THE PEW CHARITABLE TRUSTS

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Ms. Patty Snow
Oregon Coastal Management Program
Department of Land Conservation and Development
635 Capitol St NE, # 150
Salem, OR 97301

Submitted via email

RE: The Pew Charitable Trusts' Comments on Oregon's Section 309 Coastal Needs Assessment and Strategies (2021-2025)

Dear Ms. Snow:

Thank you for the opportunity to provide comments on Oregon's 309 Assessment and Strategy, conducted by the Oregon Coastal Zone Management Program (Program) under section 309 of the Coastal Zone Management Act (CZMA). Every five years, this program allows states and territories to assess their CZM programs across nine enhancement areas, rank specific areas in order of priority, and develop new five-year strategies in specific enhancement areas to improve protection and management of the coastal zone through the development of new enforceable policies and plans.

The Pew Charitable Trusts' (Pew's) main interests relative to the CZMA and section 309 are to promote and maintain healthy ocean and coastal/estuarine ecosystems. These natural areas provide many benefits and services that support coastal communities and economies, such as nursery habitat for fisheries, recreational opportunities and cultural values. They also play an important role in both climate mitigation and adaptation by sequestering carbon, helping ameliorate ocean acidification, reducing erosion, and lessening the impact of coastal storms and damaging waves.

Oregon has a strong networked coastal management program that promotes coordination among partner state agencies and local jurisdictions, advances comprehensive approaches to tackling complex challenges, and strategically directs and leverages limited resources. The Program also has strong partnerships with coastal communities, evidenced in the robust stakeholder outreach conducted as part of this assessment.

Accordingly, over the next five years, the Program has an opportunity to strengthen estuary and ocean management in furtherance of the State's climate goals (including Executive Order EO 20-04 and the recently released Draft Climate Mitigation Framework), coastal economies and natural heritage. We commend Oregon for its ambitious proposed 309 strategies for the period 2021 to 2025 focusing on resiliency planning (coastal hazards), estuary management (special area management plans), public access, and ocean resources. In particular, we support proposed strategies that will strengthen CZM enforceable policies to account for coastal hazards, climate impacts, and emerging marine uses, as well as proposed strategies to formally incorporate an ecosystem approach to understanding and addressing

threats to ocean health as part of Oregon's Territorial Sea Plan. We feel these strategies will bring to bear public input, science and evidence-based solutions for future Program updates necessary for addressing the significant challenges facing the coastal zone, most notably climate change.

We provide detailed comments on the proposed enhancement strategies related to coastal hazards, special area management plans and ocean resources in the following section.

Resiliency Planning (Hazards)

Pew supports the Program's prioritization of resiliency planning and the development of specific strategies related to reviewing enforceable policies and promoting shoreline and community resiliency. These strategies address some of the most critical issues facing the State's coastal zone including flooding, habitat loss, and community vulnerability from sea level rise.

We recommend incorporating input from a broad range of stakeholders and experts, including from other states and national entities, to take advantage of new research and policy guidance to complement Oregon's work to date including the Georgetown Climate Center's Managed Retreat Toolkit, the Pew Charitable Trusts' Mitigation Matters Report, and North Carolina's recently published Climate Risk Assessment and Resilience Plan.

Conferring with other states about the benefits and challenges associated with using local land use regulations or other management plans as sources of enforceable policies may also be beneficial. For example, with respect to strengthening enforceable policies (EPs), we note that Virginia as part of its draft 309 strategy for 2021-2025 proposed initiating a review of the state's enforceable policies related to coastal hazards and climate-impact considerations. Oregon could study that approach and join Virginia in such an audit. This work would be precedent setting and could guide other state CZM programs that are in the process of reviewing their EPs. Examples include EPs related to land-use planning in floodplains; policies governing protection and restoration of natural defenses like submerged aquatic vegetation, native oyster beds and natural shorelines; and authorities related to land conservation and opportunities to facilitate inland migration of coastal habitats projected to be inundated due to sea level rise.

One area of considerable concern not mentioned, and a less 'visible' coastal hazard, includes saltwater intrusion of important freshwater-based habitats and working lands. Although sea level rise modelling has occurred for estuaries in Oregon, associated impacts like salt water intrusion and working lands subsidence has not occurred to the same extent. Pew recommends that work to update beach and dune landform mapping to support implementation of Goal 18, as well as efforts relative to resiliency planning, consider salt water intrusion that will alter rare freshwater dunal wetlands and decrease productivity of adjacent agricultural land. Salt water intrusion could have significant implications for coastal community livelihoods.

The proposed update of the Oregon Resilience Plan (ORP) in 2021 could be an opportunity to incorporate this issue alongside other coastal hazards related to climate change impacts like sea level rise. As part of this update, we encourage the Program to advance innovative solutions to bolster the state's natural defenses to coastal hazards. For example, the Program could work with local communities in areas experiencing salt water intrusion and erosion to restore natural habitats as buffer areas that could also serve as landward migration zones for coastal habitats. The 309 strategy focusing on modernizing Oregon's Estuary Management Plan, discussed below, would be an ideal vehicle for

operationalizing the "nature based" resilience priorities related to estuaries included in the updated ORP.

