



**We want to  
hear from  
YOU!**

## **PEACE RIVER SITE C HYDRO PROJECT**

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**AN OPTION TO HELP MEET B.C.'S FUTURE  
ELECTRICITY NEEDS**

**PROJECT DEFINITION CONSULTATION  
DISCUSSION GUIDE AND FEEDBACK FORM**

**ROUND 1: MAY/JUNE 2008**

**BC**hydro 

FOR GENERATIONS





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## What is Site C?

Site C is one of several options being considered to help meet B.C.'s future electricity needs. The potential Site C dam would be located about seven kilometres southwest of Fort St. John on the Peace River, downstream of where the Moberly River enters the Peace River. It would provide about 900 megawatts of capacity, and produce approximately 4,600 gigawatt hours of electricity each year – enough to power about 460,000 homes.

As the third dam and generating station on the Peace River, Site C would gain significant efficiencies by taking advantage of water already stored in the Williston Reservoir and used to generate electricity upstream at the existing W.A.C. Bennett and Peace Canyon dams. In fact, it would produce about 30 per cent of the electricity at the W.A.C. Bennett Dam, with five per cent of the reservoir area.

As currently designed, the earthfill Site C dam would be 1,100 metres long, with 300 metres of concrete structures located on the right bank for the spillway and power intakes. If built, Site C would be a mid-size facility with a significant upfront capital cost, a long operating life and low operating costs. Site C would have one of the most stable reservoirs in the BC Hydro system, with a maximum range of fluctuation of +/- three feet, and would not appreciably change downstream flows. The reservoir would be 83 kilometres long, on average two to three times the width of the current river, and would flood approximately 5,340 hectares.

Site C would be publicly owned. Early interim project estimates indicate that Site C could cost between \$5 billion and \$6.6 billion. As a decision to build is still years away, any project estimates at this stage are only interim. Cost estimates will be updated at the end of each stage of project review.

Because Site C was examined as a resource option more than 25 years ago, and again from 1989–1991, significant engineering design and environmental studies have been done. Today's approach to Site C will consider environmental concerns, impacts to land, and opportunities for community benefits, and will update design, financial and technical work. The work during Stage 2 will determine what new or updated information is required, update decades-old studies, and begin some new environmental studies and technical work. The project as originally conceived must be updated to reflect current standards and to incorporate new ideas brought forward by communities, First Nations, regulatory agencies and stakeholders.

## Potential Site C Impacts

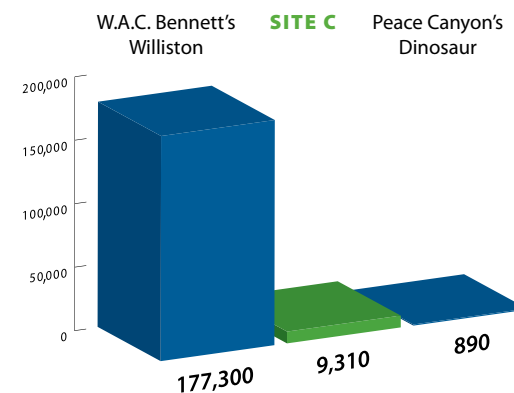
Should the provincial government decide to continue pursuing Site C, the project would be subject to provincial and federal regulatory review including comprehensive environmental assessment and permitting processes.

During Project Definition consultation, BC Hydro is looking at ways to avoid, minimize or mitigate against these and other project impacts.

- **Environment.** Effects on the environment include flooding and water flow impacts on fish, wildlife and agricultural land, local air quality impacts and construction impacts.
- **First Nations.** Site C would impact traditional lands of First Nations, including cultural, heritage and land use.
- **Social.** Site C would require the relocation of some sections of Highway 29, and some buildings would need to be moved above the reservoir safeline. It would also require relocation of some families.
- **Construction.** Construction of Site C would require a large number of workers for the construction phase, resulting in demand for housing and services. It would also result in noise, traffic, temporary construction facilities, and access roads.
- **Land.** Development of Site C would create a reservoir, flooding portions of the Peace River valley between the Peace Canyon Dam and the confluence of the Peace and Moberly rivers, as well as in the lower reaches of the Moberly and Halfway rivers.

### Reservoir Area (hectares)

Site C would produce one-third the amount of electricity produced at the W.A.C. Bennett Dam, with one-twentieth the reservoir size.



## Our Province is Growing...So are Our Energy Needs

Clean, reliable and affordable electricity has been key to our province's economic prosperity and our quality of life. By planning ahead, we can ensure that future generations of British Columbians are able to enjoy the same benefits of clean and reliable power that we do today.

As impressive as our hydroelectric assets are, they will not be enough to provide future generations of British Columbians with the energy security they will require if demand continues to grow as projected. For much of the last decade, we have been a net importer of electricity, depending on other jurisdictions to supply between 10 and 15 per cent of our electricity needs. By planning now, BC Hydro is working so that British Columbians will continue to enjoy the benefits of a secure, reliable and affordable electricity supply.

There are three ways this will be done – by conserving more electricity, by buying more electricity from independent power producers and by investing more in our legacy assets and new resource options.

### Conservation First...Power Smart and Energy Efficiency

The first and best way to meet our future electricity needs is through conservation and energy efficiency. Through its Power Smart program, BC Hydro is a global leader in conservation, providing programs and incentives to encourage customers to use less power. BC Hydro is introducing even more conservation programs to help us all meet the provincially established target to realize 50 per cent of the province's new energy needs through conservation by 2020. These programs include: new energy efficient products and buildings, smart metering infrastructure, electricity audits, incentives, and programs for schools and local governments.



## Buying Renewable Energy

BC Hydro is looking to innovative power projects in B.C., such as small hydro, wind power and biomass projects, to help meet our province's electricity needs. Three new procurement processes to acquire power are currently planned or underway: a standing offer for clean electricity projects of less than 10 megawatts; a Clean Power Call for 5,000 gigawatt hours per year; and a call for bioenergy projects that generate electricity from under-utilized wood residues, including mountain pine beetle-affected timber.

### Reinvesting in Hydro Assets and Exploring Additional Resource Options

BC Hydro continues to make important investments to modernize, expand the capacity and extend the life of its hydro assets. By modifying, updating and retrofitting our existing generation facilities, such as adding a fifth unit to the Revelstoke generating station, BC Hydro is increasing efficiency and electricity production with little or no environmental impact. Extending the capacity of these facilities will add enough electricity to power some 130,000 homes each year.

However, even with conservation, purchases from independent power producers, and reinvestment in existing generation assets, we will need to explore additional sources of power in British Columbia that can provide a large, dependable supply of electricity throughout the year.



## Site C Today: A New Approach

### Multi-Stage Evaluation and Consultation Process

The *BC Energy Plan* called for BC Hydro and the provincial government to “enter into initial discussions with First Nations, the province of Alberta and communities to discuss Site C to ensure that communications regarding the potential project and the processes being followed are well known.”

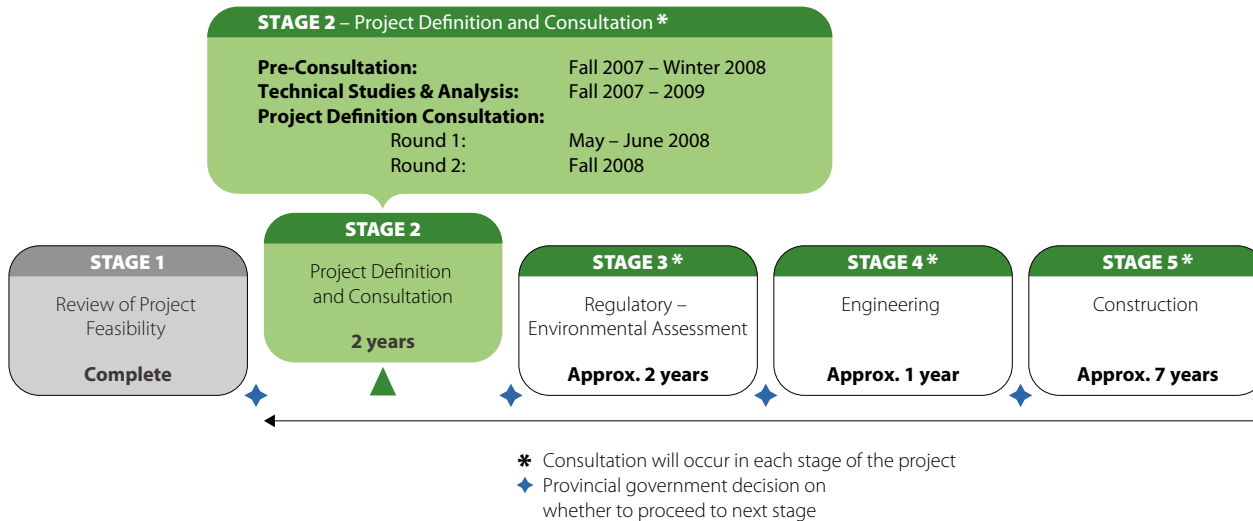
No decision has been made to build Site C. However, large projects like Site C have a long lead time, and require early evaluation and study. To preserve Site C as an option for the future, significant work needs to take place now to understand the project’s impacts and benefits from a technical, financial and environmental perspective. For that reason, there are a number of studies and comprehensive consultation planned today to update the project.

