

*Fisheries and Aquatic Habitat  
Management Plan Annual Report:  
July 27, 2015 to March 31, 2016*

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*Site C Clean Energy Project  
July, 2016*

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## 1.0 Background

### 1.1 The Site C Clean Energy Project

The Site C Clean Energy Project (the Project) will be the third dam and generating station on the Peace River in northeast B.C. The Project will provide 1,100 megawatts of capacity and about 5,100 gigawatt hours of energy each year to the province's integrated electricity system. The Project will be a source of clean, reliable and cost-effective electricity for BC Hydro's customers for more than 100 years.

The key components of the Project are:

- an earthfill dam, approximately 1,050 metres long and 60 metres high above the riverbed;
- an 83 kilometre long reservoir that will be, on average, two to three times the width of the current river;
- a generating station with six 183 MW generating units;
- two new 500 kilovolt AC transmission lines that will connect the Project facilities to the Peace Canyon Substation, along an existing right-of-way;
- realignment of six segments of Highway 29 over a total distance of approximately 30 kilometers; and
- construction of a berm at Hudson's Hope.

The Project will also include the construction of temporary access roads, a temporary bridge across the Peace River, and worker accommodation at the dam site.

The environmental assessment of the Project was carried out in accordance with the *Canadian Environmental Assessment Act, 2012* (CEAA 2012), the *BC Environmental Assessment Act* (BCEAA), and the *Federal-Provincial Agreement to Conduct a Cooperative Environmental Assessment, Including the Establishment of a Joint Review Panel of the Site C Clean Energy Project*. The assessment considered the environmental, economic, social, heritage and health effects and benefits of the Project, and included the engagement of Aboriginal groups, the public, all levels of government, and other stakeholders in the assessment process.

Detailed findings of the environmental assessment are documented in the Site C Clean Energy Project Environmental Impact Statement (EIS), which was completed in accordance with the Environmental Impact Statement Guidelines (EIS Guidelines) issued by the Minister of Environment of Canada and the Executive Director of the Environmental Assessment Office of British Columbia. The EIS was submitted to regulatory agencies in January 2013, and amended in August 2013 following a 60 day public comment period on the assessment, including open house sessions in Fort St. John, Hudson's Hope, Dawson Creek, Chetwynd, town of Peace River (Alberta) and Prince George.

In August 2013, an independent Joint Review Panel (JRP) commenced its evaluation of the EIS, and in December 2013 and January 2014 undertook five weeks of public hearings on the Project in 11 communities in the Peace region, including six Aboriginal communities. In May 2014, the JRP provided the provincial and federal governments with a report summarizing the Panel's rationale, conclusions and recommendations relating to the environmental assessment of the Project. On completion of the JRP stage of the environmental assessment, the CEA Agency and BCEAO consulted with Aboriginal groups on the JRP report, and finalized key

documents of the environmental assessment for inclusion in a Referral Package for the Provincial Ministers of Environment and Forests, Lands and Natural Resource Operations.

Construction of the Project is also subject to regulatory permits and authorizations, and other approvals. In addition, the Crown has a duty to consult and, where appropriate, accommodate Aboriginal groups.

## **1.2 Environmental Assessment Findings**

The environmental assessment of the Project focused on 22 valued components (VCs), or aspects of the biophysical and human setting that are considered important by Aboriginal groups, the public, the scientific community, and government agencies. In the EIS, valued components were categorized under five pillars: environmental, economic, social, heritage and health. For each VC, the assessment of the potential effects of the Project components and activities during construction and operations was based on a comparison of the biophysical and human environments between the predicted future conditions with the Project, and the predicted future conditions without the Project.

Potential adverse effects on each VC are described in the EIS along with technically and economically feasible mitigation measures, their potential effectiveness, as well as specific follow-up and related commitments for implementation. If a residual effect was found on a VC, the effect was evaluated for significance. Residual effects were categorized using criteria related to direction, magnitude, geographic extent, context, level of confidence and probability, in accordance with the EIS Guidelines.

