### Species at Risk Workshop February 23, 2012 Allco Park

How can we improve information sharing and collaboration among habitat restoration practitioners?

How do we maximize opportunities to improve habitats for species of concern during the course of projects for other species?

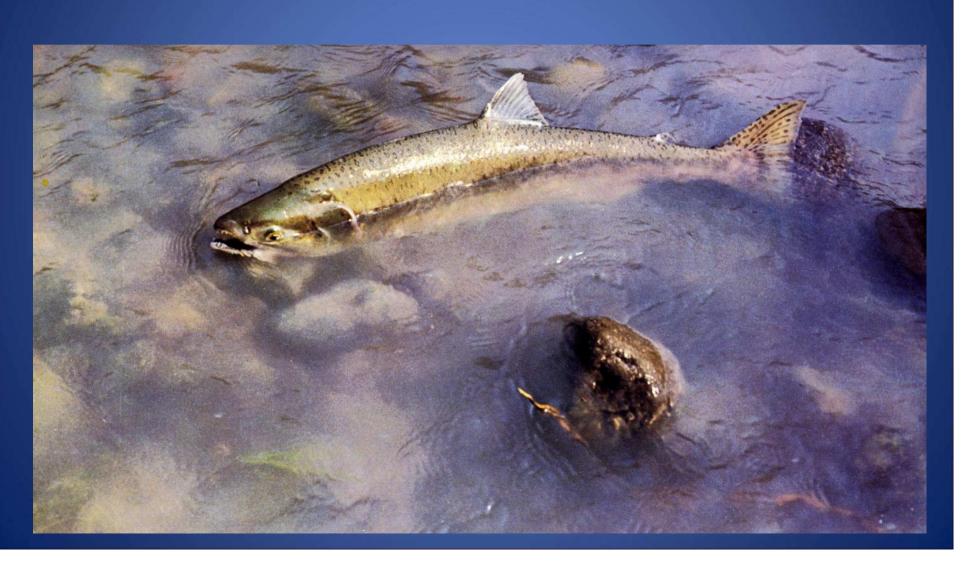
Fisheries and Oceans Canada
Salmonid Enhancement Program
Resource Restoration Unit

Presented by: Dave Nanson and Matt Foy

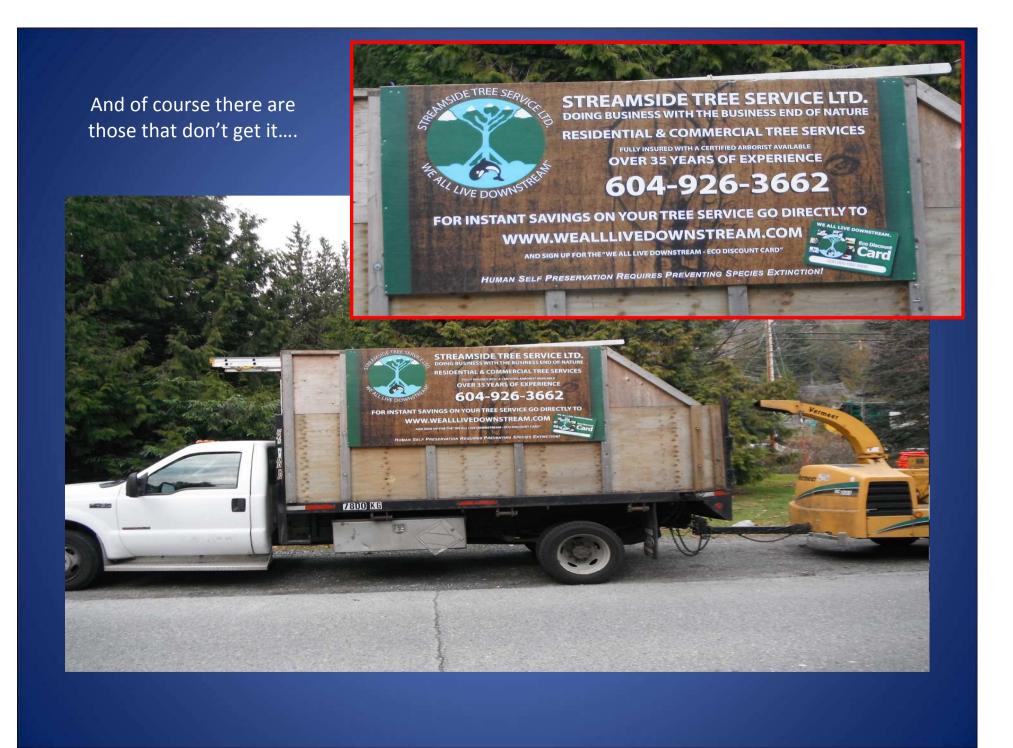


Salmon are a keystone species that provide many benefits to people and aquatic and terrestrial ecosystems.

