



**Dublin San Ramon  
Services District**

*Water, wastewater, recycled water*

# POLLUTION PREVENTION REPORT 2021





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# Introduction

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*This report on the Dublin San Ramon Services District Pollution Prevention Program from January 1 through December 31, 2021, is prepared in accordance with the requirements of the 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) serves 188,000 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 the City of Dublin and south of the City of San Ramon, and recycled water supplier and wastewater treatment to the City of Pleasanton (by contractual agreement). DSRSD's distribution and collection network include 331 miles of potable water pipe, 72 miles of recycled water pipe, and 219 miles of the collection system, along with 14 potable water reservoirs, 17 potable water pump stations, 2 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.



*DSRSD's Regional Wastewater Treatment Facility is located in Pleasanton and treats domestic, commercial, and industrial wastewater.*

## Treatment Plants and Processes

The wastewater treatment plant discharges under the 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 treats approximately 10.41 MGD of wastewater utilizing an activated sludge process, sedimentation, and hypochlorite disinfection. An adjacent water recycling plant applies advanced tertiary treatment to up to 16.2 MGD of secondary effluent, using enhanced sand filtration. Additionally, there is a microfiltration treatment system that has a treatment capacity of 2.5 MGD. Following advanced tertiary treatment, it receives ultraviolet disinfection.



# 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 Toxics Rule (CTR), the NPDES permit limits, or the water quality criteria established in the Regional Water Quality Control Board (RWQCB) Basin Plan. The DSRSD identifies pollutants of concern:

- When they are designated as such by the RWQCB in the DSRSD's NPDES permit; or
- When applicable pollutants are addressed by the Bay Area Pollution Prevention Group (BAPPG) through Bay Area Clean Water Agencies (BACWA), and
- 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, DSRSD staff monitored and reduced the following pollutants of concern: mercury, copper, fats/oils/grease (FOG), and pharmaceuticals. DSRSD has performed evaluations for cyanide and polychlorinated biphenyls (PCBs), and determined control programs are not necessary. DSRSD also actively participates in several regional collaborations, i.e., with BAPPG, to address pollution minimization. Priorities and accomplishments are outlined in Chapter 4, Table 5.

The list below identifies the sources of pollutants of concern:

- 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
- Pyrethroids – pet owners and veterinarians
- Triclosan – residences
- Trash and wipes – residences
- PFAS – industrial and residential

# Tasks to Minimize Pollutants

## CHAPTER 2

### Pretreatment and Waste Minimization Audits for Industrial Users

Environmental Compliance inspectors continue to look for ways to expand and enhance the DSRSD's Pretreatment Program to reduce pollutants discharged into the sanitary sewer system. The Pretreatment Program currently has 29 permitted industrial and commercial users. During annual inspections, DSRSD 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 DSRSD's Pretreatment Program Annual Report.

### Mercury Control

#### ***Dental Amalgam Waste***

Mercury continues to be a pollutant of concern for DSRSD 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, DSRSD 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, the 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 DSRSD. Existing dental dischargers are to achieve compliance with this rule by July 14, 2020. New dental dischargers are required to install approved amalgam separators and submit the one-time compliance report within 90 days after the first discharge to the publicly owned treatment works (POTW). All 108 permitted dental facilities 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 2021 include:

- Permit 108 qualifying dental practices.
- Received documentation indicated 100 percent of the permitted dental practices have instituted the required BMP's for managing amalgam waste and installed approved amalgam separators.
- Received the one-time compliance report from dental offices within the service area.
- Maintains an up-to-date database of dental facilities and tracks program results.

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

- Continue to implement the EPA's Dental Final Rule requirements.
- Continue to 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 the required BMP's.
- Reissue permits to existing dental practices.
- Perform inspections as needed to ensure compliance with permit requirements.

### ***Collection and Recycling***

DSRSD educates employees and 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**

Twelve influent and effluent samples were collected in CY 2021, and the monthly discharge limit was not exceeded. To ensure that copper concentrations remain well below the maximum allowable limits, DSRSD 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.
- Mandatory installation of dental amalgam separators will also contribute to copper control since amalgam waste does contain some copper.
- 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. DSRSD'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.

