



Walter Chuck, Chair  
Oregon Ocean Policy Advisory Council  
C/O Andy Lanier, Marine Affairs Coordinator  
635 Capitol St. NE, Suite 150  
Salem, OR 97301-2540

February 28, 2020

**Re: Comments on the Draft Rocky Habitats Management Strategy Phase II**

Dear Chair Chuck and members of the Council:

We write to support the Ocean Policy Advisory Council's (OPAC) efforts to update the management of rocky habitats under Oregon's Territorial Sea Plan (TSP) Part 3: Rocky Habitats Management Strategy (Strategy). Oregon has long recognized the ecological, economic and social value of rocky habitats. These areas belong to the public and should be managed to ensure they continue to provide benefits for future generations.

OPAC has made several meaningful decisions that will make this update more useful to managers and the public. The rocky habitats mapping tool and rolling designation proposal process provides OPAC the ability to revisit this important resource as nearshore ocean conditions experience unprecedented change and will also prevent the strategy from becoming obsolete. The adaptive management model requires feedback loops to be effective and OPAC has succeeded in providing this mechanism for this part of the Strategy. Moreover, several of the policies of the Strategy embody Oregon's precautionary approach to ocean resources as required by Statewide Planning Goal 19<sup>1</sup> and it is encouraging to see this aspect of the Goal incorporated into policy. We urge OPAC to adopt the Strategy for Land Conservation and Development Commission (LCDC) consideration with the below recommendations incorporated:

1. Automatically include in the Strategy any rocky habitat designation that was recommended in the original 1994 effort, but not implemented or otherwise addressed through other state-designation processes.
2. Incorporate submerged aquatic vegetation (SAV)-focused actions from the Governor's Ocean Acidification and Hypoxia (OAH) Action Plan<sup>2</sup> to guide management of the rocky habitat that supports SAV.
3. Adopt policies that require avoidance of impacts to submerged aquatic vegetation (SAV) with clear, precise language to advance agency missions and policies within the coastal zone.
4. Link Statewide Planning Goal 19's precautionary approach more clearly to this Strategy regarding protection of submerged aquatic vegetation.
5. Add additional datasets to the mapping tool to support a robust inventory of resources related to Oregon's rocky habitats.

Statewide Planning Goals carry the weight of administrative rule and it is important this Strategy carry out Oregon's implementing regulations. We believe there are still actions that can be taken to strengthen the adaptive management approach to better respond to changing nearshore conditions caused by a rapidly changing climate and increased visitation<sup>3</sup> to Oregon's shoreline rocky habitats. We provide further detail and context for our recommendations below.

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<sup>1</sup> Oregon's Statewide Planning Goals & Guidelines, Goal 19: Ocean Resources, OAR 660-015-0010(4).

<sup>2</sup> Oregon Governor's Natural Resource Office. Oregon's Ocean Acidification and Hypoxia Action Plan. August 2019. URL: <https://www.oregonocean.info/index.php/ocean-acidification>

<sup>3</sup> Dean Runyan Associates. 2019. [Oregon Travel Impacts – Statewide Estimates 1992-2018](#). Report prepared for the Oregon Tourism Commission ([www.traveloregon.com](http://www.traveloregon.com)) by Dean Runyan Associates, Portland, Oregon, pp. 254.

**1. Automatically include in the Strategy any rocky habitat designation that was recommended in the original 1994 effort, but not implemented or otherwise addressed through other state-designation processes.**

The 1994 working group that developed the original Strategy identified, inventoried and analyzed important rocky habitat resources on Oregon's coast. They recommended ten habitat refuges, eight marine gardens, seven research reserves, seven priority offshore rocks/reefs, and identified 28 'marine shores' areas that were not recommended with any additional regulations but were flagged as rock habitat areas of special interest along Oregon's coast. They identified nine rocky habitats for further review. Unfortunately, there seems to be no summary from 1994 to provide historical context or detailed explanation for many of those recommendations. Many of the designations and associated regulations, although accepted by the State and officially part of the TSP, were never recognized in administrative rule. State agencies did not define boundaries nor commit the recommended regulations in rule.

It appears that some of the work of the 1994 working group was lost or ignored and the reason why the approved recommendations were not implemented remains unclear. If OPAC and the Land Conservation Development Commission have approved a document for inclusion in the TSP, state agencies must carry out the provisions within, whether through rulemaking or management actions. The Oregon Ocean Resources Management Act<sup>4</sup> identifies the Department of Land Conservation and Development (DLCD) as the agency charged with coordinating agencies that implement TSP and determines agency consistency with Goal 19. DLCD has a critical role in facilitating implementation of the management document.

