Despite the many obstacles encountered in the face of the pandemic that plagues us, the Board of Directors for your Orange County Water Association is pleased to announce that it continues to plan and prepare for multiple upcoming events and presentations.

After the disappointment of cancelling our March and April Industry Insight luncheon presentations, the Board began to explore the possibility of holding our monthly event virtually, as an online webinar.

It proved a rousing success!

We were fortunate to have OCWD’s Jason Dadakis join us in June to discuss one of the hot issues of the day, “PFAS in the Orange County Groundwater Basin.” The inaugural presentation in OCWA’s Industry Insight On-Line Webinar Series saw 160 people sign up. Viewers were treated to an informative, wide-ranging presentation. A complete write-up of the event begins on page 2 of this newsletter.

For our July 15 Industry Insight On-Line Webinar, we’re proud to announce we will welcome back Metropolitan Water District’s Brad Coffey. As Group Manager, Water Resources Management, Mr Coffey is uniquely qualified to provide useful Industry Insight. Those who attended Mr. Coffey’s presentation last year can attest it was an informative, engaging talk. We’re very excited to welcome him back again.

Details about Mr Coffey’s webinar can be found on page 3 of this newsletter.

For our August 19 webinar, the Board has invited speakers to provide us an update on Oceanside PURE Water, the first recycled water project in San Diego County. Further details will be published as they are finalized.

The Board continues to develop ideas for webinars through the rest of the year and will have updates as they develop. And of course, should any of our readers have an idea for a webinar, or wish to develop one themselves, please feel free to contact Sandy Scott-Roberts, Board Vice President, to share your thoughts. She’s always open for new ideas.

Later in the year, our always popular Operator Expo is slated for September 17. Offering both CE-certified training sessions and a chance for operators to meet and talk with a wide variety of industry vendors, this yearly extravaganza also features a spirited pipe tapping competition pitting some of the county’s finest teams against each other, a robust horseshoe competition, and a great BBQ lunch. Further details can be found on page 6 of this newsletter.

October finds us looking to the great outdoors and our 41st Annual OCWA Golf Tournament. Once again, our event will be held at Strawberry Farms Golf Club in Irvine. Always a memorable outing, this year’s tournament, to be held October 5, promises to be especially entertaining. Spots are still open and members and their guests are invited to join now. In addition, Sponsorship Opportunities remain available. For additional information on the tournament, including costs and qualifications, please see page 8.

Going forward, we’ll keep you apprised of the latest news from OCWA as it develops. Look to your email for our updates. And in these challenging days, stay safe and stay well.
TESTING AND TRACING. Hallmarks of scientific inquiry, these twin pursuits formed the basis of the water industry’s initial response to the emerging issue of PFAS in local groundwaters.

PFAS, or perfluoroalkyl and polyfluoroalkyl substances, are a family of manmade compounds that have been in use since the 1940s. They were developed for their unique oil- and water-repellence, as well as resistance to degradation and surfactant properties. Over the years, they’ve been used in products ranging from cleaning compounds to firefighting foams, and found particular application as stain-resistant treatments for clothing and carpeting, as well as non-stick coatings for cookware.

Unfortunately, this widespread use led to widespread environmental contamination in soil, air, and water. And despite two individual “long-chain” PFAS — perfluorooctanoic acid (PFOA) and perfluorooctane sulfonate (PFOS) — being phased out of production in the US and EU over concerns about their effects on human health, the very properties which made them useful — the strong carbon-fluorine bonds and their resistance to moisture and heat — render them hard to breakdown and remove, especially from water. For this, they’ve been dubbed “forever chemicals.”

Against this backdrop, Jason Dadakis, Executive Director, Water Quality & Technical Resources, Orange County Water District, joined OCWA for an informative, in-depth look at the issue of PFAS in the Orange County Groundwater Basin: Occurrence, Regulation, and Impacts on Local Water Supply.

As the inaugural presentation in OCWA’s Industry Insight On-Line Webinar Series, the Association could not have chosen a better speaker or a more engaging topic. And our membership and friends agreed, as 160 people signed up for the presentation, viewers from throughout Orange County, as well as sites as far flung as San Diego in the South to Humboldt Bay near the Oregon border.

