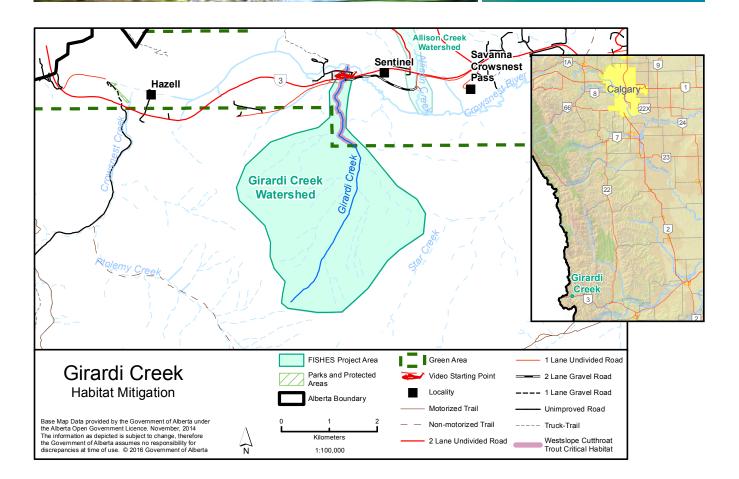
Southern Alberta Fisheries Habitat Enhancement and Sustainability Program

GIRARDI CREEK SUMMARY REPORT



PROJECT UPDATES

- Overview Fish Habitat Assessment including an initial site visit to selected sites was completed on May 26, 2015.
- Preliminary Assessment and aerial videography of the watershed was completed on July 15, 2015.
- Detailed Field Surveys were completed between October 20 and 22, 2015.

NEXT STEPS

- Project design is planned for winter 2015/2016.
- Project construction is planned for 2016.

GIRARDI CREEK PROJECT

Girardi Creek, a tributary to the Crowsnest River, is located in the Municipality of the Crowsnest Pass. The entire Girardi 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 this creek.

A portion of Girardi 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 Girardi Creek Project was ranked as a number seven priority project for the FISHES Program, tied with Hidden Creek, by a technical working group of fisheries habitat experts. This ranking is based on a number of biological, social, economic and project specific criteria. An undersized culvert conveying the creek under Highway 3 has been a source of repeated instream disturbances and an ongoing impediment to fish migration. The Girardi Creek drainage basin has also recently become more accessible as a result of industrial activities. Multiple land uses occur within the sub-basin including recreational off-highway vehicle use, agriculture and oil and gas exploration.

Initial FISHES investigations identified several sediment sources and areas of habitat degradation resulting from the existing road, trails and cutlines associated with the drainage. The effects of these activities on the landscape have been further compounded by 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 will be used to confirm key threats which are limiting the productivity of the Girardi Creek fishery. Once this work is completed, a habitat restoration project will be developed and constructed to mitigate these threats.



PROJECTS GOALS AND BENEFITS

Project goals for Girardi Creek include the following:

- amelioration of issues arising from gravel deposition and associated reductions in flow through the culvert under highway 3;
- 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 zone; 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 in Girardi 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 Girardi Creek Project please see the FISHES Project Selection and 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: esrd.fishes@gov.ab.ca

