

## **2021 OISES Drought Proofing Report**

The droughtproofing program, begun in 2004, uses naturally stored winter and spring runoff in Mud Lake, Reed Lake and a large wetland to augment summer flow in Hyacinthe Creek when required. There are two sets of 5 cm diameter lines at three sites (Mud Lake outlet, the large Walcan Road culvert at Reed Lake outlet and the wetland outlet downstream of Reed Lake). Drawdown of these sources in sequence, or together, is intended to maximize water delivery to lower reaches of Hyacinthe Creek during dry periods, and thus provide higher quality rearing habitat for coho fry.

Rainfall was below average for the first 8 months of the year. From June 20 to Aug 14, the temperatures were very hot, with three separate heat dome events in the high 30's centigrade. Late summer rain began on the Labour Day weekend, with heavy rain and cool weather beginning mid-September.

The season began April 12th when waterlines were inspected for winter damage and the valves were shut down to avoid release of stored water. One 100-foot length of line from the wetland had been stolen, and one line at the Reed Lake culvert is still unattached. Other waterlines were primed and ready to use. The beaver were active at the Reed Lake culvert, and at the wetland, where they were building up the old dam as well as a newer dam 20 meters downstream of the old one. These dams impounded substantial amounts of reserve water.

One Mud Lake line and one Reed Lake line were opened on August 2 and 14, respectively. The line that had been cut below the wetland was open and flowing. Water levels continued to decrease throughout the summer, and waterlines were adjusted accordingly. Photos of the streambed were taken on Aug 28.

The droughtproofing program continues to be a useful tool for supporting coho fry and resident trout in Hyacinthe Creek in the dry season. Summer of 2021 was a challenge in keeping a minimal flow in the lower reaches. Without the beaver impoundments, the creek would have been in an even more serious de-watered state.

The program required many hours of volunteer work, and a special thank you is due to Doug Richardson, Randy Mellanby, Eileen Sowerby, Theresa O'Brien, Alethia Cameron, Mel Dery and Stephen Belfry for their help in maintaining this system in 2021.  
Janis McLean

### 2021 Timeline

April 12 - inspect lines and shut down valves.

June 8, July 18, July 29, and Aug 2, 5 - checked flow.

Aug 2 - opened one line at Mud Lake

Aug 14 - opened one line at Reed Lake

Aug 22 & 28 - increased flow at Reed Lake  
Sept 21 - opened all lines for the winter.