

California Regional Water Quality Control Board  
San Diego Region

# Response to Comments Report

Tentative Order No. R9-2022-0006  
NPDES No. CA0107611

Waste Discharge Requirements  
for the South Orange County Wastewater Authority  
Discharge to the Pacific Ocean  
through the Aliso Creek Ocean Outfall

March 9, 2022



**CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD  
SAN DIEGO REGION**

2375 Northside Drive, Suite 100

San Diego, California 92108

Telephone: (619) 516-1990

Documents are available at: <https://www.waterboards.ca.gov/sandiego>

STATE OF CALIFORNIA  
GAVIN NEWSOM, Governor  
JARED BLUMENFELD, Agency Secretary, California Environmental Protection Agency



California Regional Water Quality Control Board,  
San Diego Region

Celeste Cantú, Ph.D., *Chair*  
Betty Olson, Ph.D., *Vice Chair*  
Henry Abarbanel  
Eric Anderson  
Megan Blair  
Gary Strawn  
Stefanie Warren

David W. Gibson, *Executive Officer*  
Kelly Dorsey, *Assistant Executive Officer*

Vincent Vu, *Staff Counsel*, Office of Chief Counsel

This report was prepared by  
Joann Lim, *Water Resource Control Engineer*  
Keith Yaeger, *Environmental Scientist*

under the direction of  
David Barker, P.E., *Supervising Water Resource Control Engineer*  
Brandi Outwin-Beals, P.E., *Senior Water Resource Control Engineer*

## **INTRODUCTION**

This report contains the California Regional Water Quality Control Board, San Diego Region (San Diego Water Board) responses to written comments received on Tentative Order No. R9-2022-0006, NPDES No. CA0107611, *Waste Discharge Requirements for the South Orange County Wastewater Authority Discharge to the Pacific Ocean through the Aliso Creek Ocean Outfall* (Tentative Order).

The San Diego Water Board provided public notice of the release of the Tentative Order on January 4, 2022 and provided a period of 30 days for public review and comment on the Tentative Order. The public comment period ended on February 3, 2022. Written comment on the Tentative Order were timely received from:

1. South Orange County Wastewater Authority
2. Laguna Bluebelt Coalition
3. South Laguna Civic Association
4. Penny Elia
5. Roger E. Bütow, Founder & Executive Director, Clean Water Now
6. Los Angeles/Orange Counties Building and Construction Trades Council
7. CalDesal
8. Dana Point Chamber of Commerce
9. Karl W. Seckel, P.E., Municipal Water District of Orange County
10. Robert J. Hunter, Municipal Water District of Orange County
11. Susan Hinman
12. Mesa Water District
13. Local Union 652

## **Comments and Responses**

The following pages provide the written comments as provided in the comment letters and San Diego Water Board responses to the comments. In some cases, the San Diego Water Board modified formatting, but did not correct spelling or grammatical errors in the comments submitted. This Response to Comments Report includes detailed responses to the comments received and evaluates the need to modify the Tentative Order in response to the comments.

## **COMMENTS AND RESPONSES**

### **1. Comments from the South Orange County Wastewater Authority (SOCWA), dated February 3, 2022**

Thank you for the opportunity to comment on the Tentative Order No. R9-2022-0005 NPDES Permit for the Aliso Creek Ocean Outfall. SOCWA and its member agencies would like to thank the Board and their staff for their assiduous work on this Tentative Order as we support the approval of this NPDES Order at the March 9, 2022 San Diego Regional Water Quality Control Board meeting. The overriding concerns that SOCWA has are related to the increase in monitoring costs and adherence to compliance with Clean Water Act monitoring methodologies that are contained in this Tentative NPDES permit. While SOCWA will not be challenging the scope or need that the Regional Board has identified since the previous permit cycle, SOCWA welcomes the opportunity to work with the Regional Board on matters that may directly result on escalating permitting costs into the future. SOCWA would like to work with the Board on the formation of a public group to evaluate the pressing scientific questions associated with ocean discharge to identify shared problem identification, tools available to answer the developed questions, and strategies to achieve the proposed monitoring questions in a cost-effective manner.

#### **Response**

Comment noted. For clarification purposes, it should be noted that the National Pollutant Discharge Elimination System (NPDES) permit for the Aliso Creek Ocean Outfall is Tentative Order No. R9-2022-0006.

### **2. Comments from Laguna Bluebelt Coalition, dated February 3, 2022**

#### **2.1. Comment - Laguna Bluebelt Coalition**

The Laguna Bluebelt Coalition is a community based organization of dedicated individuals, groups and organizations engaged in the design, implementation and long term sustainability of Laguna's Marine Protected Areas. Central goals include: Education, Protection & Enforcement, Water Quality, Restoration and Networking.

#### **Response**

Comment noted.

#### **2.2. Comment – Concerns Over the Tentative Order**

We appreciate the San Diego Regional Water Quality Control Board's important role in advancing water quality improvements in regulated coastal receiving waters off of Laguna Beach adjacent to State designated Marine Protected Areas (MPAs) and remain concerned the renewal of the proposed Tentative Order No. R9-2022-0005 NPDES Permit No. CA0107417 without modifications will:

- Continue daily discharge of wastewater with Constituents of Emerging Concern (CECs) to protected marine life areas
- Fail to advance viable alternatives
- Overlook the central role of ocean water quality and climate change

Our comments are intended to achieve multiple benefits to protected marine mammals, regional fisheries and public health to reduce and, eventually, eliminate secondary sewage discharges at the Aliso Creek Ocean Outfall.

### **Response**

Comment noted. For clarification purposes, it should be noted that the NPDES permit for the Aliso Creek Ocean Outfall is Tentative Order No. R9-2022-0006, NPDES Permit No. CA0107611.

### **2.3. Comment – Daily Discharges to Marine Protected Areas (MPAs)**

These discharges may or threaten to harm protected marine life.

The Ocean Protection Council recognizes “Beachgoers and wildlife need the same thing – clean ocean water. A relaxing day enjoying California’s waters can easily be undone by beach closures or **widespread harmful algal blooms**. With California’s coastal and ocean waters extending from the top of the watersheds to the deep waters off the coast, the Ocean Protection Council has made **improving water quality a top priority.**”

“The ocean is usually the end point of land-based pollutants that flow from coastal watersheds. Nearshore impairment of water quality can result from **municipal sewage discharges**, industrial waste discharges, dredge spoils, and agricultural and urban runoff. When water quality is poor, the ability of coastal ecosystems to support healthy fisheries, aquaculture, recreational opportunities, and other beneficial uses is undermined.”

### **Response**

In order to protect the beneficial uses (including marine life), the Ocean Plan establishes water quality objectives and a program of implementation. The Tentative Order implements the requirements of the Ocean Plan, including all applicable technology-based effluent limitations, water quality-based effluent limitations, and receiving water quality standards to protect water quality and beneficial uses in the Pacific Ocean. The Dischargers<sup>1</sup> are required to comply with all requirements in the Tentative Order.

The Tentative Order also includes requirements to better understand and evaluate the impacts of the discharge through the ACOO on the receiving ocean waters. Attachment E, section 6.2, of the Tentative Order requires a Plume Tracking Study that will provide information on the fate of the wastewater plume

---

<sup>1</sup> The term “Dischargers” refers to SOCWA, Irvine Ranch Water District, El Toro Water District, and South Coast Water District.

discharge through the ACOO, including whether the wastewater plume may be encroaching on recreational areas and MPAs. However, the Plume Tracking Study may be delayed until the next permit reissuance if SOCWA chooses to coordinate plume tracking activities with the San Juan Creek Ocean Outfall.

Attachment E, section 3.2, of the Tentative Order requires effluent monitoring for nutrients that will be used in a coupled biogeochemical-physical model of the Southern California Bight (also referred to as the ocean acidification and hypoxia model or OA/H Model) currently under development by the Southern California Coastal Water Research Project (SCCWRP) to improve our understanding of 1) how land-based anthropogenic nutrients are changing seawater chemistry conditions, and 2) how this manifests as adverse biological effects in vulnerable marine organisms. The nutrient monitoring and OA/H model are also useful for determining the contribution of the discharge to harmful algal blooms.

These studies will help inform the San Diego Water Board of the impacts from the discharge so it can continue to protect designated beneficial uses and achieve water quality objectives.

#### **2.4. Comment – Microplastics**

Statewide Microplastics Strategy developed recently by the Ocean Protection Council seeks more understanding in addressing Impacts to Protect Coastal and Ocean Health.

**“Wastewater is a known pathway of microplastic and microfiber pollution** into the aquatic environment directly through wastewater effluent. Numerous studies demonstrate that wastewater treatment plants with only primary **and secondary treatment levels release higher concentrations of microplastics** than wastewater treatment plants with tertiary or advanced levels of treatment, which release negligible levels of microplastics. Tertiary and advanced treatment have demonstrated efficacy in preventing microplastic pollution from entering receiving waters.”

In reference to previous studies regarding microplastic removal efficacy in wastewater treatment plants, we recommend further recycling of tertiary-treated wastewater that would otherwise be discharged to the ocean at the ACOO. In addition, based on the results of previous studies and the completion of the ongoing SCCWRP study on wastewater treatment plant efficacy, we encourage the SDRWQCB to further develop microplastics reduction strategies and monitoring recommendations based on each level of treatment, including primary, secondary, tertiary, and advanced treatment.

#### **Response**

Microplastics contamination is a growing concern not just for the San Diego Water Board, but also for other resource agencies in the State of California (State) and across the world. In 2018, the State passed legislation to direct the California Ocean Protection Council (OPC) to develop, adopt, and implement a

statewide microplastics strategy (Pub. Resources Code, § 35635). In November 2021, OPC released a draft Statewide Microplastics Strategy (SMS) report for public comment. It is anticipated that OPC's SMS report will be considered for adoption at its February 23, 2022 meeting. As noted in OPC's SMS report, additional research is needed regarding the efficacy of microplastic removal in wastewater treatment plants. OPC initiated a study in 2020 to assess microplastic removal, with anticipated completion by the end of 2022.

