Rocky Habitat Site Proposal Initial Recommendation

The Rocky Habitat Management Strategy Initial Proposal Process (2020-2021)

Proposed Site

Site Name: Cape Blanco Marine Research Area

Site Map: http://seasket.ch/y0uvvr4X_7

Proposal Materials: https://bit.ly/3rcIObU

Initial Recommendation

This document is a draft summary of the site proposal evaluations conducted by the Rocky Habitat Working Group. The final drafts will be included in a recommendation packet that will be forwarded to the Ocean Policy Advisory Council (OPAC). The summary below represents an initial draft of the recommendations made by the Working Group for Cape Blanco Marine Research Area. Proposal recommendations will be made available for a 30-day public comment period, during which proposers and other members of the public are invited to submit their feedback. The Working Group will review the feedback for consideration prior to making their final recommendation determinations.

Initial recommendations were crafted using a ranking system whereby the members of the Working Group entered a vote for each proposal where 1 = *Recommend*, 2 = *Recommend, with considerations*, 3 = *Reservations, even with considerations*, and 4 = *Do not recommend*. Consideration are those components of a proposal, identified through the evaluation process, which must be addressed to facilitate its implementation. A vote of modified consensus was agreed upon where no more than 20% of the voting Working Group members could vote *Do not recommend* (4) in order for a proposal to receive a recommendation to move forward for consideration by OPAC.

Average Vote Ranking: 2.2

Initial Recommendation: Recommend, with considerations

Summary of Considerations

The Rocky Habitat Working Group identified the implementation considerations listed below for the proposed Cape Blanco Marine Research Area. Any potential recommendation from OPAC should address these considerations as outlined in the following summary to ensure that implementation of the proposed site is a) consistent with state agency authority and coastal policy, b) appropriately inclusive and representative of stakeholder interests, c) reasonably achievable within the existing framework of rocky habitat site management, and d) in balance with the merits and goals of the proposed site.

Any potential recommendation for implementation of this site should address the following; considerations:

- Resolve inconsistencies with MRA management prescription, including:
    - No closure of commercial and recreational fish harvest
    - No closure of subtidal invertebrate harvest
- No additional restrictions on souvenir collection, boat anchoring, live-fed aquaculture
- Clarification of expectations for support for volunteer programs
- Reconciliation of site boundaries with respect to rocky intertidal habitat distribution

The original 1994 Territorial Sea Plan recommended Cape Blanco for designation as a Research Reserve, recognizing it as an ideal area for conducting scientific research, noting "*excellent representation of several south coast marine ecosystem types*" present. The site is relatively remote, with access to the upland area maintained by OPRD and Bureau of Land Management. Access to portions of the rocky intertidal shore area is difficult and constrained by the steep bluffs of the headland. Although Cape Blanco State Park and lighthouse attract many visitors each year, site use in the rocky shore habitats appears relatively low compared to other rocky shore sites on the central and north coast. Additionally, the site has been used for intertidal and oceanographic research for more than two decades by researchers associated with Oregon State University and the Partnership for Interdisciplinary Studies of Coastal Oceans (PISCO).

The site goal expressed in the proposal is focused on supporting long-term scientific research by protecting natural communities, including two habitat areas of particular concern (HAPC), and essential fish habitat (EFH). Cape Blanco has an established history of on-site research with a particular focus on ecological stressors and long-term ecosystem health. Continued protection for monitoring and research would benefit the long-term aspects of site use, and is a good fit to meet the intended use of an MRA designation. The site proposal is thorough and well-supported by its sources, with strong stakeholder outreach and engagement efforts demonstrated. The site is also geographically well-located to fill gaps in rocky intertidal management on the south coast, being approximately 50 miles distant, both north and south, from the nearest rocky intertidal designations at Cape Arago and Brookings (note: Redfish Rocks Marine Reserve does not include rocky intertidal habitat).

