# **Field Studies Information Sheet**

### **PEACE RIVER SITE C HYDRO PROJECT** June/July 2008 Field Study Overview

BC Hydro continues to conduct environmental and engineering field studies on and around the Peace River, between the Williston Reservoir and the B.C.-Alberta border, as part of the Stage 2 evaluation of the potential Site C project. Below is an overview of studies that will be taking place in June and July.

#### June/July 2008 Overview:

Field Study (additional details are attached)	Timing
Peace River Tributary Fisheries Study	June, Aug, Oct
Fish Tracking in the Peace River system	Spring – Fall
Fish Tagging in the Pine River watershed	June – July
Water Quality Baseline Study in the Peace River and	June, July, Aug, Oct
Tributaries	
Water Temperature Monitoring in the Peace River	June – July
Tributaries	
Peace River Angler	June and July
and River-Based Recreational Use Survey	(monthly survey)
Wildlife studies in the Peace River system	June – July
Geotechnical Field Investigations	June - October

Because much of the information currently known about the potential Site C project is almost 25 years old, information from new field studies is required to update engineering, environmental studies, and other technical work.

No decision has been made to build Site C. BC Hydro is taking a stage-by-stage approach to the evaluation of the potential project and is currently in Stage 2 – Project Definition and Consultation.

Field study updates are available on the website at **www.bchydro.com/sitec** and in the Community Consultation Office: 9948 100th Avenue, Fort St. John.

#### SITE C FIELD STUDIES JUNE/JULY 2008

- Some field studies may require access to public and private land. BC Hydro will obtain permission before accessing private property.
- Additional study activities may occur during the month. Notice of these will be posted at: <u>www.bchydro.com/sitec</u>
- Ongoing, regular BC Hydro operations work will take place during the spring and summer months on the Peace River and tributaries. This work is in addition to the Site C field study activities outlined here.

For further information, please contact: David Conway Community Relations Manager, Site C Project 9948 - 100th Ave., Fort St. John, BC V1J 1Y5 (250) 785-3415 office (250) 612-9143 cell

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## June/July 2008 Field Studies Information Sheet

Study Name	Description, location and access needed	Timing
Peace River Fisheries Tributary Study	<ul> <li>BC Hydro continues to conduct a fisheries study on the Peace River tributaries. The study involves a survey of upstream summer and fall fish migrations in the Peace River tributaries, by sampling with hoop nets and boats, and backpack electro-fishing. Fish surveys will also be conducted on foot and by boat in the summer to assess critical fish rearing habitat.</li> <li>The following sites will be surveyed:         <ul> <li>Maurice Creek/Lynx Creek/Farrell Creek/Cache Creek/Wilder Creek/Red Creek/Moberly River and Halfway River</li> </ul> </li> </ul>	June 2008 Additional sampling periods: August and October
Fish Tracking in the Peace River system	<ul> <li>Researchers will access sites by foot and boat.</li> <li>BC Hydro continues to conduct periodic aerial surveys over the Peace River in the Fort St. John area to determine the locations and movement of radio-tagged fish in the Peace River and tributaries. These surveys began in the week of March 31 and will continue until fall 2008.</li> <li>Helicopter and airplane flyovers will be conducted biweekly on: <ul> <li>Peace River mainstem from the Peace Canyon Dam downstream to the B.CAlberta border and potentially as far as Peace River, AB.</li> <li>Halfway River from the mouth to the upper headwater tributaries</li> <li>Pine River to the upper extent of the Sukunka and Burnt rivers, and the Murray River confluence</li> </ul> </li> <li>In addition to aerial surveys, telemetry stations are set-up on the ground to track the movement of radio-tagged fish as they move past these stations in the Peace River and tributaries.</li> <li>Telemetry stations are located on the: <ul> <li>Moberly River/Beatton River /Pine River/Halfway River/Graham River</li> </ul> </li> </ul>	Spring to Fall 2008