Addressing microplastics and microfibers in the Pacific Ocean is also a high priority item for the *Water Quality Control Plan for Ocean Waters of California* (Ocean Plan) Triennial Review (See Issue U of the California State Water Resources Control Board's [State Water Board] *Final Staff Report and Work Plan for 2019 Review of the Water Quality Control Plan for Ocean Waters of California*, December 3, 2019.). The State Water Board is coordinating with agencies and organizations, such as the SCCWRP and the OPC, in considering microplastic research and to seek a solution for the growing microplastics problem. The State Water Board may also consider amending the Ocean Plan in future years to include monitoring and reporting provisions or to develop water quality objectives for microplastics and microfibers. The San Diego Water Board will implement all microplastic requirements as required by the Ocean Plan.

The San Diego Water Board agrees that recycling water may reduce the amount of microplastics discharged into the aquatic environment. The San Diego Water Board's Water Quality Control Plan for the San Diego Basin (Basin Plan) does stipulate in Chapter 4 on Page 4-71 that water recycling should be carefully considered by persons proposing to discharge substantial quantities of once-used wastewater to the ocean particularly in a water short area where water is imported. It has long been a policy of the San Diego Water Board to encourage and promote water recycling while taking into consideration the need to protect beneficial uses of the waters of the State and protect the public health. SOCWA and its member agencies have an extensive history of collaborating to implement water recycling projects that are protective of water quality and help to ensure the sustainability of the water supply. Since the early 1990's, the use of recycled water has played a vital role in increasing the reliability and sustainability of the overall water supply within the SOCWA service area. SOCWA reports that its recycled water program regulated under the San Diego Water Board's Order No. 97-52 currently produces just under 20,000 acre feet per year (AFY) of recycled water for use within its service area, thereby saving approximately 6.5 billion gallons of domestic water each year that otherwise would be used for those purposes. Future projects are in the planning stages in the SOCWA service area to further maximize water reuse for greater resiliency and sustainability of future drinking water supplies. Examples of such projects include Moulton Niguel Water District's ongoing investigation of the beneficial reuse of recycled water for implementation in a Direct Potable Reuse Project and Santa Margarita Water District's proposed multi-phased San Juan Watershed Project to increase the



capture and storage of urban runoff and stormwater, optimize recycled water use, and augment local groundwater supplies. According to Irvine Ranch Water District's (IRWD) website, IRWD's recycled water is a key component of their water efficiency program, representing 28% of the IRWD's total water supply. About 80% of the public and commercial irrigated landscape in IRWD's service area is watered with recycled water. According to El Toro Water District's (ETWD) website, in 2012, ETWD began a Recycled Water Expansion Project to increase the treatment and delivery of recycled water through a new tertiary treatment facility. When completed, the total recycled water production will amount to over 1,400-acre feet per year. According to South Coast Water District's (SCWD's) website, SCWD produces 307 million gallons each year of recycled water and 15 percent of the total demand in SCWD's service area is met by recycled water.

From a legal perspective, the San Diego Water Board is not required to reduce discharges of treated effluent from POTWs when reissuing an NPDES permit. Water Code section 13263, which is the San Diego Water Board's statutory authority to issue NPDES permits regulating discharges into waters of the State, identifies the issues the San Diego Water Board is to "take into consideration" before issuing those permits. (Water Code, section 13263, subdivision (a).) These include "the beneficial uses to be protected, the water quality objectives reasonably required for that purpose, other waste discharges, the need to prevent nuisance, and the provisions of Section 13241." (Ibid.) None of those considerations involve the volume of water discharged. (See also Water Code, sections 13370, 13389.) Further, the discharger has the exclusive authority to decide whether to reuse or discharge wastewater produced by a POTW. (See *City of Santa Clara v. Von Rasefeld* (1970) 3 Cal.3d 239, 246; *Mefford v. City of Tulare* (1951) 102 Cal.App.2d 919, 924; see also Wat. Code, § 1210.) However, the San Diego Water Board may encourage dischargers to recycle water.

As a future initiative in keeping with this policy and the Basin Plan, the San Diego Water Board may consider requiring persons proposing a discharge of once-used wastewater into the ocean to 1) carefully analyze as an alternative, or partial alternative, the feasibility of recycling the wastewater for a beneficial use in lieu of ocean disposal and to 2) include the analysis in the report of waste discharge permit application.

## **2.5. Comment – Viable Alternatives**

Rather than developing large scale projects that often fail to be implemented due to cost, we support pilot demonstration projects that incrementally reduce discharges to the ocean.

Multiple pathway interventions can promote inland SOCWA facilities utilizing all wastewater as recycled water, industrial water, steam energy production, hydrogen fuel feedstock and similar emerging technologies will retain our reputation as environmental leaders.

The Proposed NPDES Permit Renewal is the appropriate time to implement measurable, scheduled reductions of discharges from SOCWA Publically Owned Treatment Works (POTWs) to the ACOO in collaboration with water agencies, universities, city & county agencies and NGOs, including the Laguna Bluebelt Coalition.

**Response**

Please see Response to Comment No. 2.4 regarding the dischargers' exclusive authority to decide whether to reuse or discharge wastewater produced by a POTW.

**2.6. Comment – Ocean and Climate Change**

Multiple regulatory policies and procedures are available through the California Porter Cologne Act, Ocean Protection Council, California Coastal Act, California Fish & Wildlife Commission and Regional Boards to utilize sound science to advance the best available strategies to improve precious ocean resources and California's special climate.

Our knowledge of the key role the ocean plays in mitigating the rise of climate change impacts encourages a greater understanding of the impacts of wastewater discharges to MPAs and surrounding ecology. The 2022 version of the Porter Cologne Act, established in 1967, provides the regulatory framework to advance measures aimed at reducing daily wastewater discharges averaging between 10 and 12 million gallons per day at the Aliso Creek Ocean Outfall (ACOO).

Specifically, Section § 13142.5. [Coastal marine environment] the policies of the state with respect to water quality as it relates to the coastal marine environment are that:

(a) Wastewater discharges shall be treated to protect present and future beneficial uses, and, where feasible, to restore past beneficial uses of the receiving waters. Highest priority shall be given to improving or eliminating discharges that adversely affect any of the following:

- (1) Wetlands, estuaries, and other biologically sensitive sites (e.g., MPAs).
- (2) Areas important for water contact sports.
- (3) Areas that produce shellfish for human consumption (reefs & kelp forests).
- (4) Ocean areas subject to massive waste discharge.

Ocean chemistry and mixing processes, marine life conditions, other present or proposed outfalls in the vicinity, and relevant aspects of area wide waste treatment management plans and programs, **but not of convenience to the discharger**, shall for the purposes of this section, be considered in determining the effects of such discharges. Toxic and hard-to-treat substances **should be pretreated at the source** if such substances would be incompatible with effective and economical treatment in municipal treatment plants.

(c) Where otherwise permitted, new warmed or cooled water discharges into coastal wetlands or into areas of special biological importance, **including marine reserves and kelp beds**, shall not significantly alter the overall ecological balance of the receiving area.

We invite continued cooperation and collaboration to advance timely measures to reduce coastal pollution from wastewater discharges. Thank you for your dedicated efforts throughout the years to protect and improve California's most, arguably, precious resource – the ocean.

### **Response**

Please see Response to Comment No. 2.3 regarding compliance with water quality standards for the protection of water quality and beneficial uses. Please see Response to Comment No. 2.4 regarding the dischargers' exclusive authority to decide whether to reuse or discharge wastewater produced by a POTW.

Additionally, the Tentative Order in Attachment E, section 6.1 requires the Dischargers to prepare and submit a Climate Change Action Plan (CCAP) within three years of the effective date of the order. The CCAP is required to identify the magnitude and timing of projected regional impacts on the Dischargers' facilities (including sewers, pipes and other conveyances), and operations ability to meet the requirements of the order due to climate change if current trends continue. The CCAP is also required to identify steps being taken or planned to address greenhouse gas emissions attributable to wastewater treatment plants, solids handling, and effluent discharge processes.

The Tentative Order in provision 6.3.5.3 requires the Dischargers to implement and enforce an approved pretreatment program. A pretreatment program is required to prevent the introduction of pollutants (e.g., toxic substances), which will interfere with treatment plant operations or sludge disposal and prevent pass through of pollutants that exceed water quality objectives, standards, or permit limitations.

## **3. Comments from South Laguna Civic Association, dated February 2, 2022**

### **3.1. Comment – Reduce or Eliminate Discharges**

The Aliso Creek Ocean Outfall 5 year Permit Renewal presents an important opportunity to reduce or eliminate discharges of secondary sewage threatening ocean water quality with acidification and bioaccumulation of anthropogenic contaminants. Without modification to the permit our coastal waters will remain a disposal site for our wastewater.

### **Response**

Please see Response to Comment No. 2.4 regarding the dischargers' exclusive authority to decide whether to reuse or discharge wastewater produced by a POTW.

### **3.2. Comment – Discharges from Aliso Creek Ocean Outfall**

South Laguna, as the southern area of the City of Laguna Beach, is the primary community impacted by wastewater in the Aliso Watershed with a population of over 177,000 residents. The City of Laguna Beach average daily wastewater flow is over 1.5 million gallons per day (mgd). In addition, the community of Emerald Bay and portions of Dana Point send wastewater to South Laguna as well as an estimated 6,000,000 annual visitors to Laguna Beach. In total, the Aliso Creek Ocean Outfall (ACOO) discharges an average of 10 million gallons each day of secondary sewage from the combined Aliso Watershed and Irvine Desalter Project in the Santa Ana Watershed through a diffuser pipe commencing 1.2 miles offshore.

