



**Dublin San Ramon
Services District**

Water, wastewater, recycled water

7051 Dublin Blvd. | Dublin, CA 94568



2018
POLLUTION
PREVENTION
REPORT

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Introduction

This report on the Dublin San Ramon Services District Pollution Prevention Program from January 1 through December 31, 2018, is prepared in accordance with the requirements of National Pollutant Discharge Elimination System (NPDES) Order R2-2017-0017, NPDES Permit CA0037613.

DSRSD Background and Service Area

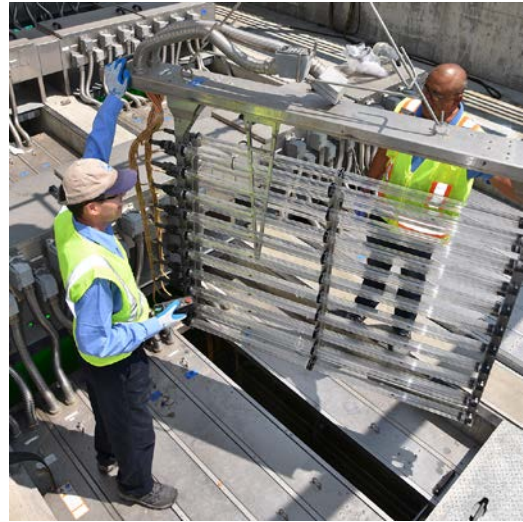
Founded in 1953, Dublin San Ramon Services District (DSRSD, District) serves 178,000 people, providing potable and recycled water service to the City of Dublin and the Dougherty Valley area of the City of San Ramon, wastewater collection and treatment to Dublin and south San Ramon, and recycled water supplier and wastewater treatment to the City of Pleasanton (by contractual agreement). Its distribution and collection network includes 319 miles of potable water pipe, 68 miles of recycled water pipe, and 207 miles of collection system, along with 14 potable water reservoirs, 17 potable water pump stations, 4 recycled water reservoirs, 5 recycled water pump stations, and 2 wastewater lift stations. DSRSD pumps effluent to San Francisco Bay through pipelines operated by the Livermore Amador Valley Water Management Agency (LAVWMA) into the East Bay Dischargers Authority (EBDA) for disposal.

Treatment Plants and Processes



DSRSD's Regional Wastewater Treatment Facility is located in Pleasanton and treats domestic, commercial, and industrial wastewater. Pictured here, the lower left biosolids digester was completed in 2018.

The wastewater treatment plant discharges under National Pollutant Discharge Elimination System (NPDES) Order No. R2-2017-0017 effective July 1, 2017. With a permitted capacity of 20.2 million gallons per day (MGD) (which consists of 17.0 MGD domestic wastewater plus 3.2 MGD of Zone 7 brine), the plant currently treats approximately 10.6 MGD of wastewater utilizing an activated sludge process, sedimentation, and hypochlorite disinfection. An adjacent water recycling plant applies advanced tertiary treatment to up to 12.7 MGD of secondary effluent, using sand filtration. Currently, the sand filtration system is in the process of being expanded to a capacity of 16.2 MGD, which is due for completion in June 2019. Additionally, there is a microfiltration treatment system that has the treatment capacity of 2.5 MGD. Following advanced tertiary treatment, it receives ultraviolet disinfection.



Senior Wastewater Treatment Plant Operator III Stephan Kozanda and Process Lead Wastewater Treatment Plant Operator V Virgil Sevilla inspect one of the new banks of UV lights that are part of the latest recycled water plant expansion.



Pollutants of Concern and Their Sources

A pollutant of concern (POC) is defined as a substance that exceeds the applicable water quality objectives from the California Toxic Rule (CTR), NPDES permit limits, or the water quality criteria established in the Regional Water Quality Control Board (RWQCB) Basin Plan. The District identifies pollutants of concern:

- When they are designated as such by the RWQCB in the District's NPDES permit; or
- When applicable pollutants are addressed by the Bay Area Pollution Prevention Group (BAPPG) through Bay Area Clean Water Agencies (BACWA).
- By reviewing monitoring data from DSRSD and EBDA influent, effluent, biosolids, and industrial discharges;

DSRSD has had a Pollution Prevention Program since 1995. During the current reporting period, District staff worked to monitor and reduce four pollutants of concern: mercury, copper, fats/oils/grease (FOG), and pharmaceuticals. The District performed evaluations for cyanide and polychlorinated biphenyls (PCBs) and has determined control programs are not necessary.

