



September 10, 2024

Ocean Protection Council
Wade Crowfoot, Secretary for Natural Resources
Chair, Ocean Protection Council
California Natural Resources Agency
1416 9th Street, Suite 1311
Sacramento, CA 95814

Re: Support for Ocean Protection Council September 10, 2024 Meeting Agenda Items 9a and 9b on MPA Management Review and Consideration of Disbursement of Funds to Advance Monitoring of the MPA Network: Mid-Depth Habitats.

Dear Secretary Crowfoot and Members of the Ocean Protection Council:

We are pleased to submit this comment in support of Items 9a and Item 9b related to the marine protected area (MPA) review and consideration of funding to advance MPA monitoring and offer considerations as the Ocean Protection Council (OPC) provides policy guidance on adaptive management of the MPA Management Program.

The undersigned non-profit organizations have decades of collective experience working on MPA management, research, compliance, education, and outreach. We are dedicated to ocean protection and the implementation of California's MPA Network. We celebrate California's MPA network and submit this letter to applaud the leadership efforts of the OPC to improve and strengthen the protection of our invaluable, diverse, and globally recognized marine ecosystems. We wanted to highlight a few key points as the OPC leads California towards adaptively managing our MPA Network and achieving our 30x30 biodiversity conservation

goals. We also want to thank the OPC for your continued leadership, funding, and support in managing and protecting our ocean ecosystem.

1. California's MPA Network is Working and Needs Continued Support

We want to acknowledge the tremendous success of California's MPA network due to the efforts of state agencies, anglers, local communities, other stakeholders, and Tribes. We created a global model for scientifically designed MPA networks. The network is now in its final stages of review for inclusion as an IUCN Green List site, which will make it the first Green Listed site in the United States and the first scientifically designed MPA network on the list. In addition, the Channel Islands MPAs were the recipient of the Marine Conservation Institute's prestigious Blue Parks Award in 2019. Furthermore, extensive research as part of the Decadal Management Review (DMR) illustrates that our MPA network is indeed achieving the goals it was designed to accomplish, creating "safe havens" for large fish and invertebrates to grow and reproduce.

On top of the network already resulting in increased fish abundance, population, size, and density, there has been no evidence of economic loss as a result of the MPA network. With 2023 data from more than 4,000 MPA Watch surveys showing 99 percent of activities in MPAs are recreational, nonconsumptive uses, our MPAs are also meeting their goal of "improving recreational opportunities provided by marine ecosystems." In addition, MPA Watch boat-based survey and monitoring enables Community Compliance Liaisons opportunities to provide live, on-the-water observations of all potential consumptive violations with CDFW and allied enforcement agencies in efforts to curb illegal on-the-water and hard to reach onshore take from our MPAs.

Given California's commitment to environmental justice, equity, and addressing the biodiversity and climate crises through the 30x30 initiative, OPC has an opportunity to meaningfully deliver on the overwhelming public support for expanding MPAs off our coast. In its June 2024 report, the Public Policy Institute of California (PPIC) found 81 percent of adults in California support "expanding the rules and boundaries of National Marine Sanctuaries and California Marine Protected Areas (MPAs) to protect fish, wildlife, and their habitat off the state's coast."¹ Strengthening and expanding the MPA Network through adaptive management is the most effective pathway to achieving the state's 30x30 goals, both scientifically and as a mechanism to promote equitable access to healthier marine environments for communities that are excluded from decision-making and coastal access.

1. California Must Adaptively Manage our MPA Network

Since the design of our California MPA Network, our ocean seascape has experienced an increase in numerous unanticipated stressors. These stressors, including ocean acidification, harmful algal blooms, marine heat waves, and sea level rise continue to impact our coastal

¹ <https://www.ppic.org/publication/ppic-statewide-survey-californians-and-the-environment-july-2024/>

resources and have implications for how well our MPA Network functions into the future. We recognize the leadership and guidance provided by OPC, CDFW, and other state agencies in prioritizing adaptive management of the MPA Network. With continued commitment to scientific analysis and implementation, there is the opportunity to ensure the wealth of relevant, new science techniques and tools will be applied to effectively manage our MPA Network.

