

Comment Number	DATE	COMMENTS ORIGINATED			SOURCE									Topic Subject	Comments	Response	Satisfactory/Unsatisfactory to WG member?	If unsatisfactory - Comments	Response	EAO Response
		Name	Affiliation	Group	General	Draft Section	Section	Page #	VC Page	VC Reference Section	AIR Page	AIR Reference Section	Table Number							
184	March 9/10, 2016	Craig Candler	Ktunaxa Nation Council	Technical Task Group	Revelstoke 6 Fact Sheet			Page 3						Minimal change for Revelstoke Reservoir levels	Request Clarification: "Revelstoke Reservoir levels fluctuate throughout the day in response to generation discharge from Revelstoke and Mica Generating Stations. BC Hydro generally operates the reservoir level within 1.5 metres from full pool to maintain head and maximize power generation from Revelstoke Generating Station. Operation of the sixth generating unit would be expected to only "cause small changes to the timing and amount of water level fluctuation within the current 1.5 metre operating range" under normal conditions. BC Hydro would continue to occasionally operate Revelstoke reservoir at a lower minimum level during cold weather or unusual system conditions. (Revelstoke 6 Fact Sheet, p. 3, italics added)	Correction; normal operating range is 571.5 m to 573 m. There would be no change to normal operating range, and daily fluctuations would be similar for REV5 and REV 6. However, on rare occasions during winter, the increase in daily fluctuations could be up to 0.2m.				Satisfactory
185	March 9/10, 2016	Craig Candler	Ktunaxa Nation Council	Technical Task Group	BC Hydro's draft Project description (March 2013)		Section 4.5.3	Page 22						Operational Effects	Based on these sources, our understanding is that the Revelstoke 6 Project is anticipated to result in increase daily fluctuation of the Revelstoke Reservoir by up to 0.2 meters, occurring primarily in the winter when local inflows are low. Please let us know if this understanding is correct so that we can know to include a pathway for Project effects related to increased frequency of diurnal water level fluctuations in the Revelstoke Reservoir of up to 0.2m in winter. For greater clarity, based on experience in other reservoirs, while we understand that the changes would be within the 1.5 m operational range, we would anticipate this Project effect to influence winter build up of hanging ice on reservoir shorelines, and increased diurnal freeze/thaw action within the 1.5m operational range. These effects may be important as they may impact a number of VCs including: 1) ability of wildlife to use shorelines and make water crossings in winter. Depending on shore conditions and	There will be no change to normal operating range, and daily fluctuations would be similar for REV5 and REV 6. However, on rare occasions during winter, the increase in daily fluctuations could be up to 0.2m. These rare fluctuations will not effect wildlife. Reservoir ice was assessed in REV 5 with regard to potential effects to wildlife and this was determined to not be an issue. This is not considered to be an issue as Revelstoke Reservoir does not freeze over other than in isolated bays and inlets around and north of Downie Arm. The findings of REV 5 assessment indicated that there were no effects on furbearers related to reservoir levels. Effects on reservoir Archaeology sites will be assessed in EA.				Satisfactory
186	28-Apr-16	Nicole Kapell	Ktunaxa Nation Council	Advisory Working Group	dAIR	All	General								It is disappointing to note that the substantive comments provided by the Ktunaxa on the AIR in round 1 review for multiple sections – including biophysical, economic and social components – have to a large extent not been integrated into the draft AIR document at this stage. Please review the past comments, and either incorporate or provided responses regarding why they were not incorporated in this version of the AIR as they cannot all be repeated again in this Table.	This tracking table incorporates comments received from First Nations, Core Committee, regulators and stakeholders. BC Hydro commits to provide clarity on how previous comments provided in 2014 and 2015 on earlier versions of the VC and dAIR have been addressed prior to finalizing the AIR.		We have confirmed that all comments received from KNC are included in this table and the Master Tracking Table.		Satisfactory
187	28-Apr-16	Nicole Kapell	Ktunaxa Nation Council	Advisory Working Group	dAIR	Section 1.0								Purpose of the Application	The third bullet referring to parties and their qualifications should include whether each party is a member of a professional organization in BC. This is relevant in terms of any future queries with respect to the validity of their assessments, and any follow-up required.	The EAC Application will include contributors professional organizations, where relevant.				Satisfactory
