

## FIELD STUDIES INFORMATION SHEET

## Dam Site Investigations: June – October 2014

The Site C Clean Energy Project 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 as part of the project's environmental assessment process. Project construction will not take place unless Site C receives environmental certification, regulatory permits and authorizations, and approvals to proceed.

To further characterize geological conditions at the proposed dam site, BC Hydro is continuing **geotechnical investigations** this field season. The investigations will include subsurface drilling on the north and south banks using a drill rig and a backhoe to dig test pits. On the south bank, drilling investigations and resistivity testing will be carried out along the existing BC Hydro 138 kV transmission line right-of-way and the proposed alignment of the 500 kV transmission line. The monitoring of instrumentation previously installed at the dam site and along the reservoir slopes will be visited regularly. Some locations will be visited as often as weekly to collect readings.

Geophysical seismic reflection surveys

will be conducted on both the north and south banks and on the Peace River at the proposed dam site to characterize geological conditions. Seismic reflection involves creating seismic energy and measuring the time taken for the seismic waves to travel through the ground and return to the surface.

BC Hydro will be conducting **topographic surveys** to establish a survey control network; confirm the accuracy of Light Detection and Ranging (LiDAR) data through ground truthing; and survey the general site topography, the locations of historical boreholes, test pits, and other geotechnical instrumentation locations, and environmental and archaeological features.

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## DAM SITE INVESTIGATIONS June – October 2014

- BC Hydro is conducting engineering investigations in the area of the proposed dam site, this work includes:
  - Geotechnical Investigations
  - Seismic reflection surveys
  - Topographic surveys
  - Construction materials investigations
- As required, permits will be obtained, and environmental management plans and archaeological assessments completed.
- To maximize safety and efficiency, helicopters will be used periodically to access the south bank.



**Site inspections** or visual surveys will be completed on the north and south banks at the proposed dam site and Moberly River area. Engineers will walk or drive potential access roads to conduct visual surveys of the area to confirm topography and terrain. Work may include taking measurements, surveying and taking photographs.

This data is being collected to plan for clearing activities and for the design of access roads required for construction on the south bank of the Peace River.

Investigations for potential **construction materials** may be conducted in the area of the proposed dam site. This work may include engineering field crews walking through the identified area completing field mapping; drilling of exploratory drillholes using an auger drill; digging of exploratory test pits; and clearing of necessary access routes.

Additional work such as water sampling, remediation work, potential contaminated site investigations and road maintenance work may be conducted as required throughout the field season.

As required, permits will be obtained, and environmental management plans and archaeological assessments completed.

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.

Engineering investigations will be occurring on both private and Crown land. To maximize safety and efficiency, helicopters will be used periodically to access the south bank at the dam site for the subsurface investigations, as well as instrumentation sites along the south bank.

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

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