

Central Estuary Brownfield Restoration Project



PRESENTATION BY:

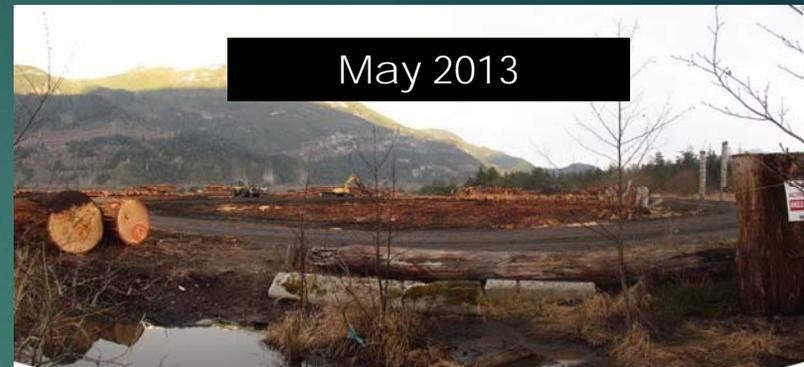
EDITH B. TOBE, RPBIO

SQUAMISH RIVER WATERSHED SOCIETY

SER – WC: THURSDAY, FEBRUARY 15, 2018

WWW.SQUAMISHWATERSHED.COM

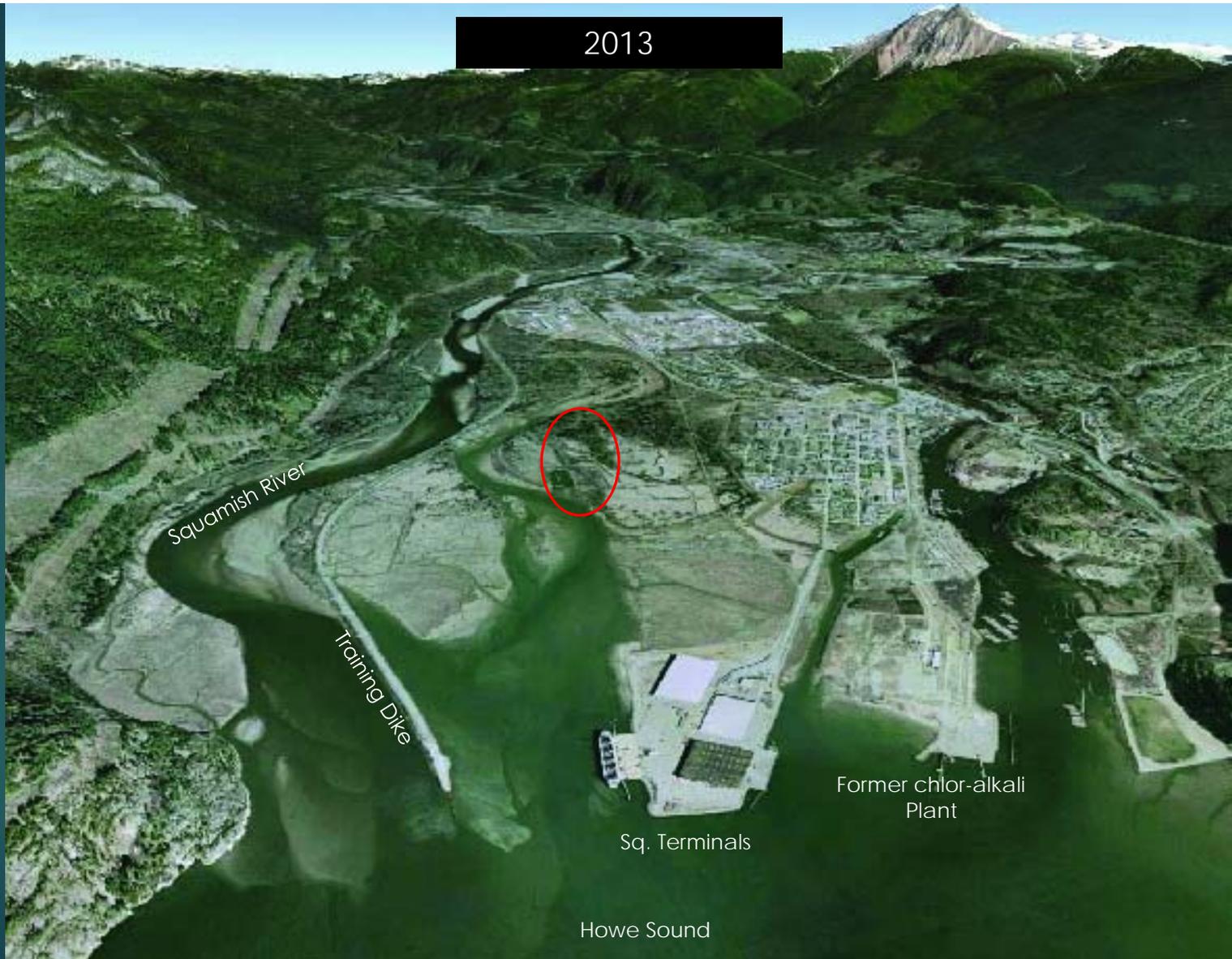
Transforming a former log sort back into functional estuary habitat:



