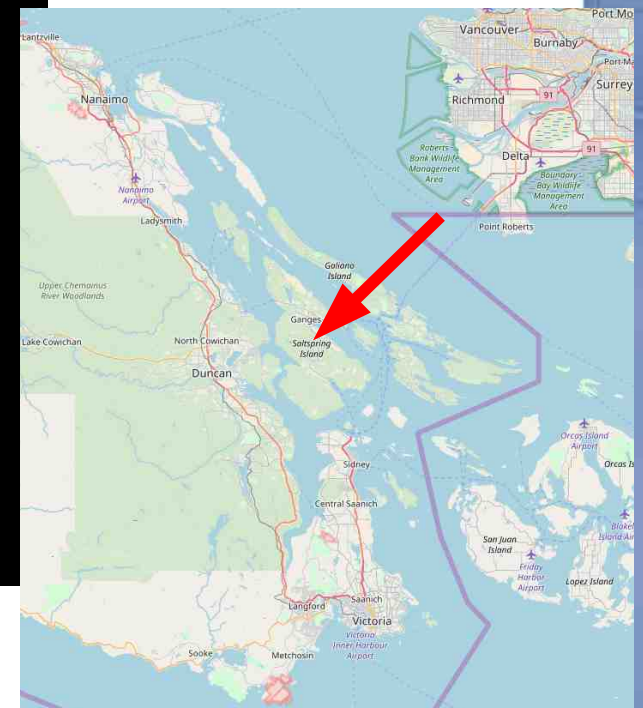


# It's a dirty job but someone has to do it: an environmental contractor's perspective on restoring wetlands on an old golf course on Salt Spring Island