After a quick overview of the situation, Dadakis looked back to March 2019, when the California State Department of Drinking Water (DDW) issued its initial PFAS monitoring orders. As the first public agency laboratory in California to be certified to analyze PFAS in drinking water, OCWD took the lead with its member agencies to both test their wells for contamination and, moreover, trace that contamination to its source.

Sample collection was conducted under strict guidance from DDW. To guard against cross-contamination, sample collectors were not allowed to carry pre-packaged food, fast food wrappers, or foil, nor were they allowed to use any notebooks, ink, or clothing that had been waterproofed. And while the sampling and test preparation was somewhat time consuming, taking between 2 to 3 weeks for analysis and reporting, through the utilization of automated extraction followed by liquid chromatography with mass spectrometry technology (LC-MS/MS), the District was able to ensure reliable, accurate PFAS detection.

Initial results showed only 9 local retail water agencies with one or more wells exceeding the State’s initial Interim Notification Levels (NLs). Additional research caused DDW to lower its Response Levels (RL) from 70 ng/L for combined PFOA + PFOS to 40 ng/L for PFOS and 10 ng/L for PFOA. These lowered RLs caused the initial analysis, where only 3 wells exceeded the combined RL, to blossom to 42 wells above the new, lower RL. Furthermore, given that testing is expected to expand in light of these lowered numbers, OCWD projects that perhaps as many as 71 of its 200 service area wells could exceed the new RL. And with over 1/3 of its drinking water wells excessing the combined RL, to blossom to 42 wells above the newer, lower RL. Furthermore, given that testing is expected to expand in light of these lowered numbers, OCWD projects that perhaps as many as 71 of its 200 service area wells could exceed the new RL. And with over 1/3 of its drinking water wells...

Continued on Page 5
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Mr Coffey has not divulged his topic for this year yet, but we are confident he will again educate and delight us all. You won’t want to miss this event.

So join us, July 15, for a timely, considered discussion of Southern California water. As Water Resources Group Manager, Mr Coffey is uniquely qualified to provide useful Industry Insight.

**About Our Speaker**

Brad Coffey currently leads the Water Resource Management Group at Metropolitan Water District of Southern California. In this role, he and his team plan for the region’s long-term water supply, manage imported and local water resource programs, advance water-use efficiency, and prepare for droughts and a changing climate.

Brad started at Metropolitan in 1990 as an assistant engineer. In a variety of increasingly responsible positions, he developed process design criteria for the $1.2 billion ozone retrofit, investigated perchlorate contamination on the Colorado River, and managed Metropolitan’s five large water treatment plants. Most recently, Brad served as Assistant Manager for the Water System Operations Group. In this capacity, he helped manage more than 900 employees who import, treat, and deliver water throughout Southern California. Through this work, Brad has authored or co-authored over 80 publications and conference presentations.

A registered professional engineer and water treatment operator in California, Brad earned degrees in mechanical and environmental engineering from Virginia Tech. He also holds a Master of Public Administration degree from the University of Southern California.

**Wednesday, July 15, 2020**

**Online ZOOM Presentation**

**Webinar Open for Log-In: 12:00**

**Presentation: 12:30 – 1:00**

OCWA Members with Reservation: **FREE**

Non-Members with Reservations: **$10.00**

Reservations must be made by EOB, Tuesday, July 14, to qualify for the Reservation Rate. Cancellations received AFTER this date CANNOT be refunded.

Visit the OCWA website to make reservations: [www.ocwater.org](http://www.ocwater.org)

RSVP IS A FINANCIAL COMMITMENT. NO-SHOWS WILL BE BILLED.
It was an ambitious, challenging project from its conception. An undersized, aging pump station needed to be replaced, and not by something similar, but with a completely revamped powerhouse. This new, robust station would have to improve the resilience, reliability, and efficiency of the entire water system. And it would need to blend in seamlessly with the community’s architecture.

To no one’s surprise, Yorba Linda Water District’s refurbished Fairmont Booster Pump Station project proved a success in keeping with every expectation. And in recognition of its excellence, it was recently awarded as Outstanding Water Project for 2020 by the American Society of Civil Engineers.

Those who attended the April 2019 OCWA Industry Insight presentation on this project well remember the detail that went into it. YLWD Engineering Manager Rosanne Weston took us through a comprehensive tour of the project, from concept to completion, and the quality of the endeavor was plain to see.