1930



2013



Squamish River

Training Dike

Sq. Terminals

Former chlor-alkali
Plant

Howe Sound

East Delta Tidal Channel Restoration

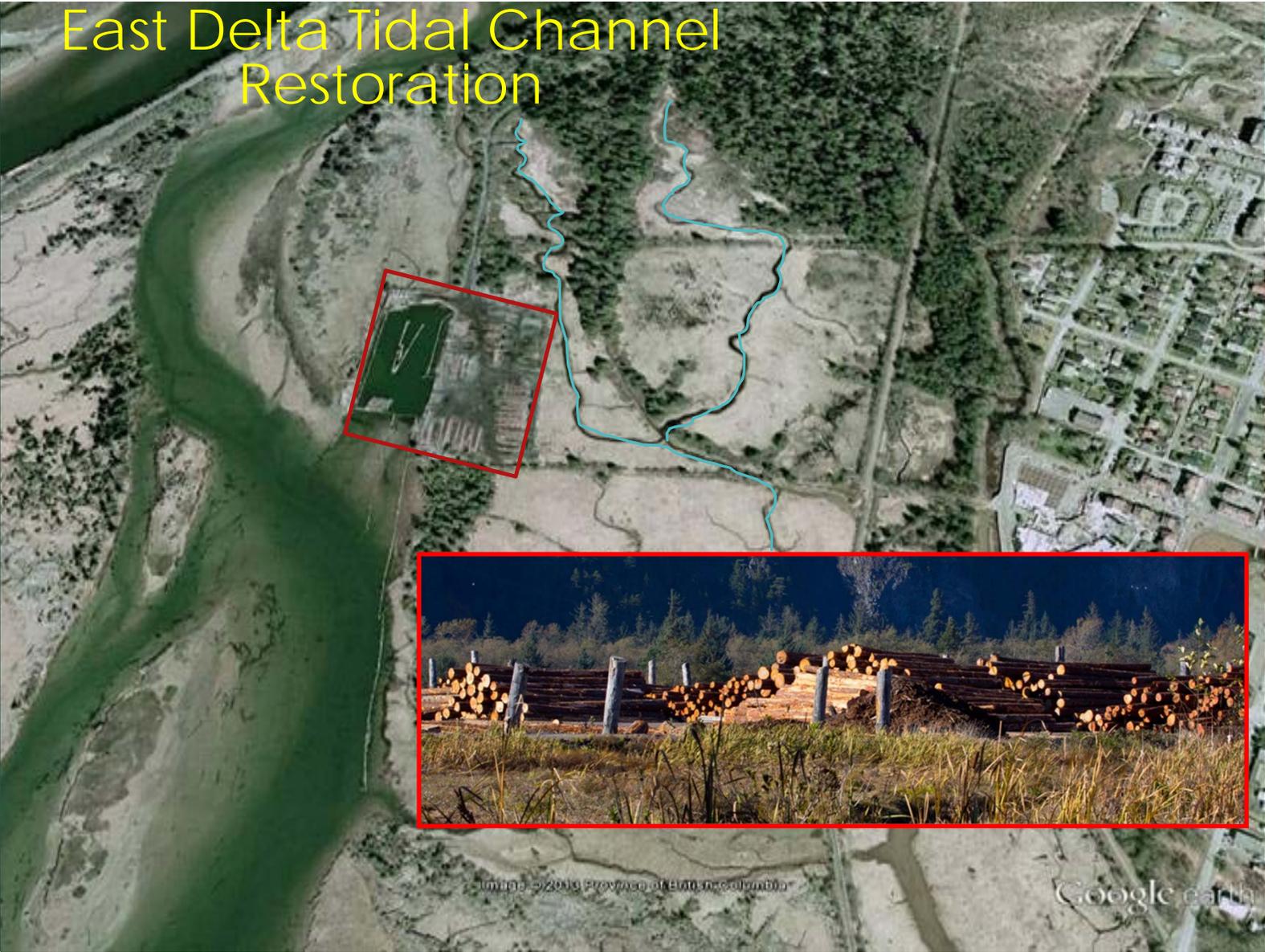
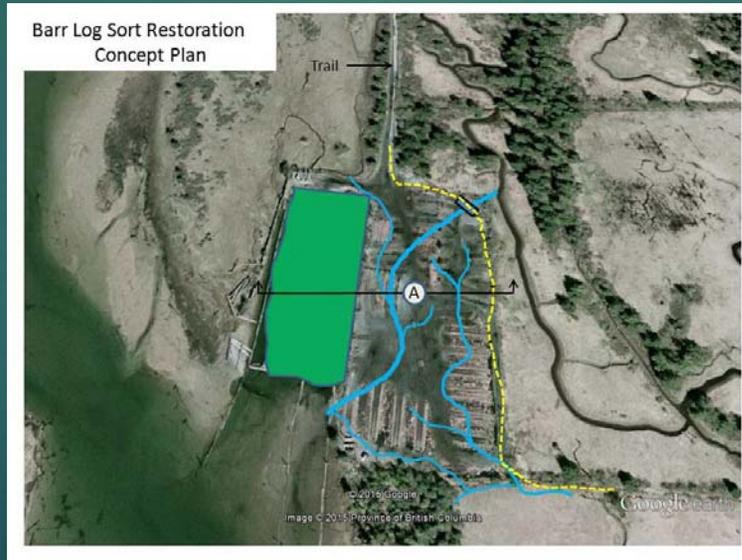


