

March 14, 2025

Erika Zavaleta, President
California Fish and Game Commission
715 P Street, 16th Floor
Sacramento, CA 95817

Submitted electronically to fgc@fgc.ca.gov

RE: Amendments to Petition 2023-28MPA: Point Sal State Marine Reserve

Dear President Zavaleta and Honorable Commissioners:

In November 2023, Natural Resources Defense Council (NRDC) submitted petition 2023-28MPA to the Fish and Game Commission (FGC) proposing a new marine protected area (MPA) off the coast of Point Sal, to be named Point Sal State Marine Reserve (SMR).

With the ecological significance of the area in mind, we proposed regulations for the Point Sal SMR that are aligned with current State Marine Reserves: *“It is unlawful to injure, damage, take, or possess any living, geological, or cultural marine resource.”* Given the historic and contemporary importance of the region to the Chumash people, we also recommended that the state consult with local Indigenous communities and Tribes before designation to determine whether a State Marine Conservation Area with exemptions for cultural and subsistence use of relevant Indigenous communities and Tribes in the area is warranted.

Since January 2024, we have conducted extensive outreach with community members and interested parties to discuss the proposal and gather additional insights and information. These conversations have improved our understanding of the Point Sal region and provided a greater appreciation of the historical and contemporary significance of the area for Chumash peoples. Our discussions with local communities, Tribal members, and Tribal organizations in particular, informed our decision to amend the original petition submitted to the FGC.

Our decision to amend Petition 2023-28MPA to allow recreational take of finfish by hook-and-line from shore is in recognition of: 1) the importance of this area for federally and non-federally recognized Chumash peoples, and 2) the importance of the area for shore-based subsistence and sport fishers. We support having the option to rename the Point Sal State Marine Conservation Area with a Chumash place name after further consultation with Chumash Tribes in the region. While we explored options for renaming the proposed SMCA, we were unable to affirmatively determine an appropriate Chumash name in time for the amendment deadline.

We hope this amendment, informed by the additional insight and information gathered through our outreach efforts with local communities and interested parties, encourages the Commission to support the proposed Point Sal SMCA.

Thank you for your consideration.

Sincerely,

Sandy Aylesworth
Director, Pacific Initiative, Nature
Natural Resources Defense Council

Bella Sullivan
Next Wave Fellow
Natural Resources Defense Council

Petition to Designate a New State Marine Reserve at Point Sal, Central California
PETITION NARRATIVE

Point Sal is located in Santa Barbara County, California, roughly 50 miles (80 kilometers) to the northwest of Point Conception. The nearest city to Point Sal is Guadalupe, located about six miles to the northeast, and Vandenberg Space Force Base is located to the south. Known for its scenic beauty, rugged cliffs, and stunning ocean views, Point Sal is a relatively remote and undeveloped area along California's coastline. Its waters are home to rich biodiversity, productive oceanographic features, and intact food webs that are worth protecting. This petition calls for the designation of a new ~~State Marine Reserve~~ or State Marine Conservation Area allowing for cultural and subsistence use by Tribes and Indigenous communities in this area, to advance the goals of California's network of marine protected areas (MPAs) in the face of climate change and threats from increased human activities and threats in the future.

Goals

The overall goals of this new MPA are to 1) protect this rich and productive ecosystem and the biodiversity found within, 2) to protect this larval retention zone and the connectivity dynamics within the region, and 3) to enhance the climate resilience of the broader state MPA network.

Proposed boundaries

In keeping with state MPA design and feasibility guidelines provided by CDFW, the proposed area is bounded by the mean high tide line and straight lines connecting the following points in the order listed:

- a. 34.880667518 N lat. 120.726433061 W long. (SW corner)
- b. 34.929894739 N lat. 120.727488272 W long (NW corner)
- c. 34.930008197 N lat. 120.666597401 W long. (NE corner)
- d. 34.880979714 N lat. 120.639473286 W long. (SE corner)

The proposed boundaries were drawn to align with visible landmarks and natural geographies as much as possible, with the northern boundary beginning at Mussel Point, and the southern boundary drawn at the end of Brown's Beach. The eastern boundary aligns with the mean high tide line, and the western boundary extends out to the edge of state waters as recommended by state feasibility guidelines.

The proposed area is 14.22 square miles with an alongshore span of 3.2 miles, which meets the state's minimum size guidelines and design recommendations. The proposed area is located 19 miles alongshore from Point Buchon SMR/SMCA, the nearest MPA to the north, which meets the state's minimum spacing recommendations, and 6.5 miles from Vandenberg SMR, the nearest MPA to the south.

