**CALIFORNIA COASTAL COMMISSION**
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SAN FRANCISCO, CA 94105-2219
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# Th10a

**9-20-0691**
**(South Coast Water District)**

**October 13, 2022**

**CORRESPONDENCE**

**Received between**

**5:00pm, October 7, 2022 and 500:pm, October 11, 2022**

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# 9-20-0691
# (South Coast Water District)

## October 13, 2022

## CORRESPONDENCE

## Public Offices and

## Organizations

MICHELLE STEEL
48TH DISTRICT, CALIFORNIA
STEEL.HOUSE.GOV

COMMITTEE ON TRANSPORTATION AND INFRASTRUCTURE

COMMITTEE ON EDUCATION AND LABOR

# Congress of the United States
## House of Representatives
Washington, DC 20515–0548

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WASHINGTON, DC 20515
(202) 225–2415

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SUITE 570
HUNTINGTON BEACH, CA 92647
(714) 960–6483

October 6, 2022

Donne Brownsey
Chair
California Coastal Commission
455 Market Street, Suite 300
San Francisco, CA 94105

Dear Chair Brownsey:

I am pleased to share my support for the Doheny Ocean Desalination Project.

This technologically unique and environmentally sensitive ocean water desalination project will enhance water reliability for South Coast Water District (SCWD) and the region. SCWD has worked collaboratively for more than eight years with stakeholders and officials with local cities, other special districts, nonprofit organizations, tribal nations, and others in Orange County and regionally in furtherance of this Project. SCWD has also worked diligently at the State and Federal levels to secure more than $32 million in critical grant funding for the Project to date.

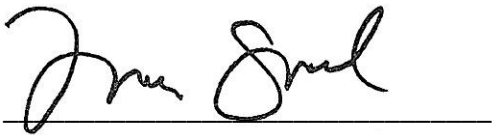
This Project will enable SCWD to further diversify its water supply portfolio and reduce its dependence on imported water from the severely stressed Colorado River and State Water Project, especially during times of historic drought conditions which will become more frequent as climate change evolves. The Project is particularly important to south Orange County, which is roughly 90% dependent on these imported water supplies.

In addition to the water supply benefits, we support this Project because it complies with the California Ocean Plan and protects the marine environment by implementing the preferred intake and discharge technologies, i.e., using a subsurface ocean water intake system to draw water passively through the ocean floor and comingling the "post-desalination" brine back with treated wastewater for disposal through an existing outfall.

The serious implications of drought restrictions on our local communities, especially when combined with the region's overwhelming reliance on imported water, justifiably inspire SCWD and its neighboring districts to be innovative in their ongoing mission to achieve a diverse and reliable portfolio of water projects and management strategies. The Project has the potential to be a local and regional asset, reducing south Orange County's reliance on imported water and ensuring supply reliability in the event of a natural disaster or other major emergency.

It is a pleasure to share my support of the California Coastal Commission's consideration and approval of the Doheny Ocean Desalination Project. Thank you for your consideration and for your ongoing commitment to and efforts on behalf of our residents, businesses, and the region's resources.

Sincerely,



Michelle Steel
Member of Congress

October 6, 2022

Ms. Donne Brownsey
Chair, California Coastal Commission
455 Market Street, Suite 300
San Francisco, CA 94105



**SUBJECT: Doheny Desalination Project – Application No. 9-20-0691 – SUPPORT**

Dear Chair Brownsey:

On behalf of Rancho California Water District (Rancho Water), a regional water, wastewater, and recycled water provider in southwest Riverside County, we strongly urge support for the Doheny Desalination Project, Application No. 9-20-0691 (South Coast Water District, Orange County) under consideration by the Coastal Commission on October 13, 2022.

This technologically unique and environmentally sensitive ocean water desalination project will enhance water reliability for South Coast Water District (SCWD) and California's southwestern region. SCWD has worked collaboratively for more than eight years with stakeholders and officials with local cities, other special districts, nonprofit organizations, tribal nations, and others in Orange County and regionally in furtherance of this Project. Moreover, this project provides the Coastal Commission with an opportunity to take a bold step in supporting Governor Newsom's California's Water Supply Strategy and the communities that we so dedicatedly serve.

As California is experiencing increasingly extreme weather conditions, with less predictable precipitation patterns and longer and more frequent dry and hot periods, the Southern California region needs to advance projects that contribute to reliable local supply development. Desalination gives us the ability to generate new water supplies that is part of a larger portfolio of actions – including conservation, expanded groundwater storage, and maximizing the use of recycled water.

Rancho Water supports innovative water reliability solutions, such as the Doheny Desalination Project, and we encourage the California Coastal Commission to advance this application. Thank you for your consideration of this project and if I can be of assistance during your deliberations, please contact me at (951) 296-6909 or by email at granthamr@ranchowater.com.

Sincerely,

Robert S. Grantham
General Manager

089.rg

Friday, October 7, 2022

California Coastal Commission
445 Market St., Ste. 300,
San Francisco, CA 94105

RE: Application No.: 9-20-0691 Doheny Desalination Project, Well Field, Treatment Plant, Reject Discharge, and Uses Item #10 a

Dear Commissioners,

On behalf of the Society of Native Nations, Sierra Club, 350.org, Desal Response Group, Southern California Watershed Alliance, Environmental Justice Coalition for Water and Social Eco Education, we write to address the staff report and FEIR for the Doheny Ocean Desalination Project proposed by South Coast Water District in South Orange County. We value the staff report and the time spent with the staff to address most of our concerns through said report, however we must oppose this project and we ask that you do as well.

The Project application is inadequate and incomplete and does not provide CEQA Support for the California Coastal Commission's considerations of the application as it is currently composed.

On September 28th, Governor Newsom signed Hertzberg's AB 1157 Urban Water Use into law.

In 2018, the Legislature approved SB 606 (Hertzberg) and AB 1668 (Friedman), which established a foundation for long-term water efficiency improvements to enhance the state's resiliency to drought. The measures enacted indoor residential water use standards at 55 gallons per capita daily (gpcd) until 2025, 52.5 gpcd between 2025 to 2030, and 50 gpcd for 2030 and beyond. Recognizing the need for additional data on indoor residential water use, the Legislature authorized DWR and the SWRCB to conduct necessary studies and jointly recommend updated standards that more appropriately reflect best practices. Based upon extensive analysis of the best available data and information, DWR and the SWRCB determined the statewide median water use for 2017 through 2019 was already at or below the 2030 standard, and jointly concluded the indoor residential water use standards should be updated.

SB 1157 (Hertzberg) enhances California's water efficiency by updating statutory indoor residential water use standards to 47 gpcd between 2025 to 2030, and 42 gpcd for 2030 and beyond – as recommended by DWR and SWRCB.

**Tribal & Environmental Justice Policy regarding Doheny:**

Society of Native Nations concerns are focused on the existing waterways as they are old and outdated. We are concerned the recycling plant's infrastructure as proposed may not be sufficient. This proposed desalination plant offers a design to carry the brine - chemical waste to be filtered through and to take on the volume, the velocity, and the condensed salt, as safe containment and dumping directly into the ocean. The existing waterways were not designed to handle toxic waste and may result in poisoning and compromising multiple communities along its path. We cannot afford to further harm the environment; we cannot continue killing marine life, and exposing toxic waste to so many.

Who is monitoring?

Will this Doheny Plant have the same unresolved challenges and issues as the Carlsbad Desal Plant?

There is zero environmental assurance and/or environmental trust. As we address the California Coastal Act: there is a failure to demonstrate need when we are nowhere near reducing water waste and water use, collectively. As proposed, the project will increase the salinity of discharge and wastewater volumes on regulated coastal receiving waters frequented by migrating whales as well as dolphins and other marine life.

Society of Native Nations is certain our Ancestors would want us to protect the ocean, the land, our marine relatives, and the people. It is great to hear we are set to protect cultural artifacts and possibly Ancestral remains - however we need to defend, protect, and honor the ocean for 7 generations to come.

**ENGINEERING**

South Coast Water District is proposing to build and operate the Doheny Desalination Project (Project) facility in the City of Dana Point. The Project treatment facilities would be located on

the south side and on the southern floodplain/bank of the Sycamore/San Juan Creek and across from the existing Sewage Treatment Plant. The Project also includes (e.g., 10+ wells of 50+ft length and at depths of -20ft) in the Doheny State Beach on the northerly floodplain (1400ft) at the mouth of the Creek. The wells would provide influent via a pump station and pipelines in parallel with other pipelines to the existing sewage treatment plant, from which it would continue southerly crossing the Creek to the Project's Desalination (desal) Treatment Facilities. After desal processing, the rejected seawater brine and wastewaters would be collected and conveyed north across the Creek to the sewage treatment plant. Current outfall plans require combining desal wastewater effluent to be combined with sewage treatment plant effluent before discharge, 1600ft south of the sewage treatment plant through the existing sewage treatment plant effluent outfall.

The Project would provide water to ratepayers throughout the District's nearby service areas and would reduce the area's reliance on imported water from other parts of the state and county or even district, that is delivered through pipelines from northeastern Orange County. All ratepayers within SCWD would pay for the total costs of the Project and operations.

The Project would use several design elements preferred under the state's Ocean Plan for seawater desalination facilities because they are meant to avoid or reduce potential impacts to marine life and water quality:

- ➢ Widely located well sources along/beneath up to 1400ft of beach
- ➢ Combining very lower saline/freshwater sewage treated effluent (e.g., 800ppm) with x2-x3 seawater salinity (e.g., 80,000ppm) with pipeline mixing before discharge to open marine waters (e.g., 30,000ppm).

Pursuant to the best available information, the CCC must consider more coast zone protective alternatives of groundwater/freshwater sourcing and groundwater storage of processed water supply for the Desal Plant and focus on sources of less than 10ppt groundwater sources and within 5000ft upstream of the plant ("Stonehill Drive Alternative") and equal/greater than 4800 feet inland/NE from the shoreline. Depending on the Creek's water quality, the Project reject/effluent waters could be directly discharged to the lower Creek reaches or combined with the sewage treated plant effluent and discharged as currently located. Siting potable water sourcing of seawater along the existing beaches adds an unnecessary element of risk/hazard for the coastal zone with needs of protecting water sourcing rather than the coastal ecosystem and processes.

A second alternative (Domingo Alternative) must consider use of the current treated sewage treatment plant effluent as the source/influent for the Desal or Supply Purification Plant (Pure Water Plant, PWP) for direct potable reuse rather than continuing discharges to the ocean. The PWP would use the existing sewage treatment plant effluent pipeline/outfall for discharges of PWP effluent with some mitigation of improved outfall mixing and dispersion or even adding pumped seawater into the effluent pipeline/outfall.

A third alternative with longer term water supply implications would combine groundwater and sewage treatment plant effluent for a larger scale treatment/purification facility and perhaps be more cost effective and less directly impacting on the coastal zone area and shallow marine waters by using the same outfall but with some improvements for mixing.

- ❖ Elevation, Storage and Distribution

Because of the relative low elevation of the proposed plant (+15ft amsl), pressures and pumping requirements may focus nighttime low demand service conditions in the coastal service areas and require storage elsewhere even for the relatively low (5MGD) initial production and more so if increased to reported 15MGD future targets. The initial Desal Plant has been proposed with storage of at least One Million Gallons of Desal water rather than using existing available storage including groundwater recharges. Therefore, nighttime production would be stored for distribution during daytime uses of the low elevation coastal zone residents. Costs for new storage would be paid via the rate structure for the entire Water District, not by those receiving the improved Desal supply.

Typical desal operation involves maintaining consistent if not constant intake and processing for 24/7/365 period in order to assure most cost-efficient operations and maintenance. The proposed Project involves an initial 5MGD (208,400 gal/hr) capacity with undetermined capability of increasing to 15 MGD in the future. Even at the initial flow rates, nighttime (10pm-7am) user rates may be less than 10% of total flows available (<21,000 gal/hr), leaving the remaining unused portion for storage, e.g., 185,000gal/hr x 9 hrs = 1.5MG (30% of daily capacity). The Project does provide for tank storage on the Project Site, and stored water would be dispensed during the typical user day for even a larger service population. However, such low elevation tankage requires supplemental distribution pumping capacity which has not been adequately discussed, especially remembering that the distribution pumps may be sitting idle at night while additional pumping capacity is required during the day if Project site storage is approved.

An alternative depends on the distribution system, and no adequate model has been provided for distribution/storage tanks, so as to locate at appropriate elevations such tanks distributed throughout the Desal service area for optimal daytime supplies and pressures. The Project is inadequately modeled and must be delayed until such modeling is provided, especially as the water supply would be assumed to serve the coastal zone and the CCC jurisdiction. With modeling, service/user benefits can be assessed regarding who pays and who benefits and adjustments could be made for those who benefit more, paying more and fair sharing of costs and benefits.

- ❖ Groundwater

Insufficient information is available regarding groundwater layering and infiltration of runoff infiltration from parking lots, user areas, and restrooms in the Park, roadways adjacent to it, the zones of influence of the wells and their various pumping phases. Similarly, groundwater

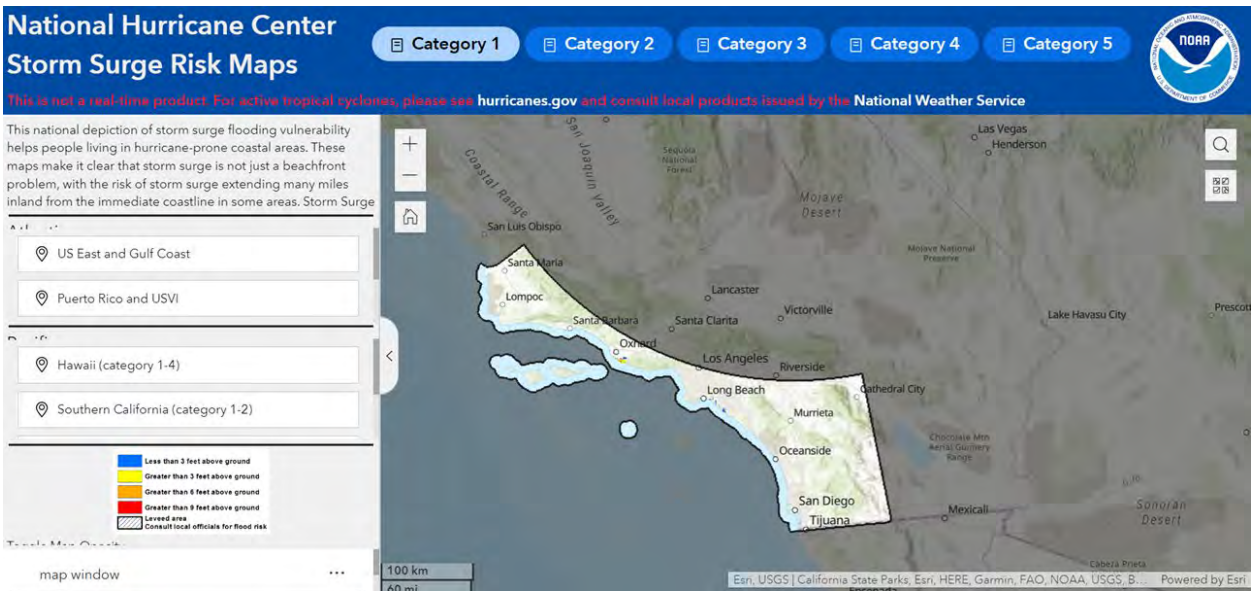
monitoring is insufficient for locating and sizing wells for the most reliable supply of consistent influent for the Project.

- ❖ Doheny State Beach

Beach Wells, pump station(s), and influent supply pipelines would impact users and beneficial uses of the Doheny State Park and its adjacent marine waters and would be subject to coastal sand/beach movements as have occurred since before 1994. Satellite images of the Park beaches and San Juan Creek discharge show highly variable beachfronts and configurations which have not been adequately discussed and documented through the many CEQA and related documents, nor assessed as to their impacts on users and beneficial uses of the Park and adjacent waters. The dynamic character of the beach and adjacent creek mouth and barrier bars requires a more responsive Project-beach-monitoring/response-program for maintaining flows, pressures, and qualities to the intake slant wells most often beneath the beach sands, which could be exposed or rendered isolated.

Major coastal hazards for this Project include changing beach/barrier bar sand movements, sea level rise, climatic flooding, tsunamis, liquefaction, red tides and earthquakes/seismic tremors. Such hazards require additional monitoring programs and well-organized responses to important events and rare events. Current submittals mention but do not assess physical impacts on water-related resources and their dependent users. Given the water dependent nature of the beach wells and potentials for liquefactions and tsunami disturbances, the design, monitoring, and recovery measures must be much more specific and subject to monitoring systems and recovery practices, standby equipment, and periodic drills to assure minimum impacts on resources and users of the coastal zone.

The California coastline from as far north as Santa Maria and south to San Diego, including Doheny Beach, appear on the [National Hurricane Center Storm Surge Risk Maps] for the Pacific Coast.



As evidenced by the recent Google Earth Satellite images below, Doheny Beach State Park and its shoreline is subject to expected and significant changes due to Creek flows, ocean currents, and wind-wave erosion and deposition all of which can change the shoreline adjacent to any beach front well field for influent to the Project. The applicant has not assessed the environmental effects of such physical changes to the well field and "aquifer" providing the influent to the Project. Similarly, the Creek and "estuary" formed by the Creek is often subjected to eutrophication and algal blooms which may influence the chemical conditions of the Project influent and maybe influenced by the current STP effluent discharges.

A thorough description of the well field and its sphere of influence and interactions with the Creek and Northwesterly drains from streets, highways, and parking lots must be provided along with a suitable groundwater model for conditions during expected flows, runoffs, and climate conditions, along with those expected during the life of the Project (2072).

1994

2005

2011


2019 (900ft)

8-21

**Seismicity**

The entire California Coast is subject to many earthquakes along the numerous faults on- and off-shore, including the Project site and any future Project and facilities. No earthquake preparedness plan, equipment, supplies, and facilities have been presented which would adequately and completely address the conditions during and following a “design earthquake” of say 7.0RM, at depths of <10,000ft and within 5 miles of the Project site. Furthermore, no discussion of past earthquakes, including the 3.6RM temblor that struck about 03:41am July 17, 2022 off coast from Dana Point, expected to have been along the active Palos Verdes fault. Although no damages/injuries were reported, no assessment was undertaken or documented as to possible associated changing in the Park nor along the Creek, and no facilities or staffing were available to assess any preceding/following changing or seismic activities.

As part of a Mitigation, Monitoring, and Reporting Plan of the final EIR for the Project (not included to date) and submittals to the CCC (not included as yet), the Applicant must provide an adequate and complete seismic review and potentials for shaking, liquefaction, detachment, floating, and breakage must be assessed and recovery provided. As a minimum, a seismicity monitoring facility must be located at the existing sewage treatment plant for locating and documenting seismic effects at this facility and for future Project facilities including influent/effluent piping networks and for initiating thorough inspections and recovery activities after a seismic event and their relationships to the direction, frequency, and duration of smaller events, before the Big One.