The assessment found that the effects of the Project will largely be mitigated through careful, comprehensive mitigation programs and ongoing monitoring during construction and operations. The EIS indicates that the Project is unlikely to result in a significant adverse effect for most of the valued components. However, a determination of a significant effect of the Project was found on four VCs: Fish and Fish Habitat, Wildlife Resources, Vegetation and Ecological Communities, and Current Use of Lands and Resources for Traditional Purposes.

## **1.3 Environmental Assessment Conclusion**

On October 14, 2014, the Provincial Ministers of Environment and of Forests, Lands and Natural Resource Operation decided that the Project is in the public interest and that the benefits provided by the Project outweigh the likely risks of significant adverse environmental, social and heritage effects (<http://www.newsroom.gov.bc.ca/2014/10/site-c-project-granted-environmental-assessment-approval.html>). The Ministers have issued an Environmental Assessment Certificate setting conditions under which the Project can proceed.

Further, on November 25, 2014, The Minister of Environment of Canada issued a Decision Statement confirming that, while the Project has the potential to result in some significant adverse effects, the Federal Cabinet has concluded that those effects are justified in the circumstances. The Decision Statement sets out the conditions under which the Project can proceed.

## **1.4 Development of Mitigation, Management and Monitoring Plans**

Mitigation, management and monitoring plans for the Project have been developed taking into account the measures proposed in the EIS, information received during the Joint Review Panel hearing process, the Report of the Joint Review Panel on the Project and consultation with Environment Canada, Fisheries and Oceans Canada, Ministry of Environment and Ministry of Forests Lands and Natural Resources. Those plans are consistent with, and meet requirements

set out in, the conditions of the Environmental Assessment Certificate and of the Decision Statement issued on October 14, 2014 and November 25, 2014 respectively.

In addition, in accordance with environmental best practices (Decision Statement Condition 3.1), these plans were informed by the best available information and knowledge, based on validated methods and models, undertaken by qualified individuals and apply the best available economically and technologically feasible mitigation strategies. These plans contain provisions for review and update as new information on the effects of the Project and on the efficacy of the mitigation measures become available.

The mitigation measures proposed by BC Hydro, and their likely success, were taken into account in the environmental assessment to determine the residual adverse effects of the Project on Fish and Fish Habitat (see EIS Sections 12 on Fish and Fish Habitat). As described in the EIS, the Project's adverse effect on this valued component will be significant, and mitigation cannot fully address these effects.

## **1.5 Status of Project Construction**

Construction for the Project commenced July 27, 2015. For the reporting period through March 2016, work crews have undertaken site preparation activities at the dam site area. Site preparation activities are described in the Environmental Impact Statement (Volume 1 Section 4 Project Description).

## 2.0 Objective and Scope

This Report covers the period from the start of Project construction through March 31, 2016.

The objective of the Fisheries and Aquatic Habitat Management Plan annual report (the Report) is to describe the mitigation measures implemented during this period to meet the reporting requirements of Decision Statement condition 8.7. The Report follows the information in Section 7.0 Implementation and Reporting, of the Fisheries and Aquatic Habitat Management Plan.

Fisheries and Aquatic Habitat Management Plan has been developed in accordance with the conditions of the Environmental Assessment Certificate (EAC) and Federal Decision Statement (FDS), as indicated below. FDS conditions 8.3 to 8.7 refer to “a fish and fish habitat management plan”, while the EAC condition 4 refers to “a Fisheries and Aquatic Habitat Management Plan”. Each refers to similar requirements for fish. For simplicity, BC Hydro developed one plan, entitled “Fisheries and Aquatic Habitat Management Plan.”

Tables 1 and 2 outline the structure of the Report. These tables list the Conditions (and components of the Conditions), as well as the corresponding sections of the Fisheries and Aquatic Habitat Management Plan that pertain to the Conditions. These tables also list whether components within the Conditions occurred or were implemented during the reporting period, and if so, the corresponding section in the Report that summarizes the implementation. Section 7 of the Report is an analysis of implementation of the Plan.