BC Hydro is taking a stage-by-stage approach to the evaluation of Site C as a potential resource option for meeting B.C.’s future electricity needs. At the end of each stage of review, BC Hydro will make a recommendation to government for a decision on whether to proceed to the next stage of project planning and development.

BC Hydro is currently in Stage 2, Project Definition and Consultation. Two rounds of public consultation on the potential project are planned in Stage 2, in addition to Pre-Consultation, which concluded in February 2008. The first round will be held in May and June 2008, followed by a second round in the fall.

In addition, Stage 2 involves extensive engineering, environmental and technical work to further define the project, to update decades-old studies, and to conduct new studies and technical work.

BC Hydro is committed to consultation and effective communications with communities, First Nations, stakeholders and the public, with the goal of building positive long-term relationships that will be instrumental to the consideration, planning and design of Site C as a sustainable project, should it proceed.



## Pre-Consultation: December 2007 – February 2008

BC Hydro conducted Pre-Consultation with stakeholders about the potential Site C project locally, regionally and provincially from December 2007 through February 2008. Pre-Consultation asked people **how** they want to be consulted, and **about what**. This input was considered in designing the first round of Project Definition Consultation.

### Pre-Consultation Participation

- 686 people, representing approximately 50 stakeholder groups
- 305 feedback forms
- Approximately 400 people attended 48 stakeholder meetings
- 31 submissions (fax, email, phone and mail)
- 56 people attended public meeting and Open House in Hudson's Hope
- 200 visits to Community Consultation Office in Fort St. John

### Key Results – Consultation Topics

The major topics that participants indicated they would like to discuss in Project Definition Consultation included: project design, water management, fish/wildlife, socio-economic impacts, land use, infrastructure, local benefits and opportunities, recreation, local and provincial climate, and alternatives to the project.

During the 48 stakeholder meetings, participants raised questions and concerns on a number of topics, including:

- Local impacts (36 meetings)
- How and when Site C will be compared to energy alternatives (34 meetings)
- The consultation process and participation in Project Definition Consultation (25 meetings)
- Local community benefits (10 meetings)
- Impact on First Nations, process for consultation (10 meetings)
- Cost/economic issues (7 meetings)
- Northern impacts vs. southern benefits (7 meetings)
- Conservation (7 meetings)

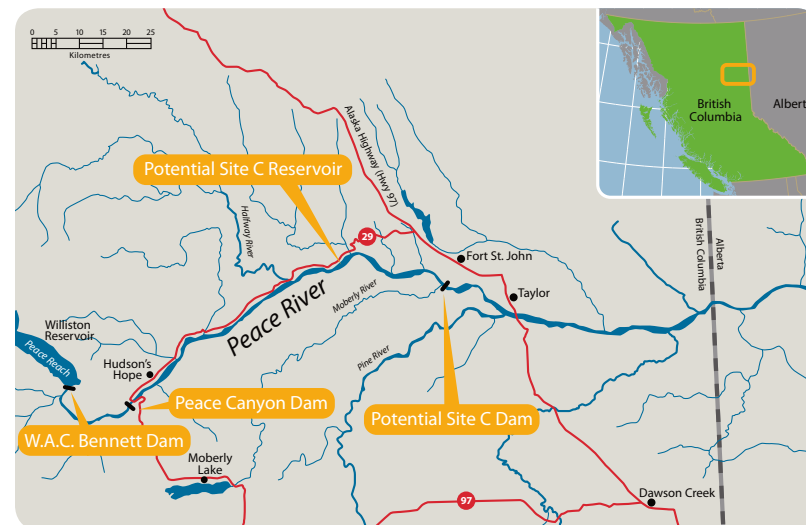
- Greenhouse gas (GHG)/climate change (5 meetings)
- Procurement/employment (5 meetings)
- Historical grievances (4 meetings)

### Key Results – Consultation Methods

The majority of Pre-Consultation participants indicated they would likely participate in Project Definition Consultation through the following:

- Stakeholder meetings
- Public open houses
- Online feedback forms
- Fort St. John Community Consultation Office (high among Peace River region participants)

To view the Pre-Consultation Summary Report, go to [www.bchydro.com/sitec](http://www.bchydro.com/sitec)



The Peace River originates in the Rocky Mountain Trench and flows downstream into Alberta.

## Project Definition Consultation: May/June 2008 (Round 1)

### The Purpose

Project Definition Consultation, which builds on stakeholder input from Pre-Consultation, is designed to consult the public and local, regional and provincial stakeholders on key impacts, benefits and features of the potential Site C project. During Stage 2, Project Definition Consultation is being undertaken in two rounds – the first in May/June 2008 and the second in the fall of 2008.

During Round 1, BC Hydro will be seeking feedback on the following topics:

- **Site C as an energy option**
- **Community and provincial benefits**
- **Project design elements**
  - Reservoir impact lines
  - Water management
- **Recreation**
  - River-based opportunities
  - Reservoir-based opportunities
- **Infrastructure**
  - Relocation of segments of Highway 29
  - Worker housing
- **Environment**
  - Potential increase of fog
  - Impacts on fish
- **Land uses**
  - Heritage resources, such as impacts on archaeological sites

## How Your Input Will Be Used

Feedback gathered through this consultation will be used along with technical and financial input to refine elements of the potential project's design and to assist in defining the scope and nature of ongoing environmental, technical and other studies.

### Round 1: Spring 2008

The first round of Project Definition Consultation seeks your feedback on elements of project design, recreation, infrastructure, local impacts, land uses and community benefits. These topics have been selected due to their importance to communities and stakeholders, as indicated during Pre-Consultation.

### Round 2: Fall 2008

The second round of Project Definition Consultation will seek input on land and agricultural impacts, as well as topics related to the environment. For instance, consultation regarding the potential locations for dam material (sand, soil and rock) will be the subject of consultation in the next round. These topics will be examined during Round 2 as more information becomes available through additional studies.

### First Nations Consultation

BC Hydro is committed to effective communications and consultation with First Nations, with the goal of building positive long-term relationships. We are committed to working fairly and equitably with First Nations as decisions about how best to meet our energy needs are made. As part of the evaluation and development of Site C, we are establishing a parallel process to consult with First Nations about the project and about how, moving forward, First Nations would like to be involved and consulted.

## We Want to Hear From You

The first round of Project Definition Consultation will take place May 1 through June 30, 2008. Consultation materials will be available on the Site C website beginning May 1. You can provide feedback and learn more by:

- Attending **stakeholder group meetings** (email [sitec@bchydro.com](mailto:sitec@bchydro.com) to sign up)
- Attending **open houses** (see schedule below)
- Reading information **mailed to households** in the Peace region
- **Providing feedback online:** [www.bchydro.com/sitec](http://www.bchydro.com/sitec)
- **Writing submissions to:** [sitec@bchydro.com](mailto:sitec@bchydro.com) or PO Box 2218, Vancouver, B.C. V6B 3W2
- Visiting the **Community Consultation Office:** 9948 100<sup>th</sup> Ave, Fort St. John
- **Calling toll-free:** 1 877 217-0777
- **Faxing:** 604 623-4332 or 250 785-3570

## Stakeholder Group Meetings

Several stakeholder meetings are planned as part of Project Definition Consultation, Round 1. If you would like to attend a stakeholder group meeting, please contact us by email ([sitec@bchydro.com](mailto:sitec@bchydro.com)) or phone (1 877 217-0777).

