

Peace River Site C Hydro Project

Stage 2 - Environmental Studies

Study Outline: Peace River Fish Movement/Telemetry Study

Introduction

Bull trout, rainbow trout, Arctic grayling and mountain whitefish are important sport fish in the Peace River system. These fish species are migratory and may move long distances throughout their life cycle for spawning, rearing and overwintering. As such, the movement of these fish species will be studied to assess the possible impacts on migratory fish, associated with potential Site C project.

There have been numerous telemetry tracking studies in the Peace River and its tributaries over the last two decades, extending from Peace Canyon Dam to the B.C./Alberta border. The most recent are BC Hydro telemetry studies in 2005, 2006 and 2007, which provide detailed information on bull trout, rainbow trout, Arctic grayling, walleye and mountain whitefish movements.

The Peace River Telemetry Studies will continue in 2008 and into the future. There are currently 79 active radio tagged fish (55 bull trout, 16 rainbow trout and 8 Arctic grayling), which will be tracked in 2008. radio tags be implemented in 75 adult bull trout, 25 adult Arctic grayling and 25 adult rainbow trout in the Pine River.

Study Objective

The objectives of the fish movement studies that will be conducted during Stage 2, Project Definition and Consultation, include:

- Monitoring the magnitude and the direction of movement, and the seasonal variability of these movements, for Pine River bull trout, Arctic grayling and rainbow trout; and
- Determining the extent of movements into the Peace River mainstem and its tributaries upstream of the potential Site C dam.

Scope of Work

The spatial extent of the 2008 telemetry study includes tracking fish in the following areas:

- Peace River mainstem from the Peace Canyon Dam to Peace River, Alberta
- Halfway River from the mouth to the upper headwater tributaries
- Pine River from the mouth to the upper extent of the Sukunka and Burnt rivers, and the Murray River to Kinuseo Falls
- Beaton River to the Doig River confluence

Seven fixed telemetry stations collect precise time and direction information for radio tagged fish moving past the fixed locations. In addition, aerial telemetry tracks collect precise locations for radio tagged fish at the date and time of surveys.

Radio tags will be surgically implanted in the abdominal cavity of additional fish, as per standard tagging procedures and with the approval of Ministry of Environment staff.

The Peace River Telemetry Study will be conducted between March and October 2008, and continued tracking of active tags is planned for 2009.

Reporting

Final reports of the fish movement studies will be available at the end of Stage 2.