Over the past decade, a suite of new mapping tools and approaches have been developed that can be applied to our MPA Network. **We applaud the OPC's support in funding critical science, such as that proposed in [Agenda Item 9b](#), to fill key gaps critical to adaptively managing our MPA Network.** The information collected and tools developed as part of this funding will be invaluable for stakeholders to examine the benefits and costs of different management options that can be applied statewide and locally. As policy lead on MPAs, OPC's investments outlined in Item 9b will also support transparent, science-based, and objective evaluation of adaptive management recommendations for the MPA network. Effective adaptive management to include local impacts to our MPAs will be crucial for building resilience to climate change and other emerging threats.

2. State Marine Reserves Remain the Backbone of California's MPA Network.

Secondly, we want to reiterate that the State Marine Reserves (SMR) remain the foundation of the California MPA Network, as stated in the Marine Life Protection Act (MLPA) and initially designed and approved by stakeholders. Notably, nearly all the original stakeholders during the initial MPA designation process submitted MPA network designs based on a backbone of State Marine Reserves (SMR), seeking to meet the broad ecosystem and biodiversity protection goals of the MLPA. Today, there remains growing scientific agreement that no-take MPAs are much more effective than partially protected MPAs, with research concluding that “partially protected areas are no more effective, and often no better than open areas^{2, 3, 4}. Another global study across taxa, regions, and ecosystems examining unprotected partially protected and fully protected areas revealed that fish biomass in marine reserves is, on average, **670 percent greater than in adjacent unprotected areas**. Scientists have concluded that **no-take marine reserves are the most effective protected areas** in the ocean helping to restore the complexity of ecosystems through a chain of ecological effects⁵. This is evidenced by substantial increases in biodiversity inside no-take marine reserves, along with increased size, age, and density of commercially important species⁶. Furthermore, recovery occurs faster and

² <https://conbio.onlinelibrary.wiley.com/doi/full/10.1111/cobi.13677>

³ <https://onlinelibrary.wiley.com/doi/abs/10.1111/qcb.17257>

⁴ <https://onlinelibrary.wiley.com/doi/abs/10.1002/aqc.2934>

⁵ <https://academic.oup.com/icesjms/article/75/3/1166/4098821?login=true>

⁶ <https://www.frontiersin.org/articles/10.3389/fmars.2020.00076/full>

more completely at higher levels of protection^{7, 8, 9}, particularly when properly enforced¹⁰. Recent studies show how no-take MPAs also increase resilience and recovery of marine communities after disturbances^{11, 12, 13, 14, 15} (such as climate-driven events) with benefits increasing in the oldest and largest MPAs^{16, 17}.

California's MPA network contains a wide range of MPA types that do allow for specific kinds of consumptive uses (e.g. SMCA, SMRMA, SMP), and we note that managing these partially protected MPAs requires additional outreach, education, and compliance resources from enforcement agencies to inform the public about site-specific regulations. Our undersigned organizations represent a wide geographic spread of MPA outreach programs and have observed that the public much more clearly understands SMR regulations versus the complexity of partially protected MPAs; in addition to their ecological benefits, the streamlined enforceability of SMRs is another key element of effective MPA management in California.

The significant benefits of SMRs are clear, and we urge OPC to continue to promote the use of SMRs as the cornerstone of our MPA Network. Given the increasing threats our ocean is facing and the declines in many key ecologically important species along our coasts, California should continue to lead by prioritizing ocean conservation.

Conclusion

We appreciate the OPC's leadership, strategic coordination, and commitment to sound science to ensure we effectively conserve our ocean for future generations. **We recommend the authorization of funding to advance adaptive management and monitoring of the MPA Network.** These tools and resources will be critical to developing a publicly available mapping tool, updating the marine connectivity models, and extending critical monitoring of deep rocky reef habitats. Such investments are crucial to identifying adaptive management strategies to respond to emerging threats.

