

SITE C FIELD WORK FOR 2018

Throughout the construction period, BC Hydro will continue to conduct environmental and engineering field work on and around the Peace River between the Williston Reservoir and the Alberta border to inform construction plans as well as mitigation and monitoring programs.

This notice provides a list of field work that is planned to occur in 2018.

BC Hydro will obtain permits, and complete environmental management plans and heritage work, as required. Helicopters may be required for some of this work.

Other non-Site C related 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.

To learn about Site C construction activities, the anticipated duration of work and potential impacts or to sign up for bi-weekly construction updates, visit sitecproject.com.

For further information, please contact **Kate O'Neil, Community Relations** at 250-785-3415.

Below is a summary of field study work currently underway or planned:

Environment Work:
Climate and Air Quality Monitoring
BC Hydro is continuing the collection of climate and air quality data in real-time from monitoring stations between Hudson's Hope and Taylor. This work includes regular visits (biweekly or monthly) for maintenance.
Water and Sediment Quality Monitoring
BC Hydro is continuing to conduct Peace River surface water, groundwater, and sediment monitoring and sampling in the area of the Site C project. This work is to assess the effects on water quality as it relates to fish and fish habitat, and municipal/industrial water supplies.
Drinking Water Well Monitoring
BC Hydro is continuing to conduct monitoring of drinking water wells within a kilometre of the future reservoir of the Peace River, with the approval of well owners. This includes periodic site visits to assess water quality and/or quantity, as arranged with well owners.
Assessment of Potentially Contaminated Sites
BC Hydro is continuing to identify sites in or near the project boundaries that, due to their historic use, may have been exposed to soil contaminants. This includes visual inspections, and may include the collection of ground water elevation information and soil sampling. This may also include notification to site owners of investigation findings.

Peace River Turbidity and Suspended Sediment Monitoring

BC Hydro is continuing the collection of baseline turbidity in real-time 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.

Peace River Bull Trout Spawning Assessment

BC Hydro will assess the timing, duration, distribution, and intensity of Bull Trout spawning in known spawning locations in the Halfway River watershed through aerial and snorkel surveys. A tag detection system and resistivity fish counters will be used to ground truth estimates of spawn timing, duration, and intensity generated using the aerial and snorkel surveys. This work started in 2016 and will happen annually during the months of July, August, September and October.

Fish Population Indexing Survey

BC Hydro will monitor tributary fish populations' responses to the project to provide measures of fish abundance and distribution in representative index sections of the Peace River and tributaries including Maurice and Lynx creeks as well as Moberly and Halfway rivers. This work started in 2016 and will occur annually during the months of July, August and September.

Fish Stranding Monitoring Program

BC Hydro will assess fish stranding risk in the diversion head pond and Peace River downstream of the dam site. This work started in 2016 and will occur annually during the months of May to October.

Fish Food Organisms Monitoring

BC Hydro will assess the effects of Site C reservoir formation on the production of fish food organisms through collection of baseline information in the Peace River as well as Williston and Dinosaur reservoirs in 2018.

Tributary Mitigation Opportunities Evaluation

BC Hydro will identify fish habitat enhancement opportunities through habitat assessment in Peace River tributaries, including Maurice and Cache creeks and the Halfway, Moberly, Beatton and Kiskatinaw rivers. The work started in 2017 and will continue in 2018.

Beatton River Arctic Grayling Status Assessment

BC Hydro will monitor Arctic Grayling in the Beatton River to provide abundance and density estimates during the summer in 2018.

Small Fish Translocation Monitoring

BC Hydro will monitor small fish species populations in the Peace River to determine project impacts on genetic structure, movement, and genetic exchange of these species in 2018 and 2021.

Peace River Fish Habitat Enhancement Monitoring Program

BC Hydro will monitor the effectiveness of Peace River fish habitat enhancement measures near the dam site construction area to confirm suitability of habitat for fish during the summer months in 2018.

Traffic Monitoring

BC Hydro is continuing to collect data on traffic volumes and turning movements at selected intersections in or near Chetwynd, Hudson's Hope and Fort St. John to inform evaluation of potential effects of the project on traffic. This work includes annual and quarterly roadside data collection.

Waterbird Surveys

BC Hydro will continue to conduct waterbird surveys along the Peace River between Hudson's Hope and the Alberta border. Surveys will also be conducted at natural wetlands in the project area between the transmission line right-of-way and the Peace River, and areas adjacent to the Peace River between the dam site and the Alberta border. Surveys will be conducted from the ground and air. Trucks, all-terrain vehicles, helicopters, fixed-wing aircraft and boats may be used. Surveys will begin in late February/early March and will be conducted through October.

Songbird Surveys

BC Hydro will continue to conduct songbird surveys in and around the reservoir area, the Highway 29 realignment and other areas that may be affected by the project. Surveys will be conducted using a combination of foot, boat, all-terrain vehicle and truck access. Surveys will take place in the mornings during the songbird breeding season from late May to early July.

Common Nighthawk Surveys

BC Hydro will conduct surveys for common nighthawk (a crepuscular migratory bird) in and around the reservoir area, the Highway 29 realignment and other areas that may be affected by the project. Surveys will be conducted using a combination of foot, boat, all-terrain vehicle and truck access. Surveys will take place near dusk during the common nighthawk breeding season from early June to mid-July.

Ground-Nesting Raptor Surveys

BC Hydro will continue to conduct surveys for ground-nesting raptors in and around the reservoir area, the Highway 29 realignment and other areas that may be affected by the project. Surveys will be conducted using a combination of foot, boat, all-terrain vehicle and truck access. Surveys will take place near dusk during the breeding season from May to July.