Some of the 1994 working group's effort was implemented through other means over the years following the creation of the Strategy. For example, some priority offshore rocks and reefs have been incorporated into marine reserves, while other areas are part of a current marine protected area. Overall, this is heartening and demonstrates that the recommendations by the 1994 working group were well-founded and deserve designation. It is unclear why the current working group chose not to move the original recommended designations forward for OPAC consideration if they have no designation. Threats have not diminished, and new threats have emerged including increased human visitation and impacts related to climate change<sup>5</sup>. Forwarding the 1994 working group's recommendations could also reduce a potentially

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<sup>4</sup> ORS 196.405 to 515. URL: [https://www.oregonlegislature.gov/bills\\_laws/ors/ors196.html](https://www.oregonlegislature.gov/bills_laws/ors/ors196.html)

<sup>5</sup> Three recent examples:

- a) Piatt, J.F, et al. 2020. Extreme mortality and reproductive failure of common murrelets resulting from the northeast Pacific marine heatwave of 2014-2016. PLoS ONE 15(1): e0226087. <https://doi.org/10.1371/journal.pone.0226087>
- b) Bednaršek, N. et al. 2020. Exoskeleton dissolution with mechanoreceptor damage in larval Dungeness crab related to severity of present-day ocean acidification vertical gradients. Science of the Total Environment. <https://doi.org/10.1016/j.scitotenv.2020.136610>
- c) <https://www.oregonlive.com/news/2019/10/sea-urchins-are-devouring-oregon-coast-kelp-uncharted-territory-for-marine-ecosystem.html>

substantial workload related to reviewing public proposals focused on these areas. Specifically, we recommend:

- Six 1994 ‘habitat refuges’ should automatically be recommended for ‘no take Marine Conservation Areas’, which is the current equivalent of the 1994 habitat refuge category. This includes Tillamook Head, Cape Lookout (south side), Coquille Point, Crook Point/Mack Reef, Hooskanaden Creek, and Cape Ferrelo. As a National Wildlife Refuge, and with the seasonal vessel restriction, the Three Arches Rocks area is managed appropriately, but could be included in an inventory of rocky habitat as described below.
- Cascade Head, a 1994 approved ‘habitat refuge’, now located next to a Marine Protected Area, should automatically be recommended for ‘no take Marine Conservation Area’, which matches the current marine protected area designation. The current working group has stated that rocky habitat designation proposals will not be accepted when located next to a current marine reserve or protected area. As stated on pg. 74 of the draft Strategy, “maintaining previous designations in areas of overlap ensures that these areas will remain protected should the marine reserve and protected area designations be removed.” We agree. The goals of this Strategy are markedly different than the goals of the Marine Reserve Program<sup>6</sup> and address management challenges related to visitation issues like tidepool habitat trampling and stewardship of sites<sup>7</sup>. To recognize these differences, new designation proposals should be accepted whether they are located next to a current marine reserve or protected area or not.
- Two 1994 ‘research reserves’ should automatically be recommended for ‘Marine Research Areas’ with the 1994 recommended regulation ‘Invertebrate/algae harvest by scientific permit only’. This includes Cape Blanco and Humbug Mountain to Lookout Rock.
- The above areas, the thirty-seven ‘marine shores’ and ‘not yet designated’ areas should be combined to create a Rocky Habitats Inventory List or Atlas to capture the ecological findings by the 1994 working group, while recognizing that some areas have moved into a designation since (i.e. research reserve). While the creation of the Strategy’s Appendix F addresses historical timeline for each designation, it does not capture ecological knowledge that originally led to the 1994 recommendations. The state is at risk of losing historical natural resource knowledge and previous state agency work. The Strategy is currently the only organized ‘inventory’ the state has for this habitat. We recommend using the state’s new mapping tool as the inventory, so that all previous, current, and future rocky habitat areas are identified. Function and attributes, current uses, and threats based by site, can be captured, organized and updated over time.

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<sup>6</sup> Oregon Policy Advisory Council. 2008. [Oregon Marine Reserves Policy Recommendations](#). Pg.1. The main goals of Oregon’s marine reserves are to 1) Conserve marine habitats and biodiversity; 2) Provide a framework for scientific research and effectiveness monitoring; and 3) Avoid significant adverse social and economic impacts on ocean users and coastal communities.