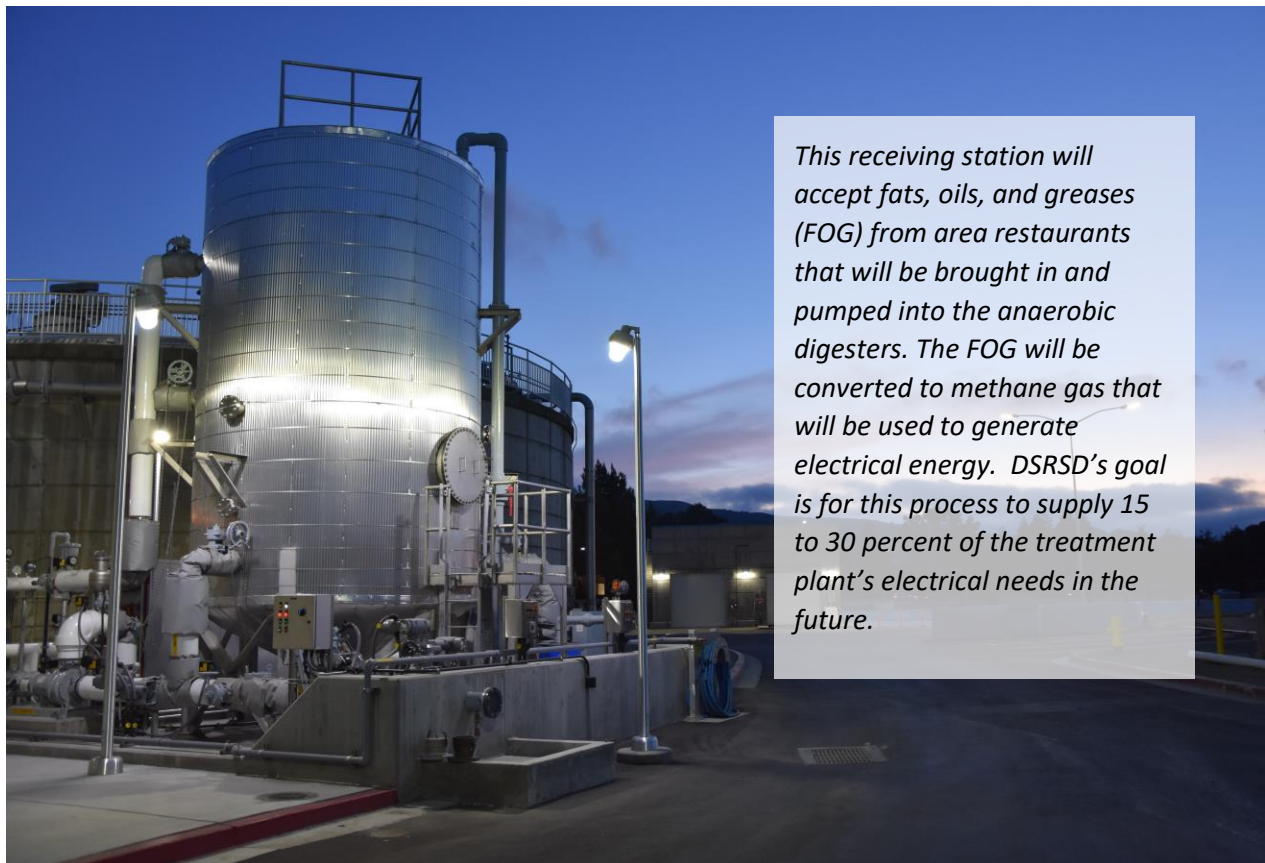
- DSRSD continues to support the BAPPG's copper pipe corrosion and pool and spa maintenance outreach efforts.

## Fats/Oils/Grease (FOG) Control

DSRSD has had a grease reduction program for more than 25 years. Currently, 184 food service establishments and automotive repair shops 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.

In 2020, DSRSD declared a state of emergency in coordination with local county health, state, and federal authorities in response to the COVID-19 pandemic. Due to this emergency, the District suspended all non-essential business practices from mid-March 2020 until November 2020, after which, DSRSD staff focused on completing all required regulatory items. In 2021, District staff implemented an as-needed inspection priority with FOG facilities due to the lingering effects of the pandemic, and as such, did not conduct any FOG inspection. Instead, DSRSD responded to incidents of grease accumulation in sewer lines in support of collection crews and made contact with suspected sources of FOG contributions. The plan for 2022 is to attempt a resumption of FOG inspections as federal, state, and local health orders permit.

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 receiving station 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. DSRSD's goal is for this process to supply 15 to 30 percent of the treatment plant's electrical needs in the future.*

## Pharmaceutical Collection

In 2014, City of Pleasanton and DSRSD opened a permanent pharmaceutical collection center within the City of Pleasanton Police Department. In May 2017, the collection center became part of the Alameda Medication, Education and Disposal Project (Med 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 the collection of unwanted pharmaceuticals. The Pleasanton Police Department continues to house and supervise the collection kiosk. The center is open 24 hours a day, seven days a week.

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.



DSRSD's website promotes both collection sites, and other local drug collection sites and events along with the regional BAPPG website, [www.Baywise.org](http://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

DSRSD 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 the Significant Industrial User (SIU) discharges, treatment plant influent, and final effluent, as explained below.