Ecological significance of the area

The coastal waters around Point Sal in California support a diverse and dynamic marine ecosystem. The rocky coast is home to abundant and rich tidepools. The kelp beds found in waters leeward of the point provide habitat for endangered Southern sea otters and many other kelp-associated species. The rocks and coastal habitats around the point provide critical roosting and foraging habitats for multiple species of seabirds. State waters surrounding the point are home to a variety of feeding and migrating marine mammals, including bottlenose and common dolphins, harbor porpoises, humpback and gray whales, California sea lions, harbor seals, elephant seals, and Steller sea lions.¹

An analysis of species, habitats, threats, and existing protections within the California Current found that the waters around Point Sal are among the top 5% in conservation value in the California Current.² Notably, the area remained within the top 5% regardless of whether conservation value was being measured utilizing the species richness index or the rarity index, with a significant portion of these areas falling into the top 2%. This region of California is also well-known as a marine biogeographic 'transitional zone' for ocean and coastal biota. Many species reach the southern or northern limits of their ranges here, making it an important biogeographic boundary along California's coast.³

The nutrient-rich waters in this region support a productive food web. Upwelling, where nutrient-rich deep waters rise to the surface, enhances primary productivity, providing ample food resources for a variety of marine organisms, from plankton to larger predators. A krill hotspot⁴ and Biologically Important Area (BIA) for blue whale foraging are located just outside the proposed area,⁵ indicating that these waters are productive enough to support feeding blue whales, which ingest up to 16 tons of krill per day.⁶ The state waters within the proposed area are home to several other BIAs for marine mammal species, including a BIA for humpback whale foraging, a BIA for migrating gray whales, and BIA for resident harbor porpoises.⁷

Lion Rock haul out and roosting site

Lion Rock, located off the southern coast of Point Sal, is an important haul out site for sea lions and other marine mammals. As many as 883 sea lions have been observed on the rock on a

¹ Condor Environmental Planning Services, "Point Sal Reserve Revised Management Plan" (Santa Barbara County Parks Department, July 2002), <https://ryono.net/pointsal/ptsalreserve.pdf>.

² Nathan Elliott et al., "Assessment of Marine Protected Areas in the California Current" (Petaluma, CA: Point Blue, June 5, 2020), https://www.pointblue.org/wp-content/uploads/2020/09/MPA-Assessment_Final.pdf.

³ Ronald S. Burton, "Intraspecific Phylogeography Across the Point Conception Biogeographic Boundary," *Evolution* 52, no. 3 (June 1998): 734–45, <https://doi.org/10.1111/j.1558-5646.1998.tb03698.x>.

⁴ Jarrod A. Santora et al., "Mesoscale structure and oceanographic determinants of krill hotspots in the California Current: Implications for trophic transfer and conservation," *Progress in Oceanography* 91, no. 4 (December 2011): 397–409, <https://doi.org/10.1016/j.pocean.2011.04.002>.

⁵ National Oceanic and Atmospheric Administration, "Biologically Important Area Map," Web map, Cetacean & Sound Mapping, accessed November 20, 2023, <https://cetsound.noaa.gov/biologically-important-area-map>.

⁶ Matthew S. Savoca et al., "Baleen Whale Prey Consumption Based on High-Resolution Foraging Measurements," *Nature* 599, no. 7883 (November 2021): 85–90, <https://doi.org/10.1038/s41586-021-03991-5>.

⁷ NOAA, "Biologically Important Area Map."

single day, and the site is also occasionally used by Steller sea lions and elephant seals.⁸ Haulouts are critical to the behavioral cycles of foraging, resting, and breeding for pinnipeds. However, these species are highly sensitive to visual and auditory disturbance and will leave haulouts when they become stressed – even abandoning them permanently, if disturbances occur frequently. Undisturbed haulouts are thus necessary for the protection of these species. Given Point Sal's remote location, Lion Rock currently experiences little to no human-caused disturbance⁹ and may be one of the few remaining undisturbed haulouts along the busy California coastline – making it especially important for the conservation of these marine mammals.

Commented [S11]: discrepancy in spelling from "haul out". are these supposed to be different?

Lion Rock is also an important roosting site and breeding site for many seabird species. Roosting is a vital behavior for seabirds, providing essential rest, social interaction, protection, and nesting opportunities, thereby enhancing their energy conservation, reproductive success, and overall well-being in the dynamic marine environment. Seabirds like cormorants do not have oil-producing glands to help their feathers repel water, making roosting especially critical for these species to dry after foraging. Thousands of cormorants have been observed roosting on Lion Rock,¹⁰ and it is also a roost site of significant importance for Brown Pelicans, which until recently were listed as endangered species.¹¹ Finally, Lion Rock is a breeding site of growing importance for Brandt's cormorants, with as many as 14 breeding pairs observed on the rock in recent years.¹²

Connectivity and larval retention zone

Although wind-driven upwelling is a vital source of nutrients for California ecosystems, this large-scale offshore transport of coastal ocean water poses a significant challenge to larval stages of marine organisms that must recruit to coastal environments. Headlands, such as found at Point Sal, can help to mitigate this effect by slowing down or recirculating ocean currents, and research has shown waters on the leeward sides of coastal promontories or headlands provide refuge for fish and invertebrate larvae against offshore transport during upwelling events.¹³ These "larval retention zones" are critical for enhanced recruitment, and help to ensure that adult populations are supplied with larvae in recruitment-limited upwelling regions.¹⁴ Larval retention zones also serve as biological hotspots, where upwelling delivers

⁸ NMFS, NOAA, and Department of Commerce. Takes of Marine Mammals Incidental to Specified Activities; Taking Marine Mammals Incidental to Weapons Testing at Vandenberg Air Force Base; California. 87 FR 762 (Jan. 6, 2022). Available at <https://www.federalregister.gov/documents/2022/01/06/2022-00032/takes-of-marine-mammals-incidental-to-specified-activities-taking-marine-mammals-incidental-to>.

