



COLLABORATIVE
NETWORK

CLIMATE AND THE COAST

SANTA BARBARA CHANNEL



Santa Barbara Channel Marine Protected Area Collaborative

Perspectives on climate change, the coast, and
California's Marine Protected Area Network

*A summary of the greatest concerns, needs, and
priorities from a survey and focus group of Santa
Barbara and Ventura County residents on climate
change, the coast, and marine protected areas
(MPAs). www.mpacollaborative.org*



EXECUTIVE SUMMARY

This report is a summary of 16 survey respondents and 9 focus group attendees in Santa Barbara & Ventura Counties.

Participants discussed climate resiliency and benefits of MPAs, climate change-related risks to MPAs, and avenues for ensuring MPAs continue to promote a healthy ocean.

Recommendations for decision makers can be found on page 3.

Key Takeaways

The following key takeaways are highlighted in further detail throughout the report.

Respondents believe...

- **climate change is negatively impacting MPA effectiveness**, coastal ecosystems, and coastal communities
- **MPAs are helping address climate change** impacts on local coastal ecosystems and communities
- **marine management is a priority** for addressing climate change
- **climate action is a high priority** for their community

Some takeaways **specific to the Santa Barbara Channel region** include:

- Concerns about **maintaining the benefits of MPAs** despite climate change
- Importance of the need to **change political will**, support officials willing to take bold action (e.g., **transportation**), and emphasize the **broader climate picture**
- **Coordination** (e.g. with West Coast [sanctuaries'] Climate Vulnerability Assessment), **awareness building, staffing/support, and emergency response planning** are identified as needs, along with increased public education and outreach efforts.

Recommendations

The following recommendations represent the perspectives of respondents and do not necessarily represent the perspectives of the MPA Collaborative Network, which represents many diverse viewpoints.

Develop...

- **outreach and education materials** (messaging) that clearly and succinctly communicates the intersections of climate change and MPAs
- **positions** within each organization/agency/department dedicated to climate change
- **co-management agreements** for MPAs between Tribes and state governing agencies
- **funding streams** towards projects focused explicitly on climate change and MPAs
- **learning opportunities** for partners and the public to learn about the intersections of MPAs and climate change
- **clear communication** to partners and the public about how **adaptive management** will address climate change

Prioritize...

- **Traditional Ecological Knowledge (TEK)** in management and research practices
- **Protection of blue carbon ecosystems**
- **Research and monitoring** projects focused on MPAs and climate change to inform management decisions

Assess potential positive climate impacts of...

- **allowing for restoration** activities within MPAs
- **expanding protected areas** and **implementing stronger protections**
- additions of **dynamic MPAs** that address changing conditions

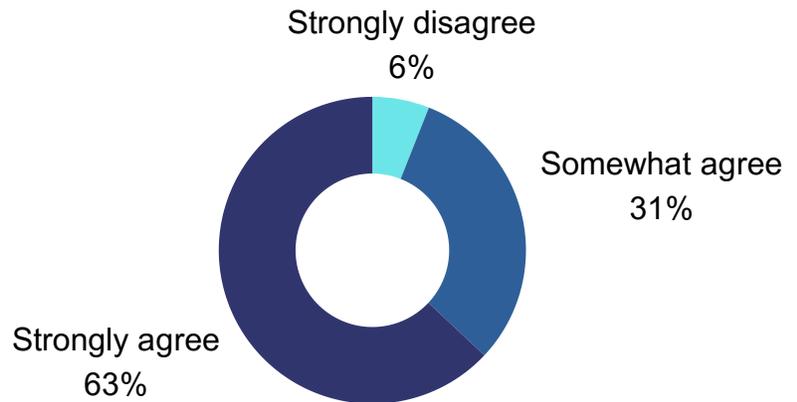
Conduct...

- a **blue carbon inventory** for California's MPAs (either as a whole or individually) that estimates how much blue carbon they sequester, as well as how much greenhouse gases are created through the management program
- **A climate change vulnerability assessment** for California's MPAs (either as a whole or individually)

TAKEAWAY #1

Respondents believe climate change is highly impacting MPA effectiveness and coastal ecosystems.

1.1 Indicate how strongly you agree or disagree with the following statement:
Climate change is impacting MPA effectiveness.



1.2 Rank your **biggest concerns about how climate change impacts** your local coastal ecosystems and marine protected areas (MPAs).

