IRVINE RANCH WATER DISTRICT has been recognized by water professionals and organizations around the nation as a Utility of the Future — a formal designation given to agencies that have demonstrated forward-thinking, innovative approaches to trends in the industry today.

This is IRWD’s first UoTF award, granted in recognition of the District’s recycled water programs and infrastructure. Judging for the award is done by members of a selection committee consisting of peer utility general managers and executives.

The District is a national leader in water reuse — with a history of achievements dating to 1963, when its Board of Directors implemented a vision to integrate water recycling into the design of the surrounding community. IRWD’s highly skilled staff using state-of-the-art technologies and processes mean IRWD’s recycled water consistently meets the California Water Resources Control Board’s stringent water quality criteria for water reuse.

Today, nearly all of the public and commercial irrigated landscape in our service area — including parks, medians, golf courses and community association property — is irrigated with recycled water. It is also used for toilet and urinal flushing in commercial buildings, for cooling towers, construction activities such as dust control, grading and compaction, and industrial processes such as concrete production and composting. IRWD delivers about 28 million gallons of recycled water daily to more than 6,200 metered customer connections.

“We are extremely proud to have received this honor,” General Manager Paul Cook said. “This is one of the highest distinctions in the industry, carrying the added significance of being judged by peers.”

This year’s award was announced at the Water Environment Federation’s Technical Exhibition and Conference earlier this month.

The award is sponsored by the National Association of Clean Water Agencies, Water Environment Federation, Water Research Foundation, and WateReuse, with support from the United States Environmental Protection Agency.

DON’T FORGET TO VOTE!

2021 OCWA Board of Directors Election

The 2021 OCWA Board of Directors will be selected on Wednesday, November 18, 2020 during the November webinar.
Plan to attend to ensure a quorum.

Coming in November . . .

COVID-19 and Its Impact on Public Works Projects

See Page 6 for advance information about this upcoming Industry Insight Webinar
The year 2020 was terrible, and as a water year (WY), October 2019 to September 2020, it’s over. A dry winter (drier than 2014-2015 in the Sacramento Valley), COVID-19, recession and unemployment, wildfires, racial violence and unrest, and extreme high temperatures. (Fortunately, no major earthquakes.)

We happily ring out this year and hope for a better 2021 (though it doesn’t seem to be improving just yet).

As we leave 2020, the soils are dry (and ashen) and most reservoirs and aquifers have been somewhat drawn down by the dry year. Most major water storage reservoirs have below average storage, but some are above average. We enter WY 2021 with less stored water than when we entered 2020.

What should we look forward to in the new Water Year 2021?

**Will 2021 be wetter? Wetter would be better.**

If the new water year begins wet, it will be a great relief for folks living in rural areas, and all Californians who breathe. A wetter year overall should bring a shorter and hopefully less intense fire season for the year.

Wetter years also better refill reservoirs and aquifers for use in the coming year, and future droughts. Some refilling of aquifers is essential for many critically-overdrafted aquifers to comply with California’s Sustainable Groundwater Management Act and soften future reductions in groundwater pumping.

**Water, wind, and fire?** During WY 2020, we saw unusually tight and varied connections between water and wildfire conditions. Tighter connections between precipitation and fire potential seem likely to persist until forest conditions change. Fire budgets, preparations, and insurance might be usefully contingent on annual water conditions.

**Will 2021 be the year of voluntary environmental flow agreements?** If some of 2020’s major distractions subside, perhaps there is more hope. A second dry year might further focus attention. Ecosystems don’t seem to be getting any healthier. Regulatory uncertainty without such agreements might hinder or skew some water infrastructure investments might be insufficient without agreements or more certain regulations on environmental flows.

**Will 2021 be another dry year?** We have already had one dry year. California’s larger water system usually needs at least one dry year for a drought. A single dry year can usually be accommodated with reservoir storage and some additional groundwater pumping, but longer droughts require more groundwater pumping, and increase shortages to human and ecosystem uses. Additional dry years deepen shortages for ecosystems and humans, and increase risks of species extirpations, with warmer conditions exacerbating this situation. It might be time to dust off or prepare drought management plans for agencies, water projects, and ecosystems.

**Continued distractions?** Perhaps the greatest uncertainty for the new water year is whether the many distractions to effective science and policy-making will continue. With the onset of deeper drought conditions, COVID and political disruptions could damage the water system’s usually effective abilities to respond and adapt to drought.

2020 demonstrates the diverse and changing challenges facing California, with profound implications for water and environmental management. In 2021, we need to better organize how we will learn and explore how to manage water and ecosystems in California with profoundly changing conditions for decades to come. We need to prepare for this future.

