

Headworks Project Update

In a previous issue of Pipeline, we provided background information on OC San's largest project to date — Headworks Project at Plant No. 1

We are now a little over one year into the project and have "broken ground" on the project, literally! If you walk around the Headworks area, you will notice most of the areas are dug up. Much of the progress in the first year has included major demolition throughout the Headworks area to make room for the construction of new structures, tunnels, and buried utilities. Power Building No. 1, the PCI/IT Trailer, and the parking lot area have been completely removed to make room for the new Power Building No. 3 and the Headworks Standby Power Building.

The old and decommissioned Headworks No. 1 has also been completely removed to make room for the new Grit Handling Building. In addition, tons of old concrete, asphalt, buried pipe and electrical duct banks have been removed in order to make room for approximately 14,000 lineal feet of new buried pipe and 123,000 lineal feet of electrical duct bank conduit. You have also probably seen (or heard and felt) the majority of the 500 foundation piles being driven for several of the new structures. Other notable facts and figures on the project include the addition of:

- 65,000 cubic yards of excavation
- 14,000 cubic yards of concrete
- 50,000 lineal feet of above ground pipe
- 217,000 lineal feet of above ground conduit
- 3,370,000 lineal feet of wire

Because this project is rehabilitating structures and equipment that need to keep flow moving through them, part of the work is required to be done during the dry weather season (mid-April to mid-October) when daily flows coming into Plant No. 1 are lower. Work in the Metering and Diversion Box and Influent Pump Station are currently being performed this dry season to repair damaged PVC liner and deteriorated concrete. Much of this work is in confined spaces and some is in live wastewater flows making the work tricky. The contractor works very closely with OC San's Inspection, Risk Management, and O&M groups to make sure it is done safely.

There are also special considerations for the wet weather season (mid-

October to mid-April) as well! To make room for the new Grit Pump Station and other structures, portions of the old inlet channel to the old Headworks No. 1 were demolished. This channel acted as the "overflow" channel if Plant No. 1 received more flows than the main sewage pumps can handle. Because the inlet channel is no longer available, the project needs to maintain a wet weather bypass pumping system — consisting of three large diesel driven pumps — that will be able to handle the excess flows and bypass the Headworks in the event that happens.

All in all, this project is like remodeling an entire home while the residents are living and working inside it. A tremendous amount of communication, coordination, and moving around are needed to keep everything working. The project team has done an awesome job in the first year (six more years to go) of construction for the project. This next year will continue to see more underground utility work, rehab of existing structures, and major progress on all of the electrical buildings and new odor control facility. Stay tuned for more updates! 👌



May 2021 – Headworks Project Progress



June 2022 – Headworks Project Progress

CONSTRUCTION CORNER And the Work Continues...

The Westminster Boulevard Sewer Project (Project No. 3-62) replaces the three-mile-long dual force main system from the Seal Beach Pump Station in the city of Seal Beach along Westminster Boulevard to Rancho Road/Hammon Place in the city of Westminster.

Prior to the project, only one of the two force mains was in service. The project replaces both pipelines, resulting in two fully functional force mains that will increase reliability and continue to provide appropriate capacity.

The project, which started spring of 2020, has completed the replacement of one force main and is currently constructing the second force main.

A portion of the second force main in the city of Westminster was constructed using the slip lining method. With slip lining, 50 feet segments of 36-inch diameter high density polyethylene (HDPE) pipe are fused together in long continuous segments ranging from 150 - 700 feet long. The fused pipeline is pulled into an excavated insertion pit, pulled through the existing 42-inch ductile iron pipe to a receiving pit several hundred feet away, ending up with a pipe within a pipe that will be in service for many years to come.

Major construction is expected to be completed by late 2022. For project updates visit www.ocsan.gov/ Westminster.



LEFT: Segments of HDPE pipe are fused together. Fun fact: Each 50-foot segment of HDPE pipe weighs 5,000 lbs.



As part of the slip lining process, the fused together new pipeline is then inserted into a receiving pit and pulled into the existing pipeline.