Concerns ranked from highest to lowest

- 1 Increased ocean temperatures and marine heatwaves
- 2 Ocean acidification
- 3 Coastal storms
- 4 Sea level rise
- 5 Invasive species
- 6 Climate driven shift in human impacts
- 7 Wildfire runoff
- 8 Other *



“Episodic events like marine heatwaves, El Niños, intense weather conditions do not stop at MPA borders. There are some offsets to impacts by MPAs including improving resiliency of kelp forest communities, but MPAs cannot completely compensate for increases in ocean temps, intensifying storms, runoff from wildfires, etc.”
- Respondent

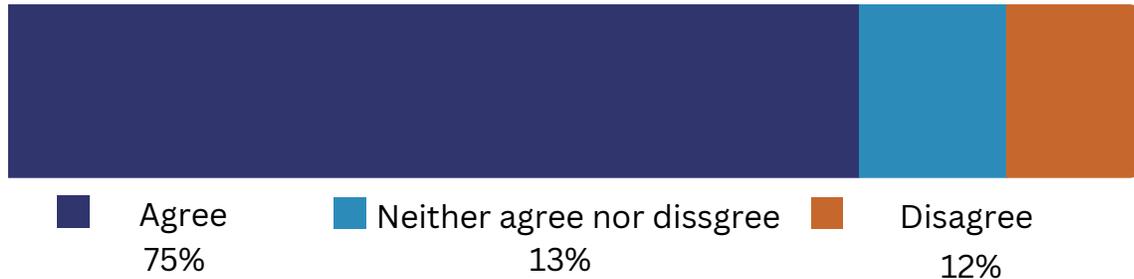
TAKEAWAY #2

Respondents believe MPAs are helping address climate change impacts on local coastal ecosystems

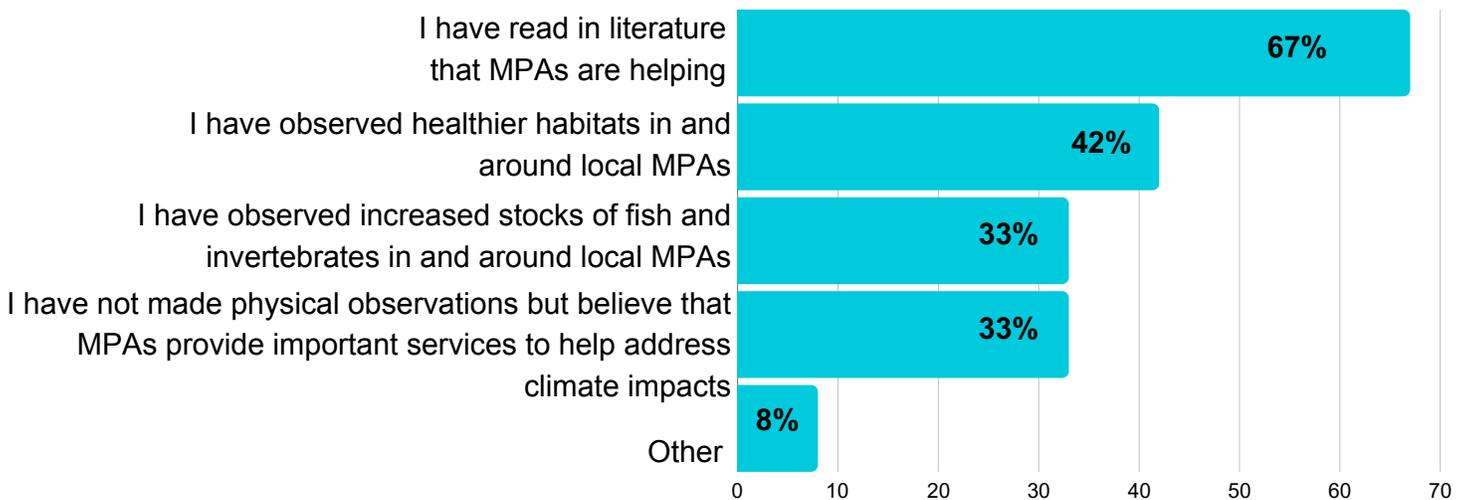
2. Indicate how strongly you agree or disagree with the following statement:

My local MPAs are offsetting/helping address these impacts to my local coastal ecosystems.

A majority of respondents felt that their local MPAs are offsetting/ helping address impacts to local coastal ecosystems. In particular, 75% feel strongly (44%) or somewhat (31%) that MPAs are helping offset climate impacts.



Respondents who **agreed** local MPAs are offsetting/helping address impacts to your local coastal ecosystems were asked why.



“I've seen presentations by the marine biologists about the dramatic improvements at the Channel Islands.” - Respondent

TAKEAWAY #3

Respondents are concerned about the impacts of climate change on coastal communities

3. Rank your biggest concerns about how the following **climate impacts affect the health** (ability to function and thrive) **of your community or your community's resilience** (ability to bounce back).