**Table 1. Environmental Assessment Certificate Conditions and Relevant Plan Sections**

EAC Condition	Condition	Occurred During Construction Period for Report	Section in this Report	Plan Reference
<b>FISH AND FISH HABITAT</b>				
4	The EAC Holder must manage harmful Project effects on fish and fish habitats during the construction and operation phases by implementing mitigation measures detailed in a Fisheries and Aquatic Habitat Management Plan.			
	The Fisheries and Aquatic Habitat Management Plan must be developed			This condition is addressed in FAHMP Section 8.0 Qualified

EAC Condition	Condition	Occurred During Construction Period for Report	Section in this Report	Plan Reference
	by a QEP			Professionals
	The Fisheries and Aquatic Habitat Management Plan must include at least the following:			
	<ul style="list-style-type: none"> <li>Remove temporary structures as soon as they are no longer required.</li> </ul>	Yes	Section 6.1	These conditions are addressed in Construction Environmental Management Plan (CEMP) Section 4.5, Fisheries and Aquatic Habitat Management.
	<ul style="list-style-type: none"> <li>Maintain a 15 m machine free zone adjacent to watercourses during reservoir clearing (as measured from the Ordinary High Water Mark).</li> </ul>	No, planned for implementation during subsequent stage of construction		
	<ul style="list-style-type: none"> <li>Place material relocation sites (R5a, R5b, and R6) 15 m back from the mainstem to avoid affecting Peace River fish habitat.</li> </ul>	No, planned for implementation during subsequent stage of construction		
	<ul style="list-style-type: none"> <li>Contour mainstream bars to reduce potential for fish stranding, as advised by FLNR.</li> </ul>	Yes	Section 6.2	
	<ul style="list-style-type: none"> <li>Incorporate fish habitat features into the final capping of material</li> </ul>	No, planned for implementation during subsequent stage of construction		This condition is addressed in FAHMP Section 6.2.3.4, Dam Site Material Relocation

EAC Condition	Condition	Occurred During Construction Period for Report	Section in this Report	Plan Reference
	relocation sites upstream of the dam.			Site Enhancement.
	<ul style="list-style-type: none"> <li>Contour and cap with gravels and cobble substrate the spoil area between elevations 455 m and 461 m to provide a productive fish habitat that will be available to fish during the operation phase.</li> </ul>	No, planned for implementation during subsequent stage of construction		This condition is addressed in FAHMP Section 6.2.3.4, Dam Site Material Relocation Site Enhancement.
	<ul style="list-style-type: none"> <li>Include fish habitat features (e.g., shears, large riprap point bars, etc.) in the final design of the north bank haul road bed material that would be placed in the Peace River.</li> </ul>	Yes	Section 6.3	This condition is addressed in FAHMP Section 6.2.1.2, River Road Habitat Enhancement.
	<ul style="list-style-type: none"> <li>Incorporate fish habitat features into the final design of the Highway 29 roadway that would border the reservoir, east of Lynx Creek.</li> </ul>	No, planned for implementation during subsequent stage of construction		This condition is addressed in FAHMP Section 6.2.3.2, Highway 29 Realignment Fish Habitat.
	<ul style="list-style-type: none"> <li>Construct the Hudson's Hope shoreline protection with</li> </ul>	No, planned for implementation during subsequent stage of construction		This condition is addressed in FAHMP Section 6.2.3.3, Hudson's

EAC Condition	Condition	Occurred During Construction Period for Report	Section in this Report	Plan Reference
	large material that will provide replacement fish habitat.			Hope Shoreline Protection Fish Habitat.
	<ul style="list-style-type: none"> <li>Incorporate additional fish habitat features (e.g., shear zones and point bars) into the final design of the Hudson's Hope shoreline protection.</li> </ul>	No, planned for implementation during subsequent stage of construction		This condition is addressed in FAHMP Section 6.2.3.3, Hudson's Hope Shoreline Protection Fish Habitat.
	<ul style="list-style-type: none"> <li>Contour Highway 29 borrow sites prior to decommissioning to provide littoral fish habitat in the reservoir.</li> </ul>	No, planned for implementation during subsequent stage of construction		This condition is addressed in FAHMP Section 6.2.3.1, Site C Reservoir Shoreline Enhancement.
	<ul style="list-style-type: none"> <li>Cap material repositioning areas with gravel and cobble, and contour to enhance fish habitat conditions.</li> </ul>	No, planned for implementation during subsequent stage of construction		This condition is addressed in FAHMP Section 6.2.3.4, Dam Site Material Relocation Site Enhancement.
	<ul style="list-style-type: none"> <li>Plant a 15 m wide riparian area along the reservoir shoreline adjacent to BC Hydro-owned farmland where necessary to provide riparian habitat and bank stabilization except as</li> </ul>	No, planned for implementation during subsequent stage of construction		This condition is addressed in FAHMP Section 6.2.3.5, Reservoir Shoreline Riparian Planting.

