

FIELD STUDIES INFORMATION SHEET

August 2010

BC Hydro is conducting environmental and engineering field studies on and around the Peace River between the Williston Reservoir and the Alberta border as part of Stage 3 of the Site C Clean Energy Project. Environmental and socio-economic studies will advance from baseline work to impact assessment, including identifying and evaluating potential options for mitigation.

An overview of studies that will be taking place in August 2010 is below. Additional study activities may occur; notice of these studies will be posted at www.bchydro.com/sitec.

Overview

- Wildlife Studies in the Peace Region Mule Deer, Moose and Elk Study
- Wildlife Studies in the Peace Region Baseline Studies/Avian Program
- Wind Monitoring in the Peace River Valley
- Climate Monitoring in the Peace River Region
- Peace River and Tributaries Fish Studies
- Peace River Aquatic Productivity and Assessment
- Foundation Testing on the North Bank of the Proposed Dam Site
- Peace River Geomorphology and Sediment Transport Studies
- Investigations for Potential Sources of Construction Material
- Ecosystem Mapping

Some field studies may require access to public and private land. BC Hydro will obtain permission before accessing private property.

Field study updates are available at www.bchydro.com/sitec and in the Community Consultation offices in Fort St. John and Hudson's Hope.

For further information, please contact: Kate O'Neil, Community Relations Site C Clean Energy Project Community Consultation Office – Fort St. John Office: 250-785-3415 Cell: 250-793-5416

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FOR GENERATIONS

Site C Clean Energy Project

PO Box 2218, Vancouver British Columbia V6B 3W2 Fax: 604 623 4332
Toll-free: 1 877 217 0777
sitec@bchydro.com
www.bchydro.com/sitec

SITE C FIELD STUDIES

- Ongoing, regular BC Hydro work may also be taking place on the Peace River and tributaries. This work is in addition to the Site C field study activities outlined here and is related to BC Hydro's Peace River water license requirements program or other operations work. For more information, please visit:
 - www.bchydro.com/planning_regulatory/water_us e_planning/northern_interior.html.
- Golder Associates Ltd. has been employed by BC Hydro to provide environmental and archaeological monitoring during geotechnical investigations.
- BC Hydro has also invited representatives of First Nations to monitor geotechnical work.

Community Consultation Offices:

9948 - 100th Avenue Fort St. John, BC V1J 1Y5 [250] 785 - 3420 The Pearkes Center 10801 Dudley Street Hudson's Hope, BC V0C 1V0



Study Name	Description	Timing
Wildlife Studies in the Peace Region – Mule Deer, Moose and Elk Study	BC Hydro is conducting a mule deer, moose and elk study in the Peace River area from Hudson's Hope to the B.C. – Alberta border. The purpose of the study is to further the understanding of mule deer, moose and elk habitat use and movement patterns in the Peace River region.	August 2010 Phase 2 monitoring will occur from February 2010 to winter 2012.
	Monitoring and habitat data collection began in mid- February and will continue for up to 24 months. Animals will be located using a combination of ground based telemetry and fixed wing telemetry flights. Flights are scheduled for the first and last week of the month (weather dependent). Ground-based locating of animals will occur during both the first and last week of the month.	
Wildlife Studies in the Peace Region – Baseline Surveys/Avian Program	BC Hydro will continue to collect baseline wildlife information in 2010 with surveys focusing on collecting additional data on birds. Surveys will be conducted for northern goshawk, northern harrier, short-eared owl, broad-winged hawks, swallows, woodpeckers and common nighthawk. Work will include ground based surveys (boat, foot and/or vehicle based) within the project area and adjacent habitats. Data will be collected using a combination of call playback surveys, nest searches, colony counts and	June – August 2010



Note: Access to public and private land may be required in order to complete study work. BC Hydro will obtain permission from land owners and provide notification to BC Hydro leaseholders before entry onto private or leased lands.