⁹ Dan Robinette, Sara Acosta, and Julie Howar, "Year 1 Results of Baseline Monitoring Within the Point Sur to Point Mugu Study Area of the Seabird Protection Network" (Petaluma, CA: PRBO Conservation Science, November 15, 2012).

¹⁰ Condor Environmental Planning Services, "Point Sal Reserve Revised Management Plan."

¹¹ Dan Robinette and Julie Lanser, "Brown Pelican Roost Utilization Along the Coastal Margin of Vandenberg Air Force Base, 2004" (Stinson Beach, CA: PRBO Conservation Science, May 3, 2006).

¹² Robinette, Acosta, and Howar, "Year 1 Results of Baseline Monitoring Within the Point Sur to Point Mugu Study Area of the Seabird Protection Network."

¹³ Amber J. Mace and Steven G. Morgan, "Larval Accumulation in the Lee of a Small Headland: Implications for the Design of Marine Reserves," *Marine Ecology Progress Series* 318 (August 3, 2006): 19–29, <https://doi.org/10.3354/meps318019>.

¹⁴ Ibid.

nutrients that then fuel phytoplankton growth and support marine food webs. This effect has been shown even for small headlands like Point Sal (e.g., Bodega Headland).¹⁵

Point Sal's leeward waters are known to serve as a larval retention zone in this stretch of the Central Coast. One study used seabird foraging rates as a proxy for juvenile fish recruitment to explore whether seabird foraging and geographic indicators can be used to identify larval retention zones, in order to help inform MPA network spatial design.¹⁶ The findings show that both long and short headlands—including Point Sal—lead to higher juvenile fish abundance, and that coastal orientation was an important determinant of juvenile fish abundance. Pelagic cormorant foraging rates were also found to be higher at south-facing coasts like Point Sal's compared to other coastal orientations. This is due to weaker offshore advection caused by coastal upwelling along south-facing coasts, and eddies forming in the lee of the south-facing coasts of embayments.¹⁷

This biological evidence for local retention zones is supported by physical oceanography data. Multiple studies of oceanographic currents in the area show that within the Santa Barbara Channel, ocean currents primarily run from east to west.¹⁸ Just north of Point Conception there is strong seasonal equatorward flow heading south. Around the area of Point Sal, the interaction of these westward and southward surface currents cause convergence.¹⁹ Additionally, the region experiences episodic periods of wind relaxation in the spring, leading to less vigorous upwelling with important biological consequences for larval retention and surface productivity.²⁰

Historical and cultural use

Point Sal holds significant cultural and historical ties to the Chumash people, who have inhabited the region for thousands of years.²¹ For instance, the Chumash village Axwin was located very close to the area.²² There is abundant evidence of Chumash occupation of Point Sal as recently as 250 years ago and as far back as 4,800 years ago. Rock rings where homes once stood, grinding stones, and other Chumash artifacts are easily visible. Human remains found at Chumash burial sites indicate that the diet of ~~ancient peoples~~ Indigenous peoples living

¹⁵ Ibid.

¹⁶ Dan Robinette, Nadav Nur, and Jaime Jahncke, "Spatial Patterns in Nearshore Juvenile Fish Abundance Throughout the California Network of Marine Protected Areas as Revealed by Seabird Foraging Rates," *California Cooperative Oceanic Fisheries Investigations* 60 (2019).

¹⁷ Ibid.

¹⁸ Clinton D. Winant, Edward P. Dever, and Myrl C. Hendershott, "Characteristic Patterns of Shelf Circulation at the Boundary between Central and Southern California," *Journal of Geophysical Research: Oceans* 108, no. C2 (2003), <https://doi.org/10.1029/2001JC001302>.

¹⁹ Sutara H. Suanda et al., "Wind Relaxation and a Coastal Buoyant Plume North of Pt. Conception, CA: Observations, Simulations, and Scalings," *Journal of Geophysical Research: Oceans* 121, no. 10 (2016): 7455–75, <https://doi.org/10.1002/2016JC011919>.

²⁰ Louis W. Botsford et al., "Effects of Variable Winds on Biological Productivity on Continental Shelves in Coastal Upwelling Systems," *Deep Sea Research Part II: Topical Studies in Oceanography*, The Role of Wind-Driven Flow in Shelf Productivity, 53, no. 25 (December 1, 2006): 3116–40, <https://doi.org/10.1016/j.dsr2.2006.07.011>.

²¹ Bureau of Land Management, "Point Sal," Visit Point Sal, accessed November 20, 2023, <https://www.blm.gov/visit/point-sal>.

