

PROJECT: Creation of long-term fish friendly access through Ellis Creek's sediment collection basin.

**KEY MESSAGES:** The sediment basin was redesigned to create fish passage year round and improve overall habitat. This project also allows the Ministry to do routine sediment extraction without disturbing fish passage and riparian habitat, and provide a more natural and healthy ecosystem for the community to enjoy

# TIME FRAME/SCHEDULE:

- 1. Pre-monitoring and outreach (2016-2017)
- 2. Conceptual design and Engineered design (fall 2017-spring 2018)
- 3. Construction (November-December 2018)
- 4. Planting (Spring 2019)
- 5. Post-monitoring (2019-2020).

### **PROJECT TEAM:**

- PIB project lead: Project management, reporting, on-site environmental monitor.
- Camille Rivard-Sirois Fisheries Habitat Biologist: project coordination, Hec-ras modeling, preand post-monitoring, data analysis.
- Karilyn Alex Fisheries Biologist with ONA project management, steering committee chair.
- Shaun Reimer MoFLNRO -RD— Provincial jurisdiction over the sediment basin and clean-out
- AD-HOC Committee (MoFLNRO –RD, ONA, PIB, City Penticton, SOSCP, FOTO)
- Lee McFadyen Public Relations Coordinator



Ellis weir in 2016 (left) and fish passable riffle in 2018 (right)

## **BACKGROUND/HISTORY:**

Ellis Creek sediment catchment basin, located near the creeks mouth is bordered on the downstream end by a rock weir that was constructed to retain transported sediment and prevent it from entering Okanagan River. The rock weir is not passable by fish species year round (Walsh et al., 2006). In addition, the ongoing process of sediment extraction over time negatively affects the local environment and initiates extensive

maintenance requirements. The modifications to the sediment basin have rectified these issues and have opened up 4 km of potential salmon spawning habitat in Ellis Creek (Walsh. Et al., 2006). This project was modeled after a similar project carried out on Shuttleworth Creek's sediment basin in 2015. Construction works are completed; next steps include replanting vegetation in the spring and post-construction monitoring to ensure that restoration is successful.

### **HIGHLIGHTS:**

- Riffle was built successfully
- Bypass system is functional
- Many cottonwoods and willows were salvaged before construction and replanted or staked along the bank of the basin
- No wildlife salvage was required
- There were no public safety concerns, despite the popularity of the area for walking
- Banks were graded and left rough and loose in anticipation of planting during the spring of 2019



Bypass system inlet



**LOCATION:** The sediment basin is located in Penticton, BC, between the Ellis Creek highway crossing bridge and the Ministry of Environment near the mouth of Ellis Creek. (UTM: 49°28'41" N 119°35'45 W)

### **PUBLICATIONS:**

Walsh, Michelle and Karilyn Long. 2006. *Survey of barriers to anadromous fish migration in the Canadian Okanagan sub basin*. Prepared for the Okanagan Nation Alliance, Westbank, BC.