188	28-Apr-16	Nicole Kapell	Ktunaxa Nation Council	Advisory Working Group	dAIR	Section 1.1								Description of the Project	Under Government Revenues, please require inclusion of First Nation Governments and require a summary of revenues or other benefits by First Nation for all phases of the Project.	BC Hydro will discuss the inclusion of this informaion with First Nations as the information becomes available.			BC Hydro will discuss the inclusion of this information with First Nations as the information becomes available.	Satisfactory
189	28-Apr-16	Nicole Kapell	Ktunaxa Nation Council	Advisory Working Group	dAIR	Section 1.1								Description of the Project	Under Project Location, please require a description, including maps, of all water bodies, managed or unmanaged, and above or below the Project, where water level, temperature, speed or other characteristics will change as a result of the Project.	A figure describing the location of the Project and surrounding water bodies will be included in the EACA.			Spatial boundaries of the Project are set out in Section 3.2 of the dAIR and includes all water bodies above and below the project. The hydrological context is set out in Section 4.1 of the dAIR. All water bodies potentially interacting with the Project are discussed in Section 4.1 of the EA.	Satisfactory

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190	28-Apr-16	Nicole Kapell	Ktunaxa Nation Council	Advisory Working Group	dAIR	Section 1.4								Alternatives to the Project	Please include a 'no new development' alternative, including discussion of environmental benefits (bank stability, avoided risk to sturgeon spawning, etc.) or lost opportunities that would accrue as a result of the Project not proceeding	A no new development scenario is described in the Rev 5 EACA as well as within each baseline section of the Effects Assessment in the EACA.			Satisfactory
191	28-Apr-16	Nicole Kapell	Ktunaxa Nation Council	Advisory Working Group	dAIR	Section 2.0								Proposed Project Overview	Section 2.2 The Proponent should include a link to the Project Description in this section of the AIR. Section 2.2.7 Hydrology and River Behaviour; • p. 8. A section should be added to include a description of hydrologic and river behaviour conditions before Revelstoke 5 and immediately after, in order to anticipate incremental changes to the Middle Columbia River. This will be important for reducing uncertainty, planning restoration and/or mitigations for specific changes to hydrology and river behavior as well as fisheries, safety of river users and other issues of importance to the Ktunaxa. • Please provide information on the condition of the river prior to regulation of the river (a pre-development baseline). • It would be useful to undertake a study on how reservoir levels and MCR channels have changed over time (retrospective study using aerial photographs from pre-Revelstoke Dam), how these changes have influenced indigenous use of the river and whether actual impacts are within the bounds of what was predicted for Rev 5. Section 2.6 Project Land Use: Until this section discuses existing First Nations Clarify that assessment requirements identified in the AIR apply to all VCs identified in table 3 (Section B VCs) as well as all VCs identified by Aboriginal Groups (Section C VCs).	Section 4.1.1, of the Application includes information on river behaviour prior to Rev 5. Section 6.2 Socio-community Assessment and Section 6.3 Land and Resource Use will consider potential First Nations land use plans overlapping the study areas as sources of information. Effects on First Nations related to land use will be addressed in Part C of the Application.		A link to the Project Description is provided in Section 1.1 of the dAIR. The dAIR has been updated to include hydrological conditions of the Columbia River pre and post river regulation in Section 4.1 of the dAIR. Section 4.1.1. of the Application includes information on river behaviour prior to Rev 5. Section 6.2 Socio-community Assessment and Section 6.3 Land and Resource Use of the EA considers potential First Nations land use plans overlapping the study areas as sources of information. A review of historically channel mapping using historical aerial photos was completed for the assesement. First Nations related land use plans, areas of use and existing agreements will be provided in Part C of the Application.	Satisfactory
192	28-Apr-16	Nicole Kapell	Ktunaxa Nation Council	Advisory Working Group	dAIR	Section 3.1								Issues Scoping and Selection of VCs	Clarify that assessment requirements identified in the AIR apply to all VCs identified in table 3 (Section B VCs) as well as all VCs identified by Aboriginal Groups (Section C VCs).	The assessment requirements apply to all VCs in Section 3 and generally apply to the VCs in Part C though there may be variations based on the direction and requirements of First Nations authoring these sections.		0	Satisfactory
