Anacapa Island State Marine Reserve (SMCA)

Photo by Robert Schwemmer

The Channel Islands are home to some of the greatest biodiversity in California and are a critical habitat for a wide range of commercial, recreationally, and culturally important species. Anacapa Island specifically used to be abundant with eelgrass until white urchin (Lytechinus anemesus) populations increased and locally extirpated eelgrass following the 1983 El Nino.[1] This disappearance of Anacapa's eelgrass meadows reflects the global eelgrass decline over the past 25 years.[2],[3]

Based on a scientific study conducted at the Anacapa SMCA from 2016 to 2019 [4], and a growing body of literature on eelgrass recruitment and ecology, there is compelling evidence that seasonally occurring lobster trapping and anchoring in the SMCA is destroying eelgrass beds that are otherwise thriving in the adjacent Anacapa SMR.

Protecting the eelgrass meadow within the Anacapa Island SMCA would

- Help revive and protect Frenchy's Cove, located within the Anacapa Island SMCA, which historically sustained the largest eelgrass meadow around all Anacapa Island.
- Further support and enhance complex food webs, filter nutrients, improve water quality, stabilize sediments, and serve as important refuge and nurseries for marine vertebrates and invertebrates.[5]
- Support the restoration of essential fish habitat for federally managed fish species within the Pacific Coast Groundfish and Pacific Coast Salmon Fisheries Management Plans. [6]
- In the long term further benefit the California spiny lobster fishery despite a potential closure as it was determined in a 2021 study that the short-term losses from a restrictive MPA is compensated by an over 200% increase in total catch after about 6 years of MPA designation.[7]

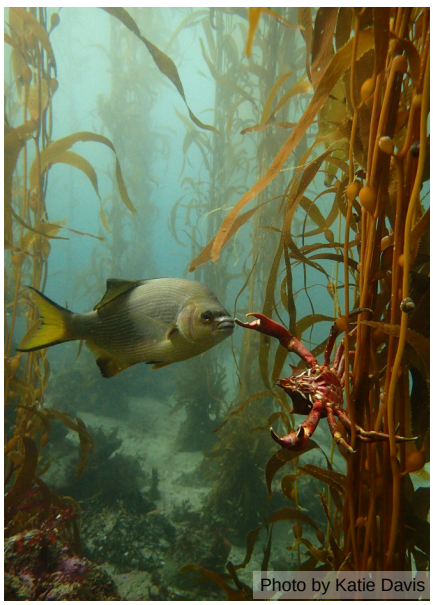
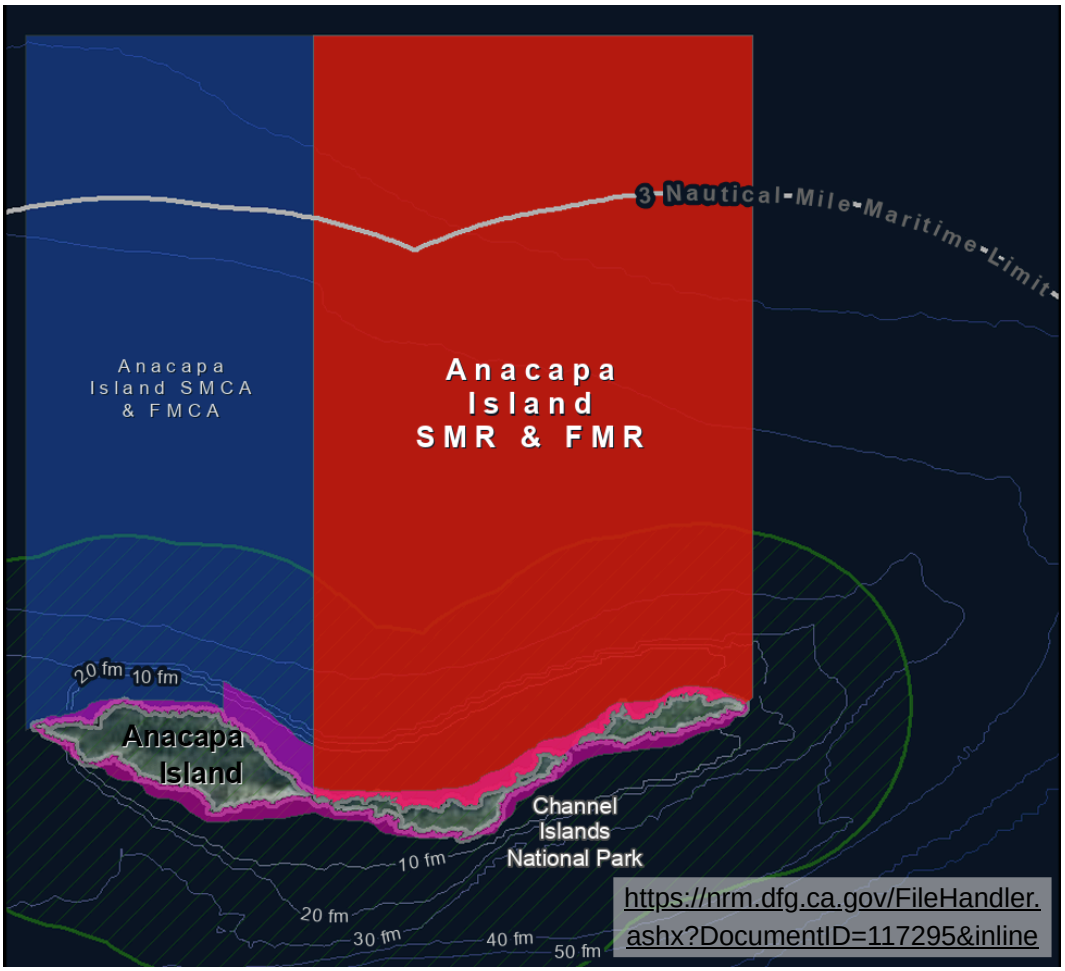