## Open House Schedule\*

Community	Date	Time	Location
Fort St. John	Mon, June 2	6–9 p.m.	North Peace Cultural Centre
Taylor	Tues, June 3	6–9 p.m.	Taylor Community Hall
Hudson's Hope	Sat, June 7	10 a.m.–1 p.m.	Hudson's Hope Community Hall
Dawson Creek/Pouce Coupe	Mon, June 9	6–9 p.m.	South Peace Community Multiplex – EnCana Centre
Hudson's Hope	Tues, June 10	6–9 p.m.	Hudson's Hope Community Hall
Fort St. John	Sat, June 14	10 a.m.–1 p.m.	North Peace Cultural Centre
Chetwynd/Tumbler Ridge	Mon, June 16	6–9 p.m.	Chetwynd Recreation Complex
Fort Nelson	Tues, June 17	6–9 p.m.	Woodlands Inn
Prince George	Wed, June 18	6–9 p.m.	Treasure Cove Hotel
Mackenzie	Thurs, June 19	6–9 p.m.	Mackenzie Recreation Centre

\* Please check [www.bchydro.com/sitec](http://www.bchydro.com/sitec) for any potential additions to this schedule.



## Site C as an Energy Option

### Energy Planning

The second most commonly raised topic in Pre-Consultation stakeholder meetings (managing local impacts was the most frequent topic) was the question of how and when Site C would be evaluated in relation to energy alternatives such as wind, Burrard Thermal, conservation, other large hydro, solar, biomass and others. Some Pre-Consultation participants expressed a preference for a consultation process that focused on energy alternatives rather than consultation focusing on the potential Site C project.

Analysis of energy alternatives is generally done as part of BC Hydro's energy planning process, which incorporates developing Integrated Electricity Plans (IEP) and Long-Term Acquisition Plans (LTAP) on a regular basis. Both plans are filed with the British Columbia Utilities Commission (BCUC) for review and consideration.

In 2006, BC Hydro prepared a combined 2006 IEP/LTAP, and Site C was identified as an attractive potential resource option. Some stakeholders, however, expressed interest in having updated information about Site C, through project-specific studies and consultation, before being able to compare Site C to energy alternatives. Currently, BC Hydro is developing its 2008 LTAP to be filed with the BCUC in spring 2008. More information about the 2008 LTAP and BC Hydro's energy planning process is available at [www.bchydro.com](http://www.bchydro.com).

As part of the Stage 2 review of Site C, BC Hydro is seeking input from stakeholders and the public about key factors to consider in evaluating Site C as a potential resource option. A summary of energy options, and their attributes, is shown in the table on page 8.

### Looking Ahead

Understanding and evaluating B.C.'s electricity resource options is an important topic in considering Site C as a potential option to meet future need. BC Hydro is committed to providing ongoing information about energy options, as well as engaging First Nations, stakeholders and the public about these planning processes.



B.C.'S Potential Electricity Resources						
Resource	Financial Cost	Energy Quality	Capability	Environmental Impact		
				Air *	Land	Water
<b>Small hydro (run-of-river)</b>	Low operating cost Water rentals Large initial capital investment	Intermittent – seasonal	Low dependable capacity	None	Affects wildlife habitat, traditional and recreational uses	Diverts a portion of stream flow; may impact recreational uses
<b>Large hydro (such as Site C)</b>	Low operating cost Water rentals Large initial capital investment	Flexible, firm energy	Dependable capacity	Minimal	Affects wildlife habitat, traditional and recreational uses, agriculture	Changes portion of river flooded; may affect flows downstream and fish habitat
<b>Conservation</b>	Low operating cost No fuel cost Can require initial capital investment	Reliable reduction in firm energy requirements	Reliable reduction in dependable capacity requirements	None	None	None
<b>Natural gas</b>	Low operating cost Significant fuel cost Moderate capital investment	Flexible, firm energy	Dependable capacity	Nitrous oxides largely controllable; carbon dioxide emissions must be offset**	Limited to plant site	Consumptive water use
<b>Coal</b>	Even split between fuel cost (coal) and service on capital	Firm, base-load energy	Dependable capacity	Some sulphur oxide or mercury emissions; carbon dioxide emissions must be captured**	Footprint would include mine and transportation infrastructure	Consumptive water use
<b>Wind</b>	Low operating cost No fuel cost Large initial capital investment	Intermittent	Low dependable capacity	None	Visual impact of towers and may affect wildlife	Potential impacts on ocean floor, mammals and fisheries at some offshore sites
<b>Biomass †</b>	Low operating cost Low to moderate fuel cost Large initial capital investment	Firm, base-load energy	Dependable capacity	Dependent upon fuel burned; possible local air impacts	Limited to plant site	Consumptive water use
<b>Solar</b>	Low operating cost No fuel cost Large initial capital investment	Intermittent	Low dependable capacity	None	Utilizes buildings; no change to existing footprint	None
<b>Tidal</b>	Moderate operating cost No fuel cost Large initial capital investment	Intermittent	Low dependable capacity	None	Limited to powerhouse footprint	May affect fish, marine mammals and fishing operations

† Biomass: Plant material, vegetation or agricultural waste used as a fuel or energy source.

\* Based on emissions during operation. However, all resources except conservation have a greenhouse gas impact during construction and filling of reservoirs (for hydro with storage).

\*\* In addition, the *BC Energy Plan* mandated that 90 per cent of total electricity continues to be clean or renewable, which means no more than 10 per cent may be generated through options such as coal or natural gas.

## Community and Provincial Benefits

As part of BC Hydro's consultation with communities, First Nations, the public and stakeholders in the region, some discussion will focus on creating long-term benefits for the region and the province. The potential Site C project could provide an opportunity for a legacy of benefits for the communities that may be directly affected. It could also help the province attain its environmental goals by reducing greenhouse gas emissions, as once it is operational, Site C would generate clean energy. BC Hydro is seeking public and stakeholder assistance with identifying potential opportunities to benefit First Nations, residents and communities directly affected by the potential Site C project.

During Pre-Consultation, a number of local, regional and provincial stakeholder groups raised ideas for how BC Hydro could provide a legacy of benefits. Suggestions included:

- Regional employment and skills training
- Enhanced recreational opportunities
- Upgrades to infrastructure
- A lasting legacy community fund

## Looking Ahead

A review of potential community and provincial benefits is planned during Stage 2. Results of this analysis may be ready for feedback during Project Definition Consultation, Round 2.





## Project Design

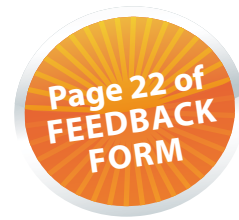
### Reservoir Impact Lines

Public safety is of the utmost importance to BC Hydro. The creation of a reservoir would flood land and impact land use in the surrounding area. Safety would be the top concern when determining land use around the potential reservoir. The reservoir would be 83 kilometres long, on average two to three times the width of the current river, and would flood approximately 5,340 hectares.

### History

The banks of the Peace River are prone to sliding and slumping similar to other valleys in the Peace region. The potential Site C reservoir would have little effect on the frequency of landslides or sloughing, other than during the development of beaches at the new water level. Beaches are expected to reach stable configurations at most locations within 10 years of reservoir operation.

When Site C was initially examined more than 30 years ago, a “safeline” around the potential reservoir was established, which was defined as a conservatively located line beyond which the security of residents and their belongings can be reasonably assured. The safeline was intended for residential and associated land use, and addressed both safety issues regarding sudden landslides and the slow regression of the reservoir shoreline caused by erosion and slumping.



### Stage 2 Studies – Reservoir Impact Lines

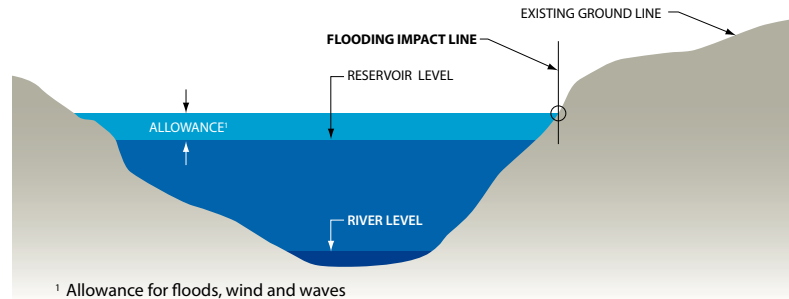
The safeline concept originally envisioned for the project can be improved to recognize the many different uses for land in the Peace River valley, such as agriculture, industry, transportation, hydroelectric, forestry and recreation. Safelines are intended for residential situations and are very conservative. They also don't account for the time-dependent effects of erosion and beaching, or separate those effects from potential stability problems. The safeline developed for the project in the 1970s included land deemed to be unsuitable for residential use, even where it would not be affected by the reservoir.

To address these limitations and minimize impact on land owners and leaseholders as well as land uses in the area, BC Hydro is proposing to replace the safeline with a family of “reservoir impact lines” based on the different physical processes that will be affected by the reservoir. These lines would be conservatively located based on the information available but could be modified after some years of experience with reservoir operation, should the project proceed.