²² King, Chester. *The Names and Locations of Historic Chumash Villages*. The Journal of California Anthropology, 12 Jan. 1975, escholarship.org/uc/item/8833s5k5

at Point Sal was high in marine protein, demonstrating the strong link between coastal peoples and marine resources.²³ There are many Chumash people who still live in the general area and come to Point Sal for a variety of reasons. Protecting the marine waters and coastal resources of Point Sal would help to recognize its value as a cultural heritage site that still contributes to the identity and sense of place for many of the tribe Indigenous people of Central California today.

Habitat

Since the creation of the California MPA network, a new dataset that allows for detailed delineation of the habitat categories used in the design of the MPA network for all California state waters has been completed and made available through the California State Mapping Program (CSMP). Using this dataset, we characterized the habitat types present in the area proposed for protection around Point Sal (Figure 1).²⁴

The proposed area is characterized by a large amount of sandy bottom, with some rocky substrate south of the point and in the northeast portion of the area (8.3% shallow (0-30m) rocky bottom, 41.9% shallow sandy bottom, 1.2% deeper (30-100m) rocky bottom, and 48.6% deeper sandy bottom). Kelp beds are present on the shallow rocky bottom substrate (personal communications, Dan Robinette), supporting numerous marine species like rockfish and sea otters.²⁵

Adding this area to the California state MPA network would increase the number of replicate sites for these four important habitat types, as recommended by the science-based guidelines for the MLPA planning process and recent peer-reviewed guidelines for the design of climate-smart MPA networks.²⁶

Land-sea connection

Coastal marine ecosystems are influenced by both ocean- and land-based activities. Conservation efforts focused on addressing ocean-based threats alone are often compromised by land-based impacts that affect coastal ecosystems, such as nutrient runoff, organic and inorganic pollutants, and the direct impacts associated with high levels of human traffic and visitation.²⁷ Planning for and designating MPAs that are linked with terrestrial reserves or adjacent to areas with little to no human impact can therefore considerably improve MPA

²³ Bureau of Land Management, "Point Sal," Visit Point Sal, accessed November 20, 2023, <https://www.blm.gov/visit/point-sal>.

²⁴ California State University, Monterey Bay, Seafloor Mapping Lab. 2014. California Seafloor Mapping Project - Undersea Imagery Archive 2007-2014. <https://csumb.edu/undersea/seafloor-maps> Accessed 2023.

²⁵ Condor Environmental Planning Services, "Point Sal Reserve Revised Management Plan."

²⁶ Nur Arafah-Dalmau et al., "Integrating Climate Adaptation and Transboundary Management: Guidelines for Designing Climate-Smart Marine Protected Areas," *One Earth* 6, no. 11 (November 17, 2023): 1523–41, <https://doi.org/10.1016/j.oneear.2023.10.002>.

²⁷ David M. Stoms et al., "Integrated Coastal Reserve Planning: Making the Land–Sea Connection," *Frontiers in Ecology and the Environment* 3, no. 8 (2005): 429–36, [https://doi.org/10.1890/1540-9295\(2005\)003\[0429:ICRPM\]2.0.CO;2](https://doi.org/10.1890/1540-9295(2005)003[0429:ICRPM]2.0.CO;2).

conservation outcomes.²⁸ The proposed SMRCA is adjacent to Point Sal State Beach, which currently protects approximately 80 acres and includes just over 1 1/2 miles of ocean frontage. Due to its remote location, and possibly these terrestrial protections, Point Sal's terrestrial habitats remain relatively undisturbed and free of negative human impacts,²⁹ making the waters around Point Sal a particularly valuable area to protect.

Access and recreation

The coastline of the proposed SMR-SMCA is currently accessible through Point Sal State Beach and Point Sal Trail. Recreational activities at Point Sal State Beach include fishing, beach combing, hiking, nature study, photography, picnicking, and sunbathing.

In 1998, heavy rains destroyed Point Sal Road in several places, which was the main access road for Point Sal State Beach. The road was closed until May 2008, when Air Force and County officials announced they had reached an interim agreement to provide access. They have since been "coordinating to place informational signs, fix fences and repair washed-out sections of the County road", though progress has been extremely slow. The road remains closed, although according to California's State Parks Department, efforts to develop a long-term access plan to Point Sal State Beach are ongoing.³⁰

Point Sal State Beach is currently best accessed via Point Sal Trail, which is located at the end of Brown Road. This moderately challenging trail is approximately 10.2 miles round trip to the beach and back,³¹ and is open year-round. It provides unparalleled access to untouched pristine coastal wilderness, traversing astonishingly beautiful coastal habitats such as dunes, chaparral, windswept bluffs, and rocky cliffs. The trail is described as "a very popular area for hiking".³²

By making the ocean more productive and resilient to climate change, stronger marine protections like the proposed Point Sal SMRSMCA can enhance shore-based recreation. When combined with efforts to increase access and connect more people to nature, additional state MPAs can give those from marginalized communities more equitable access to the ocean's resources and benefits. California's MPAs have been shown to increase the biomass of fishery-targeted species and promote "spillover" into nearby coastal areas, benefitting nearby fishing grounds.³³ The California Environmental Protection Agency identifies the adjacent city of Guadalupe as "disadvantaged" under CA Senate Bill 535, and their synthesis of environmental and socioeconomic indicators further reveals that Guadalupe – alongside Santa Maria and Lompoc – are underprivileged communities that experience significant cumulative impacts from

²⁸ Arafeh-Dalmau et al., "Integrating Climate Adaptation and Transboundary Management."