EAC Condition	Condition	Occurred During Construction Period for Report	Section in this Report	Plan Reference
	approved by the onsite environmental monitor.			
	<ul style="list-style-type: none"> <li>Increase wetted habitat by creating new wetted channels and restoring back channels on the south bank island downstream of the dam.</li> </ul>	No, planned for implementation during subsequent stage of construction		This condition is addressed in FAHMP Section 6.2.1.1, Peace River Channel Contouring and Side Channel Enhancement.
	<ul style="list-style-type: none"> <li>Enhance side channel complexes between the dam site and the confluence of the Peace and Pine rivers during low flows.</li> </ul>	No, planned for implementation during subsequent stage of construction		This condition is addressed in FAHMP Section 6.2.1.1, Peace River Channel Contouring and Side Channel Enhancement.
	<ul style="list-style-type: none"> <li>Manage reservoir fluctuation within a 1.8 m maximum normal operating range from the maximum operating level of 461.8 m.</li> </ul>			
	<ul style="list-style-type: none"> <li>If the reservoir deviates from the normal operating range, the EAC Holder must report the event in accordance with water licence requirements.</li> </ul>			

EAC Condition	Condition	Occurred During Construction Period for Report	Section in this Report	Plan Reference
	<p>The EAC Holder must manage construction footprints to reduce the harmful Project effects on fish and fish habitat, in accordance with the conditions of the applicable <i>Fisheries Act</i> authorization(s) and direction provided by FLNR.</p>			
	<p>This draft Fisheries and Aquatic Habitat Management Plan must be provided to FLNR, MOE and Aboriginal Groups for review a minimum of 90 days prior to commencement of construction.</p>			<p>This condition is addressed in FAHMP Section 2.3 Consultation</p>
	<p>The EAC Holder must file the Final Fisheries and Aquatic Habitat Management Plan with EAO, FLNR, MOE and Aboriginal Groups a minimum of 30 days prior to commencement of construction.</p>			
	<p>The EAC Holder must develop, implement and adhere to the Final Fisheries and Aquatic Habitat Management Plan, and any amendments, to the satisfaction of EAO.</p>			

**Table 2. Federal Decision Statement Conditions and Relevant Plan Section**

<b>FDS Condition</b>	<b>Condition</b>	<b>Occurred During Construction Period for Report</b>	<b>Section in this Report</b>	<b>Plan Reference</b>
8.	<b>Fish and Fish Habitat</b>			
8.1	The Proponent shall undertake efforts to avoid or minimize adverse impacts to fish and fish habitat to ensure the continued availability of fisheries resources in the Local Assessment Area.			
8.2	The Proponent shall prepare and submit to the Agency an annual schedule identifying the location and timing of construction activities that may impact fish or fish habitat 90 days prior to such activities occurring.			Submitted under separate cover.
8.3.	The Proponent shall prepare, in consultation with Fisheries and Oceans Canada, Reservoir Area Aboriginal groups and Immediate Downstream Aboriginal groups, a fish and fish habitat management plan.			These conditions are addressed in the Fisheries and Aquatic Habitat Management Plan (FAHMP).
8.4	The Plan shall include:			
8.4.1.	Identification of baseline conditions for fish and fish habitat in the Local Assessment Area;			This condition is addressed in FAHMP Section 4.0, Fish and Fish Habitat Baseline Conditions.

