

April 6th, 2018

Gloucester Industrial Estates Storm water Management Plan and the Capacity of the present day detention pond.

The present day detention pond in Gloucester Industrial Estates (dug in 2004) which covers most of the storm water in the south east quadrant was authorized by the DFO in 2000 (even though West Creek runs through it!) and is designed to retain ~ 40,000 cubic meters of storm water. The storm water is held in these ponds and is released at a controlled rate to mitigate damage down stream to the salmon bearing West Creek. By 2012 the vegetation (willows and young alders) had grown sufficiently along the banks, providing food for the beaver and they built dams and lodges creating a wet-land habitat for herons and ducks, fish, amphibians etc. As a result of their creation of this ecosystem, the ponds are now nearly always full of water and they have reduced the detention pond capacity by ~ two thirds.. The detention pond capacity is now less than ~15,000 cu. meters, not the approximately 40,000 cu. meters as originally designed.

The “Ultimate” Detention pond proposed in 2004 would have been 2 meters deeper and substantially bigger than the present one and have a capacity of ~110,000 cu. meters. It would have accommodated 46 acres of additional Industrial land, which was proposed to come out of the designated golf course lands. This plan was abandoned in 2014. In time, beaver would have dammed up this pond as well after the vegetation (food) grew back in. The lesson to be learned is that detention ponds should NOT be built in a flowing creek system as the beaver will eventually dam them up, leading to more years of trapping of this Keystone species “Best management practice” would be to build detention ponds in dry areas and the water retention would only take place when storms occur.

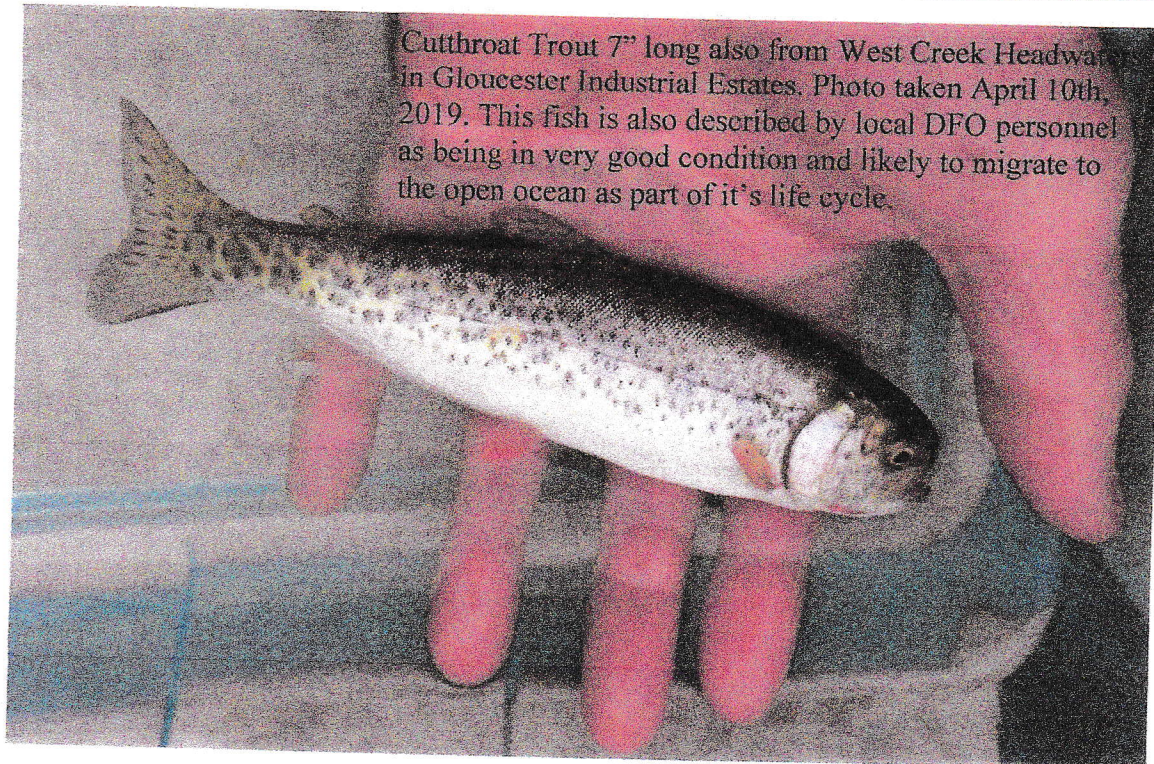
The existing detention ponds should have a capacity re-evaluation done now that significant additional development has occurred. The development at 48th & 275th street should be put on hold until an Integrated Storm Water Management Plan for Gloucester is put in place. The DFO authorization clearly states that if there is not sufficient capacity in the detention pond for a site being developed, the storm water must be retained on the site ie. (site specific). The building permit BP#137038 does not show any such on site accommodation even though a storm water plan is required in the Township of Langley before a building permit is issued. The Beedie Group confirmed that all the storm water from development at 5525 272nd Street was going directly into West Creek and we have not been made aware of any remediation.

