

SCMU Review

(schmoo ri-vyoo) n. items of interest and information from your Santa Cruz Municipal Utilities

No.70 FALL 2020 SANTA CRUZ MUNICIPAL UTILITIES 212 LOCUST STREET, SANTA CRUZ, CA 95060 (831)420-5220 scmu@cityofsantacruz.com

Fire and Rain and Sunny Days We Thought Would Never End



IN 1970 JAMES TAYLOR WROTE A SONG ABOUT SEEING FIRE AND RAIN, and sunny days that he thought would never end. Remember just a few years back when we had those sunny days that we thought would never end? Then, on the heels of that historic drought, we had rain, at record-

setting levels. And fire? Every year it feels like more of the state burns to where this year, it feels as if the whole state of California has been on fire.

I have been with the Water Department for just about seven years now, and during that time we've had two "normal" years of precipitation. The rest of the years have seen historic drought and record-setting rain; water rationing and rain water too turbid to treat. Why does that matter? Because we have a municipal water system designed for normal water years. Where multiple year drought and record rainfall years used to be the exception to normal years, *they now are the new normal*.

Look – we know you're probably getting tired of hearing about how we must reinvest in the system and how expensive it is. We get it, we pay bills too. But unless we want to follow the model set by utilities that must cut service because their systems can't keep up with demand, or are unreliable in certain weather conditions, the truth really is that tiring; we must reinvest in our system, and yes, it's really expensive.

Friends have tried to convince me that it's unlikely that James Taylor was inspired by a municipal water system to write "Fire and Rain", and I try to be respectful of others' opinions. (But really — what could possibly be more inspiring than high-quality, safe, reliable drinking water?!) Read on to learn more about how we're staying inspired to prepare for our new normal.

Cheers,
Rosemary Menard

Happy New Year!

...WAIT, WHAT?!

WHILE WE'RE ALL UNFORTUNATELY STILL STUCK IN 2020, THE 2021 "WATER YEAR" STARTED OCTOBER 1. WATER YEARS RUN FROM OCTOBER 1 – SEPTEMBER 30. A water year (also called hydrological year, discharge year or flow year) is a term commonly used in hydrology to describe a time period of 12 months for which precipitation totals are measured. Water years often refer to surface water supply (e.g. rivers and streams), and are used to compare precipitation from one year to the next.

In Santa Cruz, a "normal" water year sees 31 to 33 inches of rainfall. At SCWD we classify our years by wet, normal, dry, and critically dry. If you had to guess how many "normal" water years we've had in the past decade of 2010–2020, how many would you guess? If you guessed three, you're correct. Yep, only three.

So what happened the rest of the decade? Well, we had one critically dry year, four dry years including two years of mandatory water rationing, and two with water restrictions. We had a wet year of record setting rain in 2017, calling for emergency conservation when a critical water main blew out in landslides due to the storms. 2018 and 2019 brought another dry and another wet year respectively, and 2020?

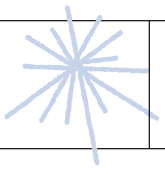
In keeping with everything else being abnormal in 2020, so was our precipitation; 2020 was a "dry" year.

WHAT'S THE SIGNIFICANCE OF SANTA CRUZ'S WATER YEAR RECORDS?

Our water system was designed, engineered, and built for normal water conditions — and not so much for extreme weather events. While extreme weather events used to be an exception to normal conditions, the past decade has demonstrated the inverse: Extreme weather conditions have become the normal, and "normal" weather is now the exception.

If you think about the water system like a car, think about driving a sedan off-road. While Dad's Buick sedan might hold up to a bit of Dukes of Hazard driving, it's not going to hold up for the long haul. It would need a lot of maintenance to keep it operating in those kinds of conditions, and it would probably make the most sense to replace it with a vehicle designed for off-road driving.

That's where we are with our water system. It wasn't designed to operate under the conditions we find ourselves in today. But unlike a car, our water system provides critical life-support. We can't do without safe, reliable water service. Not even for a day.



Neither pandemic nor wildfires slowed us down this year.

We've been busy! Since it's said a picture is worth a thousand words, here's a snapshot of some things we've been up to:

1 REPLACING THE INLET/OUTLINE PIPELINE IN THE NEWELL CREEK DAM

We're replacing the pipeline that lets water in and out of Newell Creek Dam at the Loch Lomond Reservoir, as required by the Division of Safety of Dams (DSOD). Construction began this year and is expected to be finished in 2022. The cost is \$103 million.