Presented by: Christopher Drake





**BLACKBURN LAKE NATURE RESERVE**  
**- purchased 2013**

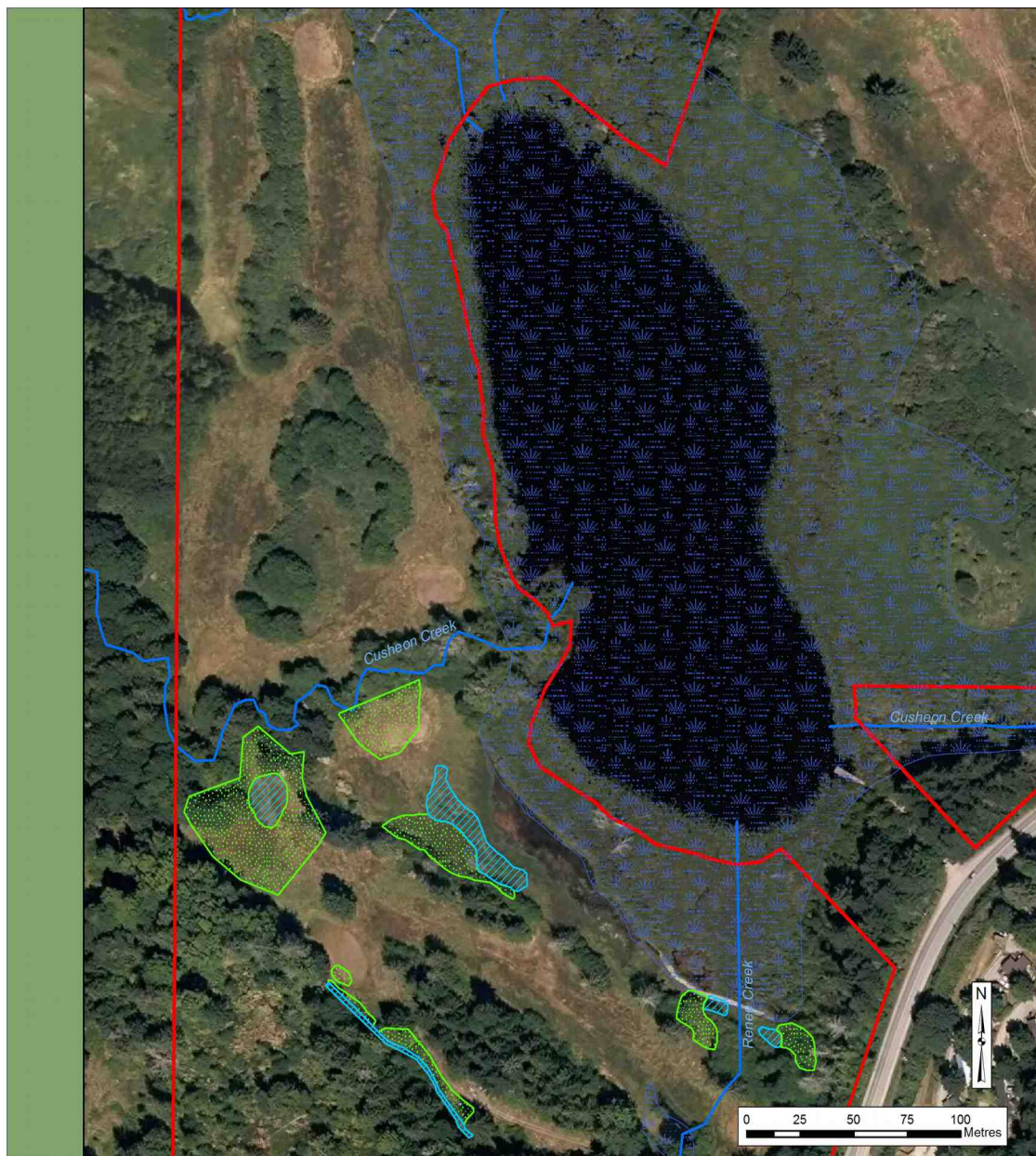
# Blackburn Meadows Golf Club



- 9-hole organic

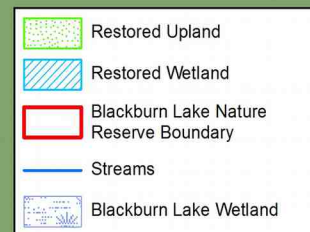
\*\*\*no dogs



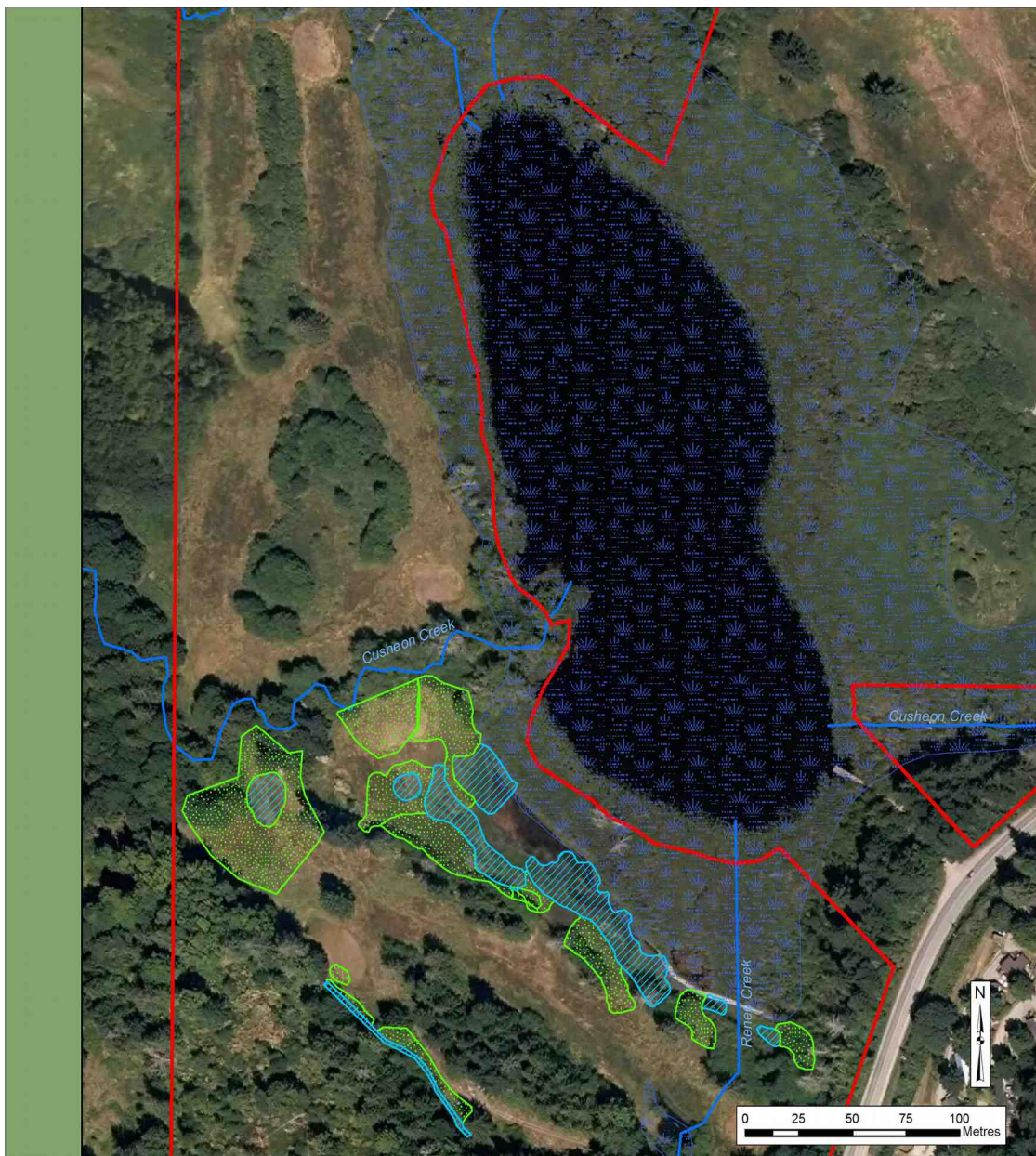


## Restoration Areas 2015

2013 Orthophotos

