



COACHELLA VALLEY WATER DISTRICT

Established in 1918 as a public agency

GENERAL MANAGER
Jim Barrett

ASSISTANT GENERAL MANAGER
Robert Cheng

June 6, 2019

Carolyn Peterson
Director of Communications & Public Affairs
Association of Metropolitan Water Agencies
1620 I Street, NW, Suite 500
Washington, DC 20006

Re: Coachella Valley Water District
Application for the 2019 Platinum Award for Utility Excellence

Dear Ms. Peterson:

Enclosed please find Coachella Valley Water District's (CVWD) application to the Association of Metropolitan Water Agencies for the 2019 Platinum Award for Utility Excellence. This application is a thorough representation of CVWD and its various water-related services as they relate to each of the ten effective utility management attributes and five keys to management success. Please note that while CVWD provides seven water-related services, we have focused this application on our municipal drinking water service.

If you have questions about the information contained in this application or wish to review additional supporting material, please contact me at your earliest convenience. I am happy to provide any additional detail you may need during your review.

Sincerely,

Jim Barrett
General Manager

COACHELLA VALLEY WATER DISTRICT

APPLICATION TO THE Association of Metropolitan Water Agencies
FOR THE 2019 Platinum Award for Utility Excellence



MISSION STATEMENT

To meet the water-related needs of the people through dedicated employees, providing high quality water at a reasonable cost.

VISION STATEMENT

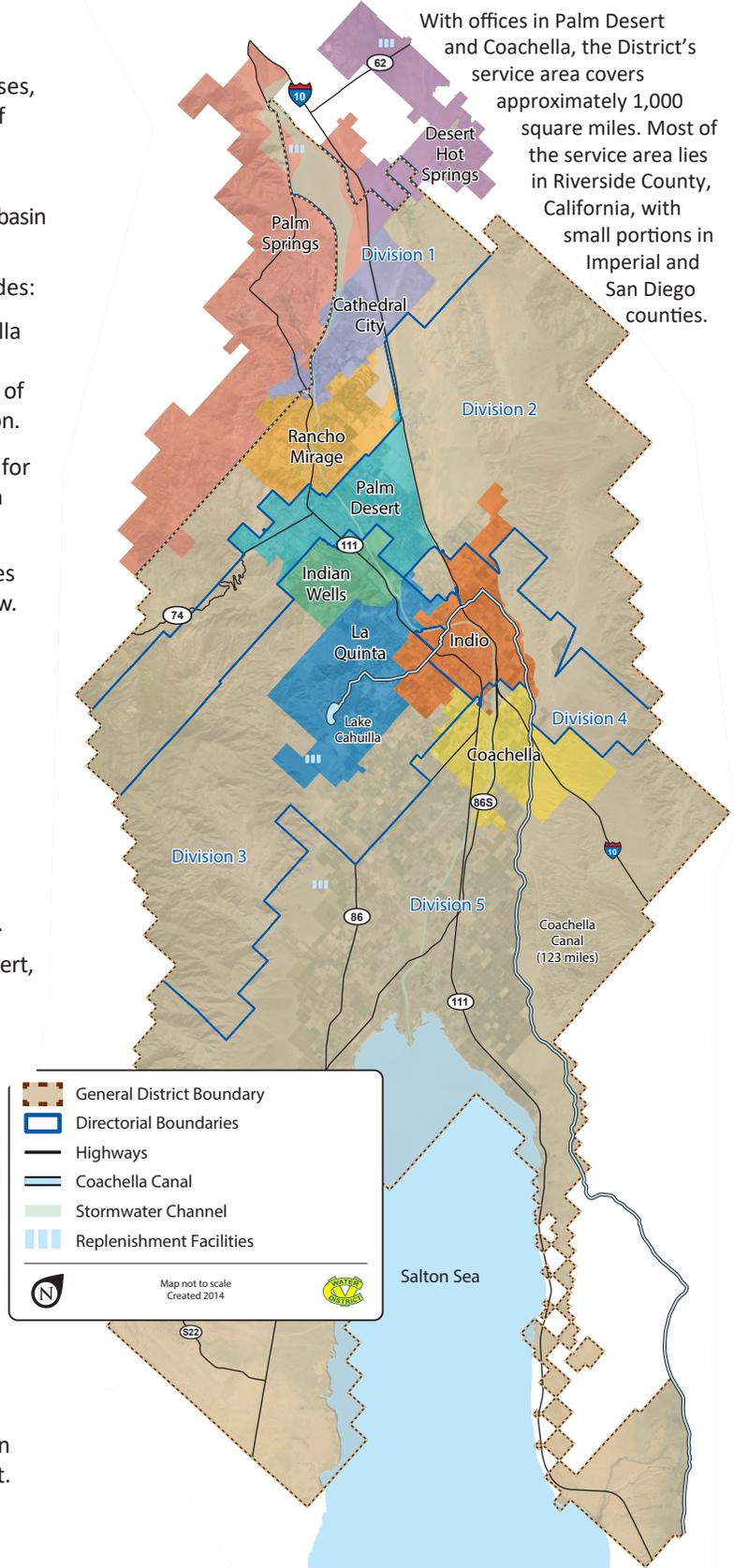
Coachella Valley Water District's top priority is delivering high quality drinking water that meets stringent government standards.

Coachella Valley Water District Overview

Coachella Valley Water District (CVWD/District) is a retail entity that provides potable water for drinking and other domestic purposes to about 108,000 homes and businesses, not including connections for fire service. A population of about 290,000 people across three counties in Southern California receive the District's services.

- Drinking water is pumped locally from the groundwater basin which has an estimated capacity of 39 million acre-feet.
- In addition to domestic water, the District also provides:
 - Colorado River water from the 123-mile Coachella Branch of the All American Canal via 485 miles of underground delivery pipes to nearly 80,000 acres of highly productive farmland for agricultural irrigation.
 - Regional stormwater protection & flood control for 600 square miles with 16 stormwater protection channels.
 - Wastewater treatment by five treatment facilities that process an average of 17 mgd of incoming flow.
 - Recycled and nonpotable water to 54, or 50%, of all golf courses in the CVWD service area.
 - Groundwater replenishment and water conservation services for the benefit of all residents. More than 3.9 million acre-feet of water have been replenished since 1973.
 - Groundwater replenishment and agricultural drainage services to protect the quality of 37,500 acres of farmland by reducing salinity in the soil.
- The Coachella Valley is located in the arid Colorado Desert, where rainfall averages about three inches a year.
- The District, in conjunction with Desert Water Agency, manages the groundwater basin utilizing the Coachella Valley Water Management Plan (CVWMP), a frequently updated 35-year blueprint for protecting/preserving groundwater through more efficient water use, increased use of alternate sources and aggressive groundwater replenishment.
- Recently celebrating its centennial anniversary, CVWD is a California Special District, authorized by the voters on January 9, 1918.
- A five-member Board of Directors (Board), which meets twice monthly, governs CVWD. Directors are elected to four-year terms by registered voters within the divisions in which they live and seek to represent.
- The operating budget for CVWD in FY19 is nearly \$289 million, with a capital improvement budget of \$121 million and a five-year Capital Improvement Program of \$619 million.

Boundary Map



Strategic Business Planning

Initiated in 2014, Strategic Business Planning defines issues of critical importance to CVWD's success. The District's Board annually adopted strategic plans in June 2014-2018. Guided by the *Ten Attributes of Effective Utility Management* and with consultant facilitation, CVWD's management, Board members, and more than 50 key staff members have developed a plan with specific initiatives to ensure that CVWD achieves its goals.

The Strategic Plan covers six distinct Strategic Goals, that address the 10 Effective Utility Management (EUM) attributes, shown in blue italics below. The goal areas were selected to ensure CVWD's ability to continue to provide to customers a highly reliable supply of water and services that meet all applicable and foreseeable future regulations, utilizing a skilled workforce, at the most competitive market prices.

- **Employee Workforce Development** ensures that competitive salaries and benefits are maintained, succession process is well-planned and institutional knowledge is preserved and managed. (*Employee & Leadership Development*)
- **Financial Viability** follows industry-recognized rate-making practices to maintain organizational fiscal health while ensuring integrity and transparency in the financial process. (*Financial Viability*)
- **Water Supply Sustainability** is possible through enactment of more aggressive conservation, expansion of the nonpotable water program, updating and compliance with the CVWMP and protecting the water supply and its optimized usage. (*Operational Optimization, Infrastructure Strategy & Performance and Water Resource Sustainability*)
- **Exceptional Customer Service** leads to optimal customer service experiences, improved internal communications and efficient gathering of customer feedback and input. (*Customer Service and Operational Optimization*)
- **Water Quality & Environmental Leadership** maintains continued compliance with all water quality regulations, effective environmental resource management and optimized energy usage. (*Product Quality, Operational Optimization, Infrastructure Strategy & Performance, Community Sustainability, Enterprise Resiliency, Water Resource Sustainability, Resource Adequacy and Fiscal Viability*)
- **Infrastructure Investment & Management** involves development of asset management and capital improvement programs, a preventative maintenance program, irrigation infrastructure repair and replacement program and effective management of other physical assets. (*Product Quality, Customer Satisfaction, Operational Optimization, Infrastructure Strategy & Performance, Enterprise Resiliency, Community Sustainability and Water Resource Sustainability*)

Since 2014, the District has experienced an impressive 85% completion rate with 113 initiatives put forth by the Strategic Planning team and 96 projects completed. Initiatives have project coordinators and project sponsors, both of whom are responsible for ensuring meaningful progress.

