

MONTHLY FIELD STUDIES SUMMARY

January 2015

BC Hydro is continuing to conduct environmental and engineering field studies on and around the Peace River between the Williston Reservoir and the Alberta border to inform detailed mitigation and monitoring planning.

Construction of the Site C project is scheduled to begin in summer 2015, with project completion in 2024.

This notice provides a list of field work planned for January 2015. Helicopters may be required for some of this work. BC Hydro will obtain permits, and complete environmental management plans and archeological assessments as required.

Overview
Environment Studies
<ul style="list-style-type: none"> • Jackfish Lake Moose and Elk Monitoring Program • Climate and Air Quality Monitoring • Fish and Fish Habitat Site Inspections • Peace River Turbidity and Suspended Sediment Monitoring
Engineering Investigations
<ul style="list-style-type: none"> • Traffic Counts • Distribution Line Site Inspections • Geotechnical Investigations and Soil Resistivity Testing Along Transmission Right of Way • Dam Site Investigations

Current and previous field study activities are available at www.sitecproject.com/news-and-information/field-study-notice and in the Community Consultation offices in Fort St. John and in the Pearkes Centre in Hudson's Hope.

Regular and ongoing BC Hydro work may also be taking place on the Peace River and tributaries related to BC Hydro's Peace River water licence requirements or other operations work.

For further information, please contact:
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January 2015

Study Name	Description	Timing
<p>Environment Studies – Jackfish Lake Moose and Elk Monitoring Program</p>	<p>BC Hydro is conducting a moose and elk monitoring study on the south bank of the Peace River, around the Jackfish Lake Road area, between the Peace River and Chetwynd, and in the area of the transmission corridor right-of-way.</p> <p>The first phase of the study took place between winter 2012 and spring 2013, and involved the capture and outfitting of 32 moose and elk with GPS collars. An additional 12 animals were captured in the winter of 2014.</p> <p>Phase II involves 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. Ground based track surveys will also be conducted to document road crossings.</p>	<p>December 2012 – April 2015</p> <p><i>Phase II, tracking collared animals, occurs between May 2013 and April 2015.</i></p>
<p>Environment Studies – Climate & Air Quality Monitoring</p>	<p>BC Hydro is collecting climate and air quality data from monitoring stations on private and BC Hydro owned land between Hudson’s Hope and Old Fort, south of Fort St. John.</p> <p>Information on various climate parameters is being 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) is being conducted at Old Fort, Halfway River and 85th Avenue.</p> <p>These data were used to establish baseline conditions that informed the effects assessment of the Site C project on in-valley climate and air quality in the area. BC Hydro is continuing to collect the data to verify actual changes and to forecast periods of high tributary inflows for construction planning.</p>	<p>Ongoing monitoring from February 2009.</p>

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	<p>BC Hydro also monitors climate within the Peace River watershed in order to forecast periods of high tributary inflows for construction planning.</p> <p>Stations are visited regularly to retrieve data and for maintenance. Access to the monitoring stations is by vehicle, foot and helicopter.</p>	
<p>Environment Studies – Fish and Fish Habitat Site Inspections</p>	<p>BC Hydro will be conducting Peace River fish and fish habitat site investigations within the dam site area and upstream areas near the mouths of Cache, Lynx, and Farrell Creeks.</p> <p>The work will include fisheries personnel walking along river margins and working from jet boats to assess fish habitat conditions and sample fish eggs.</p>	<p>January – March 2015</p>
<p>Environment Studies – Peace River Turbidity and Suspended Sediment Monitoring</p>	<p>BC Hydro is continuing the collection of baseline turbidity and suspended sediment data in the Peace River to inform the evaluation of potential effects of project construction on water quality as it relates to fish habitat and municipal/ industrial water supplies.</p> <p>In January, BC Hydro will continue maintenance and operation of six turbidity monitoring stations located on either river bank both upstream and downstream of the Site C dam site, as well as just upstream of the community of Taylor and at the Spectra water intake.</p> <p>Field crew access will be by boat and foot.</p>	<p>January 2015</p>
<p>Engineering Investigations – Traffic Counts</p>	<p>BC Hydro will be conducting traffic counts at key intersections in Fort St. John, Taylor, Hudson’s Hope and Chetwynd to establish current levels of traffic volume.</p> <p>Video recording equipment will be mounted on</p>	<p>October – January 2015</p>