2 REPLACING THE RAW WATER TRANSMISSION PIPELINE AT THE COAST PUMP STATION

The pipeline that supplies the majority of raw water to the Water Treatment Plant on Graham Hill Rd has had significant leaks. We're replacing the problematic segment that crosses under the San Lorenzo River between River Street and Ocean Street Extension with a new 24" pipeline. This project will be done early in 2021 and costs \$6.6 million.

3 AMENDING WATER RIGHTS

Water rights control how the Santa Cruz Water Department operates. Because they were granted more than 50 years ago, they're out-of-date with current needs, and lack flexibility to enable the Water Department to ensure supply reliability, protect fish populations, and partner with neighboring water agencies to improve regional supply reliability.

4 REPLACING FLOCCULATORS

Besides being fun to say, flocculators play an important role in water treatment. Flocculation is the process of small particles being gathered together into larger "flocs" which can then be removed from water prior to treatment. We replaced one flocculator bay and have two left to go at a cost of \$1.8 million.

5 MONITORING WATER QUALITY IN THE AFTERMATH OF FIRE

Following the CZU fire the Department developed a comprehensive source water quality monitoring plan. It includes new key water quality parameters related to impacts from the fire. Additional source locations including soils are being monitored along with routine locations. This will give us a detailed evaluation of urban and rural run-off in fire impacted watersheds.

6 PROTECTING ENDANGERED SPECIES

Seining is completed in San Lorenzo River lagoon and Laguna Creek lagoon each summer to monitor the population size of juvenile steelhead trout and coho salmon. These surveys have been conducted for over 10 years and help us to document the changes in population size from year to year. The data we collect helps inform our compliance with the Endangered Species Act and is part of our process to create a Habitat Conservation Plan. A highlight in this year's seining was seeing juvenile coho in June. We don't see them every season, so when we do it's a good sign for the population that season.

7 FIXING AND INSTALLING PIPELINE

We installed 5,884 lineal feet or 1.1 miles of potable water main this year, including fixing broken lines and installing new ones.

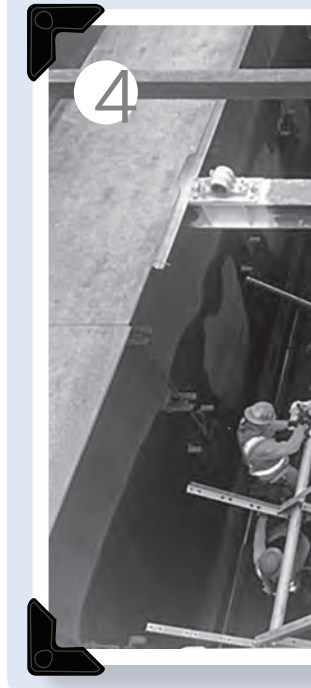
8 PROVIDING NON-STOP SERVICE

Despite the closure of our offices due to the pandemic, customer service staff never missed a day of providing responsive service. Working remotely from kitchen tables, bedrooms, attics and garages, staff used personal phones and laptops to respond to customers before a remote operating system was installed. We also created a way to ensure that customers experiencing financial hardships during the pandemic are able to maintain reliable water service without penalty.

9 SECURING GRANTS AND LOW-INTEREST LOANS

Upgrading the water system to meet the demands of climate change is expensive! We've been able to secure over \$103 million in grants and low-interest loans for needed projects, which will help keep water rates lower. Low interest loans and grants reduce the costs passed on to rate payers.

Read more about projects to improve the water system at www.cityofsantacruz.com/h2oprojects



9

San Juan Creek Dam Inlet/Outlet Replacement Project

Contractor: Obayashi Corporation
Subcontractors: Marine Construction Inc., Sierra Mountain Construction Inc.,
Santacruz Construction Inc., JM Electrical, Tesco, Certified Coatings Company,
Pacific International Grout Company
Construction Manager: Mott MacDonald

(Disclaimer/Cable Statement: Project #021-001-001 has been provided to the City of Santa Cruz in accordance with the State Water Resources Control Board's California Drinking Water State Reporting Requirements, including grants from the United States Environmental Protection Agency and State Water Resources Control Board.)

 For more information, visit
cityofsantacruz.com/ncd_io





GET TO KNOW PUBLIC WORKS A LITTLE BETTER!



