# ONLY The 3 Ps (toilet) and **paper**

#### should be flushed down the toilet.



**Important Message** About This Issue

This is a one-time courtesy printed newsletter to our Bay Bridge Pump Station and Force Mains Replacement Project community. To continue receiving this free quarterly e-newsletter, sign up and subscribe to the OC San Connection Community Newsletter.



#### Upcoming **Holiday Closures**

MON	FRI
<b>MAY 26</b>	<b>JUL 04</b>
Memorial Day	Independence Day

While the offices will be closed our wastewater treatment and recycling services will continue as usual.

#### Need to get a hold of us?

For general information, email forinformation@ocsan.gov or call 714.962.2411

For OC San construction projects, reach your community liaisons at ConstructionHotline@ocsan.gov or call 714.378.2965.

More at www.ocsan.gov.



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COSAN

## community newsletter



A Closer Look at the Bay Bridge Pump Station and Force Mains Replacement Project

#### published by the orange county sanitation district

Spring 2025

# Inspiring Future

Career Day at OC San!

It's Career Day season, and OC San staff are visiting schools—from kindergarten to universities—to share their career journeys.

From engineering to environmental science and wastewater operations, our team is excited to inspire students and spark interest in careers that make a difference. By engaging with young minds, we hope to shape future leaders in public service and environmental stewardship.

If you see our team out and about, say hello! The future is bright, and we're proud to be part of it.

If you are interested in a career in wastewater visit **ocsan.gov/careers** or if you'd like us to visit your school, reach out and let's coordinate. Email us at **forinformation@ocsan.gov**.



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## **OC San in the Community** Costa Mesa Earth Day

Beyond our daily work treating wastewater, we're also passionate about educating the community on the importance of protecting our environment. Our team loves getting out and sharing how OC San helps turn wastewater into a valuable resource. Join us in Costa Mesa for their upcoming Earth Day event.

#### 2025 Costa Mesa Earth Day Festival

Saturday, April 26, 2025 10 AM–2 PM

Costa Mesa City Hall 77 Fair Drive Costa Mesa, CA 92626



#### The Journey of OC San's Water

You flush the toilet, take a shower, or run your dishwasher, but do you ever wonder where all that water goes? OC San takes care of putting all the water to good use. We're not just treating wastewater—we're transforming it into valuable resources that benefit the environment, the economy, and our community.

#### **Collecting & Cleaning the Water**

Every day, OC San receives and treats an average of 190 million gallons per day of wastewater from homes and businesses across Orange County. This used water flows through an intricate system of pipes to our reclamation facilities, where it goes through multiple cleaning processes. The goal? To safely remove impurities and protect public health.

#### Giving Water a Second Life

Once the water is treated, it doesn't just disappear! A significant portion is sent to our partners at the Orange County Water District for the Groundwater Replenishment System (GWRS)—the world's largest water purification system for indirect potable reuse. Here, the water undergoes even more advanced treatment before being used to replenish Orange County's groundwater supply. This high-quality purified water eventually becomes part of our drinking water system, helping us stay resilient against droughts and water shortages.

**Want to Learn More?** Join us for a facility tour to see this process in action! Visit www.ocsan.gov/tours to sign up and learn more about how we're turning waste into a resource for a cleaner, greener Orange County.

#### Turning Waste into Energy

But what about the solid materials removed during treatment? Instead of going to waste, they become an important source of renewable energy. At OC San, we use a process called anaerobic digestion, where bacteria breaks down organic material and produces biogas—a type of natural gas. This biogas is captured and converted into energy, helping power our reclamation plants in Huntington Beach and Fountain Valley.

#### Creating Sustainable Fertilizer

The remaining solids from the treatment process are further processed into biosolids—a nutrient-rich material that can be safely used as fertilizer for agriculture. Some farms in California and nearby states use these biosolids to improve soil quality and grow non-edible crops.

### A Circular System for a Sustainable Future

At OC San, we see wastewater as a valuable resource, not waste. By recovering water, generating renewable energy, and producing sustainable fertilizers, we're playing a key role in protecting the environment and ensuring a reliable water future for Orange County.

So, the next time you turn on the tap, flush the toilet, or hear about water conservation, remember—every drop has the potential to be used again!

#### Upcoming Public Tour Dates:

Tuesday, May 6, 2025 | 9:00 am Tuesday, July 8, 2025 | 9:00 am



## SECURING **OUR PLANT**

OC San's Plant No. 2 in Huntington Beach is triangular shaped and bounded by Brookhurst Street, the Santa Ana River, and the Talbert Marsh, just inland from the Pacific Coast Highway.

As critical infrastructure, OC San facilities fall under the safety measures of the Department of Homeland Security. To secure our Plant No. 2, a project is set to begin construction this spring along the southern perimeter by the Talbert Marsh.

The Wall and Soil Improvements Project will provide improved site security and visual screening of the process facilities. Soil

improvements will mitigate lateral spreading to prevent structures from shifting due to a seismic event. An existing chain link fence will be replaced with a concrete wall. The wall is designed to protect from future sea level flood rise and to withstand tsunami forces. By securing our Plant and adding resiliency to risks, we can continue to serve our communities and protect public health and the environment.

The wall will have nature-themed marsh birds stamped artwork and a unique wave pattern on the top of the wall. New landscaping will be planted along the wall and the existing bikeway making it a beautiful path to enjoy.