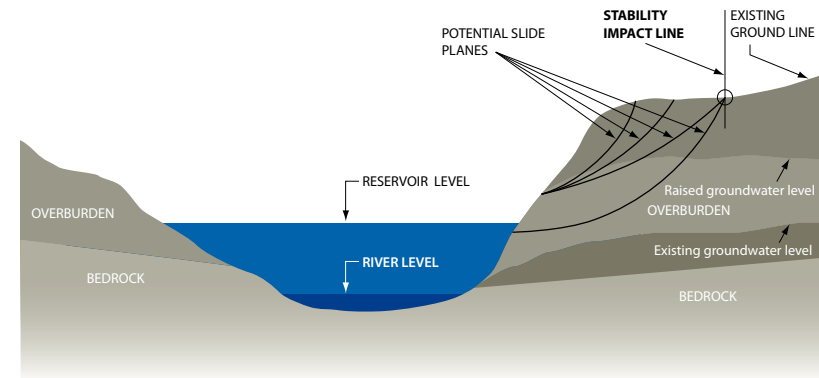
## Reservoir Impact Lines

Studies are underway as part of Stage 2 to establish five reservoir impact lines, which would provide more precise information to land owners and residents, and allow BC Hydro to tailor land use restrictions and property acquisitions. BC Hydro proposes to establish the following reservoir impact lines:

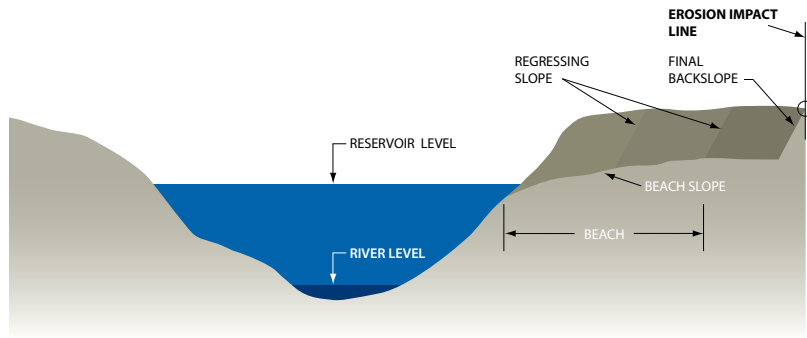
- **Flooding impact line**
- **Stability impact line**
- **Erosion impact line**
- **Groundwater impact line**
- **Landslide wave impact line**



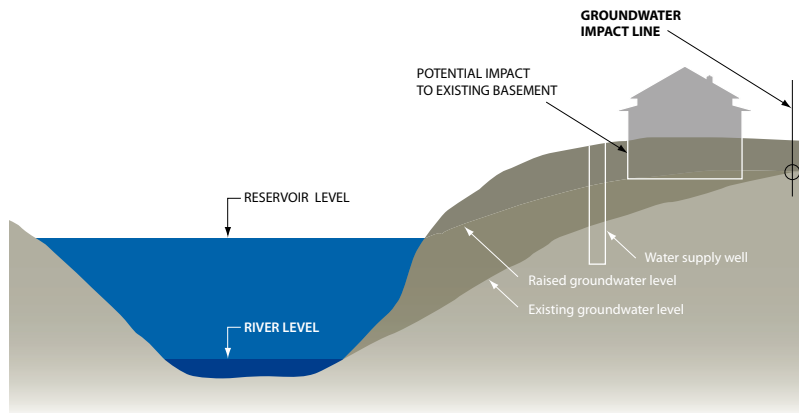
**Flooding impact line:** The boundary beyond which land adjacent to the potential reservoir will not be inundated as a result of reservoir operation. This line includes an allowance for floods, wind and waves.



**Stability impact line:** The boundary beyond which land adjacent to a reservoir is not expected to be directly affected by sudden landslides. Existing natural landslides and unstable areas will not necessarily be included on the reservoir side of the stability impact line. During Stage 2, there will be investigations on existing and potential natural landslides. The stability impact line may be adjusted periodically as a result of these investigations.

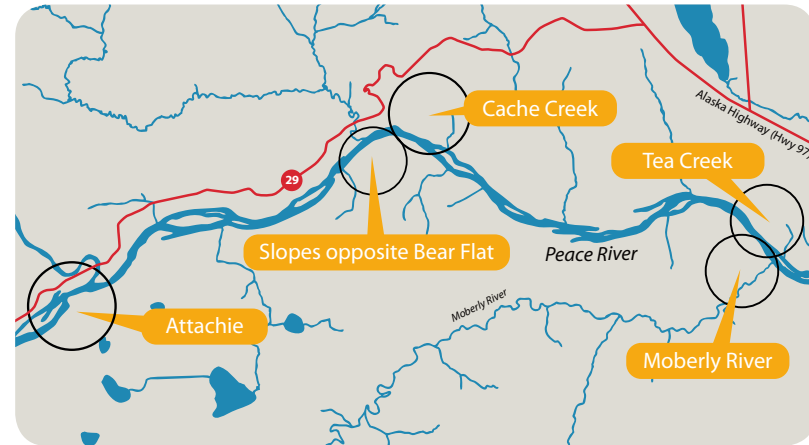


**Erosion impact line:** The boundary beyond which the reservoir bank will not regress due to progressive erosion caused by reservoir operations and wave action. The development of beaches and the regression of the shoreline is a process that could take many decades. While the erosion impact line will be based on expected regression, BC Hydro would monitor the reservoir's first decade and adjust the line according to actual progress of beaching. Most non-residential land uses may continue between the flooding impact line and the erosion impact line.



**Groundwater impact line:** The boundary beyond which groundwater levels adjacent to a reservoir shoreline are not significantly affected by the presence of the reservoir.

**Landslide wave impact line:** In certain areas it could be necessary to account for the possibility of waves being generated by a landslide. In these areas a landslide wave impact line will be developed.



This graphic illustrates the areas in the Peace River valley that have been investigated to help determine their potential for producing landslide-generated waves.

## Looking Ahead

The Site C project team is updating mapping and studies to determine potential impact lines for private property, as described above. The Stage 2 review will include development of review policies related to potential land acquisitions in the future. In addition, a project Land Use Policy and Land Acquisition Plan will be completed during Stage 2 regarding the five impact lines described in this section.



## Water Management

Operation of a dam and a generating station is primarily about water management in upstream reservoirs and management of downstream flow rates. These variables are managed for the benefit of electricity generation while balancing consideration of environmental and social factors. Water management happens hour to hour, day to day and season to season depending on the water control structures. BC Hydro has demonstrated its responsible approach to water management for over 50 years.

As the third dam on the Peace River, Site C would primarily use water currently stored in and released from the high-volume Williston Reservoir. Site C would have one of the most stable reservoirs in the BC Hydro system, with a maximum normal range of fluctuation of +/- three feet, and would not appreciably change downstream flows. Downstream effects are expected to primarily consist of small temperature changes, shifting of the water release point from Peace Canyon to Site C, and reduced sediment transport and associated localized channel changes.

As part of this consultation process, combined with further technical and environmental studies, BC Hydro is committed to understanding the costs and benefits of different operation scenarios on reservoir and downstream interests. More flexibility in reservoir operations would generally result in lower electricity rates, but could potentially impact the environment and recreation opportunities. Reservoir levels and downstream flows are interconnected and options need to be reviewed together, including the rationale for constraints.

The **reservoir operating range** represents the range of water levels (minimum and maximum) within which the potential reservoir would vary.

The **downstream flow range** represents the minimum and maximum rate at which water would be released and flow out of the potential reservoir.

The specific overall and seasonal operating regimes that are appropriate for the Site C reservoir will be important considerations, and BC Hydro will be seeking stakeholder and public input with respect to the trade-offs that will determine these operating regimes.

Decisions around the reservoir operations have the potential to affect several objectives. Constraints on the operating range reduce the flexibility, and therefore value, of Site C. The frequency of changes is also an important consideration with respect to shoreline and aquatic habitat. Seasonal timing of such changes is another consideration; for example, reservoir restrictions designed to improve summer recreation activities would be unnecessary in the winter.

BC Hydro is examining operating regimes and their potential effects on different water management interests, such as:

- Energy
- Value of energy
- System stability
- Environmental concerns
- Recreation
- Flood control
- Downstream ice and groundwater management

The table on page 14 shows the effect of specific operational constraints on various interests. These constraints could apply year-round or on a seasonal basis. In general, it is not possible to have stable reservoir levels and rigid flow rates at the same time. To be able to stabilize the reservoir, the operator must have flexibility to adjust flows from Site C to match flows into Site C, to stabilize downstream flows.