Estuary Planning

We commend the Program's commitment to helping local communities modernize their estuary management plans (EMPs) through technical assistance, guidance, and direct engagement in plan updates. Many of these special area management plans have not been updated in decades and are therefore ill-equipped to address current and emerging challenges, such as increased growth, habitat degradation, and climate-related impacts like warming and acidifying waters, sea level rise, and increased storms.

This strategy creates an opportunity for the Program to incorporate scientific and technological advances into estuary management planning. For example, understanding of restoration ecology, salmon recovery, species life history requirements, fluvial geomorphology, and other issues relevant to estuaries has grown considerably over the last forty years. Web-based information and advanced spatial mapping tools are also now available. Helping communities update and modernize their EMPs can ensure these sensitive areas continue to provide important services to Oregon's coastal communities, such as nursery habitat for recreationally and commercially important fish and invertebrates, water quality, shoreline stabilization, flood mitigation, and carbon sequestration.

Estuary Guidance Document

Pew supports the development of an EMP guidance document that will support all 17 EMPs in the state. The guidance document will be a vital source of information for resource-constrained local communities as they engage in planning; for example, applying habitat inventory products generated through the Oregon Estuary and Shoreland Habitat Atlas, as well as including lessons learned based on a review of past updates and model ordinances that communities can incorporate and adapt to local conditions. The guidance document also creates an opportunity to advance statewide priorities such as the Executive Order on Climate Action (EO 20-04), Oregon's Climate Change Adaptation Framework, and Oregon's Ocean Acidification and Hypoxia (OAH) Action Plan at the estuary level.

We encourage the Program to include climate considerations and partnership opportunities in specific guidance on restoration efforts in individual estuaries. For example, the document could call for utilizing emerging science on the historic extent of west coast estuaries to support resource mapping and guide restoration planning, as well as provide case studies of successful partnership efforts with private landowners to restore historic wetlands, such as the ongoing wetland restoration projects in Tillamook Bay.

We also note opportunities to consider recent research on "blue carbon" (i.e., carbon sources and sinks found in wetlands and submerged aquatic vegetation - see the recently published Kauffman et al study "Total ecosystem carbon stocks at the marine-terrestrial interface: Blue carbon of the Pacific Northwest Coast, United States") in estuary planning. Incorporating a blue carbon aspect to EMP updates could help shape and reinforce on-going work by the Oregon Global Warming Commission to develop and maintain a Natural and Working Lands Inventory of the state's natural carbon sources and sinks and reveal new opportunities for coastal communities to benefit from state carbon incentives and carbon markets.

Finally, though the process of updating EMPs rests within localities, Pew recommends the Program consider options to help ensure operationalization of the guidance document by involving partner state agencies in its formulation and implementation. State partners critical in the formulation of a 21st century EMP guidance document include the following:

- Department of State Lands, relative to its role managing aquatic lands and implementing the state's wetland law.
- Department of Agriculture, which manages aquaculture leases
- Department of Fish and Wildlife, relative to implementation of the state's fish passage law.
- Oregon Watershed Enhancement Board, which coordinates land management agencies for natural and working lands climate goals in addition to various priorities for watershed restoration.

Individual Estuary Updates

The Program's special area management plan updates in individual estuaries (including Yaquina and Coos Bays) will complement the statewide guidance document with on-the-ground application of new policies and tools. As a first order, individual updates should take into account changes in management and regulatory structure over the decades. For example, since the initial creation of EMPs in the 1980s, the definition of estuaries has changed to 'head of tide' in Oregon. State and federal regulatory agencies now work from salmon recovery plans and require mitigation for estuarine impacts, all of which did not exist when the plans were created.

As noted in the previous section, the updates also provide an opportunity for communities to adapt to and help mitigate climate change at the local level. Using the plans as an opportunity to meet state carbon sequestration goals through accounting of natural management units already conserved or prioritizing areas for restoration based on multiple factors (e.g. marginal agricultural lands due to sea level rise, saltwater intrusion, and presence of historic tidal forested wetland) can help achieve multiple community and natural resource goals while also meeting broader state climate mitigation goals.

Finally, certain stakeholder groups were not present during the formulation of the original estuary management plans. Oregon coastal tribal nations had just been 'restored' by the federal government, and their government structures were still nascent. Without resources, they were not able to participate meaningfully in policy formulation or to speak to cultural and natural resources important to their tribal identity. This update and subsequent updates provide the opportunity to include this previously marginalized group indigenous to the area.

In sum, the state's priority to engage in estuary management plan updates and to seek funding to help augment County resources, is well placed. Pew welcomes the opportunity to support state and local managers and stakeholders in this process.

Ocean Resources

Pew supports prioritizing the Ocean Resources enhancement area for the development of new strategies. Our specific comments will focus on proposed strategies related to Parts 2 and 3 of the Territorial Sea Plan, *Decision-making and Resource Inventory and Rocky Habitats Management,* respectively.