#### **Response**

Comment noted.

### **3.3. Comment – South Laguna Civic Association and Community Residents**

On behalf of the residents of our community, which is the receiving area for all discharges from the 32 square mile Aliso Watershed Effluent Transmission Main (ETM) and Aliso Creek Ocean Outfall, the South Laguna Civic Association recommends revising the reissuance of the Aliso Creek Ocean Outfall Tentative Order No. R9-2022-0005, NPDES Permit No. CA0107417

The South Laguna Civic Association (SLCA), est. 1946, is an organization of South Laguna residents, which strives to preserve and enhance the quality of life in our community. This effort includes working for improved water quality in Aliso Creek and State Marine Protected Areas within the Gulf of Santa Catalina. Consequently, the SLCA recommends a number of revisions to the NPDES permit which are reasonable, feasible and environmentally superior alternatives.

#### **Response**

Comment noted. For clarification purposes, it should be noted that the NPDES permit for the Aliso Creek Ocean Outfall is Tentative Order No. R9-2022-0006, NPDES Permit No. CA0107611.

### **3.4. Comment – Eliminate Ocean Pollution/Discharges**

The National Pollutant Discharge Elimination System (NPDES) Permit renewal process provides a rare opportunity to advance sustainable solutions to creek and ocean pollution in a time sensitive manner. It is, therefore, incumbent to utilize all regulatory tools, technologies, and strategies in taking collaborative, meaningful actions to eliminate ocean pollution from secondary sewage and urban runoff discharges.

The San Diego Regional Water Quality Control Board (SDRWQCB) is the principal regulatory agency capable of reducing and eventually eliminating ocean water pollution in Laguna Beach and surrounding State Marine Protected Areas (MPAs). The public and protected marine life rely on the Board and staff to

establish, advance, and enforce the most protective measures to improve ocean water quality in the Gulf of Santa Catalina – a semi-enclosed embayment created by the Channel Island network along the Pacific Ocean. The Channel Islands are an eight-island archipelago located within the Southern California Bight off the coast of California.

Over the new proposed Five Year NPDES Permit, the ACOO will cumulatively discharge another 17,250,000,000 gallons to the Zone of Initial Dilution (ZID) Plume. Unfortunately, the proposed Permit does not provide goals, incentives, or metrics to measurably reduce secondary sewage discharges to waters within the Gulf of Santa Catalina.

**Response**

Please see Response to Comment No. 2.3 regarding compliance with water quality standards for the protection of water quality and beneficial uses. Please see Response to Comment No. 2.4 regarding the dischargers' exclusive authority to decide whether to reuse or discharge wastewater produced by a POTW.

**3.5. Comment – Present Conditions**

The reissuance of the Aliso Creek Ocean Outfall NPDES Permit No. CA0107417 requires revisions due to aging infrastructure deficiencies of the South Orange County Wastewater Authority (SOCWA) Effluent Transmission Main (ETM) sewer pipeline and Coastal Treatment Plant. A study by the Army Corp of Engineers proposed a \$100 million SUPER Project to repair and restore the ETM. The SUPER Project was never funded, and concerns remain about the maintenance of the ETM against seasonal stormwater erosion.

**Response**

The San Diego Water Board would like to clarify for the Commenter that the NPDES Permit No. for the Aliso Creek Ocean Outfall is CA0107611.

The Tentative Order contains specific language in Attachment D, section 1.4 requiring the Dischargers to properly operate and maintain all facilities and systems of treatment and control (and related appurtenances) which are installed or used by the Dischargers to achieve compliance with the conditions of the Tentative Order. This requirement would include addressing deficiencies that may lead to non-compliance with the effluent limitations and other requirements of the Tentative Order.

Generally speaking, aging infrastructure is a significant concern for the entities responsible for operating and maintaining stormwater and wastewater systems throughout the United States. To address this issue, the operating entities are developing and implementing formal asset management programs (AMPs) to reduce unexpected, expensive, and reactive repairs, and better ensure overall system performance and compliance with NPDES permit requirements. In keeping with this growing systems management trend, the Tentative Order includes a requirement in Special Provision 6.3.5.7 for the Discharger(s) to

develop and submit to the San Diego Water Board an AMP to ensure proper ongoing operation and maintenance of the POTWs. One of the elements of the AMP includes rehabilitation and replacement projects, which would include addressing aging infrastructure deficiencies.

The Effluent Transmission Main (ETM) referenced in the comment is predominately located along the route of Aliso Creek. The ETM conveys effluent from the Irvine Desalter Project, Los Aliso Water Reclamation Plant, El Toro Water District Water Reclamation Plant, and SOCWA Regional Treatment Plant to the Pacific Ocean via the Aliso Creek Land Outfall and Aliso Creek Ocean Outfall. The ETM has largely remained unchanged since its original construction in 1979. SOCWA reports that the use of the ETM has largely decreased through the life of the system as the amount of water reclamation from the upstream treatment plants has increased. This trend was not significantly impacted by the introduction of brine and treated groundwater flows from the Irvine Desalter Project in the early 2000's.

The ETM consists of four separate reaches A, B-C, D and E. ETM Reach A is owned and maintained by Irvine Ranch Water District; The remaining ETM reaches B-C, D and E, are managed by SOCWA., the following projects for the ETM to increase reliability are identified in the SOCWA 10-Year Capital Improvement Program. Appendix L for the years 2019 through 2028<sup>2</sup>:

- *Life expectancy of reinforced plastic mortar (Techite) piping.* Reaches A and B-C<sup>3</sup> were constructed with a type of reinforced plastic mortar pipe that was commonly used in the 1970's. This fiberglass material has been typically identified by the trade name "Techite". Many concerns have been raised about the structural integrity and the anticipated life of Techite due to failures experienced throughout the United States. Projects for the replacement of reaches B and C of the ETM are identified in the SOCWA Capital Improvement Program Appendix L as beginning in year 7 of the plan (2025/26) and carrying through until year 10 (2028/29).
- *Replacement of pipeline appurtenances.* This project entails providing access to a vault between Reaches B and C, replacement of a limited number of manholes and replacement of combination air valves with lighter PVC valves. These projects are identified in the SOCWA Capital Improvement Program, Appendix L as beginning in year 1 of the plan (2019/20) and carrying through until year 2 (2020/21).

---

<sup>2</sup> See SOCWA Ten Year Capital Improvement Program, 2019 – 2028, August 5, 2019, available on the SOCWA website at <http://www.socwa.com/wp-content/uploads/2019/10/2019-2028-Ten-Year-Plan-WITH-Apendices-A-M-8-2019.pdf>

<sup>3</sup> Reach A of the ETM is owned and managed by IRWD, reaches B through E of the ETM are owned and managed by SOCWA.

- *Erosion Protection.* The protection of the ETM against erosion along Aliso Creek has been an ongoing issue. The ETM crosses beneath Aliso Creek at four locations. The down cutting of Aliso Creek exposes the concrete encasement of the ETM crossings. The ETM is also potentially impacted by the stability of the embankment that runs parallel to the pipeline alignment. Projects to address these issues are identified in the SOCWA Capital Improvement Program, Appendix L as beginning in year 1 of the plan (2019/20) and carrying through until year 8 (2027/28).

The San Diego Water Board understands that SOCWA is moving forward with these ETM projects in accordance with the schedules described in the SOCWA 10-Year Capital Improvement Program document.

### **3.6. Comment – Irvine Desalter Project**

In addition, the Irvine Desalter Project discharges from the Santa Ana Region to the Aliso Ocean Outfall in the San Diego Region continues despite recommendations to retain the facility's wastewater on-site for beneficial reuse.

#### **Response**

Please see Response to Comment No. 2.4 regarding the dischargers' exclusive authority to decide whether to reuse or discharge wastewater produced by a POTW.

Also, the wastewater discharge from the Irvine Desalter Project may not be suitable for recycling without further treatment. The Irvine Desalter Project is a multifaceted groundwater project owned and operated by Irvine Ranch Water District. The Irvine Desalter Project includes the Irvine Desalter Project Portable Water Treatment System that treats groundwater for potable water use and discharges the waste brine to the Pacific Ocean through the ACOO. Currently, the most common practice for disposal of highly saline brine waste is through the use of dedicated brine lines and/or ocean outfalls. The Irvine Desalter Project also includes the Irvine Desalter Project Shallow Groundwater Unit that treats contaminated groundwater and discharges the treated groundwater to the Pacific Ocean through the ACOO.

### **3.7. Comment – California Environmental Quality Act (CEQA)**

To adequately comply with relevant water quality, CEQA and related rules and regulations the proposed NPDES Permit Renewal application must take into account:

- a deteriorated Effluent Transmission Main
- inadequate recycled water system
- an aging and inefficient Coastal Treatment Plant
- exposed sewage pipes
- creek and coastal impaired water bodies

- beach public health and safety
- protected tidepool, shellfish and kelp forest habitat
- offshore marine life migration and foraging areas

**Response**

Please see Response to Comment No. 2.3 regarding compliance with water quality standards for the protection of water quality and beneficial uses. Please see Response to Comment No. 3.5 regarding the Tentative Order requirements for proper operation and maintenance of all facilities, the requirement for submittal of an AMP, and the response addressing concerns pertaining to the ETM.

With respect to the comment addressing reliability concerns with the SOCWA's Coastal Treatment Plant and the ETM, it should be noted that the purpose of the previously cited SOCWA Ten Year Capital Improvement Plan (see footnote 2 above) as well as the Tentative Order's AMP requirement in Special Provision 6.3.5.7, is to identify projects needed for the rehabilitation or replacement of SOCWA's facilities, the approximate scope of proposed projects to address the need and the required budget. This planning allows SOCWA and its member agencies to effectively plan and budget for the needed capital improvement projects,

A detailed summary of SOCWA's proposed improvement projects for the Coastal Treatment Plant including detailed project descriptions, summary of scope, need, key issues, timing and basis for construction costs are described in Appendices F, G and H of SOCWA's Ten Year Capital Improvement Plan. Revisions of the Tentative Order to further address Coastal Treatment Plant reliability concerns are not needed at this time.