The proposed management measures are intended to maintain scientific research activities by protecting sensitive rocky intertidal communities from human use pressures, and are unlikely to impact current site use, with some exceptions. Several of the proposed restrictions are inconsistent with

regulatory standards and management practices, and present myriad enforcement challenges. Standard regulations for MRAs (TSP3 Section D.) include no changes to fish harvest, no commercial or recreational take of invertebrates (except certain species at select sites), and no commercial or recreational take of algae. The proposed harvest regulations would eliminate commercial and recreational fish harvest, which is not normally regulated in MRAs. Harvest regulations would also apply to subtidal areas, inconsistent with rocky habitat site management practices, and would require strong justification to implement. Additionally, while relatively low, shore angling is known to occur at the site. The primary fishing impact would be to shore anglers, and it is unclear if the boundary choices made to minimize impacts on anglers were done with consideration for shore anglers as well as boat anglers.

Other proposed management measures include no collection of souvenirs ("non-living resources"), a restriction on boat anchorage, and a ban on live-feed aquaculture activities. The proposed restriction on non-living souvenir collection is unusual (i.e. even marine reserves allow collection of non-living souvenirs) and regardless is protected in statute (ORS 390.705). Beachcombing activities are known to occur at the site. The restriction on boat anchorage would require coordination with Oregon State Marine Board, which is not currently involved in this process. Given the close proximity of the site boundaries to the shore, it is unlikely that boats would be anchoring in the proposed area. The restriction on live-feed aquaculture is also unusual and unlikely to be an issue. Were the concern to arise, it could be implemented via an internal agency understanding to not issue permits for live-feed aquaculture at existing protected sites, avoiding the need to engage in rulemaking.

The location of the site and the nature of the proposed regulations present many enforcement challenges while potentially increasing enforcement needs and hazards. Not all of the intertidal area is visible from the top of the bluff and the intertidal areas are difficult and potentially dangerous to access for enforcement personnel. The remote location of the site may also delay OSP or USFWS enforcement activity in an area that already has limited enforcement presence. It would also be difficult to determine if boaters are inside the offshore boundary, making it logistically challenging to enforce.

Ongoing research and monitoring efforts are likely to be well-supported by protections afforded by a management designation, ensuring the site remains a strong "listening station" for measuring and identifying key ecological stressors and resilience of species. The proposal identifies a myriad of data gaps which a site designation could help address. Key ocean stressors – ocean warming, disease, ocean acidification, hypoxia, etc. – were all outlined as potential knowledge gaps that monitoring can support. The site is proposed to be utilized as a sentinel for long-term monitoring of key issues related to changes in ocean conditions, intertidal ecology, and disease, and increasing human use and impact. While monitoring has occurred at this site for decades, the proposal seeks to formalize this long-term monitoring with a site designation.

The proposed outreach activities and volunteer stewardship programs would focus on educating visitors about marine communities and "research in action". Such a program would be well-informed and supported by the ongoing research efforts, and would focus on days of high visitation. A strong effort was made to engage the proper groups, and garner support. However, given the remote nature of the site, it may be challenging to gather regular volunteers at this location from local communities. The local area has a small population with constrained volunteer capacity and is not as prepared as other coastal communities to support this kind of a site. The current capacity and level of support from the organizations most likely to provide support (e.g. SEA, CoastWatch) is presently low, and often

population-dependent. Firm commitments, including funding, may be difficult to obtain from partner organizations. OPRD has limited capacity and funding to support the programs and updates to signage without volunteer groups securing sufficient external funding. Additionally, the proposed programs intend to coordinate with programs that would be established in support of the proposed Marine Conservation Area at nearby Blacklock Point. While, it would be reasonable for volunteer programs to support both sites if implemented, establishment of the programs and the site designation at Blacklock Point is presently uncertain.

Some of the site boundary choices are challenging to justify. Projecting the site on low tide satellite imagery reveals additional areas of intertidal habitat not included in the site boundaries. Some are between the landward boundary and the mean high water shoreline, while others are beyond the seaward boundaries of the designation. The designated area also includes some subtidal habitat, but there is no justification provided for why, and there is no mention of intentions to include subtidal area. However, it should be noted that this may be confounded by assumptions made about depth limits based on the Rocky Habitat Web Mapping Tool site reports which appear to be inconsistent with on-site depth limits. Final site boundaries will need to be reconciled with the involved agencies to ensure they properly reflect rocky intertidal habitat distribution and align with site protection goals.