In addition, the District actively participates in several regional collaborations that address pollution minimization, such as with the BAPPG. Priorities and accomplishments are outlined in Chapter 4, Table 5.

The District has identified these sources for the above referenced POCs and the other pollutants:

- Mercury – dentists (amalgam waste) and the general public (thermometers, light bulbs, mercury containing products)
- Copper – vehicle service facilities, and pool/spa maintenance
- Fats/Oils/Grease (FOG) – kitchen waste from restaurants and residences
- Pharmaceuticals – improper disposal by the general public and human consumption
- Cyanide – industrial users
- PCBs – industrial users
- Triclosan – residences
- Trash and wipes – residences



Tasks to Minimize Pollutants

Pretreatment and Waste Minimization Audits for Industrial Users

Environmental Compliance inspectors continue to look for ways to expand and enhance the District's Pretreatment Program to reduce pollutants discharged into the sanitary sewer system. The Pretreatment Program currently has 30 permitted industrial and commercial users. During annual inspections, District staff evaluates the users' practices for cleaning, storing material and waste, and cleaning up secondary containment, as well as their efforts for minimizing waste. Detailed information is available in the District's Pretreatment Program Annual Report.

Mercury Control

Dental Amalgam Waste

Mercury continues to be a pollutant of concern for the District since the San Francisco Bay is impaired by mercury. The RWQCB adopted a Total Maximum Daily Load (TMDL) for mercury in 2006. The regional watershed permit, Order No. R2-2017-0041, requires San Francisco Bay municipal wastewater dischargers to implement and maintain programs that reduce discharges of mercury amalgam waste from dental practices.

Developed in accordance with permit requirements and current American Dental Association guidelines, District Code, Chapter 5.20, wastewater discharge and pretreatment regulations require dental offices that generate mercury amalgam waste to implement Best Management Practices (BMPs) and install amalgam separators approved by the International Standards Organization (ISO).

On July 14, 2017, EPA's Final Dental Rule 40 CFR Part 411 became effective. The Final Rule is technology-based pretreatment standards under the Clean Water Act to reduce mercury discharges from dental offices. The Final Rule requires dental offices to use amalgam separators, implement two best management practices and submit a one-time compliance report to the District. Existing dental dischargers are to achieve compliance with this rule by July 14, 2020. New dental dischargers are to be in compliance immediately and submit the one-time compliance report within 90 days after the first discharge to the publicly owned treatment works (POTW).

To assist dental offices in achieving compliance with the EPA's Dental Rule, permitted dental offices were asked to submit a one-time compliance report to the District in lieu of the required annual self-monitoring report. To date, 72 dental offices have submitted the one-time compliance report, verifying the installation of an approved amalgam separator and implementation of the best management practices.

The Mercury Source Control Program activities for CY 2018 include:

- Permit qualifying dental practices (currently 91)
- Received documentation that 100 percent of the permitted dental practices have instituted BMPs for managing mercury amalgam waste
- Received documentation that 100 percent of the permitted dental practices have installed amalgam separators
- Received EPA's one-time compliance reports from 72 dental offices
- Maintains an up-to-date database of dental facilities and tracks program results

During the next 12-month period, the program plans to:

- Implement EPA's Dental Final Rule requirements
- Maintain an up-to-date list of dental practices ensuring all have submitted EPA's one-time compliance report, installed approved amalgam separators, and implemented BMP's.
- Reissue permits to existing dental practices
- Perform inspections as needed to ensure compliance with permit requirements

Collection and Recycling

The District educates the public about problems associated with mercury on an ongoing basis by collecting and recycling mercury-containing products such as thermometers, light bulbs, and thermostats. This program is explained further in Chapter 3, Public Outreach.

