

# Ginty's Pond: Wetlandkeepers Course



Event held July 16-18, 2019

Report prepared for SILT by Kasey Moran

## **Event organizers**

Neil Fletcher and Alyssa Purse, BCWF

Kasey Moran and Al Peatt, SILT

With support from:

Madyson Adams, BCWF

Ryan Whitehouse and Emily Blythe, FLNRORD

Lee McFadyen

## **Event Overview**

Wetlandkeepers Courses are delivered by BCWF and cover a standard set of skills related to wetland classification, plant identification, and soil analyses. For more information, see their website:

<https://bcwf.bc.ca/wetlandkeepers-courses/>

In addition to the standard Wetlandkeepers Course content, this event involved an in-depth community-based conversation about Ginty's Pond. Many Cawston (and area) residents recounted memories of the pond when it would have been classified as a shallow open-water wetland, rather than the cattail marsh that exists today. Some community members expressed a concern for the pond's current appearance, and expressed a desire to restore it to its former state to facilitate recreational uses like ice skating and boating. SILT's executive director, Al Peatt, expressed his understanding that a 7:3 ratio of open water to emergent vegetation would optimize habitat value for wildlife.

Kasey Moran delivered a presentation about oxbow formation and succession. The group agreed that Ginty's Pond is probably a "chute cutoff" type of oxbow, which typically exists as an open water body for 60-100 years before filling in with vegetation. She suggested that vegetation infilling rates may have accelerated in recent years due to a tipping point in which the rates of water drainage and/or vegetation growth began to exceed rates of water inflow and/or vegetation dieback.

Alan Peatt and Lee McFadyen both gave detailed histories of the pond, complete with photos dating back to the 1930s. These photos revealed that the oxbow has existed for more than 70 or 80 years, suggesting that even if it was unimpacted by human activities, Ginty's Pond would probably be making the transition from open water body to marsh at this time.

The aerial photos also made it possible to see changes in land use and river morphology that could have potentially sped up the process of infilling. Soil cores and hydrological observations were also used to develop and understanding of the site.

### **Main findings**

The following factors (in no particular order of importance) were identified as likely contributors to the infilling of the SILT side of the pond with vegetation:

- Large sediment plug disconnecting the Similkameen river from Ginty's Pond, characteristic of a chute-cutoff oxbow
- Meander migration of the river away from the upstream end of the oxbow
- VLA and Wooden road and culvert construction
- Dike construction
- Higher clay content in soil (and therefore higher water-holding capacity) on FLNRORD's side of the pond
- Rapid outflow near Wooden Road
- Ongoing rural/agricultural development and apparently increased groundwater extraction.

In addition, several non-native plant species (yellow flag iris, purple loosestrife, and reed canary grass) were identified at the site.

### **Proposed solutions**

Much attention was focused on the VLA culvert, which is perched, partially blocked, and tilted slightly in the wrong direction to allow for easy drainage from the FLNRORD to the SILT side of the pond. Many course attendees suggested altering or replacing the culvert to improve hydrologic connectivity between the two sides of the pond.

Another popular suggestion was to remove the culvert at VLA road entirely and replace it with a bridge, but Neil Fletcher suggested that the entire pond may drain more quickly if outflow exceeds inflow.

An excavated open-water restoration project was also proposed, and a hockey rink-sized open water area off of Wooden Road was proposed and flagged out by volunteers. Most course attendees seemed enthusiastic about this option. There was some disagreement about whether there would be more use of such an area off of Wooden Road or VLA Road, but no conclusion was reached.

There was some discussion of methods related to invasive plant removal, but no urgent recommendations were made to move forward.

### **Next steps**

The first step as determined by Ryan White of FLNRORD is from him to contact the Lower Similkameen Indian Band to consult with them as to whether or not they see a restoration project at Ginty as a priority.

An important pre-restoration requirement would be to test whether or not water can be held within the SILT side of the pond. Neil Fletcher suggested a pumping test, in which a small amount of water would be relocated from the FLNRORD side to the SILT wide via the culvert. One of the community members expressed their concern that water levels on the FLNRORD side would be irreparably lowered, but Neil assured them that the amount pumped would be minimal (~ 30 cm in depth), and that if the test was unsuccessful, then increasing hydrologic connectivity could cause both sides of the pond to drain more rapidly.

Cost analyses need to be done for all options before they can be seriously considered. Neil Fletcher of BCWF offered to take that on.

There are no actions that SILT needs to take at this time.