

Sanctuary Advisory Council
CHANNEL ISLANDS NATIONAL MARINE SANCTUARY

Members / Alternates

Tourism

Michael Cohen / Morgan Coffee

Business

Giles Pettifor / Paul Amaral

Non-Consumptive Recreation

Ben Pitterle / Tony Knight

Commercial Fishing

Kim Selkoe / Tim Athens

Recreational Fishing

Capt. David Bacon / Merit McCreary

Education

Cliff Rodrigues / Andrea Mills

Research

Phyllis Grifman / Dr. Robert Miller

Conservation

Kristen Hislop / Samantha Macks Franz

Public At-Large 1

Doug Williams / Mary Byrd

Public At-Large 2

Stuart Kasdin / Amanda Allen

Chumash Community

Eva Pagaling / Tano Cabugos

National Marine Fisheries Service

Karen Edson / Daniel Studt

National Park Service

Ken Convery / <vacant>

U.S. Coast Guard

CDR Justin Noggle / LT Lelea Lingo

Bureau of Ocean Energy Management

Donna Schroeder / Jeremy Potter

U.S. Department of Defense

Adam Melerski / <vacant>

California Department of Fish & Game

Carlos Mireles / John Ugoretz

California Resources Agency

Jenn Eckerle / Lindsay Bonito

California Coastal Commission

Cassidy Teufel / Jacqueline Phelps

County of Santa Barbara

Errin Briaas / David Villalobos

February 7, 2022

Christopher Mobley, Superintendent

NOAA Channel Islands National Marine Sanctuary

UCSB Ocean Science Education Building

Santa Barbara, California 93106

Submitted via: www.regulations.gov, Docket NOAA-NOS-2019-0110

Dear Mr. Mobley:


On behalf of the of the Sanctuary Advisory Council for Channel Islands National Marine Sanctuary (CINMS), I am pleased to submit the attached review comments on the CINMS Draft Management Plan and Draft Environmental Assessment¹.

The Sanctuary Advisory Council brings together community members and representatives from government agencies to advise NOAA's Office of National Marine Sanctuaries on the protection, management, and compatible use of sanctuary waters and associated resources. We represent the general public, tourism, business, recreational fishing, commercial fishing, non-consumptive recreation, education, research, conservation and Chumash community interests, as well as local, State and Federal government agencies.

The council compiled the attached comments during its meeting on Friday, January 21, 2022. These comments do not represent a consensus of the Sanctuary Advisory Council; rather, they represent a variety of suggestions from individual members. Participating council members are shown in Attachment 1. Comments are shown in Attachment 2.

We appreciate the opportunity to provide this feedback on the draft management plan, and hope that it assists staff with the preparation of final documents. We look forward to working with you and your staff on implementation of the final plan.

Sincerely,



Kristen Hislop, Chair, Sanctuary Advisory Council

Attachments:

1. Council voting record on adoption and submittal of this letter
2. Council comments on Draft Management Plan

¹ *The council is an advisory body to the sanctuary superintendent. The opinions and findings of this letter do not necessarily reflect the position of the sanctuary or the National Oceanic and Atmospheric Administration.*

Attachment 1: CINMS Advisory Council voting record for this letter, adopted January 21, 2022