During the reporting year, 42 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 37 of the 42 compliance samples were below the reporting limit.

The highest influent result above the detection limit was 8.0 µg/L and all of the plant's effluent cyanide concentration levels were less than the detection limit of 3.2 µg/L. Based on all the data, DSRSD concludes it is not necessary to implement a Cyanide Control Program at this time.

## PCBs Control

NPDES Permit, Order R2-2017-0041, requires DSRSD to evaluate controllable sources of polychlorinated biphenyls (PCBs) to the treatment plant. PCBs have been found in older building sealants, but it is 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 renovation, with little chance of being washed into the sanitary sewer. Furthermore, DSRSD requires sanitary sewer systems to be disconnected during building demolition. DSRSD has reviewed sampling data from industrial and commercial users within its service area and determined no potential contributors of PCBs to the treatment plant.

## Triclosan

BAPPG has been targeting triclosan for many years. Triclosan is an antibacterial and antifungal agent found in many consumer products that have 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 triclosan.

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.

DSRSD will continue outreach efforts in educating the public and discouraging the use of products that contain triclosan.

## Trash and Wipes

Toilets should not be used as trash cans. In addition, 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.





DSRSD Field Operations staff take part in a Flushable Wipes Dispersibility Field Test with the California Association of Sanitation Agencies.

## Pyrethroids

DSRSD put the word out to customers and businesses about protecting waterways from pyrethroids, synthetic chemical insecticides widely used on pets for flea and tick control. Spot-on treatments, collars, sprays, and foggers can contain pesticides that spread around the home and can end up in waterways when people bathe pets, wash bedding, or clean any floors or upholstery that may come into contact with house pets.

Pet owners can avoid exposing themselves and Bay Area waterways to toxic pesticides by talking to their veterinarians about oral medications available to control fleas and ticks.

DSRSD posted information on social media about flea and tick control options and included a flier (shown on right) sent out to the Dublin Chamber of Commerce members to alert businesses as well.



## FLEA AND TICK CONTROL

KEEP TOXIC PESTICIDES AWAY FROM YOUR PETS, FAMILY AND BAY AREA WATERWAYS

Dublin San Ramon Services District, your water and wastewater provider, recommends you speak to your vet about using oral medications to control fleas and ticks

Avoid using spot-on treatments, collars, sprays, and foggers because they contain toxic pesticides that easily spread around your home

Spot-on treatments – collars, sprays, and foggers – end up in our local waterways when you

- Wash your pet or wash your hands after touching your pet
- Wash bedding, clothing, floors, carpets, upholstery that come into contact with your pet
- Neglect to dispose of pet waste in the trash



We apply topical flea and tick products to furry friends



We wash our hands, pets, pet bedding, clothing, carpets, and floors



Chemicals rinse into the sewer and pass through treatment plants



Pesticides end up in the San Francisco Bay and can be toxic to aquatic life



www.dsrds.com

## PFAS


Per- and polyfluoroalkyl substances (PFAS) are a group of manmade fluoridated compounds used for a variety of industrial and residential applications. PFAS chemicals have been used in various products worldwide since the 1940s. They do not fully break down and are often called “forever chemicals.” These chemicals became popular and have been used widely due to being resistant to heat, water, and oil. They can be found in food containers, electronics, carpets, paint, sealants, varnishes, firefighting foams, and many household products such as nonstick cookware, furniture, clothing, cosmetics, lubricants, paint, carpets, pizza boxes, and popcorn bags.

DSRSD staff contacted local fire departments within the service area about proper disposal of firefighting foam and distributed a “How to Properly Dispose of PFAS” flyer to ensure fire departments are aware of the January 1, 2022, phase-out date.

The District included an article on PFAS in its Annual Water Quality Report, along with a mention in the General Manager’s message for the report. Additionally, staff updated the PFAS frequently asked questions on the “Outreach” section of the DSRSD website.

## How to Properly Dispose of PFAS

Phasing Out of PFAS  
Firefighting Foam Begins  
January 1, 2022



In 2020, California enacted Senate Bill 1044 that requires phasing out of all firefighting foam containing PFAS. PFAS (per- and polyfluoroalkyl substances) are man-made, “forever” chemicals that have been shown to harm the environment and human health. Firefighting foam containing PFAS must be phased out for all uses, including training, by the following dates:


- ✓ Firefighting equipment by January 1, 2022
- ✓ All fixed fire suppression systems by January 1, 2024
- ✓ Terminal or oil refineries by January 1, 2028

Fire protection districts that store PFAS foam are required to **properly dispose of PFAS foam through a hazardous waste provider**. For equipment that requires rinsing for decontamination, the best management practices of the Fire Fighters Association suggest rinsing equipment three times, and a licensed hazardous waste disposal service must handle this rinse water and foam. **Foam containing PFAS should not be discharged into the public sewer system or storm drains.** Most sewage treatment plants are not designed to remove PFAS. The new law also prohibits washing fire trucks where rinse water containing PFAS would flow into a storm drain.