Copper Control

Local limits for copper have been exceeded in the District's service area. Ten percent of the samples collected from industrial users in calendar years 2016-2018 tested above the local limit of 1.0 mg/L for copper. Seven industrial users exceeded the local and/or categorical limits for copper: A-1 Enterprises (portable toilet waste), A-1 Septic (septic waste), Hanson and Fitch (portable toilet waste), Thermo Fisher Scientific (DNA and biology product services), Thoratec (plastic molding and forming; laser etch rinse), Trinity Liquid Waste (septic waste), and Valent (testing laboratories.) The violation for A-1 Enterprises occurred during May 2017. Violations for A-1 Septic occurred during September and October 2018. The violation for Hanson and Fitch occurred during November 2018. The violation for Thermo Fisher Scientific occurred during October 2018. Violations for Trinity Liquid Waste occurred during July, August, and October 2018. Violations for Trinity Liquid Waste occurred during July and August 2018. Violations for

Valent occurred during October 2016 and March 2017. Notice of violations for the exceedances were issued and an enforcement hearing occurred for one of the industrial users.

To ensure that our copper concentrations remain well below the maximum allowable limits, the District will continue inspections, sampling, and outreach efforts as outlined below. See also Chapter 4, Table 2.

- Businesses that wash vehicles as part of their work must install wash pads equipped with solids removal devices (sand/oil interceptor), which are routinely inspected.
- Vehicle service facilities with sewer connections inside service bays are included in the vehicle inspection program.
- Residential and commercial customers are allowed to discharge pool and spa wastewater to the sanitary sewer system to avoid discharge to the storm drain system. The District's website provides information for residential and commercial customers regarding proper pool and spa maintenance to minimize the amount of copper-based algaecides discharged to the sewer system.
- Mandatory installation of dental amalgam separators will also contribute to copper control, since amalgam waste does contain some copper.
- The District continues to support BAPPG's copper pipe corrosion and pool and spa maintenance outreach efforts.

Fats/Oils/Grease (FOG) Control

The District has had a grease reduction program for more than 23 years. Currently, 130 food service establishments participate in this program. Most restaurant grease traps and grease interceptors are inspected annually to ensure that equipment is functioning as designed and being serviced at proper intervals.

During 2018, the District conducted 210 grease trap and interceptor inspections.

For more information on inspection results, refer to Chapter 4, Tables 3 and 4. Public outreach on FOG is discussed further in Chapter 3, *Adult Education*.



This new receiving station (shiny metal tank) will accept fats, oils, and greases (FOG) from area restaurants that will be brought in and pumped into the anaerobic digesters. The FOG will be converted to methane gas that will be used to generate electrical energy. The District's goal is for this process to supply 15 to 30 percent of the treatment plant's electrical needs in the future.

Pharmaceutical Collection

A permanent pharmaceutical collection center opened within the City of Pleasanton Police Department in 2014. The collection center is a partnership between the City of Pleasanton and DSRSD. The police department houses and supervises the collection center and DSRSD handles the costs associated with collection and disposal. The center is open 24 hours a day, seven days a week. Between January and April 20, 2017, 875 lbs. of unwanted pharmaceuticals have been collected at this center.

In May 2017, the collection center became part of the Alameda Med (Medication, Education and Disposal) Project. The Med Project is a public non-profit entity that provides pharmaceutical collection kiosks throughout Alameda County. The Med Project handles costs associated with collection of unwanted pharmaceuticals. The Pleasanton Police Department continues to house and supervise the collection kiosk.

The City of Dublin opened a permanent pharmaceutical collection site within the Dublin Police Services lobby on November 20, 2017. The collection site is accessible to the public Monday through Friday, 8:00 a.m. to 5:00 p.m. This is a free service open to the public.

The District's website promotes both collection sites, and other local drug collection sites and events, along with the regional BAPPG website, www.Baywise.org, and the Med-Project website, <https://med-project.org>, which lists collection pharmaceutical kiosks and events throughout the Bay Area.

Cyanide Control

The District has submitted to the RWQCB an inventory of potential contributors of cyanide to the Regional Wastewater Treatment Facility and determined there are no potential contributors of cyanide to the treatment plant. Cyanide levels were low and not considered to be significant in Significant Industrial User (SIU) discharges, treatment plant influent, and final effluent, as explained below.