Water Management Factors and Interests	Operational Constraints (Potential direction and type of effects based on water management constraints)			
	Flexible Reservoir Levels	Stable Reservoir Levels	Flexible Flow Rates	Rigid Flow Rates
<b>Energy</b> (gigawatt hours)	Ability to optimize for energy production	Less ability to optimize for energy production	More energy produced on average due to less chance of spill	Less energy produced on average due to more chance of spill
<b>Financial</b> (value of energy)	More ability to generate during higher value periods	Less ability to shift generation to high value periods	More ability to generate during higher value periods	Less ability to generate during high value periods
<b>System stability</b> (ability to balance intermittent resources for transmission grid)	More ability to use reservoir to balance short-term electricity needs	Less ability to use reservoir to balance short-term system electricity needs	More ability to adjust generation to meet capacity requirements	Less ability to adjust generation due to must-run requirements
<b>Environmental concerns</b> <ul style="list-style-type: none"> <li>• Fish</li> <li>• Wildlife</li> </ul>	Lower quality shoreline and riparian environment	Higher quality shoreline and riparian environment	Mixed effects. Higher levels of fish stranding. More dynamic flow regime.	Mixed effects. Lower levels of fish stranding. Less dynamic flow regime.
<b>Recreation</b> <ul style="list-style-type: none"> <li>• Boating</li> <li>• Shorelines</li> </ul>	Less certain water levels for boating and access. Less visual attractiveness.	More certain water levels for boating and access. More visual attractiveness.	Less certain water levels for boating and access	More certain water levels for boating and access
<b>Flood control</b> <ul style="list-style-type: none"> <li>• Mitigation of extreme local flow events</li> </ul>	Able to lower reservoir to absorb high local inflow events	Unable to lower reservoir to absorb high local inflow events	Can lower Site C flows to offset high downstream inflow events	Less ability to lower Site C flows to offset high downstream inflow events
<b>Downstream ice and groundwater management</b> <ul style="list-style-type: none"> <li>• Mitigation of ice events downstream of Site C</li> </ul>	n/a	n/a	More potential to mitigate downstream ice and groundwater concerns	Less potential to mitigate downstream ice and groundwater concerns

## Looking Ahead

In addition to Project Definition Consultation, Round 2, BC Hydro is working to identify other interests and factors that should be considered regarding water management and operation of the potential dam as part of technical and environmental studies.

## Recreation

The Peace River is used by both residents and tourists for many outdoor recreation activities. If Site C were to proceed, reservoir-based activities such as boating, fishing, hiking and camping could replace today's river-based recreation upstream of the dam. In addition, the quality of some recreation opportunities could be improved based on various project features such as reservoir water levels, shoreline facilities, boating facilities, and angling, hunting or camping opportunities.

As part of Stage 2, BC Hydro is seeking input from stakeholders and the public to assist in assessing the potential effects of Site C on recreation use in the Peace River valley. BC Hydro also seeks input to identify potential uses of the reservoir, shoreline, facilities and water levels to enhance recreation use of the reservoir and tourism in the region.

Past studies on recreation characterized the basic physical changes that could occur. These studies were helpful in assisting the public to envision the potential reservoir and the type of recreation uses it could offer. The reservoir would be a body of water consisting of a widened 83-kilometre segment of the Peace River from Peace Canyon Dam to the potential Site C dam site.

## Looking Ahead

Changes to the region's population, economy and recreation preferences over the years limit the value of previous studies on recreation. During the current stage of the project, BC Hydro is planning, and has initiated, a number of studies and surveys regarding recreation, including:

- **Angling and River-Based Recreation Use Survey** – This survey will identify current amenities, shoreline and boating activities, and use levels. This will develop a methodology for assessing the predicted future uses for recreation and angling. This survey includes a creel survey to determine current fishing activities.
- **Socio-Economic Studies** – These studies will provide recreation-related information such as current populations, regional tourism economy and recreation opportunities, and hunting and fishing information.
- **Local Climate Studies** – These studies will examine current climatic conditions, such as air temperature, fog and wind and develop a recommended methodology for assessing the effects of the project on these climatic conditions, which may have potential recreational effects. This information will be needed to complete the assessment of future recreation uses.
- **Maps** – New maps will assist in identifying important current and future recreation activities.



Boating on the Peace River





## Infrastructure

### Relocation of Four Segments of Highway 29

Four segments of Highway 29 would be flooded by the reservoir if the project were to proceed. For each of these segments, water crossings and alignment options were developed as part of early design work. Options for the alignment of each segment and water crossing require updating and further input, including community and stakeholder feedback, to determine their feasibility. Potential impacts on private property, the environment and heritage resources will be considered as well.

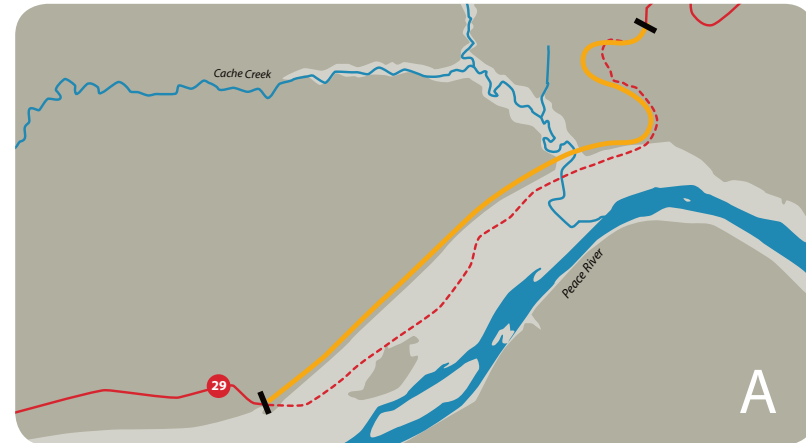


This map indicates the four areas where Highway 29 could be relocated to avoid flooded areas. Light grey area indicates Flooding Impact Line.

The four potential realignment segments would be designed to meet current Ministry of Transportation standards, providing the following improvements:

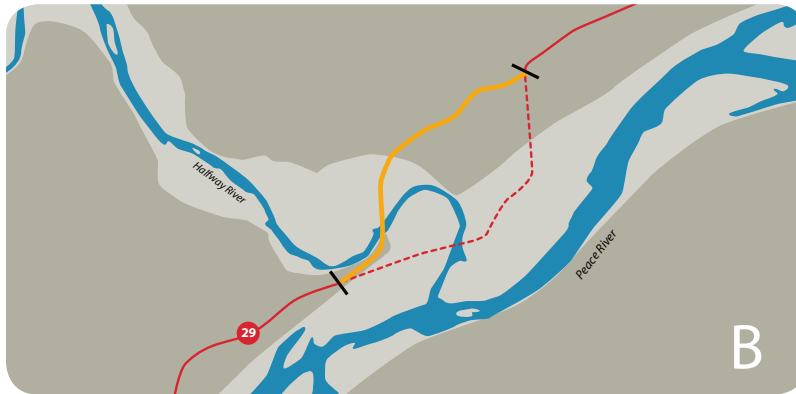
- Wider lanes
- Wider shoulders
- Passing lanes, where practical

**The Bear Flat segment** of the Highway 29 relocation starts approximately 28 kilometres west of Fort St. John. Here, the realigned segment of the highway veers north of its current alignment and descends from the upper plateau east of Cache Creek, in a gradual “S” curve, to the lower edge of the upper terrace, just above and parallel to the potential reservoir level. With a combination of earthfill and concrete deck bridge structures, the highway then crosses 360 metres over Cache Creek before continuing westwards along the edge of the cultivated areas on the upper terrace, parallel to the potential reservoir.



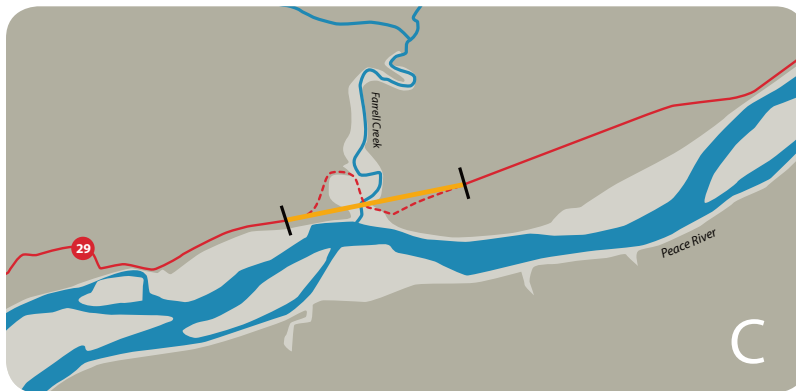
This is the 1982 design option, but other alignments may be possible with further study. Light grey area indicates Flooding Impact Line.