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The Rocky Habitat Working Group recommends OPAC consider Cape Blanco Marine Research Area for potential recommendation to LCDC, with an understanding that this recommendation hinges on appropriately addressing the considerations described above. These considerations include:

- *no* closure of commercial and recreational fish harvest *or* subtidal invertebrate harvest,
- *not* implementing restrictions on souvenir collection, boat anchoring, live-fed aquaculture,
- *clear expectations set* for support of volunteer programs, including agency roles,
- *and* reconciling site boundaries (with respect to rocky intertidal habitat distribution) with the appropriate agencies.

Where possible, the Working Group supports addressing the considerations and concerns above through statewide and site-specific non-regulatory management plans, where appropriate, with a focus on volunteer monitoring, interpretation, education, and awareness efforts. Additional considerations for potential recommendation include the other merits and perspectives identified above and in the full packet of evaluation materials, in balance with the proposed site goals.

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April 13, 2021

Oregon Ocean Policy Advisory Council and the Rocky Habitat Working Group
% Oregon Department of Land Conservation and Development
635 Capitol Street NE, Suite 150
Salem, OR 97301

RE: Cape Blanco TSP proposal changes

Dear Members of the Rocky Habitat Working Group and OPAC,

On behalf of the Cape Blanco proposal writing team, thank you for your time and consideration of our proposal. We believe this site has great merit as a Marine Research Area (MRA) and we appreciate your thorough and constructive feedback in this designation process. We are willing to accept all of the suggested changes to our proposal regarding fish and invertebrate harvest, souvenir collection, boat anchoring, aquaculture, clarification of volunteer programs, and site boundaries to move this site forward in the recommendation process. We will address each recommendation in this letter and amend the intent of our proposal to include these changes as needed to ensure that we meet the requirements for recommendation. We would also like to request an opportunity to present our rocky habitat site designation proposal for Cape Blanco to OPAC at the upcoming meeting in May.

Recommended Changes

- **No closure of commercial and recreational fish harvest**

  We understand the reason for this recommendation, and agree to make the change. We have scientific reasoning for our initial suggestion of this closure, detailed in the next section of this reply.

- **No closure of subtidal invertebrate harvest**

  We understand the reason for this recommendation and agree to make the change. We have scientific reasoning for suggesting this closure, detailed in the next section of this reply.

- **No additional restrictions on souvenir collection, boat anchoring, live-fed aquaculture**

  We understand this requested revision to our proposal and agree to make the change.

- **Clarification of expectations for support for volunteer programs**

  The purpose of the rocky habitat management strategy is collaborative management of special areas along the Oregon Coast. We continue to work with

Oregon Shores/CoastWatch and the Shoreline Education and Awareness (SEA) programs to support and enhance current volunteer efforts in rocky habitat sites that will promote education and outreach activities from Bandon to Brookings, including the proposed MRA at Cape Blanco. After the initial implementation of sites, we will work collaboratively with these groups to plan and implement site based, rocky habitat focused volunteer training, stewardship, and docent projects. Some of these outreach activities have already begun by Oregon Shores' CoastWatch program and SEA. The Partnership for Interdisciplinary Studies of Coastal Oceans (PISCO), is willing to provide simple scientific information in the form of posters and brochures that can be handed out to visitors to Cape Blanco, and to work with OPRD to appropriately and effectively post and distribute these materials. We agree that there is a limited capacity for engagement and support for volunteer programs at this time. We understand that this is a priority for the state of Oregon, so we look forward to working with OPRD and hope that together we can secure the resources to ensure the success of this program.

- **Reconciliation of site boundaries with respect to rocky intertidal habitat distribution**

  We understand that the updated Rocky Habitat Management Strategy is designed to protect rocky intertidal habitat, and that our initially proposed site boundaries may be inconsistent with the goals of the management strategy. For this reason, we agree to reconcile our site boundaries and work with relevant agencies to ensure that the Cape Blanco MRA boundaries are consistent with the current strategy goals, while protecting critical habitat that researchers are using to conduct long term marine research.