Image © 2013 Province of British Columbia

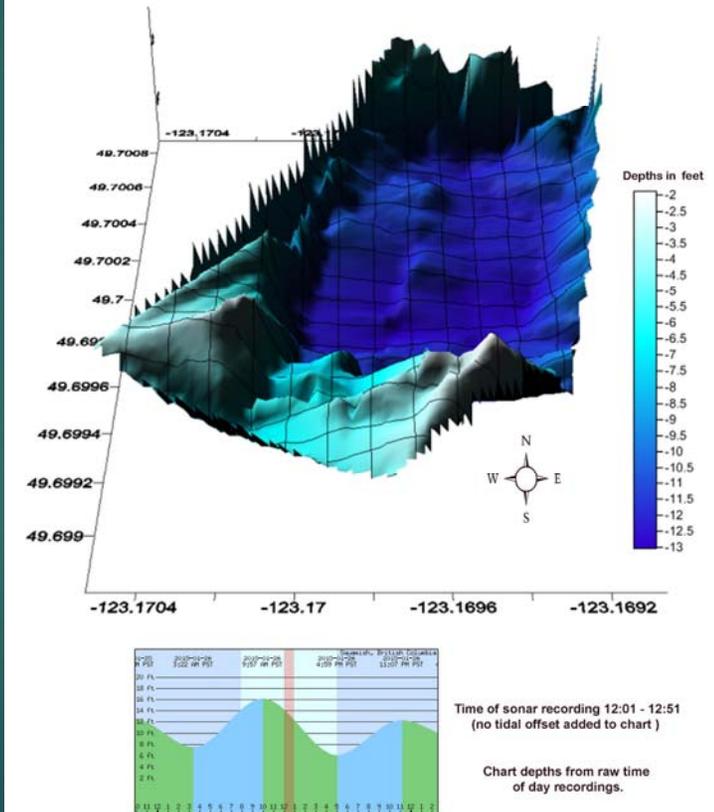
Google earth

Construction Methods

- Site initially surveyed including bathymetric survey of log-dump pond to establish locations for new tidal channels, trails, and identify elevations



Westbar Bathometric Map - Jan 26/2015
CPS Imaging - 3D



Construction Methods

- Excavators and large equipment used to remove overburden material and trucks loaded to move soil around to infill log-dump pond
- Over 30,000 cubic metres of fill to be moved
- In places the fill was over 2.0 m in depth
- Work had to be completed at low-tide



April 2015



April 2015



July 2015



July 2015



September 2017





March 2015



September 2016

Community Support

- Several planting days with volunteer support in March and September
- Re-establishing native riparian vegetation
- Good support from the community and excitement at seeing the area literally growing before their eyes!