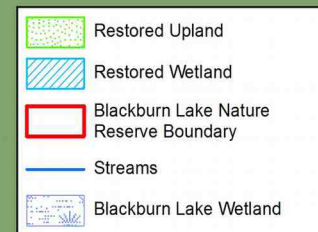




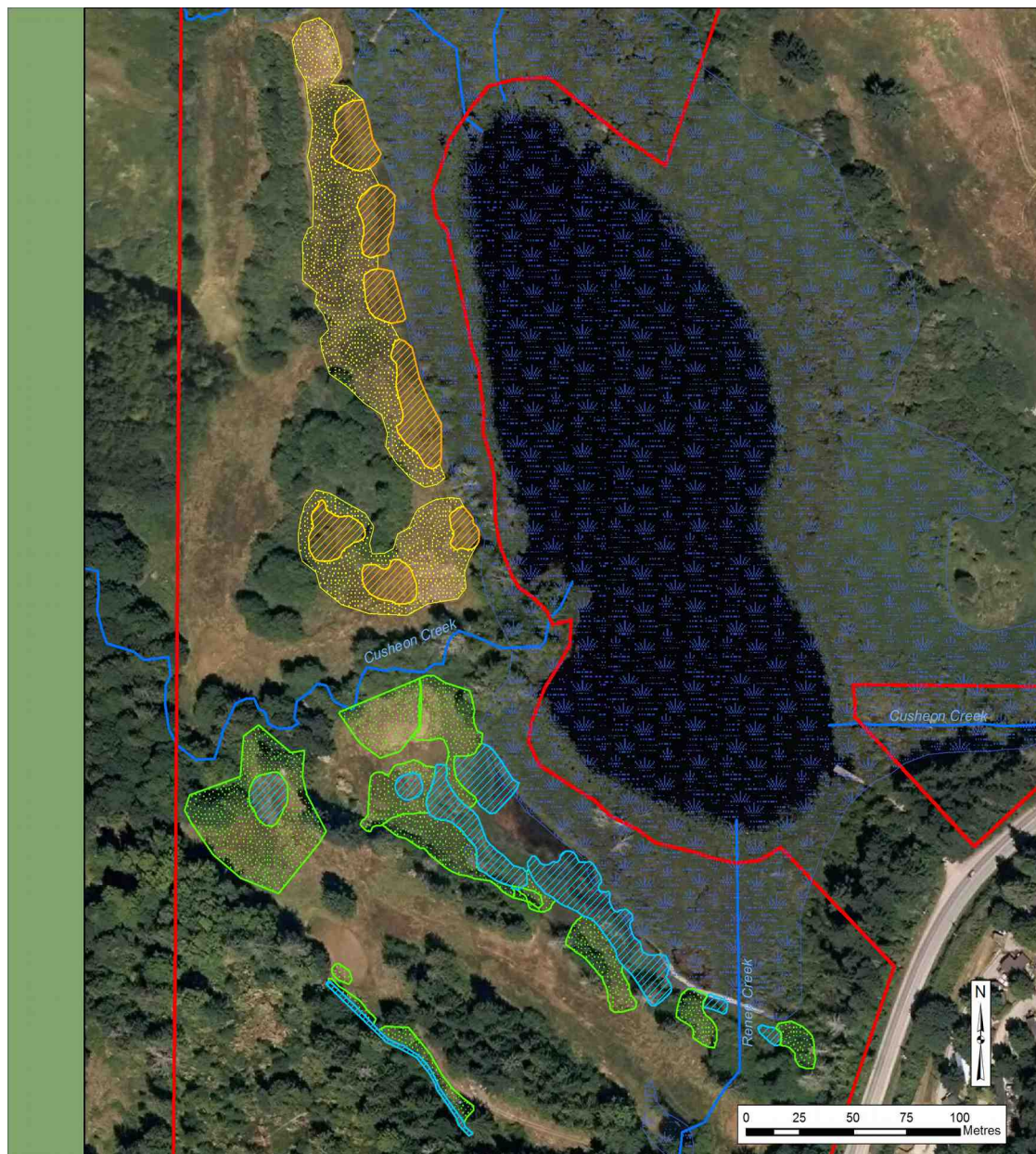


## Restoration Areas 2016

2013 Orthophotos







## Restoration Areas 2017

2013 Orthophotos



**AS OF 2017,  
OVER 1.5  
ACRES OF  
WETLAND  
AND UPLAND  
RESTORED**





# EXCAVATION



Photo Credit: Simon Henson



# EXCAVATION



Photo credit: Simon Henson