During the reporting year, 46 compliance samples were collected from industrial users and analyzed for cyanide. All the samples were below the local limit of 0.50 mg/l and 28 of the 46 were below the detection limit of 3.2 ug/l. The highest influent result above the detection limit was 10.9 ug/L. All of the plant's effluent cyanide concentration levels for CY 2018 were less than the detection limit of 3.2 ug/L. Based on all the data, the District concludes it is not necessary to implement a Cyanide Control Program at this time.



A 24/7 drug drop box is available to the public in the Pleasanton Police Department's lobby.

PCBs Control

NPDES Permit, Order R2-2017-0041, requires the District to evaluate controllable sources of polychlorinated biphenyls (PCBs) to the treatment plant. PCBs have been found in older building sealants, but it is highly unlikely PCBs would be discharged to the sanitary sewer system during building remodeling or demolition. Sealants are solid and would be physically removed with other debris during remodeling, with little chance of being washed into the sanitary sewer. Furthermore, the District requires sanitary sewer systems to be disconnected during building demolition. The District has reviewed sampling data from industrial and commercial users within its service area and determined that there are no potential contributors of PCBs to the treatment plant.

Triclosan

The Bay Area Pollution Prevention Group (BAPPG) has been targeting Triclosan for many years. Triclosan is an antibacterial and antifungal agent, found in many consumer products, that has been linked to a range of adverse health and environmental effects. BAPPG members performed outreach that educates the public about Triclosan, its harmful effects, and which consumer products contain it.

In September 2016, the U.S. Food and Drug Administration [banned](#) Triclosan from many consumer products because manufacturers did not demonstrate that it is more effective than plain soap and water in preventing illness.

The District office is certified as an Alameda County Green Business and as part of the program the District discourages the use of products that contain Triclosan.





Truck magnets

Trash and Wipes

Toilets should not be used as trash cans. Non-woven wipes and other non-flushable items such as hair, Q-tips, and all hygiene products claiming to be biodegradable or flushable should not be discarded into the toilet. These items are known to cause problems with POTW's pump station equipment, grinders, and other infrastructure, as well as sanitary sewer clogs and overflows. BAPPG group members continuously perform public outreach on this topic; DSRSD's outreach efforts are described in the public outreach section of this report.



Outreach Programs

Public Outreach

The District uses public outreach programs to directly reduce sources of mercury and pharmaceuticals, encourage proper disposal of wastewater pollutants, and educate adults and school children about the ways wastewater and stormwater become polluted and what they can do to prevent it. The District website contains all forms, program descriptions, staff contacts, and resources for Pretreatment and Pollution Prevention Program participants. The District collaborates with other wastewater agencies to provide pathways to careers related to pollution prevention, prevent pollution of our waterways more efficiently and effectively, and advocate for legislation, regulations, and new technologies that reduce and prevent pollution.

Waste Mercury Collection and Recycling

Through its website, the District encourages the public and employees to properly dispose of batteries and other products that contain mercury. Anyone can drop off such products at the District Office or wastewater treatment plant for recycling or find other locations on the Bay Area Pollution Prevention Group (BAPPG) website, www.Baywise.org.

Waste Pharmaceuticals Collection

Throughout the year, the District uses its website and customer bill inserts to promote ways for residents to properly dispose of waste pharmaceuticals. These include permanent drop boxes operated by police departments in the cities of Pleasanton, San Ramon, and Dublin (newly opened in 2017), as well as regional collection sites.

In winter and spring, a water bill insert was sent to all District customers promoting pharmaceutical take-back events conducted by Dublin Police Services on the 2018 National Drug Take-Back Day in April. A bill message was included in the fall for the Dublin Police Services pharmaceutical take-

DSRSD
@DSRSDnews

Never flush medications of any form -- wastewater treatment cannot completely remove drugs, and traces can end up in the Bay. @DublinPIO and @DublinCAPolice are offering a proper disposal option on Oct. 27 at Dublin Civic Center. #PollutionPrevention

DUBLIN POLICE SERVICES
PRESENTS
DRUG TAKE-BACK, SHREDDING & E-WASTE RECYCLING EVENT
Saturday, October 27, 2018 • 10:00 a.m. to 2:00 p.m.
100 Civic Plaza, Dublin, CA 94568