Additionally, Attachment F, section 3.4 of the Tentative Order addresses the USEPA-approved list of impaired water bodies, prepared by the State Water Board pursuant to federal CWA section 303(d) for the receiving water around the ACOO. Aliso Creek mouth and the nearby shoreline are impaired for indicator bacteria and toxicity. Several total maximum daily loads (TMDLs) for bacteria indicators have been adopted and approved within San Diego Region; however, these TMDLs did not contain applicable wasteload allocations for the discharges from the ACOO. Nonetheless, the Tentative Order implements receiving water objectives for bacterial indicators.

Also, Attachment E, section 4 of the Tentative Order contains receiving water monitoring requirements to measure the effects of the ACOO discharge on the receiving water and ensure the discharge is meeting the receiving water quality objectives to protect beneficial uses, including contact water recreation, commercial and sport fishing, and mariculture.



Finally, under Water Code section 13389, the action to adopt an NPDES permit is exempt from the provisions of Chapter 3 of CEQA, (commencing with section 21100) of Division 13 of the Public Resources Code.

**3.8. Comment – Safe and Healthy Watershed and Coastal Receiving Waters.**

The South Laguna Civic Association and all responsible citizens and elected officials in the Aliso Watershed are committed to a safe and healthy watershed and coastal receiving waters.

**Response**

Comment noted.

**3.9. Comment – Recommended Actions**

Technological advances in telecommunications, transportation and other key sectors have not been accompanied by significant improvements in wastewater management. Numerous federal studies identify serious deterioration of the Aliso Effluent Transmission Main. Compounding operational threats is the poor location of the Coastal Treatment Plant (CTP) isolated in a steep canyon with poor emergency access in a CalFire mapped Very High Wildfire Severity Area.

As noted by City of Laguna Beach Mayor Bob Whalen “The CTP would never be built there today”.

**Response**

Please see Response to Comment 2.6 regarding the CCAP. Additionally, the provision for submittal of a CCAP described in Attachment E, section 6.1 of the Tentative Order requires SOCWA to identify steps being taken or planned to address flooding, sea level rise, and wildfire risks. Please see Response to Comment No. 3.5 regarding the Tentative Order requirements for proper operation and maintenance of all facilities and the requirement for submittal of an AMP. Please see Responses to Comment Nos. 3.5 and 3.6 for responses addressing ETM reliability concerns.

**3.10. Comment – Retire Aging Infrastructure**

1) Retire aging infrastructure.

a) Abandon the deteriorating Effluent Transmission Main through Aliso Canyon and retain all inland wastewater at local facilities and the Regional Treatment Plant (RTP) to save over \$100 million in ETM repairs identified by the Army Corp of Engineers 2005 SUPER Project.

b) Eliminate the 4-mile-long energy intensive Sludge Line from the Coastal Treatment Plant (CTP) to the RTP.

c) Condemn the ETM and encourage inland publicly owned treatment works (POTWs) to seek recycle water and remediation grants. Retain and reuse all flows from the Irvine Desalter Project on site or within the assigned Santa Ana Watershed Region.

### **Response**

Please see Response to Comment No. 2.4 regarding the dischargers' exclusive authority to decide whether to reuse or discharge wastewater produced by a POTW. Please see Response to Comment No. 3.5 regarding the Tentative Order requirements for proper operation and maintenance of all facilities and the requirement for submittal of an AMP. Please see Responses to Comment Nos. 3.5 and 3.6 for responses addressing ETM reliability concerns.

With respect to the Commenter's suggestion that the ETM be abandoned, it should be noted that the ETM provides the benefit of a fail-safe land outfall connection to the Aliso Creek Ocean Outfall. For example the ETM can be used to convey excess effluent to the Aliso Creek Ocean Outfall during the winter season, wet weather, and other periods when there may be reduced recycled water demand, and the upstream treatment plants continue to operate at normal flows and need to dispose of excess treated effluent. The ETM also provides a means of conveyance of the brine waste byproduct (which cannot be recycled for beneficial use) from upstream recycled water projects for discharge to the Aliso Creek Ocean Outfall in accordance with the requirements of the Tentative Order.

The comment suggesting abandonment of the sludge line is referring to SOCWA's Export Sludge System. The expansion of the Coastal Treatment Plant in 1982 included two 4-inch cast iron pipes for the pumping of primary sludge and thickened waste activated sludge to the Regional Treatment Plant for solids processing. These conveyance pipelines were installed along the east side of Aliso Creek near the alignment of the ETM. This system is termed the Export Sludge System. The original Export Sludge System piping experienced continuing operational problems through a combination of corrosion and internal deposition. The phased replacement project for the original cast iron sludge piping has been planned since the early 1990's. Phase I involved the construction of a new 6-inch pipeline through the County of Orange Laguna Niguel Regional Park. Phase II involved the installation of a new 6-inch pipeline under a new roadway built by the Aliso Viejo Community Association along the west side of Aliso Creek in the Aliso and Wood Canyon Wilderness Park. The construction of both of these pipelines was completed in 2000, however the new pipelines have yet to be placed into operation. Construction of the final Phase III is in progress and is being installed as the final link of the new 6-inch diameter piping along the west side of Aliso Creek in the Wilderness Park. In 2015, the Coastal Treatment Plant installed an equalization tank that holds 154,000 gallons of sludge. The Coastal Treatment Plant also has a trucking station as an alternative method of transporting the sludge from the Coastal Treatment Plant to the Regional Treatment Plant in emergency circumstances when the Export Sludge pipeline(s) must be temporarily shut down.

A detailed summary of SOCWA's Export Sludge System piping replacement project including detailed project descriptions, summary of scope, need, key issues, timing and basis for construction costs is described in Appendices F, G,

and H of SOCWA's Ten Year Capital Improvement Plan. Revisions of the Tentative Order to further address the Commenter's Export Sludge System concerns are not needed at this time.

**3.11. Comment – Modernize the Coastal Treatment Plant to achieve Zero Liquid Discharges (ZLD)**

2) Modernize the Coastal Treatment Plant to achieve Zero Liquid Discharges (ZLD).

a) Protect valuable coastal water habitats, regional fisheries, and recreational areas.

b) Collaborate with private sector industry leaders to modernize the Coastal Treatment Plant in a public/private partnership to implement wastewater innovations and expand recycled water.

c) Increase production at the Coastal Treatment Plant of high quality 500tds recycled water for fire and emergency use throughout Laguna Beach, Laguna Canyon, Laguna Greenbelt and Aliso Wood's Canyon Wilderness Park.

d) Consider a collaborative design competition with the American Society of Civil Engineers, universities and ZID industry leaders.

e) As a preferred alternative, follow the industry standard locating wastewater infrastructure along streets for access and maintenance by re-routing all CTP effluent to the RTP via Coast Highway and Crown Valley Parkway.

**Response**

Please see Response to Comment No. 2.4 regarding the dischargers' exclusive authority to decide whether to reuse or discharge wastewater produced by a POTW.

**3.12. Comment – Enact Mitigation Measures**

3) Enact the following mitigation measures.

a) Require restoration of the Aliso Estuary as a water quality improvement measure and enhanced protection of public health and safety at Aliso Beach.

b) Partner with academic and aquaculture leaders to pilot test ocean water quality enhancements such as converted aquapods to support deep water kelp growth near the ACOO similar in function to land based constructed wetlands.

**Response**

The San Diego Water Board does not have the authority to require the suggested mitigation by way of the Tentative Order.

Please see Response to Comment No. 2.3 regarding compliance with water quality standards for the protection of water quality and beneficial uses.

### 3.13. Comment – Climate Change

#### Background and Outfall Location

The ocean determines the climate. Climate change is settled science and, by many indications, is presently accelerating.

Rising sea surface temperatures in recent years indicate climate changes are likely occurring in the Gulf of Santa Catalina from anthropogenic discharges and bioaccumulation of legacy contaminants within daily secondary sewage discharges to State regulated coastal receiving waters.

#### Response

Regarding climate change, the Tentative Order, Attachment E includes monitoring requirements and recommendations to better evaluate the effects and contribution of the discharge on ocean acidification, hypoxia, and harmful algal blooms.

The Tentative Order in Attachment E, section 3.2.2 includes a requirement to monitor the effluent for nutrients. The nutrient monitoring data will be used in the ocean acidification and hypoxia model currently under development by SCCWRP to improve our understanding of how changing seawater chemistry conditions manifest as adverse biological effects in vulnerable marine organisms. Ocean acidification and hypoxia, and the potential contribution of anthropogenic nutrients (such as those from wastewater treatment plants) to ocean acidification and hypoxia is also a high priority issue for the Ocean Plan triennial review. (See Issue F of the State Water Board's *Final Staff Report and Work Plan for 2019 Review of the Water Quality Control Plan for Ocean Waters of California*, December 3, 2019.). The State Water Board will consider amendment of the Ocean Plan to incorporate water quality objectives and a program for implementation associated with ocean acidification and hypoxia once sufficient scientific information is available.

The Tentative Order also includes a recommendation in Attachment E, section 4.1.3 to calibrate the receiving water pH measures using spectrophotometric pH technique and alkalinity samples, consistent with the recommendations in *An evaluation of potentiometric pH sensors in coastal monitoring applications* (McLaughlin et al. 2017).<sup>4</sup> The increased precision of calibrated pH measurements will allow for better evaluation of changes in pH due to ocean acidification. In addition to the more precise pH measurements, alkalinity measurements in the receiving water also allows the Dischargers to calculate aragonite saturation (relevant to shell building organisms), which emerging evidence suggests is a better measure for evaluating ocean acidification.