As indicated by available staff comments regarding the application and supporting documents clearly demonstrates that the CEQA process for the Project provided an inadequate and incomplete assessment and review of the Project. The CCC now has the opportunity and obligation to provide adequate and complete Mitigation, Monitoring, and Reporting Plan for the Project. However, such conclusion must be based on an adequate and complete document responding to staff report's request for many additional mitigations and compensations and that are formally submitted as elements of the application and with full public review before decisions regarding the Project.

The applicants' submission is totally inadequate and incomplete for CEQA compliance by the CCC for this Project and requires major revisions and elaborations before the CCC should make a decision for CEQA compliance.

**FEIR**

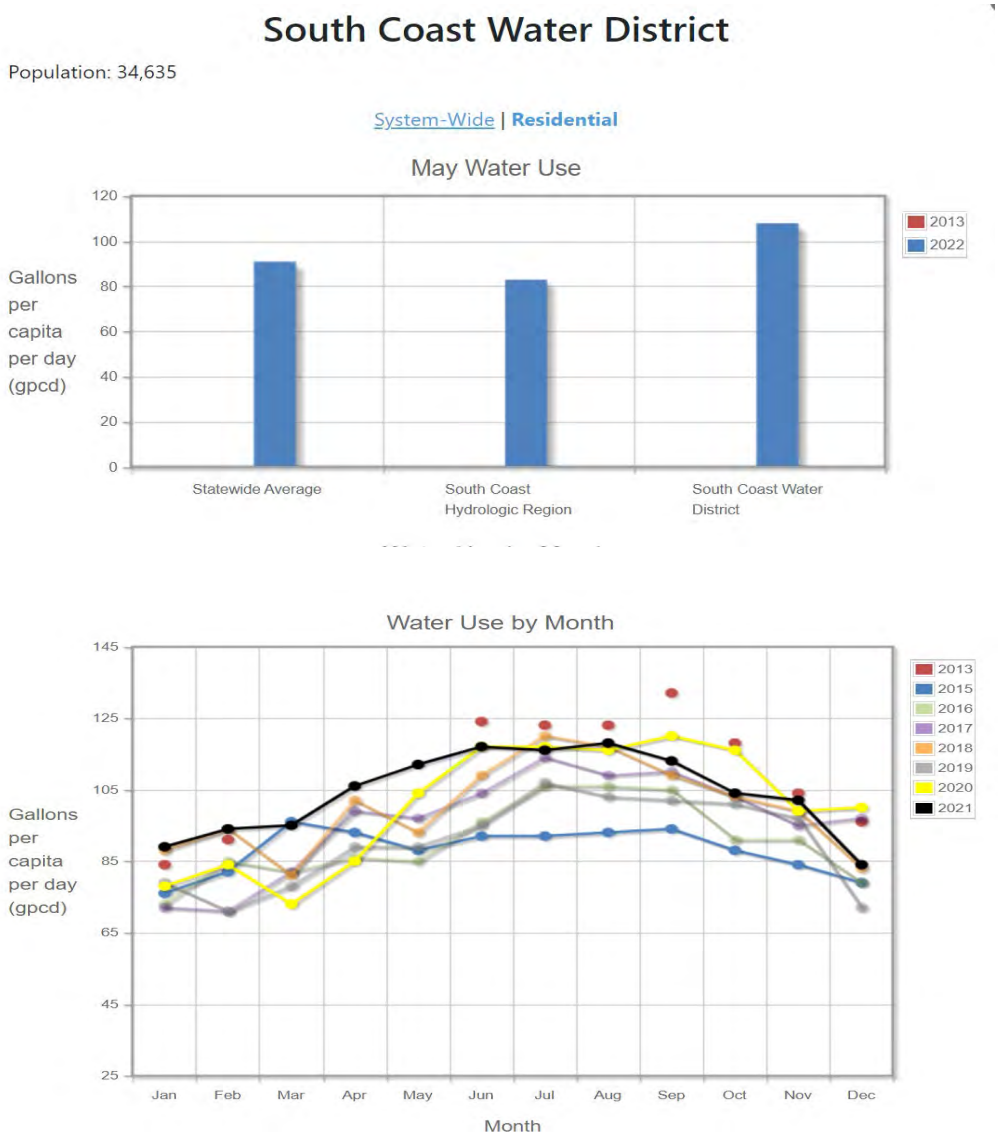
No Mitigation/Monitoring/Reporting Plan and designation of responsibilities

Final CEQA documents for the proposed Project do not include the required "Mitigation, Monitoring, and Reporting Plan", specifically assigning mitigation, monitoring of mitigation/environmental effects/reporting of impacts and mitigation to the served communities. Without specific contractual documentation, the applicant is assumed to make a good faith, FEASIBLE effort to do the mitigation and revise such if mitigation measures fail to achieve significant reduction of environmental impacts, to less-than-significant impacts.

**POPULATION GROWTH AND NEED**

SCWD is nowhere close to meeting statewide goals for urban water use. As per SCWD 2020 Urban Water Management Plan finalized 6-29-2021, district consumption is 142 GPCD. On the website under Rates, low water use is determined by the use of 1 unit. 1 Unit equates to 748 gallons of water per month. A single-family unit of 2-3 residents uses 10 units per month - 74,860 gallons a month.
A family unit of 4, considered high water use by SCWD uses 20 units - 149,720 gallons per month. This is only residential use.

The average Californian used approximately 83 GPD in April 2022, however use in SCWD's region was at 153 GPCD in May 2022 up from April 2022 at 141 GPCD. Residential use 108 GPCD (May 2022) and 101 GPCD (April 2022) respectively.



## California Urban Water Use Data

Hydrologic Region: Select All Month: May 2022

Show 100 entries Search: south coast

| Water Supplier Name | Population Served | Systemwide Per-Capita Water Use in May 2022 (gpcd) | Residential Per-Capita Water Use in May 2022 (gpcd) | Conservation Standard | Water Saved Since June 2015 | Met Conservation Target? | Charts | Map |
|---|---|---|---|---|---|---|---|---|
| South Coast Water District | 34,635 | 153 | 108 | 0% | 0% | n/a | Chart | Map |

Showing 1 to 1 of 1 entries (filtered from 376 total entries) Previous 1 Next

*The Water Board does not report residential GPCD in 2013 for months of March to May.

*Water use expressed in gallons per capita per day, or **gpcd**.

## California Urban Water Use Data

Hydrologic Region: Select All Month: April 2022

Show 100 entries Search: south coast

| Water Supplier Name | Population Served | Systemwide Per-Capita Water Use in April 2022 (gpcd) | Residential Per-Capita Water Use in April 2022 (gpcd) | Conservation Standard | Water Saved Since June 2015 | Met Conservation Target? | Charts | Map |
|---|---|---|---|---|---|---|---|---|
| South Coast Water District | 34,635 | 141 | 101 | 0% | 0% | n/a | Chart | Map |

Showing 1 to 1 of 1 entries (filtered from 392 total entries) Previous 1 Next

*The Water Board does not report residential GPCD in 2013 for months of March to May.

*Water use expressed in gallons per capita per day, or **gpcd**.

Though SCWD has stressed that the conservation has gone up 130%, there is much more to be done through stormwater capture and increased capacity of their recycling water facilities.

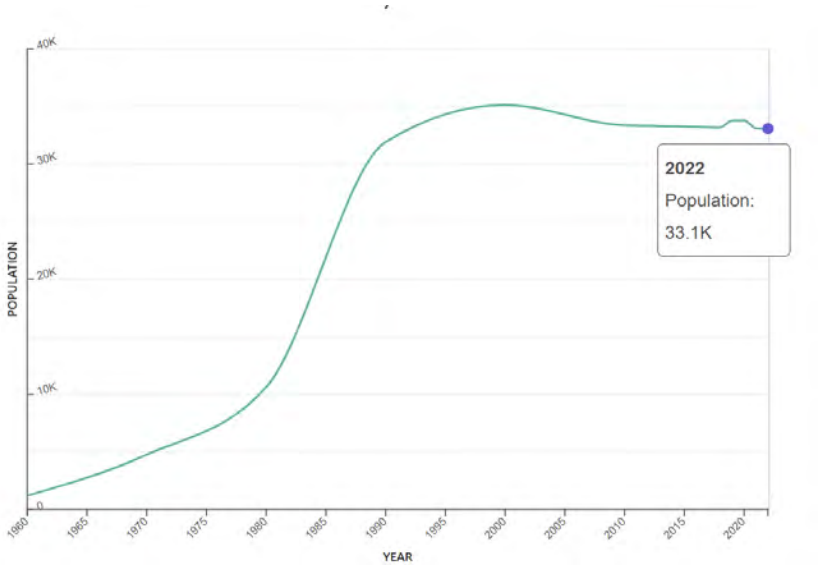
- Water use projections in SCWD's UWMP

"WATER USE PROJECTIONS: 5-YEAR AND 25-YEAR - The District's service area is almost completely built-out and is projected to add minimum land use and small population increase. Potable water demand is likely to increase 1.9% over the next 5 years. In the longer term, potable water demand is projected to increase 4.4% from 2025 through 2045. The projected water use for 2045 is 5,720 AF for potable water and 1,350 AF for recycled water. This demand projection considers such factors as current and future demographics, future water use efficiency measures, and long-term weather variability."

Yet **there is contradictory information** under the subtitle:
“WATER USE CHARACTERIZATION” - Water use within the district’s service area has been relatively stable in the past decade with an annual average of 6,564 AF and a slight downward trend in the second half of the past decade. The potable and non-potable water use accounts for an average of 88% and 12% of total District water use, respectively. In FY 2019-20, the district’s water use was 5,376 AF of potable water (groundwater and imported).”

It is typical for agencies to over-forecast water use. One wonders, if there is such a dire need for more water, why approve construction of a “lazy river” at the Waldorf Astoria? The “lazy river” Is a 543-foot-long curving loop of water that is 4-feet deep and 12-feet wide at a minimum. The Waldorf Astoria has said all the water will be treated, filtered and reused, plus we are looking at the use of potable water at an evaporation rate of ¼ inch per day depending on weather conditions.

Dana Point, California Population 2022
33,059



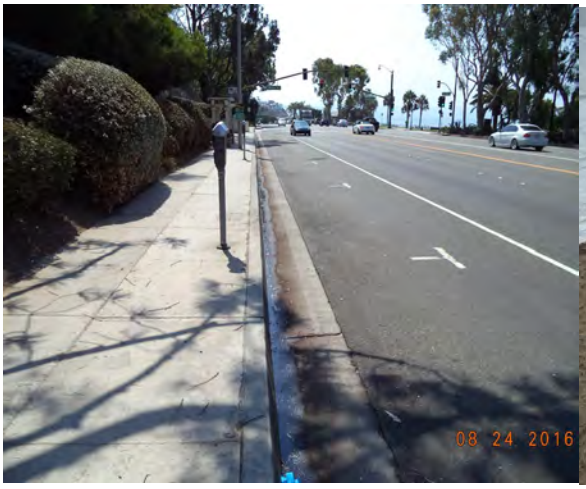

The trend throughout California has shown less water use with an increase in population, however population has decreased in Dana Point by recent US census estimates. Dana Point is currently declining at a rate of -0.07% annually and its population has decreased by -2.14% since the most recent census, which recorded a population of **33,782** in 2020. The mathematics don’t add up for the dire need of this project.

**SMARTEST ALTERNATIVES**

- ★ Stormwater Capture and Runoff

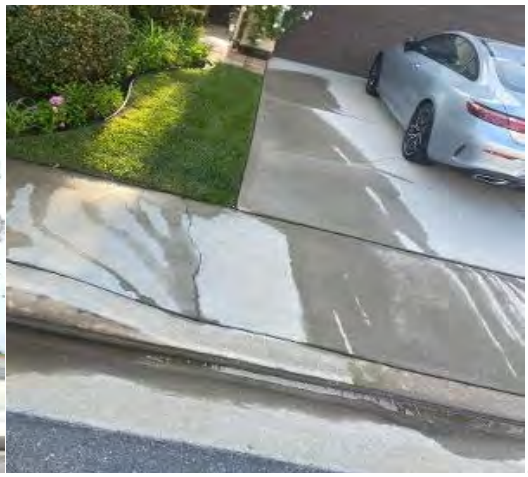
Water waste and water run off continue to be an ongoing issue within the SCWD service areas. Every day in the district that South Coast Water District services (Dana Point, South Laguna, and areas of San Clemente and San Juan Capistrano), there are millions of gallons of potable

water flowing down the gutters into storm drains or creating puddles at intersections. Little is done to truly educate customers on water conservation. Certainly, there could be more information on their website. Here are but a few examples over the years, residents have documented.





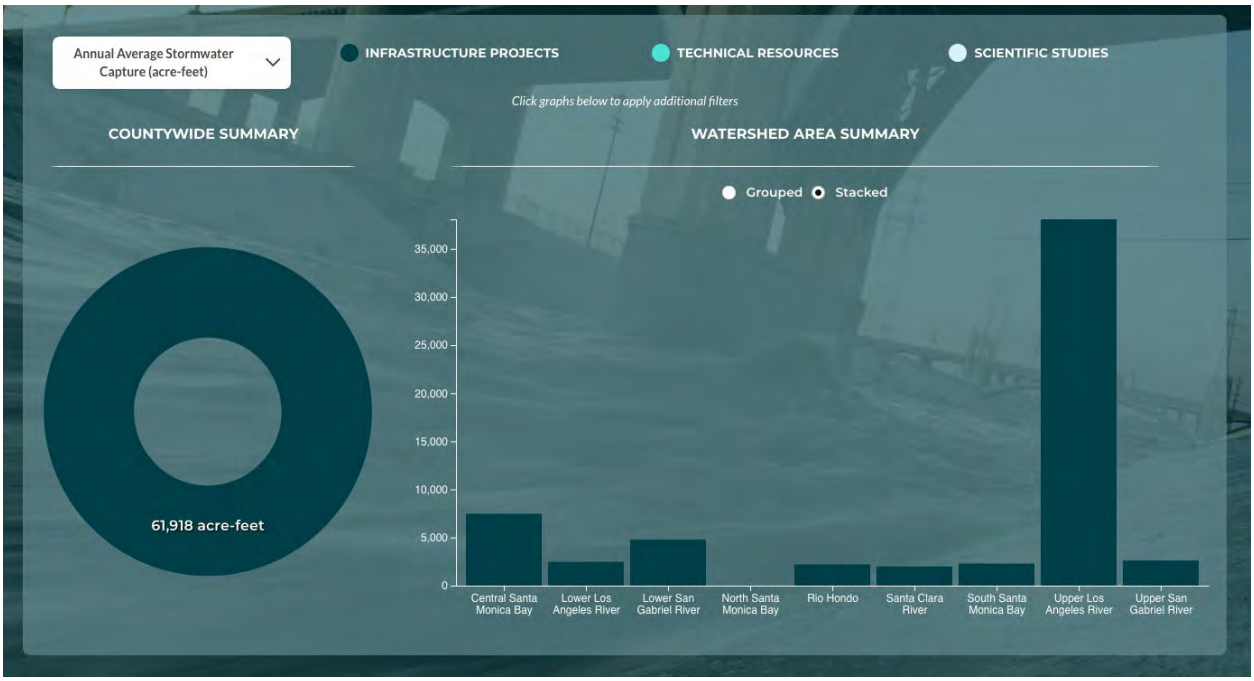

2022



10/2022

*These are everyday occurrences*

On June 4th, 2013 the City of Dana Point approved an amendment to Measure M2 for inclusion of the Golden Lantern Parkway Water Quality Mitigation Project. This project application was for landscape rehabilitation in the parkway and medians along Golden Lantern to help avoid reclaimed water runoff onto the street and into the storm drains. However, if the City of Dana Point and Orange County actually passed a measure like LA's Measure W's Safe, Clean Water Program and LA Sanitation's Green Streets Program there would be significant savings of water runoff being put to beneficial use lessening reliance on imported water.

| Watershed Area | Area Managed by Projects (acres) | 24-hr Capacity (acre-feet) | Annual Average Stormwater Capture (acre-feet) |
|---|---|---|---|
| Central Santa Monica Bay | 77,930 | 129 | 7,395 |
| Lower Los Angeles River | 23,422 | 173 | 1,999 |
| Lower San Gabriel River | 31,269 | 277 | 4,260 |
| North Santa Monica Bay | 121 | 5 | 5 |
| Rio Hondo | 55,811 | 48 | 2,168 |
| Santa Clara River | 1,459 | 32 | 340 |
| South Santa Monica Bay | 10,396 | 284 | 1,811 |
| Upper Los Angeles River | 15,916 | 2,829 | 36,326 |
| Upper San Gabriel River | 5,836 | 293 | 2,612 |
| **Grand Total** | **222,161** | **4,070** | **56,915** |




As per SCWD UWMP Section 6.5 Stormwater:
6.5.1 Existing Sources There are, **currently, no direct stormwater uses** in the District's Service area.
6.5.2 Planned Future Sources As of 2021, **there are no planned stormwater uses** in the District's service area.

★ WATER RECYCLING

Recycled water shows tremendous future potential for extending and expanding water use throughout the district. Yet the district has not focused on its value, instead choosing to throw millions of dollars into a desalination plant that will cost water users more, threaten the energy grid and cause environmental harm.

The 2020 UWMP's Section 6.2.4 Planned Future Sources outlines "investing in efforts to meet its goal of long-term regional water supply reliability." However, recycled water is listed fifth. By prioritizing recycled water, and bringing it to the top of that list, the saving and using of vital water resources will be put into proper perspective.

Consider how the following "revised" list negates the need for a desalination plant:

- Increase water recycling
- Continuing water conservation
- Developing water supply management programs outside of the region
- Developing storage programs related to the Colorado River and the SWP
- Developing storage and groundwater management programs within the Southern California region

- Increasing water recycling, groundwater recovery, stormwater, and seawater desalination.
- Pursuing long-term solutions for the ecosystem, regulatory and water supply issues

Recycled water is water we already have and are REUSING. Please remember the 3 Rs: Reuse, Repurpose, RECYCLE. Expansion of recycled water, by building facilities and laying more pipe, can easily replace the pure drinking water currently in our toilet bowls. This potential is mentioned in the 2020 UWMP's Section 6.6.5 Potential Recycled Water Uses: "Conversion customers are those that currently use potable water for demands that can also be met with recycled water such as landscape irrigation."

Every customer is a conversion customer. In fact, the 2020 UMWP acknowledges this: "Demands for recycled water will continue to increase as the district continues to invest in recycled water infrastructure and supply improvements. Figure 6-5 displays potential conversion customers in the SCWD area along the existing recycled water infrastructure that typically use over 1 AFY".

