



April 5th, 2023

California Fish and Game Commission
715 P Street, 16th Floor,
Sacramento, CA 95814

RE: Discussion Item 25 Marine Protected Areas Decadal Management Review

Dear President Sklar, Vice President Zavaleta & Commissioners,

With the Decadal Management Review (DMR) of California's Marine Protected Area (MPA) network completed, we look forward to supporting state agencies and MPA managers on the development of adaptive management strategies in accordance with the stated goals of the Marine Life Protection Act (MLPA). The following comments are focused on the adaptive management recommendations elevated by the California Department of Fish and Wildlife (CDFW) in Table 6.1 of the DMR. Specifically, we look at this suite of recommendations through the lens of the recreational angler, spear fisher or coastal gatherer and seek to expand upon this list to ensure all goals of the MLPA are met.

We applaud the following recommendations for adaptive management of the MPA network following the first ten years of MPA management and monitoring. While many of the elevated recommendations are laudable beyond the few highlighted here, the following are particularly pertinent to consumptive user groups.

- Build tribal capacity to participate in MPA management activities.
- Create a clear pathway to tribal MPA management.
- Improve state agencies' tribal engagement and relationship building efforts.
- Apply what is learned from the first Decadal Management Review to support proposed changes to the MPA Network and Management Program.
- Evaluate the accessibility of MPAs to various community groups
- Develop a comprehensive community science strategy for MPAs and better utilize community science to supplement core monitoring programs.
- Develop a framework to evaluate and approve appropriate restoration and mitigation actions within MPAs and marine managed areas.
- Improve understanding of MPA Network effects on fisheries and fish stock sustainability and further integrate MPA monitoring data into fisheries management.
- Further integrate influencing factors into ecological and human study designs and interpretations of MPA performance.

We would like to highlight the following recommendations from Appendix A that were included in the Decadal Review Report, but not selected by CDFW to be prioritized for the next decade of the adaptive management cycle. We feel there are many valid recommendations provided by members of the public, the fishing community, tribes, and various other stakeholders that are left out of CDFW's "streamlined and elevated recommendations to prioritize."

- Conduct annual engagement meetings with stakeholders to inform them about MPA Management Program activities that inform decadal reviews.
- Define clear management reporting goals, including the scale of reporting at the statewide, regional, or local scale.
- Allow take of some migratory and pelagic species in select MPAs that currently do not allow it.
- Determine who may be disenfranchised from MPAs and ensure that MPAs do not unfairly limit access and/or opportunity.
- Improve CDFW's ocean sportfishing web map by making it accessible offline and without a cell signal. Add a notification feature to alert users when they enter an MPA.

- Integrate MPA information into commonly used travel apps such as Google Maps, TripAdvisor, and State Parks OuterSpatial.
- Research opening MPAs on a rotating basis for specific fisheries and continue monitoring for abundance and biodiversity in open and closed areas.
- Consider eliminating MPAs (or modifying them to allow limited take) when no-take MPAs do not provide evidence for improving abundance and biodiversity after credible monitoring.
- Explore and consider opportunities to nominate and designate new State Water Quality Protection Areas that provide additional water quality protections in MPAs.
- Analyze landings in pounds before and after MPA implementation for fisheries that have been identified as impacted by the MPAs.
- Consider amendments to water quality control plans and policies to further protect and improve ocean water quality and marine habitat.

While we remain enthusiastic about the suite of elevated recommendations, and optimistic about some of the additional recommendations put forth in Appendix A, we suggest several additional recommendations to the Department of Fish & Wildlife and the Fish & Game Commission to achieve the stated goals of the MLPA and to ensure robust support for the MPA network and the 30x30 initiative. While the MLPA does not include the regulatory authority to control water quality, it is imperative that state agencies managing the MPA network work to improve coordination with the State Water Quality Control Board and local counties to improve water quality along the coast. Expanding and upholding Areas of Special Biological Significance (ASBS) and State Water Quality Protected Areas (SWQPA) is essential to maintain clean waters and healthy ecosystems within MPAs since many MPA boundaries do not already qualify for these additional water quality protections. In California, hundreds of millions of gallons of raw sewage have been released into the ocean since the MLPA was passed and many millions of those gallons have been within MPAs or close to MPA boundaries. Within LA County alone, in 2021, 25 million gallons of sewage were released into the ocean from easily preventable infrastructure failures, and in January of 2023, 62 million gallons were released into Bay Area waterways.¹ Increasing coordination across agencies and management of pollutants is essential to ensuring robust and resilient fisheries and biodiverse ecosystems. We hope to see additional cooperation, monitoring and resources from the MPA Management process to address this systemic problem along the California coast.