²⁹ Robinette, Acosta, and Howar, "Year 1 Results of Baseline Monitoring Within the Point Sur to Point Mugu Study Area of the Seabird Protection Network."

³⁰ California State Parks, "Point Sal SB," CA State Parks, accessed November 20, 2023, <https://www.parks.ca.gov/>.

³¹ County of Santa Barbara California, "Point Sal," County of Santa Barbara Parks, accessed November 20, 2023, <https://www.countyofsb.org/900/Point-Sal>.

³² All Trails, "Point Sal Overlook," Travel Website, AllTrails.com, accessed November 20, 2023, <https://www.alltrails.com/trail/us/california/point-sal-overlook>.

³³ Hunter S. Lenihan et al., "Increasing Spillover Enhances Southern California Spiny Lobster Catch along Marine Reserve Borders," *Ecosphere* 13, no. 6 (2022): e41110, <https://doi.org/10.1002/ecs2.4110>.

pollution.³⁴ Given these communities' close proximity to Point Sal, implementing an ~~SMR~~SMCA at the proposed site could enhance access for disadvantaged populations to valuable coastal resources and fishing opportunities, as a popular shore fishing site is located just north of the proposed Point Sal SMCA boundary, near the Rancho Guadalupe Dunes Reserve area. In addition to the designation of a new Point Sal SMRSMCA, we urge the state to redouble its efforts to provide access to Point Sal State Beach by reopening Point Sal Road.

Socioeconomic impacts

Current fishing in the proposed area is limited, likely due to its considerable distance from nearest port areas of Morro Bay and Santa Barbara. The proposed Point Sal MPA overlaps with 14% of California fishing block 631, and 11% of California fishing block 632. According to the Marine Fisheries Data Explorer, annual landings reported from these blocks over a ten year period from 2012 to 2022 were an average of 231,460 lbs by weight and \$678,632 by value per year.³⁵ This represents just 0.11% of the landings by weight, and 1.1% of landings by value, reported for the Central Coast region over the same 10 year period.^{36,37} For this reason, and due to the relatively small proposed size of the MPA, we believe the establishment of an SMRSMCA in this area would have minimal economic impact to commercial fisheries.

Our request to CDFW for recreational fishing data from this area was being processed at time of submission; we will evaluate the potential impact to recreational fishers and submit it to the state following receipt of the requested data.

Historical context

During the MLPA planning process, a large SMR around Point Sal was proposed in External Proposed MPA Package AC. The proposed SMR was 21.92 mi², with an alongshore span of 6.1 miles and depth range of 0-192 feet. Based upon a review of the historical documents provided by the Fish & Game Commission in October 2023, it is not clear why the state chose not to designate this proposed SMR at that time.

Future stressors may compromise California's coastal waters and nearby MPAs

There is increasing pressure to develop resources in and otherwise utilize California's coastal waters. For example, as efforts intensify to mitigate and adapt to climate change, the state is

³⁴ OEHHA, "CalEnviroScreen 4.0," Text, CA.Gov, September 20, 2021, <https://oehha.ca.gov/calenviroscreen/report/calenviroscreen-40>; OEHHA, "Final Designation of Disadvantaged Communities Pursuant to Senate Bill 535" (CalEPA, May 2022).

³⁵ Assuming equal distribution of effort and value across all years. Because smaller timescales resulted in confidential data outputs from the Marine Fisheries Data Explorer, we aggregated 10 years of landings data from both blocks to calculate average annual landings data. However, the state should look into the confidential data to find more detailed estimates of fisheries landings from this area.

³⁶ We defined the Central Coast region as all fishing blocks from Point Ano Nuevo to Point Conception:

<https://nrm.dfg.ca.gov/FileHandler.ashx?DocumentID=144496&inline>

³⁷ California Department of Fish and Wildlife, "Marine Fisheries Data Explorer," database, MFDE, accessed November 21, 2023, <https://wildlife.ca.gov/Conservation/Marine/Data-Management-Research/MFDE>.

investing in offshore wind and desalination plants. Interest in ocean-based carbon dioxide removal (CDR) is growing, and aquaculture activities are proliferating. Scientists warn that a rising wave of ocean industrialization, such as underway in California's waters, -will pose additional strain on marine biodiversity.³⁸

MPAs along the central coast of California will likely experience these types of stressors in the coming decade. Vandenberg SMR, located 17 km to the south of this proposed area, and the Point Buchon SMR/SMCA complex, located 50 km to the north, are both sited near potential future offshore wind development projects. The proposed California Demonstration Project (CADEMO) seeks to place four floating offshore wind turbines in state waters just outside the boundaries of Vandenberg SMR, and would deliver power via a subsea cable traveling under the seafloor to an onshore cable landing site at Vandenberg Space Force Base. The Morro Bay Wind Energy Area is located in federal waters just outside Point Buchon SMCA, and two leases have recently been issued to commercial wind developers to begin planning for offshore wind development. Offshore wind construction and operations are expected to impact the marine environment through increased ocean noise, collisions with turbines, entanglements, the introduction of electromagnetic fields, alterations to existing habitats and hydrodynamics, and the possible release of contaminants.³⁹ While the state of California is working closely with developers and the federal government to minimize the environmental impacts of these projects as much as possible, it stands to reason that the region, including Vandenberg SMR and the Point Buchon SMR/SMCA complex, will experience some level of adverse impact related to the development of heavily industrialized renewable energy projects.