<u>Advisory Council Seat</u>	<u>Name</u>	<u>VOTE</u>
Tourism	Michael Cohen – member	Yes
	Morgan Coffey – alternate	
Non-Consumptive Recreation	Ben Pitterle – member	Yes
	Tony Knight, Ph.D. – alternate	
Business	Giles Pettifor – member	Yes
	Paul Amaral – alternate	<i>absent</i>
Conservation	Kristen Hislop – member	Yes
	Samantha Macks Franz – alternate	
Commercial Fishing	Kim Selkoe, Ph.D. – member	<i>absent</i>
	Tim Athens – alternate	Yes
Recreational Fishing	Capt. David Bacon – member	Yes
	Merit McCrea – alternate	
Education	Cliff Rodrigues – member	Yes
	Andrea Mills – alternate	<i>absent for vote</i>
Research	Phyllis Grifman – member	Yes
	Robert Miller, Ph.D. – alternate	<i>absent</i>
Public at Large #1	Doug Williams, Ph.D. – member	Yes
	Mary Byrd – alternate	
Public at Large #2	Stuart Kasdin, Ph.D. – member	Yes
	Amanda Allen – alternate	
Chumash Community	Eva Pagaling – member	<i>absent</i>
	Tano Cabugos – alternate	<i>absent</i>
NOAA Fisheries	Karen Edson – member	Yes
	Daniel Studt – alternate	<i>absent</i>
National Park Service	Ken Convery – member	<i>absent for vote</i>
	<vacant>	
US Coast Guard	CDR Jason Noggle – member	<i>absent</i>
	LT Lelea Lingo – alternate	<i>absent</i>
Bureau of Ocean Energy Management	Donna Schroeder – member	<i>absent</i>
	Jeremy Potter – alternate	<i>absent</i>
Dept. of Defense	Adam Melerski – member	ABSTAIN
	Stephen Duboyce	
California Department of Fish & Wildlife	Carlos Mireles – member	ABSTAIN
	John Ugoretz – alternate	
California Natural Resources Agency	Jenn Eckerle – member	<i>absent</i>
	Lindsay Bonito – alternate	<i>absent for vote</i>
California Coastal Commission	Cassidy Teufel – member	<i>absent</i>
	Jacqueline Phelps – alternate	<i>absent</i>
Santa Barbara County	Errin Briggs – member	Yes
	David Villalobos – alternate	<i>absent</i>
Ventura County	Danielle Tarr – member	<i>absent</i>
	<vacant>	

TOTALS: YES: 12 NO: 0 ABSTAIN: 2

Attachment 2: Comments by Participating Council Members on CINMS Draft Management Plan and Draft Environmental Assessment

January 21, 2022

Draft Management Plan

Overarching and General Comments:

- NOAA West Coast Region has no substantive comments. We support our inclusion as partners in the associated activities and look forward to working with the CINMS and SAC to accomplish the goals and objectives (*Karen Edson and Daniel Studt, NOAA Fisheries seat*).
- Overall, I think the work everyone has done is very impressive (*Mary Byrd, Public At-Large seat alternate*).
- Will follow up and take a closer look at the documents in the future. Applauds the writing (*Errin Briggs, Santa Barbara County seat member*).
- Impressive plan, great job mapping out priorities over the next decade. Feel it would be valuable to include in the DMP some references to the State's new Pathways to 30x30 report. Several DMP action plans seem to overlap with the state's 30x30 report. Would be happy to discuss best ways to integrate it. The DMP also has a strong alignment with many of the Ocean Protection Council's own strategic plan priorities, so it's suggested that the final management plan include OPC as a government partner in more of the action plans, particularly in the Climate Change and Vessel Traffic action plans. (*Lindsay Bonito, California Natural Resources Agency seat alternate*)
- The plan is thorough. Education & Outreach - happy that it's a top priority, additional comments in E&O plan below. (*Amanda Allen, Public at Large seat alternate*).
- The document was written clearly. But with regard to those in our community that value shore access, how can we collect input from them? For example, those fishing out on Goleta Pier? How do we give them access to the decision-making process? How do we reach them? They're part of the community who consumes marine resources and they should have a chance to comment in some way. (*Doug Williams, Public-at-Large seat member*)

- Need to connect the dots between collaborations with the recreational angling community, and diversity and inclusion, and serve them better. (*Capt. David Bacon, Recreational Fishing seat member*)
- Agree with comments about partnerships (from Phyllis Grifman). Recommend doing a search for “Sea Landing” in the draft management plan to change it to “Santa Barbara Landing”, the new name. ONMS should look seriously to understand why it is that fishermen fear national marine sanctuaries even though the protections they provide (against industrial uses) are good for fishing. (*Merit McCrea, Recreational Fishing seat alternate*)
- Suggest CINMS conduct more direct on-the-water outreach to boaters out in the sanctuary. (*Ben Pitterle, Non-consumptive Recreation seat member*)
- The plan is articulate, professional, and well done. Overall, it’s important to remember that not every constituency gets their way completely. (*Tony Knight, Non-consumptive seat alternate*)
- Glad to see promotion of non-consumptive recreation (*Michael Cohen, Tourism seat member*)

Climate Change Action Plan:

- The Conservation Working Group (CWG) commends CINMS staff for highlighting the sense of urgency we should have regarding the impacts of climate change. (*Conservation Working Group*)
- Climate Change Action Plan goal statement (P.15 of DMP, and p. 15 of EA): “Goal: Address ecosystem resilience, ecosystem services, climate adaptation, and ocean acidification through capacity building, collaborative partnerships, and public education and outreach.” Change "Address..." to:
 - Option 1: “Investigate and where possible work to improve ecosystem resilience, ecosystem services, climate adaptation, and ocean acidification conditions through capacity building, collaborative partnerships, and public education and outreach.”
 - Or, Option 2: “Develop and implement strategies to better understand and mitigate the effects of climate change on sanctuary resources through capacity building, collaborative partnerships, and public education and outreach.” (*Mary Byrd, Public At-Large alternate*)
- The Climate Change Action Plan goal should be stronger. To “address” climate change is vague, and the goal should be more action oriented. For example, the goal could be rephrased to “Investigate, and where possible, work to improve...” or “Develop and implement strategies to better understand and mitigate the effects of climate change on sanctuary resources through capacity building, collaborative partnerships, and public education and outreach.”(*Conservation Working Group*)

- Activity 1.1 : suggest including ‘adaptive capacity’ in the vulnerability assessment activity. Vulnerability = exposure + adaptive capacity. Adaptive capacity is mentioned in Activity 1.2 but specifically references stakeholders. *(Phyllis Grifman, Research seat member)*
- Strategy CC-2: We caution the efforts to decrease the carbon footprint of sanctuary operations by decreasing greenhouse gas emissions. While this is an important effort, we do not want to see the CINMS refrain from important work, such as research, monitoring, and enforcement, to hit GHD reductions goals. These efforts should be focused on general operations (buildings), carbon sequestration through restoration, programs such as the Vessel Speed Reduction Program, etc. *(Conservation Working Group)*
- Activity 2.2 (p.17 of DMP). At the end of the text for Activity 2.2, add: “*However, the other activities outlined in this section should be considered a much higher priority than Activities 2.1 and 2.2. For instance, there could be a need to increase sanctuary operations (and related emissions) in the short term in order to address climate change impacts.*” *(Mary Byrd, Public At-Large alternate)*
- Activity 5.2 adds emphasis on monitoring changes on the seafloor, which we believe will be very beneficial to sanctuary management and our ability to understand changes over time. *(Conservation Working Group)*
- Strategy CC-6: Commend you for identifying the importance of including the role of reserves as reference areas for studying climate change, especially Activity 6.3 – measuring performance of reserves in short, medium and long terms and considering potential adaptation strategies. Might add OPC to partners re climate plans, and DFW for assessments. *(Phyllis Grifman, Research seat member)*
- In general, the CWG is very supportive of Strategy CC-6. *(Conservation Working Group)*
- Activity 2.3: How to present this clearly? A certain recommended slower ship speed has been determined that’s good for protecting marine life (whales), while the associated emissions reductions are a side effect (not a determining factor in what speeds are being recommended, but a byproduct). This part of the plan reads as if a slower speed is being chosen in order to reduce emissions rather than for choosing a speed to preserve safety for people and animals. But a beneficial side effect is the emissions reduction. *(Stuart Kasdin, Public at Large seat member)*
- Glad to see an increase in climate change relevance through the Climate Change Action Plan. But there needs to be an alarm sent from the sanctuary up the chain of command so government decision makers are really hearing this - we need to be more vocal because all other issues will become more intense if we don’t address it. *(Michael Cohen, Tourism seat member)*

- It's important to make room in the sanctuary for carbon sequestration activities (agrees with Giles - below), and to accept offshore wind energy. Be open to various ways to create carbon sequestration to draw down CO2. *(Michael Cohen, Tourism seat member)*

Marine Debris Action Plan:

- Strategy MD-2: The CINMS should engage more directly with local municipalities and local processes aimed at marine debris reduction. Consider advocating for marine debris reduction; at the very least provide data on impacts of marine debris in the sanctuary. This could be incorporated into MD-2; participate in local processes that would result in the reduction of marine debris sources that impact the sanctuary. *(Conservation Working Group)*
- Strategy MD-2 - Add local government participation. In particular, understanding the balloon problem. A solution could be with local governments – educating local families during events, or local governments banning balloons. Although balloons could drift in from a long distance away, it could be that just working with local communities that border CINMS might be enough to have a large impact on the extent of balloons that arrive at islands. *(Stuart Kasdin, Public At Large seat member)*
- Strategy MD-3 (p. 27) - Add language: “Raising awareness and exploring alternatives about marine debris.” Encourage the development and use of alternatives, which is great to include, but more than just raising awareness. *(Stuart Kasdin, Public At Large seat member)*
- The draft plan notes that in 2011 the SAC adopted a resolution supporting federal and statewide legislative efforts and local ordinances by municipalities to ban the use of single use plastic bags. Would like to see the sanctuary become more active directly in local municipal processes focused on sources of marine debris. There are more ways (in addition to what Stuart Kasdin mentioned) that the sanctuary can be involved, such as supporting and advocating for bans on food service foam. CINMS could participate and provide support, including by sharing data on the impacts to sanctuary resources, and educating local municipalities about how our marine resources are impacted by marine debris. *(Ben Pitterle, Non-consumptive Recreation seat member)*
- Sanctuary needs more vocal enforcement. For example, consider plastics and mylar balloons, which should be outlawed flat out in California. If CINMS could contribute to that, that should be expressed in the plan more explicitly. Don't just monitor and study, but “advocate for protection”. *(Michael Cohen, Tourism seat member)*

Vessel Traffic Action Plan:

- Activity 1.6: Commend you for the novel idea of a whale safe social responsibility campaign. Suggest you add USC (University of Southern California) Sea Grant to the list of associations (you can put it as a government organization since it is a NOAA program, although strictly speaking, it is an academic program). It's the only Sea Grant program with a marine transportation specialist (James Fawcett), and he was a member of the SAC's Marine Shipping Working Group. Also add the Marine Exchange of Southern California. (*Phyllis Grifman, Research seat member*)
- Activity 1.7 (p. 31 of DMP): Add "and regulatory" so it reads as "consideration of management and regulatory actions..." (*Mary Byrd, Public At-Large alternate*)
- Concern about Vessel Traffic Plan - Fishermen working off San Nicolas Island and Santa Rosa Island can be in real danger because of ships coming from all directions (south of the northern Channel Islands). Formal traffic lanes are needed in this area and possibly a vessel speed reduction. (*Tim Athens, Commercial Fishing seat alternate*)
- Activity 1.7 is not as clear as it should be. We support approaches to require slow speed zones, and the CINMS should be more direct. You should add "regulatory" after "consideration of management" to read "consideration of management and regulatory actions to reduce vessel strikes..." (at page 31) (*Conservation Working Group*)
- The plan should include an additional activity that includes consideration of action on additional spatial management measures for protections of whales from ship strikes, as evaluated and recommended by the CINMS Marine Shipping Working Group. (*Conservation Working Group*)
- Did not see any mention in this action plan related to addressing cruise ships. Recommend that this be included. (*Phyllis Grifman, Research seat member*)
- To address whale ship strikes, strongly support a more regulatory approach rather than voluntary approach to controlling ship speeds. A voluntary approach is not acceptable. Also, if there are hundreds of ships that have to wait long periods of time outside of destination ports (e.g., LA/Long Beach), then why aren't all of the inbound ships going slow? What's the hurry? (*Tony Knight, Non-consumptive recreation seat alternate*)
- Is this presented in a way that is accessible to interest groups and nonprofits? It's a voluntary program, but shaming, in essence, should be an important part of this for those shipping lines that are unwilling to voluntarily reduce their speed. (*Stuart Kasdin, Public At large seat member*)

- Vessel speed reduction - this is a very incredible program that has received less attention than is deserved. Data around program compliance is public and provided online in annual summaries. There's a nuance to this that's really important. The ocean carriers are providing this service to larger companies who pay for that service (e.g. Home Depot, Walmart, etc.). Consider the logistical supply chain system - connecting those things like ship strikes, greenhouse gas emissions, which are all being driven by costs associated with consumers buying products. Link the entity that generates the demand for these goods (i.e. consumers) with these campaigns (e.g. clean ocean shipping) and cargo owners themselves. That's a critical connection to make with the public. Also, would like to see the Port of Hueneme listed as a partner. *(Giles Pettifor, Business seat member)*

Introduced Species Action Plan:

- Overall, we support this section. *(Conservation Working Group)*
- Activity 1.3 appears to be in the wrong section, or may be misworded. *(Conservation Working Group)*

Zone Management Action Plan:

- Activity 1.2: Broad support for Activity 1.2, as it is vital for CINMS to engage with the California Department of Fish and Wildlife and help the public engage in the Decadal Management Review process. *(Conservation Working Group)*
- Activity 1.3: We are supportive of Activity 1.3 and look forward to partnering with the [CA MPA Decadal Review] process, and the opportunity to build on the state/federal partnership to evaluate the state and federal MPAs. *(Conservation Working Group)*
- Activity 1.3 (p. 40 of DMP): Delete "Following the MPA Decadal Review Process." so that it reads: "Evaluate the need for any adaptations in federal waters portions of the joint state/NOAA network of Channel Islands marine reserves and conservation areas in close consultation with CDFW." *(Mary Byrd, Public At-Large alternate) (Conservation Working Group)*
- In Activity 1.3, we suggest changing "Following the MPA Decadal Review" to "In tandem with the Decadal Review." *(Conservation Working Group)*
- Activity 2.2: While enforcement coordination among agencies is vital, we would like CINMS to consider that Activity 2.2 include sanctuary specific, direct, on-the-water outreach about sanctuary regulations, such as weekend outreach at Marine Protected Areas (MPAs), as well as

at harbors/boat launches. Many people fish in MPAs, intentionally or otherwise, as seen by CWG members who visit the islands. It could be very beneficial to have regular personnel on the water and find strategies beyond posters and signage. This outreach doesn't have to be enforcement, but it would be helpful to have a federal agency staff person contacting boats in MPAs, in comparison to local nonprofit staff. It was noted that Florida Keys does some of this interactive, interpretive enforcement, and that data supports the need for more active enforcement. *(Conservation Working Group)*

- Introduction or New Activity: State and federal agencies are actively engaged in biodiversity-focused initiatives to protect marine resources. The sanctuary should consider conducting a gap analysis on what measures are in place, what those mean for resource protection, and how these efforts can be additionally purposed for climate change under the "30x30" initiative, with the goal of information the state/federal initiatives pursuant to 30x30. Place-based regulations could be harnessed to produce benefits to climate change and the broader biodiversity crisis. CINMS has resources, findings, and programs that could benefit such an effort. The general statement at the beginning of the Zone Management Action Plan could include a note about interfacing with other initiatives, or the Plan could include this idea as a standalone activity. *(Conservation Working Group)*
- Would like to see the sanctuary do more direct boater outreach. CINMS has a strong role to play, whether the boater outreach overlaps with supporting enforcement or simply providing education & outreach. CINMS has the resources (i.e., the team, the vessels). Having a federal entity present on the water (with the agency logo) provides the ability to make a strong impact, beyond what's provided by just signage and printed materials. *(Ben Pitterle, Non-consumptive Recreation seat member)*
- There should be follow-through on addressing the Coastal Conservation Association (CCA) request that has been made, more than once, for pelagic fishing to be allowed in federal portions of certain marine reserves to solve a serious problem that recreational anglers have come up against. This request is for federal waters, so it should not have to be contingent upon waiting for the state's MPA Decadal Review to be completed. *(Capt. David Bacon, Recreational Fishing seat member)*
- The Richardson Rock Marine Reserve has presented some problematic issues. Letters have been written about this, with no response. The recreational and commercial fishing communities feel that their thoughts are being ignored on this issue. *(Tim Athens, Commercial Fishing seat alternate)*
- Regarding the CINMS marine reserves, many in his constituency would like to see MPAs expanded, and greater enforcement. *(Tony Knight, Non-consumptive seat alternate)*

- Supports continued discussion of expansion of MPAs following the state’s MPA decadal review process. (*Michael Cohen, Tourism seat member*)

Education and Outreach Action Plan:

- Good plan, very thorough and multi-faceted. Suggest spelling out USC Sea Grant in governmental agencies (as University of Southern California). (*Phyllis Grifman, Research seat member*)
- The diversity and inclusion language in this action plan is very important. How can we reach out more successfully to a diversity of our community members? Important to reach out to new partners and connect with other organizations. (*Amanda Allen, Public-at-large seat alternate*)
- Strategy 4 (“Maintain and develop exhibits and signs”) says “Maintain”, but this should really say “Expand” in order to find new locations for sanctuary signs. (*Stuart Kasdin, Public at Large seat member*)
- CINMS should promote tourism in ways that allow cities or counties to participate. (*Stuart Kasdin, Public at Large seat member*)
- How the Education and Outreach Action Plan is implemented affects the success of the other action plans. Public and community engagement are so important to this, and cultural awareness and inclusivity are essential. Must ensure that messages from CINMS and the Channel Islands National Park get out there to the public. (*Cliff Rodrigues, Education seat member*)
- Activity 2.1 contains a typo. It should say “Santa Barbara Museum of Natural History”. (*Samantha Franz, Conservation seat alternate*)
- Identify specific institutions that want to be involved for informal education opportunities (*Samantha Franz, Conservation seat alternate*)
- Appreciates the connection made between the Vessel Speed Reduction Program and education. This education link/tool should be strengthened. (*Giles Pettifor, Business seat member*)
- The new Santa Barbara Landing could become a very good visitor hub for CINMS to consider, given how many people come into the landing. There could be a lot of opportunity to bring in more interpretation and interactive installations at that location. (*Morgan Coffey, Tourism seat alternate*)

