Monthly News Clippings

October 2019

OCSD Public Affairs Office

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Business Insider
October 7, 2019

BUSINESS INSIDER

A wealthy California enclave has some of the purest tap water in the country, and it starts out as sewage

Aria Bendix
October 7, 2019

Whenever I visit my hometown of Orange County, California, I get to sip some of the purest drinking water in the US.

The quality is sometimes hard to spot, since many drinking-water contaminants are odorless, tasteless, and invisible to the human eye. Even in cities where the water is contaminated with lead, residents have reported that their taps are crystal clear.

But in Orange County, the water is actually as clean as it looks.

It wasn't always that way. In his new book, "Troubled Water," the activist Seth Siegel explains how Orange County's taps went from having too much saltwater to spouting the purest drinking water in the US.

Saltwater was seeping into Orange County's freshwater supply

Orange County is just 35 miles from Los Angeles, but it relies on a different water system to serve its nearly 3.2 million residents. About a decade ago, that system begin churning out the most pristine water the country had ever seen.

From about the 1930s to the 1970s, farmers overpumped water through Orange County's underground aquifers, the bodies of porous rock that act as a natural filtration system. The process allowed seawater to seep into the county's freshwater supply — something known as saltwater intrusion — and threatened to expose residents to excess sodium in their taps.

Though scientists are still studying the health effects of too much sodium in drinking water, early research suggests it could lead to hypertension and chronic kidney disease.

Orange County prevented this scenario by getting people to drink recycled water instead.

Now, Orange County tap water starts out as sewage

The Groundwater Replenishment System in Fountain Valley, California, converts Orange County's sewage water into drinking water.

In 2008 the county unveiled a Groundwater Replenishment System, which purifies wastewater from the local sewage system and turns it into clean drinking water.

Many cities have struggled to implement such a system because of pushback from local residents who aren't keen on drinking water that originated in their toilets. But more than 4 million Americans — including residents of Dallas, Phoenix, and Atlanta — now get at least some of their drinking water from treated sewage.

But Orange County's process is unique because it filters for inorganic contaminants — things like pesticides and industrial chemicals that are hard to detect in water and may still be allowed under federal law.

The US Environmental Protection Agency has drinking-water regulations for more than 90 contaminants, but Siegel said more than 100,000 chemicals and pharmaceutical compounds escaped regulation.

"What makes Orange County so special is they say: 'OK, fine, the federal rules are X. We don't really care. We're going to go so far beyond those rules that we're going to make the purest water flow we can possibly have,'" he told Business Insider.

Water gets filtered through invisible holes and zapped with UV light

Orange County's filtration process begins like most "toilet to tap" systems in the US. Household sewage arrives at local wastewater treatment facilities, where it's filtered by screens. Then friendly bacteria are added to get rid of lingering organic material (i.e., human waste).

Most communities allow this treated water to be discharged into public waterways, but Orange County's process doesn't stop there.

Next, the water heads to the Groundwater Replenishment System, where it passes through another set of filters with holes so tiny that they're invisible to the human eye. Mike Wehner, the assistant general manager at the Orange County Water District, told Siegel the holes were one one-hundred fiftieth the width of a human hair.

Orange County's underground filtration system removes particles, bacteria, and viruses from pretreated sewage water and pumps them through stainless steel pipes.

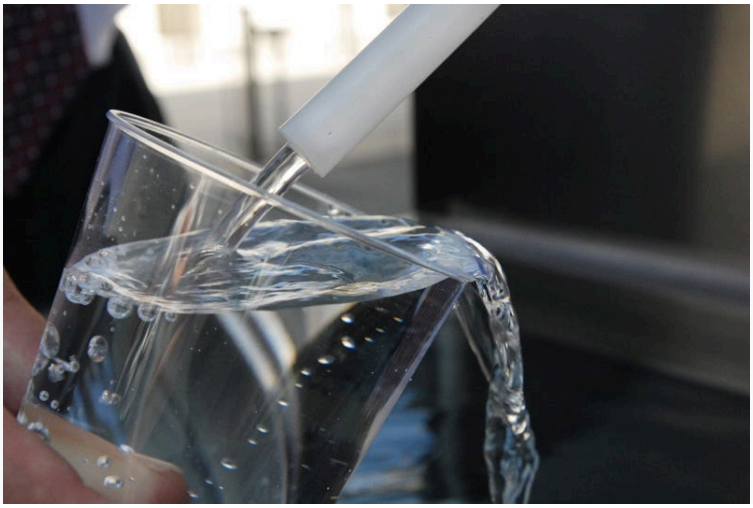
From there, the water goes through reverse osmosis, a process that extracts salt, minerals, chemicals, and pharmaceutical compounds.

The water that emerges is free of minerals, so it's slightly acidic, which means it can corrode local pipes. So the county adds crushed limestone back into the water supply to neutralize the pH. From there, it disinfects the water by zapping it with ultraviolet light. This is meant to ensure that not a single molecule of waste can survive.

"It's not fair to say that a contaminant could never possibly be in Orange County's water," Siegel said. But the community's taps, he added, are "as pure as pure can be."

The process could be replicated all over the country

Orange County's "toilet to tap" system was expensive — about $480 million to get off the ground. But Siegel argues in his book that almost any city can replicate the process for less.



Water from the Groundwater Replenishment System in Fountain Valley.

In many poor communities, he said, water fees aren't actually used to improve the local water system by investing in water infrastructure and technology. Most of these fees, he said, go toward the municipal budget.

