

HIGHWAY 29

Stage 3 of the Site C Clean Energy Project (Site C) is the environmental and regulatory review phase. As part of an environmental assessment of Site C, BC Hydro will identify and assess potential project effects — environmental, economic, social, heritage and health — and opportunities to provide lasting benefits for the region and First Nations. Where effects cannot be avoided, BC Hydro will identify and evaluate options for mitigation.

This study update provides an overview of work completed to date and currently underway and is current as of fall 2011. Studies may be changed or revised in scope or timing on the basis of input from regulators, government agencies, First Nations, stakeholders and the public as part of the pre-application stage of the environmental assessment process.

The Site C project requires environmental certification and other regulatory permits and approvals before it can proceed to construction. In addition, the Crown has a duty to consult and, where appropriate, accommodate Aboriginal groups.

DEFINITION

Highway 29 connects Hudson's Hope to Fort St. John and runs along the north side of the Peace River. Four segments of Highway 29 would be inundated by the proposed Site C reservoir resulting in the need to realign approximately 25 kilometres of highway in the Lynx Creek, Farrell Creek, Halfway River and Bear Flat areas.

STUDY PURPOSE

The project team is identifying preferred alignments for the four sections, and to identify other segments of Highway 29 which may require upgrades as a result of the proposed reservoir. BC Hydro is working closely with the Ministry of Transportation and Infrastructure on this study.

STATUS OF STUDIES

Consultation

Highway 29 was a public consultation topic during Stage 2 in May/June 2008. Participants were asked which factors were important to consider when evaluating the relocation of the highway segments. Safety and environmental impacts were considered most important by participants, followed by heritage sites, impacts on private property, scenic views and cost.

From November 2008 to February 2009, BC Hydro undertook property owner consultation on highway realignment options. In this consultation, the engineering and other representatives from the project team met individually with potentially directly impacted property owners to discuss realignment options for Highway 29. BC Hydro held 29 meetings with the owners of 31 land holdings, accounting for almost three-quarters of all land holdings potentially directly impacted by

Highway 29 realignment options. Through this consultation, potential alternative routings were identified along existing roads and rights-of-way and in areas outside of historical options. In addition, feedback was provided regarding slope stability, wildlife protection, and access.

Consultation input is being considered, along with financial and technical input, as the Site C project moves forward through the regulatory review stage and refines project plans.

Stage 3 Work

Highway 29 Realignment Options



Highway 29 Realignment Segments

BC Hydro is currently preparing the definition design for Highway 29 road and infrastructure. The definition design will identify preferred highway alignment options at Lynx Creek, Farrell Creek, Halfway River, and Bear Flat. Preferred alignment options are expected to be ready in 2012, and will be reviewed as part of Preliminary Design Consultation.

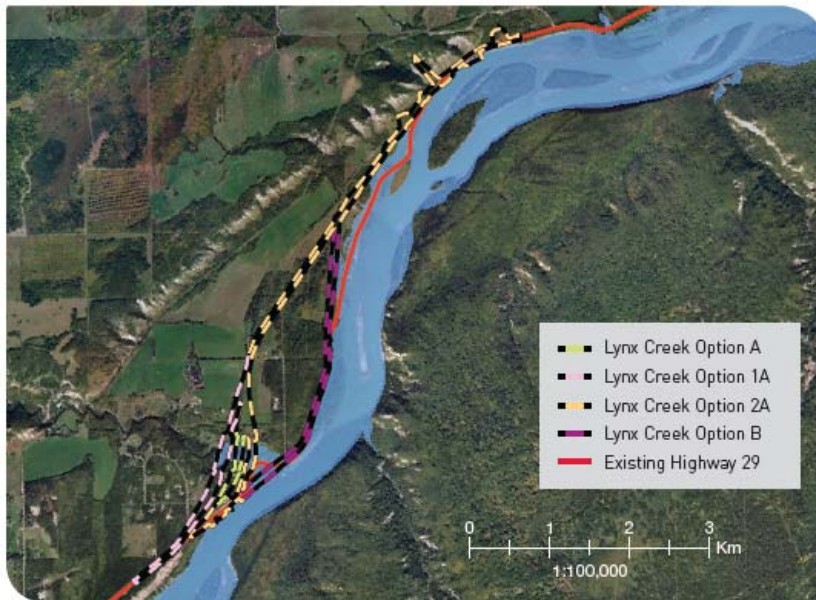
The Highway 29 alignment options are being assessed by BC Hydro's integrated engineering team, working with the Ministry of Transportation and Infrastructure. The team includes consultant specialists in project management, highway and drainage design, geotechnical and environmental design, bridge engineering, hydraulics and hydrology, traffic engineering and road safety.

