



**Regulatory Committee Meeting Agenda**  
**Thursday, August 22, 2024**  
**2:00-3:00 p.m.**  
**Zoom Meeting**

**Agenda**

- Co-Chairs **Kevin Thomas**, Kimley-Horn and **Eric Miller**, Miller Marine Science and Consulting – Welcome

**Update Items**

- Legislative update
  - Resources/climate resilience bond de-brief (**Attachments**)
- Events update
  - 2024 CalDesal Fall Mixer
    - ACWA Fall Conference – Palm Desert
    - Wednesday, December 4, 2024
  - Save the Date – 2025 CalDesal Annual Conference
    - Pechanga Resort – Temecula, CA
    - Wednesday, February 5 – Thursday, February 6
    - Conference sponsorship prospectus (**Attachment**)

**Discussion Items**

- SWRCB Triennial Review of State Plans/Policies (**Attachment**)
- OPA 2.0 planning efforts (**Attachment**)
- Draft Fact Sheet – Carlsbad Desal/Miller Marine Science and Consulting (**Attachment**)

### **Recent Project Activity, Upcoming Milestones**

- Doheny Desalination Project
- Monterey Desalination Project
- Carlsbad Desalination Facility Intake Project
- MWD desalination siting and technical studies
- Updates on any other ongoing desalination projects?

### **Other Items**

**Next Regulatory Committee Meeting:**  
**September 26, 2024 – 2:00 PM**

# Climate Resilience Bond Update

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August 2024

# Final Bond Breakdown (Content)

BOND CHAPTER	FUNDING ALLOCATION
Safe Drinking Water, Drought, Flood, and Water Resilience	\$3.8 billion
Wildfire and Forest Resilience	\$1.5 billion
Sea Level Rise and Coastal Resilience	\$1.2 billion
Protect Biodiversity and Accelerating Nature-Based Climate Solutions	\$1.2 billion
Clean Air	\$850 million
Park Creation and Outdoor Access	\$700 million
Climate Smart, Sustainable, and Resilient Farms, Ranches, and Working Lands	\$300 million
Extreme Heat Mitigation	\$450 million
TOTAL	\$10 billion

## Comparison of SB 867 – Climate Resilience Bond Package – With Statewide Coalition Funding Request

WATER RESILIENCE FUNDING CATEGORY	SB 867	COALITION REQUEST
Safe drinking water*	\$610 M	\$500 M
Groundwater storage*	\$386.25 M	\$750 M
Water recycling and desalination*	\$448.75 M	\$1 B
Water storage*	\$75 M	\$550 M
Water conservation*	\$75 M	\$400 M
Regional conveyance*	\$75 M	\$600 M
Dam safety*	\$480 M	\$700 M
Flood protection and reactivation + stormwater management*	\$660 M	\$950 M
Watershed resilience	\$100 M	\$700 M
State Water Project public benefits*	\$0	\$500 M
Land repurposing program	\$200 M	\$0
Water data management	\$15 M	\$0
Rivers, lakes, streams, wetlands	\$335 M	\$0
Salton Sea Management Plan	\$170 M	\$0
Streamflow enhancement	\$150 M	\$0
Nature education facilities	\$20 M	\$0
<b>TOTAL</b>	<b>\$3.8 B</b>	<b>\$6.65 B</b>

\*Includes "water infrastructure projects"

**Coalition request: Allocate 2/3 (66%) of \$10B climate resilience bond to water infrastructure investment**

**SB 867 water infrastructure investment: ~\$2.81B = 28% of total bond allocation**

# What's Next?

- Senate President Pro Tempore Mike McGuire signed the climate bond on July 3 to place it onto the General Election ballot
- Proposition 4 on November 5 General Election ballot
- Stakeholders (final position on SB 867):
  - ACWA – Neutral
  - State Water Contractors – Neutral
  - Northern CA Water Association – Neutral
  - WaterReuse – Neutral
  - CA Municipal Utilities Association – Support
  - Environmental Community – Support
  - Labor – Neutral
  - Individual water agencies – Varied
  - Business Community – Neutral
  - Agricultural Community – Varied