Table 6-5: Wastewater Collected Within Service Area in 2020 (AF)

| DWR Submittal Table 6-2 Retail: Wastewater Collected Within Service Area in 2020 | | | | | | |
|---|---|---|---|---|---|---|
| ☐ | There is no wastewater collection system. The supplier will not complete the table below. | | | | | |
| | Percentage of 2020 service area covered by wastewater collection system | | | | | |
| | Percentage of 2020 service area population covered by wastewater collection system | | | | | |
| **Wastewater Collection** | | | **Recipient of Collected Wastewater** | | | |
| Name of Wastewater Collection Agency | Wastewater Volume Metered or Estimated? | Volume of Wastewater Collected from UWMP Service Area 2020 | Name of Wastewater Treatment Agency Receiving Collected Wastewater | Treatment Plant Name | Is WWTP Located Within UWMP Area? | Is WWTP Operation Contracted to a Third Party? |
| SCWD | Metered | 3,035 | SOCWA | JB Latham Plant/CTP | Yes | No |
| **Total Wastewater Collected from Service Area in 2020:** | | 3,035 | | | | |
| NOTES:<br>Source: SOCWA Wastewater Meter Records | | | | | | |

Table 6-5: Wastewater Collected Within Service Area in 2020 (AF)

| DWR Submittal Table 6-2 Retail: Wastewater Collected Within Service Area in 2020 | | | | | | |
|---|---|---|---|---|---|---|
| ☐ | There is no wastewater collection system. The supplier will not complete the table below. | | | | | |
| | Percentage of 2020 service area covered by wastewater collection system | | | | | |
| | Percentage of 2020 service area population covered by wastewater collection system | | | | | |
| **Wastewater Collection** | | | **Recipient of Collected Wastewater** | | | |
| Name of Wastewater Collection Agency | Wastewater Volume Metered or Estimated? | Volume of Wastewater Collected from UWMP Service Area 2020 | Name of Wastewater Treatment Agency Receiving Collected Wastewater | Treatment Plant Name | Is WWTP Located Within UWMP Area? | Is WWTP Operation Contracted to a Third Party? |
| SCWD | Metered | 3,035 | SOCWA | JB Latham Plant/CTP | Yes | No |
| **Total Wastewater Collected from Service Area in 2020:** | | 3,035 | | | | |
| NOTES:<br>Source: SOCWA Wastewater Meter Records | | | | | | |

The 2020 UWMP's Section 6.6.6 Optimization Plan points to encouraging recycled water use by:

- require dual piping in new developments
- retrofit existing landscaped areas
- construct recycled water pump stations
- build and extend transmission lines (purple pipes) to reach throughout the county.

Why does the district want to go the expensive route of ocean desalination, instead of the practical, pragmatic and cost-effective choice of recycled water?

Let's look at the recent past. It appears the District chose NOT to focus on PROMOTION of the use of recycled water (shown in Table 6-6 Retail : 2015 UWMP Recycled water Use Projection Compared to 2020 Account) because the 2020 "actual" is lower than the projection made five years earlier, in 2015.

Table 6-6: Wastewater Treatment and Discharge within Service Area in 2020 (AF)

| DWR Submittal Table 6-3 Retail: Wastewater Treatment and Discharge Within Service Area in 2020 | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| ☐ | No wastewater is treated or disposed of within the UWMP service area. The Supplier will not complete the table below. | | | | | | | | | | |
| Wastewater Treatment Plant Name | Discharge Location Name or Identifier | Discharge Location Description | Wastewater Discharge ID Number | Method of Disposal | Does This Plant Treat Wastewater Generated Outside the Service Area? | Treatment Level | 2020 volumes | | | | |
| | | | | | | | Wastewater Treated | Discharged Treated Wastewater | Recycled Within Service Area | Recycled Outside of Service Area | Instream Flow Permit Requirement |
| JB Lantham | San Juan Creek Ocean Outfall | Dana Point | | Ocean outfall | Yes | Secondary, Disinfected - 2.2 | 3,035 | 2,190 | 845 | 0 | 0 |
| CTP | Aliso Creek Ocean Outfall | Laguna Beach | | | | | | | | | |
| | | | | | | **Total** | 3,035 | 2,190 | 845 | 0 | 0 |
| NOTES: Assumed 84% of wastewater treated at facilities (SCWD Sewer Master Plan) | | | | | | | | | | | |

- ➢ Recycled water use on “Only landscape irrigation (excludes golf courses)” shows projected use in 2015 as 755, but the 2020 actual is 557. A shortfall of nearly 200.
- ➢ Recycled water for “Golf course irrigation” is projected in 2015 as 390, with the 2020 actual at 286. Another shortfall of 104.
- ➢ Recycled water in “industrial use” is projected in 2015 as 4, with the 2020 actual being 2. Only half of the projection was achieved.

The district needs to seriously focus on recycled water infrastructure as identified in the Capital Improvement Program from the 2017 Infrastructure Master Plan:

“Example projects include the construction of new recycled water piping in Stonehill Drive between Monarch Beach Drive and Intera Way, installing new pressure reducing valves, and various other pipeline and infrastructure improvements determined necessary to provide adequate pressure and flow throughout the recycled water distribution system.”

“The District has applied for funding from the Clean Water State Revolving Fund Program for the Monarch Beach Drive/Stonehill Recycled Water Distribution Project. San Juan Watershed Project – SMWD “

These are capital improvements. Replace the decaying infrastructure with recycled water infrastructure. Spend the money repairing and replacing, NOT on a costly ocean desalination facility.

Finally, let’s look at the district’s “Recycled Water Activities and Accomplishments”. A positive note that PROVES increased emphasis on recycled water will prove to be a far more reliable source than ocean desalination.

“SCWD currently has 194 recycled water connections to service 87 use sites within our service area including City and County Parks, HOA Communities, two Public Golf Courses, Mission

Hospital, Commercial Properties, City Medians and Parkways that utilize recycled water for irrigation."

"We have recently extended our Recycled Water System to Dana Point Harbor."

"SCWD utilizes an ongoing MWD recycled water retrofit rebate program that financially assists our commercial customers in transitioning large potable irrigation systems to recycled water."

"Over the past 5 years we have converted an additional 30 potable water use sites to recycled water for an additional potable water savings of 922.1 AF. District wide we have saved over 5,066 AF. of potable water since 2015."

"Currently we have identified an additional 20 recycled water conversion sites that are underway or in the planning phase."

"The Doheny State Park is undergoing a conversion to recycled water for irrigation and should be online by early Spring of 2021."

"One of the major components of the District's Water Conservation Program is our Recycled Water Retrofit Program."

Given that the CA State Water Board will finalize DPR legislation by next year 2023, the prudent thing would be for SCWD to wait for this approval and plan ahead for the implementation of direct potable reuse, without harm to the marine estuary, marine life, waterways and the beach.

- ★ Conservation

SCWD can best meet its crucial water supply and demand management goals with a portfolio of highly efficient strategies that are tailored to local conditions. At best this agency has failed to adequately address water conservation. We are well aware that those that can afford, usually are those who continue to not conserve. There are pockets of low-income families within SCWD's service area, who will bear the brunt of the cost of desalted water. Reductions in household water use provide an immediate reduction in water bills, energy consumption and energy bills.

Having rebates for energy efficient appliances, greywater systems, rain gardens, turf removal, water barrels should be mandatory and should be additional to the offerings from Metropolitan Water District and MWDOC. Classes should be offered on drought tolerant landscapes, grasses, bioswales, if SCWD is to be taken seriously when it comes to education on

conservation. Outdoor water use takes up 70% of our water and accounts for run-off as featured


10/22

A new Pacific Institute white paper, “Advancing Affordability through Water Efficiency,” finds water conservation and efficiency improvements improve water affordability for both conserving households and the larger community. Using national data on utility rates, the study shows that reductions in household water use provide an immediate reduction in water bills and, in some instances, wastewater and energy bills for the conserving household. Because water efficiency is typically less expensive than developing new supplies, case studies from the western United States show that water efficiency also helps utilities avoid the need to build expensive new water and wastewater infrastructure, resulting in lower utility bills and connection fees for the broader community over the long term.

**ENVIRONMENTAL JUSTICE**

The proposed Project also raises environmental justice issues for the CCC. “Who pays and Who benefits from the Project operations?”
Currently all costs for the proposed Project would be assessed to all SCWD connections, while the advanced treatment beneficiaries would be those residents with connections below 200ft elevation and within a mile of the Desal Project facilities. The applicant has not prepared service pressure zone maps showing the service of the proposed Project or these and other alternatives. No mention is made as to any additional assessment for those most likely receiving the benefits of improved supply pressures and volumes. The applicant has not provided maps of service areas and populations and comparative tables for ethic/racial/education/economic status of the service area residents.
Given the typical rate adjustments, most served residents will generally pay the same prices per gallon for their water supplies, however issues arise when the sources and delivered pressures and quality of waters may vary. Concerns arise when all service residents may be subject to higher costs per volume of service, while not benefitting from better service – higher pressures and higher quality supplies near the coast and below 200ft elevation.

- Rates

As per the PPIC report Desalination, With A Grain of Salt - A California Perspective: “Discussion of actual costs has been muddled and muddied. Experience to date suggests that desalinated water cannot be delivered to users in California for anything less than the cost of production, which our research indicates is unlikely to fall below the range of $3.00 to $3.50 per thousand gallons ($/kgal) (roughly $0.79 to $0.92 per cubic meter)) for even large, efficient plants. Because the cost of production can be as high as $8.35/kgal ($2.21/m3) (MPWMD 2005b), the cost of delivered water could be in the range of $9 to $10/kgal ($2.37 to $2.64/m3 ). Even the low end of this range remains above the price of water typically paid by urban water users… Even urban users rarely pay more than $1.00 to $3.00/kgal ($0.26 to $0.79/m3).”
“Hidden and visible subsidies affect the reported and actual costs. Since water customers in Southern California ultimately pay for the subsidy, the subsidized cost is potentially misleading.”

Energy is the largest single variable cost for a desalination plant, varying from one-third to more than one-half the cost of produced water (Chaudhry 2003).

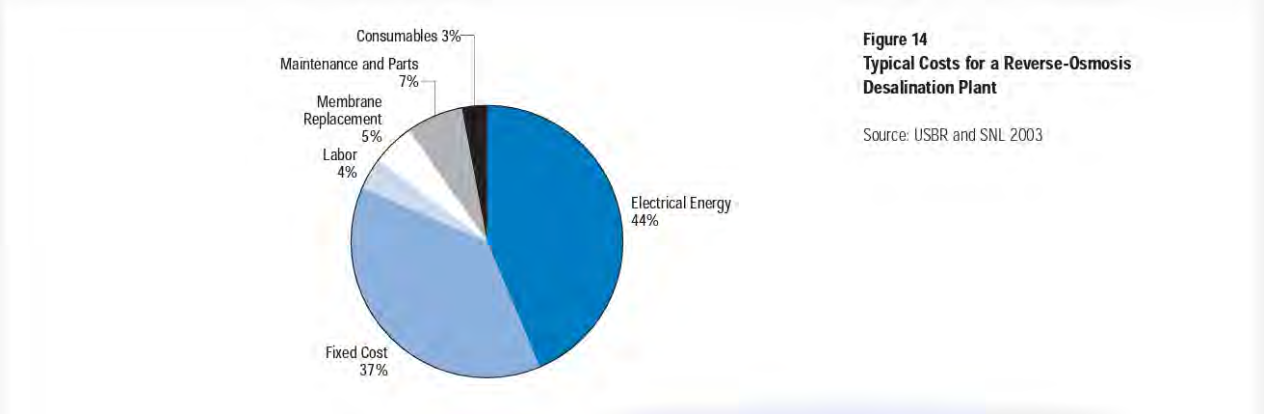
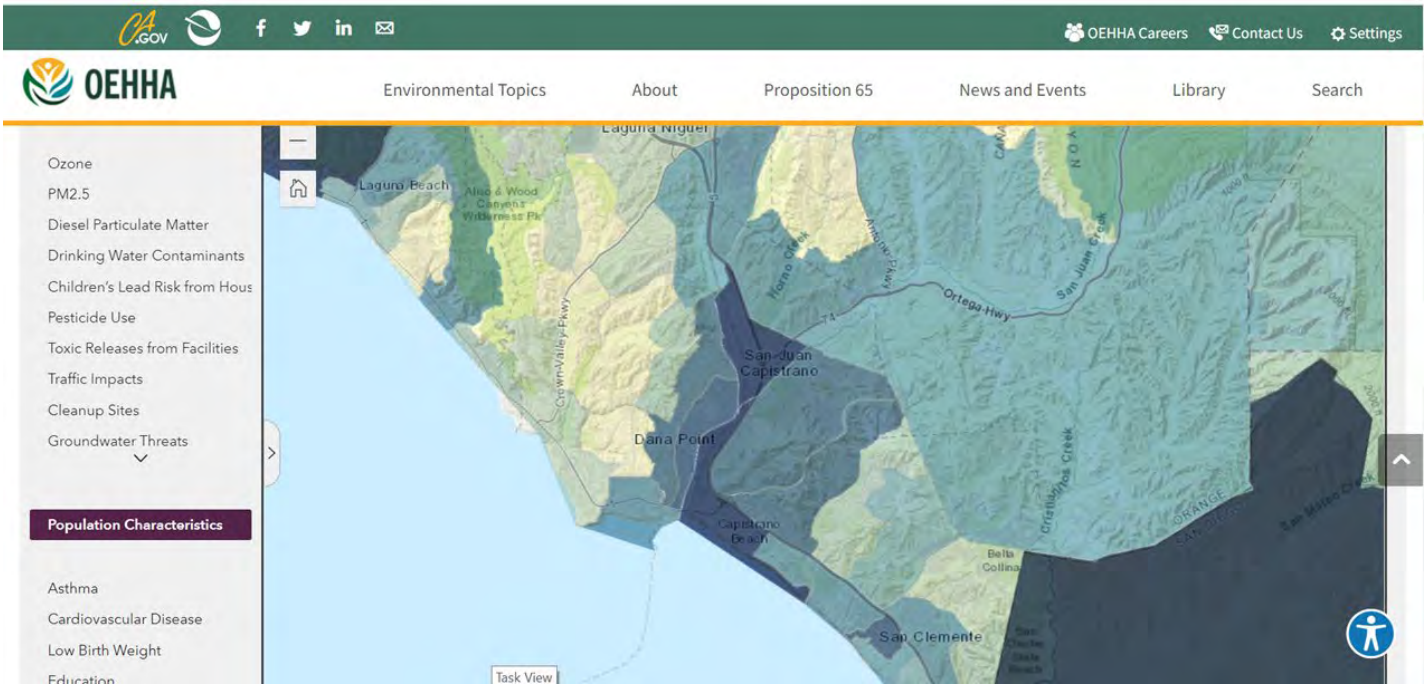


Image courtesy of PPIC

- Water Quality

The proposed Doheny Desalination Plant does not consider cumulative pollution impacts to environmental justice communities located in census tracts identified in CalEnviroScreen 4.0 OEHHA maps.




Local EJ Communities not included in SB 535 maps but are a part of census tracts included in CaEnviroScreen 4.0 OEHHA map above (DARK BLUE hourglass shape at center of map).

For example:

Census Tract 6059042312 includes the Los Rios Street Historic District and surrounding neighborhoods, and portions of the City of San Juan Capistrano. Pollution burden results for this census tract are:

1.Upper area

Los Rios Street Historic District - east bank of Trabuco Creek near 74 interchange.
San Juan Capistrano - lower half, east back of Trabuco Creek

Census Tract below
**Pollution Burden Results**

**Census Tract 6059042312**

| | |
|---|---|
| **Pollution Burden:** | 89 |
| **Population:** | 9752 |
| **CalEnviroScreen 4.0 Percentile:** | 72 |
| | |
| **Ozone:** | 65 |
| **PM 2.5:** | 47 |

| | |
|---|---|
| **Diesel PM:** | 92 |
| **Pesticides:** | 29 |
| **Toxic Releases:** | 34 |
| **Traffic:** | 98 |
| **Drinking Water Contaminants:** | 50 |
| **Lead in Housing:** | 66 |
| **Cleanups:** | 44 |
| **Groundwater Threats:** | 11 |
| **Hazardous Waste:** | 81 |
| **Impaired Water:** | 72 |
| **Solid Waste:** | 73 |

2.Lower area

Doheny Village - San Juan Creek east bank, mouth of river to ocean
Beechwood Village - San Juan Creek east bank, near mouth and 5 interchange
Beechwood Village - San Juan Creek east bank, near mouth and 5 interchange
Capistrano Beach - same as above (approximate location)
Capo Beach - Below Beechwood Village (approximate location)

Census tract below:
**Pollution Burden Results**

**Census Tract 6059042201**

| | |
|---|---|
| **Pollution Burden:** | 86 |
| **Population:** | 5207 |
| **CalEnviroScreen 4.0 Percentile:** | 38 |
| | |
| **Ozone:** | 63 |
| **PM 2.5:** | 49 |
| **Diesel PM:** | 82 |
| **Pesticides:** | 17 |
| **Toxic Releases:** | 28 |
| **Traffic:** | 93 |
| **Drinking Water Contaminants:** | 49 |
| **Lead in Housing:** | 29 |
| **Cleanups:** | 65 |
| **Groundwater Threats:** | 24 |
| **Hazardous Waste:** | 62 |

| | |
|---|---|
| **Impaired Water:** | 98 |
| **Solid Waste:** | 92 |

Census tracts on the western banks of Trabuco Creek and San Juan Creek are also score high for pollution burdens. Please note how the pollution burden for impaired water increases the closer a community is located to the mouth of San Juan Creek where it enters the Pacific Ocean. This raises a serious question about the current quality of fresh water entering the ocean water near the proposed location of the intake pipes for the desalination plant.

There has been a long-running problem with beach water quality at Doheny State Beach in Dana Point. Two independent reports document fecal bacteria contamination as source of contamination: **Water Research** Volume 46, Issue 7, 1 May 2012, Pages 2176-2186 and ASM Journals Applied and Environmental Microbiology Vol. 78, No. 18 Association of Fecal Indicator Bacteria with Human Viruses and Microbial Source Tracking Markers at Coastal Beaches Impacted by Nonpoint Source Pollution

- Water Taxation without Representation

Public Water Agencies tax property owners in addition to establishing water rates. The South Coast Water Agency (SCWA) is proposing this ocean desalination plant while the people of South Laguna pay their property taxes to SCWA, and, by contract, are ratepayers, but they have no vote or representation. As per the Laguna Beach Indy article, dated 03/31/2022: "In January 2020, SCWD received a demand letter from Newport Beach attorney Philip Greer who claims to represent a number of SCWD ratepayers concerned that at-large elections stymie candidates who represent the district's racial and socioeconomic diversity. District leaders immediately signaled their acquiescence to avoid a costly lawsuit claiming violations of the California Voting Right Act."

The article further states: "Despite the emphasis on enfranchising voters, South Laguna remains a contracted service area and lies outside the new SCWD voting boundaries. General Manager Rick Shintaku said his agency was on a tight deadline from the Orange County Registrar of Voters to get the election on the ballot and is still trying to avoid a voting rights lawsuit." "Conversations between city and water officials are ongoing but haven't afforded the votes to South Laguna ratepayers. South Lagunans were saddened but not surprised by the water board's decision to draw them out of the voting map, said Greg O'Loughlin, president of the South Laguna Civic Association. A number of councilmembers have already told the Association that South Laguna ratepayers should have the right to vote for a water board director. It's unclear why the matter hasn't reached the council's agenda."