EMPLOYEE HIGHLIGHT Anthony Chang

Operations Supervisor, (Div. 840)

How did you end up working at OC San?

My first introduction to wastewater treatment was twenty-five some odd years ago, my father an Instrument Technician at OC San (who recently retired after 29 years of service), brought my sister and I to a "Take Your Child to Work" event. I remember touring Plant No. 1's Cen Gen facility, Metering and Diversion, Bar Screen room, and the Activated Sludge process area.

The highlight of the tour, and indelible in my memory, is rummaging through the gift bags handed out at the event. Inside, amongst many things, was a pack of Animaniacs collectible cards. I'm not claiming a pack of collectible cards from a dated cartoon was the impetus for the trajectory of my career, but...

Little did I know, fast-forward a few years, that I would have the opportunity to work at OC San with my father and my sister.

What is your education background that brought you to OC San?

I graduated from UCLA with a Bachelor of Science degree in Chemistry.

How long have you been at OC San?

I've been at OC San for eight years.

What is your favorite part of working at OC San?

The camaraderie. It goes without saying, working 10 or 12 hour shifts can be quite taxing. Eleven hours into a 12 hour shift, an alarm gets called out for the bar screen room. You walk into the room, and what faces you is a "Bandini Mountain" composed of rags and whatnot. As soon as you grab a shovel and begin what seems to be a sisyphean task, fellow Operators show up and make quick work of the mess.

These are the moments that I value and remember, a team of dedicated Operators that help cultivate a culture of camaraderie all while running the plant efficiently.

What has been your most rewarding experience thus far at OC San?

With an ever-increasing global population, resource and environmental sustainability becomes more and more a real concern. The need for sustainability drives the innovative spirit in the wastewater industry, making the wastewater treatment plant operator an everevolving position, requiring continuous learning and skill development.

Being a part of the team, helping the district, the division, and my colleagues successfully navigate increasingly complex challenges has been and will continue to be the most rewarding aspect of my experience at OC San.

Tell us the trajectory that got you to be honored as Operator of the year?

It is an honor, a bit surreal at that. Little of what I have accomplished at OC San, I can confidently say I achieved on my own. From performing and coordinating large plant shutdowns, to troubleshooting and improving plant process, these are all massive undertakings that require the commitment, insight, and dedication of other Operators, Maintenance staff, Laboratory staff, Compliance staff, and Engineers.

If I were to chart a trajectory for the path to being honored Operator of



the Year, I know it can be correlated with me meeting and collaborating with an expanding network of dedicated OC San staff members.

What are you most excited about by receiving this award?

The most exciting thing is to be able to bring the California Water Environment Association California Operator of the Year award to OC San.

What was your first job ever?

I worked as a host at a restaurant.

What did you want to be when you were younger, career wise?

I wanted to be many things when I was younger, a cartoonist, a photojournalist, an industrial designer. I majored in chemistry with the intention of becoming a pharmacist.

The pivot to a career in wastewater may seem out of left field, but all the marque job traits still exist, community outreach and service, meticulous planning and coordination, and complex and creative problem solving.

Meet the New OC San Board Chairman

It's official! Chad P. Wanke, Mayor Pro-Tem for the City of Placentia, to serve as Board Chairman of the OC San Board of Directors. The position is currently held by John Withers of the Irvine Ranch Water District. Mr. Wanke, who currently serves as Vice-Chair, was nominated and elected as Chairman at the May 25 OC San Board of Directors meeting. His new role takes effect on July 1, 2022.



Chad P. Wanke

"I'm honored to be elected as the Board Chairman for the Orange County Sanitation District and I thank the members of the Board for their vote of confidence in my abilities," stated Mr. Wanke. "The stated mission of the Orange County Sanitation District is to protect public health and the environment. This is more than just words; it is truly what guides this agency to continue as a global leader in our industry."

Mr. Wanke has been a member of OC San's Board of Directors since 2014. He previously served as the OC San Board Vice Chairman from 2021 to present. He is the Mayor Pro-Tem for the city of Placentia. He was elected to the city



council in 2010 and reelected to the city council in 2014 and 2018. His fellow council members elected him Mayor in 2014 and 2017. He graduated from California State University, of Fullerton with a Bachelor of Arts in Geography and a minor in Anthropology. Mr. Wanke lives in Placentia with his wife, Léonie, and their four children.