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	<p>utility poles or signal poles at 19 locations to collect vehicle turning data.</p> <p>There will be no disruption to traffic or traffic operations during this activity.</p>	
<p>Engineering Investigations – Distribution Line Site Inspections</p>	<p>BC Hydro is continuing with site inspections along existing distribution lines that run from the Fort St. John substation on 81 Avenue to the location of the Site C dam to obtain information for proposed distribution lines upgrades to meet the increased need for electricity in the area of the dam site.</p> <p>The inspections will occur on the distribution lines, which run along the following roads:</p> <ul style="list-style-type: none"> • In the area of 86 Street and 87 Streets, between the Alaska Hwy and 81 Avenue • In the area of 81 Avenue, between 86 Street and 89a Street • 81 Avenue, between 89a Street and 100 Street (265 Rd) • 98 Street, between 81 Avenue and 85 Avenue • 100 Street (265 Rd), between 81 and 85 Avenue • 85 Avenue, between 98 Street and Old Fort Road • Old Fort Road, between 85 Avenue and 240 Road • 240 Road, between Old Fort Road and 269 Road • 269 Road, south of 240 Road to the end of the existing road <p>Engineers will walk the routes of the distribution lines to take photographs of existing overhead distribution lines, assess ground conditions, and gather measurements for determining spacing for poles.</p>	<p>January 2015</p>

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Study Name	Description	Timing
<p>Engineering Investigations - Geotechnical Investigations and Soil Resistivity Testing Along Transmission Right of Way</p>	<p>BC Hydro is conducting geotechnical investigations and soil resistivity testing on the south bank of the Peace River starting at Peace Canyon dam, following the existing BC Hydro 138 kV transmission line right-of-way, for approximately 77 km to the north-east.</p> <p>The work is to investigate the proposed 500 kV transmission tower foundation locations for the design of the 500 kV transmission lines, which would run from Peace Canyon dam to the substation on the south bank of the Site C dam site.</p> <p>To maximize safety and efficiency, it is anticipated that a low and slow flying helicopter will be used for aerial soil resistivity testing along the transmission line.</p> <p>At select locations, soil resistivity testing will also be carried out to provide information for design of the transmission line grounding system. Resistivity testing measures how much the soil resists the flow of electricity. Work includes inserting a series of 1” diameter metallic test probes into the ground and applying a test current.</p> <p>Visual inspections along the existing transmission line right-of-way will also be conducted to obtain information for proposed VHF installations.</p> <p>BC Hydro will obtain the necessary permissions before assessment work is performed.</p>	<p>January 2015</p>

January 2015

Study Name	Description	Timing
<p>Engineering Investigations – Dam Site Investigations</p>	<p>BC Hydro will be continuing with site inspections or visual surveys on the north and south banks at the dam site, the Moberly River area, along the transmission line right of way, and the Wuthrich and West Pine quarries. These surveys will be conducted periodically over the winter months. Engineers will be confirming topography and terrain, and taking measurements and photographs. Data collected will assist with planning and permit preparations.</p> <p>Other investigations such as water sampling, remediation work, potential contaminated site investigations and road maintenance work may be conducted as required.</p> <p>Engineering investigations will be occurring on both private and Crown land.</p> <p>Access to the site will be through existing roads on the north and south bank of the Peace River; and boats will be used to transport crews and supplies across the river.</p> <p>Helicopters will also be used periodically to access the dam site during the winter months.</p>	<p>January 2015</p>

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. BC Hydro will adhere to seasonal road restrictions.