have been lost to spill into groundwater wells to replenish the Goleta Basin. This active injection combined with the significant winter rainfall supports enhanced recharge of the groundwater basin and ensure this critical drought buffer continues to be available in the future.



**Following the winter of 2023 that produced record rainfall, the District received full allocations from both Lake Cachuma and the State Water Project for the first time in 17 years. This allows the District to utilize Cachuma water – its cheapest supply source – to serve customers, while allowing the groundwater basin levels to recover and storing imported water for future dry periods.**

# Water Supply, Treatment, and Distribution System

## MAINTAINED INVESTMENT IN GROUNDWATER BASIN AND WELL INFRASTRUCTURE

- The District completed the siting, design, and environmental review for the Hope Well, a new replacement groundwater well at the District Headquarters and the first in 40 years. The new well will provide water production of more than 1,000 gallons per minute (GPM) while also increasing injection capacity, supporting the District's Aquifer Storage and Recovery (ASR) Program and the long term health of the Goleta Basin. High efficiency pumps will minimize energy use required to pump water from the ground, reducing greenhouse gas emissions and operational costs.



*Photos of Groundwater Well Replacement Project in progress at District Headquarters.*

**The increasingly limited availability of surplus surface water due to the increased frequency and duration of droughts is expected to become a bigger challenge driven by climate change. The District is proactively addressing this challenge, including acquiring newly required injection permits from the state and installing a new well – the first in over 40 years – that will increase injection capacity and the continued reliability of groundwater supplies.**

# Featured Story

## Water Supply Replenishment

*The deluge of rainfall received last winter replenished surface water supplies and significantly altered the District's water supply outlook.*

Following consecutive winter storms driven by several atmospheric rivers, Cachuma rose from 31% of capacity in November 2022 to 100% by February 2023, with the lake spilling at Bradbury Dam for the first time since 2011. Locally, the Goleta Valley received over 32 inches rainfall – a phenomenal level of precipitation for an area that averages 18 inches over the course of a “normal” year.

Renewed surface water supply availability allowed the District to suspend groundwater production and shift to actively injecting surplus Cachuma water for several months for the first time in over a decade. Combined with the significant, ground saturating rainfall, this active injection supported enhanced recharge of the groundwater basin, helping to ensure this critical drought buffer continues to be available in the future. The District began serving customers with 100% Cachuma water via its gravity fed system – its most affordable and sustainable supply source.

**The District began serving customers with 100% Cachuma water via its gravity fed system – its most affordable and sustainable supply source.**

Statewide, reservoirs and the Sierra snowpack they depend on rose above average levels, and the Department of Water Resources announced a 100% allocation of State Water for the first time in 17 years, which the District is storing for future use when local supplies are strained. The replenished water supplies – both locally and statewide – combined with efficient water use by customers, leaves the community well positioned regardless of what the next few years bring.

### Sustainable Outcomes and Benefits:



Serving customers with water from Lake Cachuma – the District's cheapest supply source – through its gravity fed distribution system reduces water supply costs and operational expenses that would otherwise be required to pump water through the system.



Reduced energy use via the gravity fed distribution of Cachuma water combined with suspended groundwater production and no State Water deliveries reduces associated greenhouse gas emissions, while active injection of water into the groundwater basin helps replenish local groundwater levels.



Replenished water supplies help ensure the ongoing delivery of safe, clean, reliable water supplies to the community.

# Water Supply, Treatment, and Distribution System

## Looking Ahead

### *ENSURE THE ONGOING ACCESS TO AND DELIVERY OF SAFE, CLEAN WATER SUPPLIES TO THE COMMUNITY*

**New Replacement Groundwater Well (Initiative 3.26)** – Hope Well, a new replacement groundwater well, will be constructed in FY 2023-24 to offset declining production at existing wells, increase injection capacity, and begin to replace a well field whose oldest wells are nearly 50 years old. The new well is anticipated to restore production of up to 1,000 gallons per minute while also increasing injection capacity, supporting the District’s Aquifer Storage and Recovery (ASR) Program and the long-term health of the Goleta Basin.

