

**Petition to Increase Level of Protection and Streamline Enforcement
for Several California State MPAs**

Joint Submission by Environment California and Azul

PETITION NARRATIVE

Overview

In order to advance the goals of the California Marine Life Protection Act (MLPA) and better protect our ocean and coastal resources into the future, this petition seeks to increase the level of protection and help to improve enforceability for three state MPAs. We request that the CA Fish & Game Commission: 1) upgrade Point Buchon State Marine Conservation Area (SMCA) to a no-take State Marine Reserve (SMR) to streamline and enhance enforcement and compliance and increase protection in the face of future stressors, and 2) modify the regulations of Farnsworth Bank Onshore SMCA and Farnsworth Bank Offshore SMCA to allow only for recreational spearfishing to take place within their boundaries, in order to better protect this highly sensitive, rare, and valuable ecosystem. There may be additional state MPAs in need of similar action, and we encourage the state to do its own analysis to identify existing MPAs in need of enhanced biodiversity conservation, streamlined enforcement, and increased ease of compliance.

Enforcement & compliance within California MPAs

The success of any MPA relies on effective enforcement and community support and understanding of regulations. A global synthesis of MPA outcomes identified being well-enforced as one of the five essential features predicting MPA success around the world (Edgar et al. 2014). Further, one of the explicit goals of the MLPA is to “ensure California’s MPAs have...adequate enforcement” (Goal 5, California MLPA).

However, despite laudable investment in enforcement, outreach, and education from the state, there is a high level of illegal fishing and other FGC violations occurring in and near some of California’s MPAs (California Statewide Compliance Forum 2022). The MPA Collaborative Network held over 15 virtual and in-person public fora gathering over 500 stakeholders from 2019 to 2020 to discuss MPA compliance concerns and to brainstorm ideas to address those concerns. The Forums found that compliance is particularly compromised in areas with confusing regulations, boundaries, or jurisdictions. Public awareness and understanding of MPA regulations is crucial for compliance, and confusing regulations and a lack of understanding of restrictions can contribute to unintentional violations. While some of California’s State Marine Conservation Areas (SMCAs) have limited take allowances and provide a relatively high level of conservation value to most species, other SMCAs currently have extensive and confusing regulations, and several are paired with onshore no-take State Marine Reserves (SMRs) to form an MPA cluster – making it even more difficult for stakeholders to understand the two most

important compliance-related questions for MPAs: where are they, and what do they allow?¹ Proposed stakeholder solutions include potential regulatory changes for fishing and other activities along the coast, as well as greater investment in education and outreach.

Complicated regulations also make it exceedingly difficult for law enforcement officers or the public monitoring these areas to visually assess whether a vessel's occupants are complying with on-the-water regulations. For instance, if an officer sees a vessel in an SMCA using rod and reel gear where fishing for some pelagic species is allowed but fishing for other species is prohibited, it is virtually impossible for that officer to tell whether the boaters are complying without boarding the vessel to assess the boaters' catch. This only increases the amount of time, resources, and dollars necessary to ensure compliance in these areas, as California's enforcement officers also contend with limited staffing and budgets (Murray and Hee 2019). The same is true around the world – in fact, research has shown that areas with a mixture of partial and full protection are up to twice as expensive to manage than a simpler, fully protected area (Ban et al. 2011).

Higher levels of protection lead to greater benefits

Since the California MPA network's creation, extensive peer-reviewed research has underscored the differences in outcomes between strongly and lightly protected marine areas. We now know that highly and fully protected areas – those where little to no extractive or destructive activities are permitted – provide the greatest ecological and conservation benefits (Grorud-Colvert et al. 2021). For instance, one meta-analysis of global MPAs found that fish biomass in fully protected (“no-take”) MPAs is 343% higher than in partially-protected MPAs (Sala & Giakoumis 2018). Another global analysis found that weakly regulated areas showed minimal ecological benefits, while highly to fully protected areas showed higher abundance and biomass of commercially important species (Zupan et al. 2018). Similarly, a 24-year long timeseries of catch data in Kenya found that per-person daily catches increased 25 times faster in waters around fully protected MPAs than in areas that regulated fishing gear only (McClanahan 2021). In addition, fully protected areas have been shown to provide stronger climate adaptation and resilience benefits than lightly protected areas (Roberts et al. 2016). Finally – and importantly – an assessment of ecological effectiveness and social perceptions of MPAs in southern Australia found that partially protected areas had no more fish, invertebrates, or algae than unprotected areas; were poorly understood by coastal users; were not more attractive than unprotected areas; and were not perceived to have better marine life than unprotected areas. In addition, the fully protected areas were not only more effective ecologically, but were perceived more positively by local communities and visitors and assigned a higher value by local communities and visitors (Turnbull et al. 2021).