We reiterate our gratitude to the OPC for prioritizing ocean conservation as we review our statewide MPA Network and explore how California can advance ocean conservation in

⁷ <http://dx.doi.org/10.1002/aqc.3043>

⁸ <http://dx.doi.org/10.1371/journal.pone.0023601>

⁹ <http://dx.doi.org/10.1002/fee.1934>

¹⁰ <http://dx.doi.org/10.1016/j.biocon.2007.12.013>

¹¹ <https://journals.plos.org/plosone/article?id=10.1371/journal.pone.0040832>

¹² <https://journals.plos.org/plosone/article?id=10.1371/journal.pone.0008657>

¹³ <https://sci-hub.yt/10.1111/ele.12598>

¹⁴ <https://www.sciencedirect.com/science/article/pii/S0960982215001372>

¹⁵ <https://conbio.onlinelibrary.wiley.com/doi/abs/10.1111/j.1523-1739.2012.01926.x>

¹⁶ <https://doi.org/10.1371/journal.pone.0193426>

¹⁷ <https://journals.plos.org/plosone/article?id=10.1371/journal.pone.0081838>

alignment with the 30x30 initiative. OPC has enabled this ecosystem-wide review by promoting innovative, science-based research and making strategic investments at critical times over the past decade. This catalyzes action through partnerships and collaboration, and we look forward to supporting future efforts to achieve California's ocean conservation goals.

Sincerely,

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September 6, 2024

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SUBJECT: Support for the California Artificial Reef Program Plan (Item 8) and Advancing Recommendations from the Decadal Management Review and to Inform Management of California’s Marine Protected Area Network (Item 9a and 9b)

Dear Secretary Crowfoot and members of the Ocean Protection Council:

The Department of Fish and Wildlife (Department) has worked closely with Ocean Protection Council staff to develop funding priorities and supports the authorization for disbursement of funding for **Item 8: Development of The California Artificial Reef Program Plan** and **Item 9: To Advance Recommendations from the Decadal Management Review and to Inform Management of California’s Marine Protected Area (MPA) Network**, which are being considered at the September 10, 2024 meeting.

The Department is tasked with the management of the state’s Marine Protected Area (MPA) Network and the administration of the California Artificial Reef Program (CARP). These proposed projects would support the Department’s ability to carry out these mandates and aggregate the best science available and to integrate input from stakeholders and California Native American Tribes to implement and adaptively manage these programs.

The CARP was created in 1985 by Fish and Game Code section 6420 – 6425 and was never fully implemented due to lack of allocated resources. While the CARP has remained unfunded, requests to expand the use of artificial reefs for a wide range of objectives have been growing rapidly and are anticipated to continue to increase. Large scale development projects exploring mitigation pathways and interest in species specific restoration projects are driving much of the increase in project requests. The Department supports funding the proposed project for **Item 8** as the project will address a critical need for the Department and other state regulators to have a science-based and stakeholder informed programmatic guidance plan to inform the development and implementation of the CARP. Robust scientific, agency, stakeholder, and Tribal engagement is the center piece of the project ensuring the CARP Plan will be based on the best science available and integrate local,

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traditional and expert knowledge. The CARP Plan will provide consistency and transparency for both project developers and regulators, which will promote improved coordination and efficiency of the environmental review and permitting processes.

In 2023, the Department released the first comprehensive Decadal Management Review of the MPA Network and Management Program that included 28 recommendations prioritizing adaptive management of the Network over the next decade. The Department's continued partnership with Ocean Protection Council will be integral in moving many of these recommendations forward. The proposed funding for **Item 9a** would address Decadal Management Review recommendations to:

- Improve the understanding of human dimensions and MPAs and advance approaches to better utilize community science to supplement core monitoring programs (recommendations 12 and 14), and
- Develop tools to apply the results of the Decadal Management Review to support potential adaptive management changes to the MPA Network and update the MPA Monitoring Action Plan (recommendations 4 and 11).

Investment in the mapping tool SeaSketch and updates to the California Connectivity Model will further inform evaluation of network design and performance, inform adaptive management, and refine the tools needed for the MPA petition evaluation process that is currently under way. Funding to support the next round of long-term monitoring in mid-depth rocky reefs will forward the key findings of a Technical Advisory Panel to streamline data collection in this habitat that is so critical for promoting biodiversity across the MPA Network and supporting the state's economically important fisheries species.

These proposed projects would bring together qualified technical experts and directly address key science-based questions that will improve the efficacy of future management actions. Importantly, the projects leverage past work to infuse with emerging science as well as stakeholder and Tribal input ensuring management actions are based on the best science and information available.

If you have any questions or need additional information, please contact me at (805) 568-1246 or by email at r7regionalmgr@wildlife.ca.gov.

Sincerely,



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Wade Crowfoot, Secretary for California Natural Resources Agency

September 6, 2024

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