The analysis of alignment options is considering Stage 2 consultation input in combination with geotechnical information, safety, environmental, archaeological, agricultural and private property input and cost. The selected preferred alignments will then undergo further engineering and design work.

As part of this work, the project team will assess if any other areas of Highway 29 may require upgrades as a result of the proposed reservoir.

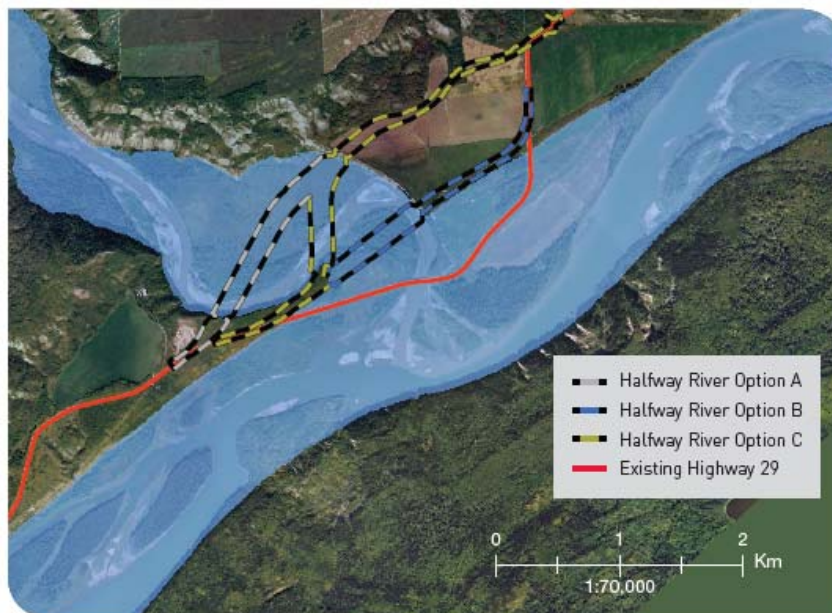
Realignment Options – Overview

Lynx Creek – The Lynx Creek segment is located approximately six kilometres east of Hudson’s Hope. In Stage 2, four alignment options were investigated at Lynx Creek.



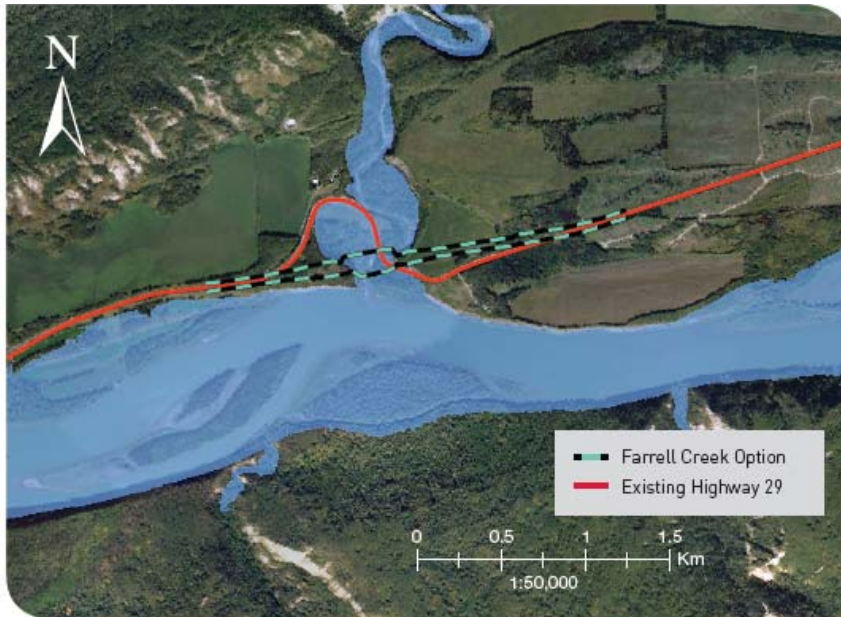
Potential Highway Realignment – Lynx Creek Segment

Halfway River – The Halfway River segment is located approximately 39 kilometres east of Hudson Hope. Three alignment options are being investigated at Halfway River.