Additional Works

- Soil sampling to establish baseline data
- Blue Carbon Protocol
- Monitoring Plan developed to identify changes over time
- Open Classroom Experiential Learning for students
- 3.5 Hectares of new habitat for wildlife and migratory birds



East Delta Tidal Channel Restoration

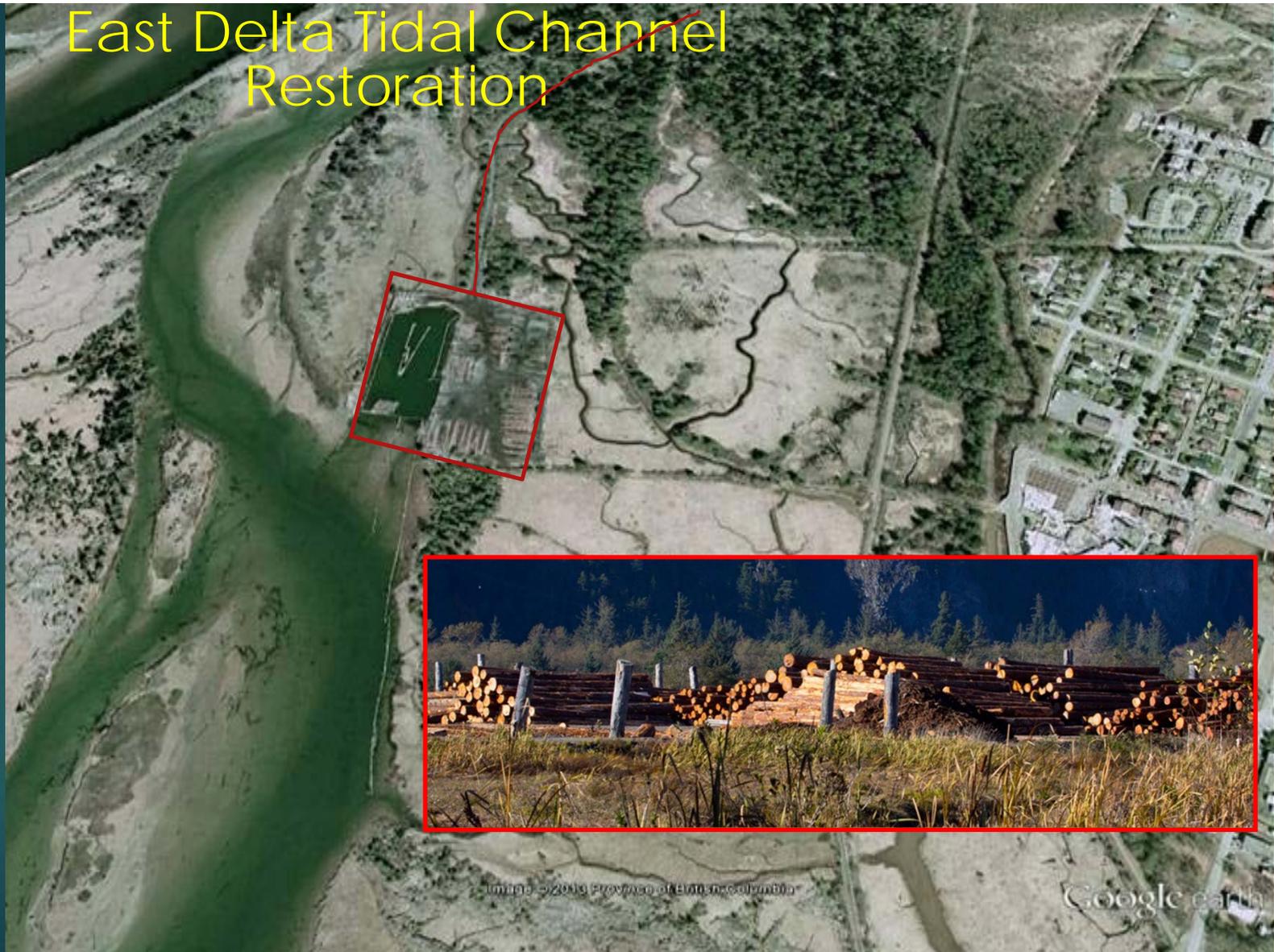


Image © 2013 Province of British Columbia

Google earth

February 2016



March 2016



April 2016



October 2016



June 2017



Partnerships

- Ministry of Forests, Lands, and Natural Resource Operations
- Fisheries and Oceans Canada
- Squamish Nation
- District of Squamish
- Environment Canada
- BC Institute of Technology Ecological Restoration Program
- Quest University



Funding

- National Wetland Conservation Fund
- Recreational Fisheries Conservation Partnership Program
- Pacific Salmon Foundation
- CN Cheakamus Ecosystem Recovery Fund
- BC Hydro Fish and Wildlife Compensation Program
- Habitat Conservation Trust Fund
- Fish Habitat Restoration Initiative





Thank You!

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Executive Director

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