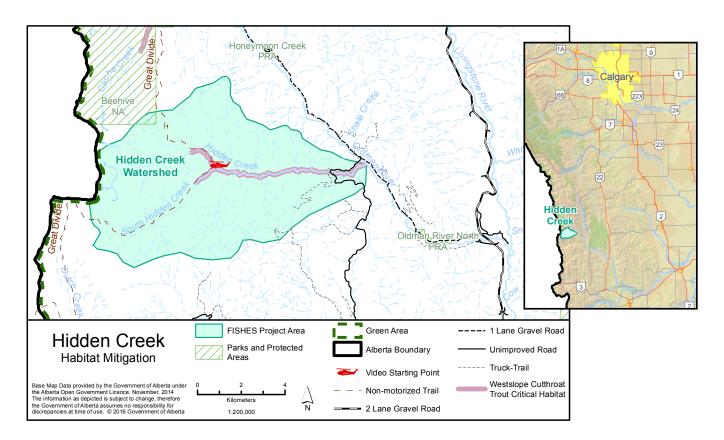
# Southern Alberta Fisheries Habitat Enhancement and Sustainability Program

## HIDDEN CREEK SUMMARY REPORT



## PROJECT UPDATES

- Overview Fish Habitat
   Assessment including an initial field reconnaissance aerial survey was completed on June 3, 2015.
- Preliminary Assessment and aerial videography of the watershed was completed on June 10 and 13, 2015.
- Detailed Field Surveys were completed between September 8 and 11, 2015.

#### **NEXT STEPS**

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

## HIDDEN CREEK PROJECT

Hidden Creek, a tributary to the Oldman River, is located along the Eastern Slopes of Alberta, Municipal District of Ranchland No. 66. The entire Hidden 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 Hidden Creek and its tributaries are designated as critical habitat and support 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)* 

Hidden Creek also provides spawning habitat for migratory Bull Trout. Bull Trout, the provincial fish of Alberta, are listed as Threatened under Alberta's Wildlife Act, due to overexploitation, habitat degradation and competition with non-native species. Bull Trout occupy only a small percentage of their historical distribution in the Oldman River drainage.

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 Hidden Creek Project was ranked as a number seven priority project for the FISHES Program, tied with Girardi 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. Currently the Hidden Creek sub-basin has no designation, but is proposed for establishment under the Recreation Management Planning process as part of the Livingstone Public Land Use Zone (PLUZ). Multiple land use activities occur within the sub-basin 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 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. Additionally, stream instability, a 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 Hidden 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 Hidden Creek include the following:

- reduction or elimination of sources contributing sediment to the waterbody;
- restoration/creation of spawning habitat for Westslope Cutthroat Trout, Bull Trout and other sportfish species;
- restoration/creation of overwintering habitat for Westslope Cutthroat Trout, Bull 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 re-establishment 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, Bull Trout and other populations of sportfish in Hidden 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 Hidden 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

## **Project Status**