¹ The MPA Collaborative Network's Vetted Regulation Recommendations cite many instances where confusing boundaries and regulations are leading to unintended violations or accidental poaching in SMR/SMCA complexes. For examples, see lines 22, 37, 43, 47, 50, 51, 54, 55, 58, 62, 63, 65, 66, 71, 87, 90, 92, 97, 99, 104, 133, 145, 146, 148, 154, 155, and 165.

With coastal and marine ecosystems facing growing threats related to climate change, increased human use, new ocean uses, and infrastructure projects such as offshore wind and aquaculture, significant improvements to the existing MPA network are warranted to better protect our ocean and coastal resources into the future. Governor Newsom recently set the goal of protecting 30% of lands and coastal waters by 2030 ('30x30'), which was codified with the passage of SB337 in 2023. However, the area protected within the statewide MPA network represents far below 30% of our state waters. Only 12% of state waters are covered in highly to fully protected areas, and an additional 4% is covered in lightly protected areas that allow considerable human impacts within their boundaries. In total, only 16% of state waters are currently protected within an MPA. As the state works to achieve its 30x30 goal, the FGC and other agencies should consider where increases in the level of protection offered by existing California MPAs are warranted, to ensure the network is able to provide the best ecological and social outcomes possible.

Proposed regulation changes for California SMCA with compliance issues and low levels of protection

Point Buchon SMCA

Point Buchon SMCA is located eight miles south of Morro Bay in San Luis Obispo County. It is part of an onshore-offshore pair of adjoining MPAs covering almost 19 square miles of rocky reefs, sandy seafloor and beaches, kelp forests, rocky intertidal areas, and offshore pinnacles. The adjoining no-take marine protected area, Point Buchon State Marine Reserve, covers the inshore portion of the MPA complex from the mean high tide line to the halfway point between the coast and the state waters limit. Point Buchon SMCA sits offshore of the SMR and encompasses more than 12 square miles of waters that range from about 200 to 400 feet deep.

Compliance with Point Buchon's regulations appears to be very low. The California Compliance Forum in San Luis Obispo cited "a high level of illegal offshore fishing and squid boats in the Point Buchon MPAs", and the Decadal Management Review revealed Point Buchon SMCA had the third highest number of violations for MPAs in Central Coast region over past decade ([DMR Report](#)). In 2022, it was listed among the top 10 MPAs with the highest MPA violations across the entire state ([Committee Staff Summary for July 20, 2023 MRC Meeting](#)).

At the same time, the potential for non-fishing impacts to the area are increasing. The Morro Bay Wind Energy Area (WEA) lies in the federal waters just outside of the Point Buchon SMCA, and the Bureau of Ocean Energy Management recently issued two leases for offshore wind development in the Morro Bay WEA. These offshore wind farms are anticipated to transmit power via undersea cables that connect with onshore power terminals, potentially at the nearby Diablo Canyon Power Plant located just outside the southern boundary of Point Buchon SMR. Offshore wind construction and operations are expected to impact the marine environment through increased ocean noise, the introduction of electromagnetic fields, alterations to existing habitats and hydrodynamics, and the possible release of contaminants (NOAA Fisheries). While the state of California is working closely with the federal government to minimize environmental

impacts, the region, and the Point Buchon SMR/SMCA complex, will experience some level of impact related to the development of heavily industrialized renewable energy projects. By minimizing ecosystem stressors, fully protected areas provide maximum resilience and greater opportunity to identify the cause of ecosystem impacts (Grorud-Colvert et al. 2021).

Current regulations

Point Buchon SMCA currently allows for recreational and commercial salmon and albacore fishing within its boundaries. The current regulations read as follows:

“It is unlawful to injure, damage, take, or possess any living, geological, or cultural marine resource, EXCEPT:
Recreational and commercial take of salmon and albacore is allowed.”