# Excavation



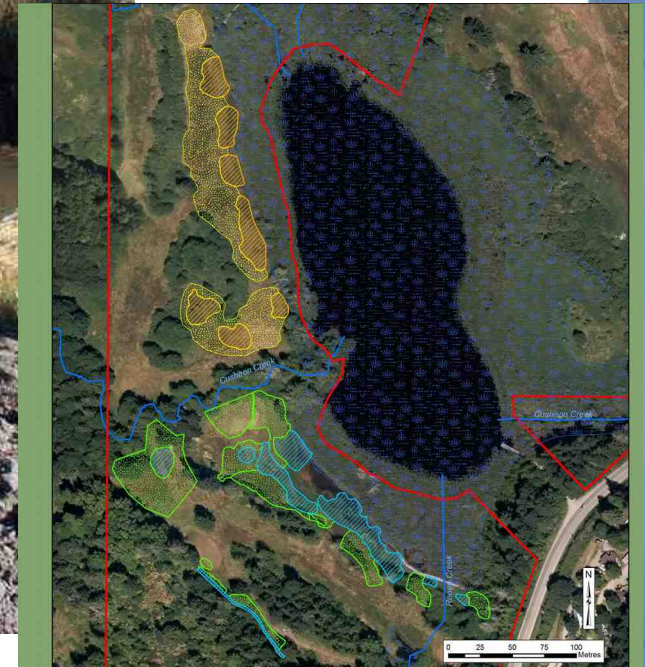
Photo credit: L Matthias



# PLANTING AND FENCING



- Fences within fences
- extreme deer pressure



**Wetland restoration volunteers extraordinaire!**  
**>10,000 plants from 55 species**  
Photo from [www.saltspringconservancy.ca](http://www.saltspringconservancy.ca)



