

Water Conservation and Quality Improvement Grant Program – Progress Report

Project Title: Managing Water Levels on Ellison (Duck) Lake

- A. The Ocoela Fish and Game Club is a volunteer organization and member of the BC Wildlife Federation. Their mandate is to protect and enhance local fish and wildlife habitat. The OFGC has been focusing their efforts within the Middle Vernon Creek watershed for the last 7 years. The club applied for the WCQI grant because of the need for more formal support from watershed stakeholders in addressing the shortage of water for spawning Kokanee (particularly in 2003 and 2004) in Middle Vernon Creek.
- B. The main objective of this project will be to develop a voluntary water management plan. The OFGC is working with the District of Lake Country, Okanagan Indian Band, Okanagan Nation Alliance fisheries department, City of Kelowna, Eldorado Ranch, downstream water licensees, local landowners and other organizations, such as UBC-O.

Based on interviews with watershed stakeholders, the main issue is water rights. There are differences in interpretation /understanding of the Water Act as it relates to individual licences and associated water rights.

This project also illustrates that “you need to measure it to manage it”. The OFGC now can better quantify how much water is required for spawning Kokanee within Middle Vernon Creek and how much water is required for Kokanee to reach Upper Vernon Creek.

- C. To date the following tasks have been completed:
 - a. Hydrometric data is being collected on Ellison (Duck) Lake and Middle Vernon Creek. The data is currently being used to better understand the adverse impacts that the beaver dams are having on water flows in the creek for spawning Kokanee.
 - b. Interviews have taken place with the main watershed stakeholders.
 - c. There is on-going efforts to establish consultation processes with First Nations.
 - d. Research into similar planning processes, methodologies and First Nation water rights.
 - e. Working with First Nations to maintain beaver habitat while providing water for spawning Kokanee.
- D. The project is within the preliminary timeline provided in the proposal. The iterative consultation process with watershed stakeholders is to be initiated next month.

E. The obstacles encountered are:

- a. The construction of beaver dams at the upper end of Middle Vernon Creek was not anticipated. As the beaver dams are located on Duck Lake Indian Reserve No.7, the OFGC has been actively communicating and working with First Nations to address this issue.



Photo 1. The beaver dam by the “God Sign” was modified to allow additional passage of water. Small channels were also formed on the top of the beaver dam to facilitate fish passage.

Middle Vernon Creek Water Level

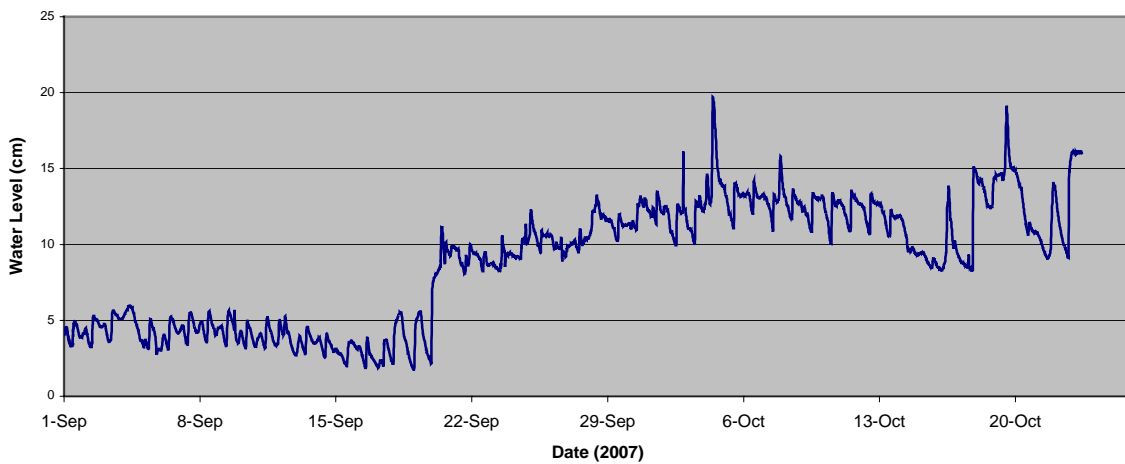


Figure 1. Water levels in Middle Vernon Creek have been highly variable over the last month.