*This article excerpt is published with permission by the California Water Blog. The full article is available on the web.*

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**POSITIONS AVAILABLE**

There are a number of new positions listed on the OCWA website. Click the titles to access the information:

- **OCWD** - Maintenance Technician I, II, or III (DOQ) (10-21)
- **OCSD** - Operations Supervisor (10-15)
- **OCSD** - Principal Environmental Specialist (10-19)
- **OCSD** - Lead Electrical Technician (10-29)
- **MNWD** - Sr Engineer - Principal Engineer (10-16)
- **OCWD** - Senior Communications Specialist (10-19)
- **SMWD** - Electrical/Instr Tech II/Sr. Electrical/Instr Tech (10-15)
- **MWDSC** - Instrumentation & Control Technician II (10-22)

**ONGOING OPPORTUNITIES:**

- Corrpro (Aegion) - Senior Corrosion Engineer
- Corrpro (Aegion) - Senior Corrosion Technician
- Mesa Water - Limited Term Operator I and II – Distribution
- IRWD - Operator II - Recycling Operations
- IRWD - Operator III - Recycling Operations

For further information on these and other currently open positions, please check them out in the “Opportunities” section of the OCWA website:

[www.ocwater.org/Opportunities](http://www.ocwater.org/Opportunities)

Members and their agency or company can post Opportunities to the OCWA website, free of charge, as often as they’d like. If you wish to post a job opening, and are a current member, please send a PDF of your listing to the OCWA webmaster. We’ll post the listing to the website and, if space permits, advertise it in the member-only monthly newsletter as well.
The Santa Margarita Water District currently imports 100% of its drinking water. But the District is committed to an ambitious plan to both locally generate 30% of its potable supply as well as recycle more of its wastewater. Central to these plans is the new Trampas Canyon Reservoir.

This vast new reservoir, a $109 million project, will eventually hold over 1.6 billion gallons of water. Dust dry at present, water may start flowing into the reservoir this December. At first, the massive reservoir will be used to hold treated wastewater for reuse. As such, it will easily rank as the largest recycled water storage receptacle in Southern California. This will allow the District to store water during the wet times for use during Summer and Fall.

Eventually, the District expects to implement a system similar to OCWD’s Groundwater Replenishment System and turn much of this wastewater into potable water. Initial expectations are to produce about 1,000 acre-feet of potable water annually, and eventually reach to as much as 5,000 acre-feet per year.

So make plans now to join us October 21 for an in-depth look at the design, construction, and future plans for this massive South Country project. It promises to be an insightful look into the making of an engineering marvel, and a bold vision for a future of water.
How ‘What If…?’ Can Formulate Our Future
A Look at How ‘Scenario Planning’ Can Help Us Understand What May Lie Ahead

A REPORT ON OCWA’S JULY ONLINE WEBINAR

By Tim Hogan, OCWA Communications

Over the past three decades, the Metropolitan Water District of Southern California (MWD) has utilized a unique planning device to prepare for future developments both within its system and with water in general throughout the State. This useful method – Scenario Planning – assists MWD to rationally develop its evolving Integrated Water Plan (IRP). From this, MWD envisions a range of plausible futures, a roadmap, if you will, to navigate categories of increasing uncertainty.

To explain all this, and shed light on its benefits, OCWA was honored to host Brad Coffey, Group Manager, MWD’s Water Resource Management, at our July webinar. Titled “What if . . .? Examining Our Water Future Using Scenario Planning,” Mr. Coffey’s presentation was well received by an audience of over 110 participants.

As Mr Coffey explained, the drought in the late ’80s proved a wakeup call for many California water agencies, but especially for MWD, which looked to adapt a potential blueprint for Southern California’s future water reliability. What was needed was a long-term strategy, something that could adapt to changing conditions. In addition, it would need to account for the region’s diversified resource portfolio, an eclectic mix of conservation and recycling, desalination and groundwater recovery, along with fluctuating levels of both imported and stored water.

What MWD devised was a methodology of planning cycles that have helped the agency respond to a range of changing conditions. From the early years of drought in the ’80s and ’90s, into the periods of cutbacks in Colorado River allocations and restrictions on State Water Project (SWP) allotments in the early years of this Century, then through the Great Recession and the return of the drought, MWD’s planning has provided it the foresight to adjust and even thrive.

As Mr Coffey detailed each of the divergent scenarios gamed in the IRPs, the wisdom of the approach was made clear. In each iteration of the plan, lessons were learned on what worked well and what issues needed to be addressed. Be it through diversification of water use or local supply development, increased investment in storage, distribution, and treatment, or a proactive approach to consumer outreach for conservation, MWD strived to remain atop continuing developments. The result was tangible benefits for both MWD and its customers. The IRP helped guide the way to a radical change in the supply mix for Southern California. Utilizing the plan, MWD expects to reduce both Colorado River and SWP sources by approximately 40% between 1990 and 2040. In addition, conservation and the development of regional sources will increase the share of local water by almost 60%. And through it all, potable water demand is expected to remain stable despite rapid population growth.