# MULCHING





# INVASIVE PLANT CONTROL

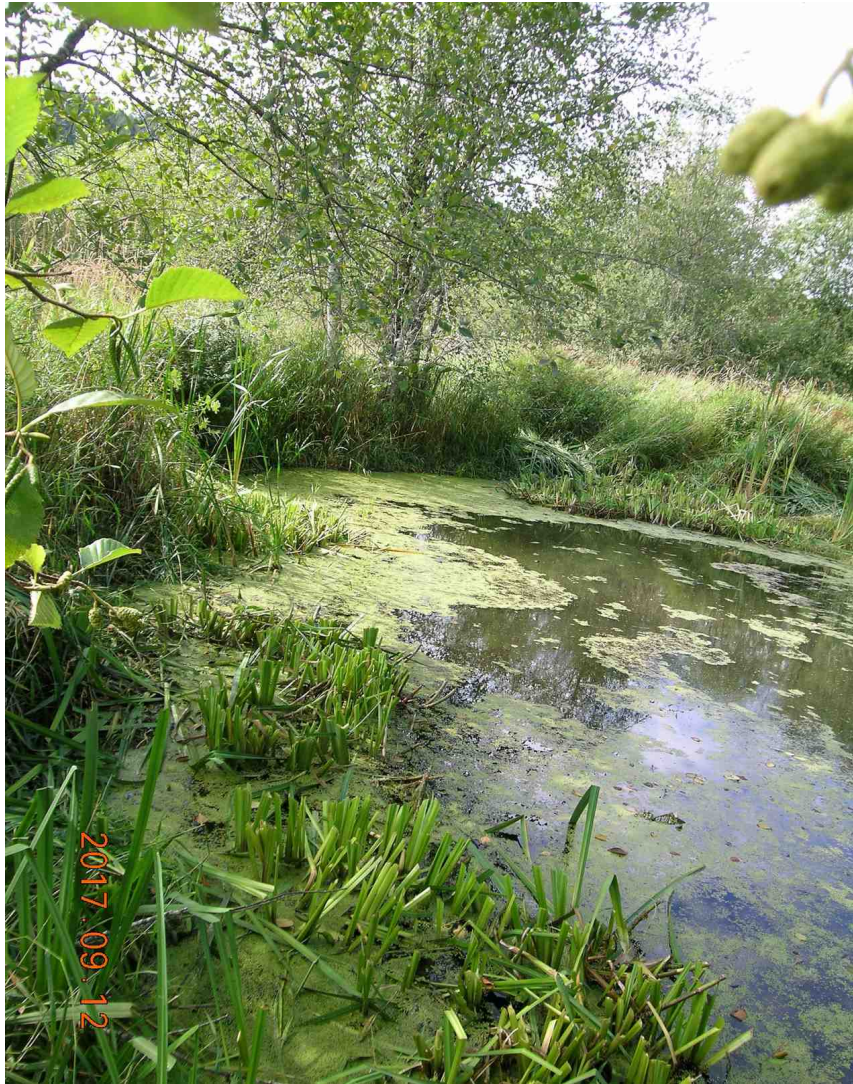


- English Holly
- Scotch Broom
- Himalayan Blackberry
- Yellow-Flag Iris
- Reed-canary Grass and other Grasses
  - Thistle
- Foxglove
- Mullein
- etc etc





# Yellow-Flag Iris



Before



After



# WILDLIFE HABITAT ENHANCEMENT



\*Beavers and Bats\*  
- 8 bat spp – highest on island





New bat species recorded in Canada:  
Brazilian Free-tailed Bat (*Tadarida brasiliensis*)



# Northern Red-legged Frog (*Rana aurora*)





# Streambank restoration



USING ONLY WILLOW  
STAKES AND LEAF  
MULCH!





# MAKING A LIVING AS AN ENVIRONMENTAL CONTRACTOR





# FUTURE IS BRIGHT!....BUT WHO ARE WE?

- \*Environmental contractors?
- \*Restorationists? Restorers?
- \*Property Stewards? Environmental Steward?
- \*Environmental/Biology Consultants?
- \*Green-necks?



## How did I get here?

Graduated Secondary School – 1988

Diploma in Recreation, Fish and Wildlife  
Technology, Selkirk College, Castlegar BC – 1997

BSc in Environmental Biology, University of Alberta,  
Edmonton – 2004

MSc in Ecological Marine Management, Vrije  
Universiteit Bruxelles, Belgium – 2009

### NOT THE STANDARD PROFESSIONAL TRAJECTORY

- BUT: lots of other experiences that are helpful to being an environmental contractor:
  - \*construction   \*treeplanting, silviculture   \*Grateful Dead
  - \*travelling   \*volunteering   \*technology and business
  - training   \*ski mountain and park work



# Becoming an Environmental Contractor

## **FIND YOUR NICHE:**

- \*Concentrate on relationships within your community**

- \*Volunteer**

- \*Stay true to your ideals**

- \*Take courses – eg small business**

- \*Go to conferences!**



# OTHER COAST ALIVE SERVICES

## ENVIRONMENTAL STEWARDSHIP OF THE HIGHEST ECOLOGICAL QUALITY

**Invasive Plant Control and Restoration** Controlling invasive species is our specialty. Coast Alive works in all weather conditions to complete **plant removal, soil remediation, and planting programs**.