In addition, Point Buchon SMR/SMCA is located just north of the Diablo Canyon Power Plant, which uses seawater for its once-through cooling process. The plant's intake pipes draw in more than 2.5 billion gallons of water per day. This large and continuous seawater withdrawal is estimated to kill roughly 1.5 billion fish in early life stages each year, as creatures are sucked into the cooling systems or become impinged against the screens on the open-water pipes.⁴⁰ The cooling water is also discharged back into the ocean water at a warmer temperature, which can cause additional harm to kelp, fish, and other marine life in the area.⁴¹ While Diablo Canyon's intake is not directly within the Point Buchon SMR/SMCA cluster, the area of source water being drawn into the plant likely overlaps with the MPA boundaries and has the potential to withdraw marine life out of the protected area.

As the increase of local stressors are likely to strain resources in the Vandenberg and Point Buchon MPAs, a new MPA at Point Sal could help to protect similar habitat not subject to these

³⁸ Douglas J. McCauley et al., "Marine Defaunation: Animal Loss in the Global Ocean," *Science* 347, no. 6219 (January 16, 2015): 1255641, <https://doi.org/10.1126/science.1255641>.

³⁹ NOAA Fisheries, "Offshore Wind Energy: Protecting Marine Life," Protecting Marine Life, National, accessed November 20, 2023, <https://www.fisheries.noaa.gov/topic/offshore-wind-energy/protecting-marine-life>.

⁴⁰ Mackenzie Shuman, "How California's Last Remaining Nuclear Power Plant Transformed Marine Life off the Coast," *San Luis Obispo Tribune*, March 25, 2022, <https://www.sanluisobispo.com/news/local/environment/article258804173.html>.

⁴¹ *Ibid.*

local stressors, adding a helpful replicate MPA to serve as an insurance policy for the region's MPA network.

Climate resilient MPA networks

Changing ocean conditions, such as warming temperatures, acidification, and reduced oxygen, combined with increasing crowding, and pressure on our ecosystems, will compound local stressors mentioned above – putting California's spectacular marine biodiversity at elevated risk. MPAs are increasingly recognized as an important ocean-climate solution. Fully protected MPAs can allow for disturbed and degraded areas to recover, and also promote and retain complex, intact food webs and ecosystems that are better at resisting future stressors.⁴² A recent meta-analysis of more than 22,000 peer-reviewed studies spanning more than 200 MPAs around the world demonstrated that marine reserves can significantly enhance carbon sequestration, coastal protection, biodiversity, and the reproductive capacity of marine organisms as well as fishers' catch and income.⁴³

Further, when designed with climate resilience in mind, MPA networks can provide greater resilience than single MPAs on their own.⁴⁴ A new analysis focused on the California Bight has identified 21 actionable guidelines for the design of climate-smart MPA networks across large geographies and international boundaries.⁴⁵ The designation of a new MPA at Point Sal would meet or help to advance at least 11 of these climate-smart MPA design guidelines ([Appendix A](#)). Specifically, a new MPA at Point Sal would help to increase habitat representation and replication; protect critical and unique areas relevant to the life histories of important California species; incorporate and enhance connectivity across the broader MPA network; provide permanent protections better suited for the maintenance of ecosystem function and resilience at relevant timescales for climate resilience, and; enhance the MPA network's protections for healthy and relatively undisturbed habitats ([Appendix A](#)). In the face of increasing impacts related to climate change, it is critical that the state adaptively manage its MPA network with climate resilience in mind.

Relevance to MLPA Goals and DMR Recommendations

This proposed Point Sal [SMCAMR](#) contributes directly to MLPA Goals 1, 2, 3, and 6 ([California Marine Life Protection Act](#)). Protecting the rich biodiversity, relatively undisturbed habitats, and important larval retention zone found in the relatively undisturbed waters around Point Sal would

⁴² Lewis A.K. Barnett, Marissa L. Baskett, and Louis W. Botsford, "Quantifying the Potential for Marine Reserves or Harvest Reductions to Buffer Temporal Mismatches Caused by Climate Change," *Canadian Journal of Fisheries and Aquatic Sciences* 72, no. 3 (March 2015): 376–89, <https://doi.org/10.1139/cjfas-2014-0243>; Lewis A. K. Barnett and Marissa L. Baskett, "Marine Reserves Can Enhance Ecological Resilience," ed. Peter Mumby, *Ecology Letters* 18, no. 12 (December 2015): 1301–10, <https://doi.org/10.1111/ele.12524>; Callum M. Roberts et al., "Marine Reserves Can Mitigate and Promote Adaptation to Climate Change," *Proceedings of the National Academy of Sciences* 114, no. 24 (June 13, 2017): 6167–75, <https://doi.org/10.1073/pnas.1701262114>.