FDS Condition	Condition	Occurred During Construction Period for Report	Section in this Report	Plan Reference
8.4.2.	Measures to mitigate potential effects on fish and fish habitat during construction and operation of the Designated Project including:			This condition is addressed in FAHMP Section 6.0, Fish and Fish Habitat Mitigation.
8.4.2.1.	Erosion and sediment control measures, riparian zone avoidance measures, best practices for watercourse crossings, in-stream work guidelines, and in-stream work timing windows;	Yes	Section 6.4	These conditions are addressed in CEMP Section 4.5, Fisheries and Aquatic Habitat Management.
8.4.2.2.	Measures to avoid or reduce fish stranding;	Yes	Section 6.5	This condition is addressed in CEMP Section 4.5, Fisheries and Aquatic Habitat Management.  See also FAHMP 6.2.1.1, Peace River Channel Contouring and Side Channel Enhancement.
8.4.2.3.	Operational practices, technologies and design features that minimize downstream fish entrainment past the dam site;	No, planned for implementation during subsequent stage of construction		This condition is addressed in FAHMP Section 6.2.2.1, Fish Entrainment.
8.4.2.4.	Measures to mitigate the effects of Total Dissolved Gas concentrations in tailwater on fish; and	No, planned for implementation during subsequent stage of construction		This condition is addressed in FAHMP Section 6.2.2.3, Mitigation of Total Dissolved Gas.
8.4.2.5.	Measures to mitigate	No, planned		This condition is

FDS Condition	Condition	Occurred During Construction Period for Report	Section in this Report	Plan Reference
	obstructed upstream fish passage for bull trout and, as appropriate and feasible, other migrating fish species;	for implementation during subsequent stage of construction		addressed in FAHMP Section 6.2.2.2, Upstream Fish Passage.
8.4.3.	An approach to monitor changes to fish and fish habitat baseline conditions in the Local Assessment Area;	Yes	Section 6.6	The approach is summarized in FAHMP Section 2.2, Scope as well in the monitoring programs listed in Appendix D. Further information on monitoring will be provided in the Fisheries and Aquatic Habitat Monitoring and Follow-up Program.
8.4.4.	An approach to monitor and evaluate the effectiveness of mitigation or offsetting measures and to verify the accuracy of the predictions made during the environmental assessment on fish and fish habitat; and	Yes	Section 6.6	The approach is summarized in FAHMP Section 2.2, Scope as well in the monitoring programs listed in Appendix D. Further information on monitoring will be provided in the Fisheries and Aquatic Habitat Monitoring and Follow-up Program.
8.4.5.	Any other requirements identified by Fisheries and Oceans Canada in support of its application for an authorization under the <i>Fisheries Act</i> .	Yes	Section 6.7	To date, Fisheries and Oceans Canada has not identified other requirements in support of an application for an authorization under the <i>Fisheries Act</i> . Should DFO identify other requirements, these will be taken into account in amendments to the plan, as described in condition 8.7

FDS Condition	Condition	Occurred During Construction Period for Report	Section in this Report	Plan Reference
8.5.	The Proponent shall submit a draft copy of the plan to the Agency, Fisheries and Oceans Canada, Reservoir Area Aboriginal groups and Immediate Downstream Aboriginal groups 90 days prior to submitting its application for authorization under the <i>Fisheries Act</i> .			This condition is addressed in FAHMP Section 2.3 Consultation
8.6.	The Proponent shall submit to the Agency the final plan a minimum of 30 days prior to submitting its application for authorization under the Fisheries Act. When submitting the final plan, the Proponent shall provide to the Agency an analysis that demonstrates how it has appropriately considered the input, views or information received from Fisheries and Oceans Canada, Reservoir Area Aboriginal groups and Immediate Downstream Aboriginal groups and shall describe how it has taken the plan into consideration as part of its application for an authorization under the Fisheries Act.			Submitted under separate cover.
8.7.	The Proponent shall implement the plan and provide to the Agency an analysis and summary of the implementation of the plan, as well as any amendments made to the plan in response to the results, on an annual basis during construction and for the first ten years of operation and once every five years for the next 20 years.	Yes	This report addressed Condition 8.7	This condition is addressed in FAHMP Section 7 Reporting