CORE AWA

Congratulations to the following Core Award recipients (April 19 through May 26, 2022).

Reynaldo	Robert Carman
Domingo Jose Luna	Tyler Clark
Kevin Landry	Aurelio (AJ) Jaime
Jackie Lagade	Robert Solis
Tyler Ramirez Wasantha	Wayne Driskell
Weedagama	Dennis Yu
Christopher	Worthy Wang
Tucker	Purvi Patel
Mike O'Reilly David Alvarado	Nina Tran
Phillip Sullivan	David Ngo
Matthew	Man Nguyen
Goldsmith	Larry Andresen

Wishing the best to... Jeffrey Mohr, Engineering Manager retired on June 2, 2022 after 10 vears of service. 🔷

Plant No. 2 Warehouse Going Remote

As you may have noticed, both plants are undergoing major construction. One of the big upcoming projects at Plant No. 2 is the Temperature-Phased Anaerobic Digesters TPAD Project (P2-198).

To make room for the new digesters and other future process facilities, the warehouse at Plant No. 2 will be demolished and replaced with a remote warehousing program. Remote warehousing will allow us to continue serving the operational needs of Plant No. 2 staff using

inventory vending machines, automated locker systems, and newly constructed laydown areas.

Staff have already started by transitioning some of the inventory items to the Plant No. 1 warehouse, with additional changes being rolled out incrementally. The plan is to vacate the Plant No. 2 warehouse by summer 2023 and the new laydown areas will be constructed by early 2024.

We will roll out more information as new equipment and processes get implemented. 👌



CELEBRATING 25 YEARS

Julie Kardos, (Div. 770)

"Wow! Where did the 25 years go? Time flies when you are having fun. Raising two kids, working at OC San for 25 years, six offices, worked at both plants, worked with many that now most of them have retired or have moved on, seen many changes, and I've enjoyed every minute of it. When work is combined with great people, you lose track of the days. I feel very grateful for the last 25 years."



CELEBRATING 20 YEARS



Jennifer Cabral, (Div. 110)

"When I first started in 2002, the plan was I'd only be here for a few years. Twenty years later and I am still here. OC San is an amazing agency that has allowed me to raise my children, be at their school events, coach them through their sporting activities, cheer them on from both the sidelines and on the field, an agency that has given me the opportunity to continue to develop and learn each and every day, establish amazing relationships and life-long friendships. I am still at an agency that challenges me daily and provides me autonomy to continue to be part of a team that is always trying to do more and be better. I am so grateful for OC San as an institution and the people I work with and for. I can't imagine a more fulfilling career anywhere else."

Tony Pimentel, (Div.630)

"There is a tremendous amount of pride that I feel when I share with folks that I have worked here for 20 years now. What an amazing organization we have full of such talented individuals doing essential work! Having started as a 21-year-old intern in the Microbiology lab, it truly has been an amazing place to learn and grow professionally. I am grateful for the consistency and stability it has provided for my family over the years as well! It has been a great ride so far...Looking forward to 10 more strong years... for the mission!" §



A SLAM DUNK WITH THE SKUNK TIME FOR CRITTER STORY!

In May the Maintenance team saw a cute little critter cruising around the Human Resources building at Plant No. 1. Turns out that little feller was a skunk!

Just to be safe, the Plant No. 1 Maintenance team called pest control to perform an assessment to make sure the skunk hadn't gotten under the building and built a home. This skunk was very respectful, he caused no incidents and came and went from the plant without any hassle.