# Political Considerations

- Proposition 1 on **March 2024 primary election** ballot
  - Passed with only 50.2% of affirmative vote – with full support by Governor
- **PPIC polling**
  - *“64% of voters say this is a bad time to issue state bonds for state programs and infrastructure projects”* (PPIC June 2024, November Election, State fiscal ballot initiatives discussion)
- **California economy + State fiscal condition**
  - \$29 billion budget shortfall for 2024-25
  - Projected \$28 billion budget shortfall for 2025-26
- **Proposition 2 on November 2024 General Election ballot** is a \$10 billion school facilities bond measure

**QUESTIONS?**



# Desalination Funding Allocation in SB 867/Proposition 4

SB 867 – June 2023 Version	SB 867 – June 2024 Version/Final Version	Key Differences
<p><b>91015.</b>  (a) Of the funds made available by Section 91010, one hundred million dollars (\$100,000,000) shall be available, upon appropriation by the Legislature, to the Department of Water Resources for capital investments in brackish desalination, seawater desalination, contaminant and salt removal, and salinity management projects to improve California water and drought resilience. Priority shall be given to projects that use renewable energy and reduce greenhouse gas emissions associated with their construction and operation.  (b) For seawater desalination projects described in subdivision (a), priority shall be given to projects that do the following:  (1) Incorporate measures to minimize the intake of all forms of marine, brackish, and freshwater life in their construction and operation.  (2) Incorporate measures to minimize the adverse impacts of outfalls on marine, brackish, and freshwater life in their construction and operation.</p>	<p><b>91016.</b>  Of the funds made available by Section 91010, sixty-two million five hundred thousand dollars (\$62,500,000) shall be available, upon appropriation by the Legislature, for capital investments in brackish desalination, contaminant and salt removal, and salinity management projects to improve California water and drought resilience. Priority shall be given to projects that use new incremental eligible renewable energy resources during operation and reduce greenhouse gas emissions associated with their construction and operation.</p>	<p>(1) Reduction in total allocation from \$100M to \$62.5M</p> <p>(2) Elimination of “seawater desalination” as an eligible project category for funding</p>

# Organizational Positions on Proposition 4

ORGANIZATION	PROPOSITION 4 POSITION
Association of California Water Agencies	Neutral
California Municipal Utilities Association	Support
Northern California Water Association	Neutral
Southern California Water Coalition	Neutral
State Water Contractors	Neutral
WaterReuse	Legislative Committee recommended Support position to WaterReuse Board
CA State Building Trades	Neutral
CA Alliance for Jobs	Neutral
CA Farm Bureau Federation	Neutral
Western Growers	Neutral
Individual Water Agencies	Varies
CA Chamber of Commerce	Neutral (on SB 867)

## CalDesal 2025 Annual Conference - Sponsorship Opportunities

### **Diamond Sponsor: \$5000 (1 Available)**

- One 6' table exhibit booth with priority booth placement
- Three full complimentary program registrations for the conference
- Logo recognition on signage at the Conference
- Logo/ad on a running PPT slide during the Conference lunch
- Logo recognition in the event program
- Logo recognition on the CalDesal website during the month of the conference
- Logo recognition in conference marketing communications
- Logo recognition on the cover of the event program
- Logo recognition in post-conference newsletter
- Free full-page ad in the event program
- Special mention in opening session and throughout event
- Signage recognizing level of sponsorship throughout event

### **Platinum Exhibitor: \$4000 (2 Available)**

- One 6' table exhibit booth
- Two full complimentary program registrations for the conference
- Logo/ad on a running PPT slide during the Conference lunch
- Logo recognition in conference marketing communications
- Logo recognition in the event program
- Logo recognition on the CalDesal website during the month of the conference
- Logo recognition in post-conference newsletter
- Logo recognition on signage at the Conference
- Special mention in opening session and throughout event
- Signage recognizing level of sponsorship throughout event
- Half-page ad in event program