Concerns ranked from biggest to smallest:

- 1 Warming and changing oceans further accelerating and exacerbating climate change on a larger scale
- 2 Impacts to species used for sustenance
- 3 Impacts to culturally important species
- 4 Loss of economic resources or opportunities
- 5 Widening of existing social inequalities
- 6 Loss of aesthetically, culturally, and/or spiritually important sites
- 7 Impacts to infrastructure
- 8 Diversion of resources that could be used for other community programs/priorities
- 9 Other *

“The more we protect our land and sea and the habitats they afford for other species, the more we are cultivating a culture that is more in harmony with nature. (And thus one that is more likely to stop destroying it.) It's a case of the behavior preceding the attitude. MPAs are one way to create more momentum in the right direction. Good behavior begets good behavior. Doing the right thing begets doing the right thing.” - Respondent



TAKEAWAY #4

Respondents believe MPAs are helping address climate impacts on communities

4. Indicate how strongly you agree or disagree with the following statement:

My local MPAs are offsetting/helping address climate impacts that affect the health (ability to function and thrive) of my community or my community’s resilience (ability to bounce back)



Agree 69%
 Neither agree nor disagree 19%
 Disagree 13%

Respondents that **agreed** were asked to explain their answer.



“MPAs provide protected zones for marine ecosystems to regain the balance often taken from them by human activity. Wildlife can safely grow to full size and reproduce within these zones, which leads to spillover and better fishing/hunting near these zones. I believe MPAs also help encourage forest growth, which helps with carbon sequestration and reduces shoreline erosion. Because Santa Barbara relies heavily on tourism, a healthy marine ecosystem helps bring in more money to the community.” - Respondent



“...I am convinced that the more larger and more diverse and abundant fish and invertebrates MPAs produce is a key factor supporting ecosystem resilience, and that resilient ecosystems are a cornerstone of community resilience.” -Respondent

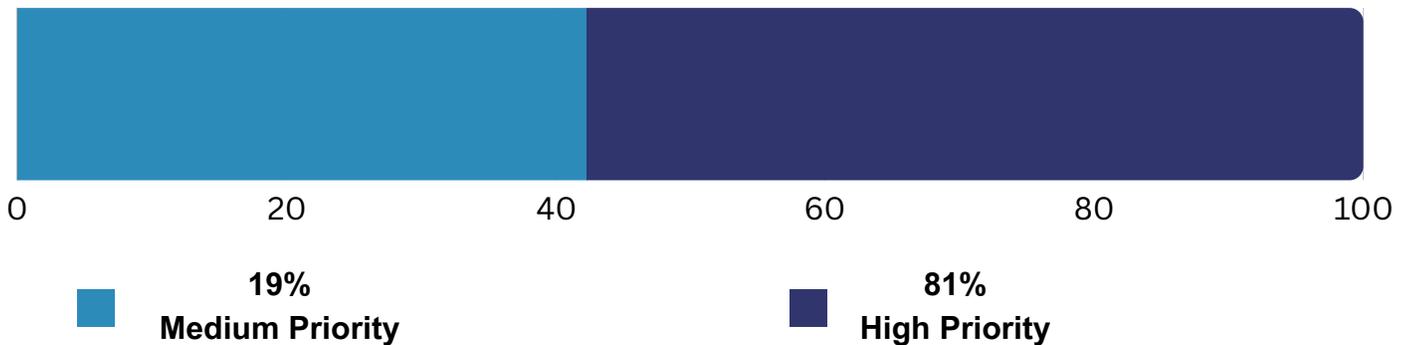
Respondents that **disagreed** were also given a chance to explain their answer.

- climate change does not stop at MPA boundaries
- little impactful action
- MPAs cannot compensate for many climatic scenarios

TAKEAWAY #5

Respondents believe marine management is a priority for addressing climate change

5.1 How would you **prioritize marine management alongside other climate change solutions** (such as renewable energy and carbon sequestration)?



5.2 Rank what you believe are the **most important priorities for adaptively managing MPAs** specifically in the face of climate change.

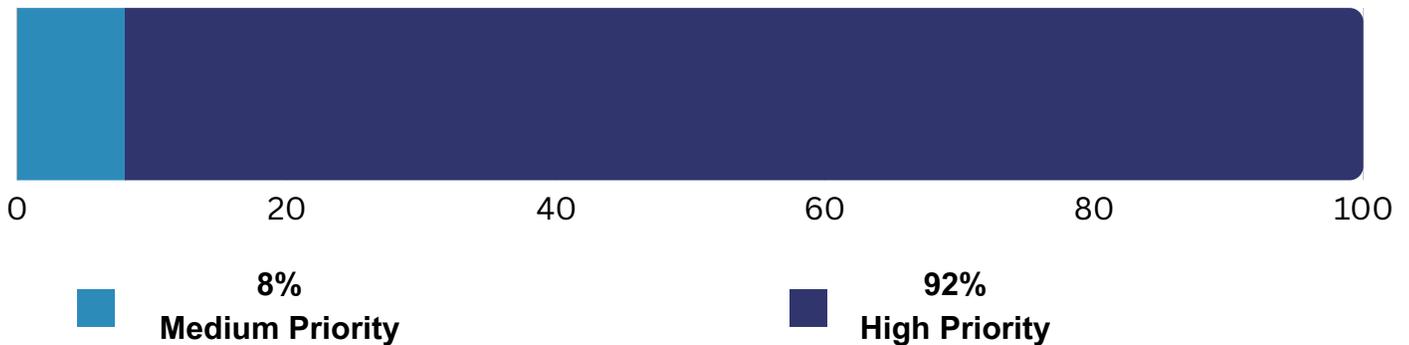
Priorities ranked from most to least important