Lessons were learned as well on what didn’t work. In some ways, these were as equally important as the successes. It was found that certain presumptions never materialized, while gains in some water supplies were offset by unexpected losses in others. And where some supply estimates were shown to be overly optimistic, projections of demographic assumptions proved too high and associated demand did not materialize.

In all, Scenario Planning did not provide MWD a prediction; it gave a projection, a range of plausible futures. From the “roadmap” that was developed, planners were able to more adequately identify the drivers of future change. This allowed them to construct various scenarios they could use to develop potential resource mixes, all while fashioning useful, adaptive management strategies.

Useful as it has been, however, the process has its uncertainties, as well. The larger issues of climate change and its effect on supplies and demand, the vagaries of the political landscape and the future of regulatory actions, the impact of technological advances, and the ever fluctuating economy and demographics all lend a heightened air of uncertainty to any prognostications. But here again, the beauty of Scenario Planning provides the ability to remain fluid in the approach to every issue, and to adapt to circumstances as they develop.
Despite Covid-19 Delay, 41st Annual Golf Tournament Went Off Without a Hitch

The annual OCWA Golf Tournament, held this year on October 5 at Strawberry Farms Golf Course in Irvine, was acclaimed by all as an unqualified success.

Played on a beautiful Fall day, over 100 golfers turned out for a great tournament, a time of golf and camaraderie.

A big part of the day’s success was due to the help provided by the many volunteers. We’re indebted to Paige Fundament and Camilla Howe from Michael Baker International, Gwen Tellegen and Mary Acuña from Leighton, and Chelsea Roy from PACE Advanced Water Engineering for their tireless assistance to ensure the event’s success.

The Association would like to express once again our appreciation for the generous support of all our sponsors, without whom our event would not be as successful – nor as much fun – as it is every year.

We will have photos of all the day’s events, as well as complete information about the event, posted to the web in the coming days. Look for the e-blast announcement soon.

New Bill Establishes Transparency in Water Standards for California

California Governor Gavin Newsom signed AB 2560 into law, a bill that establishes a transparent process for setting health-based advisory levels for drinking water contaminants before enforceable standards are established. Authored by Assembly Member Bill Quirk (D-Hayward), the Orange County Water District was a bill co-sponsor.

The new law requires the State Water Resources Control Board to comply with specified public notice and comment procedures when establishing or revising Notification Levels and Response Levels, except when the Water Board finds the potential for imminent harm to public health and safety. Previously, there was no public process for setting these health-based advisory levels and the decisions were made without input from the Water Board.

“We’re committed to providing safe, reliable drinking water for the 2.5 million people in our service area and we applaud Assembly Member Quirk’s leadership on AB 2560,” stated OCWD President Vicente Sarmiento. “Reasonable notice and transparency would help inform interested stakeholders and allow water systems affected by NL or RL changes to take appropriate measures to plan and prepare for implementation of such changes.”

“AB 2560 supports water systems in our commitment to provide a safe and reliable water supply for today and for generations to come and we are thankful to all who helped lead and support this effort,” added Sarmiento.

41st Annual Golf Tournament
October 5, 2020

Our sincere thanks and appreciation to all our Sponsors. Their generous support helps ensure our Golf Tournament remains a tremendous success, year after year.
A Recap of OCWA’s August Industry Insight Webinar

In Search of Water Independence

Pure Water Oceanside: Diversifying the City’s Water Supply While Reducing Imported Water by Over 30%

By Tim Hogan, OCWA Communications

It was an ambitious plan by any measure. In the midst of a drought, however, it seemed the wisest course.

Faced with rising costs for scarce imported water, the City of Oceanside decided in 2014 to diversify its sources of supply.

Instead of relying on imported water, as it did in that year for almost 90% of its needs, the City Council set a goal to get 50% of its water from local sources by the year 2030.

The effort to reach this ambitious goal was the topic of our August “Industry Insight” webinar. The City of Oceanside’s Principal Water Engineer, Lindsay Leahy, P.E., was joined by Steve Tedesco, Senior Manager, Tetra Tech, to present an in-depth look at the planning and development for “Pure Water Oceanside,” the latest California project built to purify recycled water into a source of high quality, potable water.

Speaking to an audience of over 100 participants, the speakers addressed a host of topics, from the initial feasibility studies to the planning, design, permits, and funding. It was a comprehensive look at a large, complicated project.

When completed, the $67 million project will treat flows from the City’s San Luis Rey Water Reclamation Facility. An Advanced Water Purification Plant using Membrane Filtration (MF), Reverse Osmosis (RO), and Ultraviolet Advanced Oxidation Process (UVAOP) will provide 3 to 5 million gallons of potable water per day, or more than 30% of the City of Oceanside’s water supply. The project also includes 2 to 3 injection wells that will be used to place the purified water into the Mission Groundwater Basin.