- Insufficient Stakeholder Consultation

While there has been some tribal consultation, it has been incomprehensible and incomplete. Other Native Nations along the discharge waterways have not been consulted. There has been no attempt to reach the communities in the local vicinity in any other language but English and no community engagement. The community hasn't even been notified of this hearing, so they may participate. As of October 1st, only one media article on this project and hearing in Patch – Laguna Beach entitled: **DoHo Desalination: Did South Coast Water District Bury The Bad**

**News?** SCWD Intentionally "Hid The Ball" By Failing To Notify The Public Regarding Their Coastal Commission Hearing in San Diego on 10/13/2022
“That’s because as of today, October 1st, there have been no media announcements regarding this final hurdle for the DODP: No Public Service Announcements, no Press Releases. Nada Zilch. Bupkis. Nary a peep.”

In searching, we found the above article, just one.

The Commission must request a thorough assessment of costs, services, and quality for those service areas to benefit from the coastal Desal plant supplies and those that don’t benefit from the Desal service.

**CONCLUSION**

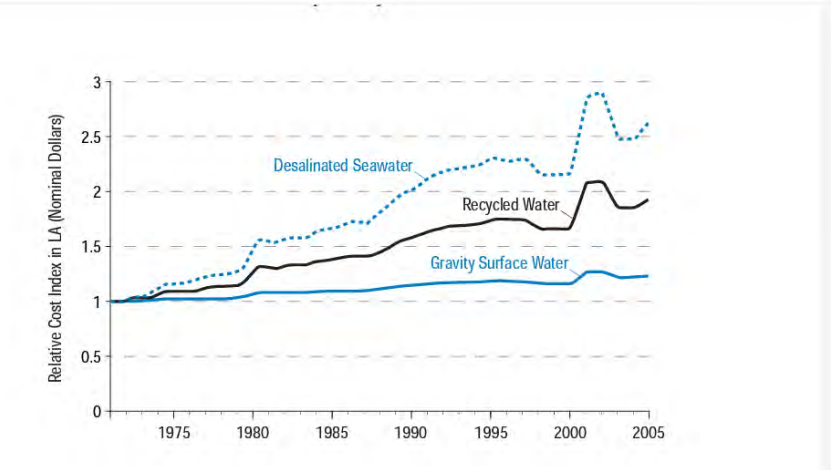
South Coast Water District repeatedly advises in their presentations and board meetings that they have made substantial investments in conservation, recycled water, and groundwater recovery. However, they currently rely on 85 to 100 percent of their water supply from imported sources. Numerous studies conclude that as much as 50% of water demand can be met with local recycled water which would decrease the reliance on imported sources. Water recycling combined with conservation and stormwater capture would more than meet the needs of such a small area. By their own records via their UWMP they have no plans to invest in stormwater capture and runoff, which could significantly lessen their reliance on imported water and add to their water portfolio.

MWDOC partners with local agencies in recycled water efforts, including OCWD to identify opportunities for the use of recycled water for irrigation purposes, groundwater recharge and some non-irrigation applications. MWD and LADWP are well on their way to capitalize on the State Water Board’s decision to move forward on DPR.

"The State Water Board staff has prepared the Framework to satisfy the recommendation in Assembly Bill (AB) 574 (Chapter 528, Statutes of 2017) to establish a framework for the regulation of potable reuse projects. In preparing the Framework, the State Water Board included the following elements stated in the California Water Code section 13560.5:
The consideration of recommendations provided in the State Water Board’s “Investigation on the Feasibility of Developing Uniform Water Recycling Criteria for Direct Potable Reuse.”
A schedule for completing the recommended research described in “Investigation on the Feasibility of Developing Uniform Water Recycling Criteria for Direct Potable Reuse.”
A regulatory framework for potable reuse projects that will be protective of public health.
A process and timeline for updating uniform water recycling criteria for potable reuse through reservoir water augmentation."

We want to acknowledge that though SCWD plans to use subsurface intakes according to the Ocean Plan, there are many issues with ocean desalination that require mitigation and why this

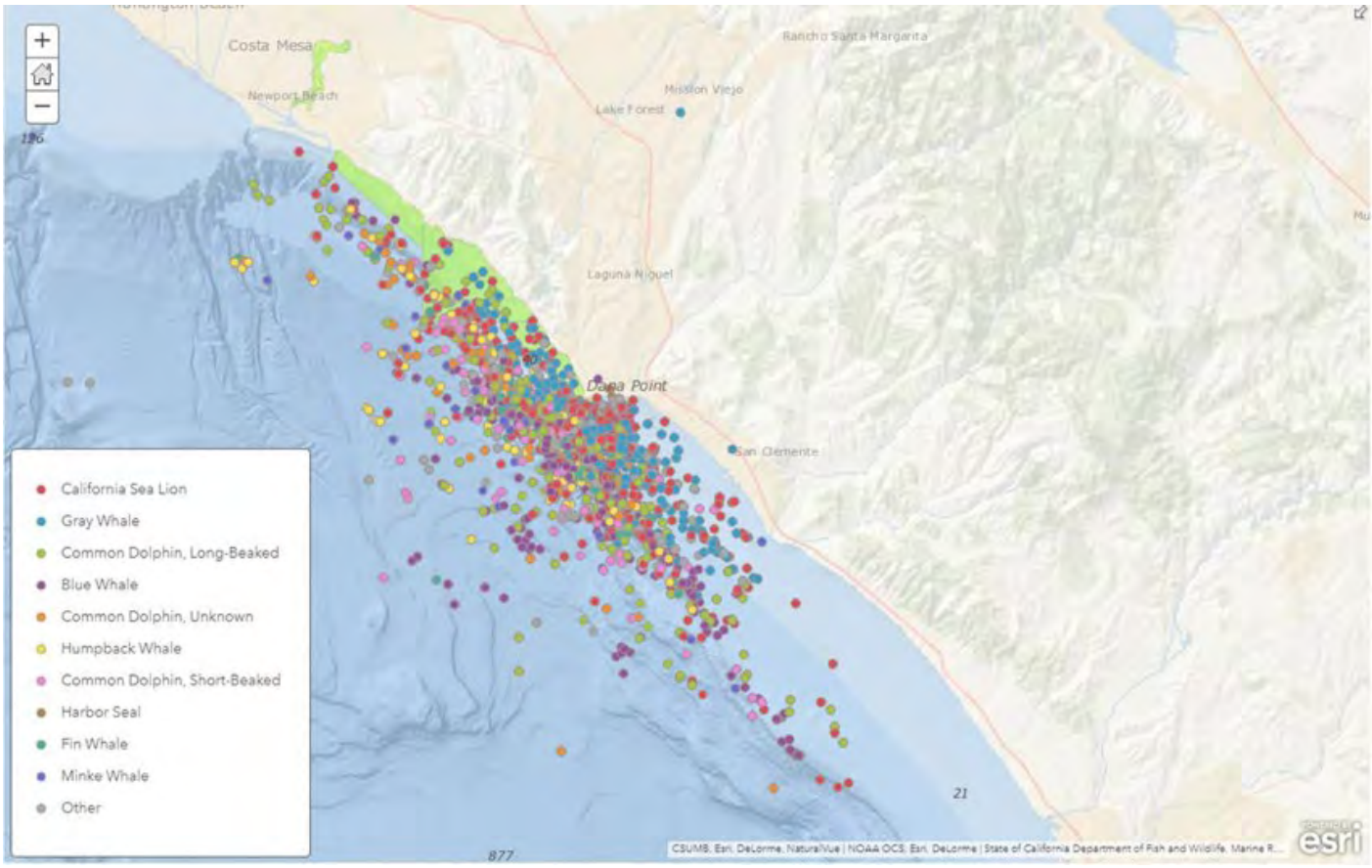
project should not be approved and/or delayed until after the State Water Board has finalized DPR regulations. DPR regulations will be a significant game changer financially as well as environmentally for water agencies, districts and the rate payer.




Relative Cost of Potable Water from a Typical Ocean Desalination, Wastewater Recycling, and Gravity Surface Water Source in the Los Angeles Metropolitan Area. (PPIC)

As proposed, the project will increase the salinity of discharge and wastewater volumes on regulated coastal receiving waters frequented by migrating whales as well as dolphins and other marine life. Increased discharges from the San Juan Ocean Outfall (SJOO) will expand the waste field plume to degrade larger areas and represent “back-sliding” as it relates to the NPDES Permit. Will the proposed Doheny project create toxic offshore brine pools where whales migrate? These deadly brine pools exist elsewhere in our oceans.

If this project is approved, we will be contaminating the ocean in the vicinity of the intake with the sewage effluent from San Juan Capistrano, Dana Point and Laguna Beach, then SCWD will harvest said polluted water to remove not only the contaminants of that effluent including viruses and pharmaceuticals, but also the additional salts and naturally occurring chemicals, that make the ocean water undrinkable. This cetacean mapping graphic depicts the project’s relation to the brine water discharges and federally protected marine life as well as potential migration of the Doheny Project’s waste field plume into South Laguna coastal waters.




*Mapping courtesy of Lei Lani Stelle, Ph.D., Professor, Chair of Department of Biology, University of Redlands*

These are just a few of the challenges with this proposed project, and we can not mitigate our way from long term impacts. This project will be a 5 MGD facility, yet SCWD's 3 recycled water facilities produces 300 million gallons of recycled water per year - quite enough to meet the future needs of SCWD residents with DPR in the next few years and offset the production of the proposed facility. Capacity at the District's three recycled water reservoirs is at 4.8 million gallons, again enough to offset the proposed desalination facility.

We ask that the permitting for this project is denied or delayed until the State Board releases DPR regulations in 2023.

Sincerely,

Charming P Evelyn
Co-Chair Water Committee
Sierra Club California

Frankie Onero
Executive Director
Society of Native Nations

Conner Everts
Executive Director
Southern California Watershed Alliance
Desal Response Group

Martha Camacho-Rodriguez
Executive Director
Social Eco Education

Jack Eidt
Co-Founder
SoCal 350 Climate Action

Esperanza Vielma
Executive Director
The Environmental Justice Coalition for Water

SOCWA
South Orange County Wastewater Authority

October 7, 2022

Donne Brownsey
Chair
California Coastal Commission
455 Market Street, Suite 300
San Francisco, CA 94105
Donne.Brownsey@coastal.ca.gov

Dear Chair Brownsey:

On behalf of South Orange County Wastewater Authority, I am pleased to convey and share with your Commission our strong support for the Doheny Ocean Desalination Project.

This technologically unique and environmentally sensitive ocean water desalination project will enhance water reliability for South Coast Water District (SCWD) and the region. SCWD has worked collaboratively for more than eight years with stakeholders and officials with local cities, other special districts, nonprofit organizations, tribal nations, and others in Orange County and regionally in furtherance of this Project. SCWD has also worked diligently at the State and Federal levels to secure more than $32 million in critical grant funding for the Project to date.

This Project will enable SCWD to further diversify its water supply portfolio and reduce its dependence on imported water from the severely stressed Colorado River and State Water Project, especially during times of historic drought conditions which will become more frequent as climate change evolves. The Project is particularly important to south Orange County, which is roughly 90% dependent on these imported water supplies.

In addition to the water supply benefits, we support this Project because it complies with the California Ocean Plan and protects the marine environment by implementing the preferred intake and discharge technologies, i.e., using a subsurface ocean water intake system to draw water passively through the ocean floor and discharge brine to through an existing ocean outfall.

The serious implications of drought restrictions on our local communities, especially when combined with the region's overwhelming reliance on imported water, justifiably inspire SCWD and its neighboring districts to be innovative in their ongoing mission to achieve a diverse and reliable portfolio of water projects and management strategies. The Project has the potential to be a local and regional asset, reducing south Orange County's reliance on imported water and ensuring supply reliability in the event of a natural disaster or other major emergency.

It is a pleasure to convey our strong support of the California Coastal Commission's consideration and approval of the Doheny Ocean Desalination Project. Thank you for your consideration and for your ongoing commitment to and efforts on behalf of our residents, businesses, and the region's resources.

Sincerely,

B. Burnett

Betty Burnett
General Manager
South Orange County Wastewater Authority

Santa Margarita Water District

October 6, 2022

Donne Brownsey
Chair
California Coastal Commission
455 Market Street, Suite 300
San Francisco, CA 94105
Donne.Brownsey@coastal.ca.gov

Subject: Support for Proposed Doheny Ocean Desalination Plant, Application No. 9-20-0691

Dear Chair Brownsey:

The proposed Doheny Ocean Desalination Plant ("Doheny Desal" "Project") is an important demonstration project to show that small-scale, distributed ocean desalination plants are feasible not only in South Orange County, but also in other areas of the California.

Doheny Desal, as proposed by South Coast Water District ("SCWD") has the unique feature of coastal slant wells. Piloting this technology in a full-scale operation will not only help diversify SCWD's drinking water supply, it will provide valuable technical data to further the concept regionally, statewide, and even nationally. An augmented water supply will help reduce dependence on imported water from the severely stressed Colorado River and State Water Project, as vividly highlighted over the last several months. The Project is particularly important to south Orange County, which is roughly 90% dependent on imported water supplies.

In addition to the water supply benefits and the development of slant wells, the project location provides future opportunities for potable reuse through the possible comingling of treated wastewater from the nearby J.B. Latham Treatment Plant, once the potable reuse standards are finalized. The existing ocean outfall averages approximately six million gallons a day in secondary effluent, which could be recycled for irrigation, groundwater recharge, and could be a potential source water to commingle with the ocean source water. We support this Project because of the opportunities it provides not only SCWD, but the region, again, potentially demonstrating leadership in potable water development.

Doheny Desal has the potential to be a local and regional asset, reducing south Orange County's reliance on imported water and ensuring supply reliability in the event of a natural disaster or other major emergency. Santa Margarita Water District supports the California Coastal Commission's consideration and approval of the Doheny Ocean Desalination Project. Thank you for your consideration.

Very Truly Yours,
SANTA MARGARITA WATER DISTRICT

Justin McCusker
Board President

**To:** California Coastal Commission

**CC:** California State Lands Commission, California State Parks, SDRWQCB, SWRCB Division of Water Rights (Enforcement Unit)

**Attention Staff:** Mr. Tom Luster, Senior Environmental Scientist

**Date of Submission:** October 7, 2022

**Transmitted electronically via email to: EORFC@coastal.ca.gov**

**CC: Tom.Luster@coastal.ca.gov**

**Agenda Item:** Th10A October 13, 2022

**CDP Application No.** 9-20-0691

Honorable Commissioners and Staff:

CleanBlu® Inc. and its CEO Dr. Markus Lenger supports the Staff recommendation for approval contingent upon the Applicant's unaltered (non-amended) agreement to and acceptance of **ALL** terms and conditions, i.e., mitigations, exactions, measures, and concessions as explicitly proposed in the 57- page Filing Report (dated 9/22/2022) officially provided to the public on 9/30/2022 with several additional suggestions.

In regard to this controversial project, I would like to congratulate the Staff on its excellent research.

www.CleanBlu.com
www.CleanBluFOG.com
info@CleanBlu.com

34604 Via Catalina
Capistrano Beach, CA 92624
(949) 200-6226

In addition to serving on many Standards and Codes committees that seek to optimize water use practices, I am the CEO and co-founder of CleanBlu®, a water sustainability technology company.

As a voting member of the IAPMO **WE.Stand Committee**, chartered by the US Congress, I contribute to establishing national and international water efficiency standards. Being the **Chair of the DPR (Direct Potable Reuse) Committee** provides me with a unique perspective on the future of water science and the direction and trends of the water industry.

According to my expertise in the DPR field, the wastewater from the adjacent JB Latham Plant should be used as the primary raw water source for the proposed SCWD Doheny Desalination Plant. Santa Margarita Water District has already submitted a previous offer to take over management of the Latham facility and proposes to add advanced tertiary treatment capabilities to its plant to facilitate water reuse.

The plant has a daily output of between 8-10 mgd. This approach would be considerably more cost effective than the desalination component of the proposed plant. DPRs are similar to desalination plants in many ways, including membrane filtration and some postprocessing, but the high pressure and, consequently, massive energy consumption of the desalination plant are not required.

A more reliable and cost-effective solution would be to distribute the proposed infrastructure between both DPR and desalination, thus providing

a more sustainable and reliable water security option. DPR water could be supplemented by stored desalinated water in emergencies or in case of limited DPR availability. DPR as a primary raw water source would significantly decrease energy consumption and operating costs.

I recommend you ask SCWD to generate a cost breakdown between a desalination plant component and a DPR plant component and provide financial feasibility studies for both. This will give the rate payer a better understanding of the costs involved and the financial and operational risks.

Further, I would like to highlight the excellent work done by Clean Water Now and Roger von Bütow in his submission dated October 3, 2022, and his appendix A submission to the SDRWQRB on Feb 2, 2022 (I have attached both submissions for clarification). In terms of understanding this project, Clean Water Now is by far the most knowledgeable NGO and as such I am in agreement with its statements and conclusions.

SCWD use of water reuse technology is disappointing despite claims to do otherwise. Neither rainwater catchment nor gray water reuse are addressed anywhere.

**Environmental Concerns**

SCWD describes this project as environmentally friendly, sustainable, green and carbon neutral. As an expert in sustainable water technologies, I

can confidently claim that it is none of these. Desalination produces more waste than usable product – it is, therefore, **unsustainable**. It also creates brine, a potentially environment-harming waste made up of salt and chemical residues. There are justifiable concerns about the impact of returning discharged brine to the ocean as it tends to settle toward the bottom of the coastal areas where it is released resulting in brine toxicity and threatening local marine ecosystems.

Also, brine waste likely contains residues of conditional chemicals, reaction by-products and heavy metals, especially when considering the chemical needed for membrane conditioning and postprocessing. Both MIT and the University of Abu Dhabi voiced concerns over brine toxicity, so did the 2019 United Nations study,
*"The state of desalination and brine production: A global outlook"*
https://www.sciencedirect.com/science/article/abs/pii/S0048969718349167

The energy consumption of a desal plant is ten times higher than other reuse methods, making it the most expensive way to make new water. Due to desalinations high energy footprint, toxic discharge and environmental issues, industry has chosen to favor sustainable water reuse technology. While indirect ocean intake is considered the "least objectionable" method for collecting desalination raw water, SCWD wrongly calls it the environmentally favored method. Despite SCWD's cheerleading and miss statements about this project, many questions remain unanswered. I urge

you to look at the environmental claims more closely and reassess the reasoning.

## Fiscal Concerns

Desalination becomes financially more feasible with scale. Building a small plant as proposed works against the economy of scale. SCWD has roughly 13,000 rate payers. It is already $100 million in debt due to the Laguna Beach Sewer Tunnel. We cannot afford to add another $150-200 million! The public seems to either not know or forget that almost 30% of our property tax goes to the water district. The monthly “water bill” is only your actual usage. Only few rate payers understand the true cost of their water and how the costs are structured. SCWD fails to educate their rate payers as to the true cost of the proposed plant. It also has failed to look at alternative technologies, as required by CEQA. Furthermore, SCWD has failed to secure a partner for the proposed project, in fact during the last ten years any interest from potential partners has vanished.