"Flint actually had the highest water fees in the United States when the crisis broke," Siegel said. "What they did wrong was they diverted money from water fees to the general budget."

Based on his conversation with Wehner, Siegel estimates that having water as pure as Orange County's would cost communities an extra $33 a person a year. (That's after repaying any loans used to build the system and not including state and federal subsidies.)

As filtration technologies become more advanced, he said, that cost could drop lower.

"Now that Orange County has led the way and spent fortunes of money to figure it out, everybody can adopt more or less the Orange County system at not a phenomenal expense," Siegel said. "Why isn't everyone doing it? The answer is: because nobody's pushing them to."

California Water News Daily

Orange County Water District Designated Utility of the Future Today at WEFTEC 2019

By California Water News Daily on October 10, 2019

The Water Environment Federation's (WEF) 92nd annual technical exhibition and conference (TEC), held Sept. 24 at McCormick Place in Chicago, has honored the Orange County Water District (OCWD) as the Utility of the Future Today (UotFT). This award celebrates the achievements of water utilities that transform from the traditional wastewater treatment system to a resource recovery center and who provide leadership in the overall sustainability and resilience of the communities they serve.

"The Orange County Water District is extremely proud of this new designation," said OCWD President Vicente Sarmiento. "Our agency has pioneered groundwater management for more than 80 years and water reuse for nearly 40 years. OCWD's Board of Directors and staff take on the water challenges of today and prepare to meet the region's water demands for generations to come. Solid science and state-of-the-art technologies guide our decisions."

Like many California water agencies, OCWD realized long ago that they must prepare for a future replete with a shrinking source of water and an ever-growing population. To meet the challenges of groundwater depletion and unreliable surface water supplies, plus the more recent problem of seawater intrusion from the Pacific Ocean, OCWD in partnership with the Orange County Sanitation District, created the Groundwater Replenishment System (GWRS). Launched in 2008, the GWRS is the world's largest advanced water purification project of its kind. The system purifies wastewater and provides 100 million gallons of near-distilled quality water each day. The GWRS has been replicated in both Singapore and Australia as well as several U.S. cities and is considered the gold standard for both indirect and direct potable reuse projects.

Utility of the Future Today designation was launched in 2016 by the National Association of Clean Water Agencies (NACWA), WEF, the Water Research Foundation (WRF) and the WateReuse Association, along with input from the U.S. Environmental Protection Agency (EPA).The consortium of awarding agencies have indicated that 43 utilities across the United States have been recognized this year that recover resources from wastewater, engage in their community, form unique partnerships, and build an internal culture of innovation. A total of 118 utilities have been recognized since the program started.

"Each of the Utility of the Future Today honorees represent a transformational approach to utility management that results in a ripple effect of benefits," said WEF Executive Director Eileen O'Neill. "We are delighted to celebrate their impact and proud to recognize their leadership in water sector innovation."

Numerous Orange County water agencies depend on the GWRS for up to 77 percent of their water demands including: Anaheim, Buena Park, Costa Mesa, Cypress, Fountain Valley, Fullerton, Garden Grove, Huntington Beach, Irvine, La Palma, Los Alamitos, Newport Beach, Orange, Placentia, Santa Ana, Seal Beach, Stanton, Tustin, Villa Park, Westminster and Yorba Linda.

Daily Pilot
September 24, 2019

DAILY PILOT

OCC's new Mariner Training Center breaks ground in Newport; completion expected in 2021

By LILLY NGUYEN
SEP. 24, 2019
4:12 PM

Orange Coast College is building bridges in Newport Beach — literally. Construction on the Costa Mesa college's new Professional Mariner Training Center is officially underway following a groundbreaking ceremony Monday afternoon, and it will connect to the marine program's sailing and rowing base at Newport Harbor — just across the street — by a skyway bridge over West Coast Highway.

It also will have simulations of the bridge of a ship.

Once completed in fall 2021, the two-story, 12,000-square-foot training center will be home to the college's growing Professional Mariner Program, which currently serves more than 1,500 students and adults annually, the college said.

The $22-million project is funded by Measure M, a Coast Community College District initiative approved by voters in 2012 for facilities rehabilitation and construction.

"It's a demonstration of the support that Orange Coast College has from this community," said OCC President Angelica Suarez. "From the passage of [Measure] M ... to coming out this afternoon for the groundbreaking, it just demonstrates the incredible support that the college enjoys from the community it serves."

The new facility will include classrooms, a laboratory space, a full bridge simulator, a radar training room, a conference room and a student lounge.

Sarah Hirsch, newly appointed manager of the college's community boating program, said the school offers a radar class to students on the main campus in Costa Mesa, but the new training room will bring the class to the program's primary location on the water.

Students will have access to simulator units in the lab space, Hirsch said, and the full bridge simulator will be outfitted to look like the bridge of a ship, which serves as the command and control center.

“On the ship, you’d have a big window and a lot of electronic equipment right there to navigate,” Hirsch said. “To simulate that, a number of large screens will simulate the view out of the window, and we could actually work with our students to navigate out of, say, the Port of Long Beach or Los Angeles and they could practice leaving or managing in heavy weather.”

The project is more than 15 years in the making. Brad Avery, OCC’s director of marine programs and a Newport Beach city councilman, said the concept began when seven contiguous lots went up for sale across the street from the sailing and rowing base.