California’s salmon fishery has experienced significant challenges due to the proliferation of dams, the loss of wetlands and estuaries, and recently, prolonged drought and increased warming that affects freshwater habitat. As a result, the entire fishery was closed in 2023. Sport fishing for albacore is largely centered from the California Channel Islands south to Ensenada. Given these circumstances, converting the Point Buchon SMCA into an SMR would provide full no-take protection for this important area with de minimis impacts to fishing activity.

In addition, the boundary between the SMCA and SMR is oriented as a diagonal line that runs parallel to the coastline. The headlands of Point Buchon hide the southeast corner of the SMCA/SMR complex from view from the north, allowing for poaching to occur more easily in the SMR. Enforcement officers patrolling the busier, more heavily trafficked waters to the north of the point aren’t able to see fishing boats that enter the SMR via the southeast corner of the SMCA, and unless enforcement officers take the time to cross the point to patrol this area specifically, vessels are able to fish in the SMR without being detected.

Proposed regulation change

We propose merging the Point Buchon SMR/SMCA complex into a single State Marine Reserve, creating a more enforceable protected area able to confer greater conservation benefits consistent with its intended role as an “anchor” protected area in the Central Coast region. The new, proposed regulations would reflect those of Point Buchon SMR, and would read as follows:

“It is unlawful to injure, damage, take, or possess any living, geological, or cultural marine resource.”

We also strongly recommend the state revisit installing a camera near the flagpole looking south at Point Buchon. A camera or the M2 radar system could inform officers and help address offshore poaching regularly occurring there.

Socioeconomic impacts

As mentioned above, the Point Buchon SMCA currently allows for the recreational and commercial take of salmon and albacore. While it is possible there may be very minor short-term economic impacts associated with closing the area depending on the level of albacore fishing conducted within the existing SMCA, they are expected to be negligible. Salmon fishing is presently closed for all state waters, and the extremely poor status of salmon stocks no longer appear to support specific allowances in the state's MPA network. In addition, we argue that the long-term benefits provided by an increased level of protection and streamlined enforceability for this area will outweigh the short-term costs, especially in the face of climate change, increasing ocean uses and competition, and potential impacts from offshore wind development.

Historical context and intent

The Point Buchon SMR/SMCA complex was placed near the Diablo Canyon Power Plant to align with the no-fishing zone already surrounding the power plant, thereby limiting the negative socio-economic effects on the local fishing community. The state decided to split the Point Buchon MPA into an onshore SMR and an offshore SMCA to minimize the impacts on recreational fishing in the area, allowing for recreational salmon fishing within the SMCA.

One of the objectives of the Point Buchon SMR/SMCA complex is to "Protect ecosystem structure, function, integrity and ecological processes...from disturbances both natural and human induced". In light of increased impacts from nearby offshore wind development areas, stronger protections are warranted for this MPA complex to continue meeting stated objectives.

Farnsworth Onshore and Offshore SMCAs

The Farnsworth Onshore/Offshore SMCA complex is located on the windward side of Santa Catalina Island, a little more than 20 miles south-southwest of the Southern California mainland. This SMCA complex protects a series of pinnacles and underwater mountains known as Farnsworth Bank, which is one of only four known locations of a rare purple hydrocoral and is a well-known, exceptional location for advanced SCUBA diving and underwater photography. Farnsworth Onshore SMCA also provides critical habitat for the endangered black abalone, which dwells in the intertidal zone, and the endangered white abalone, which inhabits the deeper, subtidal zone. The full SMCA complex protects the unique cooler water, wave-exposed portions of the "east islands" bioregion and includes a high diversity of productive, relatively high-exposure habitats, productive nearshore reefs and a wider shelf than found on the leeward side of Catalina Island.

Both SMCAs allow for several gear types and species to be targeted, with some slight differences between the two areas. The regulations themselves and also the regulation differences are challenging to understand, creating confusion and unintentional regulation violations. Commercial passenger fishing vessels (also known as "party boats") are also often

seen illegally fishing in Farnsworth Onshore SMCA, moving out if they see a patrol boat approaching ([MPA Collaborative Network's Vetted Regulation Recommendations](#) lines 146 & 147).