### **Gold Exhibitor: \$3000 (5 Gold)**

- One 6' table exhibit booth
- One full complimentary program registration for the conference
- Logo/ad on a running PPT slide during the Conference lunch
- Logo recognition on signage at the Conference
- Name recognition in conference marketing communications
- Name recognition in the event program
- Name recognition on the CalDesal website during the month of the conference
- Name recognition in post-conference newsletter
- Signage recognizing level of sponsorship throughout event
- Half-page ad in event program

### **Tote Bag Sponsor: \$2,500 (1 Available)**

- Logo branding and recognition as Tote Bag Sponsor
- One full complimentary program registration for the conference
- Logo/ad on a running PPT slide during the Conference lunch
- Logo recognition on signage at the Conference
- Name recognition in the event program
- Name recognition in post-conference newsletter
- Signage recognizing level of sponsorship throughout event

### **Lanyard Sponsor: \$2,500 (1 Available)**

- Logo branding and recognition as Lanyard Sponsor
- One full complimentary program registration for the conference
- Logo/ad on a running PPT slide during the Conference lunch
- Logo recognition on signage at the Conference
- Name recognition in the event program
- Name recognition in post-conference newsletter
- Signage recognizing level of sponsorship throughout event

# CalDesal 2025 Annual Conference - Sponsorship Opportunities

## Reception Sponsor: \$1250 (2 Available)

- Logo recognition on reception drink tickets
- Logo/ad on a running PPT slide during the Conference lunch
- Name recognition in the event program
- Name recognition on signage at the Conference
- Name recognition in post-conference newsletter
- Signage recognizing level of sponsorship throughout event

## Keynote Lunch Sponsor: \$1,000 (1 Available)

- Logo/ad recognition on the Keynote welcome slide
- Logo/ad on a running PPT slide during the Conference lunch
- Name recognition in the event program
- Name recognition in post-conference newsletter
- Name recognition on signage at the Conference

## General Sponsor: \$750

- Logo/ad on a running PPT slide during the keynote conference lunch
- Name recognition in the event program
- Name recognition in post-conference newsletter
- Name recognition on signage at the Conference

## Conference Bag Swag Item Sponsor: \$500

- Add an item with your organization logo into the bags that will be provided to all attendees at registration (or sponsor the bags themselves – logo bags distributed to all attendees, with various swag items included)
- Sponsor is responsible for providing the swag to CalDesal by **January 10, 2025**, in order to be included.
- No refunds will be given if your swag arrives too late to be added to the bags.

## DIY Sponsorships:

- DIY or “do it yourself” sponsorships are for all the creative desal professionals out there. Showcase your organization in a way that we haven’t thought of! Email: [glennf@caldesal.org](mailto:glennf@caldesal.org) with your proposed sponsorship and budget and we will work with you to customize a package for your organization!

## All Sponsors Will Receive:

- List of attendees
- Acknowledgement in handout materials – 100-word organization/company/agency description

## Sponsor Registration Form

[Click Here](#)

[CalDesal.org](http://CalDesal.org)



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## State Water Resources Control Board

### **NOTICE OF COMMENCEMENT OF 2024 REVIEW OF STATE WATER QUALITY CONTROL PLANS AND STATE POLICIES FOR WATER QUALITY CONTROL**

**NOTICE IS HEREBY GIVEN THAT** the State Water Resources Control Board (State Water Board) is commencing the 2024 Review of State Water Quality Control Plans and State Policies for Water Quality Control (2024 Review of State Plans and Policies). State water quality control plans and state policies for water quality control (State Plans and Policies) contain water quality standards and other provisions established by the State Water Board to preserve and enhance California's waters to safeguard human health, support aquatic ecosystems, improve the quality of water resources, and protect beneficial uses of waters. Triennial, or periodic, review is conducted pursuant to the federal Clean Water Act (33 U.S.C. § 1251 et seq.) and its implementing regulations, and the Porter-Cologne Water Quality Control Act (Wat. Code, § 13000 et seq.). (Refer to 33 U.S.C. § 1313(c)(1), 40 C.F.R. § 131.20(a), Wat. Code, §§ 13143, 13170, 13170.2, subd. (b), 13240.) For 2024, the State Water Board will be conducting its triennial review and its periodic reviews in a single combined proceeding. The purpose of the 2024 Review of State Plans and Policies is to engage with the public and interested persons to identify potential changes or additions that will help to guide the State Water Board's priorities for future amendments to the State Plans and Policies.