Progress is measured using the SMART (specific, measurable, attainable, realistic, timely) matrix and reported regularly to the Board. Many initiatives address more than one EUM attribute.

Keys to Management Success

As the 10 Attributes to Effective Utility Management are discussed throughout this application, reference will be made to the five management approaches and systems — Leadership, Strategic Business Planning, Knowledge Management, Measurement, and Continual Improvement Management — that the District utilizes to increase business efficiencies and improve outcomes.

Acronyms

AMP	Asset Management Program	GIS	Geographic Information System
AMWA	Association of Metropolitan Water Agencies	GSPs	Groundwater Sustainability Plans
AWWA	American Water Works Association	H2O	Help to Others
Board	Board of Directors	HVAC	Heating, Ventilation, and Air Conditioning
CIP	Capital Improvement Plan	IRWM	Integrated Resources Water Management
Cr6	Chromium-6	IS	Information Services
CEUs	Continuing Education Units	MC/GHWMP	Mission Creek and Garnet Hill Water Management Plan
COSS	Cost of Services Studies	MCL	Maximum Contaminant Level
CMMS	Computerized Maintenance Management Systems	mg/L	Milligrams per Liter
CVRWVG	Coachella Valley Regional Water Management Group	MWD	Metropolitan Water District of Southern California
CVRWMP	Coachella Valley Regional Water Management Plan	NIMS	National Incident Management System
CVWD/District	Coachella Valley Water District	PMP	Preventative Maintenance Program
CVWMP	Coachella Valley Water Management Plan	SCADA	Supervisory Control and Data Acquisition
CVMSHCP	Coachella Valley Multiple Species Habitat Conservation Plan	SMART	Specific, Measurable, Attainable, Realistic, Timely
DACs	Disadvantaged Communities	SGMA	Sustainable Groundwater Management Act
DDC	Direct Digital Control	SWP	State Water Project
EEMs	Energy Efficient Measures	SWRCB	State Water Resources Control Board
EMS	Energy Management System	RAS/WAS	Return Activated Sludge/Waste Activated Sludge
EOC	Emergency Operations Center	TDS	Total Dissolved Solids
ERP	Enterprise Resource Planning	USBR	US Bureau of Reclamation
EUM	Effective Utility Management	UWMP	Urban Water Management Plan
FEMA	Federal Emergency Management Administration	WAN	Wide Area Network
FY	Fiscal Year	WIFIA	Water Infrastructure and Innovation Act
		WRP	Wastewater Reclamation Plant

Attributes to Effective Utility Management

1. PRODUCT QUALITY

CVWD provides seven distinct areas of water-related services to our customers. The quality of our services is a core part of our mission statement and drives strategic decisions within the organization. We communicate the value of quality with our stakeholders in a variety of ways including outreach campaigns, group presentations, and personal conversations. The most thorough communication forum for product quality is our annual review. This document provides required water quality data for the Consumer Confidence Report, and also includes articles on projects, information on various services, rates, rebate programs, budget, and a summary “By the Numbers” page that provides a quick annual snapshot.

Domestic Water: CVWD maintains a state-certified laboratory that analyzes microbial and inorganic constituents of concern potentially found in local groundwater. While operating a state-certified laboratory is not a regulatory requirement, this facility ensures that a high-quality product is delivered to our customers.

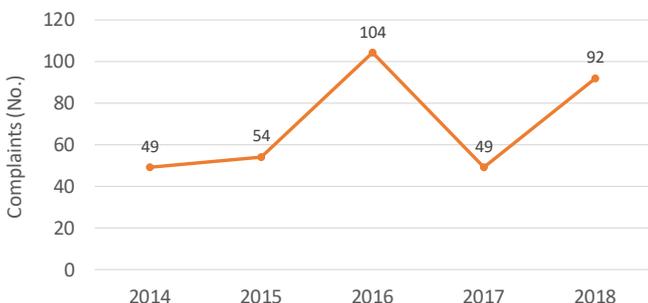
STATE & FEDERAL DRINKING WATER STANDARDS

100% DAYS IN COMPLIANCE FOR 5 YEARS

2014 | 2015 | 2016 | 2017 | 2018

CVWD complies with all drinking water standards set by State and Federal regulations. We occasionally receive water quality complaints, usually related to slight chlorine taste or cloudiness from trapped air in the pressurized delivery lines. CVWD voluntarily made its laboratory services available to the community when other labs serving eastern Coachella

WATER QUALITY COMPLAINTS



Valley closed their doors. The District’s laboratory served the analytical needs of drinking water providers beyond its service area, including small water systems serving Disadvantaged Communities (DACs). Going beyond water quality, CVWD created a task force to work with stakeholders to improve the water infrastructure so that reliable water services may be provided. (See page 10, Community Sustainability).

Drinking Water Quality Innovation: CVWD’s laboratory recently filled a critical role in the District’s need in satisfying State regulators’ concerns related to chromium-6 (Cr6) found in drinking water. Just days from executing a \$201 million construction contract to install Cr6 ion exchange treatment systems, the District learned of a potential alternative treatment process. Using the brief window of time available to determine the feasibility of the alternative treatment, the District rapidly reallocated its internal laboratory resources to perform groundbreaking research. Completed in April 2017, the research showed that the alternative was feasible, and could easily be tested with a full-scale demonstration project.

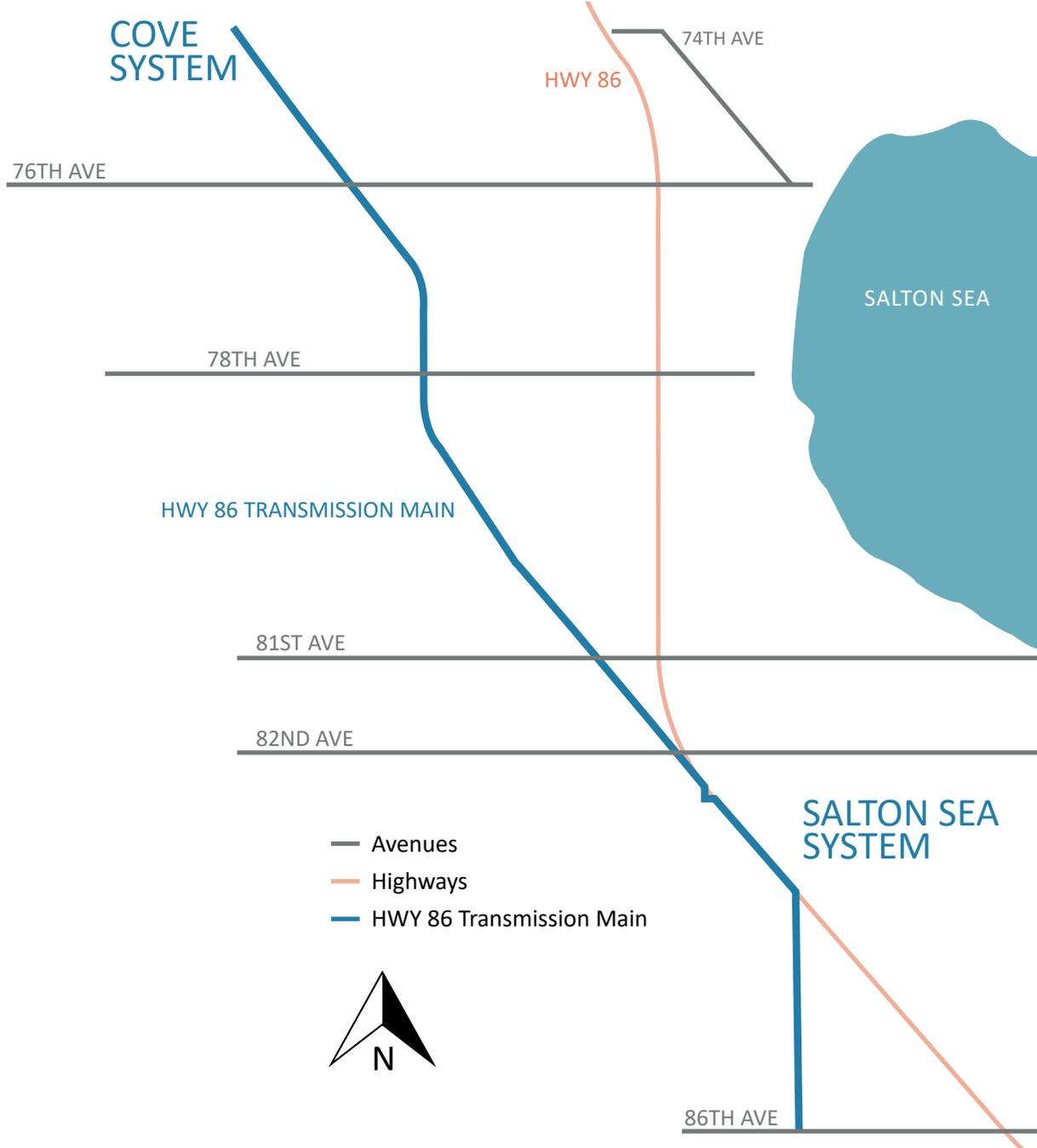
Shortly after this discovery and as a result of a separate lawsuit, the California Supreme Court determined that the State had failed to perform the required economic feasibility analysis and ordered that the drinking water Cr6 maximum contaminant level (MCL), adopted in 2014, be withdrawn. In September 2017, the State initiated a multi-year effort to complete the economic feasibility analysis and to adopt a new Cr6 MCL for drinking water; this effort is still ongoing.