<p>Bring unwanted or expired medications for safe disposal. No questions asked!</p> <p>Acceptable: capsules, pills, any solid forms of prescription medication</p> <p>Not Acceptable: syringes, liquids, creams, injectables</p>	<p>City of Dublin residents are encouraged to bring any type of documents containing personal or sensitive information to be professionally shredded on site. (Maximum of 4 boxes)</p>	<p>Safely recycle your old electronics including computers, printers, smart phones, TVs, DVD players, VCRs, batteries, old gaming systems, and more.</p> <p>Visit https://www.ca2recycle.ca.gov to learn more.</p>
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4:12 PM - 1 Oct 2018

7 Retweets 11 Likes

back event in October, and the event was also promoted on DSRSD's Nextdoor and Twitter social media accounts.

Website Targets So-Called Flushables, FOG

The District promotes proper disposal of so-called "flushable" products, as well as fats, oil, and grease (FOG), on its web pages, [What Not To Flush](#) and [FOG Clogs Pipes](#). Videos demonstrate the problems with flushing wipes and a link to www.Baywise.org provides a searchable directory of FOG collection centers. In January and February, the District sent bill inserts to water customers to attract residents to these pages.

DRUGS SHOULD NEVER GO DOWN THE DRAIN



Please do not flush expired or unwanted medications. Wastewater treatment does not completely remove drugs, so traces end up in the San Francisco Bay and harm aquatic life. Instead, use the free drop-off sites listed on the back. Learn more at www.dsrdsd.com/WhatNotToFlush

Education Efforts for Adults

District staff typically provide quarterly tours of the Regional Wastewater Treatment Facility. During 2018, there were two major construction projects (a fourth digester and expansion of the water recycling plant) that made it unsafe for public tours, so they were put on hiatus. Regular quarterly tours picked up again on October 17, with 11 people in attendance. Tours are conducted by Operations staff and emphasize how individuals and businesses can prevent pollution through proper disposal of hazardous waste and grease. Quarterly public tours are promoted through customer bills, the District website, news releases picked up by local media, and through DSRSD's social media (Nextdoor, Twitter, and Facebook).

District management hosts an annual Neighborhood Meeting to promote constructive dialog with residents living near the wastewater treatment plant. On October 23, 2018, four people attended and learned about the District's capital improvement projects on site as well as odor control methods.

The District increased its social media outreach in 2018, and included multiple posts about "flushable" wipes and other items that clog pipes.

Education Programs for Children

In 2018, Zone 7, DSRSD visited 238 classrooms in the District's service area, reaching approximately 6,259 students. Zone 7's Grade 2 lesson, *Creek and Stream Environments*, teaches how water from storm drains and pollution from residential areas ends up in creeks and how students can prevent such pollution. In a middle school lesson, *The Wonder Down Under*, students learn how our groundwater and surface water systems are connected, pollutants common to our valley, and effects of urban development on our watershed. The *Choices and Change* curriculum for high school freshmen discusses pollutants, including plastic bag bans and where plastic bottles end up, plus encouraging youth to make informed choices regarding water, trash, and recycling. The Advanced Placement curriculum focuses on water abundance and scarcity, including economic and physical scarcity, water uses, and water rights in California.

The District's website offers free lesson plans for grades K-6. Grade 3, *The Amazing Watershed*, teaches pollution prevention and watershed protection. Grade 5, *Every Drop Counts*, reveals how little potable water we have on the earth and the need to recycle and protect water. Grade 6, *Sum of the Parts*, demonstrates the cumulative effects of pollution and the best management practices that protect the Earth's resources.



Todd Millison, Senior Wastewater Treatment Plant Operator III, explains the bar screens to a student tour group at the Regional Wastewater Treatment Facility.

The District organized the regional *Excellence in Water Research Awards* for the 2018 Contra Costa County and Alameda County Science and Engineering Fairs, annual events affiliated with the Intel International Science and Engineering Fair. The awards are jointly sponsored and promoted by 21 water and wastewater agencies to honor outstanding student research on water and wastewater topics. Four of the 11 winning projects were related to preventing pollution or protecting public health.

