

Our Vision

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

Our Goals

- Promote and support lagoon stewardship and education
- Prevent further loss or destruction of habitat and wildlife
- Reduce contaminant inputs to the lagoon
- Promote environmentally protective recreation uses in the lagoon area
- Promote environmentally protective land uses



Original Esquimalt Lagoon bridge built in 1906 by the Royal Garrison Artillery.

Photo credit: Parks Canada and Fort Rodd Hill.

Background

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.

After its founding in 2001, ELSI developed a Stewardship Plan for Esquimalt Lagoon which provides a framework for a coordinated approach to environmental management. ELSI creates opportunities for collaboration on environmental projects and outreach activities and provides a forum for the exchange and sharing of information.

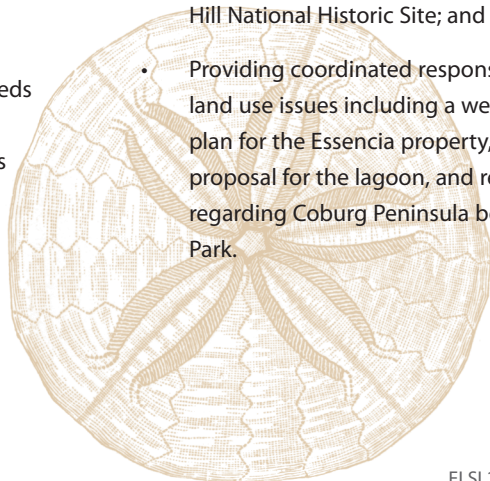
ELSI is led by a consensus-based steering committee responsible for guiding the implementation of the Esquimalt Lagoon Stewardship Plan. ELSI is chaired by the Capital Regional District's (CRD) Harbours and Watersheds Coordinator. A part-time assistant coordinator, funded through the CRD, initiates and manages projects, seeks funding and coordinates ELSI.

2010 Accomplishments

Due to changes in funding allocation for the CRD's Harbours Environmental Action Program, through which ELSI is funded, the ELSI budget was significantly reduced in 2010. Steering committee meetings were held on an as needed basis, subcommittee meetings were suspended and no new projects were undertaken. ELSI's 2010 accomplishments included:

- Contracting a forage fish survey and beach profile study;
- Continuation of the historical signs and mural project;
- Volunteer participation in a broom pull, beached bird surveys, coastal water bird surveys, fish monitoring, Great Canadian Shoreline Clean-up, Naval Celebration and Canada Day at Fort Rodd Hill National Historic Site; and
- Providing coordinated responses to Colwood on land use issues including a wetland restoration plan for the Essencia property, a food vending proposal for the lagoon, and recommendations regarding Coburg Peninsula becoming a CRD Park.

Visit us at:
www.elsi.ca



ELSI Committee

- Canadian Wildlife Service
- Capital Regional District
- City of Colwood
- City of Langford
- Esquimalt Lagoon Enhancement Association
- Go Rowing and Paddling
- Local residents
- Parks Canada
- Royal Roads University
- SeaChange Marine Conservation Society
- Victoria Natural History Society
- WestShore Chamber of Commerce

Advisory Members

- BC Ministry of Environment
- Capital Regional District Parks
- Department of National Defence
- Environment Canada
- Esquimalt Nation
- Fisheries and Oceans Canada
- Songhees Nation

Water Quality Monitoring Program

For the past several years, the lagoon has experienced dense algal blooms that resulted in fish and crab kills in late summer. To characterize and pinpoint sources for the elevated nutrient levels that fuelled the algal blooms, the CRD Stormwater, Watersheds and Harbours program increased sampling efforts around the lagoon during the past several years.

In 2010, nutrient levels measured were not out of the ordinary and no fish kills occurred in the lagoon. University of Victoria graduate student research into the nutrient dynamics and microalgal blooms in the lagoon continued. General trends showed that nitrate, ammonia and silicate levels were highest during winter months and lowest during spring and summer when phytoplankton populations were most dense. Phosphate levels showed two spikes, in winter

and late summer. This apparent anomaly is being investigated.

Stewardship and Education

ELSI volunteers organized a broom pull on Coburg Peninsula and participated in a shoreline clean-up, and naval celebrations and Canada Day at Fort Rodd Hill National Historic Site. Regular and on-going beached bird surveys and coastal water bird surveys were also undertaken.

Fish Monitoring and Spawn Surveys

Since 2004, ELSI volunteers have conducted a Community Fish Monitoring Program in the creeks that flow into Esquimalt Lagoon. The goal is to determine the types of fish that use the creeks during different seasons and any changes in this pattern over time. Monitoring has confirmed that there are resident populations of cutthroat trout throughout Bee

Creek and Colwood Creek, and coho salmon fry are regularly found in Colwood Creek.

