



PROJECT UPDATES

- Preliminary Assessment and aerial videography of the watershed was completed on July 17 and 21, 2015.
- Detailed Field Surveys were completed between August 9 and 12, 2016.
- Design contract awarded to Lotic Environmental Ltd.
- Project currently in the final design phase.

NEXT STEPS

- Project construction is planned for 2018.

LYONS CREEK PROJECT

Lyons Creek, a tributary to the Crowsnest River, is located within the Municipality of Crowsnest Pass, directly south of Blairmore, AB. The entire Lyons Creek sub-basin was identified as a potential candidate for the Fisheries Habitat Enhancement and Sustainability (FISHES) Program by Regional Fisheries Management staff. Widespread habitat degradation and increased sediment inputs, exacerbated by the 2014 flood, are significant issues for fish in Lyons Creek and the Crowsnest River.

Fisheries survey data indicates that the dominant sport fish species occurring within Lyons Creek is Rainbow Trout. Mountain Whitefish and Brook Trout have also been documented. Rainbow Trout and Brook Trout are both non-native species to Alberta that compete for resources with native fish species whose populations are already at risk. As well these species are able to hybridize with Cutthroat Trout and Bull Trout, respectively, resulting in depletion of native stock genetics. These fish however are still valued recreationally and are actively sought after by anglers.

Given the characteristics of Lyons Creek and proximity to identified Westslope Cutthroat Trout habitat in adjacent watersheds, this creek could be considered as a potential recovery stream in the future for Westslope Cutthroat Trout. Westslope Cutthroat Trout are listed as threatened under Alberta's Wildlife Act and the Federal Species at Risk Act, due to their small distribution, fragmented population and the continuing decline in habitat quality within their limited range. For information about threats to this species please see the *Alberta Westslope Cutthroat Trout Recovery Plan*.

The FISHES program aims to mitigate the effects on fish and fish habitat as a result of the flood and re-establish a healthy aquatic environment.



PROJECT RATIONALE

The Lyons Creek Project was ranked number three among the Tier 2 Fishes Project priorities by a technical working group of fisheries habitat experts. This ranking is based on a number of biological, social, economic and project specific criteria. The Lyons Creek sub-basin is heavily used by outdoor enthusiasts among others. Multiple land use activities occur within the area including recreational off-highway vehicle use, forestry, agriculture, and oil and gas activities.

Initial FISHES investigations identified a significant number of sediment sources and widespread habitat degradation resulting from the Sartoris road, trails, cut lines and pipelines connected to the drainage. The effects of these activities on the landscape have been further compounded by the Lost Creek wildfire that occurred in 2003, salvage logging that occurred following the fire, and the flooding that occurred in 2014. Additionally, stream instability as result of natural alluvial processes has contributed to habitat degradation within the watershed. Detailed Field Surveys and sophisticated computer modeling were used to confirm major factors that are potentially limiting the productivity of the Lyons Creek fishery. Habitat restoration projects are being developed and will be constructed to mitigate these threats.

PROJECT GOALS AND BENEFITS

Project goals for Lyons Creek include the following:

- rehabilitation of flood-eroded stream banks and re-establishment of healthy riparian zones;
- reduction or elimination of sources contributing sediment to the waterbody;
- restoration/creation of spawning habitat for sportfish species;
- restoring habitat connectivity through the removal of flood created barriers to upstream fish migration;
- restoration/creation of overwintering habitat for sportfish species;
- support successional advancement through the use of soil bioengineering techniques to improve stream stability; and
- creation of cover for various fish life stages including the redistribution of large woody debris.

In the long term, it is hoped that these habitat improvements will help conserve and protect sportfish populations in Lyons Creek.

WEBSITE INFORMATION

Further information on the FISHES Program can be found by visiting our website at: www.fishes.alberta.ca

For a more detailed assessment of the Lyons Creek Project please see the FISHES Project Selection Priority Ranking Tool on the FISHES website.

This website is updated regularly to reflect current activities.

For further inquiries regarding the FISHES program please email: aep.fishes@gov.ab.ca

Project Status