To help students understand the value of recycled water, the District distributed an activity booklet, *Give Water a Second Chance...Re-Cycle It*, to all fifth graders in areas where it treats wastewater (2,811 students at 24 schools). Teachers were encouraged to borrow the equipment needed to teach the fifth grade lesson plan, *Every Drop Counts*, and schedule tours of the wastewater and recycled water treatment plants.

Career Training

To train a skilled workforce for Bay Area wastewater treatment plants and utilities, DSRSD participates in the Bay Area Consortium of Water and Wastewater Education (BACWWE). This 19-agency partnership teams with Solano Community College to offer college-level training in water and wastewater operations.

Since 2007, more than 1,500 students have participated, either to obtain entry-level or additional certifications that will advance their careers. Students attend courses at treatment plants throughout the East Bay, including DSRSD's facility. The sponsoring agencies pay for students' tuition and books and provide working professionals as instructors. DSRSD Wastewater Treatment Plant Operations Supervisor Levi Fuller is one of the adjunct faculty for the program.

During Water Professionals Appreciation Week, DSRSD highlighted three staff members (one each from water, wastewater, and recycled water areas) on its website and linked from social media. The Q&A style profiles described each employee's background on the job and some of the training needed to get started.



Senior Wastewater Treatment Plant Operator III Sinzee Tran talks to students at a career fair about job opportunities at DSRSD.

Partnering with Other Agencies and Cities

Collaborating with other agencies enables DSRSD to reach a larger audience at a lower cost. Consistent pollution prevention messages and coordinated outreach are particularly important among Bay Area wastewater agencies, which all discharge to the San Francisco Bay and its tributaries.

Bay Area Pollution Prevention Group

The District's Clean Water Programs Specialist participates in meetings of the Bay Area Pollution Prevention Group (BAPPG), a committee of Bay Area Clean Water Agencies (BACWA) that is responsible for implementing public outreach related to pollution prevention. DSRSD also contributes funding to BAPPG to support meaningful information exchanges among wastewater agencies and coordinated regional projects. BAPPG is comprised of 44 wastewater agencies that discharge primarily into the San Francisco Bay and local waterways.

California Association of Sanitation Agencies

The DSRSD Community Affairs Supervisor, Sue Stephenson, is a member of the Communications Work Group of the California Association of Sanitation Agencies (CASA). In 2018, the Committee:

Provided guidance for the Association's communications plan

- Published various articles related to outreach, marketing and public relations in the Association's e-news and hardcopy conference newsletters
- Participated in strategic planning and implementation of communications projects on behalf of the Association

Bay Area Biosolids Coalition

The Bay Area Biosolids Coalition consists of 15 member agencies with a mission to *“develop a diverse and robust portfolio of beneficial biosolids resource recovery projects for the San Francisco Bay Area.”*

The Coalition continues to pursue a multi-pronged approach that includes the following:

- Investigating viable, year-long (weather-resilient) alternatives to land application that look beyond "biosolids to energy" and seek to responsibly recycle back value-added products of biosolids to the environment;
- Educating the public on biosolids management issues in California through public outreach efforts, including the creation of a public website and securing media coverage;
- Serving as a technology incubator – particularly for pre-commercial technologies;
- Supporting land application in the Bay Area by seeking to create more capacity for biosolids in the Bay Area marketplace; and
- Advancing the industry and legislative state of knowledge on biosolids as a valuable resource;

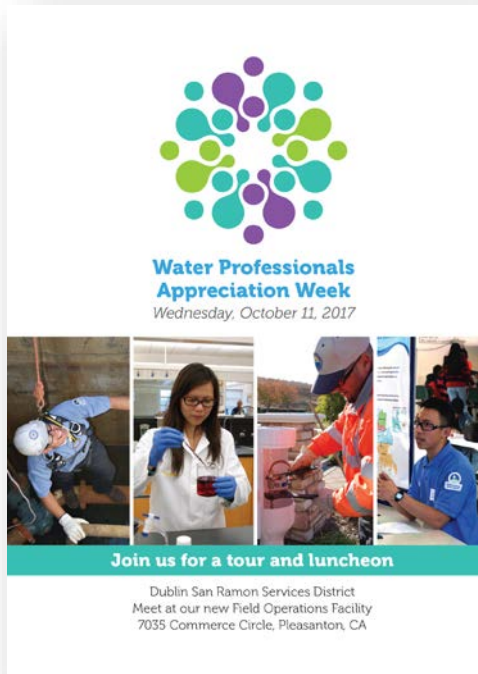
East Bay Municipal Utility District and Recycled Water Users