Current regulations

These SMCAs are currently “minimally protected” according to the MPA Guide framework (Grorud-Colvert et al. 2021), due to the substantial number of gear types allowed and species targeted. The regulations for Farnsworth Onshore SMCA are currently as follows:

“It is unlawful to injure, damage, take, or possess any living, geological, or cultural marine resource, EXCEPT:

Recreational take of market squid by hand-held dip net; white seabass and pelagic finfish (northern anchovy, barracudas, billfishes, dorado (dolphins), Pacific herring, jack mackerel, Pacific mackerel, salmon, Pacific sardine, blue shark, salmon shark, shortfin mako shark, thresher shark, swordfish, tunas, Pacific bonito, and yellowtail) by spearfishing; and marlin, tuna and dorado by trolling is allowed.

Commercial take of coastal pelagic species (northern anchovy, Pacific sardine, Pacific mackerel, jack mackerel, and market squid) by round-haul net, brail gear, and light boat; and swordfish by harpoon is allowed (no commercial take of marlin is allowed). Not more than five percent by weight of any commercial coastal pelagic species catch landed or possessed shall be other incidentally taken species.”

The regulations for Farnsworth Offshore SMCA are currently as follows:

“It is unlawful to injure, damage, take, or possess any living, geological, or cultural marine resource, EXCEPT:

Recreational take of market squid by hand-held dip net; white seabass by spearfishing; pelagic finfish (northern anchovy, barracudas, billfishes, dorado (dolphins), Pacific herring, jack mackerel, Pacific mackerel, salmon, Pacific sardine, blue shark, salmon shark, shortfin mako shark, thresher shark, swordfish, tunas, Pacific bonito, and yellowtail) by hook-and-line or spearfishing, and marlin, tuna and dorado by trolling is allowed.

Commercial take of coastal pelagic species (northern anchovy, Pacific sardine, Pacific mackerel, jack mackerel, and market squid) by round-haul net, brail gear, and light boat; and swordfish by harpoon is allowed (no commercial take of marlin is allowed). Not more than five percent by weight of any commercial coastal pelagic species catch landed or possessed shall be other incidentally taken species.”

The difference between the two is almost impossible to detect, leading to confusion about what is and isn't permitted, increasing chances of accidental violations, and possibly acting as a disincentive for law enforcement officers to enforce these MPAs and/or prosecutors to pursue these cases.

Proposed regulations

To simultaneously streamline regulations, increase the level of protection for this ecologically significant site, and honor the original intent of the SMCA complex to allow for recreational use, we propose adjusting the regulations for both SMCAs to allow only for recreational take via spearfishing. Spearfishing is a relatively low-impact activity that, with close attention to buoyancy and best practices, has a low likelihood of interaction with bottom habitat. The new, proposed regulations for both SMCAs (effectively merging them into one) would read as follows:

“It is unlawful to injure, damage, take, or possess any living, geological, or cultural marine resource, EXCEPT:

Recreational take of white seabass and pelagic finfish (northern anchovy, barracudas, billfishes, dorado (dolphinfish), Pacific herring, jack mackerel, Pacific mackerel, salmon, Pacific sardine, Pacific bonito, and yellowtail by spearfishing.”

Socioeconomic impact

We acknowledge that closing this area to non-recreational spearfishing may have some impact on the commercial market squid fishery and recreational sportfishing. However, the risk of damage to this highly sensitive ecological area is too high to allow even for pelagic fishing activities, which can result in bottom disturbance and bycatch. For instance, party boat patrons have often been observed dropping weighted lines that interact with bottom habitat in the Onshore SMCA (pers. comms with local recreational fisher wishing to remain anonymous). Further, these proposed regulation changes strongly align with and help to promote the high intrinsic and recreational value of the area, improving the safety and quality of recreation for divers, underwater photographers, and spearfishers.

Historical context and intent

This area has been protected since 1973, when the California Fish and Game Commission designated Farnsworth Bank an ecological reserve. During the MLPA planning process, a much larger SMR protecting Farnsworth Bank was proposed in order to fully protect Farnsworth Bank and a variety of other ecologically important features nearby, such as the deep water squid spawning habitat. While CDFW’s Feasibility Analysis deemed that this historical proposal met feasibility criteria, the state decided upon the smaller onshore/offshore SMCA complex currently in place, with the intent of balancing conservation with recreational and commercial use. This pair of SMCAs are considered “backbone MPAs” for the backside of Catalina Island.