### *MAINTAIN INVESTMENT IN GROUNDWATER BASIN AND WELL INFRASTRUCTURE*

**Groundwater Treatment Equipment Upgrades (Initiative 3.30)** – Groundwater Treatment Equipment Upgrades will be installed at San Ricardo and Anita Wells in the year ahead to improve water quality of raw groundwater from Anita Well. Adding filtration, pipework, valves, and controls at the San Ricardo Well site will allow for full production in combination with treated groundwater from Anita Well. Additionally, the District completed procurement and construction of filtration treatment equipment at University Well to treat increasing levels of iron and manganese. Water quality improvements will support the continued delivery of safe, clean water supplies to the community while ensuring compliance with state and federal regulations.

# Overall Progress at a Glance

SERVICE CATEGORY #1 - CUSTOMER SERVICE AND BUSINESS OPERATIONS		
REF	2012-13 INITIATIVES	STATUS
1.1	Integrated Regional Water Management Planning (IRWMP)	Ongoing   
1.2	Conservation	Complete   
1.3	Electronic Billing System	Complete   
1.4	Emergency Response Plan Update	Complete  
1.5	Workplace Safety Program Update	Complete  
1.6	Drought and Water Shortage Contingency Plan	Complete  
1.7	Vendor Management	Complete  
1.8	Technology Improvement and Integration	Ongoing   
1.9	Alternative Revenue Sources	Ongoing  
1.10	Introduction of Lifeline Discount Program	Deferred 
1.11	Tiered Rate Updated	Complete   
REF	2013-14 INITIATIVES	STATUS
1.12	Community Demonstration Garden Outreach	Ongoing  
1.13	Salt and Nutrient Management Plan Scoping	Complete   
1.14	Asset Management Implementation Plan and Pilot Study of the Recycled Water System - Phase I	Complete  
1.15	Coordinated Energy Management	Ongoing   
REF	2014-15 AND 2015-16 INITIATIVES	STATUS
1.16	Drought Supply and Demand Model	Ongoing  
1.17	Groundwater Management Plan Update	Complete   
1.18	Water Supply Management Plan Update	Underway   
1.19	Urban Water Management Plan Update	Complete   
1.20	Drought Outreach Plan	Complete  
1.21	Sustainable Groundwater Management Act Implementation	Ongoing  
1.22	Groundwater Model	Complete   
1.23	Agricultural Water Efficiency Action Plan	Complete   
1.24	Conservation Incentive Programs	Ongoing   
REF	2016-17 AND 2017-18 INITIATIVES	STATUS
1.25	Informing Customers about Water	Underway 
1.26	Employee Wellness Program	Ongoing  
REF	2018-19 INITIATIVES	STATUS
1.27	Web Self-Service Program	Complete   
1.28	Hazard Mitigation Plan	Complete   
1.29	Recycled Water Slough Crossing Alternative Design Study	Complete   
1.30	Worker Safety Electrical Upgrades	Underway   
1.31	Customer Service Payment Portal	Complete   
REF	2019-20 AND 2020-21 INITIATIVES	STATUS
1.32	SCADA Upgrades	Underway   
1.33	Electronic Process Migration	Underway   
1.34	District Based Elections	Complete 
REF	2022-23 INITIATIVES - NEW	STATUS
1.35	Seismic Vulnerability Assessment	Underway  

**SERVICE CATEGORY #2 - ADMINISTRATION BUILDINGS AND FLEET MANAGEMENT**

REF	2013-14 INITIATIVES	STATUS
2.1	Community Demonstration Garden Restoration and Enhancement	Complete  
2.2	Renewable Energy (Solar) Feasibility and Permitting	Ongoing   
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  
2.7	Fleet Replacement Study	Complete  
REF	2013-14 INITIATIVES	STATUS
2.8	Edible Garden Project	Complete  
2.9	Lighting Upgrades at Administrative HQ – Phase I	Complete   
2.10	Solar Trellis System at Administrative HQ – Phase I	Underway  
2.11	Stormwater Runoff Improvements Study	Complete  
REF	2014-15 AND 2015-16 INITIATIVES	STATUS
2.12	Leaking Underground Fuel Tank (LUFT) Closure	Complete  
2.13	Stormwater Headquarters Improvements/Master Plan (Phase I)	Complete  
2.14	Board Room Remodel	Complete  
2.15	Recycled Water Hauling Program	Ongoing  
REF	2016-17 AND 2017-18 INITIATIVES	STATUS
2.16	Vehicle Charging Stations	Underway   
REF	2018-19 INITIATIVES	STATUS
2.17	Leach Field Replacement at CDMWTP	Complete   
2.18	Lighting Upgrades at CDMWTP	Complete   
REF	2021-22 INITIATIVES	STATUS
2.19	Net Zero Initiative	Underway   