Although CVWD could have idled all activities related to Cr6 reduction in drinking water, CVWD used this time to obtain State approval to perform a full-scale Cr6 reduction demonstration test using an approved drinking water additive called stannous chloride to reduce Cr6 to Chromium-3, an essential nutrient for human health. The successful two-month long test was performed at CVWD’s most challenging water system (high levels of Cr6, elevated sulfate levels, and long detention times) in the 19-mile water distribution system, which serves approximately 3,000 customers.

This full-scale test proved that the alternative process can be implemented quickly, produces no treatment residuals, does not impact neighbors, and is extremely cost effective. The alternative process cost less than \$50,000, including the additives used during the two months, compared to more than \$50 million and multiple years for construction and implementation of a Cr6 ion exchange treatment facility.

Highway 86 Transmission Main Extension Project: Consistent with CVWD’s objective to provide high product quality to its customers, CVWD began the construction of the Highway 86 Transmission Main Extension Project to improve water quality and service reliability to a community of approximately 7,400 people primarily in the Salton City area. These communities currently rely on small wells with elevated levels of total dissolved solids (TDS). The project, a seven-mile pipe extension to consolidate two of CVWD’s water systems, will allow domestic water from the District’s largest water system to supply water to an isolated groundwater system that contains naturally elevated levels of salinity. Recognizing that the drinking water TDS recommended limit is a secondary MCL (nonenforceable), this project will allow CVWD to improve water supply reliability with an improved level of consumer acceptance. Some additional small water

HWY 86 TRANSMISSION MAIN

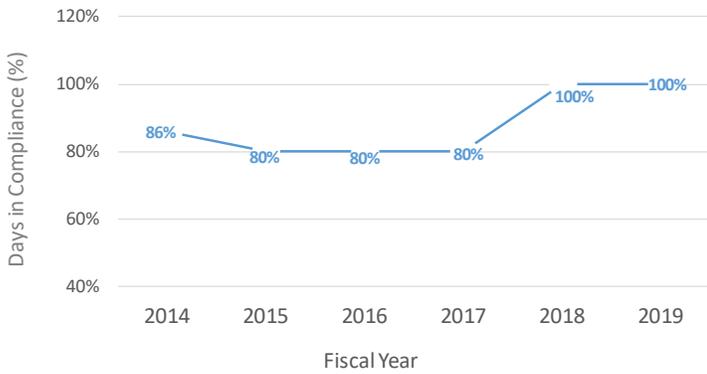


systems with elevated bacteria or arsenic levels may benefit by connecting to the pipeline. The project is scheduled to be complete by the end of 2019 at an estimated cost of \$24.8 million. Other water system consolidations are planned in the eastern Coachella Valley to improve drinking water used in many DACs located within CVWD’s domestic water service area. (See page 10, Community Sustainability)

Wastewater Reclamation Plant Effluent Compliance: CVWD renewed its Waste Discharge Requirement (required in California for land disposal/application of treated wastewater effluent) for its largest tertiary Wastewater Reclamation Plant (WRP 10) in 2018, which corrected effluent limits for

chloride, sulfate, and TDS. In California, Water Quality Control Plans contain numerical water quality objectives designed to protect the groundwater quality for beneficial use. WRP 10’s water quality limits contained in the former Waste Discharge Requirement were not supported by water quality objectives in the Colorado River Basin Water Quality Control Plan. The changes, as approved by the regulators, included removal of secondary effluent limits for chloride and sulfate and increasing the effluent TDS limit to 530 milligrams per liter (mg/L). These changes improved CVWD’s daily wastewater compliance with the Waste Discharge Requirement from 83% in 2017 to 100% in 2018, while continuing to protect groundwater beneficial

EFFLUENT LIMIT COMPLIANCE HISTORY



uses and avoiding significant customer cost increases for unwarranted facility improvements. The permit changes include a three-year study to evaluate groundwater nitrogen and TDS sources in the WRP 10 area. This study will support the use of community resources to install facilities needed to maximize the production and use of recycled water produced from WRP 10. Reducing secondary effluent land disposal and increasing tertiary treated recycled water irrigation reduces groundwater pumping, improves effluent quality, increases effluent nutrient uptake, reduces fertilizer application, and increases contaminant attenuation within the turf root zone, all of which improves groundwater conditions.

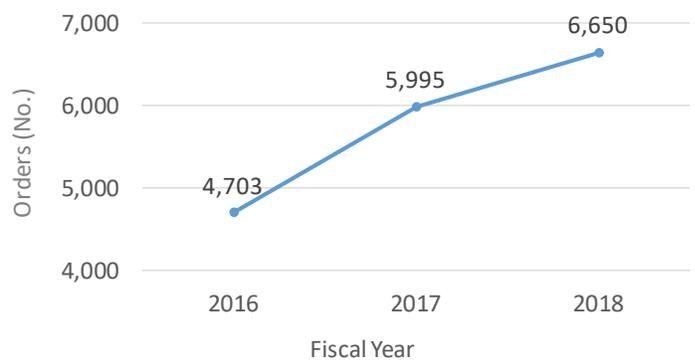
2. CUSTOMER SATISFACTION

CVWD takes customer feedback seriously in an effort to exceed customer expectations. The District monitors call statistics as shown in the table below (customer service complaints occur infrequently). Process improvements for CVWD’s customers are made in response to customer feedback, and to provide better water service. Examples of changes made during the last two years include implementing a new customer self-service portal, translating materials into Spanish, streamlining the service application process, and modifying the monthly billing statement for easier understanding.

The graphic above shows a few service level statistics. There has been a 17% decline in customer calls since fiscal year 2016 (FY16) and with the rollout of a new bill payment portal, Paymentus, complaints about the online bill payment system have nearly been eliminated.

Proactive High-Consumption Investigations: CVWD has a high number of seasonal residents (40%), which presents challenges when interacting with customers. Often, CVWD staff acts as the “property monitors” when they are on site for meter readings and can identify potential water loss before the customer is aware. Flagging properties with unusually high consumption, CVWD staff will check the meters for signs of water waste, and communicate with customers through various means (calls and letters) to alert them before they receive an unexpectedly large bill. The number of proactive high consumption notifications sent has increased in past three years; this service has been well-received by our customers.

HIGH CONSUMPTION WORK ORDERS



3. EMPLOYEE AND LEADERSHIP DEVELOPMENT

Many of CVWD’s employee development activities are driven by the results of employee engagement surveys conducted in 2016 and 2018, which were a strategic initiative to obtain feedback regarding workplace satisfaction. A wide variety of topics and questions covered the areas of Job and Organizational Engagement, Culture, Learning and Development, Working Environment, and Safety. Since the original survey in 2016, CVWD has focused on improving internal communication, employee appreciation and recognition, and increased training opportunities. Proactively addressing these issues resulted in significant improvements in certain areas (Company Potential, Rewards and Recognition, Customer Focus) by as much as 11% in 2018 (as compared to the 2016 survey). While standard engagement benchmarks are 55%, CVWD’s employee engagement results this year reached 61.4%. See the graphic on the following page for some of the Employee Engagement Survey Results.



