

Esquimalt Lagoon Stewardship Initiative 2015 Annual Report



Introduction

The Esquimalt Lagoon Stewardship Initiative (ELSI), supported by the Capital Regional District (CRD), is a broad coalition of community and environmental groups, institutions, governments and First Nations working together to protect, enhance and restore Esquimalt Lagoon and Coburg Peninsula. After forming in 2001, ELSI developed a Stewardship Plan for Esquimalt Lagoon which provides the framework for a coordinated approach to environmental management of the area. The consensus-based steering committee, chaired by the CRD Harbours and Watersheds Coordinator, is responsible for guiding the implementation of this plan. The initiative creates opportunities for collaboration on environmental projects and outreach activities, and provides a forum for exchange and sharing of information. A part-time ELSI coordinator, funded through the CRD, initiates and manages projects, seeks funding and coordinates the initiative.

In 2015 volunteers worked to improve stewardship of the lagoon and adjacent dune ecosystem, monitored fish populations in streams around the lagoon and helped support the Bee Creek restoration project. ELSI reviewed and provided comments on several developments around the lagoon and presented the ELSI display at public events to raise awareness about issues affecting the lagoon and surrounding ecosystems. This year ELSI welcomed the newly formed Colwood Community Association as a member of the steering committee.

Vision

To protect, enhance and restore the health of Esquimalt Lagoon for future generations of people, plants and animals.

Goals

Goal 1:

Promote and support lagoon stewardship and education

Goal 2:

Prevent further loss or destruction of habitat and wildlife

Goal 3:

Reduce contaminant inputs to the lagoon

Goal 4:

Promote environmentally protective recreation use in the lagoon area

Goal 5:

Promote environmentally protective land use

Highlights

Water Quality Objectives

Each year, CRD staff collect water quality data from Colwood, Bee and Selleck creeks and a selection of stormwater discharges at the lagoon to provide information about watershed health. In 2015, staff rated 7 stormwater discharges in Esquimalt Lagoon for public health concern including Colwood, Bee and Selleck creeks. Staff assigned a low public health concern rating to all discharges into the lagoon with the exception of discharge 933 at the toe. Discharge 933 received a moderate rating and has been a concern for a number of years. It is spring-fed and likely impacted by upstream septic systems and animal waste. Test results indicate that bacteria from a human source was present, as well as ruminant animals (e.g. deer) and dogs. Creek water quality data indicated that Bee and Selleck creeks continue to be healthy relative to other CRD creeks. With the exception of phosphorus in Colwood and Bee creeks, no exceedances of aquatic life guidelines were measured.

Volunteer Beth Mitchell shows DFO community advisor Shona Smith cutthroat trout caught in Gee trap as part of ELSI fish monitoring program.

Land and Water Use

ELSI reviewed and provided comments on Royal Roads University's new Sustainability Plan 2015 - 2020. This is now an online "living document" that will be continuously updated as new information becomes available.

Colwood engineering staff and consultants gave presentations at ELSI meetings about erosion monitoring at the lagoon bridge and potential impacts that climate change will have on Colwood's waterfront. Of urgent concern is the sewer pump station on Coburg Peninsula which will be subject to inundation as sea level rises. Colwood drafted a protection plan for the pump station that engineers presented to the committee for comment. The station is at significant risk of flooding well before the end of its normal life expectancy in 2065. The plan recommends flood-proofing the equipment, raising and extending the length of the protective berm surrounding the pump station, installing an emergency generator and to consider moving the pump station before 2065.

ELSI reviewed development agreement revisions and variance applications from Pacific Landing and provided comments to Colwood regarding protection of riparian areas during construction, trails planned for the Migratory Bird Sanctuary portion of the lands and other environmental concerns. ELSI also reviewed the subdivision application and environmental assessment of a waterfront property on the lagoon.





Aquatic ecologist Patrick Lucey led a tour at Bee Creek, providing ELSI members with information about regional hydrology, significance of wetlands and proper functioning condition of creeks.

Stewardship and Outreach Events

ELSI volunteers held a broom pull on Coburg Peninsula in May, participated in the Mother's Day Paint-In at Royal Roads University and the Canada Day celebrations at Fort Rodd Hill and Fisgard Lighthouse National Historic Site. ELSI sponsored the Esquimalt Lagoon interactive watershed model at these public events. Volunteers participated in the Great Canadian Shoreline Clean-up in September and continued regular beached-birds and coastal water bird surveys in partnership with the Canadian Wildlife Service. Steering committee members started the process of updating the ELSI display used at public events. Colwood consulted with ELSI about their proposed "Welcome to the Waterfront" signage and events to celebrate and raise awareness of the waterfront at Coburg Peninsula. A volunteer appreciation barbeque was held to recognize ELSI volunteers for all their efforts on behalf of the lagoon and the wildlife it supports.

Fish Monitoring

ELSI volunteers continued to monitor fish in the creeks that enter Esquimalt Lagoon through live trapping and release. Data collected from continuous seasonal monitoring since 2004 was summarized and submitted to DFO for their records. Resident populations of cutthroat trout continue to inhabit Bee and Colwood creeks and coho salmon are regularly found in the lower reaches of Colwood Creek.

Bee Creek Restoration

Volunteers continued holding weekly work parties to restore and enhance the riparian area of Bee Creek. The large scale development being planned at this site made the restoration and enhancement work challenging but more important than ever. Efforts continue to control and eradicate invasive plants, such as reed canary grass, and replant with native riparian species.

Thank you to all the volunteers from Pearson College, Camosun College, Greater Victoria Green Team and the community who helped with ELSI projects, and to Thrifty Foods for donating food for the annual volunteer BBQ.



Esquimalt Lagoon Stewardship Initiative

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ELSI Partners

Committee Members

- Canadian Wildlife Service
- Capital Regional District
- City of Colwood
- City of Langford
- Colwood Community Association
- Esquimalt Lagoon Enhancement Association
- Local residents
- Parks Canada
- Royal Roads University
- Victoria Natural History Society

Advisory Members

- Esquimalt Nation
- Songhees Nation
- BC Ministry of Environment
- Department of National Defence
- Environment Canada
- Fisheries and Oceans Canada



Focus for 2016

In 2016, ELSI will focus on:

- Reviewing and providing comments on development proposals in the lagoon area
- Working with our partners to improve water quality in the lagoon and investigating nutrient sources entering the lagoon and its tributary creeks, and establishing water quality objectives for Esquimalt Lagoon
- Working with community partners to improve habitat in Pit House Park
- Completing the revision of the ELSI display
- Promoting activities that engage the community in stewardship of the Esquimalt Lagoon watershed

Pictured above: Hundreds of visitors at the Mother's Day Paint-In at RRU learned about the work of ELSI in supporting and protecting the ecosystems at Esquimalt Lagoon. The interactive watershed model demonstrates how contaminants from human activities can affect the watershed and what we can each do to help minimize our impact.

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