<sup>7</sup> [Draft Rocky Habitat Management Strategy](#) (p. 5)

**2. Incorporate submerged aquatic vegetation (SAV)-focused actions from the Governor’s Ocean Acidification and Hypoxia (OAH) Action Plan to guide management of the rocky habitat that supports SAV.**

Oregon’s nearshore marine and estuarine ecosystems are directly threatened by OAH. These same ecosystems also provide opportunities to ameliorate and build resilience to the adverse impacts of OAH. Protecting and restoring SAV, such as kelp and surfgrass, and the rocky habitat that supports them, has the potential to both combat the impacts of ocean acidification, while at the same time ensuring that our nearshore and estuarine environments continue to provide the ecosystem services that drive healthy coastal communities.<sup>8</sup>

We applaud OPAC and the working group for recommending protective SAV policies in this draft of the Strategy. In doing so, agencies are helping to implement the OAH Action Plan. Priority Action #3 of the Action Plan seeks to promote adaptation and resilience to OAH in management decisions. The Action Plan directs state agencies to “identify strategies to maintain sustainable native shellfish stocks and SAV in Oregon’s estuaries and nearshore waters,” and encourages identification of methods to restore and protect “SAV and native shellfish that provide ecosystem services.”<sup>9</sup> The draft developed by the working group partially implements Priority Action #3, but OPAC should adopt additional measures to ensure that the Strategy further advances the OAH Action Plan.

The OAH Council’s first biennial report released September 2018 identifies recommended actions including working with OPAC in the revision process for this Strategy to “ensure that OAH adaptation and resilience strategies are incorporated into long-term planning outcomes for Oregon’s Rocky Shores management.”<sup>10</sup> To date, it appears that the working group has not fully addressed this recommendation for incorporation into long-term planning.

If the working group is currently unclear on how to include adaptation and resilience strategies into rocky habitat management, the group can consider policies that will re-convene the group or integrate strategies later. We recommend the following policy language that commits the state to updates related to the Action plan in Section A.4.a.i. or Section A.6.b, as appropriate, for consideration:

***Until Actions 1 through 5 of Oregon’s Ocean Acidification and Hypoxia Action Plan are implemented in full, marine aquatic vegetation of concern policies of this Strategy will be updated as needed, but at least every 5 years, with appropriate public input, to stay***

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<sup>8</sup> Nielsen, K., Stachowicz, J., Carter, H., Boyer, K., Bracken, M., Chan, F., Chavez, F., Hovel, K., Kent, M., Nickols, K., Ruesink, J., Tyburczy, J., and Wheeler, S. Emerging understanding of the potential role of seagrass and kelp as an ocean acidification management tool in California. California Ocean Science Trust, Oakland, California, USA. January 2018.

<sup>9</sup> Oregon Governor’s Natural Resource Office, *supra* note 2, at p. 16.

<sup>10</sup> Barth, J.A., C.E. Braby, F. Barcellos, K. Tarnow, A. Lanier, J. Sumrich, S. Walker, F. Recht, A. Pazar, L. Xin, A. Galloway, J. Schaefer, K. Sheeran, C.M. Regula-Whitefield. The Oregon Coordinating Council on Ocean Acidification and Hypoxia. First Biennial Report. September 2018, p. 32.

***consistent with new statutory and regulatory outcomes from state agency Action Plan implementation.*** (Marine aquatic vegetation of concern is defined in #3 below.)

The state has spent considerable energy on the new OAH Action Plan and has worked to place the state as a global leader on the issue. The Oregon Department of Fish and Wildlife (ODFW) and the OAH Council have done outstanding work despite carrying out these orders without special funding. If Oregon Senate Bill 1554<sup>11</sup> is successful, there will be additional information forthcoming regarding SAV and impacts of OAH to nearshore intertidal and subtidal ecosystems that will inform management of Oregon's rocky habitats. The jurisdictional complexity of rocky habitats spurred creation of this Strategy in 1994 and it remains an appropriate management tool to coordinate managing and regulatory agencies. OPAC should integrate the Action Plan where possible within this Strategy and align this management tool with outcomes of the Action Plan as they are revealed.

**3. Adopt policies that require avoidance of impacts to submerged aquatic vegetation (SAV) with clear, precise language to advance agency missions and policies within the coastal zone.**

Policies A through R in the Strategy are forward thinking and meaningful, both for guiding managing agencies, as well as for others that may interact with Oregon's rocky habitats. We understand that the development of policy language can be difficult and time consuming. Creating specific definitions and appropriate language that accurately describes the intent of the policies and advances agency missions, while implementing Statewide Planning Goal 19 is challenging. Below, we provide suggested language and rationale for Policies Q and R for OPAC to consider; the policies remaining for approval by OPAC and LCDC.