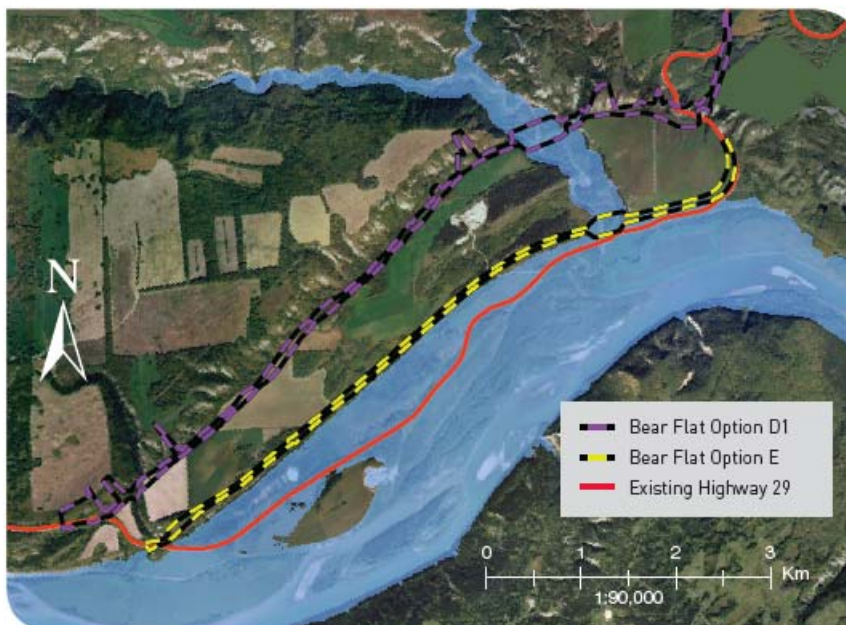
Potential Highway Realignment –Halfway River Segment

Farrell Creek – The Farrell Creek Segment is located approximately 18 kilometres east of Hudson’s Hope. One alignment option is being further investigated at Farrell Creek.



Potential Highway Realignment – Farrell Creek Segment

Bear Flat – The Bear Flat segment is located approximately 17 kilometres west of Charlie Lake. Two alignment options are being investigated at Bear Flat.



Potential Highway Realignment – Bear Flat Segment

Additional Areas of Investigation

Dry Creek

The Dry Creek segment is located between Lynx Creek and Farrell Creek. The design team is investigating the need to replace and upsize the existing culvert at this location due to the creation of the reservoir.

“Km 21 to 27” (East of Hudson’s Hope)

A six-kilometre segment of Highway 29, located 21 to 27 km east of Hudson’s Hope, is in close proximity to the proposed reservoir. The design team is investigating the possibility of providing slope protection to prevent erosion of the existing slopes near the highway.

Work Underway

The following field investigation programs are ongoing:

- Topographical Field Survey – Survey of the existing highway at key tie-in locations and survey of all the proposed bridge sites.
- Bathymetric Survey – Survey of the existing river and creek channels to determine the depth of the channels.
- Geotechnical Drilling – Drilling at various locations to determine the sub-surface soil types and properties.
- Foot Traverses – Site visits along the alignment.
- Gravel Sourcing – Evaluating several potential gravel sources along the corridor for use during the proposed highway construction.

As part of the detailed engineering of the various highway segments, the design team is also considering the following:

- Navigable water clearance at bridge structures to allow small water craft to navigate upstream along select river tributaries;
- Structural design of the bridges and highway fills to withstand wave impacts caused by wind and reservoir drawdown; and
- Design of pier structures to withstand ice loading during winter months.

Stage 3: Consultation

The Site C project requires environmental certification and other regulatory permits and approvals before it can proceed to construction.

The Stage 3 environmental and regulatory review process will include opportunities for consultation and input by the public, Aboriginal groups, communities, property owners and stakeholders.

In addition to the consultation opportunities led by the environmental regulatory agencies within the environmental assessment process, BC Hydro will lead several streams of public and stakeholder consultation during Stage 3:

- Regional and Local Government Liaison
- Property Owner Liaison
- Local Area Consultation
- Preliminary Design Consultation

BC Hydro and Aboriginal groups are also engaged in a thorough consultation process that will continue through all stages of the project.

How Input Will Be Used

A Consultation Summary Report will be prepared and released on the project website following each consultation period and Consideration Memos will be prepared, indicating how input has been considered, along with technical and financial information, for project designs or plans, including engineering and environmental mitigation plans.

FURTHER INFORMATION

The following information can be found at www.bchydro.com/sitec:

1. Field Studies Notices – Monthly updates on field studies.
2. Highway 29 Topographical Survey Program. Field Studies Information Sheet. June 2011.
3. Site C Clean Energy Project: Project Description Report. 2011. (pages 31-32).
4. Stage 2: Consultation and Technical Review. 2009. (pages 52, 72-73).
5. BC Hydro Peace River Site C Hydro Project: Project Definition Consultation, Round 1 Summary Report. 2008. (pages 44-47).
6. Peace River Site C Hydro Project – Consultation Summary Report: Property Owner Consultation on Potential Highway 29 Realignment Options, November 2008 – March 2009. 2009.
7. Site C Feasibility Review: Stage 1 Completion Report. BC Hydro. 2007. (page 30).

INQUIRIES

Updates on field studies 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:

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