Land Protection Strategy Cape Meares NWR Cape Meares, Tillamook County, Oregon



Cape Meares NWR with Tillamook Bay in the background (USFWS photo taken during the 2023 aerial seabird survey).

August 2024

U.S. Fish and Wildlife Service Oregon Coast National Wildlife Refuge Complex Newport, Oregon

I. INTRODUCTION

The U.S. Fish and Wildlife Service (Service) proposes to expand the Cape Meares National Wildlife Refuge (NWR or Refuge) approved acquisition boundary (AAB) by 470 acres. The proposed expansion would support the survival and recovery of the federal and state-listed marbled murrelet (*Brachyramphus marmoratus*) and the northern spotted owl (*Strix occidentalis caurina*). A boundary expansion would facilitate the protection of old growth coastal forests that are known to sequester a large amount of carbon and would contribute to the Administration's goal to proactively combat the climate crisis by conserving 30% of our lands and waters. Additionally, expansion would directly benefit the local Cape Meares community and Oregon Coast visitors by protecting the community's natural resources, such as clean drinking water, providing opportunities for wildlife-dependent recreation, and contributing to climate resiliency by protecting future old growth forest. The proposed boundary expansion would also support 5 Strategic Species in Oregon (ODFW 2016) and 14 federal Migratory Birds of Conservation Concern (Service 2021).

Established in August 1938 "*as a refuge and breeding ground for migratory birds and other wildlife*," Cape Meares NWR is a predominantly old-growth Sitka spruce (*Picea sitchensis*) and western hemlock (*Tsuga heterophylla*) forest located on a Pacific Ocean headland in Tillamook County, Oregon. Cape Meares NWR represents pre-Euro-American settlement on the Oregon Coast, where ecological and geological processes predominate and continue in their natural state without major human influence. In 1987, the Service further designated Cape Meares NWR (excluding the hiking trail) as a Research Natural Area (RNA) to further protect its unique vegetation, geology, and wildlife habitat in a naturally functioning ecosystem.

Marbled murrelet occupancy was recorded at Cape Meares NWR in the late 1990s (Service, unpublished data). More recent surveys have not been conducted thoroughly to confirm current occupancy on the Refuge; however, the Tillamook area has maintained a comparatively low, but relatively stable, population since the early 2000s, indicating that marbled murrelets are successfully breeding in the old-growth habitat that does persist near Cape Meares NWR (L. Adrean, pers. comm.). Acquisition and protection of additional forested lands located contiguously with Cape Meares NWR would prevent industrial logging, future urban expansion, and other human interference on these lands, thereby increasing the amount of future old-growth forest in this area to support at-risk species. Currently, there are two parcels totaling 209 acres of secondary growth forest that are immediately available for acquisition. In coordination with the Service, the Cape Meares Community Association, which owns one of the two available parcels, has worked with The Conservation Fund to temporarily secure both parcels under contract with the respective sellers (J. Wros, pers. comm.).

Cape Meares NWR and the surrounding temperate coastal rainforest provides not only essential breeding habitat for listed and other special-status species, but also provides a living laboratory for measuring, monitoring, understanding, and responding to natural fluctuations in plant and wildlife populations following the resist-accept-direct (RAD) framework. Along with being a living laboratory, the unique temperate coastal rainforest habitat can provide wildlife-dependent recreation opportunities unlike anywhere else.

II. PROJECT OVERVIEW

A. Project Proposal

This proposal would expand the Cape Meares NWR AAB by 470 acres (Figure 1). Acquisitions within a larger AAB would allow the Service to expand the current 138-acre Cape Meares NWR to nearly 610 acres of permanently protected, contiguous Pacific Northwest Forest located in the immediate vicinity of documented sightings and nesting sites of marbled murrelet, northern spotted owl, and other special-status species that rely upon old growth forest on the Oregon Coast for their survival and recovery.