⁴³ Juliette Jacquemont et al., "Ocean Conservation Boosts Climate Change Mitigation and Adaptation," *One Earth* 5, no. 10 (October 2022): 1126–38, <https://doi.org/10.1016/j.oneear.2022.09.002>.

⁴⁴ Roberts et al., "Marine Reserves Can Mitigate and Promote Adaptation to Climate Change."

⁴⁵ Arafeh-Dalmau et al., "Integrating Climate Adaptation and Transboundary Management."

help to protect the state's marine life and habitats, marine ecosystems, and marine natural heritage, as well as improve recreational, educational and study opportunities provided by marine ecosystems subject to minimal human disturbance.

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." New and groundbreaking peer-reviewed guidelines for the design of climate-smart MPA networks have recently been developed, and the proposed MPA at Point Sal aligns strongly with these guidelines.⁴⁶ We recommend the state consider these guidelines for the review and implementation of additional proposals to enhance and expand California's MPA network.

We must pass on a healthier ocean for future generations to experience, benefit from, and enjoy. California has the opportunity now to protect the conservation legacy of our iconic coastal state, including its rich and diverse marine wildlife. We urge the state to designate a new MPA at Point Sal to enhance the protection and climate resilience of our coastal and ocean resources, for the benefit of current and future generations of Californians.

⁴⁶ Ibid.



State of California – Fish and Game Commission

PETITION TO THE CALIFORNIA FISH AND GAME COMMISSION FOR REGULATION CHANGE

FGC 1 (Rev 06/19) Page 1 of 4

Tracking Number: ()

To request a change to regulations under the authority of the California Fish and Game Commission (Commission), you are required to submit this completed form to: California Fish and Game Commission, (physical address) 1416 Ninth Street, Suite 1320, Sacramento, CA 95814, (mailing address) P.O. Box 944209, Sacramento, CA 94244-2090 or via email to FGC@fgc.ca.gov. Note: This form is not intended for listing petitions for threatened or endangered species (see Section 670.1 of Title 14).

Incomplete forms will not be accepted. A petition is incomplete if it is not submitted on this form or fails to contain necessary information in each of the required categories listed on this form (Section I). A petition will be rejected if it does not pertain to issues under the Commission's authority. A petition may be denied if any petition requesting a functionally equivalent regulation change was considered within the previous 12 months and no information or data is being submitted beyond what was previously submitted. If you need help with this form, please contact Commission staff at (916) 653-4899 or FGC@fgc.ca.gov.

SECTION I: Required Information.

Please be succinct. Responses for Section I should not exceed five pages

1. Person or organization requesting the change (Required)

Name of primary contact person: Lisa Suatoni, National Resources Defense Council

Address:

Telephone number:

Email address:

2. Rulemaking Authority (Required) - Authority cited: Sections 200, 205(c), 265, 399, 1590, 1591, 2860, 2861 and 6750, Fish and Game Code; and Sections 36725(a) and 36725(e), Public Resources Code.

3. Overview (Required) - We propose the designation of a new State Marine ~~Reserve~~ Conservation Area (SMCA) in the waters around Point Sal, Central California to 1) protect ~~this~~ the rich and productive ecosystem and biodiversity found within, 2) protect an important larval retention zone and enhance the connectivity dynamics within the region, and 3) enhance the climate resilience of the broader state MPA network.

The proposed area aligns with state MPA design and feasibility guidelines provided by CDFW, and is bounded by the mean high tide line, the 3 nm state waters boundary, and straight lines connecting the following points in the order listed:

- 34.880667518 N lat. 120.726433061 W long. (SW corner)
- 34.929894739 N lat. 120.727488272 W long. (NW corner)
- 34.930008197 N lat. 120.666597401 W long. (NE corner)
- 34.880979714 N lat. 120.639473286 W long. (SE corner)

The proposed SMCA would prohibit the injury, damage, take, or possession of all living, geological, or cultural marine resources with the exception of recreational take of finfish from shore using hook and line. This permitted activity would allow for fishing access to the



shoreline and marine resources for recreational, traditional, ceremonial, cultural, and subsistence purposes for the public including, the Chumash people and other members of federally -and non-federally recognized tribes.

However, We recommend that the state consult with local Indigenous communities and Tribes to explore co-management options for the Point Sal SMCA before designation, to determine whether a State Marine Conservation Area with exemptions for cultural and subsistence use of relevant Indigenous communities and Tribes in the area is warranted.

