

Esquimalt Lagoon Stewardship Initiative 2013 Annual Report



Introduction

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

This year ELSI helped distribute a harbours survey for Esquimalt Lagoon and redesigned and updated the website. Throughout the year ELSI volunteers worked to improve stewardship of the lagoon and adjacent dune ecosystem, helped support the Bee Creek restoration project and conducted outreach and education.

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

Data collection for the development of harbour water quality objectives continued with CRD staff collecting more robust data on water quality, flow dynamics and benthic invertebrate communities in Colwood Creek, the main tributary to Esquimalt Lagoon. Sampling in February and September at the mouth of Colwood Creek indicated that fecal coliform and phosphorus contamination is a concern. It is not known whether the source of fecal coliform bacteria is from human or animal waste, and the elevated phosphorus may be due to failing septic systems, land clearing or improper fertilizer use. Phosphorus can potentially impact the lagoon by promoting algal growth which adversely affects aquatic life. A full year of data has now been collected from flow monitors in Colwood Creek. The creek data, along with the lagoon water quality data collected in 2012, were submitted to the BC Ministry of Environment for interpretation and development of recommended objectives. The report should be available in fall of 2014.

Harbours Survey

CRD Harbours Program staff conducted a public survey during the summer to support development of water quality objectives for the core area harbours. ELSI members provided input for the questions about Esquimalt Lagoon and helped distribute the surveys at outreach events. The survey covered how people value and use the lagoon and adjacent areas, issues of concern and visions for the future. More than 280 people provided input about the lagoon. Results will be available in 2014.

ELSI collaborated with the University of Victoria Geography Department as part of the public engagement process for establishing water quality objectives. Students enrolled in the urban ethnoecology

course, “Place Making at Esquimalt Lagoon”, interviewed many local residents to learn their stories and researched other aspects of peoples’ relationship to the lagoon now and in the past. Their reports are posted on the ELSI website.



ELSI volunteers at the annual September beach clean-up.

Stewardship and Outreach Events

ELSI volunteers held a broom pull on Coburg Peninsula in the spring and a shoreline clean-up at the lagoon in the fall. ELSI participated in the annual Canada Day celebrations and the Off-the-Grid event at Fort Rodd Hill National Historic Site as well as the Mother’s Day Paint-In at Royal Roads University.

ELSI volunteers continued their regular beached-birds and coastal water bird surveys in partnership with Canada Wildlife Services. ELSI also worked with Colwood staff to develop an updated dog on-leash flyer for distribution at the lagoon and public events. Keeping pets on a leash is vital for minimizing disturbance to birds in the federally designated Migratory Bird Sanctuary at Esquimalt Lagoon.



Camosun College students helped propagate over 500 dune grass seedlings started from seeds collected on Coburg Peninsula in 2012. ELSI members are grateful to former ELSI coordinator Natalie Bandringa (far right), for her years of dedicated work in support of the lagoon and its ecosystems. Thank you Natalie! Kitty Lloyd is now the ELSI coordinator.

Fish Monitoring

ELSI volunteers continued to monitor fish in the creeks that enter Esquimalt Lagoon. Continuous monitoring since 2004 confirms that there are resident populations of cutthroat trout throughout Bee and Colwood creeks. Coho salmon fry are found regularly in Colwood Creek despite the concern of low summer flows. With the ongoing restoration in Bee Creek, it is hoped that coho will eventually be found there as well.

Bee Creek Restoration

The dedicated volunteers for the Bee Creek restoration project spent 250 hours working to restore the riparian area along the lower reaches of this creek where it flows through the Coast Collective Art Gallery before entering the lagoon. Now in the third phase of the project, the focus is on removal of invasive plants including reed canary grass, spurge laurel (*Daphne*) and Himalayan blackberry. Replanting is done with native species that volunteers have propagated onsite including roses, sword fern, red flowering currant, blue-eyed grass, sedge, false lily-of-the-valley, beach strawberry and dune grass.

Restoration volunteers also worked with Camosun College to propagate and maintain dune grass seedlings for the Dune Habitat Restoration Project.

Pilot Dune Habitat Restoration Project

Camosun College completed a summary report of six years of dune habitat restoration project monitoring, now posted on the ELSI website. Overall, native plant species are increasing and non-native species, except for grasses, are decreasing. Total cover of all plant species, on both treatment and control plots, showed slightly declining trends over the six year period. Despite this, overall plant cover remained high (>90%) which is encouraging considering the high visitor use along this dune ecosystem and the amount and movement of large driftwood from annual winter storms. The report recommends the continuation of the annual monitoring.

New ELSI Website

The ELSI website was fully redesigned and updated in 2013. It is now easier to view on tablets and smart phones. Check it out at www.elsi.ca

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ELSI Partners

Committee Members

- Canadian Wildlife Services
- Capital Regional District
- City of Colwood
- City of Langford
- Esquimalt Lagoon Enhancement Association
- Habitat Acquisition Trust
- Local residents
- Parks Canada
- Royal Roads University
- SeaChange Marine Conservation Society
- 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 2014

In 2014, ELSI will focus on:

- Reviewing and providing comments on development proposals in the lagoon area
- Analysis and reporting of the harbour survey results and creek flow data
- Establishing water quality objectives for Esquimalt Lagoon
- Working with our partners to improve water quality in the lagoon and investigating nutrient sources entering the lagoon and its tributary creeks
- Facilitating installation of the First Nations interpretive signs and cedar mural with Colwood and First Nations partners
- Promoting activities that engage the community in stewardship of the Esquimalt Lagoon watershed

ELSI introduced many students to the sensitive ecosystems surrounding the lagoon.