This proposal would also allow the Service to immediately acquire two available parcels (209 acres) of second-growth forest contiguous with the Cape Meares NWR (Figure 2). One parcel, owned by RLC, Inc., a construction and timber products corporation based in McMinnville, Oregon, has a current appraisal for 1,654 mbf of merchantable timber ready for harvest, the bulk of which is Sitka spruce and western hemlock. If allowed to fully mature, these trees would facilitate marbled murrelet and northern spotted owl breeding by providing a multi-storied, moderate to high canopy closure forest with large-diameter trees containing large, moss-covered limbs used for nesting platforms by these two listed species. Once lost, the earliest possible recovery time for this habitat to exhibit these old-growth characteristics is generally 100-200 years (Service 1997).

B. Contribution to Refuge System and Context to the Larger Landscape

The proposed AAB expansion contributes to landscape-level conservation goals and priorities outlined in several regional, state, and federal planning documents, including the 1994 Northwest Forest Plan, 1997 Marbled Murrelet Recovery Plan, 2011 Revised Recovery Plan for the Northern Spotted Owl, 2016 Oregon Conservation Strategy, and the most recent conservation priorities outlined by the Cascades to Coast Landscape Collaborative. The proposed expansion is supported by each plan as follows:

Northwest Forest Plan

• Interagency plan calls for a Land Allocation Goal of 30% **late successional reserves** for species such as marbled murrelets and northern spotted owls.

Oregon Conservation Strategy

- **Cape Meares NWR** identified as a "Region" in the State's Strategy connectivity analysis. The proposed expansion could add to the "Cape Meares NWR Region" by increasing the availability of high-quality contiguous habitat important for species movement along the Oregon Coast.
- The Strategy identifies the need for larger contiguous patches of **late successional mixed conifer forest** that has the potential to become old-growth forest capable of supporting the State's Strategic Species, two of which are marbled murrelet and northern spotted owl.

• **Tillamook Bay and its Tributaries are identified as a Conservation Opportunity Area** (COA) that encompasses Cape Meares NWR and part of the proposed expansion area as a priority due to its importance to migratory birds, shorebirds, and the coastal forest landscape.

Cascades to Coast Landscape Collaborative (CCLC)

- CCLC is a collaborative group of various partners, including the Service, whose mission is:
 "To achieve a connected network of functioning, resilient ecosystems and working lands in the coastal Pacific Northwest that can adapt to climatic changes and other large-scale stressors, through the use of collaborative, science-based strategies that support the cultural, economic, and ecological values of the region."
- CCLC's Northwest Landscape Conservation Mapper identifies spatial conservation
 priorities using various representative species and habitat distributions. Cape Meares NWR
 is identified as a conservation priority because it contains Sitka spruce habitat, marbled
 murrelet critical habitat, brown creeper presence as a surrogate for old growth forest habitat,
 and Western flycatcher presence as a surrogate for deciduous canopy habitat, among other
 things.

Marbled Murrelet Recovery Plan (Service 1997)

The plan identifies six marbled murrelet Conservation Zones, including one critical habitat unit located on the southern unit of the Cape Meares NWR. The plan emphasizes a need to maintain potential suitable habitat in large contiguous blocks, increase the amount, quality, and distribution of suitable but unoccupied nesting habitat, decrease fragmentation, and protect "recruitment" habitat.

Revised Recovery Plan for the Northern Spotted Owl (Service 2011)

For long-term recovery of Northern spotted owls, the plan asks land managers to conserve older stands that have high-value habitat, emphasize long-term ecosystem restoration and conservation, and manage for large contiguous block of late-successional forest.

C. Science-Based Criteria used to Support the Priority Conservation Targets

The Service partnered with multiple state and federal agencies and other stakeholders on all plans listed above, including as a member of the Regional Interagency Executive Committee for the development and implementation of the Northwest Forest Plan, as part of the Stakeholder Advisory Committee for the Oregon Conservation Strategy, and as a member of the Cascade to Coast Landscape Collaborative Leadership Team. Through these positions and processes, the Service provided subject matter expertise on federal trust species and their habitats, contributed science from Service staff and our partners that helped guide the development of long-term goals and objectives, and ultimately helped focus priority actions on federal trust species, such as the marbled murrelet, northern spotted owl, and 14 federally recognized Migratory Birds of Conservation Concern. As a result, areas prioritized for expansion in this Land Protection Strategy include two available parcels that are contiguous to the existing Cape Meares NWR, as

well as 261 additional acres of commercial timber that may be available for permanent protection in future years. Acquisition of these potential future parcels ties the two units of the Cape Meares NWR and the Cape Meares State Scenic Viewpoint into a larger contiguous block of future old growth forest that meets objectives outlined in all the plans listed above.