SERVICE LEVEL STATISTICS

	SERVICE LEVEL GOAL	2016	2017	2018
# OF CALLS RECEIVED	—	140,288	116,002	116,000
% OF CALLS ANSWERED IN < 3 MINUTES	>90%	93.3%	93.8%	91%
AVERAGE ANNUAL ABANDON RATE	<5%	2.4%	1.2%	1.7%
AVERAGE WAIT TIME	<2 MINUTES	1:54	1:40	1:59

EMPLOYEE ENGAGEMENT SURVEY RESULTS

<i>Agrees with</i>	CVWD-2019	BENCHMARK
<i>I am encouraged to pursue career development activities</i>	72%	53%
<i>I can advance my career in this organization</i>	64%	47%
<i>People in this organization are committed to doing high quality work</i>	71%	66%
<i>I believe in the organization's overall business strategy</i>	65%	63%
<i>This organization encourages innovation</i>	64%	55%

Training: CVWD emphasizes continuous education and training, and offers educational reimbursement for relevant career development classes, paying up to \$3,000 for undergraduate and \$6,000 for graduate-level classes annually. Participation has grown due to increased online courses and local college programs. In 2017, CVWD collaborated with University of California, Riverside to hold the Leadership and Supervision classes at a campus within CVWD's service area. To date, 150 employees have participated, and given the demand, UCR now also offers a Project Management certification program locally. Employees understand the value of taking these classes in preparation for future promotional opportunities.

In 2017, the District established a Leadership Development Academy as part of a strategic plan initiative, and more than 40 employees have participated to date. Employees must apply, be selected, and make a commitment to attend the program that is one day per month for eight months. This program, conducted by a leadership consultant, includes independent reading, homework assignments and additional external courses. The Leadership Development Academy is key in succession planning by preparing more employees to take on new roles and responsibilities.

CVWD's Knowledge Transfer program is designed to capture an employee's job knowledge that may not have been recorded. Employees are videotaped so their knowledge can be used expedite the process of allowing their replacements to assume their required duties. The separation of long-term employees presents a significant challenge, and recruitment begins immediately after notice is given, which often allows a window of opportunity for the new employee and the departing employee to interact.

In early 2017, CVWD's Operations Department launched its inaugural in-house training. A total of 75 employees with certifications in their work areas are qualified to teach, which allowed participants to receive continuing education units (CEUs). These on-site training days have proven to be very cost effective as it saves on the travel-associated costs

incurred with off-site events. The most recent event was held for two consecutive days and was open to all interested employees who wanted to learn more about various District functions. Nearly 250 employees attended the training, resulting in 11,750 CEU hours. These events allow employees to be better versed in all aspects of the District's services and responsibilities.

Safety: Safety has been a highly-stressed aspect of an employee's responsibility and all employees are regularly scheduled for safety training. The Safety Division creates an annual training calendar of required topics, and each department is encouraged to request additional relevant safety-related training. An important topic is heat illness training, due to the high seasonal temperatures experienced in the Coachella Valley (often exceeding 110° F).

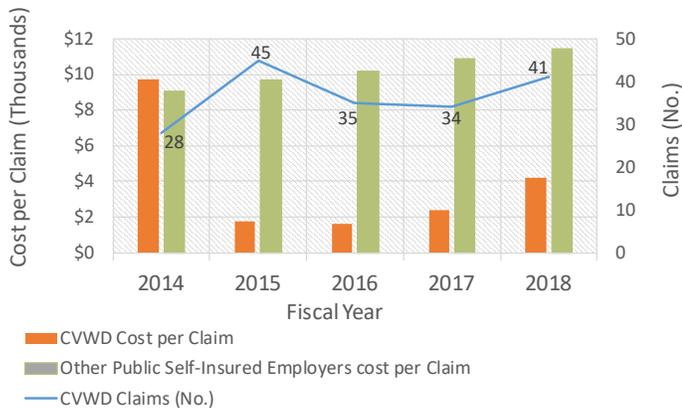
Monthly Safety Tailgate Meetings provide employees with other timely safety topics. All employees and supervisors are evaluated on their safety practices as part of their performance evaluation. The 2018 employee engagement survey indicated that 84% of respondents consider safety to be an important part of the business process.

Recognizing that good safety practices start with the supervisors, a key initiative that has been effective is the Supervisor Safety Boot Camp. All supervisors attend two full days of training related to the supervisors' role and responsibilities regarding safety for their crews, which includes discussion on local conditions, CVWD work tasks, regulatory requirements, and maintaining a culture of safety. Supervisors and employees also complete mandatory Job Hazard Analyses, which gives employees an opportunity to evaluate a task and identify potential hazards and reinforces the concept of safety as everyone's responsibility.

Recognizing that proper ergonomics are important and can be a safety-related issue, new employee workspaces are evaluated for proper ergonomic seating, and keyboard and monitor height. Existing workstations are periodically assessed and any necessary tools or equipment is purchased to correct ergonomic issues.

Workers' Compensation: The District has been self-insured under the California Department of Industrial Relations since July 1, 1992, which reduces the insurance costs associated with workers' compensation. In 2012, indemnity and medical expenses declined with the implementation of a 24/7 registered nurse triage hotline. At the time of an incident, employees can call and immediately speak with a registered nurse specializing in occupational injuries who can evaluate the injury to determine immediate medical needs. By addressing the case when it occurs, the program can provide quick and accurate care intervention, often preventing a minor injury from becoming an expensive claim. Further reducing the medical costs is a new policy that limits salary continuation to the 3-day waiting period for temporary total disability.

WORKERS' COMPENSATION CLAIM UNIT COST



4. OPERATIONAL OPTIMIZATION

CVWD’s operational optimization efforts include programmatic changes, adopting new technology, and improving data management. Careful monitoring has allowed the operations and maintenance costs to increase at a measured pace.

up from 81 to 83 on a scale of 100. Best management practices combined with water loss control measures have reduced non-revenue water to 10.9% from 11.8%. To ensure that the appropriate costs are billed and to reduce apparent losses, an independent auditor verifies meter reading and customer billing in accordance with the AWWA M36 manual. Apparent losses result from inefficiencies in measuring, recording, archiving and accounting operations used to track water volumes. The audit results will be used to address metering and billing inconsistencies and to develop internal policies and procedures to control the apparent losses.

CVWD also tracks Key Performance Indicators and Units of Production for operational tasks. Performance tracking using the Computerized Work Order Management System allows managers to measure completed work so that opportunities for improved use of available resources may be identified. The Operations Department publishes an annual summary of these trends.

DOMESTIC WATER ANNUAL OPERATING & MAINTENANCE (O & M) COST



Optimization Through Technology: Adoption of relevant innovative technology is critical in ensuring operational optimization. The Information Services (IS) department is an important part of this process and researches technologies to improve services. Since receiving the 2016 AMWA Gold Award, several Strategic Plan initiatives have been adopted to optimize operations. Examples of initiatives adopted since 2016 include:

Programmatic Changes in Operations: Two significant program changes were made since the District received the Association of Metropolitan Water Agencies (AMWA) Gold award in 2016:

1. CVWD joined the American Water Works Association (AWWA) Partnership for Clean Water, a wastewater treatment plant operational optimization program. The key process change made is including the use of a solids mass balance spreadsheet in daily operations. This spreadsheet tracks and provides guidance on optimizing the secondary effluent treatment process through controlling the solids volume in the activated sludge process, which maximizes solids removal from the treated water stream. Self-assessment reports for three of CVWD’s facilities have been submitted to AWWA for peer review.
2. Although CVWD has had a leak detection group and an understanding of the importance of non-revenue water for years, the recently adopted California Water Audit requirements have provided a framework to compare CVWD’s results against industry benchmarks. Comparing FY17 to FY18, the District’s Data Validity Score, as derived from a self-assessment of CVWD’s system, is

- New Mass Notification system to reach employees and customers quickly during emergencies and critical incidents.
- Plan to improve CVWD’s Wide Area Network (WAN) redundancy and increasing large data transfer speeds with the effective use of bandwidth, productivity, and response time.
- Supervisory Control and Data Acquisition (SCADA) Master Plan to replace CVWD’s SCADA legacy systems. The modern SCADA system provides additional security and more operational functionality.
- Use of additional computer models, including groundwater models to determine the water quality and elevation levels within CVWD’s groundwater basin. The model results will feed directly into decisions regarding pumping and treatment.
- Expanding the Geographic Information System (GIS) into areas of mobile field applications, desktop office applications, modeling, and aerial-based data capture and integration with the District’s mass notification system.
- Finding new opportunities to use drones, including mapping and monitoring incidents and active construction projects. Additional use of drones includes monitoring and tracking replenishment pond levels and silt levels.

Capital Improvement Plan (CIP) Software: Staff attended the AWWA Infrastructure Conference to learn how top performing agencies achieve high CIP execution rates and identified the need for a project management information system. Aurigo Masterworks, a comprehensive cloud-based project management system, was selected as the tool that can help to plan, build, and maintain capital assets, infrastructure, and facilities safely and efficiently. Aurigo Masterworks will integrate with CVWD's current financial system, which will allow the actual project costs to be captured and make budget comparisons, assisting in future project planning.