Photo by Katie Davis



Adaptively managing our marine areas along California's coast promotes continued health and well-being of marine life and our communities. California completed the first ten-year review of its MPA network in 2022, which showed that MPAs are enhancing biodiversity, helping fish populations thrive, and even increasing California's coastal ecosystem resilience to warming ocean temperatures.[8] The state is now in the process of adaptively managing the MPA network, evaluating potential changes that would improve the network's functioning in the face of changing ocean conditions.[9]

Threats to our ocean are increasing and evolving, from marine industrialization to major climate impacts. This petition process is an opportunity for all Californians, including those from inland communities, to call for stronger ocean protection and a resilient MPA network for all Californians to enjoy.

environmental DEFENSE CENTER

To support this petition, please contact:
Ahudson@environmentaldefensecenter.org
To learn more about the petition and CDFW's evaluation process, visit:
https://storymaps.arcgis.com/collections/27e78c677dca484ebfb37120abc59d10?item=2

Sign the public petition to show your support!
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Key stats:[10]

Boundaries
34° 00.828' N. lat. 119° 26.623' W. long.;
34° 00.800' N. lat. 119° 26.700' W. long.;
34° 04.998' N. lat. 119° 26.700' W. long.;
34° 04.998' N. lat. 119° 24.600' W. long.; and
34° 00.411' N. lat. 119° 24.600' W. long.

Total area
7.30 square miles

Proposed regulations:
- Change current regulations to disallow commercial lobster fishing year round;
- Change current regulations to disallow hard bottomed fishing gear (including anchoring if applicable) near eelgrass meadows; or
- Change the existing border, prohibiting the deployment of lobster traps from 0-30 meters (0-98.43 feet) instead of the existing 0-20 feet.

Citations

[1] Jessica Altstatt, Richard Ambrose, Jay Carroll, James Coyer, Joseph Wible, John Engle "Eelgrass Meadows Return to Frenchy's Cove, Anacapa Island: Recovery Ten Years after Successful Transplantation," Monographs of the Western North American Naturalist, 7(1), 500-517, (1 January 2014)

[2] Short, F.T. and S. Wyllie-Echeverria. 1996. Natural and human-induced disturbance of seagrasses. Environmental Conservation 23:17–27.

[3] Hemminga, M.A. and C.M Duarte. 2000. Seagrass Ecology. Cambridge University Press, Cambridge, UK, 298 pp.

[4]Jessica Altstatt (2021). Island Eelgrass (Zostera pacifica): Focused Assessment of Condition and Extent of Meadows and Biological Monitoring of Associated Fish and Invertebrate Communities

[5]Engle, J. M., & Miller, K. A. (2005, November). Distribution and morphology of eelgrass (Zostera marina L.) at the California Channel Islands. In Proceedings of the Sixth California Islands Symposium. Institute for Wildlife Studies, Arcata, CA (pp. 405-414).

[6]https://www.fisheries.noaa.gov/feature-story/importance-eelgrass

[7] Lenihan, H.S., Gallagher, J.P., Peters, J.R. et al. Evidence that spillover from Marine Protected Areas benefits the spiny lobster (Panulirus interruptus) fishery in southern California. Sci Rep 11, 2663 (2021). https://doi.org/10.1038/s41598-021-82371-5

[8] California Department of Fish and Wildlife. (2022). California's Marine Protected Area Network Decadal Management Review.

[9] MLPA Master Plan 2016

[10] Note: This area includes Anacapa Island State Marine Conservation Area and the adjoining federal Anacapa Island Marine Conservation Area. Coordinates are provided for outer boundaries of the joined state and federal areas.