## Slant Well Technology

Slant-well technology for desalination is experimental and no real-world application or data exists. The inventor, Dennis Williams of GeoScience is also the consultant and – incredibly - the peer reviewer of his own invention. This represents a conflict of interest and is scientifically

inappropriate. Our small water district should not be coerced into paying for untested experimental technology. Tried and proved radial wells have not been seriously considered – why? The CCC questioned use of slant wells at the Monterey plant, and I urge you to carefully examine and question the same here. At best, even a full production well should be considered a pilot plant.

**Public approval**

SCWD claims the public shows high interest in the project. Claims vary but are generally stated as 80-90% of the rate payers and is partly based on the highly biased survey they conducted. I should point out that I ran twice for a seat on the board of SCWD – in 2016 and 2020 – as an outspoken critic of this project. I shared facts and updates for constituents on my website www.savedheny.org to bring awareness about what was being proposed, its real cost to the rate payer and its unsustainable nature. During both elections, I won over 6,000 votes making it clear that the public support for this project is not nearly as high as it is portrayed by SCWD.

**Cost of Water**

SCWD revised the cost of water produced by the desalination plant to $1750 per foot. This is half the industry actual costs and even then, subject to energy and chemical costs among other things. When the EIR was

released, I asked what the proposed power draw of the plant would be as it was not mentioned in the EIR. It took considerable effort to get a number from SCWD and its consultant. It took the intervention of Clean Water Now to get the answer of an estimated 4MW, a week after inquiry. The importance of this number being included as part of the EIR cannot be overstated.

Approximately 60% of the operating costs of a desalination plant are energy costs making the power draw calculation crucial to the EIR. Your report states 3 MW, identifying a discrepancy of 25%. The fact is the cost is poorly understood.

Rate payers want a reliable and cost-effective solution to continue their water supply in an emergency, however the proposed plant is unlikely to provide it. To provide adequate water in an emergency, such as an earthquake, 100 MW a day is needed to run the plant, but it is unlikely energy providers could get it there. Neither generators or solar will provide enough energy and not all pump stations will have power. Furthermore, should SCWD have water to distribute it will be honor bound to share it with other districts.

I also strongly object to the notion of tying my water supply to private energy companies. Water utilities are publicly owned for good reason – to protect such a vital resource from undue profiteering. Making water availability solely dependent on private energy providers is unwise and bad for the rate payer.

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**Conclusion**

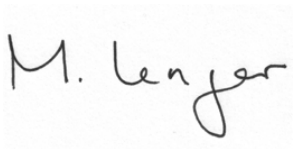
I am certainly more aware than most that we need to stop relying on imported water as much as we do. I have been in the water industry for over 30 years. The industry has clearly taken the path of conservation first combined with reuse second. We have enough water, but we *must* stop wasting it.

Building this questionable project at this problematic location at the limited scale proposed, makes no sense. Better and cheaper alternatives are literally next door at the Latham plant. I have grave concerns that the proposed plant will be obsolete once it starts producing usable water in the early 2030's. A dual purpose approach allowing DPR/IPR and Desalination, possibly modular, would serve us and our children much better.

I fear people in the Southland are forced to finance yet another failed infrastructure project like the ill-conceived Salt Creek Treatment Plant in Dana Point (also SCWD) or the San Onofre Nuclear Power Station. Our coast is littered with these stranded assets, let's be careful to not add another one.

Sincerely,

Dr Markus Lenger



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Dr. Markus Lenger began his career in wastewater back in 1989 during the Exxon Valdez oil spill in Alaska where he introduced **BioVersal**, an advanced bioremediation oil-spill cleanup technology, which became more successful than over 1400 other technologies tested. Markus spent eight months in Valdez during the cleanup where he developed systems for wastewater processing, soil remediation and biological mixed surfactant systems.

Markus continued as a wastewater research engineer during the 1990's while further developing his **BioReactor** technology.

This work concluded with his invention of the **FOG-DS** (**O&G Disposal System**), the fundamental technology that established **CleanBlu®** corporation. Markus holds four US patents for his technology with two further pending and continues to explore and develop new and disruptive technologies, which have the greatest impact on water reclamation.

He is Co-Founder and CEO of **CleanBlu Inc.**, a member of five **IAPMO Green Technical Task Forces**, a member of the **ASME A112 Committee** and is a frequent presenter at the **IAPMO International Emerging Technology Symposiums**. He currently chairs the DPR Taskforce.

Markus is an **Electrical Engineering** graduate of Berufsschule, St. Gallen, Switzerland and holds a **Doctorate in Physics** from an affiliate of the **Max Planck Institute, Munich**.

He gained his business education at **Sony Europe** and as a **Senior Technical Solutions Manager for IBM**.

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STATE OF CALIFORNIA - NATURAL RESOURCES AGENCY GAVIN NEWSOM, GOVERNOR

CALIFORNIA COASTAL COMMISSION
45 FREMONT, SUITE 2000
SAN FRANCISCO, CA 94105-2219
FAX (415) 904-5400
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# Th10a

| | |
|---|---|
| Filed | 9/21/22 |
| 180th Day: | 3/20/23 |
| Staff: | TL-SF |
| Staff Report: | 9/30/22 |
| Hearing Date: | 10/13/22 |

## STAFF REPORT: REGULAR CALENDAR

| | |
|---|---|
| **Application No.:** | **9-20-0691** |
| **Applicant:** | South Coast Water District |
| **Agent:** | Kevin Thomas, Kimley-Horn Consultants |
| **Project Location:** | City of Dana Point and Doheny State Beach, Orange County. |
| **Project Description:** | Construct and operate a desalination facility, including a slant well field, associated water transmission pipelines, and related infrastructure within the coastal zone. |
| **Staff Recommendation:** | **Approval with conditions.** |

CLEAN WATER NOW

CLEAN WATER NOW is an innovative, science-based organization committed to solution-oriented collaboration as a means of developing safe, sustainable water supplies and preserving healthy ecosystems.

To: California Coastal Commission

CC: California State Lands Commission
California State Parks
SDRWQCB
SWRCB Division of Water Rights (Enforcement Unit)

Attention Staff: Mr. Tom Luster, Senior Environmental Scientist

Date of Submission: October 3, 2022

Transmitted electronically via email to: EORFC@coastal.ca.gov
CC: Tom.Luster@coastal.ca.gov

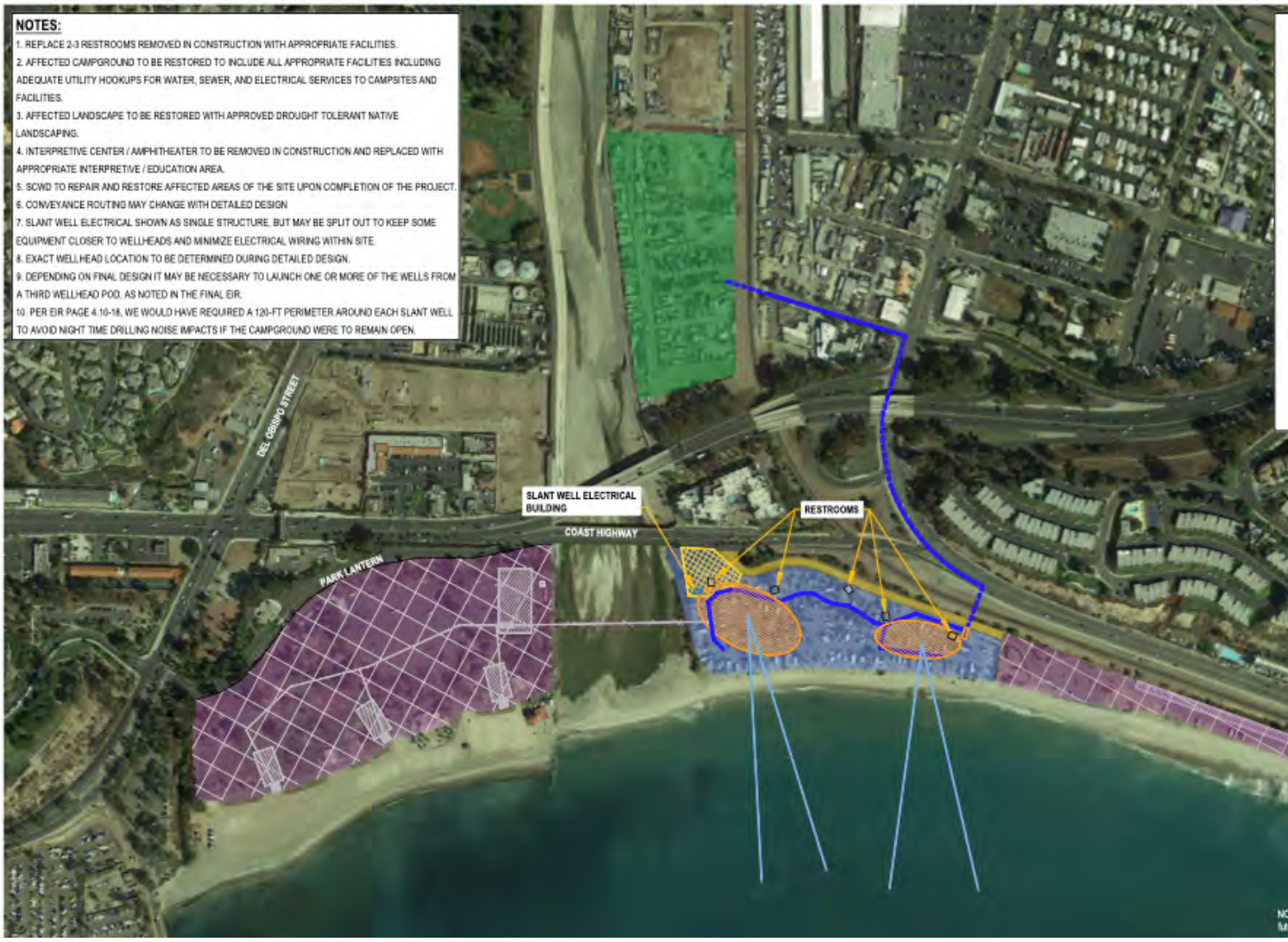
Honorable Commissioners and Staff:

Clean Water Now supports the Staff recommendation for approval contingent upon the Applicant's unaltered (non-amended) agreement to and acceptance of ALL terms and conditions, i.e., mitigations, exactions, measures, and concessions as explicitly proposed in the 57-page Filing Report (dated 9/22/2022) officially provided to the public on 9/30/2022.

Moreover, the Applicant should be ordered to pursue and achieve the contractual-binding perfection of the responsibilities and accountability as imposed expeditiously and transparently, i.e., notify/inform interested party stakeholders in a timely manner *re* other agency petitions/applications, their hearings dates (if any), their completion and legally required validation of the additional implantation steps and

scheduling (algorithm), including listed permits, permissions, plans, etc., which the Commission has stated in said Staff Report.

NOTE:
CWN would like some clarification in the final report version *re* the maximum number of slant wells being allowed, their layout/direction in relation to the DSB Campgrounds/shoreline being perpendicular, and to offer one minor reconfiguring triggered by said Staff's Report (Exhibit 1):
https://documents.coastal.ca.gov/reports/2022/10/Th10a/Th10a-10-2022-exhibits.pdf




"Well field: *The well field would include two wellheads accommodating up to five slant wells that would extract up to about 10 mgd of seawater from alluvial deposits located beneath the seafloor. The project's two wellheads would be located within Doheny State Beach, just south of the mouth of San*

*Juan Creek (see Exhibit 2 – Project Well Field). Each wellhead would be located within a below-grade cast-in-place concrete vault that would include two or three slant wells, with the eventual configuration dependent in part on geotechnical investigations that would be conducted before construction."*

The graphic above and the well field description by Staff are incongruent, to us are ambiguous. *"....up to 5 slant wells"* is expressed yet the formal report JPEG shows 4 drafting wells arrayed in 2 pods/wellheads.

The verbiage is unclear/imprecise, could the Applicant drill 6 total (3 wells within each vault) without further review? Who or what 3rd party agency, or independent consultant having no $$$ interest is going to perform the geotechnical investigations?

(a) One of CWN's major concerns has been the potential drawdown/dewatering of the estuary, possibly unforeseen or under-investigated impacts upon biological resources. The estuary is a candidate for restoration first proposed by Trout Unlimited South Coast Chapter in 2015. Proactive measures and, if necessary, memorialized restrictions should be in place to optimize such a rehabilitation, not fetter or hinder its future via this Project.

The geotechnical and geohydrology vendor is also the slant well patent holder (Dr. Dennis Williams---GeoScience), hence open to legitimate skepticism, that of having a conflict of interest. He/his corporation have a financial interest, i.e., gain to profit significantly from not just this Project but by using/leveraging it, be rewarded via promotion of others. All without any agency either having the expertise or demanding peer review of a relatively new technology for ocean installations.

(b) The other issue is the drawing, the enticing or inciting of sea water intrusion, already the subject of a SWRCB Water Rights investigation still in progress: In its Report Of Investigation (No. 7806----8/27/2021), the Division of Water Rights (Enforcement Unit). The State declared that the Applicant had in fact caused significant sea water intrusion upstream, all of

the way up to Stonehill Drive (1 mile) over the course of many years. ROI 7806 is still an open file.

The ROI violation conclusions perforce deduced intrusion that includes the upper reach of the Doheny estuary, ≈ ½ mile from DSB (halfway to Stonehill Drive). We believe this lower 1 mile to be inextricably linked, a gestalt, a surface and subsurface continuum, connected hydrologically. In fact, the groundwater is regulated as a sub-surface stream by the State, NOT an isolated aquifer.

The Applicant painted a Pollyanna picture to first procure and then subsequently increase those brackish water pumping rights, and we believe more cynicism, more of a jaundiced eye is intuited. The Applicant has therefore harmed this creek's habitat and base flow regime before, is now, not to mention elevated the TDS/Chloride levels to unacceptable concentrations in violation of Basin Plan Objectives, SNMP, etc..

Please read the ATTACHMENT A document fastened to this communication. It's our joint pleading to both the SDRWQCB and SWRCB Division of Water Rights for the SJCOO amended NPDES permit hearing on March 9, 2022.

ATTACHMENT A expresses in more refined details why CWN believes that San Juan Creek and other diversions/impounding up to and including the estuary are of great concern to us. We believe ourselves to be justifiably suspicious. Utilities see water as a commercial enterprise, for their procurement and sale, we see it as a natural resource that sustains and protects native biota.

(c) The Staff Report allows for a reopener to grant the Applicant greatly increased yet unknown numbers of future wells/wellheads. Although it laid out the general requirements, there's no mention of a revisit timeline. CWN believes that the DSB Campground wells being permitted presently should have a multi-year monitoring track record pre, during and post-construction to determine if adverse impacts are/are not occurring.

> Monitoring records should be kept starting asap for a benchmark database. Then, when ALL of wells at the DSB Campground are online and producing potable supplies, a long-term, reliable survey will allow comparisons for impacts. Not when one well is online, not two, but ALL. This is the only way to assess if this method in fact protects the biological functionality and resources of the estuary.

We also encourage the Commission to add a condition for approval: A recommendation to ensure the protection of both the lagoon and discourage, to the Maximum Extent Practicable (MEP), sea water intrusion which could affect the salinity and delicate fresh/salt water balance ratios of the entire lower reach of San Juan Creek, that the wells be pivoted approximately 15° counter-clockwise. Downcoast and drafting further away from the creek mouth, less perpendicular, more oblique to DSB.

It is our policy that this, or any subsequent addended ocean desalination project, must omit future consideration of recreational dislocation or use of the DSB North Day Use Area. This is another reason that we're unhappy with the revisit or reopener verbiage, failing to address now the intended expansion of extraction volumes and their impacts proactively, not post facto when the damages have already happened.

CWN profoundly feels that this upcoast portion and the estuary should be kept inviolate, i.e., the Applicant or inheritor should be disallowed *in perpetuity* from ever encroaching into either.

CWN is a grass roots, self-funding NGO, we have no inhouse counsel nor the money to hire one. Otherwise, we would have filed a legal challenge to the Final EIR asap after its certification by (who else) the Applicant themselves. The Applicant never fully complied with CEQA mandates *re* a "Reasonable Range of Alternatives."

Example:

Though petitioned in person by both CWN and Surfrider Foundation Coastal Engineer Rick Wilson (now retired) in 2015 (7 years ago), the

Applicant didn't agree with us. Staff and consultants refused at that time to analyze the feasibility of taking the secondary discharges from the *"just across the creek"* JB Latham Waste Treatment Plant and commingling as an alternative other than No Project.

The Applicant is a JPA member of the owner/operator, SOCWA. The JBL discharges ≈ 8 mgd of secondary from the SJCOO.

At minimum, both SF and CWN requested that the Applicant consider co-mingling. With very high recovery rates (80% or more) and ≈ 1/12$^{th}$ of the TDS content, commingling for potable treatment would have assured the same volume of production as what the Applicant purports it will eventually pursue at a future buildout to become a regional supplier:

5 mgd of potable from the cleansing of the seawater being proposed + 6+ mgd from the JBL Plant surplus==11+ mgd production, plus acquiring economy of scale, lower prices for ratepayers too. Less of a carbon footprint, etc.

Long Term Objectives Could Be Met. No need for additional wells beyond these being requested. No additional DSB incursions/invasions, no indeterminate (# of years unknown) discontinuities, dislocations or disturbances to recreational use, greatly lessened ecological effects/impacts or potential thereupon.

Our prompting for this alternative, in 2015, met what we felt were *"fair argument standards,"* the noted rule of reason per CEQA.

Per State guidelines, what the Applicant should have planned for, should be proposing for implementation and pursuing <u>NOW</u> is the reclamation and reuse of existing waste supplies (DPR) to the MEP coupled with ocean desalination.