After the Orange Coast College Foundation tried unsuccessfully to buy the lots, the Orange County Sanitation District reached out to the sailing program to discuss installing a pump station at what would later become the construction site for the new training center, with the remaining land allocated to the college, Avery said. The Coast Community College District bought the land from the sanitation district in 2017.

Avery said the new facility will “supercharge” the program and provide a bigger presence in a credit program for students interested in maritime careers.

“Whether it’s on yachts, work boats, tug boats, military sea lift command or transferring to a four-year maritime college, we’re able to offer that with this new building,” Avery said. “That’s what it’s really about.”

Avery added that members of the public who participate in the program will be able to use the facility as well.

“It’s a win-win for the community on both sides,” he said. “We’re training local kids for jobs in an avocation that they’re passionate about, but we’re also open to all community members to participate in the classes.”

Orange County Breeze
September 26, 2019

Report on Poseidon desalination plant in Carlsbad, California shows poor performance and high costs

By: courtesy
On: September 26, 2019
In: Community, Environment
Tagged: Carlsbad CA, Orange County CA, Poseidon desalination plant, San Diego County Water Authority

The San Diego County Water Authority's 2019 fiscal year report on the Carlsbad ocean desalination plant shows poor performance at the facility. According to the report, Poseidon paid a penalty of almost $2 million for non-delivery of water, reaffirming concerns around affordability and reliability raised by community advocates in Orange County over the company's proposal to build a similar desalination plant in Huntington Beach.

The report showed that water from the Carlsbad facility was far more costly than average, at a cost of $2,685 per acre foot, and is expected to increase 5 percent next year. The Authority (SDCWA) paid an astonishing total of $121 million for Poseidon's desalinated water.

Alarmingly, the report also showed that Poseidon received five citations for violating its wastewater discharge permit at the Carlsbad plant over the last year. Desalination plants like Poseidon's discharge extremely salty, chemical-laden brine into the sea that can harm ocean plants and animals.

Poseidon also failed to deliver enough water to meet the area's needs during the 2018-2019 contracted period, falling short by more than 5,000 acre feet. Despite this, the report indicated that Poseidon received a 'Management Fee' from the Water District based on their performance and the amount of the fee has not been disclosed.

"This is more evidence that Poseidon dealt Carlsbad a bad deal with its desalination plant and is trying to repeat the corporate boondoggle in Huntington Beach," said Ray Hiemstra, Associate Director of Programs of Orange County Coastkeeper. "Orange County and state leaders should take a hard look at this report as a cautionary tale and really consider what it would do to working families in Orange County who need affordable drinking water."

Poseidon's proposal for a $1 billion desalination plant in Huntington Beach is currently before the Santa Ana Regional Water Quality Control Board, who will likely issue a tentative decision in late November or early December. UCLA recently found that the Huntington Beach plant would make water less affordable for low-income households in Orange County, causing moderate to severe rate increases. A study by the Municipal Water District of Orange County found that the Poseidon's desalination plant would be the most expensive of all water supply options for Orange County, and the most financially risky.

"All signs indicate that Poseidon's desalination plant is a terrible idea. UCLA's study shows it will raise water bills for Orange County families, and this report confirms that Carlsbad communities are already paying the price," said Andrea Leon-Grossmann, Deputy Director of AZUL. "It is an injustice to ask working-class families to pay more for water, only to benefit Wall Street investors."

Poseidon's recent corporate behavior has also been raising questions. While the $1 billion sale of the Carlsbad plant to international investment corporation Aberdeen Standard was reported in May, the sale was left unmentioned in the SDCWA report. The terms of the sale remain unknown, raising an important question of how to reconcile the profit from the sale against the $400 million public subsidy Poseidon has applied for in Huntington Beach.

Moreover, Poseidon has been spending millions lobbying state officials and making campaign contributions, as well as hiring influential lobbyists including former Senator Barbara Boxer and Axiom Advisors, a lobbying firm with ties to Governor Newsom. Poseidon has also been linked to a front group called OCWISE.

"Orange County doesn't need—and shouldn't have to pay for—Poseidon's boondoggle," said Susan Jordan, Executive Director of California Coastal Protection Network. "Orange County should look for cleaner, cheaper and common sense solutions like recycling water and capturing rainwater."

For more information, please visit https://www.californiadesalfacts.org/

Daily Pilot
September 27, 2019

DAILY PILOT

September 27, 2019

County Sanitation District honored with industry award

The Orange County Sanitation District was recently honored by national water sector organizations through the Utility of the Future Today recognition program, according to a news release.

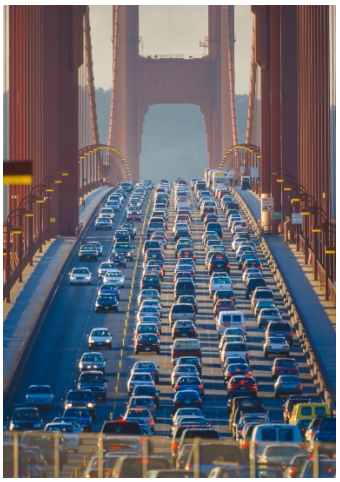
The district, based in Fountain Valley, was honored for its excellence in watershed stewardship.

“We are honored to be recognized for the innovations in watershed stewardship that allow us to protect the public health and the environment while providing a valuable resource,” district board Chairman David Shawver said in a statement. “Initiatives such as our dry weather urban runoff program that protects the beaches and the groundwater replenishment system that provides source water for the largest indirect potable reuse program in the world ensures our ratepayers are getting top-notch service while providing a tangible benefit beyond wastewater treatment.”