193	28-Apr-16	Nicole Kapell	Ktunaxa Nation Council	Advisory Working Group	dAIR	Section 3.1.1								Assessment Process	In Section 3.1.1., on P. 7, the second bullet should provide a table of candidate VCs proposed for inclusion by the Advisory/Working Group & Core Committee that were not selected as final VCs as well as the a rationale with reasons for not including them.	Candidate VCs identified at the time of writing are presented in Appendix A of the dAIR. Where they have not been selected as VCs a rationale has been presented. How Candidate VCs identified after the dAIR was drafted have been addressed will described in this Tracking table.		Candidate VCs identified at the time of writing are presented Table 1 in Appendix A of the dAIR. Where they have not been selected as VCs a rationale has been presented. How Candidate VCs identified after the dAIR was drafted have been addressed will described in this Tracking table.	Satisfactory
194	28-Apr-16	Nicole Kapell	Ktunaxa Nation Council	Advisory Working Group	dAIR	Section 3.1.1								Assessment Process	In Table 3.1.1, Size and age distribution should also be used as indicators for fish. Condition is only one indicator of fish health. Size distribution is an indicator of growth rate and prey availability, age distribution is an indicator of the resilience of the population.	Part of the methodology for choosing indicators is the availability of information and the ability to provide and adequate measure. The indicators chosen partially reflect the kind of data available. While size and age data are important in fisheries, these data are not normally readily available for most species, require a longer time series, and therefore, are not usually of a quality that could be reliably used as an indicator.			Satisfactory
195	28-Apr-16	Nicole Kapell	Ktunaxa Nation Council	Advisory Working Group	dAIR	Section 3.1.1								Assessment Process	In Table 3.1.1, indicators for provincially listed ecosystems should include the spatial distribution (as opposed to just location), condition (species composition and % cover for endemic and weed species), quantity and availability (inundation frequency, depth, and duration).	Spatial distribution has been addressed by summarizing broad vegetation types within elevation bands in the Draw Down Zone (DDZ). Comparisons of inundation frequency, depth and duration have been provided in tabular format in the Ecological communities chapter		Spatial distribution has been addressed by summarizing broad vegetation types within elevation bands in the Draw Down Zone (DDZ). Comparisons of inundation frequency, depth and duration have been provided in tabular format in the Ecological Communities (Section 4.3) of the EA.	Satisfactory
196	28-Apr-16	Nicole Kapell	Ktunaxa Nation Council	Advisory Working Group	dAIR	Section 3.1.1								Assessment Process	In Table 3.1.1, indicators for sensitive ecosystems should include the spatial distribution (as opposed to just location), condition (species composition and % cover of natural and weedy species), quantity and availability (inundation frequency, depth, and duration).	Section 4.3 provides a summary of the various habitats found within the Local Study Area (LSA) (including quantity), the spatial location of the larger wetland complexes specifically requested by Core Committee members, and the availability (when first inundated, the depth, and how long).		Section 4.3 of the EA provides a summary of the various habitats found within the Local Study Area (LSA) (including quantity), the spatial location of the larger wetland complexes specifically requested by Core Committee members, and the availability (when first inundated, the depth, and how long).	Satisfactory

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197	28-Apr-16	Nicole Kapell	Ktunaxa Nation Council	Advisory Working Group	dAIR	Section 3.1.1								Assessment Process	In Table 3.1.1, indicators for ecosystem health and function for biodiversity should include both the spatial extent and structure of all ecosystems and habitats (i.e., the extent may not change much, but the structure may and both are important)	Section 4.3 provides a summary of the various habitats found within the Local Study Area (LSA) (including quantity), the spatial location of the larger wetland complexes specifically requested by Core Committee members			Table 2 of Section 3.1 of the dAIR has been updated to include an indicator to review current and anticipated changes to the spatial extent for all ecosystems and habitats, including vegetation. Section 4.3 provides a summary of the various habitats found within the Local Study Area (LSA) (including quantity), the spatial location of the larger wetland complexes specifically requested by Core Committee members	Satisfactory