For more information about the phase-out of PFAS in firefighting foam, please contact the State Fire Marshal, **Chief Mike Richwine**, Office of the State Fire Marshal, 2251 Harvard Street, Suite 400, Sacramento, CA 95815, 916-568-3800.

If you need information about discharges to the sewer or storm systems, please contact:

**Stefanie Olson**  
 Clean Water Programs Administrator  
 7051 Dublin Blvd., Dublin, CA 94568  
 925-875-2345, [olsonst@dmsd.com](mailto:olsonst@dmsd.com)



**Dublin San Ramon Services District**  
 Water, wastewater, recycled water



# Outreach Programs



## Public Outreach

DSRSD uses public outreach programs to reduce sources of mercury and pharmaceuticals directly, 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. DSRSD website contains all forms, program descriptions, staff contacts, and resources for Pretreatment and Pollution Prevention Program participants. In addition, DSRSD 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.

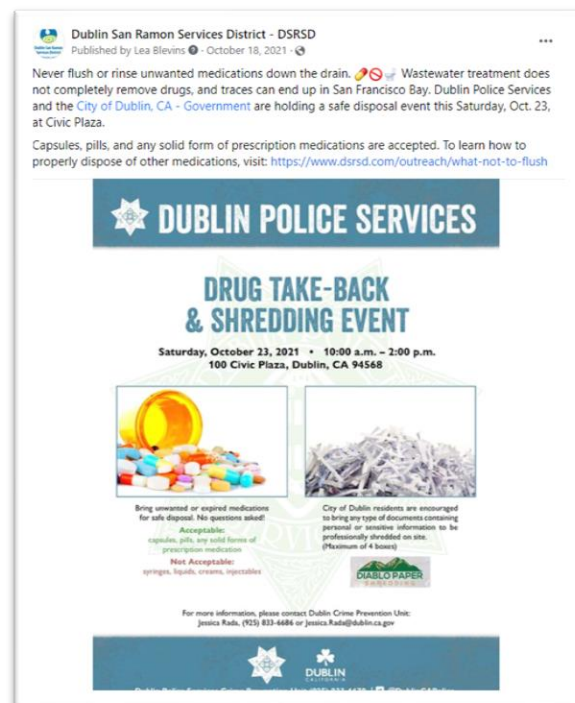
### ***Waste Mercury Collection and Recycling***

Through its website, DSRSD encourages the public and employees to properly dispose of batteries and other products that contain mercury. The District also provides a list of local drug take-back locations and links to search engines such as BAPPG (Bay Area Pollution Prevention Group), [www.Baywise.org](http://www.Baywise.org).

### ***Waste Pharmaceuticals Collection***

Throughout the year, DSRSD uses its website to promote ways for residents to dispose of waste pharmaceuticals properly. These include permanent drop boxes operated by police departments in the cities of Dublin, San Ramon, and Pleasanton, as well as regional collection sites.

In April and October 2021, the District promoted pharmaceutical take-back events conducted by Dublin Police Services. DSRSD publicized these on its three social media platforms (Nextdoor, Facebook, and Twitter) to let residents know about the events.



*A Facebook post from October 2021 promotes a pharmaceutical take-back event.*

### ***“Flushable” Wipes and FOG***

DSRSD promotes proper disposal of so-called “flushable” products, as well as fats, oil, and grease (FOG) on its webpage: [What Not To Flush](#) and [FOG Clogs Pipes](#). Links to [www.Baywise.org](http://www.Baywise.org) and [Re:source by StopWaste](#) provide searchable directories of FOG collection centers. In January and February 2021, DSRSD included a bill insert with information on how to properly dispose of fats, oils, and grease, with additional facts about caring for pipes, so they do not freeze in cold temperatures.

With the COVID-19 pandemic still prominent, the District used social media to continue its outreach. DSRSD ties in FOG messaging with the fall and winter holidays when people are cooking large meals. Posts went out on how to properly dispose of FOG. The District also worked with the California Association of Sanitation Agencies’ communications committee to spread the word about how single-use wipes clog pipes. DSRSD posted the news on social media when AB 818 was signed, requiring proper wipes labeling. Additionally, the District shared posts from other regional agencies about the problems involved when flushing wipes.