---

<sup>4</sup> McLaughlin, K., Nezlin, N.P., Weisberg, S.B., Dickson, A.G., Booth, J.A., Cash, C.L., Feit, A., Gully, J.R., Johnson, S., Latker, A., Mengel, M.J., Robertson, G.L., Steele, A., & Terriquez, L. (2017). An evaluation of potentiometric pH sensors in coastal monitoring applications. *Limnology and Oceanography: Methods*, 15, 679-689. doi: 10.1002/lom3.10191

Please also see Response to Comment No. 2.6 regarding the CCAP.

Regarding bioaccumulation, Attachment E, section 4.3.2 of the Tentative Order requires the Dischargers monitor fish tissue to evaluate whether pollutants are bioaccumulating in fish. Also see Response to Comment No. 2.3 regarding compliance with water quality standards for the protection of water quality and beneficial uses.

### **3.14. Comment – Wastewater Plume Migration to Nearshore Waters**

Monitoring Stations along South Laguna, Laguna Beach and Dana Point suggest the Aliso Creek Ocean Outfall Plume may migrate to nearshore waters to impact kelp forests and threaten the marine life food chain as well as public health. Annual migration of California Gray Whales over many months and resident foraging dolphins, sea lions, harbor seals and other protected sea mammals must navigate the Aliso Plume Zone of Initial Dilution (ZID) of 10 million gallons per day (mgd).

#### **Response**

Please see Response to Comment No. 2.3 regarding the Plume Tracking Study and compliance with water quality standards for the protection of water quality.

### **3.15. Comment – Constituents of Emerging Concern (CECs)**

#### **Harmful agents and impacts**

Figure 3 - Young migrating Blue Whale near ACOO Outfall

#### **Harmful agents and impacts**

a) Studies have found secondary sewage transports partially treated wastewater with Contaminates of Emerging Concern (CECs) including kitchen solvents, cosmetic plastic microbeads, laundry synthetic microfibers, pharmaceuticals (endocrine hormone disruptors, drugs, medical diagnostic waste, etc.).

The occurrence and concentrations of contaminants of emerging concern (CECs) were investigated in municipal effluents and in marine receiving water. For 56 CECs, several CECs were detected in effluents; naproxen, gemfibrozil, atenolol, and tris(1-chloro-2-propyl)phosphate were the compounds most frequently found and with the highest concentrations (>1 mg/L).

Gemfibrozil and naproxen had the highest seawater concentrations (0.0009 and 0.0007 mg/L) and were among the most frequently detected compounds. The evaluation of potential chronic effects for CECs is uncertain because aquatic life toxicity thresholds have been developed for only a few CECs, and the effluent and seawater samples had compounds, such as nonylphenol, known to bioaccumulate in local fish.

#### **Response**

CECs refers to a large group of constituents that may or may not pose a risk to human health and ecosystems. CECs include pharmaceuticals and metabolites,

industrial chemicals, pesticides, personal care products, household chemicals, food additives, transformation products, natural chemicals, and more. The State Water Board rated CEC monitoring as a medium priority issue in the most recent 2019 Ocean Plan triennial review. (See Issue A of the State Water Board's *Final Staff Report and Work Plan for 2019 Review of the Water Quality Control Plan for Ocean Waters of California*, December 3, 2019.) The State Water Board did not recommend amending the Ocean Plan at this time to include standard monitoring procedures for CEC but may do so in the coming years. However, the State Water Board is continuing to work towards development of uniform statewide CEC management strategies.

SCCWRP is currently in the process of developing strategies and tools for comprehensively monitoring CECs in aquatic environments. Much of SCCWRP's research is focused on building, testing, and refining tools and strategies to support the initial screening and diagnostic stages for monitoring emerging contaminants. The goal is to ensure these approaches are cost-effective, rapid, accurate, and reproducible.

Rather than including monitoring requirements for an ever-growing list of CECs, the San Diego Water Board is awaiting the completion of SCCWRP research and further State Water Board direction. While the San Diego Water Board did not include CEC monitoring, Attachment E, section 3.3 of the Tentative Order requires the Dischargers to monitor chronic toxicity to evaluate 1) aggregate toxic effects of all chemicals in the effluent including additive, synergistic, or antagonistic toxicity effects; 2) the toxicity effects of unmeasured chemicals, including CECs, in the effluent; and 3) variability in bioavailability of the chemicals in the effluent. Additionally, Attachment E, section 4.2.3 of the Tentative Order requires the Dischargers monitor benthic communities and Attachment E, section 4.3.1 requires the Dischargers conduct fish and macroinvertebrate diver surveys. These requirements evaluate trends in biological communities and may be able to detect potential impacts due to CECs.

### **3.16. Comment – Deteriorated Effluent Transmission Main**

b) A 2005 Army Corp of Engineers report determined deteriorated conditions and a projected life span of as little as ten years for the SOCWA Effluent Transmission Main sewer pipeline through Aliso Canyon. As recently as 2019, failures of the SOCWA infrastructure resulted in 1 million gallons of raw sewage discharged to Laguna's Marine Protected Areas (MPAs) and Essential Fish Habitats (EFHs) at Aliso Beach.

#### **Response**

Please see Response to Comment No. 3.5 regarding the Tentative Order requirements for proper operation and maintenance of all facilities and the requirement for submittal of an AMP. Please see Response to Comment Nos. 3.5 and 3.6 for responses addressing ETM reliability concerns.

### **3.17. Comment – Impact of Brine Discharges**

c) The use of the Aliso Effluent Transmission Main to convey Irvine Desalter Project brine water, possibly with latent military aviation toxins, contributes a significant increase in wastewater flows to Laguna Beach's protected coastal receiving waters and Marine Protected Areas. Discharges of brinewater from the City of Irvine and Santa Ana Watershed amounts to 10% of the size and distribution of the ACOO ZID Plume. In terms of climate change impacts, the conveyance of brinewater from the Irvine water filtration facility through a 4.5-mile pipeline against the natural gradient will consume excess energy over the 20-to-50-year Irvine Desalter Project timeframe. Without justification, the Irvine facility will distribute pollution and brinewater from the Santa Ana Watershed, with low value coastal receiving waters, to the Aliso Creek Watershed and regionally valuable Marine Protected Areas (MPAs).

#### **Response**

Please see Response to Comment No. 2.3 regarding compliance with water quality standards for the protection of water quality and beneficial uses. Please see Response to Comment No. 2.6 regarding the CCAP.

### **3.18. Comment – Wastewater Plume Dispersion**

A 2016 Report by SOCWA found no protective thermocline at the ACOO. The discharge plume was determined to be transported by currents parallel to the shore from the Northwest to Southeast before flowing Northwest due to the Southern California Eddy Current. Transported by ocean upwelling and the Southern California Eddy Current, the daily discharges likely expose the public and marine life to more legacy pollutants in higher discharge volumes.

#### **Response**

Please see Response to Comment No. 2.3 regarding the Plume Tracking Study. Additionally, the Plume Tracking Study will evaluate the effect of upwelling on the dispersion and fate of the wastewater plume discharged through the ACOO.

### **3.19. Comment – Local Water Quality Degradation**

d) Increased discharges and local water quality degradation from Irvine's discharges to continue to expand the present plume by over 10% will contribute to the incidence and magnitude of harmful algal blooms threatening public health and marine life recovery. Unnecessary incremental increases in total allowable discharges will contribute to expanded coastal degradation. The ACOO plume only 1.2 miles offshore likely comingles with the Aliso Creek Urban Runoff Plume throughout the year. Given a discharge location at 33° 29' 53" N 117° 46' 16" W, the ACCO plume is adjacent to MPAs at 33° 30' 50" N 117° 46' 00" W. In 2012, SOCWA was notified of violations of Order No. R9-2006-0055 at the Aliso Creek Ocean Outfall.

#### **Response**

Please see Response to Comment No. 2.3 regarding compliance with water

quality standards for the protection of water quality and beneficial uses, harmful algal blooms, and the Plume Tracking Study. Additionally, the Plume Tracking Study is required to evaluate whether the wastewater plume discharged through the ACOO interacts with other sources of pollution, including stormwater.

Please also see Response to Comment No. 3.13 regarding climate change.

### **3.20. Comment – Wastewater Plume Surfacing**

e) The Southern California Bight (SCB) is a region south of Point Conception where the California Coast takes a sharp eastward turn that complicates atmospheric and oceanic flows (Gelpi & Norris, 2008; Hickey, 1979; Winant et al., 2003). The SCB encapsulates an area in which the California current departs from its shore-bound southward flow to the north of Point Conception and extends off the coastline as it flows toward the south. The current typically curls back toward the coastline in the vicinity of Punta Colonet in Baja California, especially in the summer months (Dailey et al., 1993).

This departure from and intersection with the coastline defines the northern and southern ends of the SCB, while the western edge is defined variably as the edge of the California current or as the continental slope.

Data indicates that sea surface temperature anomalies were largest near the surface and extended to at least 100-meter depth, indicating that surface temperature maps of the upper ocean are reflective of anomalies over the upper several tens of meters of depth. This highlights the relationship between two interwoven processes: a long-term increase in temperatures driven by anthropogenic climate change and large amplitude fluctuations that are enhanced because of that increase.

Warm wastewater must naturally form a plume but, according to wastewater engineers, does not reach the surface due to a colder, denser upper seawater thermocline. Eventually the plume spreads along the seafloor to be sent up and down the coast with warm Baja currents, Southern swells, and the Southern California Countercurrent. Studies by SOCWA, however, found no thermocline to sequester the ACOO ZID and relied instead upon salinity to determine plume boundaries. Plume migration was plotted from Northwest to Southeast parallel to shoreline before turning seasonally to the Northwest as a function of the Southern California Eddy Current.

#### **Response**

Please see Response to Comment No. 2.3 regarding the Plume Tracking Study. Additionally, the Plume Tracking Study will determine whether the wastewater plume discharged through the ACOO stays submerged below the thermocline or surfaces.

