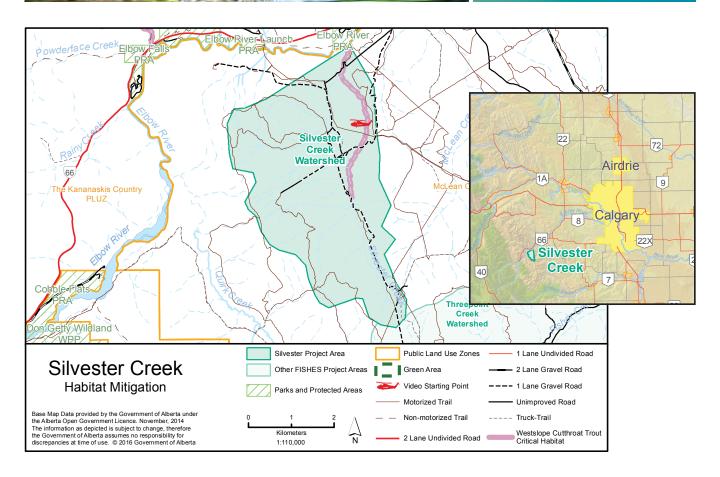
Southern Alberta Fisheries Habitat Enhancement and Sustainability Program

SILVESTER CREEK SUMMARY REPORT



PROJECT UPDATES

- Overview Fish Habitat assessment including an initial field reconnaissance site visit was completed on May 1, 2015.
- Preliminary assessment and aerial videography of the watershed was completed on July 8, 2015.
- Detailed field surveys were completed between August 24 and September 2, 2015.
- Contract awarded to Lotic Environmental Ltd.
- Project is currently at the conceptual design phase.

NEXT STEPS

Project construction is planned for 2017.

SILVESTER CREEK PROJECT

Silvester Creek, a tributary to the Elbow River, is located in the McLean Creek Public Land Use Zone (PLUZ), Kananaskis Country. The entire Silvester 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 2013 flood, are significant issues for fish in this Creek.

A portion of Silvester Creek is designated as critical habitat and supports an isolated population of 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 of habitat quality within their limited range. For more information about threats to this species please see the Alberta Westslope Cutthroat Trout Recovery Plan. (http://tinyurl.com/pmrrjtk)

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.







Helicopter Flight Path

PROJECT RATIONALE

The Silvester Creek Project was ranked as the number one priority project for the FISHES Program by a technical working group of fisheries habitat experts. This ranking is based on a number of biological, social, economic and project specific criteria. As part of the McLean Creek PLUZ, the Silvester Creek drainage basin is heavily used by outdoor enthusiasts, amongst others. Multiple land use activities occur within the PLUZ including recreational off-highway vehicle use, livestock grazing, forestry operations and petroleum development.

Initial FISHES investigations identified a significant number of sediment sources and widespread habitat degradation resulting from the network of roads, trails, cutlines and pipelines connected to the drainage. The effects of these activities on the landscape have been further compounded by the flooding that occurred in 2013. Detailed fish habitat assessments and sophisticated computer modeling will be used to confirm the key threats which are limiting the productivity of the Silvester Creek fishery. Once this is done, a habitat restoration project will be developed and constructed to mitigate these threats.



PROIECT GOALS AND BENEFITS

Project goals for Silvester Creek include the following:

- reduction or elimination of sources contributing sediment to the waterbody;
- restoration/creation of spawning habitat for Westslope Cutthroat Trout and other sportfish species;
- restoration/creation of overwintering habitat for Westslope Cutthroat Trout and other sportfish species;
- support successional advancement through the use of soil bioengineering techniques to improve stream stability;
- rehabilitation of flood-eroded stream banks and reestablishment of healthy riparian zones; and
- creation of cover for various fish life stages including the introduction of large woody debris.

In the long term, it is hoped that these habitat improvements will help conserve and protect Westslope Cutthroat Trout and other populations of sportfish species in Silvester 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 Silvester Creek Project please see the FISHES Project Selection Priority Ranking Tool.

This website is updated regularly to reflect current activities.

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

Project Status Overview Preliminary Detailed Conceptual Detailed **Project** Project Fish Habitat Field Project Construction Monitoring Assessment Project and Evaluation Assessment Survey Design Design