The preliminary list of State Plans and Policies that will be reviewed as part of this project includes the following:

State Water Quality Control Plans:

- Bay-Delta Plan
- California Ocean Plan
- California Thermal Plan
- Enclosed Bays and Estuaries Plan
- Components of the Inland Surface Waters, Enclosed Bays, and Estuaries Plan

State Policies for Water Quality Control:

- Antidegradation Policy
- Aquatic Toxicity Provisions
- Cannabis Policy
- Compliance Schedule Policy
- Consolidated Cleanup Plan
- Enclosed Bays and Estuaries Policy
- Guidance for Toxic Hot Spot Policy
- Impaired Waters Policy
- Instream Flows Policy
- Investigation and Cleanup and Abatement of Dischargers under Water Code Section 13304
- Listing Policy
- Low-Threat Underground Storage Tank Closure Policy
- Municipal Solid Waste Policy
- Nonpoint Source Pollution Enforcement Policy
- Once-Through Cooling Water Policy for Coastal and Estuarine Waters
- Once-Through Cooling Water Policy for Inland Waters
- Pollutant Policy Document for the San Francisco Bay/Sacramento-San Joaquin Delta Estuary
- Recycled Water Policy
- Sources of Drinking Water Policy
- State Implementation Policy
- State Wetland Definition and Procedures for Discharges of Dredged or Fill Materials to Waters of the State
- Supplemental Environmental Projects Policy
- Water Reclamation Policy

In addition to reviewing these State Plans and Policies, the 2024 Review of State Plans and Policies will include consideration of the federally promulgated water quality standards for California (40 C.F.R. §§ 131.36, 131.37 and 131.38) and Clean Water Act section 304(a) recommended criteria.

The State Water Board will solicit initial public feedback through a public survey on potential changes or additions to State Plans and Policies, including federally promulgated water quality standards and recommended criteria. The initial public feedback will be used to help identify and prioritize potential changes or additions to State Plans and Policies, along with ongoing rulemaking projects, in an upcoming Draft Report and Work Plan for the 2024 Review of State Plans and Policies. A separate public notice describing the written comment period and public hearing will accompany the release of the Draft Report and Work Plan. Changes or additions may include, but will not be limited to, proposing new or revised existing beneficial uses and water quality objectives (referred to as “water quality standards” under the Clean Water Act) and programs of implementation.



The 2024 Review of State Plans and Policies is not a rulemaking, and it will not include the adoption of any of the proposed changes or additions to the State Plans and Policies. Changes and additions to the State Plans and Policies are subject to state and federal rulemaking requirements, including public participation. The State Water Board will provide a separate public notice when it initiates each future rulemaking project.

## **DOCUMENT AVAILABILITY AND KEY DATES**

The State Plans and Policies listed above are available on the State Water Board's website at: [https://www.waterboards.ca.gov/plans\\_policies/](https://www.waterboards.ca.gov/plans_policies/). Information regarding federally promulgated water quality standards and Clean Water Act section 304(a) criteria will be made available at the time that the public survey is released.

The public survey, fact sheet, Draft Report and Work Plan, and public notice of written comment period and public hearing on the Draft Report and Workplan will be released by email to the email distribution list identified below and by posting on the State Water Board's website at [https://www.waterboards.ca.gov/plans\\_policies/](https://www.waterboards.ca.gov/plans_policies/).