**The Halfway River segment** of the potential Highway 29 relocation starts about 2.5 kilometres east of the Halfway River bridge, at the toe of the highway's descent from the upper plateau to the upper terrace. Here, the new alignment follows the toe of the plateau slope for 3.7 kilometres. With a combination of earthfill and concrete bridge deck structures, it crosses 920 metres over the river, approximately 800 metres upstream of the existing bridge, before reconnecting with the existing alignment.



This is the 1982 design option, but other alignments may be possible with further study. Light grey area indicates Flooding Impact Line.

**The Farrell Creek segment** of the potential Highway 29 relocation is located at Farrell Creek, approximately 69 kilometres west of Fort St. John. Here, where the existing highway meanders 2.6 kilometres across the creek bed, the new alignment runs parallel to the Peace River, crossing 270 metres over Farrell Creek by means of earthfill and concrete bridge deck structures, reducing travel by approximately 500 metres.



This is the 1982 design option, but other alignments may be possible with further study. Light grey area indicates Flooding Impact Line.

**The Lynx Creek segment** of the potential Highway 29 relocation is located approximately 74 kilometres west of Fort St. John. Here, the potential new alignment veers northwest towards the back of the upper terrace, following the toe of the upper plateau slope. The highway travels some 7.7 kilometres, crossing 580 metres over Lynx Creek by means of a combination of earthfill and concrete bridge deck structures before reconnecting with the existing alignment.



This is the 1982 design option, but other alignments may be possible with further study. Light grey area indicates Flooding Impact Line.

## Looking Ahead

BC Hydro will continue to survey the potential alignments, gather feedback from communities and stakeholders, and engage in further discussions with the Ministry of Transportation.

### Worker Housing

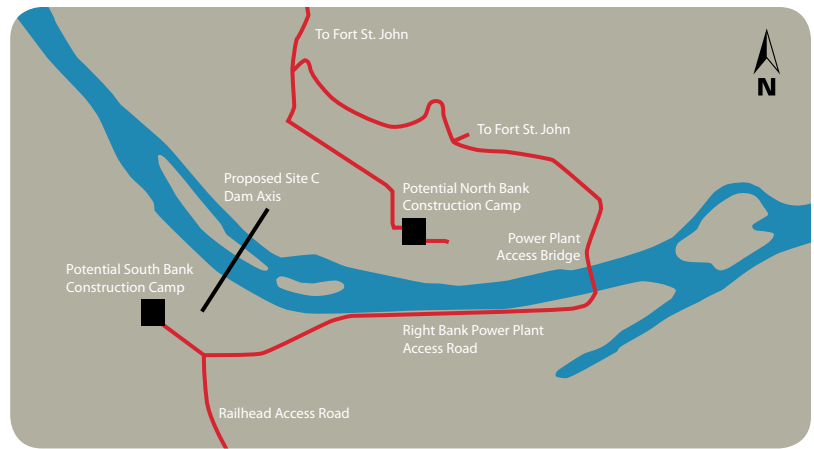
As part of project planning in the early 1980s, BC Hydro prepared preliminary construction plans and cost estimates, including requirements for worker housing. Ultimately, if the project were to proceed, infrastructure requirements for workers would be determined by BC Hydro and the contractor(s) who construct the project. The following information is based on earlier estimates and assumptions made by BC Hydro.

Earlier studies indicated that the construction labour force was estimated to peak at about 2,015 persons in the fourth year of construction, as seen in the graph on the right. It was assumed that many workers would be from out of town and would be accommodated in a construction camp located at or near the construction site, with the remainder of the workers and staff coming from, or finding accommodation in, the surrounding communities. A camp capacity of about 1,250 persons would be sufficient to accommodate the workers except in the fourth year when a camp capacity of 1,350 persons would be required.

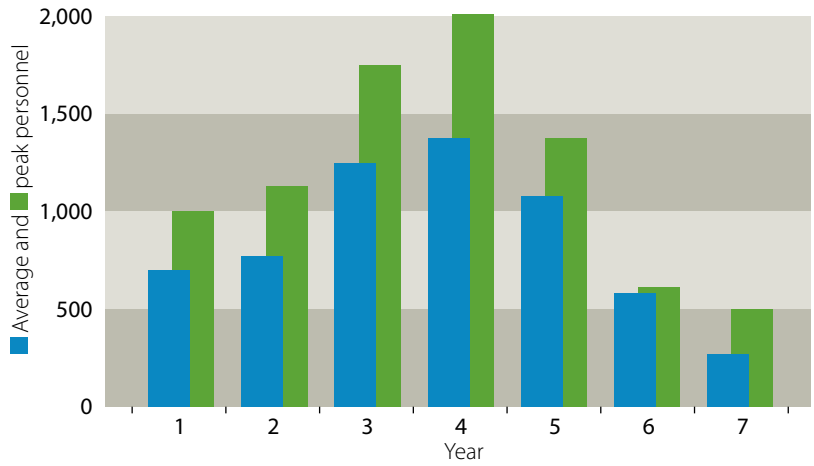
One potential camp could be located on the south bank where the majority of the construction work, such as intakes, penstocks, the powerhouse and spillway, would be done. Two alternate camp configurations have also been considered:

- A 500-person “starter” camp on the north bank with the main camp on the south bank
- A camp on the north bank only

The map above right shows the location of the potential north bank camp approximately 1.5 kilometres downstream of the dam site and the potential south bank camp. The camp(s) would be assembled using portable modular units and contain worker accommodations, kitchen(s), recreation rooms, parking and utility equipment. A camp with a capacity of 1,350 people would cover approximately 5.5 hectares. The camp(s) would include a water supply system, a water treatment plant, a wastewater treatment plant, an incinerator and parking facilities.



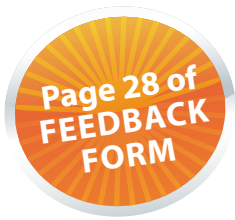
This graphic illustrates the location of the construction camps and network of roads, based on earlier design plans.



This graph illustrates the estimated labour force during the seven-year building period, peaking in year four of construction.

### Looking Ahead

BC Hydro will examine the previously developed plans and gather feedback from communities and stakeholders. Subject to technical and financial constraints, review and analysis of other housing options may also be conducted. Further consultation on this topic will be conducted in Round 2.



## Environment

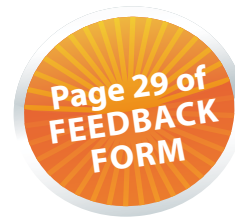
### Potential Increase of Fog

Studies in the 1970s and 1980s indicated that the potential Site C reservoir could increase the number of fog days in the Peace River valley due to a slight increase in water temperature in late summer and fall. However, after a review of these findings in 1992, recommendations were suggested to improve the methodology for making predictions. In the past, the lack of adequate data was the major weakness identified in climate impact assessment.

### Looking Ahead

As part of the Stage 2 Site C environmental studies, BC Hydro will review historic information and methodologies and will collect data required to conduct a new assessment of the potential effects of Site C on fog and other climate factors. During 2008, a number of new meteorological stations will be installed at key locations in the basin as required to meet modelling needs. Public and stakeholder input, as well as technical and regulatory agency input, will assist in collecting appropriate data to assess potential impacts. The current plan is to collect information on the following:

- Air temperature
- Humidity
- Wind speed and direction
- Solar radiation
- Fog frequency and density
- Particulate matter



## Impacts on Fish

If Site C were to proceed, the creation of a reservoir would result in the formation of a lake-type environment instead of the current river environment. This change normally results in a shift in species composition from a river environment to those species that are adapted to a lake environment. Also, the presence of a dam could result in a blockage to fish migrations. These changes would be subject to comprehensive environmental assessment.

Studies over the past 30 years have examined the potential impacts Site C would have on fish and their habitat, as well as the effect of ongoing hydroelectric operations. Recent key studies include:

- Peace River mainstem fish population, species composition, condition factor, population estimation and year-class strength
- Small fish survey in the Peace River and Halfway River
- Peace River mainstem and tributary habitat and seasonal use assessment
- Fish radio tagging studies to track movement within the study area and into Alberta
- Baseline water quality

### Looking Ahead

BC Hydro has initiated or planned a number of additional studies and surveys including:

- Annual Peace River populations, species composition, condition factor, population estimation and year-class strength
- Fish radio tagging studies to track movement within the study area and into Alberta
- Angler creel survey and boater use survey
- Calculation of habitat availability in the study area
- Assessment of benthic, planktonic and invertebrate populations in the study area
- Water quality analysis including sediment regime, temperature and potential for mercury methylization and greenhouse gas emissions





## Land Uses

### Impacts on Heritage Resources

In addition to its natural beauty, the Peace River valley is rich with history and culture. First Nations people have a long history of living, hunting and travelling through the valley. European traders established fur trade posts in the late 1700s, followed by other newcomers seeking resources and agricultural lands. The area is also known for its fossils.