Take a **Virtual Tour** of Our Environmentally-Friendly Wastewater Treatment Facility

WE INVITE YOU TO TAKE A VIRTUAL STROLL THROUGH OUR SANTA CRUZ WASTEWATER TREATMENT FACILITY. In our new video you will see how we treat 7 million gallons of wastewater each day with all-natural processing that is environmentally friendly.

Our operators will walk you through the various stages of treatment where you will observe how microorganisms consume the organic carbon present in the water and are the main workhorse of the facility. Our operators explain how ultraviolet light is used to disinfect the water by breaking down the cellular structure of any organisms/pathogens/viruses that may be present, preventing them from reproducing.

You'll learn how our Santa Cruz Wastewater Treatment Facility not only provides an essential quality of life service, but also helps to reduce our City's carbon footprint and protects the environment we live in!

The tour is available in English and Spanish at www.cityofsantacruz.com/Wastewater



See how we treat 7 million gallons of wastewater each day with all-natural, environmentally friendly processing!



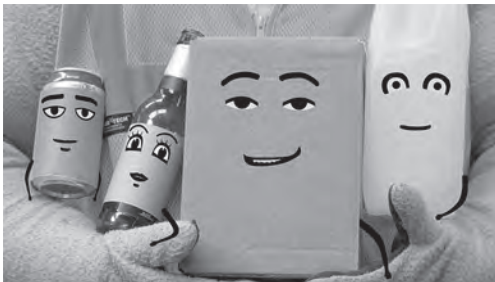
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Visit Our **Recycling Center Online** with Mav' and Friends



YOU CAN NOW EXPERIENCE AN ENTERTAINING AND CLOSE-UP TOUR of our City of Santa Cruz Recycling Center online. Led by Santa Cruz Warriors mascot Mav'Riks and four animated characters, our 6-minute video reveals the ins and outs of the multifaceted recycling process.



The video follows **Can, Bottle, Box and Jug** from a blue recycle bin as they travel up the coast to the Dimeo Lane facility with an entire truckload of recyclables.

As all are sorted and processed for recycling there, eddy currents send aluminum cans flying through the air, a V-screen separates 2-D and 3-D items, and a giant magnet dramatically pulls out the metal-heads.

See this and so much more with Mav' and his friends. The tour will be fun and educational for the entire family!

The video can be viewed in English and Spanish at www.cityofsantacruz.com/RecycleRight



Protect Monterey Bay and Our Environment

DO YOU KNOW HOW TO DISPOSE OF UNWANTED MEDICINES to ensure the safety of Monterey Bay and our greater environment? Products such as pills, liquids or creams, should not be flushed down the toilet or placed in the trash where they are accessible to children or animals and may contaminate the sanitary sewer or landfill.

To avoid these hazards, our medication disposal program, MED-Project, is available to all residents of the City of Santa Cruz and Santa Cruz County. If you have expired or unwanted medicines, the program offers 12 City of Santa Cruz locations for drop-off. Find the closest one to you at www.medproject.org.

Similarly, needles should never be placed in a recycling cart, flushed down the toilet, or discarded separately or loosely. Instead, place them in a dedicated red sharps container and drop off at one of the strategically located, tamper-resistant MED-Project kiosks at participating pharmacies, Emeline Health Center, Water Street Bridge and other locations.

Red sharps containers are available for a nominal fee in 1-quart, 5-quart, and 2-gallon sizes at all pharmacies. You may also request a free sharps mail-back package by visiting MED-Project or calling (844) MED-PROJECT (633-7765).

The proper disposal of unwanted pills, liquid medication, and needles is important for the protection of employees as well as home safety and the environment.

Download the "Unwanted Medicines and Sharps" brochure in English or español at www.cityofsantacruz.com

2019 Water Quality Consumer Confidence Report Available

THE CITY OF SANTA CRUZ WATER DEPARTMENT is pleased to report that your drinking water meets or exceeds all United States Environmental Protection Agency and State Water Resources Control Board – Division of Drinking Water health standards.

The 2019 Consumer Confidence Report (CCR) is now available; this report contains important information about the source and quality of your drinking water.

To view the 2019 Consumer Confidence Report and to learn more about your drinking water, please visit www.cityofsantacruz.com/ccr2019

If you would like a paper copy of the 2019 CCR mailed to your mailing address or would like to speak with someone about the report, please call (831) 420-5220.

Este informe contiene información muy importante sobre su agua potable. Tradúzcalo o hable con alguien que lo entienda bien.