The impetus for renovating the pump station was driven by the District’s recognition of how restricted it was in its capabilities: It could distribute imported water to the entire district, or deliver imported water to the western half, groundwater to the east. There was no middle course.

The newly refurbished Fairmont Booster Pump Station, however, with its eight vertical turbine electrical pumps, provides the District with remarkable operational flexibility. Now able to pump water to three different pressure zones within its service area, this new array helps the District fully utilize both the groundwater from its wells and imported surface water from Diemer.

Out of concern over periodic, scheduled outages, and the fear of how fire or earthquake could impact the system, the YLWD Board of Directors had long sought a means to cut its reliance on Metropolitan Water District. Now, with its revamped Fairmont Station, YLWD can serve its customers with either 100% groundwater or 100% imported water, and easily switch between the two. And with an onsite sodium hypochlorite system, water purification is always assured.

The new booster station has a pumping capacity of 10,900 gpm. It’s designed not only to deliver water to multiple pressure zones, but to push the water uphill over 1,100 feet to reach the most elevated communities in Yorba Linda. And with an onsite diesel generator as backup, the District needs never fear a loss of service.

But the project was more than an inspired engineering feat. It was critically important to the community that the new building blend in with the surrounding architecture. To ensure this, the District worked in conjunction with a local developer to design a building in the Spanish Mission Revival Style, so it would closely resemble the large homes adjacent to the site, with the same stucco finish, paint colors, roofline, and roll-up “garage-like” doors. Decorative masonry walls, wrought iron gates, and attractive landscaping completes the look.

What endeared the project to the neighborhood, however, was the extensive effort the District put into soundproofing the pump station. Residents had initially been quite wary about replacing the older, much smaller pump station with a plant almost three times the size. But on completion, they were incredibly pleased that the noise abatement efforts had been so successful. Not only did the new building blend in with the neighborhood’s aesthetics, it did so without disturbing its ambiance as well.

For a look into the development and construction of this award-winning project, check out this exceptional video on YouTube:
Impact of PFAS is Widespread, Costly – and Being Addressed

Continued from Page 2

Potentially out of commission, the District’s retail water systems could see a loss of some 100,000 acre-ft/yr.

The financial impact of this would be tremendous. To replace the output of these wells with costlier, imported surface water from Metropolitan Water District of Southern California (MWD) would cost some $30 million if only 42 wells are offline. This could rise to as much as $50 million if 71 wells are lost. And adding wellhead treatment for all these wells to the mix could bring the total to an excess of $850 million. Combined with the additional studies, testing, and treatment design activities OCWD foresees, total response costs could likely exceed $1 billion.

Fortunately, the tracing activities conducted in conjunction with the testing identified multiple potential sources for the PFAS release. These include local military bases, municipal airports, landfills, as well as discharges and runoff to the Santa Ana River. Armed with this knowledge, true mitigation efforts become more realizable.

Fortunately, the testing regimens have produced positive outcomes as well. OCWD’s Groundwater Replenishment System potable reuse project has no detectable PFAS in its final product. Dadakis attributes this to the effectiveness of the Reverse Osmosis array (RO) used for GWRS water treatment. In addition, there is no detection of either PFOA or PFOS in any of the raw imported surface water purchased by the District for groundwater recharge from MWD.

To address this emerging issue, and provide leadership for its mitigation, OCWD has taken a strong stance. A PFAS Treatment Policy was adopted by the District’s Board in November 2019, then amended in February 2020. Among its objectives, the plan calls for OCWD to pay for 100% of capital expenditures needed for wellhead treatment, and up to 50% of Operations & Maintenance. To date, 9 of 10 affected Producers have signed onto the Agreement.

In addition, the District has selected Jacobs, a leading water and infrastructure engineering company, to review PFAS treatment remedies and support OCWD in the design of a pilot program. The pilot system, provided by Evqua Water Technologies, will test Granular Activated Carbon (GAC), Ion Exchange (IX) Resin, and various novel adsorbents to develop a treatment regimen. These methods are being explored because, as Dadakis explained in the Q&A session after his presentation, while RO is shown to be extremely effective in removing all forms of PFAS, it is an expensive process with a problematic disposal/discharge issue to address.