**Other Environmental Stewardship Services** **Wildlife habitat enhancement** is achieved through creating healthy landscapes that provide food, shelter, protection, and water.

**Wildfire hazard risk reduction** removes forest fire fuels while beautifying your property by opening up shaded and unproductive areas.

And **ecological research, from experiment design to data analysis**, lets property owners monitor the health of their land.

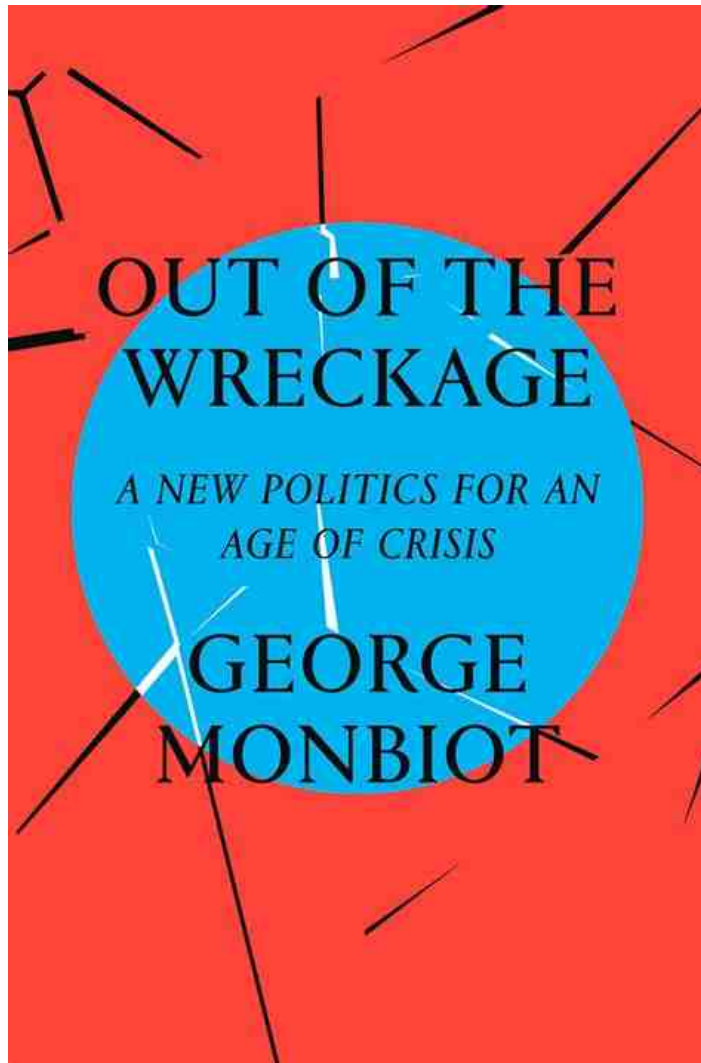
**Recreational Services - Trails, Campsites, Boardwalks, Etc** Enjoy the beautiful features of your property in a low-impact manner. Coast Alive Services has extensive experience in **trail building and maintenance, campsite construction and campground maintenance, boardwalk construction** and more.

**Natural Landscaping and Gardening** Completed projects include **rockwall terracing and patios, raised beds, and pathways**.

**About and Contact**



# A Culture of Restoration: A Politics of Belonging



**IS THE COOPERATIVE  
BUSINESS MODEL THE  
KEY? - pool resources,  
better security, ability to  
bid on larger projects –  
increase influence,  
make lasting  
change**



THANKS, AND  
HAVE A GREAT  
CONFERENCE!





## Some species-at-risk found at BLNR



Blue Dasher



Townsend's Big-eared Bat



Common Woodnymph



Northern Pygmy-owl



Barn Swallow



Swamp Fingernail Clam

Musculium partumeium  
Cusheon Lake, Salt Spring Is.,  
British Columbia, Canada  
48° 81' 60" N, -123° 46' 56" W  
Elev: 123m  
leaf litter/silt  
Depth: < 1m  
Coll Date: 21 March 2014  
Coll: [unclear]  
ID by: [unclear]