Data Management: Colorado River water is an important imported water supply for CVWD, and the uses are tracked monthly in the Canal Water Utilization Tracking report, which appears in the Board of Directors meeting packet. This report is in direct response to the FY17 Strategic Initiative "Develop Mechanisms for Fully Utilizing Imported Water Supplies." Tracking canal water use provides information on the different usages of Colorado River water, and how the actual use tracks with the planned use. As there are consequences to overusing or underusing this supply, this information helps to inform the staff and the Board of any changes needed in policy direction.

5. FINANCIAL VIABILITY

Water-related services provided by CVWD including Domestic Water, Sanitation, Nonpotable Water, Irrigation Water, Stormwater, and Groundwater Replenishment (reported as enterprise funds) operate similarly to separate businesses. Rates are structured to cover the cost of operations and maintenance of the facilities, capital improvements, and to ensure sufficient reserve targets. Rate setting is contingent upon a public process including mailers, official notices, and in-person workshops that allow customer input. Financial viability is dependent on a variety of factors, including proper rate setting, water affordability, maintaining capital assets, and fiscal security.

Cost of Service Studies: Cost of Services Studies (COSS) were completed in 2016 for Canal Water, Domestic Water, Sanitation, and Groundwater Replenishment funds. The COSS evaluated the cost of providing service to each customer class, determined revenue requirements of the fund, and presented rate recommendations for equitably collecting revenue based on the cost to provide service. The COSS included a five-year financial plan that culminated in a recommended five-year rate schedule. All COSS are publicly available on CVWD's website. In addition, domestic water rates are set as water-budget based rates with the first tier being the "lifeline" rate that ensures enough water for a family of four for indoor use at a reduced rate.

The District maintains reasonable rates through ongoing cost containment, pursuing grant funding and low interest loans for Capital Improvement Projects, prudent use of reserves,

maintaining adequate reserves, maintaining a minimum of 365 days of cash on hand, and managing Other Post-Employment Benefits and CalPERS costs.

Customer Payments: Effective strategies for collecting customer payments start by presenting bill information in an engaging and clear layout so that customers are more likely to pay on time. CVWD launched an improved online payment system offering convenient payment options including online account profiles and the ability to view bills, store credit card information, and set up automatic payments. Customers can make payments through a one-time payment portal, interactive voice response, customer service representatives, or pay-by-email or text. All payment options are fully Payment Card Industry compliant. Other features include automatic extensions built into the billing cycle, payment plan options, a customer assistance program, and the ability to appeal high bills.

Passed in 2018, California Senate Bill 998 requires that every human being has the right to safe, clean, affordable, and accessible water adequate for human consumption, cooking, and sanitary purposes. CVWD's Board of Directors and staff have taken a multi-pronged approach to assist customers in addressing water affordability to ensure domestic water bills remain low. According to a State Water Resources Control Board study, the average water bill for customers using 12 units (8,976 gallons) is \$60 per month. CVWD customers pay between \$19.80 and \$28.16 per month for 12 units, depending upon outdoor water use. Some of the ways that CVWD provides solutions to the affordability issue include:

- Establishing the Help to Others (H2O) program to assist customers who have difficulty paying their monthly bill. Because it is illegal in California to fund low-income customer bills from rate revenues, any financial assistance must be provided from non-rate revenues. The United Way administers the program. Advertised in a variety of media, all customer service staff are trained to refer customers in need based on average water bills referenced above. This assistance reduces eligible customers' annual water cost by 30% to 42%. In 2018, 274 customers received assistance from the H2O Program, a 385% increase from the prior year.
- Once leaks have been repaired, CVWD staff may grant payment extensions, offer payment plans, and provide billing adjustments caused by water leaks. In 2018, 1,720 billing adjustments were made, while encouraging customers to repair leaks in a timely manner and to be more conservative with their water use.
- CVWD has established partnerships with Riverside County departments and other social service agencies to refer vulnerable customers in need of assistance. Forms of assistance include leak repairs, contacting social service case managers for at-risk elders, and direct financial assistance.

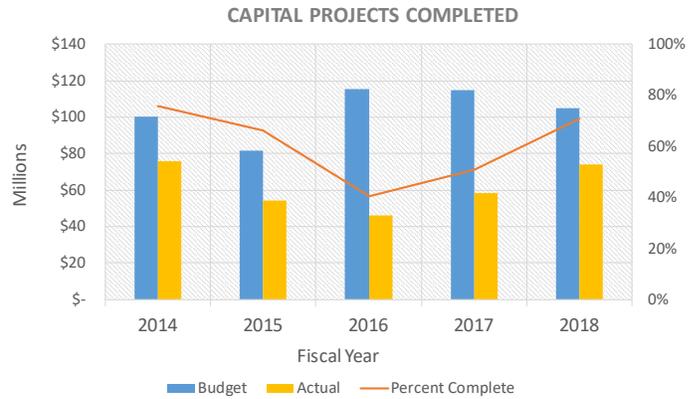
In early 2017, CVWD revised the delinquency process to reduce the cost of administering delinquent accounts and to ensure that costs are paid by customers who do not pay in a timely manner rather than sharing that cost across the entire customer base. CVWD improved communication by sending a bilingual pamphlet to all past due customers outlining billing processes, including ways to seek extensions, payment plans, H2O Program assistance, and how to appeal a bill. The funds generated by the delinquency fee offset the costs associated with the special handling of delinquent accounts help keep water rates lower for all customers.

Cost Allocation Plan and Fee Study: CVWD is currently engaged in a Cost Allocation Plan and Fee Study, with an expected completion date of June 2019. This study will ensure that overhead costs are appropriately charged to fees, grants, and customer projects. It will also ensure revenue recovery and diversification for the non-rate-related services that the District performs.

Fraud Risk Reduction: CVWD has engaged a consultant to perform an internal control risk analysis to ensure that risk from financial fraud, waste, and abuse is minimized. The results will identify areas of risk that can be addressed through process improvements. The assessment is reviewing entity-level controls (for the entire organization), as well as controls in the warehousing and accounting environments.

Budget and Capital Improvements: CVWD’s annual budget serves as a financial policy, planning, and communications document for the upcoming fiscal year and includes a five-year forecast and five-year CIP. The five-year forecasts take a forward look at CVWD’s revenues and expenses to identify financial trends, shortfalls, and issues. The assumptions used are specific to the revenue source, expense item, and fund. CVWD has received the Government Finance Officers Distinguished Budget Presentation award, as well as the Certificate of Achievement for Excellence in Financial Reporting, for the past six years. CVWD uses the budget document as a messaging tool to share priorities and direction with the public. It is available online or in hard copy by request.

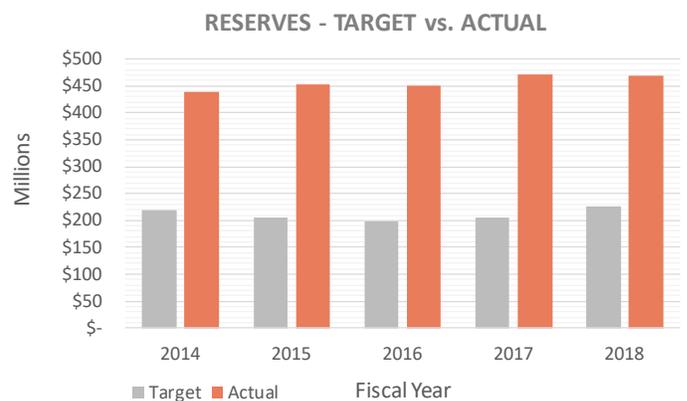
The five-year CIP amounts to over \$619 million, which is funded through grants, loans, restricted developer fees, and cash. CVWD developed the plan during public meetings, which allows customers and stakeholders to participate in the process. CVWD has not issued any public bonds, but is forecasting that bonding will be required in the near future. CVWD is working closely with the US Department of Agriculture, the US Bureau of Reclamation (USBR), the Federal Emergency Management Administration (FEMA), and the State Water Resources Control Board (SWRCB) to obtain grants for a variety of projects, including connecting DACs to CVWD’s drinking water and wastewater systems. In all, CVWD is pursuing over \$53 million in grants from these agencies.