### **3.21. Comment – Upcycle Wasted Wastewater**

4) Upcycle wasted wastewater



Treated wastewater for non-potable uses is crucial in a semi-arid area such as California, where public policy emphasizes water recycling. California law provides that the State's interest in conservation of water resources requires the maximum reuse of treated wastewater (Water Reuse Law, Water Code Sections 461-465). It also provides that the State should encourage Californians to develop water recycling projects to meet the State's water needs and augment surface and groundwater supplies (Water Reclamation Law, Water Code Sections 13500-13556).

In 1972, Congress passed the Clean Water Act (CWA), which limits pollution of the nation's waters. Then, in 1991, the California Water Recycling Act (California Water Code 13577) set recycling goals of 700,000 acre-feet of water annually by year 2000 and 1 million acre-feet annually by 2010. All these laws help prompt more regulations, policies, and public support to control treated wastewater.

Advanced water reuse technology used in Australia can now recover Hydrogen for fuel cells from wastewater to power sewage treatment facilities like the 50-year-old Coastal Treatment Plant – located in a CalFire mapped Extremely High Wildfire Severity Area.

Public requests for increasing water reclamation for wildfire prevention and routine irrigation of public areas to serve Laguna Beach were not considered by SDRWQCB as mitigation requirements to measurably reduce ocean discharges (Water Code Section 13500).

### **Response**

Please see Response to Comment No. 2.4 regarding the dischargers' exclusive authority to decide whether to reuse or discharge wastewater produced by a POTW.

### **3.22. Comment – Waste Brine Discharges**

At present, the California Ocean Plan provides general requirements for the management of waste discharge to the ocean, including: "Waste management systems that discharge to the ocean must be designed and operated in a manner that will maintain the indigenous marine life and a healthy and diverse marine community."

Currently, there are no Ocean Plan Water Quality Objectives that apply specifically to brine waste discharges from desalination plants or groundwater desalting facilities. Untreated brine waste discharged into the ocean "behaves" differently than either wastewater treatment plant freshwater effluent or the brine waste-freshwater mixture. The "brine waste" plume is denser than the receiving ocean water due to a much higher salinity and tends to settle on the ocean bottom. As a result, a brine waste plume can have an adverse effect on the bottom-dwelling marine organisms - a key foundation of the marine life food chain.

**Response**

Please see Response to Comment No. 2.3 regarding compliance with water quality standards for the protection of water quality and beneficial uses. Additionally, the water quality objectives in the Ocean Plan are applicable, as appropriate, to all point source discharges to the ocean, including discharges from desalination facilities. The San Diego Water Board agrees that brine waste from desalination plants behaves differently in the ocean than freshwater effluent from wastewater treatment plants or a commingled brine and wastewater effluent. However, the ACOO does not receive 100% brine waste and the wastewater plume from the ACOO is always positively buoyant. The Tentative Order also includes a requirement to conduct a Plume Tracking Study to evaluate the fate of the wastewater plume discharged through the ACOO. Please see Response to Comment No. 2.3 regarding the Plume Tracking Study.

**3.23. Comment – Impacts from Anthropogenic Ocean Discharges**

Changes to the Water Code in 1972 required the State Water Board to redraft its proposed Policy as a Water Quality Control Plan. At that time, it was the intent of the State Water Board to "...determine the need for revising the [Ocean] Plan to assure that it reflects current knowledge..." (SWRCB 1972). Current knowledge recognizes the impacts of ocean upwelling, harmful algal blooms, ocean acidification and rising sea temperature from anthropogenic ocean discharges but is not incorporated in recent actions by the SDRWQCB.

**Response**

Please see Responses to Comment Nos. 2.3, 2.6, and 3.13 regarding climate change.

**3.24. Comment – An Opportunity for Action to Improve Ocean Water Quality**

The revised NPDES Permit is our chance to make measurable improvements to ocean water quality and continue our community's leadership in protecting State Marine Protected Areas.

On behalf of the residents of South Laguna, the South Laguna Civic Association recommends revising the reissuance of the Aliso Creek Ocean Outfall NPDES Permit No. CA0107417.

Thank you for incorporation of our Public Comments and Recommended Actions to improve water quality at the Aliso Creek Ocean Outfall.

**Response**

Comment noted.

**4. Comments from Penny Elia, dated February 3, 2022**

**4.1. Comment – Major Discharge**

Thank you for the opportunity to comment on these orders that have both been deemed “Major” discharges to the receiving waters of the Pacific Ocean (Gulf of Catalina). I will cite “Major” as my first concern about approval of these orders.

**Response**

For the purposes of NPDES permitting, point sources are categorized based on the type of discharge and volume. There are three categories of discharges: Major, Minor, and General. A “Major” facility is a facility that treats sewage with a design volume greater than or equal to 1.0 MGD and industrial discharges requiring EPA review. The Tentative Order includes four sewage treatment facilities with a design volume greater than 1.0 MGD. Thus, the ACOO discharge has been classified as Major.

**4.2. Comment – Wasted Water**

As a nearly 40-year resident of South Laguna, I ask the board to carefully consider what you are preparing to do, and make sure that you are taking advantage of this important opportunity that presents itself so very infrequently to actually reduce, or better yet, eliminate these discharges that we are forced to live with decade after decade.

It’s not just about these discharges, but all of the wastewater that flows down our gutters and into our storm drains on a minute-by-minute basis every hour of the day, every day of the year.

I have personally made complaints via the EPA Complaint form platform in an effort to reduce or eliminate all of the wasted water that our “water providers” allow to flow down our gutters and streets, collecting oil, gas, brake dust, grease, and much more before it reaches the waters of the Pacific. This doesn’t work – it just continues.

This isn’t just about the discharges you are addressing via these orders. No, it’s a bigger responsibility than just doing that. It’s about developing methods and standards by which all waste water is monitored.

Here is a photo of what I observe every day - - rain or shine and in wind conditions like we just experienced of up to 35 mph. [See Supporting Document 3.5 for the photo.]

This potable water floods the entire area and eventually ends up in the gutter and runs down the street to the storm drain along with ALL the other runoff created from over irrigation by water customers. This is just one example of what the Laguna Beach Water Quality Department tells me is approximately one of at least 1000 incidents going on simultaneously throughout the City of Laguna Beach. This goes on in every city that is currently requesting that they be allowed to continue to discharge into the receiving waters of the Pacific.

**Response**

Please see the Response to Comment No. 2.4 regarding the dischargers’

exclusive authority to decide whether to reuse or discharge wastewater produced by a POTW.

The term “over-irrigation” referenced by the Commenter generally refers in part to the application of water to outdoor landscapes in a manner that causes runoff such that water flows onto adjacent property, non-irrigated areas, private and public walkways, roadways, parking lots, or structures. The San Diego Water Board prohibits the discharge of excess over-irrigation water flows to municipal separate storm water systems (MS4s) in SOCWA’s service area under the terms and conditions of Order No. R9-2013-0001, NPDES No. CAS0109266, *National Pollutant Discharge Elimination System (NPDES) Permit and Waste Discharge Requirements for Discharges from the Municipal Separate Storm Systems (MS4s) Draining the Watersheds Within the San Diego Region*, as amended Order Nos. R9-2015-0001 AND R9-2015-0100 (Regional MS4 Permit). Municipal owners and operators of MS4s in south Orange County subject to the requirements of Order No. R9-2013-0001 include the Cities of Aliso Viejo, Dana Point, Laguna Beach, Laguna Hills, Laguna Niguel, Mission Viejo, Rancho Santa Margarita, San Clemente, San Jan Capistrano, and Laguna Woods; County of Orange; and the Orange County Flood Control District. Comments on over-irrigation water flow issues pertaining to the provision and enforcement of the Regional MS4 Permit are outside the scope of the San Diego Water Board’s March 9, 2022 hearing to consider the adoption of the Tentative Order.

It should be noted that many water districts, including SCWD and other water districts located in SOCWA’s service area, have long-term water policies in place restricting certain outdoor water uses or restricting outdoor water use under certain parameters. Urban water suppliers<sup>5</sup> have been required to develop urban water management plans (UWMPs) since 1983. The Water Code requires UWMPs to include information about demand management measures including water waste prevention ordinances (Water Code, section 10631, subdivision (f)) and, as part of drought contingency planning for mandatory prohibitions against specific water use practices during water shortages, (Water Code section 10632). For example the SCWD’s 2020 UWMP<sup>6</sup>, cited in Finding 12 of Attachment H of Tentative Order No. R9-2022-0005 for the San Juan Creek Ocean Outfall, describes in section 9 of the UWMP the various water conservation programs, including water waste prevention ordinances that SCWD has implemented, is currently implementing, and plans to implement in order to meet its urban water use reduction targets. SCWD reports in the 2020 UWMP that it has developed water conservation courtesy notice door hangers and bill inserts to inform homeowners of excessive runoff from leaks and using irrigation

---

<sup>5</sup> Urban water suppliers are defined as water districts providing over 3,000 acre-feet of water annually or serving more than 3,000 urban connections.

<sup>6</sup> SCWD 2020 Urban Water Management Plan is available at this website: [https://www.scwd.org/T6\\_R81.php](https://www.scwd.org/T6_R81.php) (as of February 23, 2022)

outside of designated days and times. SCWD also reports that it also has an extensive public education and outreach program to communicate the importance of water use efficiency and conservation of water. Finally, SCWD also reports that it has replaced all of its customers water meters with new Automatic Meter Reading Technology meters allowing SCWD to identify water leaks (water running continuously for 24 hours or more) and expedited notifications to homeowners to take remedial action.

