## History of Cape Meares Lake

## by John Harland

The midden on the south side of Cape Meares Lake indicates this area was an important source of seafood for the local native community for hundreds of years. The lake was originally part of Tillamook Bay, and it was only recently formed as a lake after repair of the erosion of Bayocean Spit that destroyed the town of Bayocean.

Erosion of Bayocean Spit started after the construction of the North Jetty at the entrance to Tillamook Bay in 1917. The erosion caused the destruction of the town of Bayocean and eventually breached the spit at the south end in the 1950's. When the Army Corp of Engineers built the rock and sand dike as part of repairing the erosion, a new shoreline forming the east side of the new lake was established. The dunes that form the west boundary of the lake built up after the south Jetty was completed in the 1960's. The level of the lake was established by construction of a small overflow dam in the SE corner by the lake.

The fresh water of Cape Meares Lake is fed predominantly by Coleman Creek and other streams flowing from Mt. Meares. The Coleman Creek watershed, that includes the Creek, wetlands and Cape Meares Lake is the focus of a thriving ecosystem that nurtures a full range of land and aquatic animals. The lake and Tillamook Bay are an important habitat for birds and attract bird watchers from around the state and all over the US. It is a key stopping point for migratory birds as well as home to many year-round residents and transitory raptors. The lake is stocked with triploid rainbow trout by the Oregon Department of Fish and Wildlife (ODFW) and there are self-sustaining populations of Largemouth Bass and Bluegill that create popular recreational fisheries. Cape Meares lake is a major tourist attraction with kayaking, paddle boarding, fishing, bird watching and hiking being some of the favorite activities.

The lake water quality and the ecosystem the lake supports are under threat from the many impacts of climate change. Longer and dryer summer's heat the lake and cause more evaporation, which along with invasive weeds, such as Eurasian watermilfoil, water lilies, Japanese knotweed, and yellow flag iris are displacing native vegetation, reducing recreational access, and have the potential to reduce dissolved oxygen in the lake which may have adverse effects on fish and other aquatic species. In winter, more intense storms are causing waves to overtop the dunes in the village of Cape Meares introducing saltwater and sand. Storms higher up the watershed are causing erosion that silts the lake and chokes wetlands. It is important that we develop a management plan for Cape Meares Lake to mitigate these challenges.