Active management and stewardship of our natural resources is essential to ensuring healthy ecosystems in the face of human disturbance and climate disruption. We encourage managers of the MPA network to promote, plan and execute hands on restoration and stewardship of MPAs and to utilize and leverage the grassroots resources of the fishing community and volunteer networks where possible. For example, purple urchin (*Strongylocentrotus purpuratus*) populations increased 60-fold in 2015 along numerous stretches of the central and Northern California coast, and their numbers have continued to increase², yet culling has not been permitted within MPAs, despite promising scientific research regarding culling at Tankers reef in Monterey. Due to the “physiological and dietary plasticity” of purple urchins and their ability to endure long after primary food sources are gone, purple urchin barrens can persist for decades after kelp forests are extirpated. Research has shown that removal of purple urchin barrens can be an effective tool to help recover decimated kelp forests which are essential to the health of the overall ecosystem, especially the abalone and red urchin fisheries.³ We encourage MPA managers to permit and promote active restoration of MPA sites where applicable and to incorporate the angling and diving community as much as possible to achieve management objectives.

Spillover and the positive impacts to fisheries located in waters adjacent to MPAs are often referenced in association with the MPA network, and the initial science has demonstrated some strong positive correlations with spillover of invertebrates like lobsters to adjacent fishing grounds in select study areas. However, there remains an opportunity to further study this hypothesis and to promote scientific research

¹ <https://www.kqed.org/news/11938273/our-worst-nightmare-as-storms-raged-millions-of-gallons-of-sewage-spilled-into-bay-area-waterways-streets-and-yards>

² Rogers-Bennett, L., Catton, C.A. Marine heat wave and multiple stressors tip bull kelp forest to sea urchin barrens. *Sci Rep* 9, 15050 (2019). <https://doi.org/10.1038/s41598-019-51114-y>

³ Rogers-Bennett, L., Catton, C.A. Marine heat wave and multiple stressors tip bull kelp forest to sea urchin barrens. *Sci Rep* 9, 15050 (2019). <https://doi.org/10.1038/s41598-019-51114-y>

that successfully documents spillover of targeted finfish across the MPA network. Some data from MPA monitoring along the Central California Coast indicated limited evidence of spillover from targeted finfish that were tagged and recaptured at a later point during the study period as evidenced from the Starr et al study: Variation in Responses of Fishes across Multiple Reserves within a Network of Marine Protected Areas in Temperate Waters:

As of July 2014, a total of 251 individual tag recaptures have been reported (Table 8). Tagged fishes were recaptured by commercial and recreational hook-and-line fishermen, commercial trap fishermen, SCUBA divers, and during our fishing surveys. Of all the tagged fishes recapture and reported, 71% were recaptured in the same site and grid cell as they were released, and 22% of recaptured fishes were caught within the same site but outside the original grid cell where they were released. Only 18 fish, or 7% of the recaptured fishes, were recaptured beyond the boundaries of the MPA or REF site in which they were released. The mean net distance moved by eight of nine species recaptured was less than half the length of the MPAs we studied.⁴

While we do not seek to draw conclusions regarding the overall merits of spillover to adjacent fisheries from the results of one study, we do encourage additional research to evaluate the impacts that MPAs have on local fisheries and fisheries as a whole, especially within the context of varied siting and disparate habitat types evidenced across the MPA network. Additional analysis and modeling of larval transport will also help MPA Managers to understand the extent of spillover and how the MPA network operates as a whole. As the Forcada study indicated, “We conclude that spillover effects are not a universal consequence of siting MPAs in temperate waters and they are related to the distribution of habitats inside and around MPAs.” (Forcada et al., 2009).