**SERVICE CATEGORY #3 - WATER SUPPLY AND SYSTEM INVESTMENT**

REF	2012-13 INITIATIVES	STATUS
3.1	Hydroelectric Generator Installations	Complete  
3.2	Recycled Water System Booster Station Electrical Upgrades	Complete   
3.3	San Ricardo Well Rehabilitation	Complete  
3.4	WTP Sustainable Wastewater Disposal and Irrigation Study	Complete  
3.5	Grant Application Readiness	Ongoing   
3.6	Goleta Beach Recycled Waterline Relocation	Planning  
3.7	Infrastructure Improvement Program Evaluation Criteria	Complete   
3.8	Corrosion Protection Program	Ongoing  
3.9	Neighborhood Compatibility of District Facilities	Ongoing  
3.10	Meter Replacement Program	Ongoing  
REF	2013-14 INITIATIVES	STATUS
3.11	San Ricardo Well Site Enhancement	Complete   
3.12	Arc Flash and Electrical Upgrades	Complete   
3.13	Water System Evaluation and Submetering Program – Phase I	Complete  
3.14	Van Horne Reservoir Slope Protection Evaluation	Complete  
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   

## Overall Progress at a Glance (continued)

REF	2014-15 AND 2015-16 INITIATIVES	STATUS
3.18	San Antonio Well Rehabilitation Project	Complete  
3.19	Berkeley Well Rehabilitation Project	Complete  
3.20	Shirrell Well Rehabilitation Project	Complete  
3.21	Oak Grove Well #2 Rehabilitation Project	Deferred  
3.22	SB Corporation Well Rehabilitation Project	Deferred  
3.23	Hollister Recycled Water Pump Replacement	Complete  
3.24	Emergency Pump Project (Patterson and Edison)	Complete  
3.25	Airport Area New Well Project	Deferred  
3.26	New Replacement Groundwater Well Project (Hope Well)	Underway  
3.27	Monitoring Wells	Planning  
3.28	Injection Wells	Planning  
REF	2016-17 AND 2017-18 INITIATIVES	STATUS
3.29	Booster Pump Station Improvements	Underway  
3.30	Groundwater Treatment Equipment Upgrades	Underway 
3.31	Water Quality Studies	Complete  
3.32	Valve Replacement Program	Ongoing   
REF	2018-19 INITIATIVES	STATUS
3.33	Reservoir Aeration Systems	Complete 
3.34	Surface Water Quality Treatment Technologies	Underway 
3.35	Hollister RW Booster Pump Station Relocation	Planning   
3.36	Transition Main Relocation	Underway   

3.37	Reservoir Reliability Program	Underway	\$	🌱	🤝
3.38	Corona Pump Station	Complete	\$	🌱	🤝
3.39	Interconnect Component Replacements	Underway	\$	🌱	🤝
<b>REF</b>	<b>2019-20 AND 2020-21 INITIATIVES</b>	<b>STATUS</b>			
3.40	Distribution Main Tie-ins	Underway	\$	🤝	
<b>REF</b>	<b>2021-22 INITIATIVES</b>	<b>STATUS</b>			
3.41	Creek Crossing Pipeline Replacements/Repairs	Underway	\$	🌱	🤝

## LOOKING FORWARD

The Sustainability Plan is a living document, and its ability to remain adaptable is a key asset. Ongoing monitoring of the progress of District activities and key initiatives will continue so the District can effectively adjust its approach as needed, and report on Sustainability Plan implementation results and related benefits to the community. Through continued strategic planning, focused 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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Goleta Water District  
4699 Hollister Avenue  
Goleta, CA 93110  
[www.GoletaWater.com](http://www.GoletaWater.com)

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