When available, you may also request a paper copy of the Draft Report and Work Plan by emailing [Beverly.Schornhorst@waterboards.ca.gov](mailto:Beverly.Schornhorst@waterboards.ca.gov) or calling (916) 323-0874.

The State Water Board's projected key dates and actions are listed below:

### **Fall 2024**

Public Survey and Fact Sheet

### **Spring – Summer 2025**

Draft Report and Work Plan

Public Comment Period and Public Hearing

### **Fall 2025**

Board Consideration of Adoption Hearing

Final Report and Work Plan

## **FUTURE NOTICES AND STAYING INVOLVED**

Relevant documents and information, including any changes to the information noticed above will be provided via a new State Water Board's email distribution list for the Review of State Plans and Policies. Any person desiring to receive future communications and notices via email must subscribe to the new listserv e-mail distribution list by accessing the following e-mail list subscription form:

[http://www.waterboards.ca.gov/resources/email\\_subscriptions/swrcb\\_subscribe.shtml](http://www.waterboards.ca.gov/resources/email_subscriptions/swrcb_subscribe.shtml)

To subscribe, select the 'Water Quality' tab, and check the box for 'Review of State Plans and Policies'.

## ADDITIONAL INFORMATION

Please direct questions about this notice to Beverly Scharnhorst at (916) 323-0874 or [Beverly.Scharnhorst@waterboards.ca.gov](mailto:Beverly.Scharnhorst@waterboards.ca.gov), or Kat Faick at (916) 445-2317 or [Kat.Faick@waterboards.ca.gov](mailto:Kat.Faick@waterboards.ca.gov).

\_\_\_\_\_  
August 15, 2024  
Date

  
\_\_\_\_\_  
Courtney Tyler  
Clerk to the Board



## OPA 2.0 Working Group – Issues Matrix

ISSUE	CONTEXT (What Issues are Implied Within This Item?)	KEY TALKING POINTS
Allowance of flow augmentation without bias	Flow augmentation can result in less impact than diffusers and should be included in discharge analysis.	All brine dilution methods should be included in analysis to determine which has least impact project by project.
Elimination of brine diffusers as best available technology		
Improving science around determination of shearing mortality and related mitigation requirements		
Eliminate shearing mitigation for projects that comply with the SWB streamlining recommendations by utilizing subsurface intakes and commingling discharge with an existing wastewater outfall.	Differentiating brine from freshwater in an existing wastewater outfall ignores the fact that the brine makes the freshwater more similar to the receiving waters and thereby reduces shearing effects because the more similar water masses mix more readily. Just as a subsurface intake is assumed to minimize entrainment and impingement to the point no mitigation for marine life impacts is needed, the same logic should be applied to commingled discharges.	Using the BTA for intake and discharge should result in no mitigation needed as the impacts to all forms of marine life have been minimized to the extent possible. Freshwater causes shear just like brine because dissimilar liquids (freshwater and marine receiving waters) are being forcibly mixed. Pre-mixing brine and freshwater wastewater reduces the liquid dissimilarity and results in less energetic mixing needing less shear. An overall environmental benefit.
		The state does not regulate shearing in wastewater discharge and it's scientifically inconsistent to apply this standard only to desalination plants.
De facto prohibition on open intakes	Subsurface intakes are not feasible everywhere and cannot provide sufficient source water for the large plants the arid southwest will need to offset the aridification-induced water losses.	Subsurface is not possible everywhere. We cannot replace the water volumes lost to aridification without open intakes.  Cost must be considered. Lots of small plants with subsurface intakes could result in higher water costs. Brings in the EJ/SJ issue opponenets have been focused on.