- 1 Protection of blue carbon ecosystems (kelp, seagrasses)
- 2 Expansion of protected areas and stronger protections
- 3 Research and monitoring projects to collect more data to inform decisions
- 4 Allow for restoration activities within MPAs
- 5 Integration of Traditional Ecological Knowledge (TEK) into MPA management and research
- 6 Co-management of MPAs between tribes and state governing agencies
- 7 Consider addition of dynamic MPAs that address conditions impacting California currents
- 8 Take necessary management action to allow for landward migration of submerged aquatic habitats

TAKEAWAY #6

Respondents believe climate action is a high priority for their community

6. How would you prioritize climate change alongside other drivers of political, demographic, and/or socioeconomic change impacting your community?



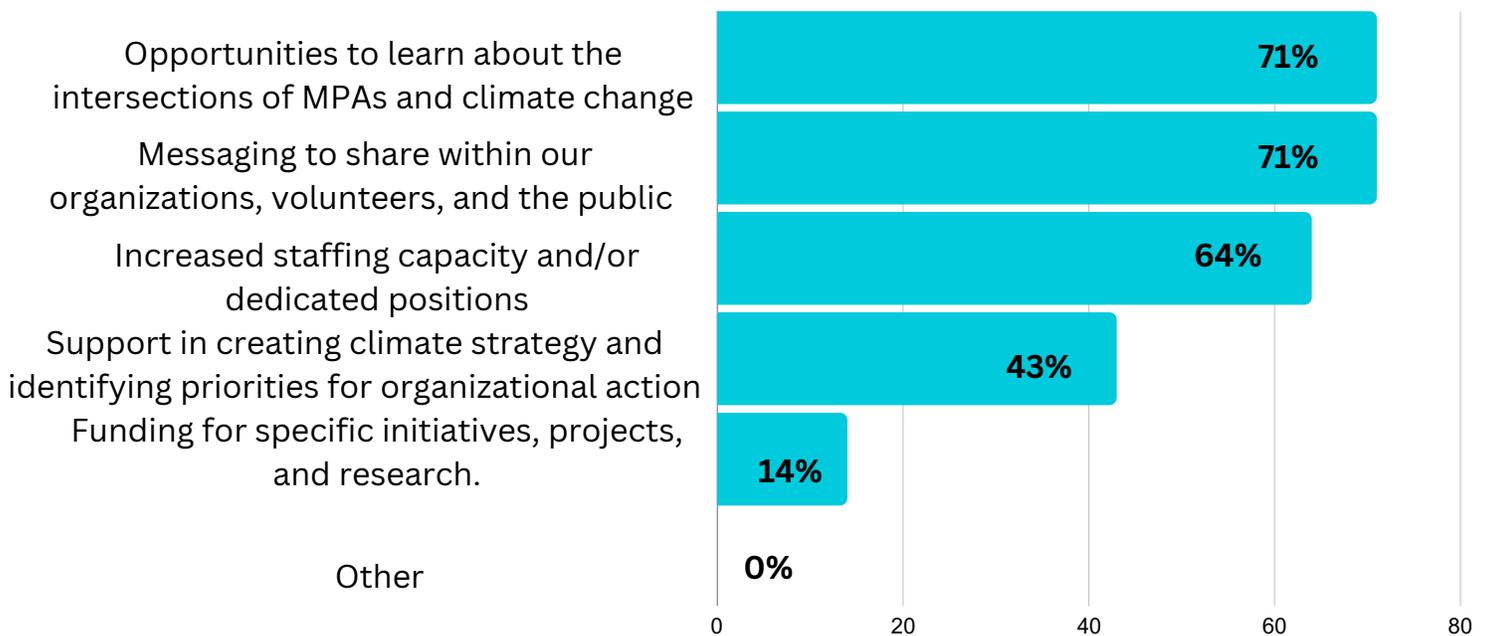
Respondents had the option to mention the **most important general climate change solution along the coast** (i.e. offshore wind, managed retreat, return of coastal land to tribal management, etc.)?