Clear, precise language is of most use to implementing agencies. Staff can apply clear standards more easily and can convey to the public why they are taking an action. To that end, there is some language in the draft SAV policies that we recommend replacing with clearer definitions. These include:

- incorporating additional detail to policies and supporting definitions to avoid challenges associated the word "significant"
- clarifying which marine aquatic vegetation types should be covered by SAV policies
- identifying what constitutes "adverse effects" and a "marine development activity"

Federal law is a good resource for policy definitions and it appears to be the original source for the current definition of 'significant'<sup>12</sup> in the TSP. However, OPAC should consider the analyses<sup>13</sup>, discussion papers<sup>14</sup>, and case law<sup>15</sup> that have demonstrated this word has many challenges that may not be as helpful as originally conceived. The word should not be continued to be used based on past practice for the TSP. The measure of use should be how easily

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<sup>11</sup> Senate Bill 1554, Introduced, 82nd Oregon Legislative Assembly, 2020 Regular Session. URL:

<https://olis.oregonlegislature.gov/liz/2020R1/Downloads/MeasureDocument/SB1554/Introduced>

<sup>12</sup> [40 CFR § 1508.27](#)

<sup>13</sup> [National Association of Environmental Professionals. 2014. Guidance on Best Practice Principles for Environmental Assessments.](#)

<sup>14</sup> [P. Doub. 2014. Uses of Tiered Significance Levels in NEPA Documents.](#)

<sup>15</sup> [R. Lazarus. 2012. The National Environmental Policy Act in the US Supreme Court.](#)

Oregon's state agency staff can implement the policies and how easily affected stakeholders can comply because they are precise and clear. Despite its length, the current definition<sup>16</sup> is vague, seems to require additional definition, and is potentially unenforceable in any context. Unless there are detailed administrative rules or other guidance on what constitutes 'significant' and definitions of the words therein, we recommend the working group and OPAC work to clarify the policy in an alternative manner and strike the word "significant".

Second, we recommend the language below to address the working groups concerns, while providing clear language for all stakeholders and a high level of protection for an ecological community that supports our state's wildlife and fisheries economies. Recommended improvements are in bold or strikethrough for the SAV policies (Policy Q And R):

Policy Q: Harvest of **marine** aquatic vegetation **of concern in intertidal and submerged rocky habitat** is prohibited except as regulated by state agencies for appropriate recreational, scientific, restoration, and educational use.

Policy R: **Marine** development activities occurring within ~~or near~~ an area with **marine** aquatic vegetation **of concern in intertidal and submerged rocky habitats** must have no ~~significant~~ adverse effects to the **marine** aquatic vegetation **of concern** or its habitat.

Third, we recommend several changes to current definitions that support the SAV policies:

**Marine** aquatic vegetation **of concern**:

Naturally occurring, native ~~marine plants, including~~ **aquatic vegetation and** macroalgae **inhabiting marine intertidal and submerged rocky habitats including kelps and other seaweeds, and plants including surfgrasses.** ~~(e.g. kelps and seaweeds), vascular plants (e.g. seagrass, surfgrass, and eelgrass), and other vegetation in marine environments.~~ **Not included in this designation: photosynthesizing single-cell algae (i.e. phytoplankton and diatoms), cyanobacteria, and soft substrate seagrasses, like eelgrass.** ~~This does not include microscopic or planktonic algae.~~ This definition does not apply to aquatic vegetation grown for aquaculture or mariculture.

The definitions of 'adverse effects' and 'marine development activity' can be clarified to specify what they are and what they are not. Doing so can help broaden or narrow the scope of activities by their likely degree of effect, while also acknowledging necessary exceptions. We suggest adding the following language (in bold) to the current definitions:

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<sup>16</sup> [Draft Rocky Habitat Management Strategy](#) (p. 55) Definition of term significant: Involves the evaluation of context and intensity of an environmental effect. Context will vary with the physical setting of the proposed action, and may involve interests at the local, regional, state, or federal level. Intensity refers to the severity of the effect; that is, the magnitude and duration of the effect. The intensity of an effect should be weighed along with the likelihood of its occurrence. An effect may be significant even when its chance of occurrence is not great, but when the resulting effect would be severe if it occurred. Significance does not lend itself to a formula or quantifiable test when used to describe natural resources (unlike statistical analyses where "significance" does lend itself to mathematical expression). The agency with jurisdiction over the activity being reviewed has final authority over determining significance.