Finally, OCWD selected Carollo, a leading water engineering firm, to assist with a regional planning study to evaluate how such treatment would be rapidly implemented. This effort will include assessing the number and locations of the wells impacted, the number of treatment systems required, their integration into the Producer’s operations, the necessary DDW permitting and California Environmental Quality Act (CEQA) assessments, along with capital cost estimates and initial designs. Already, the Wellhead Treatment System engineering designs are underway with a goal to bring them online within one to three years.

OCWA was honored to host this very informative presentation by Jason Dadakis. He helped us kick off our new Industry Insight Webinar series with an exceptionally instructive talk. For despite the disruptions the Covid-19 pandemic has plagued us with, the OCWA Board of Directors remain committed to providing quality, timely information for the Association’s members, as well as the entire Orange County water community.

For those interested, a PDF of the PFAS PowerPoint presentation is available for download by OCWA’s members only. Yet another great reason to consider becoming a member if you aren’t one already.

The July Industry Insight Webinar promises to be equally enlightening. Brad Coffey, Group Manager, Water Resource Management for MWD, will return to provide his unique take on Southern California water. Those who attended Mr Coffey’s Industry Insight Presentation last July were treated to a highly illuminating, very entertaining talk on how Southern California Water Poses a Challenge for Every Generation. Mr Coffey explored both the historical forces that brought us to where we are and the plans in store for future development.

Mr Coffey has not divulged his topic for this year yet, but we are confident he will again educate and delight us all. You won’t want to miss this event.

Register Now to Ensure You Don’t Forget!
OCWA Members: FREE. Non Members: $10.00.

So join us, July 15, for a timely, considered discussion of Southern California water. As Water Resources Group Manager, Mr Coffey is uniquely qualified to provide useful Industry Insight.

2020 OCWA CALENDAR OF EVENTS

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<th>Date</th>
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<td>Webinar – MWOSC Update Brad Coffey, MWOSC</td>
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<td>Oceanside PURE Water Presenter to be Announced</td>
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<td>October 5</td>
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<td>October 22</td>
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<tr>
<td>December 4</td>
<td>63rd Annual Holiday Party</td>
<td>Location TBA</td>
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Includes Catered Lunch

This is the 13th year of the pipe tapping contest. It will follow the same rules as the AWWA competition. Each team will be given two chances at the pipe tap. All material – except the tapping machine – is provided by OCWA. Trophies are awarded to the first and second place teams. Agencies may have multiple teams. Contact Boyd Schultz at (949) 306-0714 if your agency wishes to compete. To participate, teams must be registered to attend the Operator Expo. To register, contact Bobby Young at byoung@etwd.com.

There’s still space available for Horseshoe competitors – especially women’s teams! There is a limit of two teams per Agency with two contestants per team. It is a single-elimination competition. Complete contest rules are available on www.OCWater.org. To participate, teams must be registered to attend the Operator Expo. To register, write Bobby Young at byoung@etwd.com.

Tickets: $45.00 each 

Sponsorship Opportunities Still Available:
Sponsor: $200.00 ★ Exhibitor: $300.00

Sponsors receive recognition at the event, have their name on a banner, and are recognized in the OCWA newsletter.

Reservations can be made on the OCWA website: www.ocwater.org

For group registrations, or to enter a team in either Competition, contact: Bobby Young at byoung@etwd.com
As an Association Member, You Receive these Valuable Benefits…

**Knowledge & Networking Opportunities**
- **Monthly Meetings**: Reduced fees for our monthly Industry Insight meetings, informative luncheon talks at which members have an opportunity to hear reports on new and innovative projects, and meet and mingle with other local water industry professionals.
- **Expand Your Contacts**: Members gain access to OCWA’s vast member directory.

**Career Advancement**
- **Board Positions**: Earn a position on the Board to gain leadership and help guide the Association.
- **Committee Positions**: As a member, you’re invited to join one of the Association’s various committees, or volunteer to help with an event. It’s a fun way to contribute, meet people, and get involved.
- **Increased Visibility**: Gain opportunities to present your agency or company’s projects and programs to our local network.

**Timely Communications**
- **On-Going Updates**: Receive regular notices on jobs, projects, local water news, and regulatory and legislative affairs.
- **FREE Job Listings**: Members and their organization can post unlimited job listings to the Association website. Listings are promoted with periodic e-blasts sent to our 1,500+ contacts.