TAKEAWAY #7

Highest needs of respondents

7. What are the **needs of your organization/agency/tribe/business/community** in relation to MPAs and climate change?*



“Needed to teach people to coexist with plovers (Coal Oil Point) and put dogs on beach, and sure enough, there was relative harmony, but it took docents and volunteers to educate the public.” -Respondent



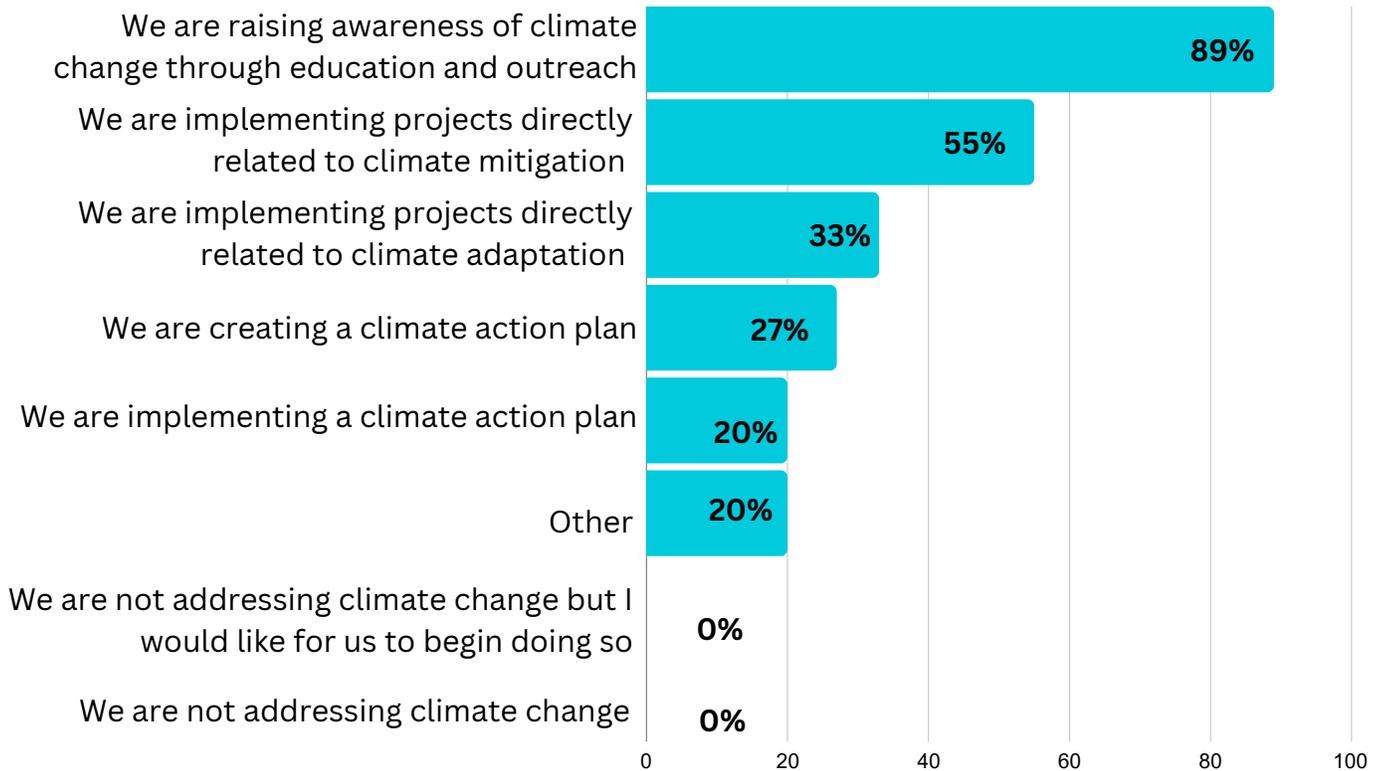
“Need for support (funding) for the monitoring programs continuing to collect data.” - Respondent