Los Angeles Times
October 2, 2019

Los Angeles Times

The biggest likely source of microplastics in California coastal waters? Our car tires



A new study finds that tire dust and fragments appear to be the largest source of microplastics polluting San Francisco Bay, and it is likely that the same is true for other coastal waters in California.
(David Madison / Getty Images)

By ROSANNA XIASTAFF WRITER

OCT. 2, 2019
8:15 AM

BERKELEY —

Driving is not just an air pollution and climate change problem — turns out, it just might be the largest contributor of microplastics in California coastal waters.

That is one of many new findings, released Wednesday, from the most comprehensive study to date on microplastics in California. Rainfall washes more than 7 trillion pieces of microplastics, much of it tire particles left behind on streets, into San Francisco Bay each year — an amount 300 times greater than what comes from microfibers washing off polyester clothes, microbeads from beauty products and the many other plastics washing down our sinks and sewers.

These tiny plastics, invisible to the naked eye, have been vilified for tainting water and wildlife but are notoriously difficult to study. They're everywhere and seemingly come from everywhere. They wash into the ocean in all different shapes and sizes, many covered with dyes and chemicals. Scientists and labs across the state, the nation and the world haven't even agreed on how exactly to measure or sample or study them.

So a team of researchers, led by the San Francisco Estuary Institute and the 5 Gyres Institute, a nonprofit research group focused on reducing plastic pollution, set off to create an inventory of sorts to identify all the ways these different microplastics were getting into San Francisco Bay. They analyzed hundreds of samples from fish, sediment, surface water, wastewater and stormwater runoff and tried to trace the origins of all these particles.

Mark Gold, who heads the state's Ocean Protection Council and was recently appointed the state's deputy secretary for ocean and coastal policy, said he was surprised that car tire particles were such a large source.

"I'm so used to thinking of the toxics that come from urban runoff and not the actual physical particles from something like tire dust," said Gold, who has worked for 30 years on cleaning up California's beaches and oceans from toxic chemicals. "But the sheer number of particles … the scope and scale of this problem makes

you realize that this is something that's definitely worth looking at a great deal more seriously."

Once plastic enters the environment, it breaks down into smaller and smaller pieces but never goes away. The tiny particles make their way into the ocean, into the stomachs of marine animals, and ultimately become part of the food and water people consume.

A recent UC Davis study sampled seafood sold at local markets in Half Moon Bay, Calif., and found that one-quarter of the fish and one-third of the shellfish contained plastic debris. A survey comparing 150 tap-water samples from five continents found synthetic microfibers in almost every sample — 94% in the United States.

Microplastics have been found in Lake Tahoe, in the deep, deep ocean — even in the Arctic, one of the most remote regions in the world. A scientific review of 52 studies recently concluded that humans on average consume a credit card's worth of microplastic each week. The European Union is trying to classify microplastics as a contaminant that is unsafe at any level of discharge.

"We're using more and more plastic and it's showing up as a footprint on the seafloor," said Jennifer Brandon, a microplastics biologist at UC San Diego's Scripps Institution of Oceanography whose research found that since the 1940s, the amount of microscopic plastics has doubled about every 15 years. "It begs the question: Is this what our civilization is going to be remembered for?"

Brown pelicans at San Francisco Bay in Sausalito, Calif. Trillions of microplastic particles, invisible to the naked eye, dump into the bay every year and work their way through fish and birds and the rest of the food chain.
(Eric Risberg / Associated Press)

Microplastics are commonly defined as plastic particles smaller than 5 millimeters and classified into five general shape categories: foam, “sphere or pellets,” such as microbeads; jagged “fragments” from larger plastic debris; “film,” such as breakdowns from plastic bags and wraps; and “fibers,” from the likes of textiles, fishing gear and even cigarette filters. Rubber is also considered plastic, both natural (isoprene) and synthetic (styrene butadiene).

These particles often contain harmful chemical additives such as flame retardants or plasticizers, but the overwhelming diversity in size and chemical composition also makes toxicity difficult to predict, let alone study.

What's missing right now is a systematic approach to evaluating all these different microplastics. When every study does it differently, it's hard to compare results, said Susanne Brander, an environmental toxicologist at Oregon State University.

As for rubber fragments, they can be toxic because of the fossil-fuel-associated compounds that they're likely picking up. The San Francisco findings, Brander added, are a window into other populated coastal areas with so many bridges and roads crisscrossing the watershed.

San Francisco Bay is a good laboratory for investigating this emerging contaminant in an urban environment. Essentially a bathtub surrounded by more than 7 million people, it ends up trapping many of the contaminants before they disperse into the greater ocean.

In the latest study, a three-year, $1.1-million effort by a large team of researchers, microplastics from almost 400 samples were identified and analyzed with microscopes, tweezers and lasers in an ecotoxicology lab at the University of Toronto. By establishing new standards for doing a large-scale study of a major estuary and creating a baseline for all these diverse plastics, scientists found clues to where all the particles were coming from.

"We wanted to come up with methods that could be duplicated anywhere in North America — to measure the sources, pathways and fates of those various particles … so that we could standardize a definition of the problem," said Warner Chabot, executive director of the San Francisco Estuary Institute, an independent science think tank whose board draws both from regulating agencies and those being regulated for water quality, as well as public interest groups.

“The goal was to provide the data and the science to define and quantify the microplastic problem and inform policy solutions.”