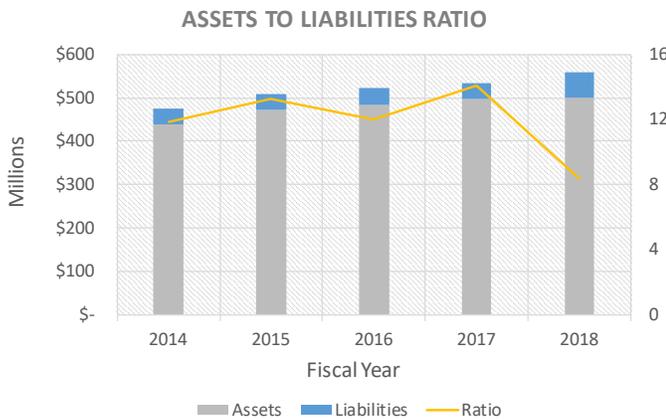
To minimize the impact of the CIP on customers’ rates, CVWD is also pursuing low interest loans from the Environmental Protection Agency’s Water Infrastructure and Innovation Act (WIFIA), SWRCB, and the California Infrastructure Bank. Total loans applied for are over \$134 million, and an additional \$75 million revolving line of credit will provide further financial flexibility.

Although CVWD does not yet have a bond rating, Fitch Ratings, Inc. provided a confidential rating on the District as a whole in March 2018. CVWD will be obtaining a bond rating from two rating agencies in mid-2019 as part of the WIFIA process. The District’s current debt service ratio is unavailable because it has no debt service.

Part of CVWD’s financial resilience is due to its strong reserve policy that mandates a minimum of 250 days’ cash on hand with a goal of maintaining over 365 days of cash for the entire organization. Currently, CVWD has approximately 470 days’ cash on hand, which is consistent with agencies that have attained a AA rating. In an emergency, CVWD has access to cash because of the strong reserve policy.



The public water industry standard for the Assets to Liabilities ratio is higher than 2.0. In CVWD’s case, a high ratio is desirable because a portion of CVWD’s income is based on tax revenue, which is received only twice a year. Having significant working capital allows large bills to be paid while waiting for the taxes to be collected.



6. INFRASTRUCTURE STRATEGY AND PERFORMANCE

Using a computerized work order module, CVWD began tracking planned versus reactive maintenance in FY15 to develop more reliable measurable performance metrics. Specifically, the Facilities and Maintenance Department tracks planned and corrective maintenance hours, and associated costs. Although several work tasks are reactive by nature, a high planned maintenance ratio helps reduce reactive maintenance, which may be more disruptive and costly. The ultimate goal of using the performance metrics is to extend the asset life, and may be accomplished through tracking the annual variances. Properly executed, this process should reduce unplanned downtime, decrease costs from unanticipated equipment failure, and identify and prioritize areas requiring improvement. The planned maintenance ratios have been steady in the past four years hovering around 40%, but are expected to increase once the Asset Management Program (AMP) and Computerized Maintenance Management System (CMMS) programs are fully operational.

Although 80% proactive maintenance and 20% reactive maintenance is the standard for water utility agencies, and many of CVWD’s divisions meet these standards (Facilities Maintenance, Canal, Electricians, Electronics, etc.), some divisions are inherently reactive in performing their maintenance activities (Irrigation Distribution, Welding, etc.) due to the variety of internal/external services that the Facilities and Maintenance Department provides. Also, the ratios are highly dependent upon the age of the various infrastructure systems, and their remaining lifecycle.

Preventative Maintenance Program: To advance the efforts on the AMP, the Facilities and Maintenance Department is updating and formalizing the Preventative Maintenance Program (PMP) to be consistent and aligned with the upcoming implementation of the CMMS.

The purpose of the scheduled (recurring) maintenance program is to provide a consistent and standardized basis to maintain key infrastructure and to maximize the life expectancy of assets in the most cost-effective manner. The PMP provides the framework and administrative record of the performance of the key equipment/systems, to maximize operational availability.

PRIMARY PMP COMPONENTS INCLUDE:

1. Key maintenance responsibilities for various equipment/facilities
2. System for prioritizing work requests
3. Comprehensive working procedures
4. Key performance goals and gap assessment criteria
5. Training program sorted by trade, equipment, and facility
6. Long-range planning outlook

Through this effort, CVWD has reduced the number of potable water main breaks. Industry best practices have been set by the AWWA Partnership for Safe Water Distribution Optimization Program at 15 leaks/100 miles and CVWD’s trends are below that value.

NUMBER OF BREAKS PER 100 MILES



2014	2015	2016	2017	2018
14	12	14	12	12

The Irrigation Distribution Division is responsible for the maintenance of 485 miles of the irrigation distribution system, a 70-year old gravity system owned by the USBR. Distribution ensures the system can reliably provide Colorado River water to 66,000 acres of agricultural production, golf courses, and approximately 36,000 acre-feet of aquifer recharge annually. Implementation of a proactive valve, meter, pipe replacement, and valve exercise program is required because of vulnerabilities created by outdated meters and valves, the lack of redundancy in the system, and the inability to shut down the system for maintenance (due to a lack of components that allow for partial system isolation). To ensure system reliability, an isolation valve installation program has been implemented and an on-call contractor has been engaged to deal with emergencies.

Asset Management Program: CVWD is implementing a comprehensive AMP that was identified as an important strategic initiative by the Board. The Asset Management System includes the NexGen CMMS software, and predicts and manages asset replacement, maintenance, cost, and financial planning, such that utilities can continue to operate at maximum output while incurring minimum costs. The first step in the AMP is to conduct a full evaluation of current assets. The CMMS algorithms will eventually allow the District to manage the short-term and long-term asset planning, and to budget and plan for the financial and personnel workload. The program began in 2017, and is estimated to take up to 5 years for full implementation. The AMP implementation steps include:

1. Development of Asset Management Master Plan – *Complete*
2. Procurement of CMMS – *Complete*

3. Completion of inventory of all CVWD assets – *In Process*
4. Development of Condition Assessments, Asset Valuation, and Remaining Life of all Assets – *In Process*
5. Asset Management Certificated Training – *In Development*

CVWD selected NEXGEN as its data storage and management software for all of its capital assets. The CMMS web-based software will capture GIS data, catalog asset infrastructure, track condition assessments, and can be mined or tailored to satisfy specific needs. The CMMS contains a decision matrix to evaluate and prioritize decaying assets, ultimately using the data to provide recommendations for strategic capital improvement replacements, including financial forecasting. The CMMS will also help to schedule and prioritize preventative maintenance, track work order activities, and include all labor, materials, and equipment. These costs are ultimately transferred back to the Enterprise Resource Planning (ERP)/Financial System for financial reconciliation.

CVWD is performing an inventory, condition assessment, valuation, and remaining life assessment of approximately \$1.5 billion of capital infrastructure assets. This information will be uploaded into the CMMS. The expected effective date for the full-scale CMMS implementation is mid-2020. As of March 2019, CVWD’s implementation team had inventoried more than 96,000 assets, which are categorized by vertical (above ground) and horizontal (below ground linear) as noted on the table below. CVWD is currently developing the valuation and remaining useful life of these assets while concurrently inventorying the remaining 25,000 assets, with an expected completion date of December 2019.

The AMP and CMMS are essential data management tools for future prioritization of capital needs, optimization of preventative/corrective maintenance, and ultimately, to extend asset life that will minimize operational costs thereby reducing costs that are passed on to CVWD customers.

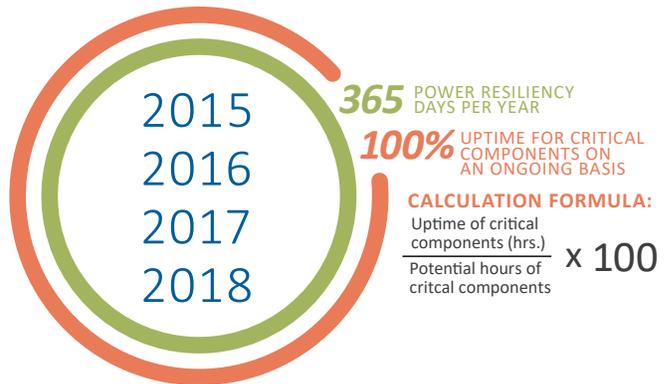
The scoring criteria for evaluating capital improvement projects includes the following categories: Reliability, Growth, Customer Service, Regulatory Compliance, Safety, Cost, and CVWD Objectives.

The Fleet Division utilizes the data collected in the existing fleet module within the ERP. Mined data determine optimal replacement cycles, identify underutilized vehicles and equipment and provide recommendations for capital replacements. Typically, fleet assets have an average 10-year replacement cycle; however, an analysis through the ERP shows that certain assets, including emergency equipment may have replacement cycles of less than 10 years.

Critical Operations: CVWD has defined Critical Operations as those facilities that require permanent generators as backup in the event of a power failure. CVWD infrastructure has a total of 106 permanent generators on critical sites, which are available 365 days a year. In addition, 20 mobile generators can be deployed to facilities deemed critical due to extenuating circumstances.