Adverse effects:

Degradation of ecosystem function and integrity, including but not limited to, direct habitat damage, burial of habitat, habitat erosion, a reduction of biological diversity, or a degradation of marine living organisms including, but not limited to, abundance, growth, density, species diversity, and species behavior. **Effects from activities that are necessary for human health, safety, scientific research, or are beneficial to marine organisms, ecosystem function, or habitat resilience, are not considered adverse.**

**Marine** development activity:

A use involving the planning, construction, modification, or removal of facilities, or other structures. These activities may consist of the construction or exterior alteration of structures; dredging; drilling; dumping; filling; removal of any sand; gravel, or minerals; bulkheads; driving of piling; placing of obstructions; or any project of a permanent or temporary nature which interferes with the normal public use of the surface of the overlying lands. **Activities not considered marine development activities for this Part of the Territorial Sea Plan include aids to navigation, single boat mooring buoys (non-commercial), scientific equipment, habitat restoration activities, hazardous material removal, and derelict vessel retrieval.**

**4. Link Statewide Planning Goal 19's precautionary approach more clearly to this Strategy regarding protection of SAV.**

Operational application of the precautionary principle in marine resource management includes proactive action intended to prevent harm to the marine environment, shifting the burden of proof of sustainability to proponents of an extractive or impactful activity, and erring on the side of caution in the absence of good information. Decision-making in data-limited situations is explicitly called for in Goal 19, which includes management measures “take a precautionary approach to decisions about marine resources and uses when information is limited.”<sup>17</sup> Operationalizing the precautionary principle in the Strategy should include an additional policy that shifts the burden of proof to proponents of an activity that may impact SAV. This shift would allow state agencies to implement their missions and regulations without also being charged with identifying the latest science on an activity's impacts to this important habitat. If the science is not yet definitive, the more protective, precautionary standard applies. We recommend the following language, modified from Washington state's Marine Spatial Plan policies to protect SAV<sup>18</sup>, for consideration in Section A.6.b:

***Marine aquatic vegetation of concern creates environmentally sensitive, biogenic habitats that support unique, sensitive, and economically important species and the best available science indicates that impacts to such areas can cause irreparable harm and warrant a standard of protection as described in Policy R. This standard of protection may be***

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<sup>17</sup> Oregon's Statewide Planning Goals & Guidelines, Goal 19: Ocean Resources, OAR 660-015-0010(4).

<sup>18</sup> [Washington Marine Spatial Plan](#). 2018. Section 4.3.3. pgs. 4-23 to 4-26.



***overcome by submitting scientific evidence that clearly indicates that no adverse effects will occur from the activity.***

**5. Add additional datasets to the mapping tool to support a robust inventory of resources related to Oregon's rocky habitats.**

The newly released online SeaSketch mapping tool that will be used for the public designation proposal process is clear and the interface is intuitive. We support the state's approach to use the online mapping tool, provided that appropriate technical support is available for less technology savvy citizens. The data included is comprehensive. In addition, we recommend the following information be included in the tool's data library:

- 2015-17 Black oystercatcher abundance/bird density data previously provided by Portland Audubon (DLCD already has this information in the story map [here](#))
- eBird data from Oregon rocky coast hotspots for species that depend on rocky habitats for breeding, wintering, migration including the following species: harlequin ducks, rock sandpipers, wandering tattler, scoter species, and brown pelican. Several of these species are identified as "strategy species" (species of greatest conservation need) in ODFW's Nearshore Strategy<sup>19</sup>. eBird data can be freely [accessed here](#).
- Data gathered from intertidal-focused bio-blitzes via iNaturalist. [Click here for an example](#).
- Important Bird Areas that overlap Oregon's Rocky Habitat. Shape files can be requested from National Audubon<sup>20</sup>

**Conclusion**

Oregon's rocky marine habitats are a treasure, accounting for millions of visits to the coast each year. By making the above changes, OPAC can ensure this process results in better protections of our rocky habitats and kelp, which can increase our scientific understanding of these areas, benefit coastal communities, support wildlife, and reduce the impacts of climate change.

Thank you for considering these comments. We look forward to working with OPAC and other stakeholders to improve the management of our marine nearshore resources.

Sincerely,

Audubon Society of Lincoln City  
Dawn Villaescusa, President

Cape Arago Audubon Society  
Harv Schuboth, President

Coast Range Association  
Chuck Willer, Executive Director

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<sup>19</sup> <https://oregonconservationstrategy.org/ocs-strategy-species/>

<sup>20</sup> <https://www.audubon.org/important-bird-areas/state/oregon>

Haystack Rock Awareness Program  
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Carol Mockridge, President

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Ray Temple, Conservation Chair