4. **Rationale (Required)** - Located in Santa Barbara County, Point Sal is an ecologically rich and relatively remote promontory along the coastline that supports a diverse marine ecosystem and provides critical habitat for seabirds and marine mammals alike. The nutrient-rich waters found at this site allow for a diversity of ocean life to thrive ~~here~~, with kelp beds, rich tidepools, and productive waters that support humpback whales, gray whales, a variety of sea lions and seals, sea otters, and a biologically important feeding area for endangered blue whales nearby. Offshore, Lion Rock is a significant roosting site for seabirds like the Brown pelican and Brandt's cormorant, and ~~also~~ acts as a relatively undisturbed haul-out for sea lions, seals, and other pinnipeds, underlining the area's conservation value for these animals as the California coastline becomes increasingly developed. In addition, the leeward waters of Point Sal act as a larval retention zone. Larval retention zones, which are known to be highly beneficial areas for the recruitment of fish and invertebrate larvae in wind-driven upwelling zones while promoting the biodiversity of the surrounding ecosystem. ~~Historically,~~ Point Sal also holds cultural significance for the Chumash people, with evidence of their occupation as recently as 250 years ago and as far back as 4,800 years ago; Chumash artifacts are visible throughout Point Sal, and analyses of burial sites from the area demonstrate the rich cultural ties to the traditional stewards of this land. Furthermore, Point Sal is still of importance to the Chumash people who visit and use the area today,

Formatted: Line spacing: Multiple 1.08 li

Protecting the waters of Point Sal aligns strongly with the goals set by the California Marine Life Protection Act (MLPA), especially with regards to the protection of natural biodiversity found in relatively undisturbed marine ecosystems. Given the remote nature of Point Sal, its relative lack of human disturbance, and ~~increasing potential for increased~~ threats to the California MPAs found nearby, there is value in an urgent need to protect the ecological merits and maximize the ecological and biological benefits that Point Sal provides to the marine species that inhabit the area and to the broader Central California region. As development of the state's coastline and seascape progresses, protecting ~~these relatively~~ undisturbed, untouched areas will add to the resilience of the MPA network by providing refugia for marine life from encroaching threats. Furthermore, designating an MPA in the proposed area will improve recreational, educational, and study opportunities at Point Sal and support equitable access to coastal resources moving forward into the future.

Formatted: Font: Not Bold, Font color: Auto

Commented [SI1]: alternatively could say undisturbed

See Petition Narrative for full rationale.

SECTION II: Optional Information

5. **Date of Petition:** 11/30/2023



6. **Category of Proposed Change**

- ☐ Sport Fishing
- ☐ Commercial Fishing
- ☐ Hunting
- ☒ Other, please specify: MPAs, Section 632.

7. **The proposal is to:** *(To determine section number(s), see current year regulation booklet or <https://govt.westlaw.com/calregs>)*

- ☒ Amend Title 14 Section(s): [Westlaw regulations](#).
- ☐ Add New Title 14 Section(s): [Click here to enter text](#).
- ☐ Repeal Title 14 Section(s): [Click here to enter text](#).

8. **If the proposal is related to a previously submitted petition that was rejected, specify the tracking number of the previously submitted petition**

Or ☒ Not applicable.

9. **Effective date:** If applicable, identify the desired effective date of the regulation.
If the proposed change requires immediate implementation, explain the nature of the emergency:

10. **Supporting documentation:** Identify and attach to the petition any information supporting the proposal including data, reports and other documents:

- a. Proposed Point Sal SMR petition narrative
- b. Figure 1 - Proposed Point Sal SMR habitat map
- c. Appendix A - Climate-smart MPA design guidelines met by proposed Point Sal SMR
- d. Appendix B - Proposed Point Sal SMR letter of support

11. **Economic or Fiscal Impacts:** Identify any known impacts of the proposed regulation change on revenues to the California Department of Fish and Wildlife, individuals, businesses, jobs, other state agencies, local agencies, schools, or housing:

Current fishing in the proposed area is limited, likely due to its considerable distance from the nearest port areas of Morro Bay and Santa Barbara. The proposed Point Sal MPA overlaps with 14% of California fishing block 631, and 11% of California fishing block 632. According to the Marine Fisheries Data Explorer, annual landings reported from these blocks over a 10-ten year period from 2012 to 2022 were an average of 231,460 lbs by weight and \$678,632 by value per year. This represents just 0.11% of the landings by weight, and 1.1% of landings by value, reported for the Central Coast region over the same 10--year period. For this reason, and due to the relatively small proposed size of the MPA, we believe the establishment of an SMR in this area would have minimal economic impact to commercial fisheries.

Our request to CDFW for recreational fishing data from this area was being processed at time of submission; we will evaluate the potential impact to recreational fishers and submit it to the state following receipt of the requested data.



State of California – Fish and Game Commission

PETITION TO THE CALIFORNIA FISH AND GAME COMMISSION FOR REGULATION CHANGE

FGC 1 (Rev 06/19) Page 4 of 4

12. Forms: If applicable, list any forms to be created, amended or repealed:

SECTION 3: FGC Staff Only

Date received: [Click here to enter text.](#)

FGC staff action:

- ☐ Accept - complete
- ☐ Reject - incomplete
- ☐ Reject - outside scope of FGC authority

Tracking Number

Date petitioner was notified of receipt of petition and pending action: _____

Meeting date for FGC consideration: _____

FGC action:

- ☐ Denied by FGC
- ☐ Denied - same as petition _____
- ☐ Granted for consideration of regulation change

Tracking Number