**Commented [1]:** CalDesal should be careful with shearing. Roberts has produced reports with conflicting conclusions. The peer-reviewed literature he cites in his reports confirms that larvae larger than 1 mm are killed more than those less than 1 mm. The biggest issue with the Roberts shearing work is that it all cites invertebrate larval studies while we are mostly concerned with fish larvae from the ETM/APF analytical standpoint. This is mainly due to Robert's reliance on Kolmogorov scales. There is literature on the effect of shearing on larval fish but they do not express shearing energy as Kolmogorov but at dynes. They find high turbulence is very lethal and not tied to time or frequency of exposure. A turbulent jet with enough force tears apart fish larvae that lack shells or exoskeletons like invertebrate larvae. I personally do not know how/if dynes and Kolmogorov scales can be converted into similar units. In this list, we also have conflicting requests about diffusers, shearing, etc. I added a different route that hopefully sidesteps the shearing issue and benefits those projects that are using what the State says is the "streamlined" route.

**Commented [4]:** Just added "pre" to indicate we are talking about com-mingling

**Commented [3]:** I think this could complicate the already complicated shearing issue. Shearing results from a high velocity jet being injected into stagnant water. The salinity perspective is only relevant in that co-mingled effluent would no longer need high velocity to mix efficiently.

**Commented [2]:** I think this is a slick solution. It preserves flexibility in compliance which is usually a benefit to industry.

**Commented [5]:** OK - you captured it here. Great

Specify a sequential order for assessing site, design, technology, and mitigation under the Water Code Section 13142.5(b) determination process ( <i>Siting Criteria Report</i> )	Each Water Code element needs to be evaluated with equal weight for each project. No project should be summarily denied because an element reviewed early in the process is determined to be less than ideal.	The current process is untenable for most developers municipalities when there are so many potential ways to stop a project. Making stage-gates, reduces risk for project proponents and increases certainty.
Offshore/deep-sea desalination evaluation and permitting	Should be given a pathway to compliance like all rather than disregarded because its in a less studied habitat.	Flexibility in the final regulations is required to leave space for new technologies
Articulate criteria for studies necessary to demonstrate subsurface intake feasibility ( <i>Siting Criteria Report</i> )		

Align the desalination provisions with the Coastal Act requirements regarding energy consumption and Resolution No. 2017-0012 ( <i>Siting Criteria Report</i> )		
Timing – requirement for mitigation to be in place prior to operations of a facility is problematic	Mitigation need is quantified too late in the permitting process to allow for a mitigation project to be feasibly designed, permitted, constructed, and demonstrated as successful. Either allow after the fact mitigation or increase the range of mitigation banks allowed in CA that can be used by desalination developers, or both.	<p>This proposed provision is not legal because it renders projects infeasible. Evidence shows that coastal wetlands take 20 years to site, design, permit and build, not taking into account demonstrating performance. Such a provision is in conflict with the state's definition of feasible as a project cannot be successfully developed in a reasonable period of time.</p> <p>No project - public or private - would be able to secure construction financing with such a permit condition, leaving a project in limbo for an unspecified period of time.</p>
Mechanisms – Fee-based mitigation; artificial reef efficacy		Establishing a fee-based program, as contemplated by the 2016 OPA, is the best way to streamline the development of desalination projects.
Elimination of mitigation for shearing mortality		
Establish definitions for terms such as “restoration,” “creation,” and “expansion” to improve clarity around mitigation planning expectations ( <i>Siting Criteria Report</i> )		
Clarify that “preservation” is not an acceptable means of mitigation under		

**Commented [6]:** I would say "allowed". It was in there.

**Commented [7]:** I just don't see the WB saying yes. This is a heavy hammer they can use against big projects. They wielded it, in part, to kill HB. More than 50% of the HB mitigation was due to shearing.

**Commented [8]:** Without shearing, flow augmentation will always result in more impact based on the current assessment methods. Earlier we request FA be allowed as a method. Having FA as an option for future big plants could be a huge reduction in impact and cost, especially if the intake can be located in a low-productivity habitat.

the Ocean Plan ( <i>Siting Criteria Report</i> )		
Who makes determinations or evaluations?		
Factors comprising determination of "need"		
Provide guidance on the information needed to prepare a Water Supply and Demand Assessment ( <i>Siting Criteria Report</i> )		
Provide guidance on the application of existing policies and regulatory requirements relating to EJ, including siting projects with proactive community engagement and locally scoped EJ in mind at the onset of the permitting process ( <i>Siting Criteria Report</i> )		
Align the desalination provisions with the Human Right to Water and all applicable racial equity resolutions ( <i>Siting Criteria Report</i> )		
Cost of water as a consideration (rate-making)		

**Commented [9]:** Instead of trying to fix a bad provision let's discuss spiking the entire "need" discussion in the OPA. It's an overreach.