*Respondents were allowed to choose more than one answer

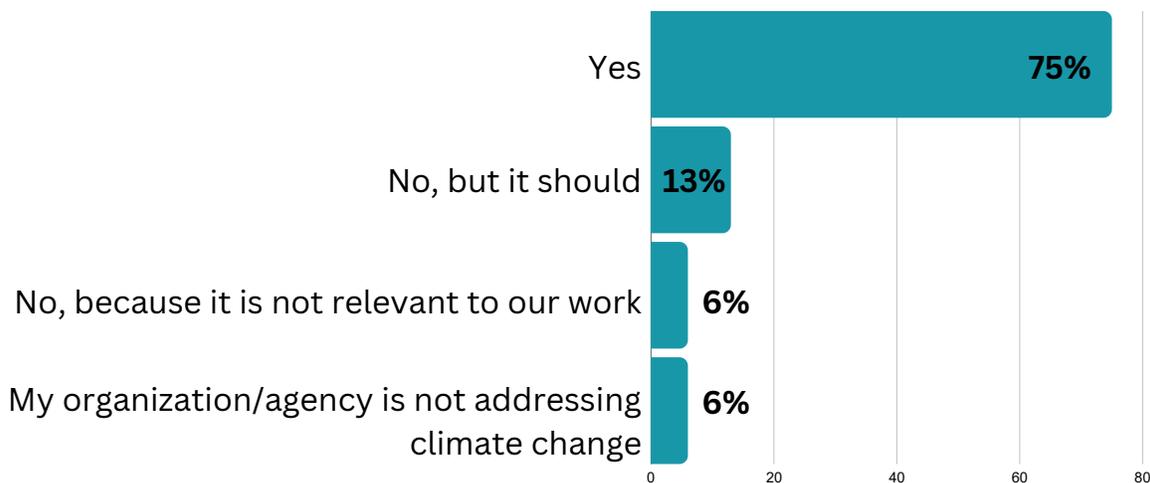
APPENDIX A

Community Work

How is your organization/agency/tribe/business/community addressing climate change? (%)*



Do the climate actions of your organization/agency/tribe/business/community incorporate or consider MPAs?(%)*



*Respondents were allowed to choose more than one answer

APPENDIX A

Community Work and Resources

The following information/resources were provided by participants in regards to the work that is already occurring within Santa Barbara and Ventura and relevant community resources.

What is currently being done to address climate change:

- [Channel Islands National Marine Sanctuary](#) is conducting a Climate Vulnerability Assessment
- [Santa Barbara Channelkeeper](#) is looking into sedimentation and turbidity (relating to emergency permitting)
- [Bureau of Land Management California Coastal Monument](#) Climate Vulnerability Assessments
- State Parks interpreters are taking a UC Climate Stewards training through UC Davis
- [Partnership for Interdisciplinary Studies of Coastal Oceans](#), [California Collaborative Fisheries Research Program](#), & [National Park Service](#) help forest monitoring reports
- [Santa Barbara County 2030 Climate Action Plan](#)
- [City of Santa Barbara Climate Action Plan](#)

Resources

For resources on Climate Change and MPAs, as well as resources specific to your region, [visit our resources document \(click on this link or scan QR code\)](#).



Resources



“[Current work being done includes] climate considerations in fisheries management (accounting for climate predictions impact on stock assessments)” - Respondent

