Ellis Creek Sediment Basin fish passage project
2018 ONA FACT SHEET

PROJECT: Creation of long-term fish friendly access through Ellis Creek's sediment collection basin.
PROJECT CODE: 728

KEY MESSAGES: Redesigning the current sediment basin to create fish passage year round and improve overall creek habitat. This project will also make the creek function more effectively, allow the Ministry to do their routine sediment extraction without disturbing fish passage, 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. Projected construction (fall 2018)

PROJECT TEAM:
• PIB – project lead: Project management, reporting, on-site environmental monitor.
• Camille Rivard-Sirois – Fisheries Habitat Biologist: project coordination, Hec-ras modeling, pre- and 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
BACKGROUND/HISTORY:
Ellis Creek sediment catchment basin, located near the creek's 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 impacts the local environment and initiates extensive maintenance requirements. Modifying the sediment basin would rectify these issues and would open up 4 km of potential salmon spawning habitat in Ellis Creek (Walsh et al., 2006). This project entails determining the optimal project design, carrying out this design with construction, and performing site rehabilitation and monitoring to ensure the restoration is successful. A similar process was recently carried out on Shuttleworth Creek’s sediment basin (2015). Work on Ellis Creek will be streamlined due to what we have learned from Shuttleworth basin such as;
1. the steering committee is already in place,
2. scoping all the design possibilities has been focused on one feasible option, and
3. we will be learning from the maintenance of Shuttleworth basin in 2016-2017.

KEY BENEFITS:
Once completed, the re-configured basin will
- Provide annual fish passage, increase fish populations, improve spawning habitats and overall habitat diversity while opening up 4 km of stream habitat,
- Allow for easier clean out and maintenance of the sediment basin due to less fines being collected, and no increase in costs or liability to the Ministry in terms of public safety,
- Reduce the amount of fines being stockpiled, therefore improving air quality for local residents,
- Allow for permanent riparian vegetation to be planted, making the area more aesthetically pleasing for people as well as improving fish and wildlife habitat.

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.

SAFETY CONSIDERATIONS: Working in and around Ellis Creek. Creek flows will be monitored to ensure creek is safe to enter. Note that the mouth of the creek has a large accumulation of fine material and you can easily sink into the sediment. Precautions will be taken in this area. Lifejackets and throw bags are included in equipment list.