**Quality Social Events**
- **Annual Holiday Party**: Our annual extravaganza brings together over 200 members and guests for a night of fun and socializing. Opportunity drawings for prizes are held throughout the evening.
- **Golf Tournament**: This member-involved event annually draws over 100 water professionals. With a traditional, non-scramble format, the contest features breakfast, lunch, and an abundance of prizes, all at a local, first-rate country club.
- **You’ll also contribute to Industry Education & Training…**
  - **SafetyFest**: The Association hosts this annual State-approved training session to help educate Operators on the latest safety issues. Participants earn continuing education units (CEUs).
  - **Operator Expo**: Our most popular Operator Training Event, this End-of-Summer celebration features some two dozen vendor exhibits, State-certified training sessions offering CEUs, and a Pipe Tapping Contest pitting some of California’s premiere teams.

Membership in the **Orange County Water Association** can benefit both your career and your company.

With an all-inclusive mission, OCWA appeals to every sector of the water community. Whether your interest lies in drinking water or wastewater, recycled water or stormwater; whether you work for a corporation or agency, are an engineer or consultant, OCWA offers opportunities to promote your firm and its activities, broaden your knowledge, expand your network, and increase your presence in the community.

Choose to become a member today. It’s a commitment to your industry; it’s an investment in yourself.

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If You’re Involved in the Orange County Water Industry, You Should be a Member of the **ORANGE COUNTY WATER ASSOCIATION**

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Despite the Covid-19 restrictions, we still plan to hold the Annual OCWA Golf Tournament. The date is set for October 5.

Once again, as we did last year, we’ll hold our event at Strawberry Farms Golf Club (SFGC) in Irvine. The SFGC staff has been very welcoming to our event and we will be able to continue to make changes for the better.

First – and possibly best – golf entry fees will remain $150. Already the day’s looking bright, when prices hold from year to year! We will also start the event earlier in the day. SFGC will allow us out on their course by 9:00 a.m., which will allow us to be finished with the awards ceremony by 4:00 p.m. or so. Check-in will be 7:15 a.m.

Singles and twosomes are welcomed and appreciated. As a reminder, the event is for OCWA members & their Water Professional guests. The OCWA Board requires a minimum of one OCWA Member per cart or two OCWA Members per foursome.

Lastly, please check your OCWA Membership status as we will be reviewing your status more closely this year as that is a requirement to be in the event. The benefits of membership far outweigh the modest $70 per year cost. Check the Membership tab on our website for complete information.

2020 Golf Tourney Postponed Until October 5
Monday, October 5, 2020
7:15 am Check-In/Breakfast • 9:00 am Shotgun Start

For additional information about the Tournament, please e-mail Mike Sinacori at Msinacori@newportbeachca.gov or give him a call at (949) 644-3342.

CLICK HERE TO DOWNLOAD REGISTRATION FORM AND EVENT RULES

Sponsorship Opportunities!

Sponsorship pricing will remain $250, same price as it has been the past few years. And as noted above, isn’t it great when prices hold from year to year?

Your sponsorship helps buy the prizes for the event. It also pays for the planned breakfast and awards ceremony, where SFGC’s famous barbeque and no-host bar will be provided. Your sponsorship also provides for a company tee sign and company name, contact and phone number on the reverse of the rules, which goes to every player the day of the event. Sponsors are also listed in the OCWA monthly newsletter to all association members starting in April, as well as on the OCWA website. What a great good marketing deal!

To become a priority sponsor, simply print the form, fill it out and send it in with a check for $250.

Lastly, please check your OCWA Membership status as we will be reviewing your status more closely this year as that is a requirement to be in the event. The benefits of membership far outweigh the modest $70 per year cost. You can sign up for Membership on-line at www.ocwater.org.

For additional information, please e-mail Mike Sinacori at Msinacori@newportbeachca.gov or call him at (949) 644-3342.

CLICK HERE TO DOWNLOAD SPONSORSHIP AND REGISTRATION FORM

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OCWA’s Board of Directors meets on the third Wednesday of each month, unless notified otherwise.
The next meeting is scheduled for:
July 15, 2020
11:00 am to Noon

Unless otherwise noted, all articles in this newsletter reflect the views or opinions of the authors and not the official opinion of OCWA, its membership or Board of Directors.

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