### ***Education Efforts for Adults***

DSRSD staff typically provide quarterly tours of the Regional Wastewater Treatment Facility. Tours are conducted by Operations staff and emphasize how individuals and businesses can prevent pollution through proper disposal of hazardous waste and grease. Due to the ongoing COVID-19 pandemic, in-person tours remained on hold throughout 2021. However, DSRSD has short flyover drone video tours of the wastewater and recycled water plants available on the District’s YouTube channel. More detailed tour videos are in progress and are expected to be completed in 2022.

The District participated in a Gardening with Natives webinar on March 10, 2021, for customers from all retailers under wholesaler Zone 7 Water Agency. DSRSD staff talked about the Water Conservation



**MAKE A NEW YEAR'S RESOLUTION TO  
AVOID A PAIN IN  
THE DRAIN  
BY CARING FOR YOUR SEWER PIPES**

- Greasy food waste is the leading cause of clogs in private sewer laterals and in the public wastewater system. Never rinse fats, oils, or grease down the drain (including oily dressings, mayonnaise, and gravy). Scrape or wipe oil into the green waste container or trash.
- Large amounts of cooking oil (such as for deep-frying) can be poured in a container with a tight-fitting lid and brought to a collection facility.
- Find your nearest household hazardous waste drop-off location at <https://search.earth911.com>

*This bill insert gives tips on keeping fats, oils, and grease out of the drain.*

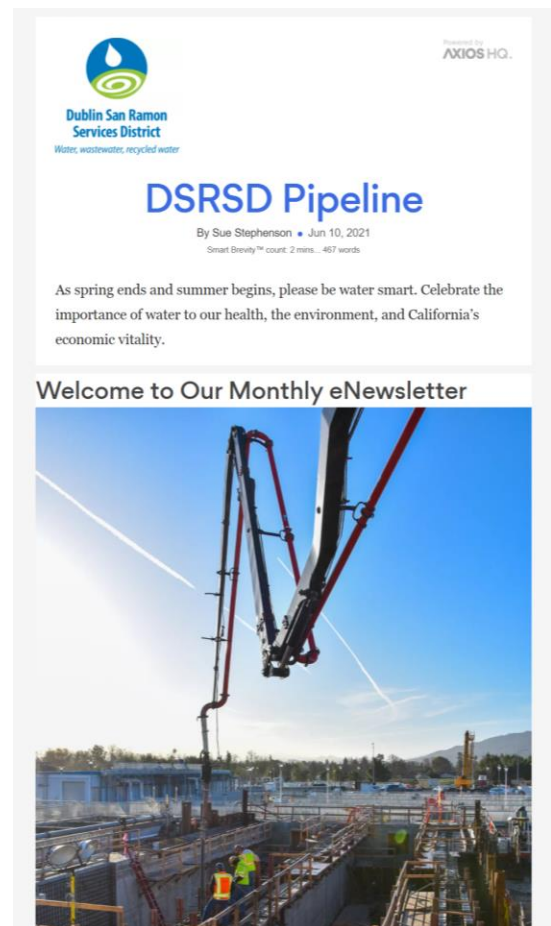
section on the District’s website, leak detection through the online AquaHawk customer portal, water-saving rebates, where to buy drought-tolerant plants, and how the District uses recycled water to assist with conservation.

The District also joined a Virtual Town Hall event with Alameda County Supervisor David Haubert, “Local Water Experts Answer Your Drought Questions.” It was held on August 25, 2021, with Tri-Valley water agencies plus Alameda County Water District.

The District started the monthly Pipeline eNewsletter in June 2021 to help get the word out about District news and messages on water conservation and pollution prevention to more than 12,000 customers. The July newsletter promoted proper wipes disposal with a link to the 2020 Pollution Prevention Report; the August newsletter discussed the wastewater treatment process; the September newsletter featured recipes for making environmentally friendly cleaning products at home; the November newsletter shared information on proper wipes labeling and keeping fats, oils, and grease out of the drain; and the December newsletter featured information on wastewater career training and a holiday message on keeping drains clear of grease.

### ***Education Programs for Children***

Zone 7 Water Agency (DSRSD’s water wholesaler) typically visits classrooms in DSRSD’s service area to teach various grade levels about pollution prevention. The pandemic altered that ability, with some classes offered in-person and others virtually. In 2021, Zone 7 offered lessons for different ages, including Grade 2 lesson, *Creek and Stream Environments*, and middle school lesson, *The Wonder Down Under*. The second-grade lesson teaches how water from storm drains and pollution from residential areas ends up in creeks and how students can prevent such pollution. The middle school lesson teaches students how groundwater and surface water systems are connected, what pollutants are common to the Tri-Valley area, and the effects of urban development on the watershed. In Dublin and



