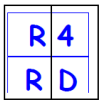

Residents for
Responsible
Desalination

April 8, 2024

The Honorable Gavin Newsom
Governor
State of California

Yana Garcia
Secretary for Environmental Protection
California Environmental Protection Agency

Joaquin Esquivel
Chair
State Water Resources Control Board

Wade Crowfoot
Secretary for Natural Resources
California Natural Resources Agency

The Honorable Mike McGuire
President Pro-Tempore
State Capitol

The Honorable Robert Rivas
Speaker of the Assembly
State Capitol

The Honorable Josh Becker
Chair, Senate Budget Subcommittee 2
California State Senate

The Honorable Steve Bennet
Chair, Assembly Budget Subcommittee 3
California State Assembly

The Honorable Dave Min
Chair, Senate Natural Resources and Water Committee
California State Senate

The Honorable Ben Allen
Chair, Senate Environmental Quality Committee
California State Senate

The Honorable Diane Papan
Chair, Assembly Water, Parks, and Wildlife Committee
California State Assembly

The Honorable Eduardo Garcia
Chair, Assembly Environmental Safety and Toxic Materials Committee
California State Assembly

RE: A CALL TO ACTION – STOP OCEAN ACIDIFICATION AND HYPOXIA 'HOT SPOTS'

Dear Governor Newsom, California State Agencies, and the California Legislature:

California Coastkeeper Alliance, the Natural Resources Defense Council, and the undersigned organizations are calling on you to take immediate and decisive action to protect our ocean from the alarming development of ocean acidification and hypoxia (OAH) 'hot spots'[1] occurring off the California coast. Our organizations are deeply concerned with the latest research and state of the science physical/biogeochemical modeling that land-based nutrients discharged to the ocean from coastal sewage treatment plants are causing ocean acidification and the loss of oxygen, creating OAH hot spots. **During late summer months, magnified by daily coastal sewage treatment plants discharges, OAH hot spots form and cause marine habitat compression on average of 20% but up to 60% (vertically) for 25% (horizontally – over 1,000 square miles) of the Southern California Bight; even at distances of up to 50 miles offshore**. Ocean acidification is gradually shifting the California coastline toward a more acidic, corrosive state, while hypoxia – or low dissolved oxygen levels – is making the ocean less habitable for organisms ranging from sea snails to crabs to fish. **We write to urge the state to support and develop an Ocean Acidification and Hypoxia Policy to prevent further exacerbation of OAH hot spots along the California coast**.

[1] OAH 'hot spots' refers to the sublethal, but ecologically relevant substantial changes to water column biochemistry, food-web interactions, and habitat livability for multiple taxa of ecological and economic importance.

In 2019, the State Water Board recognized and prioritized the need to set OAH water quality standards to prevent OAH hot spots.[2] But to-date, the state has made minimal progress due to insufficient resources to advance a regulatory policy to set OAH water quality standards that are protective of the ocean's beneficial uses and an implementation framework to eliminate OAH hot spots. We applaud the State Water Board for making the development of an OAH Policy a top priority in 2024, but without substantial state Budget funding and political support, it will be difficult for the State Water Board to adopt a policy in a timely manner to save our coast and ocean.

Our identity as Californians is inextricably tied to the Pacific Ocean and our majestic coastline. From surfing to fishing, sunbathing to whale watching, swimming to keeping our beaches clean, it is in our DNA to care for the ocean. As the nation's largest ocean economy valued at over $44 billion annually, California has a significant portion of its economy concentrated on the coast, with a great majority of it connected to coastal recreation and tourism, ports and shipping. California's diverse and abundant marine life has helped to sustain a history of commercial and recreational fishing, from market squid to king salmon, these fisheries contribute billions of dollars while providing California jobs, food production, recreation and attracting tourism. The threat of OAH hot spots puts California's coastal identity in jeopardy unless the state takes immediate action.

Fortunately, Californians are innovators and problem solvers. We have demonstrated global leadership in reducing carbon pollution, stewarding our coast, and protecting marine ecosystems. California's network of 124 world-renown marine protected areas safeguards coastal biodiversity and builds the resilience of our fisheries in the face of climate change. But despite the investments California has made to protect our ocean and coast, it will be futile if the state does not address its ocean acidification and hypoxia problem. The state's Strategic Plan to Protect California's Coast and Ocean recognizes the urgency to develop an OAH Policy and sets a state deadline to establish water quality objectives for ocean acidification and hypoxia by 2025.[3] To achieve this strategic goal the state needs to act now and provide the State Water Board with the resources necessary to adopt an OAH Policy by the state's strategic goal of 2025. Given the importance of our coastline to Californians and the California economy, and the unprecedented climate crisis impacting our oceans, now is the time for bold, decisive action.