ELSI contracted Archipelago Marine Research to conduct a forage fish survey at the lagoon during the winter spawning season. Although no fish spawn was found, there were adequate amounts of suitable habitat and substrate. Other surveys in the area did find some sand lance and surf smelt spawn earlier in the season, and further studies are recommended.

Beach Profile Study

In 2005, ELSI commissioned a beach profile and dune vegetation survey of Coburg Peninsula. The beach profile study was repeated in 2010 by Archipelago Marine Research, and the profiles did not indicate major differences over this time period. In recent years, significant erosion has occurred at the mouth of the lagoon which has undermined the bridge approaches. The

Biologist Pam Thuringer and ELSI volunteer Beth Mitchell conducted a forage fish survey in January 2010.





Bridge at Esquimalt Lagoon is under threat due to erosion.

bridge was closed for several weeks in early 2010 until temporary repairs were made to the abutments. With sea level rise and storm surges anticipated in coming years, erosion will become a more serious issue, likely to affect the bridge as well as the sewer lift station at the opposite end of the lagoon. For this reason it is important to continue to monitor physical processes occurring here.

Pilot Dune Habitat Restoration Project

The goals of the project are to restore native dune habitats by establishing and monitoring demonstration restoration plots, realigning benches with beach access points and promoting stewardship and awareness of dune habitats. For the fourth year, students from Camosun College Environmental Technology Program monitored plants in the dune restoration plots. Results will be compiled

in 2011 and posted on the ELSI website when available.

Beach access paths require annual clearing by excavator to move logs and large debris brought in by winter storms. Due to budget constraints, Colwood was able to do this on only three paths in 2010.

Land Use and Development

ELSI members provided a coordinated response to Colwood regarding proposed restoration plans for the Migratory Bird Sanctuary portion of lands at the Essencia property. The Aquattro property went into receivership during 2010, and development plans there are now on hold. ELSI members have expressed concern to Colwood about the rampant growth of invasive plants and changes in hydrology on this site due to the work stoppage.

ELSI was asked to provide

comments on a proposal to establish a mobile food vending operation at Coburg Peninsula. Members did not reach consensus on this and the proposal was later turned down by Colwood.

ELSI was also asked to comment on the concept of Coburg Peninsula becoming a CRD Park. Following a presentation by the CRD Parks manager and discussion among members, ELSI encouraged Colwood to investigate the proposal further. As the peninsula is a popular recreational asset used by people throughout the region, members thought it made sense that the costs and responsibility be shared by the region as well. This could help resolve the jurisdictional conundrums that presently exist in managing foreshore areas around the lagoon. Members support management that will lead to further protection and conservation of the lagoon area.

Thank you!

Many thanks go to the dedicated volunteer members of ELSI and the community who gave many hours of their time to help accomplish the major projects undertaken in 2010.



Wood carving, by Songhees artist Butch Dick, for installation as a mural at the Esquimalt Lagoon.

Honouring the Peoples' History

ELSI continued working with Esquimalt Nation, Songhees Nation, City of Colwood and other ELSI partners to recognize and honour the history of the lagoon area. Songhees artist Butch Dick completed a large carved cedar mural to be installed at the lagoon, and

Esquimalt artist Darlene Gait was contracted to illustrate the shared history of First Nations peoples at the lagoon for an interpretive panel.

The colonial history is being illustrated on a second interpretive panel, with help from ELSI partners, community members and local artists.

The two panels and the

carved mural will be installed in the spring of 2011, and an appropriate dedication ceremony involving Songhees and Esquimalt Nations, Colwood representatives and the general public will be held to mark this significant event.

For more information, contact:

ELSI Coordinator

T 250.360.3299

F 250.360.3047

info@elsi.ca

625 Fisgard Street

PO Box 1000

Victoria, BC V8W 2S6



Outlook for 2011

Over the next two years, the CRD will conduct a review with core municipal staff and make recommendations regarding a renewed focus for the program.

After 2011, the CRD will focus on issues related to contaminant inputs to Esquimalt Lagoon and the other harbours and will no longer coordinate ELSI.

In 2011, ELSI will focus on:

- working with Songhees and Esquimalt Nations to complete the First Nations interpretive sign
- organizing the dedication ceremony for the mural and interpretive signs
- completing the colonial history interpretive sign
- working with our partners to improve water quality in the lagoon and investigating nutrient sources entering the lagoon and its tributary creeks
- discussing options with partners to determine if ELSI will continue without CRD participation