The District partners with East Bay Municipal Utility District to provide recycled water for irrigation and other non-potable uses in Dublin and San Ramon through the [San Ramon Valley Recycled Water Program](#) (SRVRWP). In 2013, the City of Pleasanton became a customer of SRVRWP. To keep up with growing demand, the program completed an expansion of the Jeffrey G. Hansen Water Recycling Plant to accommodate the city's wastewater flow. The District promoted the celebration event and tour, which was covered by two media organizations. In 2018, SRVRWP produced 1.385 billion gallons of recycled water from wastewater that otherwise would have been pumped into San Francisco Bay.

Legislative and Regulatory Advocacy

DSRSD supports a deliberate legislative agenda that contributes to achieving its pollution prevention goals. In 2018, DSRSD supported:

- Public Works Week to spread the word about projects the District is completing to plan for future needs
- Water Professionals Appreciation Week to educate Californians on the important functions of water and wastewater agencies



The District actively participates in regional, state, and federal associations that seek to speak with one voice on legislative and regulatory issues related to pollution prevention, including Bay Area Clean Water Agencies, California Association of Sanitation Agencies (CASA), Association of California Water Agencies (ACWA), WaterReuse Association, and Western Recycled Water Coalition (WRWC).



Measuring Effectiveness and Progress

It is simpler and less costly to measure the effectiveness and progress for site-specific programs than it is to measure public outreach aimed at raising general awareness. For site-specific programs related to its industrial, institutional, and commercial customers, the District tracks the number of targeted businesses that are implementing best management practices, number of permits issued, number of inspections conducted, site-specific sampling results, and wastewater treatment plant influent sampling results. The District evaluates site-specific outreach and education based on the number of events and participants, the amount of materials distributed, number of impressions, or other activity-based criteria such as the amount of waste (e.g., mercury) collected or survey responses received. The District has not attempted to measure changes in general awareness of pollution prevention messages due to the prohibitive cost of such analysis.

The following tables include criteria used to measure the effectiveness of DSRSD pollution prevention programs and document the District's progress. When a public outreach activity is not easily measured, it is labeled as N/A in the table.

1. Mercury Education and Outreach
2. Copper Education and Outreach
3. FOG Education and Outreach
4. Pharmaceutical Education and Outreach
5. Triclosan
6. Trash and Wipes

Table 1

Mercury Education and Outreach

	SOURCES	
	RESIDENCES	DENTAL OFFICES
Audience	General and Employees	Dentists
Message/Program	Direct the public to baywise.org; in addition, collection containers are placed at the District Office and wastewater treatment plant for waste mercury products and used batteries	<p>Follow recommended Dental Amalgam Best Management Practices (BMPs)</p> <p>Install amalgam separators if they replace and/or remove amalgam fillings</p> <p>Perform regular maintenance on the amalgam separator</p>
Implementation Plan/Timeline for 2018	Year around: collect products during regular business hours	<p><i>Ongoing throughout the year:</i></p> <ol style="list-style-type: none"> 1. Issue permits to qualifying dental practices 2. Require dentists to submit forms that document implementation of BMPs and installation of amalgam separators 3. Conduct dental facility inspections as needed to ensure compliance 4. Post BMPs, forms, program description, and staff contacts on District website
Evaluation Criteria	The quantity of mercury items collected and recycled	<ol style="list-style-type: none"> 1. Number of permits issued 2. Number of dentists participating in the program 3. Number of separators installed
Evaluation of Effectiveness	454 lbs. of lamps and ballasts, 350 lbs. of used alkaline, lead acid, nickel, and lithium batteries	<ol style="list-style-type: none"> 1. 91 active dental permits 2. Added 2 dental facilities in 2018 3. All submitted completed BMP forms 4. 100% have installed amalgam separators
Specific Tasks and Time Schedule for 2019	Continue to collect and properly dispose of mercury containing products during regular business hours	<p><i>Ongoing throughout the year:</i></p> <ol style="list-style-type: none"> 1. Implement EPA's Dental Final Rule requirements 2. Maintain up-to-date list of dental facilities 3. Obtain EPA's one-time compliance report 4. Issue new permits to qualifying dentists and reissue expiring permits 5. Track the number of permitted dental offices that have installed amalgam separators 6. Conduct site inspections as needed