POWER & CRITICAL COMPONENT RESILIENCY

POWER RESILIENCY = Time backup power is available for critical operations (Required to meet 100% of min. daily demand)



ASSETS COLLECTED AS OF MARCH 2019						
Sanitation		Domestic Water		Stormwater & Ag Drainage	Fleet	Irrigation Distribution
Vertical	Horizontal	Vertical	Horizontal			
4,598	22,657	5,467	48,650	2,517	923	11,365

Capital Improvement Plan: CVWD schedules planning workshops to evaluate the existing 5-Year Capital Improvement Budget. The collaborative effort identifies key assets and their deficiencies, which when processed through a prioritization matrix are scored using key internal and external factors. This process is very similar to the risk and critical component of the future CMMS software. These prioritized replacements are compared to various Master Plans to ensure they match with long-term goals.

Critical Utility Components having major impacts to service levels have spare components in inventory for maintaining levels of service and operational availability of key systems.

One example of a project to improve power resiliency was completed in June 2019. In May 2018, CVWD solicited bids for a \$1.37 million project to ensure resiliency at our Coachella Operations building, a critical site and current location of the CVWD Control Room. CVWD launched

this project to relocate the power service, after a 400 kW generator, installed in 1990, failed during an outage, and installed the following new equipment:

- Transformer, meter, and main breaker were relocated away from CVWD's critical equipment.
- Custom switchgear was built to replace the 1971 gear.
- 750 kW standby generator was installed.
- The new system has the capability to accept portable generators. This project will protect the Coachella facility and improve power resiliency for CVWD's overall operations.

7. ENTERPRISE RESILIENCY

CVWD uses a multifaceted approach in maintaining enterprise resiliency and reducing operational risk. With standardized equipment and critical spare parts, the District maintains power generation capabilities at well sites, pumping plants, and treatment plants. CVWD addresses enterprise resilience primarily through infrastructure maintenance (see Section 6).

On May 14, 2019, CVWD's Board approved a Local Hazard Mitigation Plan that was reviewed by FEMA. This plan will set the groundwork for the Risk and Resilience Assessment required by the Water Infrastructure Act of 2018. The plan evaluates the probability of hazards to each part of the system including, but not limited to, pandemic, blackout/brownout, cyberattacks, terror attacks, and natural disasters. The plan discusses strategies to mitigate against these risks. By conducting this analysis and having it reviewed by the California Office of Emergency Services and FEMA, CVWD has a thorough understanding of potential risk of service interruption and the ability to mitigate that risk.

The District also maintains Emergency Response capabilities. Every employee goes through the FEMA National Incident Management System (NIMS) training. The District has just completed construction of a new Emergency Operations Center (EOC) in its new Critical Support Services building.

CVWD prepares for emergencies that would cause risk of service interruption to our ratepayers. CVWD maintains a detailed Emergency Response Plan, which is updated annually. The District participates extensively with external organizations, including emergency response coordination in Riverside and Imperial counties, participates as a member of the California Water and Wastewater Agency Response Network (has mutual aid agreements with all other member agencies), and is a member of the California Utility Emergency Association, which establishes emergency response relationships with utilities outside the water industry. CVWD staff conducts frequent training on the Emergency Response Plan and inside the EOC.

8. COMMUNITY SUSTAINABILITY

Ensuring that the community has a reliable and sustainable water supply is paramount to ensuring Community Sustainability (see Section 9). In addition, CVWD works on other conservation and community improvement programs such as DAC infrastructure improvement, energy conservation programs, and watershed protection.

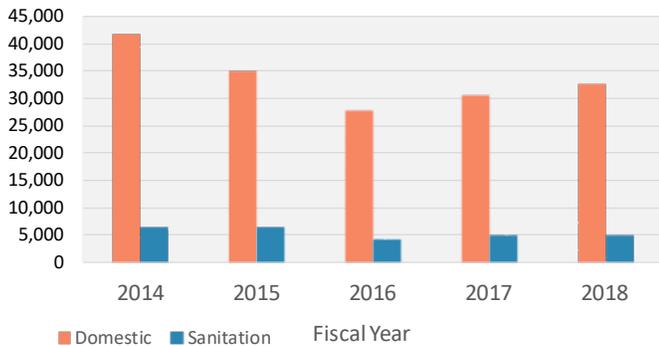
Disadvantaged Communities: The CVWD Board initiated the Disadvantaged Communities Infrastructure Task Force, which is a group of community leaders and stakeholders from various backgrounds with a common goal of identifying opportunities to work together to bring domestic water and sewer infrastructure projects to DACs. Because revenues collected from current ratepayers cannot be used to fund these projects, it is important to identify other funding sources, including grants and low-interest loans. This group updates other agencies or entities about current projects. CVWD provides information on where planned water or sewer infrastructure projects are to be located, giving other agencies/entities the opportunity to participate in the project. The CVWD Engineering Department leads monthly meetings and manages CVWD-related projects with support from the Finance Department for grant/loan applications.

Energy Conservation: CVWD continually reviews energy use through several strategies associated with operational optimization. Electrical power billing, processed through Cost Control Associates, oversees all the power bills, setting upper and lower limits to highlight unwarranted electrical waste or inefficiencies. In addition, CVWD meets with local electrical utilities annually to optimize the current Time of Use tariffs and, based on the previous year's consumption, determine if a change in tariffs will benefit CVWD. CVWD is always identifying opportunities to improve electric motors' efficiency. When available, CVWD will pursue available incentives from the power utilities to upgrade any low-efficiency equipment and improve the overall system.

In 2017, CVWD collaborated with stakeholders to conduct energy audits, which resulted in Energy-Efficient Measures (EEMs) and project opportunities for CVWD to consider. A list of EEMs was prioritized. Project feasibility studies were developed leading to several projects being implemented that optimize treatment processes and energy efficiency.

CVWD implemented an Energy Management System (EMS) that allows remote monitoring and controlling of numerous building systems simultaneously. The EMS provides increased energy efficiencies by reducing electrical consumption by as much as 5% annually through optimization. The EMS optimizes Heating, Ventilation and Air Conditioning (HVAC) system controls and offers an open protocol for integration with other building systems, including lighting, security/access control, fire, and life safety. See chart on following page for kWh Used Per Million Gallons Treated or Delivered.

KWh USED PER MILLION GALLONS TREATED OR DELIVERED



All CVWD campuses and the largest Wastewater Reclamation Plant (WRP 10) have EMS. The Board recently approved the final phase of EMS implementation, which will occur over the next two fiscal cycles. The improvements include replacing the HVAC, as well as the Direct Digital Control (DDC) controllers and modules. Top EEMs projects implemented to date include:

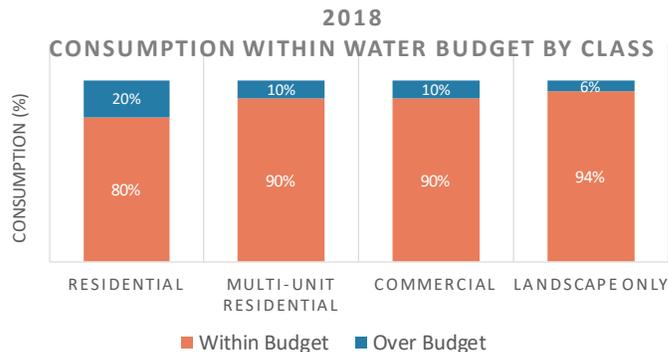
1. The Return Activated Sludge/Waste Activated Sludge with Enhanced Controls (RAS/WAS Optimization Project) helped optimize the plant’s sludge retention time. This project has an estimated energy savings of 216,538 kWh/yr (\$23,819/yr).
2. The WRP 10 Lighting Optimization Project upgrades 296 High Intensity Discharge lights with energy efficient LED lights. CVWD can reduce electricity use by 177,978 kWh/yr, with annual electricity and maintenance cost savings of \$21,889.
3. The Aeration Sensor Upgrade Project utilizes a Real Time Control for Nitrification to control aeration demand through instrumentation. With an energy savings of 325,609 kWh/yr, the estimated reduction in operational costs is \$40,983 (primarily through energy savings).

Watershed Protection: Watershed and groundwater protection includes working with landowners to properly seal or destroy abandoned wells and to review and comment on developments and general plans. An active Source Control Program and MS4 Stormwater program help keep pollutants from percolating into the groundwater basin. The District also fences and enforces no trespassing on CVWD and conservation lands. Assistance with septic system abandonment and subsequent sewer system connection is available as well as help to fund well and septic system repairs when septic abandonment is not an option.

9. WATER RESOURCE SUSTAINABILITY

CVWD’s water supply portfolio includes groundwater, imported water and recycled water. All of CVWD’s potable water is supplied from groundwater wells. That groundwater naturally recharges through percolation of surface flows/precipitation and artificially with Colorado River water percolating in replenishment facilities.