Downstream Garter Snake and Western Toad Surveys

BC Hydro will be conducting surveys for garter snake and western toad downstream of the Site C dam site in areas adjacent to the Peace River to its confluence with the Beatton River. Surveys will be conducted using a combination of foot, boat, all-terrain vehicle and truck access. Surveys will be conducted from May to September.

Wetland Surveys

BC Hydro will continue to conduct wetland surveys within the reservoir boundary, along the transmission line and at potential mitigation sites. Surveys will be conducted using a combination of foot and all-terrain vehicle access. Surveys will be conducted from May to August.

Pre-Construction Rare Plant Surveys

BC Hydro will be conducting rare plant surveys along the Highway 29 realignments and the transmission line. Surveys will be conducted using a combination of foot and all-terrain vehicles. Surveys will be conducted from July to September.

Rare Plant Translocation

BC Hydro will be continuing its rare plant translocation program. Surveys will be conducted along the Peace River between Hudson's Hope and the Alberta border, and along the Highway 29 alignment and access roads. Material (e.g., seeds, cuttings) needed to grow plants targeted for translocation will be collected for storage and germination and rare plants may be translocated.

Bald Eagle Nest Surveys

BC Hydro will continue to conduct Bald Eagle nest surveys along the Peace River and large lakes adjacent to the project area. The surveys will be conducted using a low-flying helicopter over the Peace River and its major tributaries from Hudson's Hope to the B.C./Alberta border. The surveys will take place from February to August.

Bald Eagle Nest Platforms Installation

BC Hydro will install nesting platforms to mitigate the removal of Bald Eagle nests within project construction areas. Platform sites will be adjacent to the tree line or at the edge of openings near to the Peace River and future reservoir outside the erosion impact line. Platforms will be placed to avoid interference with agricultural land use.

Bat Roost Boxes Installation

BC Hydro will install bat roost boxes to mitigate the removal of summer roosting habitat within the project footprint. Roost boxes will be installed around the reservoir outside of the erosion impact line. Boxes will be placed to avoid interference with agricultural land use.

Artificial Snake Hibernacula Installation

BC Hydro will install artificial snake hibernacula to mitigate the loss of hibernating habitat within the project footprint. Hibernacula will be installed around the reservoir outside of the erosion impact line.

Nest Boxes Installation

BC Hydro will continue to install nest boxes for a range of cavity-nesting species to mitigate the removal of trees with cavities within the project footprint. Boxes will be installed around the reservoir outside of the erosion impact line. Boxes will be placed to avoid interference with agricultural land use.

Wildlife and Vegetation Mitigation Surveys

BC Hydro will be conducting various wildlife and vegetation surveys throughout the Site C project area to inform detailed mitigation planning.

Surveys will be conducted on Crown, BC Hydro-owned and private lands, once permission to access have been received. During the surveys, the field crew will walk throughout the property recording the physical attributes of the site, observations of target species and taking photographs. The field crew will access properties by vehicle, all-terrain vehicles and foot; boats will be used to access locations along the Peace River.

Heritage Work

Throughout the project area, BC Hydro will be continuing to complete heritage work including archaeological impact assessments, systematic data recovery and other mitigation as required. As construction work continues, surface inspections post ground disturbance or concurrent monitoring of protected archaeology sites will be performed as required. This would also include responding to any unexpected heritage discoveries (chance finds) during construction.

Engineering Work:

Transmission Line Corridor

BC Hydro's transmission line contractor will complete field investigations, including geotechnical work and survey work prior to starting construction of the transmission line. Field investigations may also include the trial installation of helical pile foundations.

BC Hydro will undertake transmission structure staking (surveying) in the spring/summer at all transmission tower sites.

Excavation and systematic data recovery of several archaeological sites will occur along the transmission line corridor.

Highway 29 Investigations

BC Hydro is conducting geotechnical investigations on the Highway 29 realignments at Halfway

River, Farrell Creek East, Farrell Creek, Dry Creek, Lynx Creek and Bear Flat/Cache Creek. Work will include surveys as well as subsurface investigations, and may include minor brushing of necessary access routes. As this work can be completed during both winter and summer, this work will be ongoing throughout 2018.

Investigations for potential construction materials may be conducted at Halfway River and Bear Flat/Cache Creek, along the proposed highway alignment as well as other potential sources in the vicinity. This work will include using a backhoe or excavator to dig exploratory test pits.

Subsurface investigations will include using a truck-mounted rotary drill and an excavator to dig exploratory test pits along the alignment.

BC Hydro will also be conducting field work for the Highway 29 distribution line relocation. This could include limited geotechnical investigations, survey work and environmental assessments.

Forestry Engineering

Forestry engineering work will continue at both banks of Peace River upstream from the dam site as required by reservoir clearing. Forestry engineering work may include timber cruising, road and clearing boundary layout, ribbon hanging, and other field works as required.

Site Inspections

BC Hydro will be continuing with site inspections and visual surveys on both banks of the Peace River at the dam site, the Moberly River area, along the transmission line right-of-way, Portage Mountain, Wuthrich and West Pine quarries and the 85th Avenue industrial lands. These site inspections will be conducted periodically. Engineers will be confirming topography, reading instrumentation and taking photographs. Data collected will assist with planning and permit preparations.

138 kV Transmission Line 1L364 Relocation

Engineering investigations may be carried out to support the future relocation of transmission line 1L364 where it crosses the Halfway River. These investigations may include site inspections, geotechnical work, survey work and archaeological work.

Reservoir Distribution Line Relocation

Engineering investigations may be carried out to support the future relocation of distribution line along the future reservoir. These investigations may include site inspections, geotechnical work, survey work and archaeological work.

Note: Access to public and private land may be required in order to complete field work. BC Hydro will request 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.