Researchers collected anchovies and smelt from six sites in the bay and found they had higher particle counts — particularly of man-made microfibers — than those tested in more undeveloped areas. These prey fish are a critical link between contamination in sediment and seawater and the rest of the food web — an indicator of exposure to larger predators and ultimately humans.

Eight wastewater treatment plants in the Bay Area were also examined. More than 90 million microparticles are discharged into the ocean every day through the facilities, the report said.

Sediment samples were also collected from 20 sites. Scientists found that many microplastics do indeed sink and accumulate on the seafloor, and that the highest concentrations of microparticles were in areas that received large volumes of wastewater and stormwater discharges. Public attention and scientific study, they said, need to focus beyond just the plastic floating on the surface.

Scientists were also taken aback by the sheer amount of particles coming from stormwater runoff, as well as the “black rubbery fragments” that made up almost half of all the particles collected from these samples.

“No one had looked at all the water rushing off the streets during rainfall events to see whether that had plastics in it,” said estuary institute scientist Rebecca Sutton, the study’s lead author. “That makes all that driving we do something to think about, not just in the Bay Area, but any setting where there are cars.”

Researchers in California have been working on documenting the presence of microplastics since as early as the 1990s. Studies by the Southern California Coastal Water Research Project found that tiny pre-production plastic pellets, or "nurdles," have become a ubiquitous presence in Southern California beach sand.

The SCCWRP is now working with officials across the state to standardize the way microplastics are measured and studied. There's been growing movement on the issue since two state Senate bills, signed into law in September 2018, called for the State Water Quality Control Board to develop plans for quantifying microplastic particles in drinking water by 2021, and for the Ocean Protection Council to come up with a statewide strategy on the problem.

At a gathering Wednesday in Berkeley, top state environmental regulators, policymakers and scientists examined the latest findings. They talked about the need for better filters in washing machines that could trap microfibers, and the benefits of more advanced filtration at wastewater treatment plants

Eliminating plastic at its source will always be the ultimate, though somewhat unrealistic, solution. While people can stop using plastic straws, states can ban microbeads and companies can redesign their shrink wrap, reducing the world's dependence on automobiles is a tougher nut to crack.

"The answer to many of these stormwater deposits is ... thinking about public transit, getting people out of their cars — all the things that we need to do anyway are just exacerbated by this issue," said Jared Blumenfeld, who heads the California Environmental Protection Agency.

“Making this report actionable is about legislation, it’s about individual behavior change, it’s about more corporate responsibility. Together, we can make a big change.”

Another idea discussed Wednesday was the use of so-called rain gardens and other nature-based infrastructure that can trap polluted runoff before it reaches the ocean. Designed to remove well-known toxics and metals — while bringing more nature back into the city — a local rain garden was found to capture more than 90% of the microplastics.

“The role of greening cities becomes part of the overall solution…. It’s all part of a complex dance,” Chabot said. “Plastic pollutes the air we breathe, the water we drink, the food we eat. Plastics are a big part of the climate change problem…. Since California is the fifth-biggest economy on Earth, we have the potential to lead the planet with solutions.”

Daily Breeze
October 11, 2019

DAILY BREEZE

PILOT PLANT AIMS TO EASE WATER NEED

(Guests tour the newly unveiled Regional Recycled Water Advanced Purification Center, a $ 17 million demonstration plant for purifying wastewater into potable water, at the Metropolitan Water District of Southern California water treatment plant in Carson on Thursday.)

By Martin Wisckol

mwisckol@scng.com @MartinWisckol on Twitter

In its effort to establish a new, drought-proof source of water that could serve a half million Southern California homes, the Metropolitan Water District on Thursday unveiled a $ 17 million pilot plant that will bring wastewater to drinkable standards.

Water from the trial project in Carson will not be piped to customers. It will be put back with regularly treated wastewater and pumped into the ocean.

But it's a key step toward construction of a working plant that would reduce the region's dependence on imported water. "Mother Nature doesn't just give us water she recycles the water," said Rep. Grace Napolitano, D-Norwalk. "We do it technologically."

Napolitano, a longtime advocate for recycling water, was among a host of speakers at Thursday's grand opening of the pilot plant. Some 300 water officials, elected officials and environmentalists attended.

Like a similar project in Orange County that already recycles enough wastewater to serve about 350,000 homes, the Carson project filtration system would use reverse osmosis as a key part of the purification process. As in Orange County, the resulting potable water would be used to recharge groundwater basins. But Metropolitan officials also foresee the possibility of piping purified wastewater directly to customers in a process some dub "toilet-totap," skipping the step of first putting it into the ground or into a reservoir for mixing with other water supplies, as is done in San Diego.

So far, nowhere in the state has such a direct potable reuse system. Furthermore, California doesn't yet have a process for approving such a plant.

"We want to help establish that process in the state," said John Bednarski, Metropolitan's chief engineer. "We're kind of leading the way."

While the trial project will produce 500,000 gallons per day, the full-size plant as envisioned would purify 150 million gallons. Estimated cost of a final plant is $ 3.4 billion, with construction beginning as early as 2024 and completion as soon as 2027 if all goes smoothly with the pilot, Bednarski said.

Follow the leader

The state's 2011-2015 drought underscored Southern California's vulnerability to inadequate water supplies. The four-year stretch was California's driest on record, with some experts predicting that climate change will make such extreme droughts more common.

