

Building back from the flood

Details

Dam construction – gravel spread

Sandy beach

In summer 2019, areas of Elbow Island Park will have fish habitat restoration and flood mitigation work happening:

- The side channel will be reconnected to the river,
- Excess gravel and vegetation will be removed and,
- Critical habitat lost during the 2013 flood will be rebuilt and constructed.

The Wandering Island is based upon the flood, the natural processes of our environment and the unique location of the art itself - Elbow River Park.

This year on November 8, we counted a total of 274 Redds in the Lower Elbow, up 17 Redds from previous years. On the whole the trend is upward from the number counted immediately following the 2013 flood.

We were joined at Fort Calgary by the mobile unit of Alberta Environment and Parks to decontaminate our waders and rafts to prevent the spread of Whirling Disease.

A week's wait for weather for our Upper Elbow count postponed to November 16 paid off, and our volunteers enjoyed mostly sunny skies! Once again the Glencoe Golf Course and Country Club opened their facility to us for our use, for which we are incredibly grateful. Some of us got to learn more how The Glencoe Golf & Country Club has achieved designation as a "Certified Audubon Cooperative Sanctuary" through the Audubon Cooperative Sanctuary Program for Golf Courses, an Audubon International program.

To reach certification, a course must demonstrate that they are maintaining a high degree of environmental quality in a number of areas. These categories include: Environmental Planning, Wildlife & Habitat Management, Outreach and Education, Chemical Use Reduction and Safety, Water Conservation and Water Quality Management. Golf courses go through a re-certification process every two years.

The Brown Trout in the upper Elbow River are physically separated from their downstream cousins by the Glenmore Dam, and have room to spawn in the river up to Elbow Falls. This was CRV's second year checking in on them in a six-kilometer stretch, and this year we found 3 times as many Redds as last year.

All in all it was a very positive year!

Redd Count up

Met by AEP for decontamination for whirling disease – because water separated by the dam, this upper fish population is divorced from the lower

Upper Elbow – a different river than below the Dam: The river and its tributaries transition from a steep, generally single-channel mountain stream with pool-riffle sequences to a weakly braided/wandering pattern contained within a broad floodplain with low gradients and typically poorly-defined tributaries. Elbow River in the LAA is an irregularly meandering channel with sediment deposition across a wide valley.

Glencoe Golf and Country Club – Audobon certification

https://open.alberta.ca/dataset/ed520427-3b66-41c5-b36a-33fbdeaea9aa/resource/de0ecc89-8c47-4638-83aa-7880495ed136/download/vol_3a_s08_aquatic_ecology.pdf The river downstream of the diversion site consists of infrequent islands and occasional sediment

bars with channel widths ranging from 13 m to 100 m and channel depths ranging from 0.1 m to 1.2 m. Fish habitat in Elbow River is rated as primarily “good” run habitats, interspersed with riffle and pool habitats. Overhead is related to undercut banks and overhanging vegetation.

Instream cover is mostly woody debris and large-sized substrate (boulder and cobble). Substrate composition throughout this downstream reach of Elbow River consists of cobble and pebble, with smaller amounts of gravels and sand.

Within Elbow River reaches sampled in 2016, spawning, overwintering, and rearing habitats are rated as moderate-good for 8 of 12 reaches. Habitat is rated as poor-moderate for four reaches, including Reach 1 and 2, located upstream of Highway 22, and downstream in **Reaches 9 and 10.**

More Redds counted.