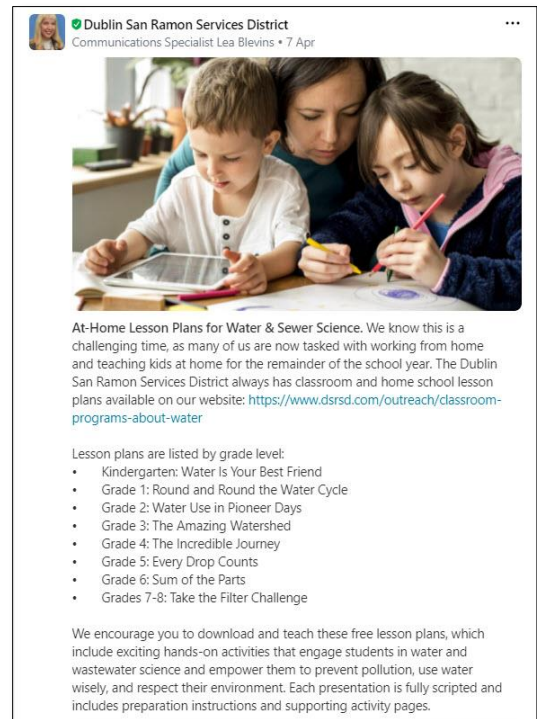
*The first edition of DSRSD’s Pipeline eNewsletter premiered in June 2021.*



San Ramon's Dougherty Valley, the second-grade program reached 34 classes and 884 students. The middle school program reached 6 classes and 210 students. Teachers were also able to directly access the virtual lessons for use in the classroom.

DSRSD'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. With students still doing at-home school for part of 2021, parents could take advantage of the planned activities available on the DSRSD website. The Classroom Programs About Water webpage received more than 200 views in 2021.

In March, a student from DSRSD's service area received the regional *Excellence in Water, Wastewater, & Recycled Water Research Award* for the 2021 Alameda County Science and Engineering Fair. The Alameda County and Contra Costa County science fair awards are jointly sponsored and promoted by more than 20 water and wastewater agencies to honor outstanding student research on water and wastewater topics. Hiya Shah, who was a junior at Amador Valley High School during the fair, won for her project titled "Maji: A computer-controlled, bioinspired system for low-energy treatment of per- and polyfluoroalkyl water contaminants, also known as PFAS." Typically, students would be honored and presented with a prize check at a Board of Directors meeting. The DSRSD Board met virtually for the majority of 2021 due to the pandemic, so Hiya Shah presented her project during a virtual meeting in April. DSRSD was a sponsor for the *Excellence in Water Research Awards* for both the Alameda County and the Contra Costa County Science and Engineering Fairs.



*A Nextdoor post tells customers where they can find online lesson programs.*



*Amador Valley High School student Hiya Shah receives her Alameda County Science & Engineering Fair award from DSRSD Director Ann Marie Johnson.*

## Career Training

DSRSD participates in the Bay Area Consortium of Water and Wastewater Education (BACWWE) to train a skilled workforce for Bay Area wastewater treatment plants and utilities. This 22-agency partnership teams with Solano Community College, Gavilan College, and Santa Rosa Junior College to offer college-level water and wastewater operations training.

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. In addition, DSRSD's retired Wastewater Treatment Plant Operations Superintendent, Levi Fuller, has served as one of the adjunct faculty for the program.

During Water Professionals Appreciation Week in October, DSRSD highlighted three staff members who work in wastewater treatment, recycled water, and water conservation. Profiles were posted to the website, shared on social media, and sent out internally to District staff. The Q&A style profiles described each employee's background on the job and some of the training needed to get started.

## Employee Outreach

DSRSD usually holds an Employee Academy for new and long-term staff from all departments each year. The academy includes learning about reliable water supply and associated challenges, wastewater treatment, recycled water, and water distribution. It also includes tours of the Regional Wastewater Treatment Facility and the Jeffrey G. Hansen Water Recycling Plant. However, due to the pandemic with some office staff and others working from home, there was no academy for 2021.

## Partnering with Other Agencies and Cities

Collaborating with other agencies enables DSRSD to reach a broader 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***

DSRSD's Clean Water Programs Administrator participates in meetings of the BAPPG, a Bay Area Clean Water Agencies committee 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 comprises 46 wastewater agencies that discharge primarily into the San Francisco Bay and local waterways.

### ***Recycled Water Committee***

DSRSD Clean Water Programs Administrator, Stefanie Olson is serving as the co-chair of the Recycled Water Committee, a committee of the Bay Area Clean Water Agencies. The committee is responsible for

promoting and developing water recycling to protect the environment and improve water supply reliability for Bay Area communities.