**Commented [10]:** See my previous comment on water cost associated with lots of small subsurface intake plants.

# CARLSBAD DESALINATION PLANT

## State of the Ocean Report



**A** new scientific study found that California's strict ocean protection regulations are working and that the Claude "Bud" Lewis Carlsbad Desalination Plant offers an environmentally friendly supply in an era of increasing water scarcity. The findings highlighted how ocean waters near the plant remain healthy and minimally impacted.

The analysis focused on the Carlsbad Desalination Plant, which has produced up to 54 million gallons of drought-proof water per day for the greater San Diego region for nearly a decade.

"The most robust monitoring program of the area ever completed demonstrated the Carlsbad Desalination Plant is operating in compliance with all applicable regulations and permits in harmony with the coastal marine environment," said the study, prepared by Miller Marine Science & Consulting, Inc. of Aliso Viejo.

### Plant Background

The Carlsbad Desalination Plant minimizes the San Diego region's vulnerability to statewide drought conditions. It is part of a \$1 billion project that includes the nation's largest, most technologically advanced and energy-efficient seawater desalination plant, a 10-mile large-diameter pipeline, and improvements to Water Authority facilities for distributing desalinated seawater throughout San Diego County.

The plant draws seawater from Agua Hedionda Lagoon, which is adjacent to the Pacific Ocean and also home to the Hubbs SeaWorld Research Institute's premier aquaculture facility for restoring California's white seabass population. The desal plant provides several environmental benefits by using cutting-edge technology to recapture energy from the desalination process, offsetting carbon emissions and developing extensive wetlands to enhance fish populations along the San Diego County coastline. The entire project was developed through a rigorous environmental permitting process, which required scientific assessments.

A new intake structure is under construction to meet strict state laws for environmental protection. Federal grant funds are being used to modify the initial intake and discharge operations, including construction of a new screening structure to further protect sea life.



Construction on the new intake structure began March 2023



# CARLSBAD DESALINATION PLANT

# State of the Ocean Report



## Ocean Health Assessment

Ocean monitoring was ordered by the San Diego Regional Water Quality Control Board to determine what impact the desal plant was having on sediments and water quality, including any impacts on surfing, diving and shellfish.

The Miller Marine study started July 2019 and ran through fall 2023 (except during the early days of the COVID-19 pandemic). All monitoring was conducted while the desal plant was drawing water from the lagoon, discharging brine back to the ocean, and delivering potable water to the San Diego County Water Authority. Samples showed that the waters off the coast of Carlsbad are healthy in the monitoring areas,

and water quality has remained consistent with the regional patterns.

Occasionally, large harmful algal blooms negatively impacted the Carlsbad coastline, but the study found that desalination plant operation did not contribute to the blooms. In addition, the seabed environment offshore of Carlsbad was deemed healthy, with low levels of common pollutants (which were expected because they can derive from various sources in the ocean) and none creating a toxic environment. Communities of sediment-dwelling sea creatures in the area were as expected, indicating no effect of the desal discharge.

## The State of the Ocean report concluded that:

1. The Carlsbad coastal marine environment continues to support its full suite of beneficial use.
2. The Carlsbad Desalination Plant's discharge is not disturbing the receiving water quality or environment outside the brine mixing zone.
3. The Carlsbad Desalination Plant is not discharging toxic substances to the detriment of the environment. The plant's operations result in an environmentally safe discharge to the marine environment in compliance with all regulations.



Read the  
Full Report

