

Enhancing Estuary Resilience:
An Innovative Approach to Sustaining Fish and Fish Habitat in a Changing Climate

A BC Salmon Restoration and Innovation Fund (BCSRIF) Project

10 Estuary Facts

1. Estuaries are where a river meets the ocean. They are a transition zone at the tidal mouth of a river where freshwater and saltwater mix.
2. Estuaries act as nurseries for juvenile salmon providing a place for them to rest and adjust to saltwater before they swim out to sea.
3. Estuaries and coast wetlands comprise less than 3% of B.C.'s coastline but support more than 80% of B.C.'s coastal fish and wildlife including critical habitat for Pacific salmon.
4. Estuaries have highly productive, delicate plant and animal ecosystems for many species including Pacific salmon, marine mammals and migratory birds.
5. The complex structure and aquatic vegetation of the estuary also serves to filter sediment, trap carbon dioxide, and stabilize shorelines from erosion.
6. Some of B.C.'s coastal estuaries support multiple species of salmon and dozens of bird species.
7. The long-term sustainability of estuary habitat is critical to the health of wild B.C. fish stocks.
8. Estuaries have been called the heart of ecosystems between rivers, the ocean and upland environments.
9. Climate change is expected to significantly impact estuary ecosystems due to rising sea-levels, ocean acidification, temperature and salinity changes as well as changes to freshwater and sediment levels.
10. Estuaries can be made more resilient to climate change and sea-level rise by taking measures to restore their processes through informed estuary management, conservation, restoration and enhancement.