### ***California Association of Sanitation Agencies***

DSRSD Public Affairs staff participate in the Communications Committee of the California Association of Sanitation Agencies (CASA). In 2021, the Committee:

- Published various outreach, marketing, and public relations articles in the Association's e-news and hardcopy conference newsletters.
- Provided guidance for the Association's editorial calendar and how to increase public engagement.
- Participated in strategic planning and implementation of communications projects on behalf of the Association.
- Discussed communication information on PFAS.

### ***Bay Area Biosolids Coalition***

DSRSD is a member of the Bay Area Biosolids Coalition, which consists of about 20 member agencies and engineering firms with a mission to "*develop a diverse and robust portfolio of beneficial biosolids resource recovery projects for the San Francisco Bay Area.*" The coalition's goals are to communicate the value of biosolids, advance scientific research on the safety and efficacy of biosolids, support and expand biosolids land application in the Bay Area, and support the development of diverse and cost-effective biosolids projects for the region.

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 recycle back value-added products of biosolids to the environment responsibly.
- 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.
- Advancing the industry and legislative state of knowledge on biosolids as a valuable resource.

### ***East Bay Municipal Utility District and Recycled Water Users***

DSRSD partners with the East Bay Municipal Utility District to provide recycled water for irrigation and other non-potable uses in the City of Dublin and the City of San Ramon through the [San Ramon Valley Recycled Water Program](#) (SRVRWP). In 2013, the City of Pleasanton became a customer of SRVRWP. To accommodate growth in the areas, SRVRWP completed an expansion of the Jeffrey G. Hansen Water Recycling Plant to provide the city's wastewater flow. DSRSD promoted the celebration event and tour, which was covered by two media organizations. In 2021, the program partnered with the Central Contra Costa Sanitary District to divert up to one million gallons of wastewater a day to increase recycled water



production. DSRSD spread the word about this partnership using email blasts, social media posts, and the new Pipeline eNewsletter.

## Legislative and Regulatory Advocacy

DSRSD supports a legislative agenda that contributes to achieving its pollution prevention goals. In 2021, the District supported:

- Public Works Week to spread the word about projects that DSRSD is completing to plan for future needs.
- Water Professionals Appreciation Week to educate Californians on the important functions of water and wastewater agencies.
- HR 3684, Invest in America Act, to urge the inclusion of an amendment establishing “Do Not Flush” labeling on single-use wet wipes.
- AB 818 (Bloom) to establish labeling requirements for wet wipes packaging in California.

DSRSD 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, Association of California Water Agencies (ACWA), WaterReuse Association, and Western Recycled Water Coalition (WRWC).

# Measuring Effectiveness and Progress

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It is simpler and less costly to measure the effectiveness and progress of site-specific programs than to measure public outreach to raise general awareness. For site-specific programs related to its industrial, institutional, and commercial customers, DSRSD 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. In addition, DSRSD evaluates site-specific outreach and education based on the number of events and participants, the amount of materials distributed, the number of impressions, or other activity-based criteria such as the amount of waste (e.g., mercury) collected or survey responses received. DSRSD 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 DSRSD's progress. When a public outreach activity is not easily measured, it is labeled as not applicable (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
7. PFAS

## Table 1

### Mercury Education and Outreach

	SOURCE	
	RESIDENCES	DENTAL OFFICES
<b>Audience</b>	General and Employees	Dentists
<b>Message/Program</b>	Direct the public to baywise.org. Prior to the COVID pandemic, the public could drop off waste mercury products and used batteries at the district office, field operations, and wastewater treatment plant.	<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>
<b>Implementation Plan/Timeline for 2021</b>	<p>Year-round: collect products during regular business hours, except during the COVID 19 Pandemic.</p> <p>DSRSD has continued the employee collection of mercury products and used batteries.</p>	<p><i>Ongoing throughout the year:</i></p> <ol style="list-style-type: none"> <li>1. Collect the one-time Compliance Reports</li> <li>2. Issue permits to qualifying dental practices</li> <li>3. Require dentists to submit forms that document the implementation of BMPs and installation of amalgam separators</li> <li>4. Conduct dental facility inspections, as needed</li> <li>5. Post BMPs, forms, program description, and staff contacts on the DSRSD website</li> </ol>
<b>Evaluation Criteria</b>	The quantity of mercury items collected and recycled.	<ol style="list-style-type: none"> <li>1. Number of one-time Compliance Reports</li> <li>2. Number of permits issued</li> <li>3. Number of separators installed</li> </ol>
<b>Evaluation of Effectiveness</b>	Products were collected from employees, however not from general public due to pandemic protocol.	<ol style="list-style-type: none"> <li>1. 108 active dental permits</li> <li>2. Added 2 dental facilities in 2021</li> <li>3. All submitted the one-time Compliance BMP Report Form</li> <li>4. 100% have installed amalgam separators</li> </ol>
<b>Specific Tasks and Time Schedule for 2022</b>	When DSRSD facilities are open to the public, we will 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"> <li>1. Continue to implement EPA's Dental Final Rule requirements</li> <li>2. Maintain an up-to-date list of dental facilities</li> <li>3. Obtain EPA's one-time compliance report</li> <li>4. Issue new permits to qualifying dentists and reissue expiring permits</li> <li>5. Conduct site inspections as needed</li> </ol>