However these species also require healthy and diverse aquatic and riparian plant and animal communities for their continued survival.







We must educate ourselves about other interests if we are to successfully reach out and educate the broader community.



**Salish Sucker Habitat Restoration** 

Salwein Creek – Atchelitz Creek – Hope Slough - Street Creek- Mountain Slough

Salmon habitat projects have included features supportive of Salish Sucker habitat requirements.

Atchelitz Creek (City of Chilliwack Pete Heide/DFO collaboration)

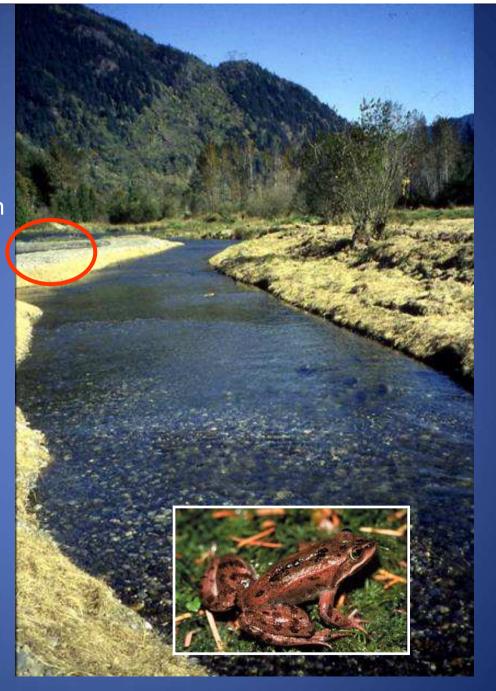




# Maria Slough-Mountain Slough Oregon Spotted Frog

During 2002 Chinook salmon habitat restoration experimental habitat work was done for Oregon Spotted Frog

- -2002 constructed OSF breeding pond first in Canada (Russ Haycock, Seabird Island FN/DFO collaboration)
- Successful trans-location of juvenile OSF into pond and reproduction and population persistence over time.
- 2009 second OSF breeding pond adjacent to first constructed.



## Nooksack Dace Brunette River Riffle Restoration

Salmon spawning and rearing habitat project design has been influenced by habitat requirements of this SARA species (Mike Pearson/DFO collaboration).



#### Whonnock Lake – where beavers go to school





#### Colony Farm Sheep Paddocks Wetland Creation

Floodplain habitats restored for benefit of salmon juvenile rearing.

Design accommodated variable topography to promote establishment of complex plant community. Log and gravels added to promote use by indigenous turtles. Rock piles and snags added to benefit snakes, small mammals and birds.





Colony Farm Association/GVRD Parks / Douglas College and DFO collaboration.



#### **Colony Farm Wetland Restoration:**

During our survey, three species of dragonfly provincially blue-listed and considered species of special concern, vulnerable to extirpation or to extinction in British Columbia (Provincial Conservation Status S3) were observed:

- The Beaverpond Baskettail (Epitheca canis),
- The Blue Dasher (Pachydiplax longipennis),
- The Autumn Meadowhawk (Sympetrum vicinum).

All observations were made in Site A

Three specimens of Beaverpond Baskettail were observed from late May to mid-June (Figure 12). All of them were confined to a small area in the northeast end of Site A. This area appears to be quite different from the rest of the habitat present at the restoration site as it is deeper, has different aquatic vegetation, is somewhat more shaded, and receives some groundwater from the Coquitlam River groundwater. A female laying eggs was observed mid-June in this particular area which confirms the breeding of this species in Site A.



Figure 12 Beaverpond Baskettail, Colony Farm July, 2009.

#### **Silverdale Creek Wetland Restoration**



Fisheries and
Oceans is
interested in
partnerships
that
promote
diverse
ecosystems
that benefit
salmon and
many other
species.

Many willing partners......

#### Future Restoration?



Who wants to help?