Southern California relies on the Metropolitan Water District to import 45% of the water supplied to 19 million residents in six counties. New local sources of water provide buffers against both local droughts and decreased availability of flows from Northern California and the Colorado River.

The Orange County Water District has been a leader in recycling wastewater for potable use, launching its plant operations in 2008.
After purifying the water at its Fountain Valley plant, it pumps 100 million gallons into the groundwater basin daily. Member water agencies then draw the water back out, give it final treatment and pipe it to customers.

Already billed as “the world’s largest water purification system for indirect potable reuse,” the Orange County system is about to undergo a $ 292 million expansion that would increase its daily capacity to 130 million gallons a day.

That would allow potable recycled water to serve 1 million people nearly a third of the county’s population. Construction is expected to begin before the end of the year, with completion in 2023. The cost of Orange County’s purified wastewater is $ 602 an acre-foot (326,000 gallons), far cheaper than imported water at $ 1,100 an acre-foot, according to Orange County Water District statistics.

The cost of purified water that would be produced at the Carson plant is pegged at $ 800 an acre-foot but the 60 miles of new pipeline needed to distribute it would bring the cost to $ 1,800, according to Bednarksi.
It would still be worth it because of the hedge against drought and against earthquakes shutting down import lines, he said.

Opponents of desalination plants proposed for El Segundo, Huntington Beach and Doheny Beach have pointed to the Carson proposal as one reason the desalting approach isn’t needed.

But Mickey Chadhuri, Metropolitan’s assistant chief of operations, doesn’t see it that way.

“There’s still plenty of room for local projects,” he said.

Bednarski, meanwhile, dismissed concerns that the Carson project could jeopardize the availability of Metropolitan subsidies for local water projects such as desalination plants.

“They’re two separate pots of money,” he said.

Current plans for the Poseidon plant are contingent on the project receiving a Metropolitan subsidy, with the El Segundo and Doheny proposals expected to also seek such assistance.

Daily Pilot
September 25, 2019

DAILY PILOT

Costa Mesa Denny's gets heat over sewage spills

The Denny's at 3170 Harbor Blvd. in Costa Mesa has had nine sewer overflows since 1997, according to the Costa Mesa Sanitary District, which blames grease clogging the pipe that connects the restaurant's plumbing to the city's sewer main. Denny's owner blames people throwing excessive paper down the toilet.
(Faith E. Pinho)
By FAITH E. PINHO
SEP. 23, 2019
5:40 PM

According to the Costa Mesa Sanitary District, the local Denny's does.

The sanitary district board of directors, which oversees trash and sewer services in Costa Mesa and parts of Newport Beach, held a special hearing Monday morning to address sewer overflows from the Denny's restaurant at 3170 Harbor Blvd. in Costa Mesa.

The board ordered Denny's to flush out its system once a month with a powerful hydro jet. If a significant overflow happens again, the board said, it would require Denny's to install a grease trap.

In a 3-2 vote, with board Vice President Robert Ooten and member Michael Scheafer dissenting, the board eased back from staff's recommendations and gave the restaurant one last chance to clean up its act.

"We're trying to be business-friendly," board member Arthur Perry said.

According to district staff, Denny's has had nine sanitary sewer overflows, in which untreated sewage spills onto the street, since 1997. The most recent were in May and January. No other restaurant in the district has experienced so many sewer overflows, district General Manager Scott Carroll said.

The sanitary district said grease clogged a pipe and obstructed sewage flow, leading to the spills. District staff tried to prevent overflows at Denny's several times in the past 22 years, at times requiring that the restaurant video-record its pipe innards and increase its hydro jet cleanings from every three months to every two.

After the January incident, the district notified Denny's that another sewer overflow would warrant requiring an interceptor to catch the grease before it enters the wastewater system.

“It comes to a point when you say, ‘OK, enough is enough.’ … Sewer spills are a threat to public safety,” Carroll said.

Carroll played a video showing white gunk caked on parts of the inside of a lateral, the pipe that connects the restaurant’s plumbing to the city’s sewer main.

Medhat Bechay, owner of Denny’s Costa Mesa location, said the issue isn’t grease. He blamed the overflows on patrons and homeless people throwing excessive toilet paper, hand towels and other objects down the toilet.

“Usually that’s what happens — somebody washing themselves, cleaning themselves, taking a shower, really, in the restaurant,” Bechay said.

Board members questioned Bechay’s business practices, saying he should make the restrooms available only to paying customers. He said the restrooms are limited to customers but cannot be patrolled constantly, since the restaurant is open around the clock.

The only grease that enters the system would be from washing the floor, he said.

Joe Jenkins, who oversees the district’s food oil and grease program for the company EEC Environmental, pointed out that any food waste or grease from pots, pans, plates and utensils also would likely flow through the drain into the lateral.

Installing a nearly $50,000 grease interceptor — plus thousands of dollars in additional costs to temporarily close the restaurant — “really doesn’t make sense … as a business,” Bechay said. Instead, the restaurant will pay about $475 for the monthly hydro jet treatments.

“We take care about the public,” Bechay said. “That’s something very important to us.”

Daily Pilot
September 26, 2019

DAILY PILOT

Many undeterred by water closure at Newport's North Star Beach after 750-gallon sewage spill

By JULIA SCLAFANI
SEP. 26, 2019
5:34 PM

Water sports enthusiasts at North Star Beach in Newport Beach are being greeted by warning signs, thanks to a sewage spill, though many rowers and paddlers are going into the Back Bay as usual.