Part 2: General Standards for Marine Resources

Like other west coast states, Oregon is facing rapidly changing ocean conditions, including warming and acidifying waters, that require an ecosystem approach to evaluating human impacts on vulnerable marine habitats (e.g., corals, sponges, kelp and eelgrass) and wildlife (e.g. salmon, Dungeness crab, and rockfish). Accordingly, strengthening the Territorial Sea Plan (TSP) by introducing an ecosystem evaluation framework capturing important coastal resources, general standards, and enforceable policies for ocean activities not otherwise addressed in other Parts of the TSP is critical.

Currently, Part 2 of the TSP, beyond requiring a resource inventory, lacks enforceable policies altogether. Pew is encouraged to see the Program integrate enforceable policy planning into this strategy. Coupled with the creation of an ocean health index, the State will be well positioned to respond to and manage emerging industrial uses such as sea bed mining in federal waters or offshore aquaculture in state waters with better information and better guiding standards. To help implement this strategy, the Program can draw from existing efforts to implement ecosystem-based management of ocean resources. For example, the Pacific Fishery Management Council's Fishery Ecosystem Plan and NOAA Fisheries' Integrated Ecosystem Assessment Program provide valuable information and resources for federal, state and local efforts to evaluate ocean health, assess human impacts, and develop ecosystem-based approaches to managing Oregon's nearshore waters. We also highlight relevant research supported in part by the Lenfest Ocean Program that focuses on climate-specific management challenges related to changing ocean chemistry on the west coast and the potential impacts to fishing communities.

In addition, Pew supports using the best available science to identify and designate ecologically rich areas to avoid impacts to sensitive habitats including deep water corals and whale migration routes from infrastructure related to offshore wind, potential offshore aquaculture, and other industries. As an example, we highlight a similar process undertaken by the state of Washington in the context of its ocean plan (Marine Spatial Plan). Washington identified Important, Sensitive and Unique Areas (ISUs) in state waters that have high conservation, historic and other values; and included standards to maintain the integrity of these areas and to protect the ISUs from adverse effects of marine development activities, while allowing existing compatible uses such as fishing. Focusing the plan on sensitive resource areas, rather than uses or activities, provides an opportunity to leverage work on the Territorial Sea Plan with Oregon's emerging Geographic Location Description work in terms of development of new enforceable policies and federal activities listed for Oregon's review.

An update to Part 2 will also create an opportunity to engage a broad range of stakeholders including businesses, communities, NGOs, tribes and others to examine current and emerging needs.

Part 3: Rocky Habitat Management

Pew appreciates the foresight of including implementation of Part 3 as part of the enhancement strategy to ensure newly designated management areas for rocky habitat are described in administrative rule and receive the correct management attention. With the inclusion of an ongoing public process for the state to consider proposed rocky habitat management areas, the Program should maintain some baseline of resources and staff time to ensure transparent and robust public engagement in the designation process.

We recognize the challenge and discussion that has occurred regarding the spectrum of marine protected areas in state waters, whether focused on managing visitation like Marine Gardens or more strictly regulated to sustain marine resources like Marine Reserves. The Program's enhancement strategy suggests that Marine Reserves may be incorporated into Part 3. However, Pew recommends

considering addressing the full suite of marine protected areas holistically in the updated Part 2 for two reasons. First, Marine Reserves include other marine habitat types in addition to rocky habitats, which is the focus of Part 3. Second, managing habitat is fundamentally different than managing for sustained fishing yield, which is a major component of Oregon's Marine Reserve Program. Although we commend the state for addressing both management goals, we contend that there is a better way to incorporate the Marine Reserves into the Territorial Sea Plan, and the update to Part 2 may provide that opportunity. Discussing the spectrum of marine protected areas and rocky habitat management designations holistically in Part 2 will not only help provide an ecosystem-based framework for all of the areas, but also help distinguish their roles in purpose and need.

Finally, addressing submerged aquatic vegetation (SAV) in the strategy is timely. Marine algae such as kelp, and seagrasses such as surfgrass, are increasingly recognized in scientific literature for the broad array of ecosystem services they provide, from nurturing commercially and recreationally valuable fish and wildlife, to protecting our communities from floods and storms, to helping sequester carbon and mitigate the impacts of climate change. Accordingly, there are several new policy and regulatory efforts in all three West Coast states to protect and restore SAV that the Program could leverage to create an explicit SAV Plan that brings together the work of the Ocean Acidification and Hypoxia Council with the Program's efforts in the TSP such as Washington's Marine Vegetation Atlas and the Puget Sound Bull Kelp Conservation and Recovery Plan, the California Ocean Protection Council's recently adopted Strategic Plan (including its targets and actions regarding eelgrass and kelp protections), and the California Department of Fish and Wildlife's forthcoming statewide Kelp Management Plan.

The Pew Charitable Trusts is committed to supporting the important work conducted by the Oregon Coastal Management Program to improve protection and management of Oregon's coastal resources. We thank you for the opportunity to comment on the Section 309 Assessment and Strategies and look forward to the development and implementation of new program enhancement strategies that will continue this vital work.

Sincerely,

Jennifer Browning
Director, Conserving Marine Life in the United States
The Pew Charitable Trusts