FDS Condition	Condition	Occurred During Construction Period for Report	Section in this Report	Plan Reference
8.8	The Proponent shall develop an offsetting plan, in consultation with Fisheries and Oceans Canada, to offset residual serious harm to fish and monitor the effectiveness of offsets.	Yes	Section 6.8	Offsetting plans are submitted as a component of the application for authorization under the Fisheries Act. Information from offsetting plans will be submitted to CEAA as described under FDS Condition 8.9.
8.9	The Proponent shall conduct an analysis for any physical fish habitat offsets proposed in the offsetting plan, in consultation with Transport Canada, Environment Canada, Reservoir Area Aboriginal groups and Immediate Downstream Aboriginal groups, that includes:	Yes	Section 6.8	These conditions will be met in a separate analysis.
8.9.1	the effects on migratory birds and their habitats;			
8.9.2	the effects on terrestrial species and their habitats;			
8.9.3	the effects on species at risk and species at risk habitat;			
8.9.4	the effects on current use of lands and resources for traditional purposes by Aboriginal peoples;			

FDS Condition	Condition	Occurred During Construction Period for Report	Section in this Report	Plan Reference
8.9.5	identification of navigation impacts; and			
8.9.6	identification of potential sources of contamination (e.g. mercury).			
8.10	The Proponent shall submit to the Agency the results of the analysis in condition 8.9, including a description of how the input, views or information received have been taken into account in finalizing its fish habitat offsetting plan.	Yes	Section 6.9	This condition will be met in a stand-alone document that is expected to be submitted to CEAA prior to implementing the offsetting plan.

## 6.0 Summary of Plan Implementation

### **Section 6.1 “Remove temporary structures as soon as they are no longer required.”**

The Moberly River Clearing Bridge, and the temporary access platforms and haul-out areas used during in-river excavation of the mid-stream island channel contouring and the bar referred to as Upper Site 109L examples of temporary structures that were removed once they were no longer required. The Moberly River Clearing Bridge was removed prior to spring freshet. Temporary access platforms and haul-out areas were removed as excavation at these sites was completed.

### **Section 6.2 “Contour mainstream bars to reduce potential for fish stranding, as advised by FLNR.”**

The bar referred to as Upper Site 109L was contoured, per the FAHMP Section 6.2.1.1 Peace River Channel Contouring and Side Channel Enhancement. Contouring also occurred at the mid-stream island and while this contouring was not specific to the FAHMP Section 6.2.1.1 Peace River Channel Contouring and Side Channel Enhancement, the contouring reduced fish stranding risk by reducing the area of the bars that dewater when discharge in the Peace River decreases.

### **Section 6.3 “Include fish habitat features (e.g., shears, large riprap point bars, etc.) in the final design of the north bank haul road bed material that would be placed in the Peace River.”**

Spurs were constructed as fish habitat features along River Road<sup>1</sup>, per the FAHMP Section 6.2.1.2 River Road Habitat Enhancement.

### **Section 6.4 “The Plan shall include: Erosion and sediment control measures, riparian zone avoidance measures, best practices for watercourse crossings, in-stream work guidelines, and in-stream work timing windows;”**

Measures to address these conditions are listed in the CEMP Section 4.5, Fisheries and Aquatic Habitat Management. The CEMP specifies the requirements for site-specific Environmental Protection Plans (EPPs) that are developed for specific components of work. Implementation of the EPPs provided for the implementation of these measures.

### **Section 6.5 “The Plan shall include: Measures to avoid or reduce fish stranding;”**

The contouring of mainstream bars (described in the section above) has reduced the risk of fish stranding by reducing the area of the bars that dewater when discharge in the Peace River decreases.