**Table 2**  
**Copper Education and Outreach**

	SOURCE	
	COMMERCIAL	RESIDENTIAL/COMMERCIAL
<b>Audience</b>	Vehicle service and wash facilities	Pool/spa owners
<b>Message/Program</b>	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 are available on the DSRSD website and in the public lobby.
<b>Implementation Plan/ Timeline for 2021</b>	Ongoing	Ongoing
<b>Evaluation Criteria</b>	Number of vehicle service/wash facilities that participate in the program. Number of inspections and number of notice of violations (NOV) issued.	N/A
<b>Evaluation of Effectiveness</b>	Conducted 0 inspections (due to COVID Pandemic); no notice of violation was issued.	N/A
<b>Specific Tasks and Time Schedule for 2022</b>	Ongoing	Ongoing

**Table 3**  
**FOG Education and Outreach**

	SOURCE		
	RESIDENCES	PUBLIC	RESTAURANTS/AUTOMOTIVE SERVICE FACILITIES
<b>Audience</b>	General	General	Restaurant managers/ employees
<b>Message/Program</b>	Inform residents about problems caused by putting used cooking oil and grease down sinks.	Inform the public about problems caused by discharging cooking oil and grease down sinks and drains.	Restaurant owners and managers shall maintain their grease trap/interceptor systems properly and follow the BMPs.
<b>Implementation Plan/Timeline for 2021</b>	Ongoing outreach through bill inserts, website, and social media.	Ongoing outreach through bill inserts, website, and social media.	Conduct restaurant inspections
<b>Evaluation Criteria</b>	N/A	N/A	Number of inspections, number of NOVs issued
<b>Evaluation of Effectiveness</b>	N/A	N/A	Conducted inspections 0 (due to COVID Pandemic) No notice of violations issued
<b>Tasks and Time Schedule for 2022</b>	Ongoing through bill inserts, website, and social media, especially during the holiday season.	Ongoing through bill inserts, website, and social media, especially during the holiday season. Continue to support BAPPG's FOG outreach programs.	Continue to conduct site inspections

**Table 4**  
**Pharmaceutical Education and Outreach**

	SOURCE	
	RESIDENCES	COMMUNITY
<b>Audience</b>	General	Government and pharmaceutical producers
<b>Message/Program</b>	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
<b>Implementation Plan/Timeline for 2021</b>	Promote the baywise.org and MED-Project websites and local pharmaceutical collection days.	Continue to advocate for Safe Drug Disposal Ordinances.
<b>Evaluation Criteria</b>	N/A	N/A
<b>Evaluation of Effectiveness</b>	Increased use of pharmaceutical collection centers throughout the Bay Area.	N/A
<b>Tasks and Time Schedule for 2022</b>	Continue promoting disposal sites	Contribute \$1,000 to the Product Stewardship Council’s efforts



**Table 5****Triclosan**

<b>Source</b>	Community
<b>Audience</b>	General and employees
<b>Message/Program</b>	Do not use products that contain triclosan
<b>Implementation Plan/Timeline for 2021</b>	Year-round outreach
<b>Evaluation Criteria</b>	N/A
<b>Evaluation of Effectiveness</b>	N/A
<b>Tasks and Time Schedule for 2022</b>	Continue outreach efforts

**Table 6****Trash and Wipes**

<b>Source</b>	Residences and employees
<b>Audience</b>	General and employees
<b>Message/Program</b>	The toilet is not a trash can. Do not throw wipes, Q-tips, dental floss, non-flushable items in the toilet.
<b>Implementation Plan/Timeline for 2021</b>	Year-round outreach
<b>Evaluation Criteria</b>	N/A
<b>Evaluation of Effectiveness</b>	N/A
<b>Tasks and Time Schedule for 2022</b>	Continue outreach efforts

**Table 7**  
**PFAS**

<b>Source</b>	Industrial, residential, and employees
<b>Audience</b>	Local fire departments
<b>Message/Program</b>	Phase out of PFAS Firefighting foam begins January 1, 2022 & proper disposal - flyer
<b>Implementation Plan/Timeline for 2021</b>	Year-round outreach
<b>Evaluation Criteria</b>	N/A
<b>Evaluation of Effectiveness</b>	N/A
<b>Tasks and Time Schedule for 2022</b>	Continue outreach efforts