Today, on the verge of DPR updated guidelines, this commingled strategy could be in place by 2025-26, contemporaneous with, by the time the proposed wells are finished and ready for potable extractions, i.e., <u>AFTER</u> they've cleared what they call the *"paleolithic depositions, the existing iron and manganese fields."*

There's no real incentive if the State keeps encouraging more ocean desalination without mandating this type of easy commingling. The JBL

Plant is just across San Juan Creek, a literal stone's throw from the Applicant's proposed facility (see JPEG below):

"***According to CEQA, an EIR must describe a reasonable range of alternatives to a proposed project that could feasibly attain most of the basic project objectives and would avoid or substantially lessen any of the proposed project's significant effects. Additionally, a "No Project" alternative must be analyzed. An EIR must evaluate the comparative merits of the alternatives.***

***The range of alternatives in an EIR is governed by a "rule of reason" that requires an EIR to set forth only those alternatives necessary to permit a reasonable choice. An EIR need not consider every conceivable alternative to a project. Rather, the alternatives must be limited to ones that meet the project objectives, are feasible, and would avoid or substantially lessen at least one of the significant environmental effects of the project.***

***"Feasible" means capable of being accomplished in a successful manner within a reasonable period of time, taking into account economic, environmental, legal, social and technological factors.***

***The EIR must briefly describe the rationale for selection and rejection of alternatives and the information the Lead Agency relied on when making the selection. It also should identify any alternatives considered, but rejected as infeasible by the lead agency during the scoping process and briefly explain the reasons for the exclusion.***

***Alternatives may be eliminated from detailed consideration in the EIR if they fail to meet most of the project objectives, are infeasible, or do not avoid any significant environmental effects."***

JB Latham Plant In Lower Right (Applicant Supplied Photo)

*From the desk of*

Roger E. Bütow
Founder & Executive Director
Clean Water Now (Established 1998)
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Direct landline: (949) 715.1912 (VM after 6 rings/No TM)
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CLEAN WATER NOW *is an innovative, science-based organization committed to solution-oriented collaboration as a means of developing safe, sustainable water supplies while preserving healthy and viable ecosystems.*


To: San Diego Regional Water Quality Control Board Tentative Order R9-2022-0005
SWRCB Division of Water Rights (DWR) ROI 7806

Re: DWR Resolution and enforcement/sanction activities (SCWD coastal zone wells)
San Juan Creek Watershed Salt & Nutrient Management Plan (SNMP)
San Juan Creek Basin Plan Objectives (BPO)
SOCWA San Juan Creek Ocean Outfall NPDES/Doheny Desalination Project (DDP)
Sustainable Groundwater Management Act (SGMA)

Date: February 2, 2022

Attention: Zach Mayo (SWRCB--DWR)
Roger Mitchell (SDRWQCB--SNMP)
Chiara Clemente (SDRWQCB--Enforcement)
David Barker (SDRWQCB--SOC NPDES Stormwater)
Joann Lim (SDRWQCB--SJCOO Permit)

Submitted by: Roger E. Bütow, Executive Director, Clean Water Now (CWN)

(Transmitted electronically via email)

To all parties:

Herein are comments regarding the DWR investigation but also the proposed Doheny Desalination Project (DDP) and its syphoning (extraction) impacts. CWN considers them inextricably bound and should not be viewed in isolation or separated, disentangled jurisdictionally.

We believe that South Coast Water District (SCWD) has NOT provided sufficient proof or evidence that the DDP won't increase seawater intrusion: It is our position that the two (2) wells operated by SCWD have already triggered both lateral and vertical encroachments, that the proposed DDP has the potential to exacerbate those intrusion dynamics and hydraulic mechanisms.

## Preface

The chronological history of CWN's constant trailing, persistent watchdog efforts matter in these two (2), *prima facie* superficially distinct issues. CWN is the ONLY NGO to have tracked the DDP via subsequent, innumerable analyses triggered by attendance at public hearings, workshops and interrogatories addressed to SCWD Board, staff and consultants.

CWN's credibility should be taken seriously as 90% of the SOC utility meetings exhibit ZERO NGO attendance. Since 2010, CWN has been a constant attendee at SJBA meetings where NGO representation has been glaringly MIA.

CWN was in fact the ONLY NGO present when SCWD announced the filing of their water rights complaint (circa 2015), naming the City of San Juan Capistrano and the parent San Juan Basin Authority (SJBA) as culpable. We have continued to track it up to this day and have greatly appreciated the DWR's acknowledgment, i.e., via recent petition granting us Interested Party Status in their objective, final pursuit regarding resolution of that complaint.

> CWN was the ONLY NGO present at the San Juan Creek Watershed Study Management meeting co-hosted by the USACE and County of Orange over 20 years ago when this project was presented by MWDOC in its infancy, its nascent conceptual launch via a PP Presentation. It proposed an open ocean intake.

Up until 2010-11, we were the ONLY NGO to participate via attendance and public testimony as it gathered municipal and utility partner momentum: SCWD, MWDOC, Moulton Niguel Water District, the cities of San Clemente, San Juan Capistrano, and Laguna Beach ALL contributed staff time and funds to sustain this desalination's progress.

Suddenly, all of the aforementioned parties announced their summary withdrawal, abandoned their fiscal contributions and removed themselves as partners, including creator and original advocate MWDOC, save one: SCWD. This jarring, *en masse* exodus was never explained to the public, there were rumors of personal disputes, friction between the new GM of SCWD and new GM at MWDOC that were never confirmed or openly divulged. CWN did hear that it was already looking too expensive, not just in construction costs (estimated at ≈$85 million in 2011) but compared to MET supply costs a deal breaker. So they all dropped out.

The most commonly uttered concerns, the dominant suspicions, uncertainty and wariness in addition to the growing, mounting administrative expenditures was the unpredictability, the experimental nature of probationary slant well drilling, its dicey risks regarding unforeseeable technological operational failures, high energy costs, and ongoing maintenance that could <u>only</u> be performed or supervised by the sole source patent holder: Dr. Dennis Williams of GeoScience.

As reflected in Monterey's ocean desalination, slant well usage hasn't cleared jurisdictional hurdles, hence there were no successful precedents, no multiple well array installations of this technology anywhere in the State's coastal waters---or elsewhere for that matter.

The SDRWQCB may receive directly or be provided by SCWD letters of support from a gamut of stakeholders. CWN believes that it's garnered support because the sub-surface intake is the lesser of evils, the least objectionable, it's as if ANYTHING but an open ocean intake merits kudos and *"huzzahs,"* delighted enthusiastic hoorays.

The prototype that was operated by MWDOC at Doheny Beach didn't instill a lot of confidence for many reasons: A single boring barely to the Mean High Tide (MHT), this was in essence a conceptual, feasibility installation (only 350 feet in length) as it did NOT drill out to the projected eventual distances (600-1200 feet) or depths of the final fan, the multiple *"snout"* array (graphic displayed later in this submission).

In fact, it was a single tubular extraction device, yet SCWD has asserted, concluded and CWN alleges falsely extrapolated full build out Pollyanna success from a modest test well that didn't mime eventual installation conditions:


Living in proximity to SCWD's offices, I personally was able to attend all of the numerous workshops and hearings as CWN's representative. Once in a blue moon, an NGO representative from another group would attend. Post 2011, a search of SCWD

and SJBA minutes and submissions archives sustain that persistent stakeholder participation.

What started at a projected $85 million total price tag 10 years ago is currently up to $120 million and rising by SCWD's own 2021 public main stream media quoted admissions. While burning through grant and significant ratepayer funds in the millions, apparently money is no object, disregarding the minor size of the customer base in relation to other utilities.

I was appointed by SCWD to serve on their ad hoc sustainability committee several years ago, and it became immediately apparent that its primary purpose was to rubber stamp the DDP. Unrecorded, no minutes taken, no public in attendance as they were not notified or invited, it intentionally avoided, did not have to meet Brown Act standards. From my opening remarks, I repeatedly voiced my concerns about not only the cloudy atmosphere of rubber-stamping tactics/allegations, the glaring deficiencies of slant wells but also my distress regarding no public stakeholder transparency.

It is not unreasonable to pause and ask the reader simple questions:

- Why did all of the other previous partners/members drop out and never return to the slant well fold?
- Why, in the past 5 years typified by SCWD Board and staff shamelessly begging former partners or new ones to join them, invest, has no agency signed aboard?
- Why didn't the largest, employing by far SOC's most knowledgeable and innovative staff, notably savvy Board and *"asset-wealthy"* utility, Santa Margarita Water District, ever invest?
- Is it possible that like the game of roulette, SCWD is failing its fiduciary responsibilities and duties by gambling, by placing all of someone else's money on RED 1, that everyone else but SCWD sees the literal bankrupt strategy being proposed? I bluntly asked their Board and GM in open session many times if they'd consider alternative conventional pumping methods and placement strategies: The retort was basically ONLY slant wells on the beach would be considered and *"damn the torpedoes."*
- That the sole source slant well commitment which SCWD pushes as *"innovative"* is in fact experimental, unproven, radical and extreme, plus fails any objective, disinterested 3rd party risk or cost benefit litmus test. Obviously as they've been no takers, only lip service support, something is amiss.

## INTRODUCTION

It's CWN's formal position that the drafting of the Lower San Juan Creek, including water rights held by SCWD (WRP 21138—A030337), Basin Plan Objectives (BPO) violations, the proposed amendment to NPDES No. CA0107417, tentatively scheduled for SDRWQCB approval in March of 2022 in conjunction with the San Juan Creek Ocean Outfall (SJCOO) NPDES Permit (R9-2022-0006), plus DDP prescriptions/conditions for approval are inextricably linked, should be seen in their totality not in isolation.

The groundwater perched sub-surface in lower San Juan Creek from just above Stonehill Drive to Doheny State Beach (≈ 1 mile) and extended seaward is a

continuum, protrudes farther out into the Pacific Ocean than SCWD's admission in its vendors supporting biased studies. That vendor (GeoScience) has a distinct Conflict of Interest in both matters, the ROI fracas plus the hydrogeological studies performed for the DDP (explained further in this submission).

Furthermore, this lower reach has been found to be a distinct sub-basin, separated from its larger upstream portion (San Juan Basin) by an occlusion, a barrier that severs the upper from the lower.

There is physical interplay, connectivity, a hydraulic relationship between the ground and surface water reflected in SWRCB's jurisdictional oversight and water rights permits. Even though a low priority groundwater basin, CWN petitions both the SWRCB and SDRWQCB to consider the main goals of the Sustainable Groundwater Management Act (SGMA) and its basic principles to be relevant.

In light of the most recent, evidence-based hydrogeological analyses and conclusions reached by the SJBA *et al*, the lowest reach should be declared a candidate for more intense scrutiny:

- Identify, i.e., declare the lowest reach of San Juan Creek as a separate sub-basin subject to critical hydraulic/habitat conditions and protected from jeopardizing overdraft, hence distinct enforcement procedures not imposed upon the known upper reach (larger San Juan Basin---Managed by the SJBA).
- Develop unique management practices/activities and objectives for the sustainable management of this lowest segment's surface and groundwater; from the now-known barrier, the estuary and out beyond the point of immediate surface discharge.
- Revise the San Juan Creek groundwater basin boundaries, developing specific regulations in collaboration with SCWD as it is the only SJBA member with water rights in this lowest unit, a distinct, readily distinguishable segment portion. Who knows how long SCWD has been abusing its POD permit? How does anyone assess the fiscal benefits of lengthy non-compliance by SCWD, or the fiscal worth of a decade or more of ecological degradation?
- We ask the SWRCBDWR to consider that their investigation bolsters and sustains our long-held position: There's a *"fair argument standard"* case to be made that SCWD as a condition of approval should be required to shut them down asap pending resolution of the water rights dispute, the complaint filed by SCWD against its fellow JPA members.
- If not, at minimum, then mandate the decommissioning of the 2 wells upon the onset, the first day that ocean desalination pumping commences as it attempts to clear the paleo channel (*stratographic depositional zone*) cone of depression. If the DDP is eventually fully permitted, SCWD will have no need for said wells anyway, correct? SCWD should be required by the State to decommission them at least temporarily to assist more accurate analyses plus as a condition of approval, i.e., an exaction, a concession/exaction, or mitigation for the DDP.

In addition to supplying water to the root zone of plants, groundwater can also contribute to surface flows, influencing the timing, duration, and magnitude of surface flows, particularly base flows. These base flows provide essential support to aquatic invertebrates, avian fauna, and fish species, including native resident and anadromous fishes. In addition, groundwater that only seasonally supports surface flows can contribute to the life-cycle of migratory fishes, such as steelhead, that can make use of intermittent flows for both migration, spawning and rearing (Erman and Hawthorne 1976, Boughton *et al*. 2006, 2009).

CWN strongly encourages both agencies to address the undesirable potential results to prevent further harm in this now proven, separate sub-basin:

- Chronic lowering of the groundwater levels within this sub-basin
- Significant and unreasonable reduction of groundwater storage
- Seawater intrusion
- Degraded water quality
- Degraded threatened/endangered habitat by drawing down surface regime flows. Adverse estuarine impacts that substantially interfere with mixing zone beneficial uses, including fresh resource de-watering of the estuary and increased salinity.
- Depletions of interconnected surface water that have significant and unreasonable adverse impacts on beneficial uses of the surface water.

Priorities:

- The negative historical and potential future effects of SCWD diversions in lower San Juan Creek as noted by DWR's ROI 7806 (coaxing of seawater upstream) shouldn't be viewed in isolation. The two (2) desalter wells should be taken offline until such a time as both the DWR and SDRWQCB staff have concluded this investigation, including conditioned mitigations to avoid seawater barrier intrusions in the future. State and federal anti-degradation policies should be brought into the dispute narrative.

- Focus upon adverse impacts on lower San Juan Creek's BPO due to desalting draft practices, that have and will take place, that need further unbiased, independent 3rd party analyses.

- Pumping activities have threatened and will continue to jeopardize the approval of the San Juan Creek Watershed Salt & Nutrient Management Plan (SNMP) currently in progress, in coordination with SDRWQCB staff for certification. SCWD/SOCWA should create adequate implementation BMP's/procedures for achieving or ensuring compliance with water quality objectives. Post facto monitoring is the equivalent of trying to put the horse back through a long ago, left open barn door. Damage, degradation and entropy may already be in place.

- Address the additional burden which could be placed upon critical fresh ground and surface water replenishment resources in both lower San Juan Creek and the estuarine zone if SCWD is allowed/certified to pump ≈9.4 mgd from the Creek mouth/Doheny State Beach as being applied for currently. This ≈9.4 added burden, this allowance should also be set aside, stripped from the Tentative Order R9-2022-0005 to be heard on March 9, 2022. As SCWD has stated, it will take several years to build/install the infrastructure, that is adequate time for CWN's proffered studies to either sustain or rebut SCWD allegations of *"nil/negligible"* adverse estuarine and sea water intrusion impacts.

- The Basin has been intensively studied by the SJBA's vendors, Wildermuth Environmental Inc. (now West Yost) and G3SoilWorks beginning in 2013. They've been followed by the current, unfinished peer review by Wesley Danskin (USGS), all sustain the existence of said blockage. All strongly embrace the highly probable existence of a distinct lower Basin.

- At minimum, neither the pumping activities/SJCOO discharges of the 2 named SCWD wells or DDP/amended NPDES permit should proceed until Mr. Danskin's final report/analysis has been completed and accepted/certified in open session public hearings before the SJBA, and the SWRCBDWR completes its own investigation and closes the file. We assume via sanctions like compensation for staff time, any ACLs and/or SEPs/ECAs.

- CWN strongly encourages both the DWR personnel and SDRWQCB staff to try and see it from our perspective: CWN believes that due to the overwhelming, mounting evidence by the SJBA's team of consultants since 2015, coupled with the DWR ROI 7806, a more refined investigation of the negative aspects of SCWD's lower creek diversions and reassessment of its desire to amend the SJCOO/ratify the DDP should take place in tandem, not in its current isolationist view.

## RECITAL

The information embedded in the ROI 7806 sustains our suspicions. We look forward to the resolution of this matter and sanctions but would reiterate what our position of 8+ years (beginning in 2014) regarding distressing concerns openly expressed verbally and in writing at both SCWD and SJBA hearings:

- SCWD has amplified upstream, ocean water intrusion via its 2 wells (Stonehill & Creekside) noted in ROI 7806. Our increasingly loud, vehement objections are a matter of public record (oral and written testimony); our alarm continues regarding the jeopardizing of the saltwater barrier and Basin Plan Objectives (BPO), including critical habitat for listed endangered/threatened species, concerns documented but unresolved.

- We believe that this ancient occlusion, the rock and rubble blockage in the lowest segment of the Creek above Stonehill Drive has hydraulically cleft the

Basin in two, starting just upstream of SCWD infrastructure. Sub-surface groundwater flows out a considerable distance beyond the beach as it comingles, it doesn't stop at the Pacific's edge.

- SCWD's sole focus appears to be selfishly consumptive, greedily extractive and without provision for freshwater recharging, thus triggering significant natural resource reductions affecting federally protected threatened and endangered flora and fauna, California species of concern including protection and restorations of native habitat. These issues were pointed out in SCWD's documentation by its own vendor, The Chambers Group (PDF attached).

- In the case of the Southern Steelhead Trout (SST), San Juan Creek Watershed enjoys the highest level of protection prioritization, it is designated as a Core One recovery unit by NOAA (NMFS)

Unfortunately, habitat for this species has been adversely affected by loss and modification of physical or biological features (substrate, water quality and quantity, water temperature channel morphology and complexity, passage conditions, riparian vegetation, introduction of non-native invasive species, *etc.*) through activities such as surface-water diversions and groundwater extractions (See "Current DPS-Level Threats Assessment", pp. 4-1 – 4-11, and "Threats and Threat Sources", pp. 9-14 – 9-17, in NMFS 2012; also, NMFS 2016). Thus many of the physical and biological features of designated critical habitats have been significantly degraded (and in some cases lost) to the detriment of the biological needs of steelhead. These habitat modifications have hindered the ability of designated critical habitat to provide for the survival and ultimately recovery of this species.

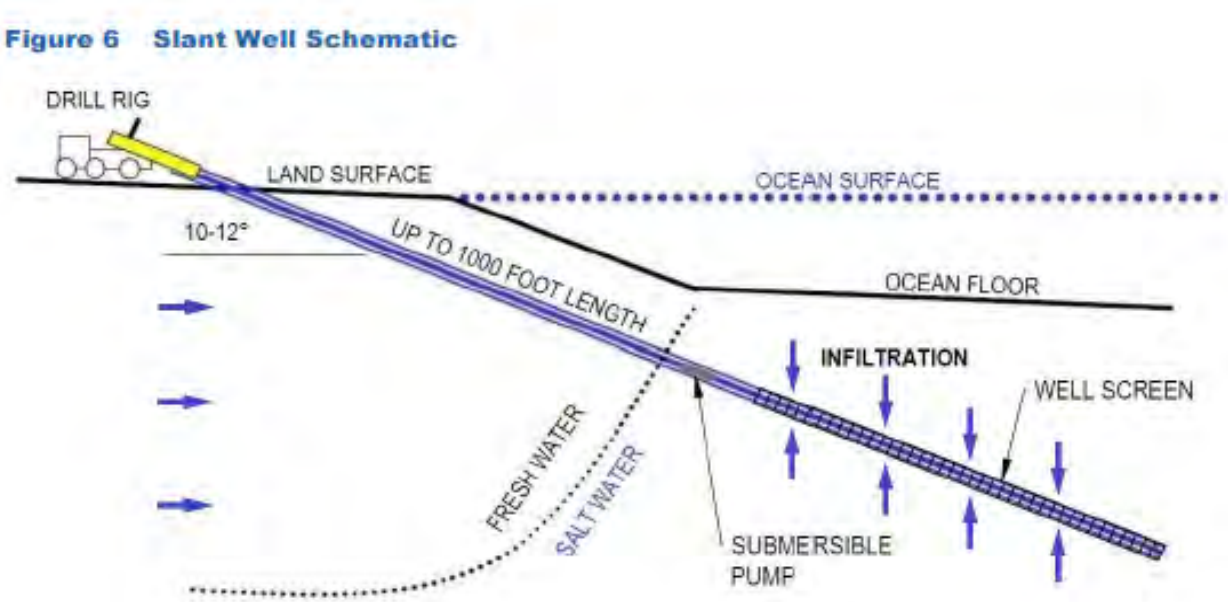
- SCWD shouldn't be allowed, should be conditionally restrained from altering the physical (water levels and duration/variations thereof), chemical (water quality/salinity) and biological integrity of the estuarine zone per BPO. SCWD's groundwater extractions have already imbalanced the fresh/seawater mixture as the SWRCB investigation reveals, and because of biased monitoring it is uncertain for what duration and to what extent degradation has occurred. The DPP has the potential to incur into extended estuarine waters as defined by the State

ESTUARIES AND COASTAL LAGOONS are waters at the mouths of streams that serve as mixing zones for fresh and ocean* waters during a major portion of the year. Mouths of streams that are temporarily separated from the ocean by sandbars shall be considered as estuaries. Estuarine waters will generally be considered to extend from a bay or the open ocean to the upstream limit of tidal action but may be considered to extend seaward if significant* mixing of fresh and salt water occurs in the open coastal waters. The waters described by this definition include but are not limited to the Sacramento-San Joaquin Delta as defined by section 12220 of the

* See Appendix I for definition of terms.