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Fish Tagging in the Pine River watershed	BC Hydro is conducting fish tagging in the Pine River watershed. Bull trout, rainbow trout and Arctic grayling will be captured by electrofishing and angling and radio tags will be implanted in adult species to allow fish movements to be tracked.	Mid-June to early July 2008
	<ul> <li>Tagging may be done in the following tributaries of the Pine River watershed:</li> <li>Pine River/Murray River/Sukunka River/Burnt River/Wolverine River</li> <li>Researchers will be use boat/water access to complete the</li> </ul>	Work is to be repeated in the late spring/early summer for the next three years.
	radio tagging.	years.
Water Quality Baseline Study in Peace River and Tributaries	<ul> <li>BC Hydro continues to collect water quality samples from various locations along the Peace River and tributaries between Hudson's Hope and Fort St. John in a Water Quality Baseline Study that commenced in February 2008.</li> <li>Water samples will be taken at the following sites: <ul> <li>Peace River/Cache Creek/Halfway Creek/Farrell Creek/Lynx Creek/Moberly River /Boudreau River</li> </ul> </li> <li>Researchers will use 4x4 vehicles and boats to access test sites.</li> </ul>	June Additional samples will be collected at designated times until Feb 2009
Water Temperature Monitoring in the Peace River Tributaries	<ul> <li>BC Hydro is monitoring water temperatures in the Peace River tributaries using digital temperatures loggers.</li> <li>These loggers remain in the same position throughout the year and are held in place with blocks and cables. Access is needed twice a year to ensure that the loggers are working properly and to download stored data.</li> <li>Temperature loggers will be accessed in the following tributaries: <ul> <li>Wilder Creek/Cache Creek/Halfway Creek/Farrell Creek/Lynx Creek/Maurice Creek</li> </ul> </li> </ul>	June -July 2008 Loggers will be accessed again in the fall Dates are weather dependent.
	Researchers will access sites by vehicles, ATV or foot.	



Peace River Angler and River- Based Recreational Use Survey	BC Hydro is conducting a monthly angler and river-based recreation use survey along the Peace River and tributaries between Peace Canyon Dam and the B.C.–Alberta border.	Commenced May 2008
	This study will result in a detailed survey of current angler and recreational use and valid estimates of total angler effort and catch each year. Estimates of angler effort will be made using flyovers of the study area in fixed-wing aircraft.	Surveys will run monthly through 2008 and into 2009
	The average catch will be estimated from shore-based interviews at boat landing or fishing sites. Flyovers and interviews will be conducted on a monthly basis through 2008 and into 2009.	
Wildlife Studies	BC Hydro is conducting wildlife surveys within, and adjacent to, the potential reservoir and along, and adjacent to, the potential transmission line corridor in order to collect data on the presence and use of these areas by key wildlife species.	June -July 2008
	<ul> <li>Investigations will include the continuation of : <ul> <li>Nocturnal owl call playback surveys (early June)</li> <li>Waterfowl surveys (throughout June)</li> <li>Nocturnal and diurnal amphibian surveys (Nocturnal surveys will be conducted concurrently with owl surveys. Diurnal surveys will be conducted independently.)</li> <li>Diurnal breeding bird surveys</li> <li>Diurnal butterfly surveys</li> </ul> </li> </ul>	
	The first of four scheduled rare plant surveys will also be conducted in July.	
	Researchers will use 4x4 vehicles, boats and helicopters to access sample sites.	



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Geotechnical Field Investigations	BC Hydro is conducting geotechnical field investigations related to the potential design of the north bank soil	June – October 2008
	excavations, the stability of potential reservoir slopes, possible sources of construction materials, and characteristics of the bedrock beneath potential main dam and south bank structures.	Work to be continued in summer 2009
	<ul> <li>Investigations may be done in the following areas:</li> <li>Potential dam site area (including north bank, island and south bank)</li> <li>10-km radius area on the south bank, near the potential dam site</li> <li>North bank areas upstream of the potential dam</li> <li>Cache Creek</li> <li>Slopes opposite Bear Flat</li> <li>Attachie</li> </ul>	
	Crews and equipment will access sites by road, boat, and helicopter. The length of work is estimated as follows: daily at the potential dam site, 10 days of work on each north and south bank and 2-3 days at each potential construction material area.	
	Work will also be done to complete improvements on the north bank access road and to prepare sites for drilling. Ongoing maintenance of the access road will continue until late October.	Late June - end of July
	Crews will be using excavators, bulldozers, trucks for hauling soil, and 4x4 vehicles.	



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