Extensive heritage resource studies of this area were conducted in the late 1970s and early 1980s. Some studies have suggested that as much as 30 per cent of archaeological and historical sites have already been impacted by ongoing human activity in the valley. Previous estimates indicate that approximately 150 heritage sites could be affected by the project design, but because the data is more than 30 years old, it needs to be updated.

Several excavations by archaeologists from Simon Fraser University from 1985 to 1987 focused on fur trade forts and settlements. Local museums currently display this rich history and some artifacts in their exhibits. Some Pre-Consultation feedback indicated the importance of some of the local history and exhibits in attracting tourists to the region.

### Looking Ahead

In 2008, studies will be done to review past work, to develop a basis for conducting a heritage impact assessment and to identify the need for any new field studies to take place in 2009. This work will include an inventory update to reflect the excavations and other sites identified since earlier work was done. The review will include discussions with interested and knowledgeable parties, such as First Nations, local heritage organizations and the BC Archaeology Branch.

## Looking Ahead to Round 2 Consultation

As environmental, engineering and other technical studies and fieldwork take place in the coming months, more information will be known about the project, resulting in the updating of many studies that are decades old. Updates for some of these studies will be ready for feedback during Project Definition Consultation, Round 2 in fall 2008. Potential topics for information or consultation include:

- **Site C as an energy option**
- **Community and provincial benefits**, such as regional employment and skills training, enhanced recreational opportunities, a lasting legacy community fund
- **Project design elements**, such as options for reservoir preparation, construction material and disposal sites, water management, and reservoir operating levels
- **Infrastructure**, which could include more detailed alignment options for relocation of segments of Highway 29 and potential public use of the construction access bridge
- **Local climate and greenhouse gas**, such as discussion of local climate effects and greenhouse gas effects and evaluation
- **Environmental**, such as potential impacts on wildlife and wildlife habitat
- **Land uses**, including impacts on agriculture, parks and protected areas

## FEEDBACK FORM **We want to hear from you.**

Your feedback is important to us. At the conclusion of this consultation period, we will report the results of input in a Project Definition Consultation, Round 1 Summary Report, which will be made available on our website at [www.bchydro.com/sitec](http://www.bchydro.com/sitec), at the Community Consultation office in Fort St. John, and by request.

### Site C as an Energy Option (see page 7)

Analysis of energy alternatives is generally done as part of BC Hydro's energy planning process, which incorporates developing Integrated Electricity Plans (IEP) and Long-Term Acquisition Plans (LTAP) on a regular basis. Both plans are filed with the British Columbia Utilities Commission (BCUC) for review and consideration.

**1. The assessment of Site C as an energy option requires trading off a number of criteria. So too does the development of an operating regime for Site C. We need your feedback on which criteria are most important in making these assessments. For each of the selections below, please choose which is more important to you.**

- |   |     |   |                 |
|---|-----|---|-----------------|
| <input type="checkbox"/> Dependable energy      | vs. | <input type="checkbox"/> Low-cost energy        | (Check one box) |
| <input type="checkbox"/> Low-cost energy        | vs. | <input type="checkbox"/> Impacts to air quality | (Check one box) |
| <input type="checkbox"/> Impacts to land        | vs. | <input type="checkbox"/> Dependable energy      | (Check one box) |
| <input type="checkbox"/> Impacts to air quality | vs. | <input type="checkbox"/> Impacts to water       | (Check one box) |
| <input type="checkbox"/> Impacts to water       | vs. | <input type="checkbox"/> Impacts to land        | (Check one box) |
| <input type="checkbox"/> Dependable energy      | vs. | <input type="checkbox"/> Impacts to air quality | (Check one box) |
| <input type="checkbox"/> Low-cost energy        | vs. | <input type="checkbox"/> Impacts to water       | (Check one box) |
| <input type="checkbox"/> Impacts to water       | vs. | <input type="checkbox"/> Dependable energy      | (Check one box) |
| <input type="checkbox"/> Impacts to air quality | vs. | <input type="checkbox"/> Impacts to land        | (Check one box) |
| <input type="checkbox"/> Impacts to land        | vs. | <input type="checkbox"/> Low-cost energy        | (Check one box) |

**2. Do you agree or disagree that, even after achieving all possible conservation, we will still need more electricity?**

- Strongly agree
  Somewhat agree
  Neither agree nor disagree
  Somewhat disagree
  Strongly disagree

**3. Additional Comments** (Please identify other key considerations in comparing Site C to energy alternatives.)

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## Community and Provincial Benefits (see page 9)

In Pre-Consultation held in December 2007 through February 2008, participants identified the community and provincial benefits listed below.

### 4. Please indicate the importance of each of the following, with 1 being extremely important and 5 being not important at all.

(Please circle one number next to each factor.)

	Extremely important	Very important	Somewhat important	Not very important	Not important at all
Regional employment and skills training	1	2	3	4	5
Local employment opportunities during construction	1	2	3	4	5
Opportunities for local contractors to provide services during construction	1	2	3	4	5
Enhanced recreational opportunities	1	2	3	4	5
Upgrades to infrastructure such as roads, bridges, parks, health facilities	1	2	3	4	5
A lasting legacy community fund	1	2	3	4	5
Dependable energy	1	2	3	4	5
Low-cost energy	1	2	3	4	5
Low-emission energy	1	2	3	4	5
Other _____	1	2	3	4	5

### 5. Additional Comments (Please identify other key considerations regarding potential community and provincial benefits.)

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## Reservoir Impact Lines (see page 10)

As noted on pages 10 to 12, the potential reservoir will impact the surrounding land in five distinct ways. To recognize the different impacts of the reservoir, BC Hydro is considering establishing Reservoir Impact Lines as an approach to property and land use impacts.

### 6. Do you agree or disagree with the Reservoir Impact Lines approach?

- Strongly agree     
  Somewhat agree     
  Neither agree nor disagree     
  Somewhat disagree     
  Strongly disagree

### 7. Additional Comments (Please identify other key considerations in analyzing and applying the proposed Reservoir Impact Lines approach.)

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## Water Management (see page 13)

Operation of a dam and generating station is primarily about water management in upstream reservoirs and management of downstream flow rates. These variables are managed for the benefit of electricity generation while balancing consideration of environmental and social factors.

### 8. How important should each of the following factors be to BC Hydro in evaluating the effects of different water management operating ranges for Site C?

(Please circle one number next to each factor).

	Extremely important	Very important	Somewhat important	Not very important	Not important at all
The potential amount of energy that can be generated from this project	1	2	3	4	5
The economic value that can be created for BC Hydro ratepayers	1	2	3	4	5
Reservoir recreation	1	2	3	4	5
Downstream recreation	1	2	3	4	5
Seasonal recreation (high season)	1	2	3	4	5
Downstream flood control	1	2	3	4	5
Fish and fish habitat	1	2	3	4	5
Wildlife and wildlife habitat	1	2	3	4	5

### 9. Additional Comments (Please identify other key considerations in evaluating operation of the dam and water management.)

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## Recreation (see page 15)

The Peace River is used by both residents and tourists for many outdoor recreation activities. If Site C were to proceed, reservoir-based activities such as boating, fishing, hiking and camping could replace today's river-based recreation upstream of the dam. In addition, the quality of some recreation opportunities could be improved based on various project features such as reservoir water levels, shoreline recreation facilities, boating facilities and angling, hunting or camping opportunities.

### 10. During which of the following seasons do you use this area of the Peace River for recreation? (Check all that apply.)

- Spring
- Summer
- Fall
- Winter
- Not at all – Please skip to question 13



**11. For the seasons during which you participate in recreational opportunities, how often do you use the Peace River valley?**

(Please indicate for each season.)

	At least once a week	At least once a month	At least once a season	Not at all
Spring	1	2	3	4
Summer	1	2	3	4
Fall	1	2	3	4
Winter	1	2	3	4

**12. Additional Comments** (Please provide any other details about your recreational use of the Peace River valley.)

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**13. Which of the following factors should be considered when evaluating potential reservoir recreation?** (Please check all boxes that apply.)

