SITE C CLEAN ENERGY PROJECT

MONTHLY FIELD STUDIES SUMMARY

November and December 2012

The Site C Clean Energy Project (Site C) is now in Stage 3, the environmental and regulatory review phase, which includes an independent environmental assessment. Stage 3 work includes conducting environmental and engineering field studies on and around the Peace River between the Williston Reservoir and the Alberta border.

An overview of studies that will be taking place in November and December 2012 is below. Additional study activities may occur; notice of these studies will be posted at www.bchydro.com/sitec.

Overview
Wildlife Studies
♦ Jackfish Lake Moose and Elk Monitoring Program
♦ Fisher Study Program
Physical Environment Studies
♦ Geomorphology and Sediment Transport Monitoring
♦ Climate and Air Quality Monitoring
Engineering Investigations
♦ Construction Access Road Topographic Survey Program and Geotechnical Investigations

Some field studies may require access to public and private land. BC Hydro will obtain permission before accessing private property and will notify property owners who may be directly impacted by helicopters. Ongoing regular BC Hydro work, in addition to the Site C field study activities outlined here, may be taking place on the Peace River and tributaries. This work is related to BC Hydro's Peace River water license requirements program or other operations work.

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

For further information, please contact:
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November and December 2012

Study Name	Description	Timing
Wildlife Studies – Jackfish Lake Moose and Elk Monitoring Program	BC Hydro is initiating a moose and elk monitoring study on the south bank of the Peace River, around the Jackfish Lake Road area, and in the area of the transmission corridor right-of-way. The first phase of the study will take place between winter 2012 and spring 2013, and will involve the capture and outfitting of 32 moose and elk with GPS collars. Aerial net gun capture will be used to capture animals for collaring. Phase II will involve tracking collared animals for up to two years, and phase III, the final phase, will involve removing the collars from the study animals following the monitoring period.	December 2012 – April 2015 *Phase I, capturing and collaring, will occur between December 2012 and March 2013* *Capture and collaring of study animals will not commence until a permit has been issued.*
Wildlife Studies – Fisher Study Program	BC Hydro is conducting a study to further the understanding of fisher habitat use and movement patterns in and adjacent to the Peace River Valley. The study area extends from the Peace Canyon Dam to the confluence of the Pine and Peace Rivers on both sides of the Peace River. Fishers are members of the weasel family. They are about 60 cm in length and weigh 3 to 5 kg (6 to 11 lbs). Animals that have been fitted with radio-transmitters will be located monthly, via fixed-wing aircraft flights. Weekly locations will be obtained during ground visits during the breeding season to identify den sites (April through June). Weekly locations will also be obtained all year in some areas. Habitat assessments will be conducted at key fisher locations (e.g., den sites, rest sites) to document characteristics associated with the site.	December 2010 – April 2013
Physical Environment Studies – Geomorphology and Sediment Transport Monitoring	BC Hydro is continuing to monitor suspended sediment gauging stations to characterize sediment loads in the Peace River. Suspended sediment gauging stations, including turbidity sensors anchored to the river bed with a cable running up the river bank to data loggers	November - December 2012

November and December 2012

Study Name	Description	Timing
	housed in metal cases, were re-installed at six of the locations used in 2010 and 2011 (Peace River, Kiskatinaw River, Pine River, Halfway River, Moberly River and Farrell Creek), and three new locations on the Peace River upstream and downstream of the proposed Site C construction site. Monitoring of these sediment gauging stations will be ongoing to collect data, check equipment and perform maintenance. Field crew access will be by boat and foot.	
Physical Environment Studies - Climate & Air Quality Monitoring in the Peace River Valley	BC Hydro is collecting climate and air quality data from eight monitoring stations on private and BC Hydro owned land between Hudson's Hope and Old Fort, south of Fort St. John. Up to seven new climate monitoring stations are planned to be installed in August and/or September in the Peace River watershed. Information on various climate parameters will be gathered, including: air temperature, humidity, wind speed and direction, fog frequency and density, snow depth and precipitation. Monitoring of particulate matter (mixture of solid particles and liquid droplets in the air) will be conducted at Old Fort and Halfway River. These data will be used to establish baseline conditions and to inform the effects assessment of the Site C project on in-valley climate and air quality in the area. Stations in the watershed will also be used to forecast periods of high tributary inflows for construction planning. Stations are visited regularly to retrieve data and for maintenance. Access to the monitoring stations is by vehicle, foot and helicopter.	Ongoing monitoring from February 2009.
Engineering Investigations - Construction Access Road Topographic Survey Program and Geotechnical	BC Hydro is conducting a topographical survey program and completing geotechnical investigations on the roads between Fort St. John and the Site C dam site, as well as the existing transmission corridor. These surveys will gather more information about	November 2012

November and December 2012

Study Name	Description	Timing
Investigations	existing ground conditions to facilitate proposed road improvements. Work will include establishing primary control, completing topographical surveys, and confirming laser radar data through ground truthing. Drilling will be completed on the road shoulder or in the ditch line, as well as on private property. The investigations will also include visual inspections of the existing roads and surrounding areas will include taking photographs, inspecting slopes, creek, and drainage channels. These investigations will take place on the following roads: • Along Old Fort Road, a total of 5.7km • 240 Road • 269 Road (south of 240 Road) • 271 Road from the intersection with Highway 97 to the access to Wuthrich Quarry • South bank of the Peace River in the area of the transmission line right-of-way corridor Traffic management (flagging), will be provided, where necessary; however, no road closures are anticipated. All disturbed areas will be restored to the present conditions.	

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.