Understanding how spillover and larval transport occur across the spectrum of MPA habitat types will improve fisheries management and help to guide policies that balance biomass, species diversity and access for sustainable harvest. Improving our understanding and management of spillover and larval transport in various habitat types should also help to improve overall fisheries health and improve harvest rates. According to the DMR,

The aggregate CDFW data on estimated statewide catch from both private boat and CPFV anglers indicates that total catch has risen and fallen, but no consistent trend is apparent from 2006-2021, despite MPA implementation and various other changes in fishing regulations during this time (Figure 4.7). While district-level estimates of recreational catch and effort remain the priority for CDFW, work is underway to make the fine scale spatial data collected through CRFS available to inform management. Future analyses using catch location may reveal spatial shifts in fishing activity following MPA implementation.

We applaud the work of CRFS citizen scientists and are enthusiastic to see continued commitment to integrating CRFS data into adaptive management strategies. We also encourage expanded opportunities for citizen science data collection, especially with shore-based anglers and divers.

While the MPA network may benefit certain species, increase biomass and provide resiliency against a changing climate, these laudable goals and conservation benchmarks should not preclude access to harvest coastal resources where state and federal fisheries managers have demonstrated robust and resilient fisheries stocks without any current threat of overfishing or for those species where a targeted fishery and active management would benefit the overall ecosystem balance. Anglers and consumptive users will often be one of the first and loudest voices to advocate for restrictions or even closures to ensure the sustainability of a fishery, as evidenced by the numerous fishing groups and organizations advocating for the closure of the 2023 salmon season following the data and dismal projections provided by the Pacific Fisheries Management Council and CDFW this year. However, a Californian constitutional right to fish seems to stand in conflict with the presumption that restriction of access is permissible where

⁴ Starr RM, Wendt DE, Barnes CL, Marks CI, Malone D, et al. (2015) Variation in Responses of Fishes across Multiple Reserves within a Network of Marine Protected Areas in Temperate Waters. PLOS ONE 10(3): e0118502. <https://doi.org/10.1371/journal.pone.0118502>

there is a lack of scientific evidence or data to justify the closure. Section 1, Article 25 of the California Constitution states, “the people shall have the right to fish upon and from the public lands of the State and in the waters thereof,” and the courts in *re Quinn* (1973) defined “public lands of the state” referenced in this article to include “access to fish in the inland streams and coastal waters of the state.”

Shore fishing, diving/spearfishing, kayak/boat fishing and coastal gathering are activities that reflect the broad spectrum of California’s diverse community and constitute a valuable resource for individuals across the economic divide to access nature and provide food for their families at the same time. We encourage state agencies and MPA managers to consider the numerous communities that enjoy the state’s many sustainable food resources when considering protections and recommendations that might unnecessarily exclude these groups. We feel that these considerations are in line with the California Natural Resources Agency’s Outdoors for All initiative and its commitment in the Pathways to 30x30 document to “implement projects that do no further harm or pose unintended consequences to historically marginalized communities.”⁵ Specifically, we wish to highlight this issue with regards to the potential expansion of California’s MPA network which might restrict shore-based diving, foraging, and fishing access for all Californians – especially historically marginalized communities, communities of color and Native American tribes. From California’s Constitutional Right to Fish:

Anglers from historically marginalized communities may be less able to travel to fishing locations and are more likely to require shore access, as opposed to access from a boat. Anglers in communities like this need accessible shore-fishing, particularly given the importance of subsistence fishing in poorer communities. Moreover, fishing opportunities offer physical and psychological benefits to disadvantaged communities, not just access to fish as food.⁶

Scientific research and monitoring of the MPA network has helped to model and provide a better understanding of our ocean’s chemistry, composition, and fisheries. Anglers, conservationists, and preservationists alike celebrate this laudable accomplishment. Numerous studies have begun to yield valuable information about the impact of MPAs on fish biomass, biodiversity and more, however, large data gaps still exist that are essential to steering the long-term success of the network and support from coastal communities. While preliminary research suggests that fish and invertebrate biomass may be larger in some MPAs compared to reference sites, especially in the South Coast region, there remains a gaping lack of research and comparison between limited take and no-take MPAs, and this important disparity is scarcely referenced or addressed in the DMR. Furthermore, little has been said or brought forth regarding the great variance in methods of take allowed within limited-take MPAs, with no apparent effort from MPA managers to standardize or analyze efficacy of the regionally varied approaches. For instance, the DMR states:

Large data gaps exist in the human domain of the social-ecological system that defines the MPA Network. There are few human-focused studies that evaluate information related to MPAs over as large a geographic area as the California coast. Research with a social-ecological focus has only recently come to the forefront of MPA science and evaluation and been prioritized by the state. Furthermore, integrating MPA effects on fisheries and the fishing community continues to be a challenge because most fishery-dependent data is collected at a much coarser spatial scale relative to the size of California’s MPAs. California has the opportunity to be a leader in this field, and the next decadal management cycle will aim to more effectively balance the human and ecological domains.

While we agree with this statement from the body of the DMR, we feel it should be further emphasized in table 6.1 of elevated recommendations. We agree with the recommendation #12 from table 6.1, to “invest in improving understanding of the human dimensions of MPAs and develop a human dimensions working group and research agenda.” However, we feel that further analysis of angler type and methods of take should be incorporated into the suggested management actions listed alongside this

⁵ https://resources.ca.gov/-/media/CNRA-Website/Files/Initiatives/30-by-30/Final_Pathwaysto30x30_042022_508.pdf

⁶ Coats, Francis, and Karrigan Bork. “CALIFORNIA’S CONSTITUTIONAL RIGHT TO FISH.” *Environmental Law*, vol. 51, no. 4, 2021, pp. 1085–147. *JSTOR*, <https://www.jstor.org/stable/48647570>. Accessed 22 Mar. 2023.

recommendation.

In the draft Pathways to 30x30 document, the CNRA writes: “It should be noted that limited-take State MPAs provide an excellent model for other jurisdictions looking to balance biodiversity conservation with sustainable well-managed commercial and recreational fishing.” While we agree that some SMCAs provide a potential model for future conservation designations, it is important to note the vast disparity between the regulations across SMCAs and to highlight how certain local restrictions can disproportionately impact divers and shore-based anglers, among others. For example, there are some locations where shore-based angling is not permitted, such as the Point Dume SMCA, yet the regulations state “the recreational take by spearfishing of white seabass and pelagic finfish is allowed.” However, there are additional examples of SMCAs that only allow for take of finfish by hook and line from shore such as the Greyhound Rock SMCA, thus excluding spear fishers. Other models such as the San Diego-Scripps Coastal SMCA only allows for the take of coastal pelagic species (bait fish) by hook and line. A final SMCA example is the Crystal Cove State Marine Conservation Area where the regulations state: “the recreational take of finfish by hook-and-line or by spearfishing, and spiny lobster and sea urchin is allowed.” This still leaves out a number of marine species commonly harvested by recreational anglers and foragers for food but includes greater access for individuals to fish or dive according to the method that best suits them. We hope the Decadal Review process and the next adaptive management cycle can expand some of the recreational methods of take within select MPAs so long as the proposed expansions are supported by the laws and the entities tasked with managing fisheries including the regulatory process established by the Magnuson-Stevens Fishery Conservation and Management Act working through the Pacific Fisheries Management Council, NOAA Fisheries, the CDFW, the Fish & Game Commission and the additional state/federal laws and agencies dedicated to this task.

There are few individuals more passionate about ocean conservation issues and the sustainable management of our precious coastal resources than the 350,000 supporters of our non-profit organization, Backcountry Hunters & Anglers. Science-based management of our fish, wildlife, waters and wild places is something many of us have dedicated our lives to. We are enthusiastic about the State’s commitment to conserve our vital resources and excited to work with tribes, MPA managers, state agencies and partner organizations to implement enduring coastal conservation measures that are not only in accordance with the stated objectives of the MLPA but also sustain our longstanding North American traditions of coastal fishing and foraging; and perhaps most importantly, we encourage policies that pay homage to the original stewards of our coastal resources, the tribes that inhabited this land long before us. We look forward to engaging with the Fish and Game Commission to work towards these important goals and to ensure sustainable fisheries for generations to come.

Sincerely,

Devin O’Dea
California Chapter Coordinator
Backcountry Hunters & Anglers