Table 2
Copper Education and Outreach

	SOURCE	
	COMMERCIAL	RESIDENTIAL/COMMERCIAL
Audience	Vehicle service and wash facilities	Pool/spa owners
Message/Program	Clean sand/oil interceptors regularly and keep brake pad shavings out of the sewer and storm drains	Do not add chemicals that contain copper algaecides and drain your pool and spa to the sanitary sewer system properly. Instructions available on District website and in public lobby.
Implementation Plan/ Timeline for 2018	Ongoing	Ongoing
Evaluation Criteria	Seventy-three (73) vehicle service/wash facilities participate in program. Number of inspections and number of notice of violations (NOV) issued	N/A
Evaluation of Effectiveness	Conducted 60 inspection; no NOV were issued	N/A
Specific Tasks and Time Schedule for 2019	Ongoing	Ongoing

Table 3
FOG Education and Outreach

	SOURCE		
	RESIDENCES	RESIDENCES	RESTAURANTS/AUTOMOTIVE SERVICE FACILITIES
Audience	General	General	Restaurant managers/ employees
Message/Program	Inform residents about problems caused by putting used cooking oil and grease down sinks	Advertise proper FOG disposal on District vehicles	Restaurant owners and managers shall maintain their grease trap/interceptor systems properly and follow the BMPs
Implementation Plan/Timeline for 2018	Ongoing outreach through bill inserts, website, and social media	Used “wrap” ads on CCTV truck to create mobile billboard that is seen year-round as it works in service area	Conduct restaurant inspections
Evaluation Criteria	N/A	N/A	Number of inspections, number of NOVs issued
Evaluation of Effectiveness	N/A	N/A	Conducted 150 inspections; No NOV was issued
Tasks and Time Schedule for 2019	Ongoing through bill inserts, website, and social media, especially during holiday season	Continue using magnetic signs on DSRSD pickups and “wrapped” CCTV truck as mobile billboard	Continue to conduct site inspections

Table 4

Pharmaceutical Education and Outreach

	SOURCE	
	RESIDENCES	COMMUNITY
Audience	General	Government and pharmaceutical producers
Message/Program	Pharmaceutical collection	Support Alameda County’s Safe Drug Disposal Ordinance and the California Product Stewardship Council efforts to establish more producer-funded take-back programs
Implementation Plan/Timeline for 2018	Promote the baywise.org and MED-Project websites and local pharmaceutical collection days	Successfully advocated for a Safe Drug Disposal Ordinance in unincorporated Contra Costa County, which will establish producer-funded take-back programs
Evaluation Criteria	N/A	N/A
Evaluation of Effectiveness	Increased use of pharmaceutical collection centers throughout the Bay Area	N/A
Tasks and Time Schedule for 2019	Continue promoting disposal sites	Contribute \$1,000 to the Product Stewardship Council’s efforts

Table 5**Triclosan**

Source	Community
Audience	General and employees
Message/Program	Do not use products that contain Triclosan such as antibacterial soaps and toothpaste
Implementation Plan/Timeline for 2018	Year around outreach
Evaluation Criteria	N/A
Evaluation of Effectiveness	N/A
Tasks and Time Schedule for 2019	Increase outreach efforts

Table 6**Trash and Wipes**

Source	Residences and employees
Audience	General and employees
Message/Program	The toilet is not a trash can. Do not throw wipes, Q-tips, dental floss, non-flushable items in the toilet.
Implementation Plan/Timeline for 2018	Year around outreach
Evaluation Criteria	N/A
Evaluation of Effectiveness	N/A
Tasks and Time Schedule for 2019	Residences and employees