Water Efficiency Index: CVWD’s water efficiency index is based on the water budget-based tiered rate program. Each domestic water customer is assigned a personalized monthly water budget, which is an efficiency target based on their property and use type. Customers meeting their budgets will also meet their efficiency index, and are rewarded with lower rates. Those who exceed their budgets also exceed their efficiency index. CVWD’s goal is for all customers to meet their water budget, and CVWD has a number of efficiency programs to assist in achieving this goal. CVWD has a Water Management staff of 16 people who implement water use efficiency projects and programs for domestic water, golf course, and agricultural water customers.



With the completion of “Making Water Conservation a California Way of Life” and the passage of California Senate Bill 606 and Assembly Bill 1668, water districts such as CVWD will be required to meet new efficiency targets. CVWD is highly involved in developing those targets and will continue serving as a member of the State’s Urban Advisory Group.

Recycled Water Program: Two of the five wastewater treatment facilities operated by CVWD treat wastewater to a tertiary level, which is used for golf course and other green space irrigation. This water is also blended with Colorado River water during the hot summer months when demand exceeds supply. Since the primary source of water in the valley is groundwater, courses using a source of water other than groundwater is beneficial to groundwater sustainability. A total of 17.5 courses within CVWD boundaries use a nonpotable blend of recycled water and Colorado River water for irrigation. An additional 36 courses within CVWD boundaries use solely Colorado River water imported via the Coachella Canal or the Mid-Valley Pipeline. In 2018, 41,725 acre-feet of nonpotable water was used for irrigation, making a like amount of water available for drinking and other potable purposes.

Imported Water Supply: State Water Project (SWP) water, is intended solely for replenishment and has an annual cost to CVWD of up to \$65 million. This water is exchanged with the Metropolitan Water District of Southern California (MWD) for an equal amount of Colorado River water delivered through MWD’s Colorado River Aqueduct system. The water is diverted into the Whitewater River where it joins natural flows from the Whitewater River to CVWD replenishment ponds.

Colorado River water from the Coachella branch of the All American Canal is delivered principally to farms for irrigation. It is also used for golf course irrigation where the course is close enough to access the canal directly, and for groundwater replenishment. Other nonpotable users can access Colorado River water via the Mid-Valley Pipeline that takes water from the canal in Indio and conveys it nearly seven miles to Palm Desert where it is blended with recycled water to supplement when demand exceeds supply.

Sites Reservoir Project: The Sites Reservoir project will store water in wet years for use in dry years. This will increase SWP yield and reliability. SWP contractors, including CVWD, have entered the planning and permitting phase of the Sites Reservoir project. If built, the project is estimated to have a price tag of over \$6 billion (\$2019).

Delta Conveyance Project: This is a multi-year project to increase the reliability for imported water from northern California through the California Aqueduct (SWP), where it acts as a primary source of water for 29 contractors. The Delta Conveyance Project recently replaced the California WaterFix Project, which was originally envisioned to be comprised of two tunnels (40 ft diameter, 35 miles long) with an estimated cost of \$16.7 billion (\$2018), that would convey water underneath the environmentally-sensitive Sacramento-San Joaquin Delta. This project was recently revised to comprise of a single-tunnel, and the details are currently being negotiated throughout 2019. Once the project is complete, it is expected that the long-term reliability of the State Water Project will increase from less than 50% to over 60%. The project has other benefits, including adaptation to climate change and mitigating the risks from earthquakes.

Planning: The Coachella Valley Water Management Plan (CVWMP), adopted by CVWD's Board of Directors in 2002 and updated in 2010, guides decision making for the District. The goal is to eliminate groundwater overdraft while meeting current and future water demands through a portfolio of strategies. The CVWMP includes five major elements to achieve these goals:

- Water conservation (urban, golf course, and agricultural)
- Substitution of imported surface water supplies and recycled water for urban, agricultural, and golf course uses in lieu of pumping groundwater
- Continued groundwater recharge with imported surface water
- Increasing surface water supplies
- Monitoring groundwater production, levels, water quality and land subsidence

The Mission Creek and Garnet Hill Water Management Plan (MC/GHWMP), was developed to address overdraft in the Mission Creek Subbasin and provide a dependable long-term water supply.

In 2014, California passed the Sustainable Groundwater Management Act (SGMA) to ensure the long-term viability of groundwater basins. CVWD has submitted the CVWMP and MC/GHWMP as functional equivalent Alternatives to Groundwater Sustainability Plans (GSPs) in collaboration with the other local water agencies in these subbasins. In accordance with SGMA, annual reports submitted will track progress towards achieving CVWMP's and MC/GHWMP goals. Both plans will be evaluated every five years and updated to respond to changing conditions while continuing to meet objectives. CVWD collaborates with the other local water agencies to implement the plans and ensure that the goal of sustainably managing these subbasins is achieved.

Additional long-term plans, regional collaboration and programs support integrated planning, including these efforts:

- CVWD prepares an Urban Water Management Plan (UWMP) every five years, as required by California Water Code. The intent of the UWMP is to support long-term resource planning to ensure that adequate water supplies are available to meet existing and future urban water needs.
- The Coachella Valley Regional Water Management Group (CVRWVG), composed of all five local water and sanitation agencies, developed the Coachella Valley Regional Water Management Plan (CVRWMP). This plan positions the region's eligibility for planning and implementation grant opportunities to fund water, wastewater, stormwater, and DACs projects.
- CVWD is part of the Coachella Valley Multiple Species Habitat Conservation Plan (CVMSHCP) that provides a regional vision for balanced growth that will help conserve the Coachella Valley's natural heritage while also building a strong economy that is vital to our future. The plan protects 240,000 acres of open space and 27 species, enhances infrastructure without environmental conflicts, offers opportunities for recreation, tourism and job creation, and ensures the survival of endangered species.

Collaboration to Improve Water Supply Reliability: CVWD collaborates with other local water and wastewater agencies in water resources planning and implementation efforts. The CVWMP and MC/GHWMP were submitted collaboratively with other local water agencies as GSPs required under SGMA. The agencies meet regularly, collaborate on Annual Reports, and will work together on future updates to the CVWMP and MC/GHWMP. CVWD also participates in the Integrated Resources Water Management (IRWM) planning process, along with other local water and wastewater agencies that make up the CVRWVG. The IRWM planning facilitates a collaborative, multi-stakeholder approach to ensure that the region's water issues are addressed and understood. IRWM planning enables the region to prioritize water, wastewater, stormwater, and DAC projects to apply for State grants that will fund these projects.

Community partners participate in all of CVWD’s planning efforts through the stakeholder process. For example, the CVRWGMG convenes a planning partners group to provide input anytime there is a plan update or selection of projects for available grant funding. The Golf and Water Task Force and Agricultural Water Advisory Group have standing meetings in which they are presented with updates and can provide input. The Joint Water Policy Advisory Committee, composed of public and private stakeholders with interest in water supply and replenishment assessments in the eastern Coachella Valley, meets annually to provide input during the preparation of Engineer’s Report on Water Supply and Replenishment Assessment presented to the CVWD Board. The CVWD DAC Infrastructure Committee, which works collaboratively with community members and stakeholders, meets monthly to promote communication about on-going projects, strategic initiatives, and planning efforts.

10. STAKEHOLDER UNDERSTANDING AND SUPPORT

CVWD’s Board solicits public comments during every board meeting and accepts written comments at all times. As projects are initiated, various departments work with the Communications and Conservation Department to schedule in-person workshops, create special project websites and to develop contact lists for impacted stakeholders. The departments work in collaboration to keep stakeholders informed and solicit their input.

CVWD provides information to customers impacted by construction work to ensure that they experience as minimal inconvenience as possible. CVWD also ensures that the messaging includes language to remind customers of the importance of the project in the overall mission to provide safe, reliable water and water-related services to all customers.

CVWD has an Outreach and Education division with 10 professionals including two certified teachers. This division focuses on informing and educating stakeholders through a variety of methods including workshops, tours, presentations, events, newsletters, social media, website, press releases and classroom visits. The District also creates and operates an annual outreach campaign aimed at educating customers through paid media.

The following table shows the number of public tours conducted, outreach events worked by CVWD employees, informational public presentations, and stakeholder meetings.

Public Outreach					
Fiscal Year	Tours	Events	Presentations	Stakeholder Meetings	Students Reached*
2014	18	32	19	0	15,744
2015	17	22	31	13	16,493
2016	19	12	2	19	16,963
2017	36	18	13	32	7,816
2018	44	36	14	25	7,407

**In 2017, CVWD educators agreed to not provide educational services within the Indio Water Authority service area, which significantly reduced the student count.*

CVWD conducted a public opinion survey in 2018. Survey results helped to create a new outreach campaign aimed at helping customers understand the services that CVWD provides, the type of highly qualified personnel working behind the scenes for these services and the District’s involvement in the community. The campaign includes billboards, television commercials, print ads, radio ads, and more. CVWD will complete a follow-up survey in 2020 to measure the success of the campaign.