California Ocean Plan

- SCWD's own submission reflects this freshwater extension, although CWN would contest the depth and distance portrayal:




- CWN does not blame the State, that these permits we specify progress and are certified in separate venues, divisions and/or departments. CWN does believe that a wider, more thoroughly holistic vantage point should stimulate State agency conversations that mandate more in depth, objective 3rd party advanced analyses and investigations.

Furthermore, the Public Trust Doctrine imposes a related but distinct obligation to consider how groundwater management affects public trust resources, including navigable surface waters an fisheries. Groundwater hydrologically connected to surface waters is also subject to the Public Trust Doctrine to the extent that groundwater extractions or diversions affect or may affect public trust uses. (*Environmental Law Foundation v. State Water Resources Control Board* (2018), 26 Cal. App. 5th 844; *National Audubon Society v. Superior Court* (1983), 33 Cal. 3d 419.) The groundwater sustainability agency (GSA) has, "an affirmative duty to take the public trust into account in the planning and allocation of water resources, and to protect public trust uses whenever feasible." (*National Audubon Society, supra*, 33 Cal. 3d at 446.) Accordingly,

Source: NOAA (NMFS)

- CWN alleges that due to the overwhelming, mounting evidence by the SJBA's team of consultants since 2015, coupled with the DWR ROI 7806, a more refined investigation of the negative aspects of SCWD's lower creek diversions and careful reassessment of its desire to amend the SJCOO NPDES, plus certify the DDP should take place in tandem, contemporaneously: Both State agencies in collaboration and in coordination, in tandem, in conjunction with each other, not in regulatory silos.

Current efforts like the Southern Steelhead Recovery Project led by Dr. Sandra Jacobs of Cal-Trout and Mr. George Sutherland of Trout Unlimited stand little chance of estuary restoration and preservation let alone San Juan Creek SST passage to upper reaches, repopulation of said federally listed endangered species if the estuarine *"smolting, transitional"* zone for juveniles is never mitigated nor concessions/exactions offered. Less fresh surface water and potential hyper-salinity are not conducive to many aquatic and phreatophytic species either in residence (see attached Chambers Group Study) or subjects for re-population, future restoration planning efforts.

SST, an ESA-listed species, is just one of the reasons that CWN objects to the proposed sub-surface drafting of ≈ 9.4 mgd at San Juan Creek Mouth/Doheny State Beach and its conveyance, its co-mingling and discharge via the SJCOO operated by the parent JPA, the SOCWA. We are not assured nor have confidence in SCWD or its vendors that this drafting won't directly affect the seawater barrier and/or estuary.

Once SCWD/SOCWA acquire the right to syphon and discharge, it will be nearly impossible to withdraw/alter those entitlements except by expensive, complex, time consuming legal proceedings or formal measures. It could take YEARS of monitoring before the significant adverse impacts are realized. Since the proponent, SCWD, only seems to hire those that tell them what they wish to hear (confirmation bias), does the State really believe that this utility will blow the whistle on itself?

## ALTERNATIVES

- When SCWD certified its FEIR for the DDP in 2017 it *"hid the ball,"* i.e., it never considered less environmentally obtrusive or fiscally viable alternatives per CEQA in the same location: Vertical wells off the beach thus no recreational use dislocation impacts (beneficial uses).
- On November of 2019, a fellow SJBA member called these slant wells *"very risky,"* conveyed serious seawater intrusion concerns and suggested a viable, much more cost-effective alternative. This member directed SCWD to consider the estimated ≈6,000 afy that could be extracted using vertical wells (e.g., Ranneys) from the Creek contiguous, just below, the proposed Title 17 plant. CWN would add that decommissioning the 2 wells named in the ROI would ensure that acceptable groundwater recharging and estuarine replenishment levels could be sustained.
- Why didn't SCWD pursue the diversion of the surplus secondary affluent from the JB Latham plant just across San Juan Creek from the proposed DDP site property owned by SCWD? The SOCWA operated JB Latham plant discharges ≈8 mgd via the SJCOO, affluent truly wasted. A no-brainer but never offered as an alternative.
- With an approximate 80% or greater reclamation efficiency and recovery rate (DDP only 50%), this alternative would not only significantly reduce ocean pollutant discharge gross volumes (per the Ocean Plan). The DDP would discharge 5 mgd of hyper-saline briny waste that also contains concentrations of a gamut of chemicals from the desalination process itself.

- DPR would result in a similar significant reduction of both volumes and type in the concentrations of briny waste. This fulfills the State's goals and objectives of recovery, recycling and reuse plus conservation in one fell swoop.
- A hybrid model, vertical wells plus the SOCWA surplus.
- Whether DPR, IDR, or hybrid, CWN has done its homework: They could be accomplished for about ½ of what SCWD is projecting in eventual costs (over $120 million), and ½ the projected timeline for the DDP to become fully operational in/around 2030. We believe that our offered alternative could be accomplished by 2026, not incur violations or jeopardy regarding the prohibitions embedded in anti-degradation policies.

## INTERTIDAL MITIGATION

- CWN has been informed that the Los Cerritos intertidal wetland (SLCW) was a result of last-minute, December 2021 negotiations between SCWD and SDRWQCB staff, that SOCWA staff was not privy to these discussions? Why was that if the lead agency SOCWA holds the Permit?
- Imagine our surprise when on January 4, 2022, we opened the SDRWQCB agenda packet and at the very last page we found in Attachment H the suddenly named intertidal wetland. What do the benthic and epibenthic larval species 2 miles out into the Pacific Ocean (in over 100 feet of seawater) and intertidal wetlands larvae 20 miles away have in common, to qualify as *"in-kind?"* Extraordinarily little according to our research.

| | |
|---|---|
| For in-kind mitigation, the mitigation ratio shall not be less than one acre of mitigation habitat for every one acre of impacted habitat. | See Finding 58. In the absence of a larval study and to be conservative, the San Diego Water Board assumes that the SLCW mitigation project will provide in-kind mitigation for all species impacted by the Doheny Desalination Project. Therefore, the SLCW mitigation project will provide in-kind mitigation and the mitigation ratio is one acre of mitigation to one acre of impacted habitat. However, the species impacted by the Doheny Desalination Plant will be confirmed by the Larval Study required in section 6.2.3.4 of this Order. |

| Finding No. | Ocean Plan chapter III.M Reference | Ocean Plan Requirement | Finding |
|---|---|---|---|
| | | | Restoration Project led by the Los Cerritos Wetlands Authority. The Dischargers' mitigation project would directly restore 7.45 acres of marine wetland habitat using the site-specific restoration tools developed by the Los Cerritos Wetland Authority. Of the 7.45 acres of restoration in SLCW, 5.25 acres will be tidal salt marsh habitat restoration (intertidal flats, cordgrass, and saltmarsh) and 2.2 acres will be subtidal habitat restoration (fully submerged and tidal channels). However, the specific location of mitigation within the broader SLCW Restoration Project will be determined as part of the development of the Final Marine Life Mitigation Plan. |

Here's the list of mitigation candidates according to SOCWA as of October 7, 2021, that CWN was tracking:

**Report of Waste Discharge**

Order No. R9-2012-0012 (NPDES CA0107417) regulates the discharge of wastewater from the San Juan Creek Ocean Outfall (SJCOO) to the Pacific Ocean from SOCWA and its member agencies. SOCWA originally submitted an RWD in application for renewal of NPDES CA0107417 on November 28, 2016. An Amended RWD was submitted by SOCWA to the RWQCB on May 30, 2018. The May 2018 Amended RWD addressed co-mingling up to 9.4 mgd of brine from the proposed Doheny Desalination Project (DDP) in the SJCOO. Subsequent revised versions of the Amended RWD were submitted to the San Diego Regional Water Quality Control Board (SDRWQCB) on March 13, 2020 and December 14, 2020. The RWQCB responded to these submittals in comment letters dated:

- December 30, 2016,
- January 30, 2017,
- July 11, 2018,
- May 26, 2020,
- March 26, 2021,
- June 7, 2021, and
- August 9, 2021.

On November 7, 2019, the SOCWA Board approved inclusion of the Doheny Desal project in the RWD. The subsequent submittals included addressing the brine mixing zone, dilution rate based on discharge, Ocean Plan compliance, additional monitoring program parameters, and the inclusion of a list of supplemental environmental projects as requested by the SDRWQCB. The following list of potential projects was included in the final submittal on September 29, 2021:

- Kelp Forest Restoration
- Aliso Creek Estuary Restoration
- Buena Vista Lagoon Enhancement Project
- Batiquitos Lagoon Restoration
- San Elijo Lagoon
- San Dieguito Lagoon Wetland Acquisition
- San Juan Creek Estuary Restoration Opportunities Assessment
- Los Penasquitos Lagoon Restoration Design and Feasibility Study
- Marine Protected Area (MPA) Management and Protection Support

The SCWD would fund the supplemental environmental project. The NPDES is scheduled for adoption in either December of 2021 or February of 2022 providing member agencies an opportunity to advocate for projects that may be mutually beneficial. SOCWA will include a support letter for consideration through the public adoption process.

- A better, more pertinent, and appropriate mitigation is the long overdue, sorely needed environmental restoration of the Doheny State Beach estuarine zone. SCWD has had 10 years of sole control, its most recently funded study co-funded/sponsored by MWDOC 5.5 years ago, to help develop a model, to convene an ad hoc stakeholder working group, progress permitting, be *"shovel ready,"* announce a launch point (upon SDRWQCB approval). The past 5.5 years since the Chambers Group delivered could have been spent collaborating with NGO protectionists, regulatory, public trust and resource agencies on a workable environmental restoration adjacent to their DDP facility and extraction zone.

Knowing of the need for mitigation, in possession of the Chambers Group Lower San Juan Creek & Seasonal Coastal Lagoon Habitat

Assessment, more specifically to the SST as noted in their July 2016 deliverable: That *"this species has a moderate potential to occur near this site."*

**Southern steelhead** is federally listed as endangered and is a California Species of Special Concern species occurs in the ocean and in rivers and streams. Steelhead are born in fresh water and sp portion of their lives in the ocean before returning to fresh water to spawn. Adults require cool, oxygenated streams for spawning. This species has been previously recorded in San Juan Creek (Ho 2005; Brennan 2008). San Juan Creek was designated Critical Habitat for the Southern Cali Steelhead Evolutionarily Significant Unit (Hogarth 2005). Although no observations of sou steelhead within lower San Juan Creek have been recorded since 2008, southern steelhead may through the mouth, when open, of San Juan Creek and may use the creek for foraging. The sea coastal lagoon potentially could be used by smolt on their downstream migration before they ente ocean. Therefore, this species has a moderate potential to occur near the site. The San Juan and Tra Creeks Watershed Recovery Plan has the goal of restoring the watershed to support stee populations in a sustainable manner (CDM 2007).

- The focal or marker species, the charismatic SST, its habitat restoration a #1 priority, would have by now, no doubt, gathered mass support, cleared permitting hurdles, resulted in an FEIR/FEIS, awaiting only funding by SCWD, grants and other supplemental monies. This lack of proffered mitigation for all indigenous, acknowledged sensitive species in the estuarine increases our suspicion that such a historical restoration: An estuary whose goals were that it return to its original physical, chemical and biological functionality (or viable resemblance thereof), would have jeopardized the DDP. The restoration's calculus (system of reasoning) is both economically feasible and technologically possible.

- Moreover, SCWD has been the sole project applicant and proponent since all of the original partners ceased participating. It merits repeating, the cities of San Juan Capistrano, San Clemente, Laguna Beach, Moulton Niguel Water District and MWDOC all pulled out nearly 10 years ago. <u>Therefore, SCWD has had in actuality 10 years to develop a mitigation project(s) in proximity, relevant to this area, this watershed, its groundwater, its estuary and the tidal Pacific Ocean</u>. And literally at the 11th hour of the last year in this 10-year slog it proposes a mitigation that is irrelevant to this locale's species?

- If GeoScience's modeling is correct, then both the ocean desalination and the estuary restoration could have proceeded not only contemporaneously but harmoniously. Except SCWD never openly discussed this possibility with the public on my watch.

Shouldn't the State and its staff be asking themselves why this didn't happen? What did SCWD know and when did they know it?

- CWN is also concerned that being an anomaly, with only SCWD's extraction studies and analyses, modeling, etc. as guidance, how can any State agency peer review for exactitude? The proposed experimental technology of the slant wells for extraction being proposed has its advantages, being sub-surface thus avoiding entrainment like an open ocean intake (drafting).
  However, CWN cannot find one instance where this specific method is being used so close in proximity to a similar-sized (175 sq. miles) watershed's terminus, its ocean discharge. Hence there cannot be any exactitude regarding modeling as it's 100% unique.

- Since 2015, SCWD and its vendors are the only ones who have disputed the degrading seawater intrusion caused by the 2 wells and refuse to accept the existence of the occlusion, the ancient landslide barrier noted. Of deep concern to CWN since 2015 is that SCWD's primary hydrogeology firm, GeoScience, is owned by the patent holder (Dennis Williams) of the proposed slant well technologies, a glaring conflict of interest: Both regarding the DDP but leveraging others like Monterey without in-depth scrutiny.

- As important is a simple yet disturbing fact: The modeling and supposedly in-depth analyses for this anomalous ocean desalination, drafting only 200 meters off of Doheny State Beach, at the terminus of San Juan Creek, a 176 sq. mile urbanized watershed, was performed by said GeoScience and/or in coordination with this corporation.

- CWN challenges oversight entities to produce any ocean desalination in California that is on par, has the same hydraulic and environmental conditions. We cannot find a predecessor, a successful analog to this method or situation (creek or river mouth in California), and it is reasonable to wonder how SDRWQCB staff can assess modeling of an anomaly. Staff is essentially taking SCWD/GeoScience at their word, granting a waiver *"Hall Pass"* (see below).

- The FEIR that SCWD approved for the DDP is based upon *"fruit from a poisoned tree."* The source, GeoScience, is tainted by its Conflict of Interest, its inherent fiscal biases (plural), selective cherry-picking by SCWD, increasing our distrust and jaundiced eye. Though repeatedly challenged by CWN, SCWD has yet to provide a substantive rebuttal.

- What about the other SOCWA members regarding SJCOO capacity volumes and pollutant constituents/concentrations? How can they in the future, acting in good faith on behalf of their clients, assertively plan and pursue their own desalters in attempts to comply with State reuse and conservation objectives if SCWD is basically *"jumping the shark,"* cleverly and preemptively using a promotional gimmick (slant wells), unilaterally, allowed to dump 5 mgd of hypersaline into the outfall's discharge plumbing? Are SCWD and SOCWA putting off the inevitable, implying that the day will <u>never</u> arrive when the members will end up in a related legal dispute?

The SDRWQCB staff have included a significant caveat, a quasi-disclaimer that sustains our cynicism. It also supports our contention that this project lacks rigorous neutral, 3rd party peer review regarding ALL OF THE STUDIES AND MODELS:

SOCWA TENTATIVE ORDER NO. R9-2022-0005
SAN JUAN CREEK OCEAN OUTFALL NPDES NO. CA0107417

| Finding No. | Ocean Plan chapter III.M Reference | Ocean Plan Requirement | Finding |
|---|---|---|---|
| 2 | 2.a.(1) | The owner or operator shall submit a request for a Water Code section 13142.5(b) determination to the appropriate regional water board as early as practicable. This request shall include sufficient information for the regional water board to conduct the analyses described below. The regional water board in consultation with the State Water Board staff may require an owner or operator to provide additional studies or information if needed, including any information necessary to identify and assess other potential sources of mortality to all forms of marine life. All studies and models are subject to the approval of the regional water board in consultation with State Water Board staff. The regional water board may require an owner or operator to hire a neutral third-party entity to review studies and models and make recommendations to the regional water board. | On March 11, 2020, SCWD submitted a request for a Water Code section 13142.5(b) determination. The Dischargers submitted a Revised Compliance Matrix dated January 14, 2021.<br>The San Diego Water Board, in consultation with the State Water Board, reviewed the request and the Revised Compliance Matrix, and determined that it was unnecessary for the Dischargers to hire a neutral third-party entity to review studies and models and make recommendations. |

<u>Recreational Dislocation, Noise and Displacement/Disturbances To Sensitive Resident Species</u>

- CWN cannot find how SCWD intends to mitigate significant recreational dislocations: Both during installation and after construction (post-construction O&Ms). Nowhere can we find the construction staging and storage area locations, estimates, i.e., the large physical space that will be required.
- Doheny State Beach is an intensely used, highly trafficked popular South OC site. The JPEG below reflects the degree to which said impacts will take place. If a well is declared inoperable, unworkable, then decommissioned, SCWD will need to remove infrastructure and drill another from scratch. Heavy, bulky construction equipment that will need a considerable operational/logistical radius per OSHA.

- CWN cannot find how SCWD intends to mitigate the impacts of noise, i.e., construction activities upon sensitive species in the vicinity as listed in the Chambers Group report. How noisy will the ongoing operation of well pumps be and won't that decibel level be 24/7/365?
- Ditto for the years of physical disturbance of estuary habitat biota, the dynamics required to install the plumbing necessary to connect the wells to the desalination plant ½ mile upstream.


- From the California Ocean Plan:

(3) Analyze the feasibility of placing intake, discharge, and other facility infrastructure in a location that avoid impacts to sensitive habitats* and sensitive species.

## Concluding Remarks

The SDRWQCB should set the requested CA0107417 NPDES 9.4 mgd additional discharge amendment aside, order the SOCWA to put it on hold (hit the pause button) until such a time as SCWD can provide more certitude, more assurance to not just regulatory agencies but the protectionist public and resource/trust entities.

Since the DWR hasn't concluded its oversight activities, these 2 elements of the Tentative Order should not be approved. As of today, SCWD hasn't responded to ROI 7806.

Once again, CWN wishes that both State agencies and SOCWA membership to know that we do support the SJCOO NPDES Permit renewal but without the DDP elements. We're not trying to hold the remainder of SOCWA members hostage over an issue specific to SCWD.

If any party reviewing this submission has any questions, please feel free to contact me.

