

# Cape Meares Community Seeks to Study the Impact of Human and Natural Factors on the Health of Cape Meares Lake and Wetlands October 11, 2024

# A CALL TO ACTION

The Cape Meares Watershed includes Coleman Creek, Cape Meares Lake and the surrounding wetlands. For many who live in and visit Tillamook County, Oregon, the Lake is a special place. It provides food and shelter for life in the natural world AND supports various human activities like kayaking, boating, swimming, hiking, birding, angling, hunting, fishing, painting, photography, and scientific research.

As they enjoy this area, some Cape Meares residents see changes that lead to questions like:

- What types of wildlife species, both resident and seasonal, live in the Lake and wetlands?
- Which riparian and aquatic plants can be found in the Lake across the seasons?
- What are the qualities of the water in the Lake (e.g., salinity, temperature, depth) and how are they affecting life in and around the Lake?
- How is human activity affecting the health of the Lake (or not)?
- Is the Lake transitioning to a wetland (or not)?
- How is the Lake functioning within the Watershed?
- Which groups and individuals have a vested interest in the Lake ("stakeholders") and what are their perspectives on the current and future utilization of this resource?

## **OUR APPROACH**

The need for rigorous study is clear to members of the Cape Meares Community and to the Cape Meares Community Association (CMCA). To this end, CMCA initiated the **Cape Meares Lake Study Project** in July 2023 and formed a committee whose primary **MISSION** (purpose) is to advocate for the Lake, including parts of the Watershed that directly interact with the Lake. Our Committee's **VISION** ("north star") is simple: a high-functioning body of water with environs that support wildlife and human activity in sustainable ways.

**Key questions** guide our work, including: (1) What are the qualities of a "healthy" Cape Meares Lake, considering its status as an artificial lake because of the location of the Bayocean Peninsula Dike Road? (2) How healthy is the Lake right now? (3) How is the Lake and its watershed evolving over time? (4) How can CMCA collaborate effectively with various stakeholders to promote the resilience of the Lake and support how all stakeholders enjoy the Lake and its environs?

We plan to pursue our Vision and Mission in phases. **Phase One** focuses on describing how the Lake functions and understanding the perspectives of stakeholders. Depending on what we learn from Phase One, **there could be a Phase Two** about which we can only speculate in 2024.



As we implement the *Mission* of the Lake Study Committee, we aim to achieve the following Phase One **GOALS** (G):

- (G1) Understand the conditions and functioning of Cape Meares Lake using rigorous scientific principles and methods grounded in Citizen Science.
- (G2) Understand the perspectives of the various stakeholders who interact with the Lake, including those with oversight and/or management responsibilities.
- (G3) Determine whether CMCA will pursue Phase Two activities based on Phase One results.

To accomplish our *Goals*, we will implement the following **ACTIVITIES (A)** simultaneously:

- (A1) Use existing data to establish a baseline *Cape Meares Lake Profile* and to identify gaps in our knowledge.
- (A2) Using the *Cape Meares Lake Profile* developed during Activity A1, develop and implement a *CMCA Lake Status Monitoring Plan* that includes water quality and wildlife monitoring (selected types of animals, plants).
- (A3) Plan and conduct "listening sessions" in partnership with stakeholders.
- (A4) Engage local partners, local volunteers, and subject matter experts to assist with the development of the CMCA Lake Status Monitoring Plan.
- (A5) As possible, involve local K-12 schools and universities to facilitate broader community engagement and learning.
- (A6) Identify a range of potential funding sources so we can be ready to apply for support if needed (the CMCA Grant-making Lead will coordinate this effort).
- (A7) Design and implement a mixed-methods evaluation grounded in community-based evaluation (a combination of quantitative and qualitative/survey data). Minimally, this will support grant-making efforts.

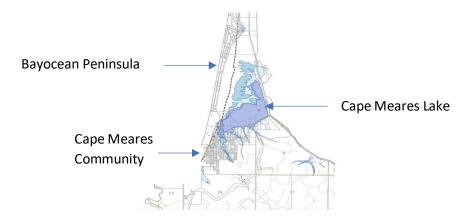
Upon completion of the *Activities*, we will produce the following **OUTPUTS (O)** (specific products/deliverables) which include a:

- (O1) Cape Meares Lake Profile
- (O2) CMCA Lake Status Monitoring Report (details our findings with recommendations)
- (O3) Stakeholder Listening Sessions Report (summary of all input provided by stakeholder listening sessions with recommendations)
- (O4) *Project Evaluation Report* (addresses key points such as lessons learned and assesses the project's achievements and challenges)
- (O5) Cape Meares Lake Study Committee recommendation(s) to the CMCA Board regarding the next steps



### **ABOUT THE LAKE**

Cape Meares Lake, Coleman Creek, the wetlands, and the unincorporated Cape Meares Community are part of what we informally call the Cape Meares Watershed or the "Coleman Creek Watershed. Officially, the ~140-acre lake is part of the Tillamook Bay Watershed. The U.S. Fish and Wildlife classifies the Lake as *L2ABH* (https://fwsprimary.wim.usgs.gov/wetlands/apps/wetlands-mapper/).



The Lake is at the southwest corner of Tillamook Bay, south of the Bayocean Spit, and north of the Cape Meares Headlands. This shallow lake was created in the 1950s during the construction of the Bayocean Dike Road by the U.S. Army Corps of Engineers. Lidar mapping suggests seasonal fluctuations in the Lake's depth. Historically, it was part of Tillamook Bay with its tidal saltwater marshes and dune vernal pools. Today, freshwater drainage, creeks, and saltwater ocean spray and waves feed the Lake. Water exits through *one* culvert at the southeast corner near the Bayocean Dike Road, which leads to the Bayocean Peninsula Park; the Tillamook County Parks Department manages the Park. The Oregon Department of Fish and Wildlife manages activities such as the stocking of fish, vegetation control, and outfall maintenance.

# ABOUT THE CMCA WATERSHED PROJECT

This project is a logical extension of the *CMCA Watershed Conservancy Project*. The threat of logging upland and concerns about landslides and flooding led CMCA to start the CMCA Watershed Conservancy Project (WCP) in 2022. CMCA's leadership resulted in the 2024 purchase of ~206 acres surrounding most of Cape Meares by The Conservation Fund (TCF). The TCF is holding the land while the federal government (Department of the Interior, U.S. Fish and Wildlife) completes required planning and public processes to support a 2026 acquisition. More information about the project may be found at <a href="https://capemeares.org/community/">https://capemeares.org/community/</a>. CMCA is a 501(c)3 organization public benefit corporation whose mission includes the ecologically sound stewardship of the community's natural resources and those in the surrounding natural areas.