#### **4.3. Comment – Water Conservation**

Once again looking at the big picture on all of this, I am attaching a 2018 letter addressing the DEIR for the South Coast Water District desalination project that is headed to the Coastal Commission for approval early this summer. Please consider all of these comments and the fact that South Coast Water does little to educate their customers on conservation - - it's just not profitable. I'm not singling out South Coast Water District because I see water waste throughout South Orange County. It's always amazing to me that I can see water running down gutters and streets everywhere I go, but when I call and report it to the water districts and/or water quality departments it has completely escaped them even though I see their service trucks literally splashing through the runoff. I am adamantly opposed to the proposed Doheny desal project given the water district's inability to CONSERVE the resources we have.

I realize you have a lot to consider and it is not my intention to over burden you with more details on how much water actually flows into our receiving waters, but please keep the big picture in mind as you once again consider approval of millions of gallons of wastewater entering the receiving waters of our precious Pacific Ocean. Please ask yourself: When do we stop doing this? When do we actually require sustainable solutions to eliminate this ongoing pollution from secondary sewage and urban runoff?

#### **Response**

The San Diego Water Board believes that this is a comment regarding the Doheny Desalination Plant, which is covered by Tentative Order No. R9-2022-0005 for the San Juan Creek Ocean Outfall. Please see the Response to Comments Report for Tentative Order No. R9-2022-0005, Response to Comment No. 5.3 and the *Final Environmental Impact Report and Responses to Public Comments, State Clearinghouse No. 2016031038, Doheny Ocean Desalination Project*.

#### **4.4. Comment – Bigger Picture**

As a side note, this isn't just about how these dischargers take for granted that discharging into the Pacific Ocean is just fine – just the cost of doing business. Recently, SOCWA replaced a sludge line in the Aliso Wood Canyons Wilderness Park. Yes, you read that correctly – a sludge line in a wilderness park. While that is completely absurd and should have been remedied decades ago, here are just two photos as a sample of the destruction of ESHA that occurred during the

project, not to mention the over reach of how large the project area actually was. We will be speaking to this destruction next week at the Coastal Commission hearing, but this is a reminder that we count on our regulatory agencies to hold these “applicants” responsible for their damage to the environment, and that includes millions of gallons of discharge to the receiving waters of the Pacific.

**Response**

Comment noted.

**4.5. Comment – Closing**

Thank you again for allowing me to comment and go a bit outside the box on discharges, but I am hoping you can appreciate my ask of you to look at the bigger picture on this situation that demands better solutions if we expect our Mother Ocean to survive and flourish.

**Response**

Comment noted.

**5. Comments from Roger E. Bütow, Founder & Executive Director, Clean Water Now (CWN), letter dated February 2, 2022**

**Comment – Comment Letter Intended for Tentative Order No. R9-2022-0005**

CWN submitted a comment letter that referred to Tentative Order No. R9-2022-0006. By email dated February 9, 2022, Roger E. Bütow clarified that the comment letter was intended for San Juan Creek Ocean Outfall, not for the Coastal Treatment Plant/Aliso Creek Ocean Outfall.

**Response**

This comment letter has been addressed in the Response to Comments Report for Tentative Order No. R9-2022-0005 for the San Juan Creek Ocean Outfall (Item No. 8).

**6. Comments from Los Angeles/Orange Counties Building and Construction Trades Council– dated February 3, 2022**

**Comment – Support for Adoption of Tentative Order**

On behalf of the Los Angeles/Orange Counties Building & Construction Trades Council, we urge you to support Tentative Orders No. R9-2022-0005 and R9-2022-0006 to advance the Doheny Desalination Project through the Regional Water Quality Control Board's permitting process and towards construction of this essential water resilience project. The Building Trades Council represent 48 affiliate organizations with 140,000 hardworking members within the Construction industry.

California is facing a historic drought and the building trades are ready to answer the call and build drought resilient infrastructure that will safeguard the state's future. Desalination provides reliable, drought-proof, and accessible source of water for the

residents of California. The Doheny Desalination project will provide true local labor through a Community Workforce Agreement. At the trades, we pride ourselves in building careers that provide a pathway to the middle class with a good wage, pension, and healthcare.

This agreement will provide you with a Skilled and Trained workforce. We build it efficiently and in the safest manner - Do it right the first time and with minimum or no liabilities. This desalination project has the potential to be a regional asset in the face of any future water crisis. We strongly urge you to support the Doheny Desalination Project.

**Response**

Comment noted.

**7. Comments from CalDesal, dated January 31, 2022**

**Comment – Support for Adoption of Tentative Order**

On behalf of CalDesal, I strongly urge your support for approval of Tentative Order No. R9-2022-0005 and Tentative Order No. R9-2022-0006 to advance the Doheny Desalination Project through the Regional Water Quality Control Board's permitting process and towards construction of this essential water resilience project.

CalDesal is a statewide association comprised of nearly 60 organizations, representing public and private sector entities as well as non-profit organizations, integrating the use of desalination to ensure a sustainable water future for communities throughout California. CalDesal is dedicated to helping California advance improved statewide water resilience which has been impacted by a changing climate, water supply challenges, and continued population growth.

As you all know well, California is experiencing increasingly extreme weather conditions, with less predictable precipitation patterns, followed by longer and more frequent dry and hot periods. Climate change is reducing the reliability of our precipitation and snowpack. As a result, California is entering a new era of water management, and the state's water managers must change the way they plan for a water resilient future that is very different from the past. Implementation of focused water conservation and water use efficiency programs has been the priority for water managers, and those efforts are increasingly being coupled with development of alternative water supplies, such as water recycling and desalination.

Produced locally, desalinated water provides new, high-quality water, and is resilient to both climate change and drought. Desalination can transform inland brackish water as well as coastal seawater into a drinkable supply. Desalination's ability to generate new water supplies in the face of an unrelenting drought is a valuable attribute that should be a strong component in our state's efforts to improve drought resiliency and water sustainability.

Your consideration of action on the Tentative Orders related to waste discharge requirements on March 9, 2022 is critical to protecting the quality of life and

economy within the Orange County region that will benefit from the Doheny Desalination Project. Not only will the project provide up to 5 MGD of reliable, locally-controlled water supplies for the region, it will do so using technology that is environmentally protective of ocean resources and marine life. The Doheny Desalination Project will use advanced slant wells that protect marine life by using subsurface water intake technology. Not only will this project advance environmentally protective technologies, there is also an energy recovery process being considered for plant operations, which would result in up to 55 percent less energy usage than facilities without that feature.

Governor Gavin Newsom and his Administration have provided clear signals- through the Water Resilience Portfolio and in many other venues -that diversifying the state's water portfolio through an "All of the Above" approach to water supply sustainability includes desalination as an important water resilience strategy. While water conservation and water use efficiency remain important priorities for a water resilient future, the state has acknowledged that it must embrace the ongoing development of new water supplies, such as stormwater and water recycling along with desalination, where feasible.

While the stark reality is that the drought conditions that California is experiencing may be the "New Normal," the good news is that you have it in your hands as Members of the San Diego Regional Water Quality Control Board to make decisions - through approval of these Tentative Orders and the assurance that there are not unreasonable conditions imposed on the implementation of those Orders- to help one region of the state move forward in the pursuit of a water resilient future that helps sustain the quality of life and regional economy.

Again, CalDesal strongly urges your support - without unreasonable conditions - for Tentative Order No. R9- 2022-0005 and Tentative Order No. R9-2022=0006 at your March 9, 2022 hearing.

### **Response**

Comment noted.

## **8. Comments from Dana Point Chamber of Commerce, dated January 28, 2022**

### **Comment – Support for Adoption of Tentative Order**

I understand that the San Diego Regional Water Quality Control Board (RWQCB) has released for public review and comment, Tentative Order No. R9-2022-0005 (NPDES Permit No. CA0107417), Waste Discharge Requirements for the South Orange County Wastewater Authority Discharge to the Pacific Ocean Through the San Juan Creek Ocean Outfall and Tentative Order No. R9-2022-0006 (NPDES Permit No. CA0107611), Waste Discharge Requirements for the South Orange County Wastewater Authority Discharge to the Pacific Ocean Through the Aliso Creek Ocean Outfall (Tentative Orders).



A public hearing before your Board will be held on Wednesday, March 9, at the City of Mission Viejo's Council Chambers to consider adopting these Tentative Orders, which are a critical and essential component of South Coast Water District's proposed Doheny Ocean Desalination Project.

Desalination would provide a new, reliable, drought-proof, locally controlled, and safe source of water for the South Coast Water District and the entire region. If implemented, the Doheny Ocean Desalination Project would provide high quality, locally controlled and drought-proof water supply while protecting the environment as one of the first projects to meet all requirements of the California Ocean Plan. The Doheny Desalination project would provide cost-effective annual and emergency water supplies. This project is a critical first step of an investment to maintain reliability of an essential resource.

As the voice of business in Dana Point, representing more than 375 member businesses, the Dana Point Chamber of Commerce believes it is vital that the Doheny Desalination Plant be approved. Our community draws more than two million visitors each year, and our economy and quality of life are dependent on a local, reliable, and safe drinking water supply. The Doheny Desalination Project is a central component to our region's diversified water portfolio. A local, reliable, safe, and drought-proof water supply is critical to the health and economic success of our community. I urge you to approve these Tentative Orders.

**Response**

Comment noted.

**9. Comments from Karl W. Seckel, P.E., Director, Municipal Water District of Orange County (MWDOC), dated February 3, 2022**

**Comment - Support for Adoption of Tentative Order**

I am currently an elected director for Municipal Water District of Orange County (MWDOC) and prior to that I was a staff member at MWDOC for 37 years. Between about 2002 and 2014 I worked on the technical aspects of the Doheny Desalination Project on behalf of MWDOC to investigate the use of a subsurface slant well intake system including the construction and operation of a test slant well and treatment of the water. I have continued to follow the work completed by South Coast Water District (SCWD) on the technical evaluations and permitting of the project. I would strongly urge your support for approval of Tentative Order No. R9-2022-0005 and Tentative Order No. R9-2022-0006 to advance the Doheny Desalination Project through the Regional Water Quality Control Board's permitting process and towards construction of this essential water reliability project for SCWD and South Orange County.