Skunk strolling through OC San



Ana Barcia, from Administrative Assistant to Staff Analyst

Darrin Canen, from Source Control Inspector I to Source Control Inspector II

Matthew Connor, from Senior Plant Operator to Lead Plant Operator

Raul Cuellar, from Engineering Supervisor to Engineering Manager

Sherjeel Dheda, from Engineer to Senior Engineer

Lazaro Eleuterio, from Associate Engineer to Engineer

Christer Gerada, from Instrumentation Tech I to Instrumentation Tech II

Reza Rezaei, from Construction Inspector to Information Tech Analyst II

David Gulley, from Vocational Intern to Plant Operator

Matthew Hirsch, from Environmental Specialist to Senior Environmental Specialist

Tom Lam, from Senior Engineer to Engineering Supervisor

Ludwig Lapus, from Senior Contracts Administrator to Principal Contracts Administrator

Joseph Manzella, from Senior Scientist to Environmental Supervisor

Michael O'Reilly, from Construction Inspector to Senior Construction Inspector

Jacob Parsons, from Instrumentation Tech I to Instrumentation Tech II

Kevin Peek, from Senior Mechanic to Lead Mechanic

Kevin Schuler, from Maintenance Superintendent to Maintenance Manager

Brittany Scavone, from Source Control Inspector I to Source Control Inspector II

Shaun Siddiqui, from Senior Plant Operator to Lead Plant Operator

Cristina Stanford, from Senior Accountant to Principal Accountant

James Stewart, from Engineer to Senior Engineer

Lights, Camera, Wastewater!

OC San recently welcomed a television production crew to Plant No. 1 for the recording of a special episode of the NOVA series, a PBS program. The crew took video of our wastewater process to properly highlight all the parts that go into making the Groundwater Replenishment System (GWRS) a reality.

GWRS is the world's largest water purification system for indirect potable reuse. The partnership between OC San and the Orange County Water District (OCWD) came into fruition in 2008 when the GWRS facility began operation to supplement existing water supplies by providing a new, reliable, highquality source of water to recharge the Orange County groundwater basin and to protect it from seawater intrusion.

NOVA was the perfect show to highlight the GWRS partnership. It is the most popular primetime science series on American television, demystifying the scientific and technological concepts that shape and define our lives, our planet, and our universe.

The episode is scheduled to air in 2023. Stay tuned for more information as the release date approaches. \diamond

HOOT AND HOLLER!



Desiree Lopez, (Div. 230) Congrats to the happy couple on their recent nuptials!



Jenna Obenshain, (Div. 770) Master's in Environmental Engineering & Water Resources from California State University, Fullerton.



Christiana Richardson, (Div.830) Master's in Urban Planning from California State University, Northridge.

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New Faces Welcome to OC San



Jeremey Arbiso (Div. 230) Buyer



Hector Espinosa (Div. 870) Instrumentation Tech I



Asela Pathirana (Div. 830) **Operator In Training**



Minh Tran (Div. 830) **Operator In Training**



Mitchell Brown (Div. 870) Instrumentation Tech II



(Div. 610) **Regulatory Specialist**



Aaliyah Richardson (Div. 140) Student Intern



Jessica Vu (Div. 230) Buyer



John Chong (Div. 870) Power Plant Operator I



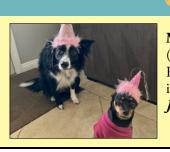
Tiffany Kieu (Div. 750) Administrative Assistant



Donald Stone (Div. 880) Electrical Tech I

DC SAN PETS

-5 YEARS-Joseph Lara Cortney Light Cory Mayne Minh Nguyen Paul Nguyen Giti Radvar Adnan Rahman Glenn Suchor



Meet Rye, (LEFT) and Penny (RIGHT). They are celebrating Rye's 1st birthday! Little Penney isn't amused. Jackie Castro, (Div. 120)



Meet Dakota. She sure is an adventurer! Mike Maldonado, (Div. 870)

Submit story ideas to Rebecca Long in the Public Affairs Office by the 10th of each month.



-30 YEARS-Michelle Hetherington William Moline

> -25 YEARS-Julie Kardos

-20 YEARS-David Andrade Iennifer Cabral Martin Dix Anthony Pimentel

-15 YEARS-Jon Bradley Jr.

-10 YEARS-David Andrews **Jim Cecil** Adam Coghill John Fladrich Stuart Jenkins May Kyi

Angel Hernandez