- Support new types of recreation activities
- Designate new parks and protected areas
- Provide minimal impacts to the environment
- Provide a range of facilities and services for recreation
- Other \_\_\_\_\_

**14. How likely would you be to use the reservoir for the following recreation opportunities?** (Please circle one number next to each activity.)

	Very likely	Somewhat likely	Neither likely nor unlikely	Somewhat unlikely	Very unlikely
Boating – non-motorized	1	2	3	4	5
Boating – motorized	1	2	3	4	5
Hiking	1	2	3	4	5
Day use	1	2	3	4	5
Camping	1	2	3	4	5
Hunting	1	2	3	4	5
Fishing	1	2	3	4	5
Other _____	1	2	3	4	5

**15. Which would you prefer to see used when it comes to accessing the reservoir for recreation?** (Please check one box only.)

- Establish a network of roads to provide easy recreational access to the reservoir.
- Keep the reservoir in its natural state and have people access it by boat or on foot.

**16. How likely would you be to use the reservoir for recreational purposes if there was public access?**

- Very likely
- Somewhat likely
- Neither likely nor unlikely
- Somewhat unlikely
- Very unlikely

**17. During which seasons would you use the reservoir for recreational opportunities if public access was available?** (Check all boxes that apply.)

- Spring
- Summer
- Fall
- Winter
- Not at all

**18. For the seasons that you participate in recreational opportunities, how often would you use the Peace River valley if a public access reservoir was available?**

	At least once a week	At least once a month	At least once a season	Not at all
Spring	1	2	3	4
Summer	1	2	3	4
Fall	1	2	3	4
Winter	1	2	3	4

**19. Additional Comments** (Do you have any other comments regarding how and when you would like to use the Peace River valley and reservoir for recreation if the Site C project proceeds?)

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## Relocation of Four Segments of Highway 29 (see page 16)

Four segments of Highway 29 would be flooded by the reservoir if the project were to proceed: Bear Flat, Halfway River, Farrell Creek, Lynx Creek.

For each of these segments, water crossings and alignment options were developed as part of early design work in the 1970s and 1980s. Options for the alignment of each segment and water crossing require further study and updating, including community and stakeholder feedback, to determine their feasibility. Potential impacts on private property, the environment and heritage resources will be considered as well.

### 20. Please indicate which of the following are important to consider when evaluating the relocation of the following four segments.

(Check all boxes that apply for each segment.)

**Bear Flat** —  Safety    Travel time    Environmental impact    Cost    Scenic view opportunities    Heritage sites, such as archaeological sites  
 Impact on private property    Other \_\_\_\_\_

**Halfway River** —  Safety    Travel time    Environmental impact    Cost    Scenic view opportunities    Heritage sites, such as archaeological sites  
 Impact on private property    Other \_\_\_\_\_

**Farrell Creek** —  Safety    Travel time    Environmental impact    Cost    Scenic view opportunities    Heritage sites, such as archaeological sites  
 Impact on private property    Other \_\_\_\_\_

**Lynx Creek** —  Safety    Travel time    Environmental impact    Cost    Scenic view opportunities    Heritage sites, such as archaeological sites  
 Impact on private property    Other \_\_\_\_\_

### 21. Additional Comments (Are there any other factors you think should be considered when planning to relocate these four segments of Highway 29?)

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**Worker Housing** (see page 18)

As part of project planning in the early 1980s, BC Hydro prepared preliminary construction plans and cost estimates, including requirements for worker housing. If the project were to proceed, infrastructure requirements for workers would be determined by BC Hydro and the contractor(s) who construct the project. At the peak of construction, there would be approximately 2,000 jobs.

**22. When it comes to housing out-of-town workers, how important are each of the following factors?**

	Extremely important	Very important	Somewhat important	Not very important	Not important at all
Minimizing impact on local cost of housing	1	2	3	4	5
Minimizing the need for additional services such as policing	1	2	3	4	5
Minimizing the cost of the project by having employees live on-site	1	2	3	4	5
Providing recreation opportunities for out-of-town workers	1	2	3	4	5
Creating opportunities for out-of-town workers to bring their families to the Peace region	1	2	3	4	5

**23. When it comes to housing out-of-town workers, where do you think it is better to house them?** (Please check one box only.)

- Primarily in a camp on the construction site
- Primarily in the community
- A mix of both

**24. Additional Comments** (When it comes to housing out-of-town workers for the Site C project, are there are any other factors you feel should be considered?)

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### Potential Increase of Fog (see page 19)

Studies in the 1970s and 1980s indicated the potential Site C reservoir could increase the number of fog days in the Peace River valley due to a slight increase in water temperature in late summer and fall. However, after a review of these findings in 1992, recommendations were suggested to improve the methodology for making predictions. In the past, the lack of adequate data was the major weakness identified in climate impact assessment.

**25. During which seasons of the year is fog a concern for you?** (Check all boxes that apply.)

- Spring
- Summer
- Fall
- Winter
- Not at all

**26. What level of impact would an increased number of fog days in the Peace River valley have on the following areas?** (Please check one box per line.)

	Little or no impact	Minor impact	Major impact
Agricultural	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Recreation	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Highways	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Airport	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

**27. Additional Comments** (Please identify other key considerations in evaluating the potential impacts of increased fog.)

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## Impacts on Fish (see page 19)

If Site C were to proceed, the creation of a reservoir would result in the formation of a lake-type environment instead of the current river environment. This change normally results in a shift in species composition from a river environment to those species that are adapted to a lake environment. Also, the presence of a dam could result in a blockage to fish migrations. These changes would be subject to a thorough environmental assessment.

### 28. Do you fish in the Peace River?

- Yes – Please continue to Question 29  
 No – Please continue to Question 32

### 29. Where do you currently fish? (Check all boxes that apply.)

- Peace River near Hudson's Hope  
 Peace River near Bear Flat  
 Peace River near Taylor  
 Peace River downstream from Taylor  
 Moberly River  
 Halfway River  
 Other \_\_\_\_\_

### 30. Please rank, in order of preference, the species you prefer to fish, with 1 being the highest and 7 being the lowest.

- Bull trout     Rainbow trout     Mountain whitefish     Arctic grayling     Walleye     Lake trout     Other \_\_\_\_\_

### 31. Do you prefer to fish from shore or from a boat?

- Shore  
 Boat  
 Both

### 32. Additional Comments (Please identify factors for consideration when evaluating options to mitigate effects on fish and fish habitat as a result of the creation of a reservoir.)

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### Impacts on Heritage Resources (see page 20)

BC Hydro would adhere to all requirements in provincial and federal legislation and environment assessment regulatory requirements to protect heritage resources such as archaeological sites.

#### 33. Which of the following factors should be considered when evaluating options to mitigate potential effects of the Site C project on heritage resources, should the project proceed? (Check all boxes that apply.)

- Identify and recover unique regional heritage artifacts
- Create regional displays for recovered regional heritage resources
- Identify the best way to protect heritage artifacts
- Respect cultural priorities for artifacts associated with specific communities
- Minimize cost of the project
- Other \_\_\_\_\_

#### 34. Additional Comments (Please identify other factors for consideration when evaluating options to mitigate effects on heritage resources as a result of the creation of a reservoir.)

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## How Input Will Be Used:

Feedback gathered through Project Definition Consultation will be used along with technical and financial input to refine the features of the project and to help define the scope and nature of environmental and other studies. Feedback collected via print and online feedback forms, stakeholder meetings, open houses, fax, phone, email and mail will be recorded and summarized in a **Project Definition Consultation Summary Report**. The Project Definition Consultation Summary Report will be posted on the web at [www.bchydro.com/sitec](http://www.bchydro.com/sitec).

**Do you live in the Peace River region?**

Yes  No

**Would you like to receive updates on the project, including the Project Definition Consultation Report?**

Yes  No

Please provide your contact information (*optional*):

Name: \_\_\_\_\_

Address: \_\_\_\_\_

Postal Code: \_\_\_\_\_

Phone: \_\_\_\_\_

Email: \_\_\_\_\_

## CONSENT TO USE PERSONAL INFORMATION

I consent to the use of my personal information by BC Hydro for the purpose of contacting me and keeping me updated about the potential Peace River Site C Hydro Project. **For purposes of the above**, "my personal information" includes name, mailing address, phone number and email address, as per the information I provide.

Signature: \_\_\_\_\_ Date: \_\_\_\_\_

## Project Definition Consultation, Round 1 deadline for feedback is June 30, 2008

For further information or to submit your feedback form:

### Peace River Site C Hydro Project:

**Toll-free:** 1 877 217-0777

**Email:** [sitec@bchydro.com](mailto:sitec@bchydro.com)

**Fax:** 604 623-4332  
250 785-3570

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