During construction, there will be periods of time the bikeway section along the project area will have temporary partial and full closures with detours. Don't let these closures surprise you.

#### **BREAKING NEWS**

# **Your Pipes Love Bacon Grease!**\*

OC San announces that fats, oil, and grease, otherwise known as FOG is good for your pipes! No more need to cool FOG, mix with other absorbent materials such as coffee grounds and place in a bag or container and throw away in the trash. Go ahead and pour that hot bacon grease down the drain, your pipes will thank you for it.



#### \*Happy April Fools' Day!\*

We are JOKING. Remember: Pouring fats, oil and grease down the drain is still a big **NO-NO!** Hopefully this story puts a smile on your face, and you keep your pipes happy and FOG free!

## Dancing in the Rain The Magic of April Showers

2025 began with heavy rains that have a significant impact on OC San's systems. During the February storm, Plant No. 1 in Fountain Valley recorded 2.64 inches of rain, while Plant No. 2 in Huntington Beach logged 2.22 inches. These intense downpours pushed the instantaneous peak flows to 200 million gallons per day (MGD) at Plant No. 1 and to 209 MGD at Plant No. 2. This is 50 percent greater than dry weather peak flow for Plant No. 1 and 130 percent greater for Plant No. 2.

With April showers approaching, our staff is ready to step in and seamlessly handle these surges so that the community isn't impacted. Even though we're prepared for this, you can help too! Residents can help ease the strain of the rain by postponing water-intensive activities—such as showering, doing laundry, or washing dishes—until the rain subsides or later in the day when flows slow down. This small adjustment can make a big difference as we continue to experience wet weather.



#### Sign up for email and text alerts:

Subscribe to "Huntington Beach Plant Activities".

Scan the QR code or visit www.ocsan.gov/wall for the latest project updates and schedule information.



#### CONSTRUCTION ALERTS

# BRIDGING COMMUNITIES

A Closer Look at the Bay Bridge Pump Station and Force Mains Replacement Project

NEWPORT BEACH – OC San infrastructure improvements are coming to Newport Beach this summer. Over the next four years the Bay Bridge Pump Station and Force Mains Rehabilitation Project will be in construction. This important project will take place to ensure the continuous collection, treatment, and recycling of wastewater flow from the city. Let's take a closer look at this complex project and why it is so important.

The wastewater system is set up to flow by gravity. That means the wastewater flow travels from high points in a downward slope through pipelines making its way to one of our two facilities for treatment and recycling. A pump station uses pumps to pressurize wastewater, pushing it through a pipe system called a "force main" which then carries the wastewater flows from a low point to a higher elevation so flows can continue by gravity. Force mains operate under pressure created by the pump station, allowing wastewater to move against gravity.

OC San owns and maintains 15 pump stations throughout the 479-square-foot service area. Eight of those pump stations are in Newport Beach. As pump stations are replaced, we work closely with the city to design the exterior architecture of the pump station to aesthetically fit in and blend with the neighborhood.

The Bay Bridge Pump Station, located on Coast Highway west of N. Bayside Drive was originally constructed in 1966 and is one of our oldest pump stations. It carries approximately half the wastewater flow generated within the city to our Plant No. 2 located in Huntington Beach for treatment and recycling. It was upgraded in 1995 with new pumps and piping. An additional pump was added in 2014 for a total of five pumps for increased capacity and reliability.



The Bay Bridge Force Mains were also constructed in 1966. There are two pipes that extend from the pump station to the west under Coast Highway and across the Bay Bridge, ending on the other side of the Lower Newport Beach Channel near Dover Drive. The portions underneath the Lower Newport Beach Channel were rehabilitated in 1981, by inserting a new pipe into the existing pipe, a technique called slip-lining which extended their service life.

Wastewater flows are not always constant. There is a peak in the morning and in the evening, and minimum flow in the middle of the night. The daily average flow through the Bay Bridge Pump Station is 4 million gallons per day. This is roughly the volume of around six Olympic-sized swimming pools. The peak flow measures 18 million gallons per day, which can happen during heavy rain events. The pump station needs to be sized appropriately to handle the average and peak flows.

The pump station and force mains are nearly 60 years old with moderate to severe concrete corrosion and mechanical and electrical equipment at the end of life. The pump station underwent emergency repairs in 2021, a short-term band-aid as the pump station continues to age. Reliability of our infrastructure is critical to ensure the safety of the public health and environment, and the time has come to replace the Bay Bridge Pump Station and force mains.



#### Sign up for email and text alerts Scan the QR code or visit www.ocsan.gov/BayBridge for the latest project updates and

schedule information.

### **CONSTRUCTION FUN FACT Cone Placement and Speed Limits** Did you know that the placement of safety cones in construction zones depends on the speed limit? In areas with lower speed limits, like residential neighborhoods, cones are placed closer together to ensure drivers are aware of the construction ahead. In higher-speed zones, cones are spaced farther apart to give drivers more time to react. It's all about keeping both workers and drivers safe!



The new pump station and force mains will need to be constructed while the existing facilities remain in service. This is to maintain continuous sewer service to the community. Construction will first start with the force mains, followed by construction of the new pump station. It will be constructed directly next to the current pump station. After the new pump station is completed and in service, the old pump station will be taken out of service and demolished. A new odor control building will be built at the location of the old pump station.

A construction contract of \$87.3 million was awarded to J. F. Shea Construction. Inc.