The beach was closed Thursday to swimming and diving after a blockage of a city sewer main caused about 750 gallons of wastewater to spill, according to the Orange County Health Care Agency.

However, it hasn't deterred many of the regulars who pass through the Newport Aquatic Center at the beach.

"We are still allowing people to go into the water if they wish," said NAC staff administrator Sydney Moralice, who added that anyone who comes in is informed of the closure.

City officials told NAC administrators that the spill occurred Tuesday, Moralice said.

Incidental splashing isn't considered a major hazard for rowers and paddlers, Moralice said.

"We haven't been busy as it is," Moralice said, noting the overcast weather Thursday, "so we haven't turned anyone away because of it."

The city posted signs on the beach saying the water is closed to swimming and diving, NAC said.

Junior rowing practice was underway as usual Thursday, though athletes were given the choice not to go on the water, particularly if they had open cuts or other wounds, NAC said.

An average of 300 people pass through the facility daily on their way to the bay, including rowers, members and rental patrons, NAC said.

There were no reported changes in the water or a noticeable indication of a spill in the area in the days leading to the closure, according to Moralice, who said she checks water quality reports daily.

The sewage spill occurred at about 12:20 p.m. Tuesday near the intersection of Jamboree and San Joaquin Hills roads, according to Health Care Agency spokesman Anthony Martinez.

The blockage was cleared within about 20 minutes, but about 750 gallons of wastewater flowed from a manhole, Martinez said.

About 250 gallons were captured, but the rest entered drains leading to the bay near the end of San Joaquin Hills Road, Martinez said.

North Star Beach is the closest public beach and testing site to the area where the spill occurred. The beach is sampled weekly.

“If today’s results come back clean, we could potentially be lifting closure tomorrow,” Martinez said Thursday.

The most recent ocean water reports can be found at *OCBeachInfo.com*. To report a swimming-related illness, call (714) 433-6011.

Twitter Posts
October 2019

Account home

OC Sewers @OCSewers

Page updated daily

28 day summary with change over previous period

Tweets	Tweet Impressions	Profile visits	Mentions	Followers
27 ↑42.1%	22.6K ↓19.2%	235 ↑14.1%	17 ↑183.3%	1,614 ↑10

Oct 2019 · 16 days so far...

TWEET HIGHLIGHTS

Top Tweet earned 3,810 impressions

Construction Alert in @City_of_Anaheim Intersection work at State College & Gene Autry - no left hand turns permitted in any direction on Wednesday, Oct. 9 from 8:30am - 3:30pm. Questions at (657) 208-7900 or email ConstructionHotline@ocsd.com. #OCSDStateCollege #FixingTheSewers pic.twitter.com/OoIY0vSMxt

3 ♥3

View Tweet activity View all Tweet activity

Top Follower followed by 968 people

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@IE_expo FOLLOWS YOU

IE expo series shows--Asia's Leading Trade Fair for Environmental Technology Solutions. IE expo China(Shanghai) · IE expo Chengdu · IE expo Guangzhou

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Top mention earned 31 engagements

MWDOC
@MWDOC · Oct 3

@MWDOC, @OCWDWaterNews, @MesaWater, @southcoastwater, and @OCSewers met with @AsmCottie to discuss local and regional #water issues. pic.twitter.com/ZikGRAGEhb

1 ♥4

View Tweet

Top media Tweet earned 535 impressions

It's Cybersecurity month and our IT Man wants to give you a few tips on how to stay cyber safe. #TipswithITMan #CybersecurityMonth #CyberSafe pic.twitter.com/UZsJDnRFJB

♥2

View Tweet activity View all Tweet activity

ADVERTISE ON TWITTER

Get your Tweets in front of more people

Promoted Tweets and content open up your reach on Twitter to more people.

