

Esquimalt Lagoon: Research Studies

The following is a non-exhaustive list of research studies that have been conducted at Esquimalt Lagoon. The unique geographic and biological features of the lagoon offer many opportunities for further research. Previous research studies could be potential launching points for further research. New areas of potential research are listed at the bottom of this document.

Water and sediment sampling

- [Development of a Water and Sediment Sampling and Monitoring Program for the Esquimalt Lagoon, 2002](#)
- [CRD Water Quality Investigations 2008](#)

Algal blooms

- [Phytoplankton Blooms in Esquimalt Lagoon in 2008, and the Effects of Freshwater Inputs, Nicky Haigh, 2008](#)
- [Development of harmful algal blooms in a coastal lagoon: the influence of physicochemical processes and phytoplankton ecophysiology, Arielle Kobryn 2012](#)

Ecosystem profiles and mapping

- Ecosystem Profiles, Ecosystem Map, and Vegetation of Coburg Peninsula, Esquimalt Lagoon, Magnus Bein, 2005: <https://colwood.civicweb.net/document/148520>
- [Esquimalt Lagoon -Terrestrial Ecology 2013](#)
- [Harbours Ecological Inventory and Rating – Intertidal, Backshore and Subtidal Zones](#)

Bird studies

- [Victoria and Esquimalt Harbours Bird Censuses 1997-1999, Shepard, M](#)
- [Citizen scientists help us understand benefits of reduced traffic for birds at Esquimalt Lagoon, Birds Canada, 2020](#)

Urban Ethnoecology studies

- [Erosion and Armouring Effects on Coburg Peninsula 2014](#)
- [Cultural Significance of Esquimalt Lagoon 2013](#)
- [Contemporary Site Use Esquimalt Lagoon 2013](#)
- [The Ecological Restoration of Esquimalt Lagoon 2013](#)

Forage Fish

- [Esquimalt Lagoon Forage Fish and Beach Profile, Archipelago Marine Research, 2010](#)
- [Preliminary habitat assessment for suitability of intertidally spawning forage fish species, Emerald Sea Research and Consulting, 2010.](#)
- [Forage Fish and Salmonids in Esquimalt Lagoon 2013](#)

Dune Restoration Project Monitoring

- [Restoration of Dune Habitat, Coburg Peninsula, David Blundon, 2013](#)

Fish Monitoring

- [Coastal cutthroat trout monitoring – Bee Creek](#)
- [European green crab monitoring](#)

Coastal Processes

- <https://colwood.civicweb.net/filepro/documents/148513>

Additional areas for potential study:

- Distribution of invasive species (eg. invasive plants, European Green Crab)
- Bird surveys
- Coastal Douglas fir and riparian zone mapping
- Fringe marsh and salt marsh monitoring
- Species at risk surveys
- Fish diversity surveys
- Enhancements to support forage fish spawning
- Biodiversity studies
- [Wildlife refuges](#)
- Human/wildlife interactions
- Stream studies
- Seasonal changes in water quality