

ENVIRONMENT AND SOCIO-ECONOMIC

Fish and Aquatic Habitat

Report: Peace River Fisheries Investigation – Peace River and Pine River Radio Telemetry Study 2009

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Summary: Since 2005 AMEC and LGL have been commissioned annually by BC Hydro to conduct radio telemetry studies on the movements of adult sportfish species in the Peace River mainstem and its tributaries.

The movements of radio-tagged fish were tracked each year from early spring through autumn by strategically located fixed-station receivers and aerial surveys conducted at given intervals. Spring-spawning species (rainbow trout, Arctic grayling, walleye) were tagged and released in the Peace River mainstem in autumn 2005, whereas mountain whitefish (autumn spawner) were tagged in the following summer in the Peace mainstem, with some additional tagging of rainbow trout and Arctic grayling. In addition, tagging and release of bull trout, rainbow trout and Arctic grayling in the Pine River drainage were performed in 2006 (by Golder) and in 2007 and 2008 (by AMEC & LGL, and MOE).

In total, 422 fish were tagged in the Peace River watershed below Peace Canyon Dam: 116 mountain whitefish, 82 Arctic grayling, 61 rainbow trout, 58 walleye and 105 bull trout. The findings from 2005 to 2008 have been described in annual reports.

This report summarizes the findings of the movements in 2009 of the Pine-tagged fish, compares them to previous results, and provides a synopsis of the overall results to date. The overall results of three years of tracking of the Pine-tagged fish populations suggest:

- It is very unlikely that Arctic grayling will exit the Pine River and move past Site C;
- A few rainbow trout may exit the Pine, but in most instances will probably not move upstream past Site C;
- Movement past Site C may be limited to a few bull trout that move between the Pine and Halfway rivers in either direction to complete their life cycle.