- Regarding outreach, experience has shown that the public responds well to charismatic megafauna. So, in the outreach sections of the plan, suggest pointing out the actual importance and tourism value of whales and dolphins. They're a friendly subject that attracts positive attention, and a worldwide draw for thousands of people. (*Morgan Coffey, Tourism seat alternate*)

Research and Monitoring Action Plan:

- We support the need for more information on socioeconomic use and value, which would be useful for many efforts including, but not limited to, research and monitoring. (*Conservation Working Group*)
- We would like to highlight our support for Activity 4.3 and Activity 5.5. (*Conservation Working Group*)
- Strategy RM-1 and RM-2: Regarding CINMS monitoring data, suggest consulting with Pacific Fisheries Management Council (PFMC) scientists that do stock assessments with respect to data gathering efforts. Consider that for vermilion and copper rockfish stock assessments, there was no data from MPAs that were used. It's important that fisheries independent data that's collected be used in stock assessment efforts (e.g. habitats and species). The PFMC would be a better source to find out exactly what's needed, and how monitoring efforts in CINMS could contribute. When designing research plans, suggest consulting with PFMC committees to find out how data could be used by them. (*Merit McCrea, Recreational Fishing seat alternate*)
- It's important that fisheries-independent data from MPAs be used in stock assessments; agree with Merit McCrea on this point. (*Tim Athens, Commercial Fishing seat alternate*)

Resource Protection Action Plan:

- For enforcement, we would like to see a strong statement that CINMS will work to support compliance and detect/deter violations of its regulations. Sanctuary regulations should have teeth, be known to the community, and be enforced. Efforts should be made to detect violations where they occur. While education is vital, we also want to see enforcement action prioritized. (*Conservation Working Group*)
- Strategy RP-3 (Respond to current and emerging issues): When responding to "current and emerging issues", and in consideration of supporting the blue economy, do not just look at new potential developments as just "threats" to sanctuary resources, but also look for opportunities to provide benefits. This could include ecosystem restoration services that might be achieved

through public and private initiatives, such as, for example, offshore wind energy, or aquaculture, or urchin harvesting/selling to help with kelp bed restoration. With crisis, there is opportunity. (*Giles Pettifor, Business seat member*)

Appendix A:

- Table 1 (p. 91 of DMP): Adjust implementation priority for three Climate Change strategies:
 - Strategy CC-1: Delete "address" in header; Change implementation prioritization rating for "Level Funding" and "5% Decrease" scenarios to "H" (high);
 - Strategy CC-2: change implementation prioritization rating for "5% Increase" scenario from "H" to "M" (medium);
 - Strategy CC-6: Change implementation prioritization rating for "Level Funding" and "5% Decrease" scenarios to "H" (high). (*Mary Byrd, Public At-Large alternate*)

Draft Environmental Assessment

Chapter 3: Description of Affected Environment:

- In Section 3.2.1, Climate Change Action Plan goal statement (p. 15 of EA, and p. 15 of DMP): "Goal: Address ecosystem resilience, ecosystem services, climate adaptation, and ocean acidification through capacity building, collaborative partnerships, and public education and outreach." Change "Address..." to:
 - Option 1: "Investigate and where possible work to improve ecosystem resilience, ecosystem services, climate adaptation, and ocean acidification conditions through capacity building, collaborative partnerships, and public education and outreach."
 - Or, Option 2: "Develop and implement strategies to better understand and mitigate the effects of climate change on sanctuary resources through capacity building, collaborative partnerships, and public education and outreach." (*Mary Byrd, Public At-Large alternate*)