Environmental groups have been requesting for years that an inventory assessment and an integrated storm water management plan be conducted before any further development occurs and Township Council unanimously agreed to direct staff to act on this. To date no such plan exists.

These Fish were recently live trapped and released in the West Creek Headwaters system within Gloucester Industrial Estates



Wild Coho smolt 6" long from West Creek headwaters in Gloucester Industrial Estates. Photo taken April 9th, 2019 with the Parr marks still visible and described by DFO staff as being in very good condition and nearly ready to begin their migration to the open ocean



Cutthroat Trout 7" long also from West Creek Headwaters in Gloucester Industrial Estates. Photo taken April 10th, 2019. This fish is also described by local DFO personnel as being in very good condition and likely to migrate to the open ocean as part of its life cycle.

"These are thriving fish" found in our local TOL streams

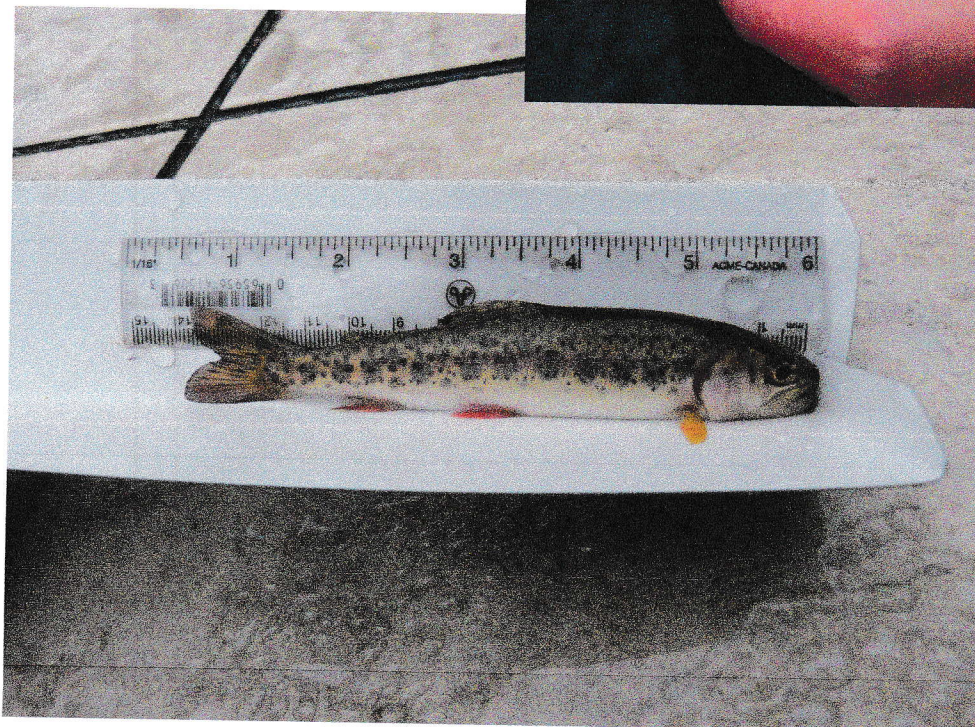
Photos Taken by; *Ted Lightfoot*

Salmon caught and released in the West Creek Headwater in Gloucester Industrial Estates in the spring of 2020.

In the last three years after learning to follow the salmon cycles within this water-course, this year has been the most active year and has lasted the longest. On April 3 six coho-smolts were caught and released after observing the young salmon breaching and feeding in the outflow detention pond. These fish were estimated to be in the hundreds. This feeding and amalgamation of fish went on until early May, mostly visible in the early evening and usually when the beaver become active.

Cutthroat trout and rainbow trout were also caught and released while the Coho-smolts were actively feeding

Coho Smolt
Oncorhynchus Kisuth



Rainbow Trout
Oncorhynchus Mykiss

West Creek Spawning Salmon

November 18th 2019



Two of these salmon are still alive both of them are females. You can see the splashing movement of the lower Salmon



The third fish was a dead Coho male measuring 26" long

Photos by: *Ted Lightfoot*

Salmon spawning in the small tributary flowing south into the Gloucester Golf course zoned Lands at 56th Ave. and 272nd st. Langley, B.C.



This Coho Salmon managed to scale this small beaver dam where the flood-waters have cut a channel over the dam. This fish died upstream of this Beaver Dam

The recent heavy rains have provided the sufficient water flows for fish to travel up the West Creek and find a place to spawn. Six fish were spotted today. The eagles are watching and waiting to feed on a new food supply



Photos by: *Ted Lightfoot* November 18, 2019