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Study Name	Description	Timing
Wind Monitoring in the Peace River Valley	BC Hydro continues to collect wind data to assist in engineering evaluations for the proposed Site C project.	August 2010 Ongoing monitoring from February 2009.
	Five temporary wind monitoring stations have been placed on private and BC Hydro owned land between Hudson's Hope and the proposed Site C dam location.	non residury 2000.
	Stations will be visited regularly to retrieve data. Access to the monitoring stations will be by vehicle.	
Climate Monitoring in the Peace River Region	BC Hydro is installing four climate monitoring stations and adding equipment to two of the existing wind stations on private and BC Hydro owned land in the Peace River region to collect information on various climate features including: air temperature, humidity, wind speed and direction, fog frequency and density and precipitation.	August – November 2010 (station and equipment installation and testing)
	These climate data will be used to establish a pre- project baseline and study the potential effects of the Site C project to the in-valley climate.	
	Stations will be visited regularly to retrieve data. Access will be by vehicle and foot.	



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Study Name	Description	Timing
Peace River and Tributaries Fish Studies	BC Hydro is continuing fisheries studies on the Peace River and tributaries downstream to the Pouce Coupe River in Alberta. The studies involve collecting baseline fisheries information from the Peace River and tributaries by sampling fish and fish habitat by boat, backpack electro-fishing, beach seines and fish traps.	August 2010 Ongoing studies.
	This program includes use of two rotary screw fish traps installed in the Peace River and one rotary screw trap placed in the lower Moberly River. The fish traps will be operated from May to October. Each fish trap is housed in a pontoon structure approximately 4m by 7m.	
	The Peace River fish traps will be located just downstream of the Moberly River confluence, one adjacent to each shore. The Moberly River fish trap will be located about 350 metres upstream from the confluence of the Peace River.	
	Sampling site access will be conducted by foot and boat in the spring, summer and fall. Access to remote sampling sites will be by helicopter.	
	The following sites will be surveyed: Peace River, Moberly River, Halfway River and Dinosaur Reservoir.	



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Study Name	Description	Timing
Peace River Aquatic Productivity and Assessment	BC Hydro is conducting a Peace River aquatic and productivity study to collect baseline aquatic data for future assessment and modelling. The study will involve collecting water quality and nutrient samples, lower trophic level organisms (e.g. periphyton, plankton), and invertebrates (insects) from Williston Reservoir, Dinosaur Reservoir, Peace River and its tributaries. Soil and vegetation samples will be collected throughout the Peace River valley. The field program will be conducted from May through October. Sample site access will be primarily by boat. Foot access will be required to a few sites.	May - October 2010
Peace River Geomorphology and Sediment Transport Studies	BC Hydro is conducting river geomorphology and sediment transport studies to characterize baseline river definition and sediment loading at five sites on the Peace River and its tributaries (Farrell Creek, Halfway River, Pine River and two sites in the Peace River extending into Alberta). Turbidity recording stations will be installed to provide data for estimating suspended sediment concentration. Bathymetric mapping of the river bed will be performed at various locations within the Peace River from the Site C dam site downstream to Many Islands, Alberta. The field program will be conducted from May through October. Sample site access will be primarily by boat. Foot access will be required for a few sites.	May - October 2010
Foundation Pump Test on the North Bank of the Proposed Dam Site	BC Hydro is studying bedrock permeability at the north bank of the proposed dam site. Pump testing commenced in mid-May and will continue throughout the summer and fall. Environmental monitoring will be conducted during the investigations. North bank access will be by vehicle via the existing north bank access road.	August 2010 Ongoing studies.



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Study Name	Description	Timing
Investigations for Potential	BC Hydro is conducting engineering investigations to locate sources of impervious fill materials that would	August 2010
Sources of Construction	be needed to construct the proposed Site C dam.	Ongoing studies.
Material	Investigations are being conducted on the north bank of the Peace River between the river and the Alaska Highway, from Fort St. John to Charlie Lake.	
	Environmental and archaeological monitors will be present during geotechnical work.	
Ecosystem Mapping	BC Hydro is conducting field surveys to determine the accuracy of the regional Composite Ecosystem mapping and to verify the occurrence of targeted ecological communities within the Peace River corridor.	August 2010
	Work will include ground based surveys by foot or boat within the project area and adjacent habitats.	



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