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<sup>1</sup> referred to in the EIS as the north bank haul road

**Section 6.6 “The Plan shall include: An approach to monitor changes to fish and fish habitat baseline conditions in the Local Assessment Area;**

**An approach to monitor and evaluate the effectiveness of mitigation or offsetting measures and to verify the accuracy of the predictions made during the environmental assessment on fish and fish habitat;”**

A Fisheries and Aquatic Habitat Monitoring and Follow-up Program<sup>2</sup> has been developed and will be implemented to monitor changes in habitat conditions in the Local Assessment Area, the effectiveness of mitigation and offsetting measures, and to verify the predictions made during the environmental assessment. The general monitoring approach in the Fisheries and Aquatic Habitat Monitoring and Follow-up Program is to monitor changes in baseline conditions in the Local Assessment Area for physical habitat, lower trophic levels, fish abundance, and community composition. This information will be used to evaluate the effectiveness of Project mitigation or offsetting measures and verify the accuracy of predictions made during the Environmental Assessment. The monitoring programs will be designed to address specific Management Questions and impact hypotheses as defined in the EIS. Many of the baseline studies for the Project were developed with future monitoring in mind such that the sample sites and methodologies could be repeated to monitor potential changes to fish and fish habitat during construction and operation of the project.

**Section 6.7 “The Plan shall include: Any other requirements identified by Fisheries and Oceans Canada in support of its application for an authorization under the Fisheries Act.”**

Works were undertaken under a Paragraph 35(2)(b) *Fisheries Act* Authorization<sup>3</sup>. The Conditions of Authorization are implemented and will be reported on as described the Authorization.

**Section 6.8 “The Proponent shall develop an offsetting plan, in consultation with Fisheries and Oceans Canada, to offset residual serious harm to fish and monitor the effectiveness of offsets.”**

An offsetting plan was developed in consultation with Fisheries and Oceans Canada, as described in the “Section 9.0 Offsetting Plan” of the document titled “DFO – Application for Authorization Site Preparation – Site C Clean Energy Project British Columbia Hydro and Power Authority”<sup>4</sup>

**Section 6.9 Conditions 8.9 and 8.10 refer to “an analysis for any physical fish habitat offsets proposed in the offsetting plan”**

The analysis of physical fish habitat offsets<sup>5</sup>, associated with work during the reporting period, was undertaken per these Conditions

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<sup>2</sup> Available at:

<https://www.sitecproject.com/sites/default/files/Fisheries%20and%20Aquatic%20Habitat%20Monitoring%20and%20Follow-up%20Program.pdf>

<sup>3</sup> DFO PATH No.: 15-HPAC-00170

<sup>4</sup> Available at: <https://www.sitecproject.com/sites/default/files/Fisheries%20Act%20Authorization.pdf>

<sup>5</sup> “Site C Clean Energy Project, Site Preparation: Environmental Analysis of Physical Fish Habitat Offsets” dated Aug 5, 2015.

## 7.0 Analysis of Plan Implementation

The FAHMP describes the following categories of measures:

- Standard mitigation measures (e.g., erosion and sediment control measures) described in the CEMP
- Project-specific mitigation measures (e.g. reservoir shoreline habitat enhancement works and capping of dam site material relocation site with fish habitat features) described in the FAHMP

During the period under this Report, both standard mitigation measures and Project-specific mitigation measures were implemented to mitigate potential effects on fish and fish habitat.

Monitoring of physical habitat, lower trophic levels, fish abundance, and community composition under the Fisheries and Aquatic Habitat Monitoring and Follow-up Program will provide information to evaluate the effectiveness of these measures to mitigate potential effects on fish and fish habitat.

## 8.0 Revisions to the Plan

There are no specific revisions to the Fisheries and Aquatic Habitat Management Plan.

Revisions were made to the following sections of the CEMP that are referenced in the Fisheries and Aquatic Habitat Management Plan: Fisheries and Aquatic Habitat Management (Section 4.5), Erosion Prevention and Sediment and Control Management (Section 4.4), and Surface Water Quality Management (Section 4.14). These revisions clarified the environmental requirements in these sections.

## Qualified professionals

This report was prepared by the following Qualified Individuals:

<b>Qualified Individual</b>	<b>Expertise</b>
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