D. Non-Biological Considerations that Affect the Feasibility of the Project

There is community, tribal, and public support for the immediate acquisition of the two available parcels. The local Cape Meares Community Association initially brought the acquisition opportunity to the Service's attention to ensure the natural resources important to the community are protected in perpetuity. Additionally, they agreed to sell the second parcel that they own to the Service as part of the deal to create one larger contiguous block of protected old-growth forest at Cape Meares. These parcels are in the process of being bought by The Conservation Fund to ensure they are not logged while the Service's land protection process is conducted. The Service also discussed the expansion proposal with the Confederated Tribes of the Grand Ronde, who occupied the Cape Meares area for 5,000 years or longer before European exploration. The Tribes fully support further protection of forested habitat along the Oregon Coast (C. Pouley, pers. comm.). Additionally, all three Tillamook County Commissioners met with the Service to discuss the proposed refuge expansion; all three agreed that we should continually work together to preserve the natural features and resources that make Tillamook County unique in Oregon.

Acquisition and management of additional old-growth forest at Cape Meares NWR would complement and increase opportunities for wildlife-dependent Big 6 recreation, including additional hiking, wildlife observation, nature photography, environmental interpretation and environmental education in the form of teacher, volunteer, community, or staff-led field trips on newly acquired parcels. Bringing the additional land into the refuge system provides opportunities for Big 6 public use access to lands that are currently only accessible to the local community of Cape Meares or private timberlands. Creating additional spaces for equitable access to wildlife-dependent recreation in high tourist areas such as the Oregon Coast helps connect people to the natural world. For example, the Oregon Coast Trail, defined as a "State Wonder," traverses the Oregon Coast from border to border. It crosses beaches, headlands, and rivers connecting parks, refuges, and towns along the way where it provides a hiking adventure for hundreds of thousands of people from around the world. The current Oregon Coast Trail Action Plan proposes an option to re-align a portion of the Oregon Coast Trail onto an existing trail on one of the available parcels.

Cape Meares is a must-see destination for hundreds of thousands of visitors annually. Among its many attractions, Cape Meares boasts the shortest lighthouse on the Pacific Coast, the largest Sitka spruce in the entire state and is the only place on earth where a visitor can view three national wildlife refuges from a single location - Oregon Islands, Three Arch Rocks, and Cape Meares NWRs. Much of the Cape is protected by the State of Oregon as the Cape Meares State Scenic Viewpoint, which is contiguous with Cape Meares NWR. From July 2021 to June 2022, the Oregon Department of Parks and Recreation (OPRD) recorded >383,000 visits to Cape Meares. OPRD is a critical partner with the Service in managing this area as a single ecological unit, as well as partnering with the Service to build and maintain visitor services facilities from where all interpretation for the three NWRs occurs. Simply reaching Cape Meares is a journey of

its own. The road leading to the Cape Meares NWR and Scenic Viewpoint is designated as the "Three Capes Scenic Route." U.S. Highway 101, the main highway serving Tillamook County, is designated an All-American Road, meaning the scenery does not exist anywhere else and is a tourist destination in and of itself. This makes the "Pacific Coast Scenic Byway" one of the most unique places in the U.S.

The partnership between the Cape Meares Community Association and the Service was instrumental in the initial stages of the proposed expansion. The proposed expansion would directly benefit the Cape Meares community by permanently protecting future old growth forest that preserves the communities drinking water source. The refuge expansion would also economically benefit the small community of Cape Meares by attracting additional visitors to the area.

An initial phase of active restoration may be required after acquisition of additional parcels. Active restoration may include a grant-funded silviculture prescription and contracting for thinning of smaller trees to accelerate late-successional conditions (*i.e.*, large trees with complex crowns, multiple canopy layers, horizontal heterogeneity, *etc.*). The active phase of restoration would be followed by passive restoration in the form of permanent protection, monitoring, invasive species management, and if required, recreational access management.