Water resources supplying Southern California are continuing to experience increasingly extreme weather conditions, with less predictable precipitation and runoff patterns, followed by longer and more frequent dry and hot periods. Climate

change is reducing the reliability of our supplies. The Doheny Project will produce locally available, high-quality water which is resilient to both climate change and drought. Possibly the most important aspect is the "locally available" characteristic as South Orange County has few local water resources but is subject to imported water that is treated adjacent to a fault and travels over 40 miles in pipelines crossing another four faults before reaching South Orange County. Having a new supply that can provide local reliability when the import system has outages is of great importance.

Your consideration of action on the Tentative Orders related to waste discharge requirements on March 9, 2022, is critical to protecting the quality of life and economy within the South Orange County region that will benefit from the Doheny Desalination Project. Not only will the project provide up to 5 MGD of reliable, locally- controlled water supplies, it will do so using technology that is environmentally protective of ocean resources and marine life through the use of slant wells to draw the water in from beneath the ocean. You have it within your ability as Members of the San Diego Regional Water Quality Control Board to approve these Tentative Orders to assure that unreasonable conditions are not imposed on the implementation of those Orders.

Again, I strongly urge your support - without unreasonable conditions - for Tentative Order No. R9-2022-0005 and Tentative Order No. R9-2022-0006 at your March 9, 2022 hearing.

**Response**

Comment noted.

**10. Comments from Robert J. Hunter, General Manager, MWDOC, dated February 3, 2022**

**Comment – Support for Adoption of Tentative Order**

On behalf of the Municipal Water District of Orange County (MWDOC), we strongly urge your support for approval of Tentative Order No. R9-2022-0005 and Tentative Order No. R9-2022-0006 to advance the Doheny Desalination Project through the Regional Water Quality Control Board's permitting process and towards construction of this essential water resilience project. As a wholesale water supplier and resource planning agency, MWDOC's efforts focus on sound planning and appropriate investments in water supply development, water use efficiency, and emergency preparedness.

Your consideration of action on the Tentative Orders related the advancement of the Doheny Desalination Project on March 9, 2022 is critical to protecting the quality of life and economy within the Orange County region that will benefit from this Project's high-quality water that is resilient to both climate change and drought.

The Doheny Desalination Project is sized to help meet Southern Orange County's water needs with up to 5 MGD of reliable, locally-controlled water supplies. This is a

region wholly dependent on imported water, and with serious reliability and emergency supply constraints brought on by climate change impacts. This Project emphasizes our region's strong commitment to California's efforts to improve drought resiliency and water sustainability.

Moreover, this Project is also an example of "Desal done right" with its environmentally protective technology. The proposed slant wells will protect marine life by using subsurface water intake technology. In addition, the Project's commitment to green energy will yield up to 55 percent less energy usage through a recovery process within the plant operations.

You have it within your ability, as Members of the San Diego Regional Water Quality Control Board, to help this region of the state have a more resilience supply of water by using the right technology and size to meet its needs in an appropriate manner. Therefore, we strongly urge your support –without unreasonable conditions –for Tentative Order No. R9-2022-0005 and Tentative Order No. R9-2022-0006 at your March 9, 2022 hearing.

**Response**

Comment noted.

**11. Comments from Susan Hinman, dated January 28, 2022**

**Comment – Support for Adoption of Tentative Order**

I understand that the San Diego Regional Water Quality Control Board (RWQCB) has released for public review and comment, Tentative Order No. R9-2022-2005 (NPDES Permit No. CA0107417), Waste Discharge Requirements for the South Orange County Waste water Authority Discharge to the Pacific Ocean Through the San Juan Creek Ocean Outfall and Tentative Order No. R9-2022-0006 (NPDES) Permit No. CA0107611), Waster Discharge Requirements for the South Orange County Wastewater Authority Discharge to the Pacific Ocean Through the Aliso Creek Ocean Outfall (Tentative Orders).

At your Wednesday, March 9, public hearing you will be considering whether to adopt these Tentative Orders which are critical and essential components of the South Coast Water District's proposed Doheny Ocean Desalination Project. I urge you to adopt these two orders.

Over twenty-six years I served on elected water boards representing South Orange County (ten years on the South Coast Water District (1990-2000) and sixteen years on the Municipal Water District of Orange County, Div. 7 (2000-2016). One of my major concerns in those many years of service was the critical need for additional sources of reliable, long-term, high-quality water for South Orange County. Years of extensive, comprehensive research has been implemented to identify the Doheny Ocean Desalination Project as a critical, valid and necessary project to keep South Orange County safe and the water supply reliable. I whole heartedly support your approval on these two important orders to move forward.

As a Long-time resident of Dana Point, I believe the Doheny Desalination Plant must be approved. Currently we import 90 to 100 percent of our water from the Sierra Nevada or the Colorado River. In an emergency such as a major earthquake, we could be left with no drinking water supply for up to six months or more. We are at the "end of the pipeline". Unlike north and central Orange County who enjoy a large aquifer as a local source of supply, Dana Point and neighboring areas need a local resilient water supply that is not affected by climate change.

Again, I urge you to approve these two Tentative Orders on your March 9 agenda.

**Response**

Comment noted.

**12. Comments from Mesa Water District, dated February 2, 2022**

**Comment – Support for Adoption of Tentative Order**

On behalf of Mesa Water District (Mesa Water®), we strongly urge your support for approving Tentative Orders No. R9-2022-0005 and R9-2022-0006 to advance the Doheny Desalination Project through the Regional Water Quality Control Board's permitting process and towards construction of this essential water resilience project.

Mesa Water is an independent special district that serves safe, affordable, and 100 percent local reliable water to businesses and 110,000 residents in an 18-square-mile service area of Orange County that includes most of Costa Mesa, a portion of Newport Beach, and John Wayne Airport. Mesa Water supports the development of cost-effective and environmentally-sensitive sources of water, including recycling, groundwater clean-up, conservation, and desalination, which includes support for the Doheny Desalination Project as it can possibly provide a new, reliable, quality water supply that is appropriately priced.

California is experiencing increasingly extreme weather conditions, with less predictable precipitation patterns, followed by longer and more frequent dry and hot periods. Climate change is reducing the reliability of our precipitation and snowpack. Produced locally, desalinated water provides new, high-quality water, and is resilient to both climate change and drought. Desalination can transform inland brackish water as well as coastal seawater into a drinkable supply. Desalination's ability to generate new water supplies in the face of an unrelenting drought is a valuable attribute that should be a strong component in our state's efforts to improve drought resiliency and water sustainability.

Your March 9, 2022 consideration of action on the Tentative Orders related to waste discharge requirements is critical to protecting the quality of life and economy within the Orange County region that will benefit from the Doheny Desalination Project. The project would provide up to 5 MGD of reliable, locally-controlled water supplies for the region, and it will do so using technology that is environmentally protective of ocean resources and marine life. The Doheny Desalination Project will use

advanced slant wells that protect marine life by using subsurface water intake technology. Not only will this project advance environmentally protective technologies, there is also an energy recovery process being considered for plant operations, which would result in up to 55 percent less energy usage than facilities without that feature.

California's ongoing and persistent drought conditions may be a new way of life for our state. By approving these Tentative Orders without unreasonable conditions imposed on the implementation of those Orders, you have the ability to allow one region of the state move forward in the pursuit of a water-resilient future that helps sustain the region's quality of life and economy.

Again, Mesa Water strongly urges your support -- without unreasonable conditions -- for Tentative Orders No. R9-2022-0005 and R9-2022-0006 at your March 9, 2022 hearing.

**Response**

Comment noted.

**13. Comments from Local Union 652, dated February 2, 2022**

**Comment – Support for Adoption of Tentative Order**

On behalf of Laborers Local 652, we strongly urge your support for approval of Tentative Order No. R9-2022-0005 and Tentative Order No. R9-2022-0006 to advance the Doheny Desalination Project through the Regional Water Quality Control Board's permitting process and towards construction of this essential water resilience project.

Laborers Local 652

California is experiencing increasingly extreme weather conditions, with less predictable precipitation patterns, followed by longer and more frequent dry and hot periods. Climate change is reducing the reliability of our precipitation and snowpack. Produced locally, desalinated water provides new, high-quality water, and is resilient to both climate change and drought. Desalination can transform inland brackish water as well as coastal seawater into a drinkable supply. Desalination's ability to generate new water supplies in the face of an unrelenting drought is a valuable attribute that should be a strong component in our state's efforts to improve drought resiliency and water sustainability.

Your consideration of action on the Tentative Orders related to waste discharge requirements on March 9, 2022 is critical to protecting the quality of life and economy within the Orange County region that will benefit from the Doheny Desalination Project. Not only will the project provide up to 5 MGD of reliable, locally-controlled water supplies for the region, it will do so using technology that is environmentally protective of ocean resources and marine life.

The Doheny Desalination Project will use advanced slant wells that protect marine life by using subsurface water intake technology. Not only will this project advance environmentally protective technologies, there is also an energy recovery process being considered for plant operations, which would result in up to 55 percent less energy usage than facilities without that feature.

While the reality is that California's ongoing and persistent drought conditions may be a new way of life for our state. You have it within your ability as Members of the San Diego Regional Water Quality Control Board to make decisions -through approval of these Tentative Orders and the assurance that there are not unreasonable conditions imposed on the implementation of those Orders - to help one region of the state move forward in the pursuit of a water resilient future that helps sustain the quality of life and regional economy.

Again, Laborers Local 652 strongly urges your support - without unreasonable conditions for Tentative Order No. R9-2022-0005 and Tentative Order No. R9-2022=0006 at your March 9, 2022 hearing.

**Response**

Comment noted.