Relevance to MLPA Goals and DMR Recommendations

The changes proposed in this petition strongly align with [Goals 1, 2, and 5 of the Marine Life Protection Act \(MLPA\)](#). Notably, the first finding of the MLPA is: "2851. The Legislature finds and declares all of the following: (a) California’s marine protected areas (MPAs) were established on a piecemeal basis rather than according to a coherent plan and sound scientific guidelines. Many of these MPAs lack clearly defined purposes, effective management measures and enforcement. As a result, the array of MPAs creates the illusion of protection while falling far short of its potential to protect and conserve living marine life and habitat." Ten years later,

California's MPA network is no longer piecemeal, yet current MPAs with unduly complicated regulations risk this very same problem.

By increasing the level of protection for several minimally and lightly protected MPAs, the state will enhance the protection of marine life as well as the structure, function, and integrity of marine ecosystems, and will enhance these MPAs' ability to sustain, conserve, and protect marine life populations, including those that are commercially valuable. By streamlining regulations for these SMCAs, the state will help to ensure that California's MPAs are adequately enforced.

In addition, this petition helps to advance DMR Recommendation 4.b.) "Identify and utilize best science-based approaches to inform potential changes to the MPA Network in order to enhance Network performance." Since the creation of the MPA network, a decade of scientific peer-reviewed research from around the world has shown that highly to fully protected areas provide the greatest benefits for biodiversity conservation, and that partially protected areas only hinder enforcement, public understanding, and conservation outcomes.

In the face of growing threats related to climate change and increased human use, the state has the opportunity now to improve and enhance our MPA network to better protect our ocean and coastal resources into the future for generations to come.

Bibliography

- Edgar, Graham J., et al. "Global Conservation Outcomes Depend on Marine Protected Areas with Five Key Features." *Nature*, vol. 506, no. 7487, 2014, pp. 216–220, <https://doi.org/10.1038/nature13022>.
- "Marine Life Protection Act." *CDFW*, <https://wildlife.ca.gov/Conservation/Marine/MPAs/MLPA>
- "California Statewide Compliance Forum", *MPA Collaborative Network*, 2022, <https://www.mpacollaborative.org/wp-content/uploads/2021/03/California-Statewide-Compliance-Forum-Report-Final-Reduced-1.pdf>
- Murray, Amantha. Hee, Tyler T. "A rising tide: California's ongoing commitment to monitoring, managing and enforcing its marine protected areas", *Ocean & Coastal Management*, Volume 182, 2019, 104920, ISSN 0964-5691, <https://www.sciencedirect.com/science/article/pii/S0964569119301206>
- Ban, Natalie C et. al. "Promise and problems for estimating management costs of marine protected areas" *Conservation Letters*, 2011, <https://conbio.onlinelibrary.wiley.com/doi/full/10.1111/j.1755-263X.2011.00171.x>
- Kirsten Grorud-Colvert *et al.* "The MPA Guide: A framework to achieve global goals for the ocean" *Science*, 2021, <https://www.science.org/stoken/author-tokens/ST-2/full>
- Sala, Enric. Giakoumi, Sylvaine . "No-take marine reserves are the most effective protected areas in the ocean", *ICES Journal of Marine Science*, Volume 75, Issue 3, 2018, Pages 1166–1168, <https://doi.org/10.1093/icesjms/fsx059>
- Zupan, Mirta. Et. al. "Marine partially protected areas: drivers of ecological effectiveness" *Frontiers in Ecology and the Environment*, 2018, <https://esajournals.onlinelibrary.wiley.com/doi/10.1002/fee.1934>
- McClanahan, Tim. R, "Marine reserve more sustainable than gear restriction in maintaining long-term coral reef fisheries yields", *Marine Policy*, volume 128, 2021, <https://www.sciencedirect.com/science/article/pii/S0308597X21000890?via%3Dihub>
- Roberts, Callum M. et. al. "Marine reserves can mitigate and promote adaptation to climate change", *PNAS*, Vol. 114. No. 24, 2017, <https://www.pnas.org/doi/abs/10.1073/pnas.1701262114>
- Turnbull, John W. et. al. "Evaluating the social and ecological effectiveness of partially protected marine areas" *Conservation Biology*, 2021, <https://conbio.onlinelibrary.wiley.com/doi/full/10.1111/cobi.13677>
- "Offshore Wind Energy: Protecting Marine Life", *NOAA Fisheries*, 2023, <https://www.fisheries.noaa.gov/topic/offshore-wind-energy/protecting-marine-life>