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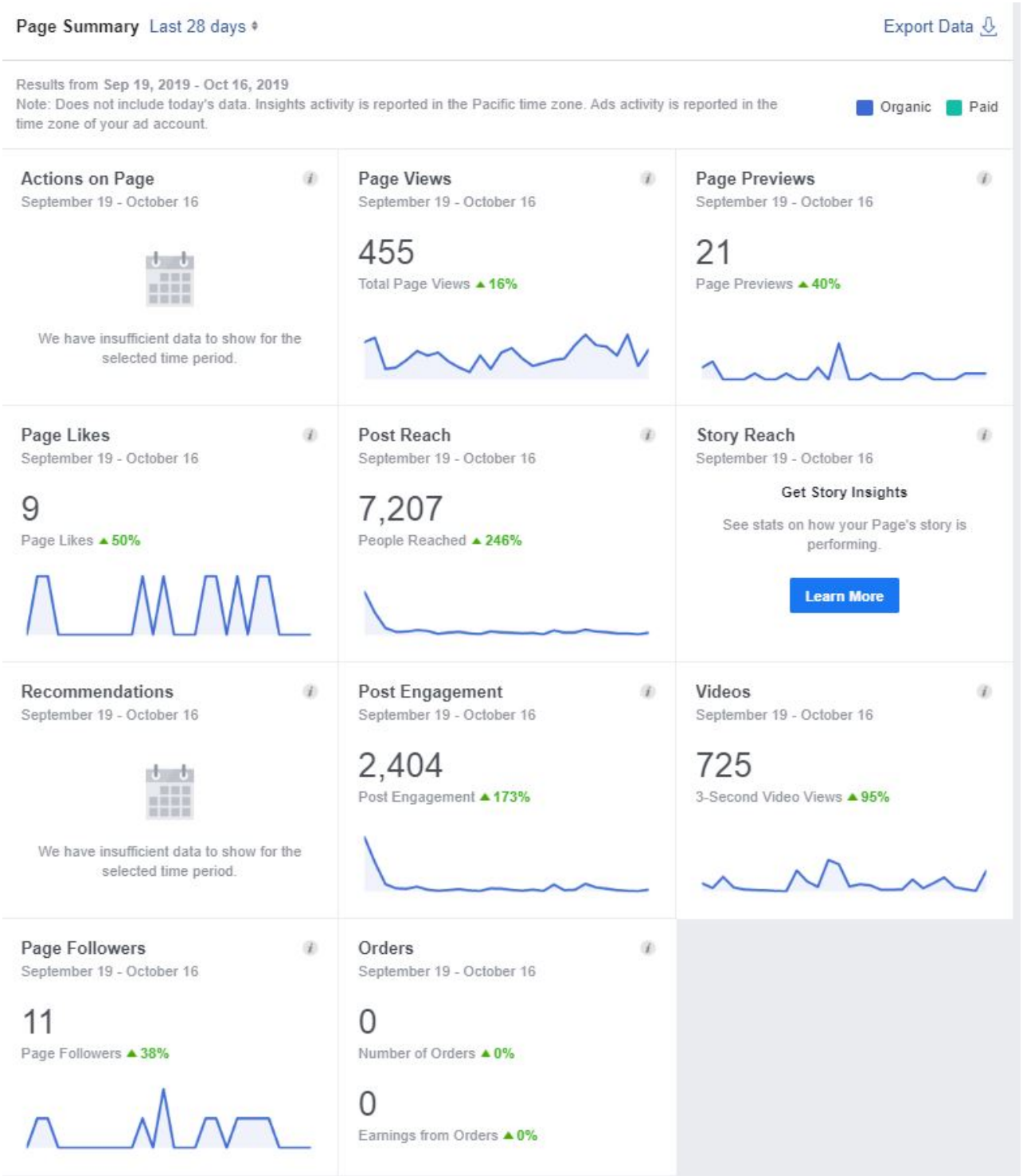
OCT 2019 SUMMARY

Tweets	Tweet Impressions
16	15K
Profile visits	**Mentions**
167	6

New followers
Currently unavailable

Facebook Posts
October 2019



Reach: Organic / Paid | Post Clicks | Reactions, Comments &

Published	Post	Type	Targeting	Reach	Engagement
10/17/2019 11:30 AM				33	1 1
10/17/2019 11:09 AM				37	3 3
10/17/2019 10:50 AM	 OCSD employees take safety VERY SERIOUSLY! #greatshakeout			57	4 5
10/16/2019 2:00 PM	 Here's some #WednesdayWisdom from our IT Man. #CyberSafe			168	17 7
10/14/2019 1:51 PM	 We are getting ready to participate in the Great #ShakeOut on Thursday at			90	1 0
10/12/2019 9:52 AM	 Today OCSD was at Costa Mesa Sanitary District 75th Anniversary			234	12 20
10/11/2019 2:40 PM	 We wanted to finish Water Professionals week with a bang!			164	11 11
10/10/2019 1:00 PM	 Throwback to last Thursday when we met with Assemblywoman Cottie			286	23 18
10/10/2019 10:34 AM	 This week is Water Professionals Week! This week is dedicated to			581	71 73
10/10/2019 9:00 AM	 Have any fun plans this weekend? If not, come visit us at the Placentia			126	3 1
10/09/2019 7:35 PM	 Intersection work continues tomorrow in City of Anaheim-			131	2 1
10/09/2019 11:35 AM	 Here's another tip from IT Man. Stay #CyberSafe! #CyberSecurityMonth			149	8 6
10/08/2019 10:21 PM	 Construction Alert in City of Anaheim- Municipal Government.			187	2 8
10/08/2019 12:00 PM	 Are you ready to ShakeOut? We are! #ShakeOut is coming soon on 10/17			116	1 2
10/08/2019 9:00 AM	 October is National Cyber Security Awareness Month and we will share			115	0 1
10/07/2019 12:00 PM	 Did you know OCSD has a Capital Improvement Program (CIP) to			186	9 7
10/07/2019 8:53 AM	 This week is Water Professionals Week! This week is dedicated to			433	69 46

10/03/2019 10:06 AM		Thank you Garry Brown from Orange County Coastkeeper for			203	17 8	
10/01/2019 3:36 PM		It's Cybersecurity month and our IT Man wants to give you a few tips on			526	28 17	
10/01/2019 12:34 PM		Yesterday, we had Huntington Beach City Council Members take a tour of			208	10 7	
09/28/2019 9:33 AM		Good neighbors keep their smells to themselves. Sign up for a tour at			306	17 14	
09/27/2019 4:44 PM		City of Anaheim- Municipal Government we're making our way			252	11 9	
09/25/2019 6:08 AM		Construction Alert in City of Anaheim- Municipal Government. No			191	2 3	
09/24/2019 4:00 PM		We've done it again!!! OCSD has been awarded the Utility of the			283	12 20	
09/24/2019 3:12 PM		It's Special Districts week! Special Districts like OCSD provide an			128	1 1	
09/24/2019 9:00 AM		Have you ever stopped and wondered where the water goes			484	31 21	

Instagram Posts
October 2019