Annual Operations and Maintenance (O&M) costs would be insignificant since the primary objective would be passive restoration over time. There would be occasional patrols, replacing boundary signs after an initial survey and staking, and some weed treatments, as needed, to get initial control over any non-native vegetation. However, these actions and anticipated needs already occur at Cape Meares NWR, much of which are completed by our partners at the State Scenic Viewpoint. Expanding the AAB as proposed would require minimal Service resources and incur negligible expenses that could be covered by existing station funds.

E. Acquisition Costs

Total project cost for the two available parcels is currently estimated to be between \$500,000 to \$800,000. We are waiting for more detailed information from a formal appraisal. The proposed funding source would be the Land and Water Conservation Fund, Recreational Access account.

F. Special Considerations

The two parcels that are currently available to the Service are under contract between the respective sellers and The Conservation Fund. As mentioned previously, an appraisal estimates approximately 1,654 mbf of marketable timber available on one of the two available parcels (May 2022, Garner Timber Services). The bulk of the merchantable timber is Sitka spruce and western hemlock, the two species most likely to support breeding sites for marbled murrelets and northern spotted owls if it is not harvested.

G. Targeted Resource Acquisition Comparison Tool (TRACT)

The Targeted Resource Acquisition Comparison Tool (TRACT) is based on the Service Strategic Growth Policy (602 FW 5) that requires all existing refuges, new refuges, and refuge expansions support viable and persistent populations of priority conservation species and achieve measurable conservation targets, such as population objectives that have been developed in cooperation with partners at various landscape levels (e.g., national, Regional, and local) to assess potential additions to the Refuge System. TRACT provides biological rankings that help Service management identify refuges where proposed land acquisition can make significant contributions to conservation. TRACT informs annual Land and Water Conservation Fund budget decisions.

The TRACT scores for the proposed Cape Meares NWR Boundary Expansion are provided in the table below as required by the Land Protection Planning Interim Guidance (USFWS May 18, 2016).

Waterfowl (2019)	Shorebirds (2022)	Waterbirds (2021)	Landbirds (2021)	T&E species (2023)	Biological score	Landscape resiliency (2021)
NC	NC	1B	2B	3C	1.2	3

The TRACT score indicates that the Refuge has a high ranking for Waterbirds and scores moderately well for Landbirds and Threatened and Endangered (T&E) species. The Waterbird score of 1B is based upon presence of the secretive marshbird and colonial waterbird, California gull, Aleutian Tern, Heerman's gull, and Western gull. The 2B Landbird score, is based on the presence of the Chestnut-backed Chickadee (Northern), Evening Grosbeak, Olive-sided Flycatcher, Rufous Hummingbird, Varied Thrush (Pacific), Vaux's Swift, White-breasted Nuthatch (Slenderbilled), and Wrentit. The 3C T&E species score is based upon the presence of Marbled Murrelet within the Refuge.

The landscape resiliency ranking uses Audubon estimates of bird species turnover due to climate change and The Nature Conservancy resilient and connected landscapes data to provide an overall estimate of refuge resiliency (a score of 1 is considered more resilient than a score of 5). This ranking is to provide additional information and is not included in the biological score.

Although the cumulative Biological Score of 1.2 is below average for all ranked projects and is unlikely to receive LWCF appropriations in FY26, the proposed realignment of the Oregon Coast Trail along one of the existing trails on this property make it a strong candidate for LWCF Recreational Access funds.

H. Next Steps

If the Director approves this Land Protection Strategy, the Service would proceed with a Land Protection Plan (LPP) and Environmental Assessment for the Cape Meares NWR approved acquisition boundary expansion. The LPP process would include public comment and

coordination with our partners at the Cape Meares Community Association, state and local governments, tribes, NGO partners, and other interested stakeholders. A final LPP would be submitted to the Director for approval.