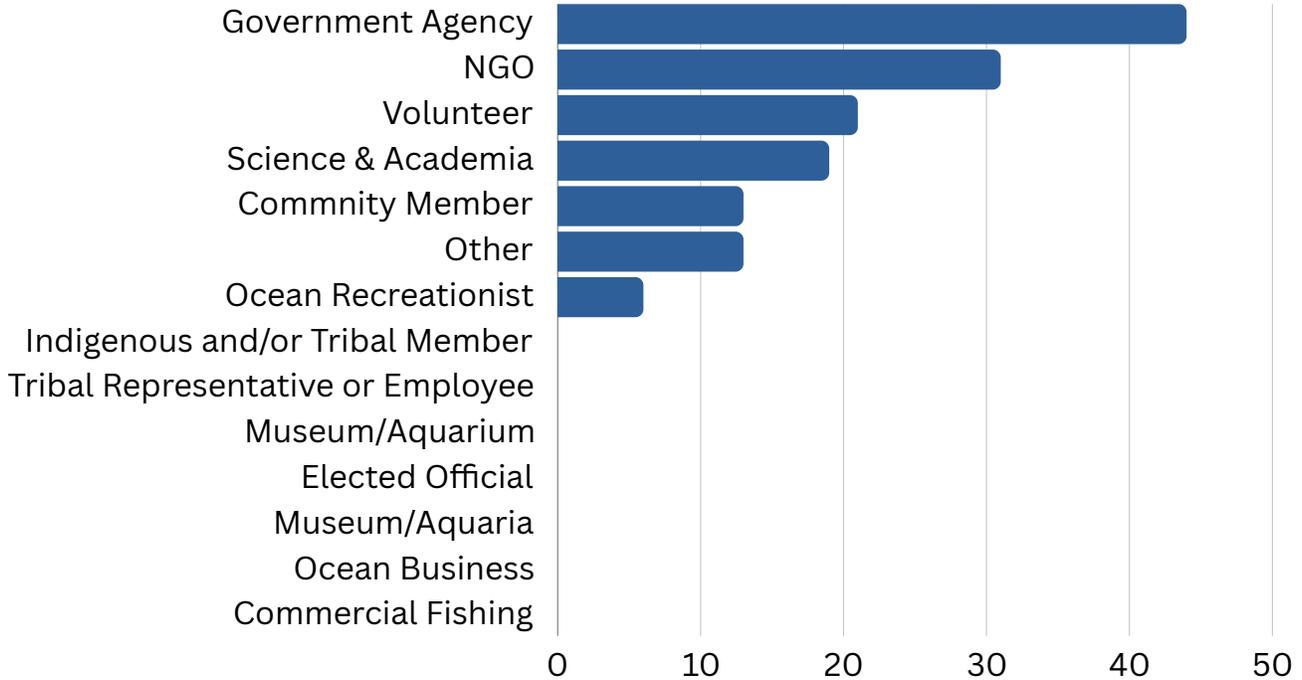


Campus Point No-Take SMCA

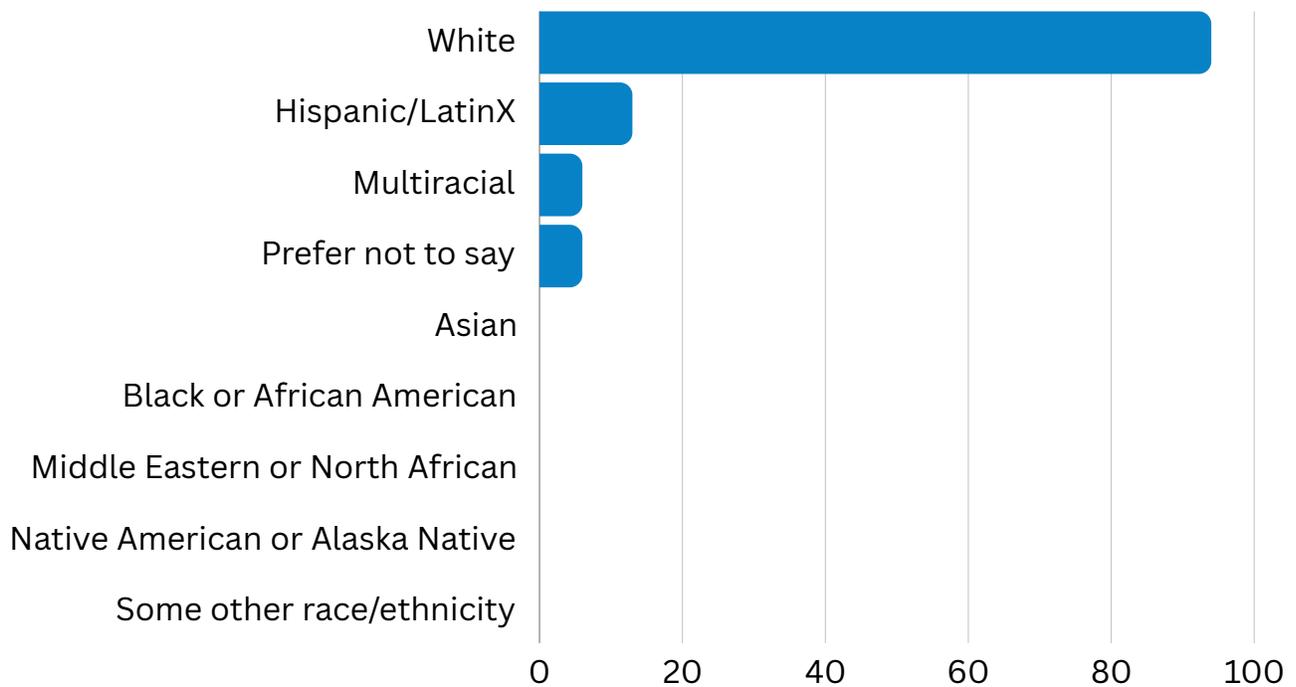
APPENDIX B

Demographics of survey respondents

Sector Affiliation (%)*



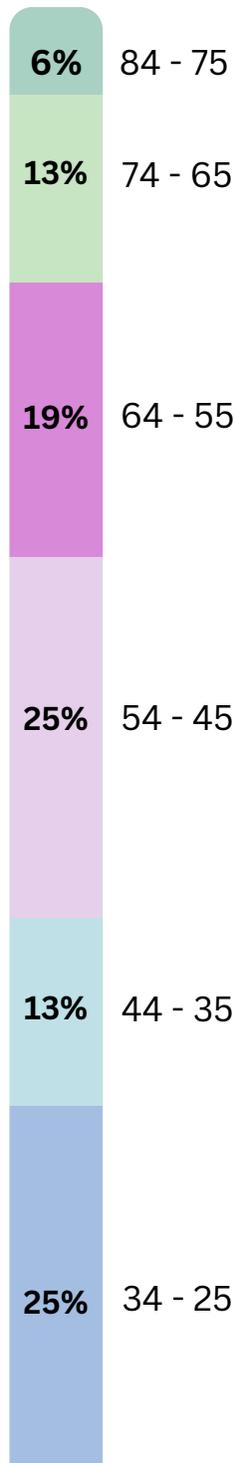
Which race, ethnicity and/or origin categories describe you? (%)*



*Respondents were allowed to choose more than one answer

APPENDIX B

Age Groups



0% of respondents selected any of the following age groups: "Under 18," "18-24," and "over 85".

Gender Identity



25% of respondents selected "**male**" as their gender identity.