*Regards from the desk of:*

Roger E. Bütow
Founder & Executive Director
Clean Water Now (Established 1998)
Mailing Address: P.O. Box 4711 Laguna Beach CA 92652
Direct landline: (949) 715.1912 (VM after 6 rings/No TM)
Cell: (949) 280.2225 (VM/TM)
Linkedin CV: https://www.linkedin.com

Email: rogerbutow@clean-water-now.org
Website: www.clean-water-now.org

CLEAN WATER NOW *is an innovative, science-based organization committed to solution-oriented collaboration as a means of developing safe, sustainable water supplies while preserving healthy ecosystems.*

# 9-20-0691
# (South Coast Water District)

## October 13, 2022

## CORRESPONDENCE

## Individual Emails

| | |
|---|---|
| **From:** | Mayo, Zach@Waterboards |
| **To:** | Markus Lenger; Energy@Coastal; Luster, Tom@Coastal |
| **Cc:** | Gibson, David@Waterboards; Clemente, Chiara@Waterboards; Vasquez, Victor@Waterboards; Borack, Alexandra@SLC; Pratt, Riley@Parks; Mark Capelli; brittany.struck@noaa.gov; Carol Roberts; Pert, Ed@Wildlife; Romberger, Christian@Wildlife; Christine Medak; Roger Butow |
| **Subject:** | RE: Doheny Ocean Desalination: Coastal Permit Application No. 9-20-0691 (South Coast Water District--OC |
| **Date:** | Tuesday, October 11, 2022 2:09:16 PM |
| **Attachments:** | image002.png |

I have received your comments. Thank you.

Zach Mayo, PG
Engineering Geologist
Sacramento Valley Enforcement Unit, Division of Water Rights
State Water Resources Control Board
Phone: (916) 322-8425
Email: zach.mayo@waterboards.ca.gov

**From:** Markus Lenger <markuslenger@mac.com>
**Sent:** Tuesday, October 11, 2022 9:48 AM
**To:** Energy@Coastal <EORFC@coastal.ca.gov>; Luster, Tom@Coastal <Tom.Luster@coastal.ca.gov>
**Cc:** Gibson, David@Waterboards <David.Gibson@waterboards.ca.gov>; Clemente, Chiara@Waterboards <Chiara.Clemente@waterboards.ca.gov>; Mayo, Zach@Waterboards <Zach.Mayo@Waterboards.ca.gov>; Vasquez, Victor@Waterboards <Victor.Vasquez@waterboards.ca.gov>; Borack, Alexandra@SLC <Alexandra.Borack@slc.ca.gov>; Pratt, Riley@Parks <Riley.Pratt@parks.ca.gov>; Mark Capelli <mark.capelli@noaa.gov>; brittany.struck@noaa.gov; Carol Roberts <carol_a_roberts@fws.gov>; Pert, Ed@Wildlife <Ed.Pert@wildlife.ca.gov>; Romberger, Christian@Wildlife <Christian.Romberger@Wildlife.ca.gov>; Christine Medak <christine_medak@fws.gov>; Roger Butow <rogerbutow@me.com>
**Subject:** Doheny Ocean Desalination: Coastal Permit Application No. 9-20-0691 (South Coast Water District--OC

EXTERNAL:

All
I sent this email last Friday before the deadline of 5 PM.
I asked for confirmation of receipt. Could you please kindly respond?
Also this has not been included in the responses posted online - why?
Thank you so much and looking forward to acknowledgement.

All
Please see attached response to staff report.
Please confirm receipt of this e-mail.

Thank you

**Dr. Markus J. Lenger**
*CEO - Water Physicist*

**CleanBlu® Innovations, Inc.**
Capistrano Beach, CA 92624
Telephone/Facsimile: (949) 200-6226
Cellphone: (949) 412-2600
Skype: CleanBlu GMT-9
E-mail: markuslenger@cleanblu.com
Web: www.cleanblu.com | www.hydrologix.org | www.bioremediation.net | www.industrialmicrobes.com

Best Regards
Markus Lenger
CEO / Water Physicist
CleanBlu Innovations Inc
Capistrano Beach, CA 92624
Tel / Fax : (949) 200-6226
Cell: (949) 412-2600

| | |
|---|---|
| **From:** | Borack, Alexandra@SLC |
| **To:** | Mark Capelli - NOAA Federal; Markus Lenger |
| **Cc:** | Carol Roberts; Clemente, Chiara@Waterboards; Romberger, Christian@Wildlife; Christine Medak; Gibson, David@Waterboards; Energy@Coastal; Pert, Ed@Wildlife; Luster, Tom@Coastal; Mayo, Zach@Waterboards; Pratt, Riley@Parks; Roger Butow; Vasquez, Victor@Waterboards; brittany.struck@noaa.gov |
| **Subject:** | Re: Doheny Ocean Desalination: Coastal Permit Application No. 9-20-0691 (South Coast Water District--OC |
| **Date:** | Tuesday, October 11, 2022 2:06:46 PM |
| **Attachments:** | Outlook-1megc1am.png |

Good afternoon,

The State Lands Commission received your communication. Apologies for the delayed response.

CALIFORNIA STATE LANDS COMMISSION

**Alexandra Borack,** Senior Environmental Scientist
Division of Environmental Planning and Management
100 Howe Avenue, Ste 100-South | Sacramento | CA 95825 | 916.574.2399



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**From:** Mark Capelli - NOAA Federal <mark.capelli@noaa.gov>
**Sent:** Tuesday, October 11, 2022 12:53 PM
**To:** Markus Lenger <markuslenger@mac.com>
**Cc:** Borack, Alexandra@SLC <Alexandra.Borack@slc.ca.gov>; Carol Roberts <carol_a_roberts@fws.gov>; Clemente, Chiara@Waterboards <Chiara.Clemente@waterboards.ca.gov>; Romberger, Christian@Wildlife <Christian.Romberger@Wildlife.ca.gov>; Christine Medak <christine_medak@fws.gov>; Gibson, David@Waterboards <David.Gibson@waterboards.ca.gov>; Energy@Coastal <EORFC@coastal.ca.gov>; Pert, Ed@Wildlife <Ed.Pert@wildlife.ca.gov>; Luster, Tom@Coastal <Tom.Luster@coastal.ca.gov>; Mayo, Zach@Waterboards <Zach.Mayo@Waterboards.ca.gov>; Pratt, Riley@Parks <Riley.Pratt@parks.ca.gov>; Roger Butow <rogerbutow@me.com>; Vasquez, Victor@Waterboards <Victor.Vasquez@waterboards.ca.gov>; brittany.struck@noaa.gov <brittany.struck@noaa.gov>
**Subject:** Re: Doheny Ocean Desalination: Coastal Permit Application No. 9-20-0691 (South Coast Water District--OC



Received, thank you.

On Tue, Oct 11, 2022 at 9:51 AM Markus Lenger <markuslenger@mac.com> wrote:

> All
> I sent this email last Friday before the deadline of 5 PM.
> I asked for confirmation of receipt. Could you please kindly respond?
> Also this has not been included in the responses posted online - why?
> Thank you so much and looking forward to acknowledgement.
>
> All
> Please see attached response to staff report.
> Please confirm receipt of this e-mail.
>
> Thank you
> **Dr. Markus J. Lenger**
> *CEO - Water Physicist*

**CleanBlu® Innovations, Inc.**
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Web: www.cleanblu.com | www.hydrologix.org | www.bioremediation.net | www.industrialmicrobes.com



Best Regards
Markus Lenger
CEO / Water Physicist
CleanBlu Innovations Inc
Capistrano Beach, CA 92624
Tel / Fax : (949) 200-6226
Cell: (949) 412-2600

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Mark H. Capelli

| | |
|---|---|
| **From:** | Charming Evelyn |
| **To:** | Schwartz, Noaki@Coastal; Energy@Coastal |
| **Cc:** | Padilla, Javier@Coastal |
| **Subject:** | RE: Application No.: 9-20-0691 Doheny Desalination Project, Well Field, Treatment Plant, Agenda Item #10A - Public Comment |
| **Date:** | Tuesday, October 11, 2022 2:10:19 PM |

Thank you Noaki.

Charming

Co-Chair Water Committee Sierra Club CA
Chair Water Committee
Vice Chair Environmental & Social Justice Committee
Sierra Club Angeles Chapter
213-385-0903

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**From:** Schwartz, Noaki@Coastal <Noaki.Schwartz@coastal.ca.gov>
**Sent:** Monday, October 10, 2022 4:36 PM
**To:** Charming Evelyn <sc_acwatercom@outlook.com>; Energy@Coastal <EORFC@coastal.ca.gov>
**Cc:** Padilla, Javier@Coastal <javier.padilla@coastal.ca.gov>
**Subject:** RE: Application No.: 9-20-0691 Doheny Desalination Project, Well Field, Treatment Plant, Agenda Item #10A - Public Comment

Thank you for the letter. I have already forwarded to our staff.

Best,

Noaki Schwartz
California Coastal Commission
Deputy Director of Communications, EJ and Tribal Affairs
(562) 833-5487

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**From:** Charming Evelyn <sc_acwatercom@outlook.com>
**Sent:** Sunday, October 9, 2022 7:12 PM
**To:** Energy@Coastal <EORFC@coastal.ca.gov>
**Cc:** Schwartz, Noaki@Coastal <Noaki.Schwartz@coastal.ca.gov>; Padilla, Javier@Coastal <javier.padilla@coastal.ca.gov>
**Subject:** Application No.: 9-20-0691 Doheny Desalination Project, Well Field, Treatment Plant, Agenda Item #10A - Public Comment

Dear Commissioners,

Please find attached public comment re: Application No.: 9-20-0691  Doheny Desalination Project, Well Field, Treatment Plant,
Reject Discharge, and Uses; Agenda Item #10A, titled: " Smartest Alternatives to the Doheny Desal Project" which is being submitted on behalf of the Society of Native Nations, Sierra Club, Social Eco Education, Desal Response Group, SoCal 350.org, Southern California Watershed Alliance and The Environmental Justice Coalition for Water.

Respectfully,

Charming P Evelyn
Co-Chair Water Committee Sierra Club CA
Chair Water Committee
Vice Chair Environmental & Social Justice Committee
Sierra Club Angeles Chapter
213-385-0903

| | |
|---|---|
| **From:** | Pratt, Riley@Parks |
| **To:** | Mark Capelli - NOAA Federal; Markus Lenger |
| **Cc:** | Borack, Alexandra@SLC; Carol Roberts; Clemente, Chiara@Waterboards; Romberger, Christian@Wildlife; Christine Medak; Gibson, David@Waterboards; Energy@Coastal; Pert, Ed@Wildlife; Luster, Tom@Coastal; Mayo, Zach@Waterboards; Roger Butow; Vasquez, Victor@Waterboards; brittany.struck@noaa.gov |
| **Subject:** | Re: Doheny Ocean Desalination: Coastal Permit Application No. 9-20-0691 (South Coast Water District--OC |
| **Date:** | Tuesday, October 11, 2022 1:39:19 PM |

Hello Dr. Lenger,

I received your comments as well.

Thank you,
Riley

**Riley Pratt, Ph.D.**
Senior Environmental Scientist
California State Parks
Orange Coast District
3030 Avenida del Presidente
San Clemente, CA 92672-4433
riley.pratt@parks.ca.gov

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**From:** Mark Capelli - NOAA Federal <mark.capelli@noaa.gov>
**Sent:** Tuesday, October 11, 2022 12:53 PM
**To:** Markus Lenger <markuslenger@mac.com>
**Cc:** Borack, Alexandra@SLC <Alexandra.Borack@slc.ca.gov>; Carol Roberts <carol_a_roberts@fws.gov>; Chiara Clemente <Chiara.Clemente@waterboards.ca.gov>; Romberger, Christian@Wildlife <Christian.Romberger@Wildlife.ca.gov>; Christine Medak <christine_medak@fws.gov>; David Gibson <David.Gibson@waterboards.ca.gov>; Energy@Coastal <EORFC@coastal.ca.gov>; Pert, Ed@Wildlife <Ed.Pert@wildlife.ca.gov>; Luster, Tom@Coastal <Tom.Luster@coastal.ca.gov>; Mayo, Zach@Waterboards <Zach.Mayo@waterboards.ca.gov>; Pratt, Riley@Parks <Riley.Pratt@parks.ca.gov>; Roger Butow <rogerbutow@me.com>; Vasquez, Victor@Waterboards <victor.vasquez@waterboards.ca.gov>; brittany.struck@noaa.gov <brittany.struck@noaa.gov>
**Subject:** Re: Doheny Ocean Desalination: Coastal Permit Application No. 9-20-0691 (South Coast Water District--OC



Received, thank you.

On Tue, Oct 11, 2022 at 9:51 AM Markus Lenger <markuslenger@mac.com> wrote:

> All
> I sent this email last Friday before the deadline of 5 PM.

I asked for confirmation of receipt. Could you please kindly respond?
Also this has not been included in the responses posted online - why?
Thank you so much and looking forward to acknowledgement.

All
Please see attached response to staff report.
Please confirm receipt of this e-mail.

Thank you
**Dr. Markus J. Lenger**
*CEO - Water Physicist*

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**CleanBlu® Innovations, Inc.**
Capistrano Beach, CA 92624
Telephone/Facsimile: (949) 200-6226
Cellphone: (949) 412-2600
Skype: CleanBlu GMT-9
E-mail: markuslenger@cleanblu.com
Web: www.cleanblu.com | www.hydrologix.org | www.bioremediation.net | www.industrialmicrobes.com

Best Regards
Markus Lenger
CEO / Water Physicist
CleanBlu Innovations Inc
Capistrano Beach, CA 92624
Tel / Fax : (949) 200-6226
Cell: (949) 412-2600

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Mark H. Capelli

| | |
|---|---|
| **From:** | Mark Capelli - NOAA Federal |
| **To:** | Markus Lenger |
| **Cc:** | Borack, Alexandra@SLC; Carol Roberts; Clemente, Chiara@Waterboards; Romberger, Christian@Wildlife; Christine Medak; Gibson, David@Waterboards; Energy@Coastal; Pert, Ed@Wildlife; Luster, Tom@Coastal; Mayo, Zach@Waterboards; Pratt, Riley@Parks; Roger Butow; Vasquez, Victor@Waterboards; brittany.struck@noaa.gov |
| **Subject:** | Re: Doheny Ocean Desalination: Coastal Permit Application No. 9-20-0691 (South Coast Water District--OC |
| **Date:** | Tuesday, October 11, 2022 12:54:14 PM |

Received, thank you.

On Tue, Oct 11, 2022 at 9:51 AM Markus Lenger <markuslenger@mac.com> wrote:

> All
> I sent this email last Friday before the deadline of 5 PM.
> I asked for confirmation of receipt. Could you please kindly respond?
> Also this has not been included in the responses posted online - why?
> Thank you so much and looking forward to acknowledgement.
>
> All
> Please see attached response to staff report.
> Please confirm receipt of this e-mail.
>
> Thank you
> **Dr. Markus J. Lenger**
> *CEO - Water Physicist*
>
> ---
>
> **CleanBlu® Innovations, Inc.**
> Capistrano Beach, CA 92624
> Telephone/Facsimile: (949) 200-6226
> Cellphone: (949) 412-2600
> Skype: CleanBlu GMT-9
> E-mail: markuslenger@cleanblu.com
> Web: www.cleanblu.com | www.hydrologix.org | www.bioremediation.net | www.industrialmicrobes.com
>
> 

Best Regards
Markus Lenger
CEO / Water Physicist
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Tel / Fax : (949) 200-6226
Cell: (949) 412-2600

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Mark H. Capelli

| | |
|---|---|
| **From:** | Schwartz, Noaki@Coastal |
| **To:** | Charming Evelyn; Energy@Coastal |
| **Cc:** | Padilla, Javier@Coastal |
| **Subject:** | RE: Application No.: 9-20-0691 Doheny Desalination Project, Well Field, Treatment Plant, Agenda Item #10A - Public Comment |
| **Date:** | Monday, October 10, 2022 4:35:54 PM |

Thank you for the letter. I have already forwarded to our staff.

Best,

Noaki Schwartz
California Coastal Commission
Deputy Director of Communications, EJ and Tribal Affairs
(562) 833-5487

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**From:** Charming Evelyn <sc_acwatercom@outlook.com>
**Sent:** Sunday, October 9, 2022 7:12 PM
**To:** Energy@Coastal <EORFC@coastal.ca.gov>
**Cc:** Schwartz, Noaki@Coastal <Noaki.Schwartz@coastal.ca.gov>; Padilla, Javier@Coastal <javier.padilla@coastal.ca.gov>
**Subject:** Application No.: 9-20-0691 Doheny Desalination Project, Well Field, Treatment Plant, Agenda Item #10A - Public Comment

Dear Commissioners,

Please find attached public comment re: Application No.: 9-20-0691 Doheny Desalination Project, Well Field, Treatment Plant,
Reject Discharge, and Uses; Agenda Item #10A, titled: " Smartest Alternatives to the Doheny Desal Project" which is being submitted on behalf of the Society of Native Nations, Sierra Club, Social Eco Education, Desal Response Group, SoCal 350.org, Southern California Watershed Alliance and The Environmental Justice Coalition for Water.

Respectfully,

Charming P Evelyn
Co-Chair Water Committee Sierra Club CA
Chair Water Committee
Vice Chair Environmental & Social Justice Committee
Sierra Club Angeles Chapter
213-385-0903

| | |
|---|---|
| **From:** | Abigail Scott |
| **To:** | Energy@Coastal |
| **Cc:** | Victoria Hernandez |
| **Subject:** | Public Comment on October 2022 Agenda Item Thursday 10a - Application No. 9-20-0691 (South Coast Water District, Orange County) |
| **Date:** | Friday, October 7, 2022 4:51:10 PM |

Good Evening,

Please include this letter of support into the record for this item:

- Abigail Scott

South Orange County Economic Coalition

Educate • Facilitate • Advocate

October 7, 2022

Donne Brownsey

Chair

California Coastal Commission

455 Market Street, Suite 300

San Francisco, CA 94105

Donne.Brownsey@coastal.ca.gov

RE: Letter of Support for Permitting of Doheny Desalination Project in Dana Point

Dear Chair Brownsey:

On behalf of The South Orange County Economic Coalition, we are pleased to convey and share with your Commission our support for the Doheny Ocean Desalination Project.

The importance of this project to the long-term sustainability and water supply reliability of this part of the county cannot be overstated and this permit will go a long way toward project implementation.

The serious implications of drought restrictions on our local communities, especially when combined with the region's overwhelming reliance on imported water, justifiably inspire SCWD and its neighboring districts to be innovative in their ongoing mission to achieve a diverse and reliable portfolio of water projects and management strategies. The Project has the potential to be a local and regional asset, reducing south Orange County's reliance on imported water and ensuring supply reliability in the event of a natural disaster or other major emergency.

We are in support of this project and its mission to encourage businesses in the region to thrive. Additionally, we are encouraged and optimistic in light of the fact that grant funding has already been secured and that they will seek future funding, if necessary, in order to offset financial impact on residents. For these reasons, the South Orange County Economic Coalition is in full alignment with the project.

It is a pleasure to convey our support of the California Coastal Commission's consideration and approval of the Doheny Ocean Desalination Project. Thank you for your consideration and for your ongoing commitment to and efforts on behalf of our residents, businesses, and the region's resources.

Should you require additional information, please do not hesitate to contact us.

Sincerely,

Victoria Hernandez

Executive Director, South Orange County Economic Coalition