Under current climate change conditions, and getting worse with the growing amounts of CO2, shell-forming organisms including Dungeness crab larvae and oysters will have a tougher time building their shells, and fish will experience behavioral changes that make them more vulnerable to predation. California's OAH hot spots have already acidified to the point that some plankton – tiny marine snails called pteropods – and Dungeness Crab larvae can experience "shell dissolution". In common language, in these hot spots, ocean water has become so acidic that it causes shells to dissolve. Further, northern anchovies do not have enough oxygen to thrive in large swaths of southern California's coastal waters.

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[2] See State Water Resources Control Board, Ocean Plan Triennial Review (Dec. 2019); available at: https://www.waterboards.ca.gov/water_issues/programs/ocean/docs/sr_2019opr.pdf.

[3] Ocean Protection Council, Strategic Plan: to Protection California's Coast and Ocean 2020-2025; available at: https://www.opc.ca.gov/webmaster/ftp/pdf/agenda_items/20200226/OPC-2020-2025-Strategic-Plan-FINAL-20200228.pdf; "Target 1.2.1: Based on the latest scientific research, advance adoption of regulations, as needed, establishing water quality objectives for ocean acidification and hypoxia that include, but are not limited to, publicly owned treatment works, stormwater, and non-point source pollution, by 2025, with scientific analysis of the relationship between nutrient inputs and acidification hot spots completed by 2022."

The best science in the world has concluded that land-based nutrients from wastewater facilities are harming the California coast and making our ocean unhabitable for California economically-critical marine life. To stop this environmental disaster, we urge the following:

Governor Newsom and California EPA: Allocate $2.8 million in the California Budget May Revise for the State Water Board to develop and adopt an Ocean Acidification and Hypoxia Policy that sets a technology-based water quality objective to remove nutrients from ocean wastewater discharges and reduce and prevent OAH hot spots.

State Legislature (Budget Funding): Appropriate $2.8 million in this year's Budget and set a legislative deadline for the State Water Board to develop a technology-based water quality objective to remove nutrients from ocean wastewater discharges and prevent OAH hot spots.

State Legislature (Bond Funding): Future Bond allocations should include funding for coastal wastewater facilities to upgrade their systems to remove nutrients to prevent OAH hot spots. Future Bonds should also include a requirement for ocean wastewater and associated water recycling facilities to include planning for denitrification as a prerequisite for Bond funding.

State Water Resources Control Board: Regardless of Budget funding, act immediately and start the regulatory process for establishing a technology-based effluent limit for nutrient removal of ocean wastewater discharges to protect the California Ocean Plan's beneficial uses.

California Natural Resources Agency: The Ocean Protection Council should adopt an Ocean Acidification and Hypoxia Resolution supporting the state's efforts to stop OAH hot spots, specifically by adopting an Ocean Acidification and Hypoxia Policy that sets water quality standards to protect the ocean's beneficial uses. The 2020-2025 Ocean Protection Council Strategic Plan for California Coast and Ocean included the objective to "Minimize Causes and Impacts of Ocean Acidification and Hypoxia" with the target: "Based on the latest scientific research, advance adoption of regulations, as needed, establishing water quality objectives for ocean acidification and hypoxia that include, but are not limited to, publicly owned treatment works, stormwater, and non-point source pollution, by 2025."

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Our organizations are calling on the State of California to act immediately and decisively to protect our ocean from the alarming occurrence of ocean acidification off the California coast. The science is clear that coastal sewage treatment plant discharges of nutrients to the ocean are linked to ocean acidification and the loss of oxygen, creating OAH hot spots. Coastal nutrient pollution and rising CO2 levels in the atmosphere and ocean have led to habitat degradation at an unprecedented spatial scale off of California. We must act quickly to stem the growing impacts of Ocean Acidification and Hypoxia on the state's fisheries and marine biodiversity. It is time to act. We urge you to take bold action to prevent OAH hot spots and further habitat degradation of our ocean and coastline.

Sincerely,

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Executive Director
California Coastkeeper Alliance

Bruce Reznik
Executive Director
Los Angeles Waterkeeper

Dr. Mark Gold
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Natural Resources Defense Council

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Ashley Eagle-Gibbs
Legal and Policy Director
Environmental Action Committee of West Marin

Garry Brown
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Rikki Eriksen
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Chelsea Tu
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Ted Morton
Executive Director
Santa Barbara Channelkeeper

Dan Silver
Executive Director
Endangered Habitats League

Don McEnhill
Executive Director
Russian Riverkeeper

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