63% of respondents selected "**female**" as their gender identity.



0% of respondents selected any of the following gender identities: "Non-binary", "Transgender", "Not listed/Option to specify", or "Prefer not to say."



0% of respondents selected any of the following gender identities: "Transgender", "Not listed/Option to specify", or "Prefer not to say."

Highest level of education



Bachelor's degree

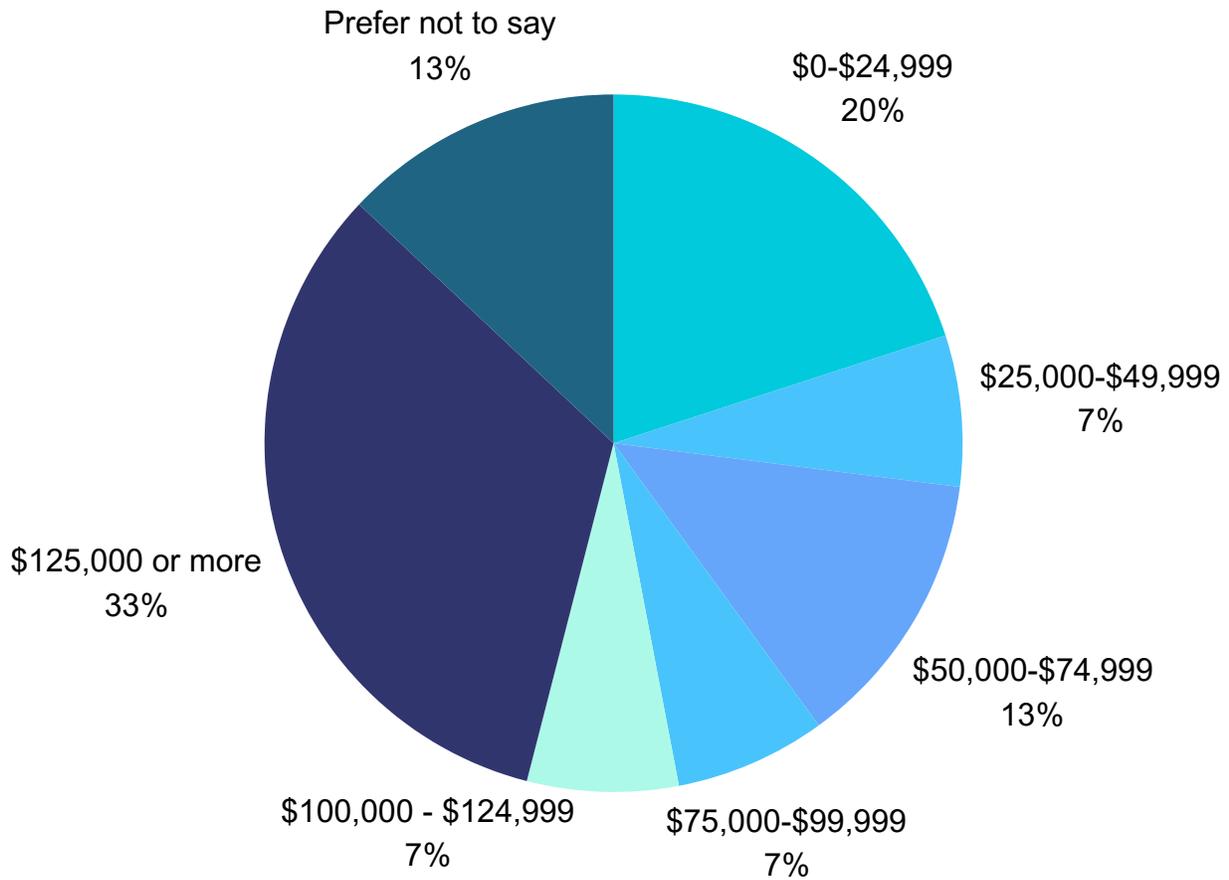


Graduate or professional degree

0% of respondents chose..."Some high school or less," "High school or GED," "some college, but no degree," "Associates or technical degree," or "prefer not to say"

APPENDIX B

Annual household income (before taxes) in 2022



Campus Point No-Take SMCA



ABOUT THE MPA COLLABORATIVE NETWORK

The MPA Collaborative Network (CN) ensures that MPAs are effective by providing a robust structure for civic engagement in MPA management. The CN's 14 county-based volunteer groups (collaboratives) bring together over 1,700 members representing hundreds of distinct and diverse Californian organizations, agencies, Tribes, individuals, interests, and backgrounds for a more comprehensive and localized approach to resource management.

Learn more as well as join your collaborative:

www.mpacollaborative.org

For more information on MPAs:

<https://wildlife.ca.gov/Conservation/Marine/MPAs>

Photo credit: Aubrie Fowler, South Coast Specialist,
MPA Collaborative Network