Literature Cited

- Oregon Department of Fish and Wildlife (ODFW). 2016. Oregon Conservation Strategy. Salem, Oregon. <u>http://oregonconservationstrategy.org</u>
- U.S. Fish and Wildlife Service (Service). 1997. Recovery plan for the threatened marbled murrelet (*Brachyramphus marmoratus*) in Washington, Oregon, and California. Fish and Wildlife Service, Portland, Oregon. 203 pp.
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- U.S. Fish and Wildlife Service. 2021. Birds of Conservation Concern 2021. United States Department of the Interior, U.S. Fish and Wildlife Service, Migratory Birds, Falls Church, Virginia. <u>http://www.fws.gov/birds/management/ managed-species/birds-of-conservation-concern.php</u>

Personal Communications

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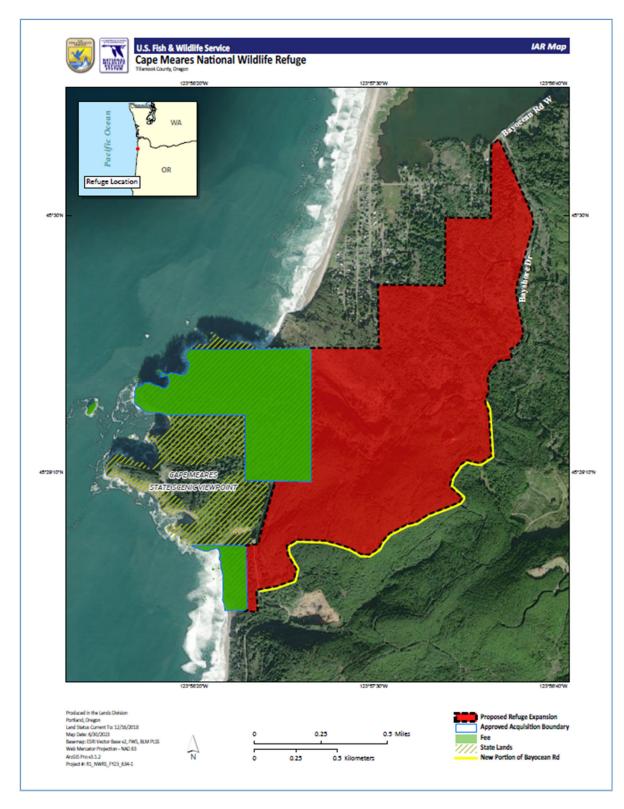


Figure 1. Proposed acquisition boundary expansion area (red area totaling approximately 470 acres) in relation to the existing Cape Meares NWR parcels (green area) and the State-owned Cape Meares Scenic Viewpoint. The new alignment of Bayshore Drive (yellow line) provides a logical man-made boundary for the proposed AAB.

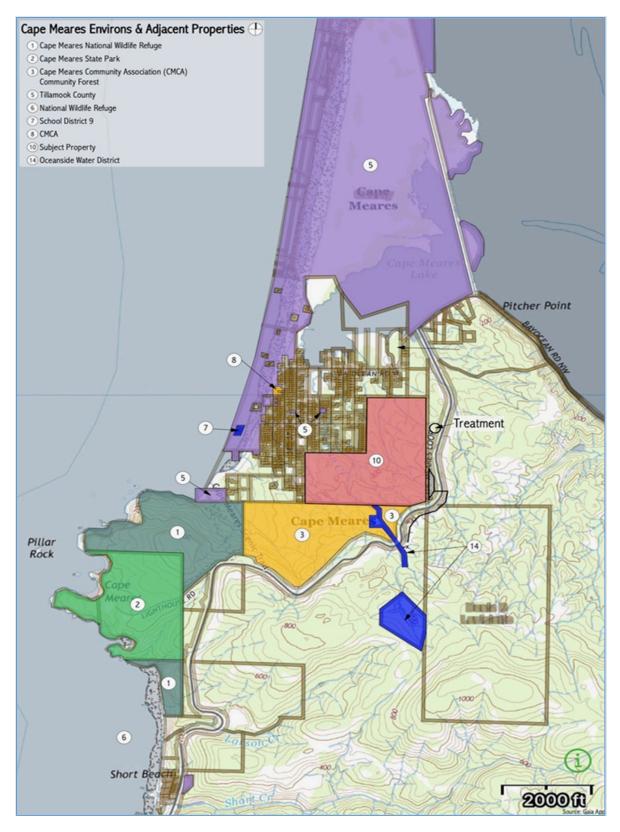


Figure 2. Two properties (#3 and 10) proposed for immediate acquisition in this proposal, and their relationship to the existing Cape Meares NWR (#1) and the Cape Meares State Scenic Viewpoint (#2). *Source: Cape Meares Community Association.*