Divided into two distinct phases, the project will eventually shift the City’s water use mix from its present 89% in imported water to a more reasonable 44%. Almost a third of its water (32%) will be generated by the Pure Water Oceanside plant, with recycled water for irrigation accounting for another 24%. Construction began in 2017 and is expected to be complete by mid-2022.

Don’t Miss Our November 18 Webinar!

COVID-19 and Its Impact on Public Works Projects

In the best of times, the management of complex public works projects is difficult. It requires extreme diligence to all aspects of construction, from initial planning to final sign-off. It also requires a full grasp of all the myriad legal requirements and industry standards that govern such projects. Every daily decision made on the management of contractors can mean the difference between a project coming in on-time and under budget, or significantly over budget and possibly late.

And always, there’s the potential for legal claims. COVID-19 has significantly exacerbated these issues. With all the myriad health concerns and safety restrictions in place to guard against the pandemic, there’s little room for error. And any misstep can lead to costly litigation.

Attorney Anthony Niccoli, with the law firm of Atkinson, Andelson, Loya, Ruud & Romo, will lead our November 18 webinar and take us through the key legal requirements and best practices managers must be aware of to minimize claims and bring projects in under budget. You won’t want to miss this presentation. It could mean the difference between a successful project or endless headaches.
Membership in Orange County Water Association is a substantial investment in your career. But membership benefits the community as well, for your dollars support OCWA’s mission to bring quality, informative presentations and events to Orange County.

www.ocwater.org/join-us

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

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.

Orange County Water Association

BY THE NUMBERS

Over 260 Members - and Growing!
45+ AGENCIES REPRESENTED
More than 12 Quality Events Every Year

120+ Companies Represented
SAVE $125+/year with membership event discounts
Over 60 Years of Service to Orange County

Membership in Orange County Water Association is a substantial investment in your career. But membership benefits the community as well, for your dollars support OCWA’s mission to bring quality, informative presentations and events to Orange County.

www.ocwater.org/join-us
OCWD Receives Loan Saving Ratepayers Nearly $42M

The Orange County Water District received a low-interest loan from the Clean Water State Revolving Fund (CWSRF) that will save ratepayers an estimated $1.4 million dollars annually over the life of the 30-year loan. The up to $181 million loan was granted for use toward financing the construction of the District’s Groundwater Replenishment System (GWRS) Final Expansion project. Ratepayers will realize a total savings of nearly $42 million over the life of the loan.

The CWSRF program is a federal-state partnership that provides communities low-cost financing for a wide range of water quality infrastructure projects. “Through sound planning and appropriate investment, the District upholds its mission to provide a reliable, high quality water supply for the 2.5 million people we serve,” said OCWD President Vicente Sarmiento. “We are thankful to the EPA and the State Water Resources Control Board for making this funding available which helps us to implement a vital regional water project.”

The total cost of the GWRS Final Expansion is $310 million. In addition to the CWSRF loan, the District actively pursued other funding opportunities. The project’s remaining costs will be paid through a $3.6 million grant from the California Department of Water Resources Integrated Regional Water Management grant program, a $1.1 million grant from the U.S. Department of the Interior Bureau of Reclamation Title XVI Water Infrastructure Improvements for the Nation program, $3.8 million in grant funding from Proposition 13, $1.2 million in grant funding from Proposition 1’s Water Recycling Program, and a $135 million loan from the U.S. Environmental Protection Agency’s Water Infrastructure Finance and Innovation Act program.

“We are beyond proud of this world-renowned project that offers significant benefits to the region, and to the state. A big thank you to our leadership, staff, and state and federal partners who have helped us to successfully obtain the various sources of funding. Because of this, we’re able to produce some of the highest quality water at the lowest cost per drop in the region,” Sarmiento added.

A joint project of OCWD and the Orange County Sanitation District (OCSD), the GWRS purifies wastewater from OCSD that would otherwise have been discharged to the ocean, and puts it through a three-step advanced purification process consisting of microfiltration, reverse osmosis and ultraviolet light with hydrogen peroxide. The result is high quality water that’s injected into a seawater barrier and pumped to recharge basins where it naturally percolates into the Orange County Groundwater Basin managed by OCWD. GWRS water accounts for one-third of the water that is annually put into the basin – an asset that provides up to 77% of the water for the region.

The GWRS first came online in 2008, producing 70 million gallons of water per day (MGD) and underwent an expansion in 2015, increasing production to 100 MGD. OCWD broke ground on the Final Expansion in 2019, a 30-MGD project scheduled for completion in 2023. The 130-MGD GWRS will produce enough water to meet the daily needs of 1 million people.

For more information about this fiscally sound water supply project, visit www.ocwd.com/gwrs, or go to www.epa.gov/cwsrf to learn more about the CWSRF program.

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