<u>Further reasoning for no-take restrictions</u>

While we agree to all of the suggested changes of the working group, we would like to elaborate on why a closure on fish, invertebrate and algae species extending to the shallow subtidal would make a stronger MRA:

Marine ecological connectivity is widely recognized as an important component of marine conservation area design and management. Ecological spatial connectivity is defined by Carr et al. (2017) as "the processes by which genes, organisms, populations, nutrients and/or energy move among spatially distinct habitats, populations, communities or ecosystems". While ecological connectivity is complex and often difficult to measure comprehensively, the science has shown that connectivity between marine ecosystems supports high marine biodiversity and provision of ecosystem services (Balbar and Metaxas 2019). The proposed Cape Blanco MRA exhibits population connectivity (movement of individual organisms of different life stages) via larval exchange with nearby rocky intertidal areas and with offshore subtidal rocky reefs. Intertidal areas such as Cape Blanco MRA also serve as a refuge for many subtidal organisms during their early life stages, such as certain rockfish species (Garwood 2006). These are just a couple of examples of how intertidal and subtidal rocky reef systems are highly interconnected. Other types of ecological spatial connectivity in the marine environment are genetic connectivity, community connectivity, and ecosystem connectivity, which are also important considerations (Carr et al. 2017).

Our research group has long measured intertidal connectivity with offshore larval populations at Cape Blanco MRA. The collection of invertebrates and fish from subtidal areas within the proposed MRA may disrupt these long term studies. Therefore, in order to maintain

the ecological integrity of the proposed Cape Blanco MRA, subtidal invertebrate and fish harvest restrictions are worth considering. It is understood that in order to better incorporate connectivity considerations into conservation planning efforts, further research on regional connectivity patterns are needed (Balbar and Metaxas 2019). What better place for this type of research to occur than within the proposed Cape Blanco MRA, which is already a site of long-term ecological research? Ultimately, while we are prepared to accept the proposed changes to subtidal harvest restrictions, we believe that protections for subtidal rocky reefs with high spatial ecological connectivity to the intertidal environment of Cape Blanco would support the mission and function of Cape Blanco MRA.

We would like to reiterate our interest in formalizing the westernmost point of the Cape Blanco intertidal area as a Marine Research Area. This special area was proposed for protection in the original 1994 Territorial Sea Plan to "maintain the ecological integrity of the site for long-term research projects; allow continued level of use that does not interfere with research objectives". That is precisely what we are intending for this Marine Research Area. We look forward to working with Oregon agencies to help implement this important area.

Sincerely,

Brittany Poirson
Lab Manager, Partnership for Interdisciplinary Studies of Coastal Oceans (PISCO)

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Ocean Science Innovation Team member at Oregon State University, Marine Resource Management Student. Former PISCO technician (2017-2020)

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Reference Material

While we accept all suggested changes to our proposal, we wish to send the working group some additional material that supports our originally proposed regulations at the Cape Blanco MRA. This primary literature specifically addresses the lack of restrictions on subtidal invertebrate and fish harvest within Oregon's protected areas and special management zones, such as an MRA.

Balbar, A. C., & Metaxas, A. (2019). The current application of ecological connectivity in the design of marine protected areas. In Global Ecology and Conservation (Vol. 17, p. e00569). Elsevier B.V. https://doi.org/10.1016/j.gecco.2019.e00569

Carr MH, Robinson SP, Wahle C, Davis G, Kroll S, Murray S, Schumacker EJ, Williams M (2017) The central importance of ecological spatial connectivity to effective coastal marine protected areas and to meeting the challenges of climate change in the marine environment. Aquatic Conservation: Marine and Freshwater Ecosystems 27:6–29.

Garwood, Rebecca. (2006). Use of rocky intertidal areas by juvenile rockfish (Sebastes) in northern California. M.S. Thesis. Humboldt State University, Humboldt, CA.