198	28-Apr-16	Nicole Kapell	Ktunaxa Nation Council	Advisory Working Group	dAIR	Section 3.1.1								Assessment Process	In Table 3.1.1, indicators for federal or provincial listed plants should include "abundance and distribution of known occurrences of listed species". Note that "presence, quality and quantity of suitable habitat" for listed plants is not a valid indicator based on site series modeling because rare plant occurrence is poorly correlated with site series and rare plants are often associated with microhabitat conditions that are hard to predict. These characteristics cannot be modeled (according to provincial experts J. Penny, Botanist, CDC and D. MacKillop, Regional Ecologist, FLNRO); therefore a field verification step would need to be performed to determine the proportion of polygons that actually support rare plants. So if the second indicator is included, it should read "abundance, distribution and quality of suitable habitat for listed species, based on verification."	Broad habitat types are useful for identifying 'potential' habitats for rare plants, and botanists commonly use those habitat types to prioritize areas for rare plant surveys. The one known occurrence of a rare plant (moss grass) is discussed in Section 4.4 which states: "the occupied area approximately 550 m x 120 m (~7 ha). Although population size was not estimated, the total number of individuals was given as 'likely in the tens of thousands'." There is also further discussion of the type of habitat where the population is found.				Satisfactory
199	28-Apr-16	Nicole Kapell	Ktunaxa Nation Council	Advisory Working Group	dAIR	Section 3.1.1								Assessment Process	In Table 3.1.1, indicators for federal or provincial listed herptiles should include "abundance and distribution of known occurrences of listed species" and "abundance, distribution and quality of suitable habitat for listed species" (it is not enough to say habitat presence; the distribution of that habitat is important in terms of linkages and connectivity, as previously indicated, so please change this).	Section 4.5 discusses where herptile species have been observed within the MCR (Table 4.5-4), thereby addressing species distribution. Abundance estimates for all species at risk are difficult to determine as variation between years and sites and detectability of many species make it difficult to be certain on exact numbers. The approach of the assessment is to identify the habitats present within the Local Study Area (LSA) that would be potentially affected with the addition of a sixth unit and that support a variety of species - including species at risk. Should these important habitats be measurably affected then species themselves that are known to occur in these habitats could also be affected. The timing of any affect is also considered should it overlap with seasonal use (e.g., breeding) that may cause displacement or even mortality. The dAIR currently has 'presence, quality, and quantity of potentially suitable habitat' as an indicator. The			Section 4.5 discusses where herptile species have been observed within the MCR (Table 4.5-4), thereby addressing species distribution. Abundance estimates for all species at risk are difficult to determine as variation between years and sites and detectability of many species make it difficult to be certain on exact numbers. The approach of the assessment is to identify the habitats present within the Local Study Area (LSA) that would be potentially affected with the addition of a sixth unit and that support a variety of species - including species at risk. Should these important habitats be measurably affected then species themselves that are known to occur in these habitats could also be affected. The timing of any affect is also considered should it overlap with seasonal use (e.g., breeding) that may cause displacement or even mortality.	Satisfactory

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200	28-Apr-16	Nicole Kapell	Ktunaxa Nation Council	Advisory Working Group	dAIR	Section 3.1.1								Assessment Process	In Table 3.1.1, indicators for federal or provincial listed birds should include "abundance and distribution of known occurrences of listed species" and "abundance, distribution and quality of suitable habitat for listed species" (it is not enough to say habitat presence; the distribution of that habitat is important in terms of linkages and connectivity, as previously indicated, so please change this). Same comment for raptor species.	Section 4.6 discusses where bird species at risk and raptors have been observed within the MCR (Section 4.6.2.2.1), thereby addressing species distribution. Abundance estimates for all species at risk are difficult to determine as variation between years and sites and detectability of many species make it difficult to be certain on exact numbers. The approach of the assessment is to identify the habitats present within the Local Study Area (LSA) that would be potentially affected with the addition of a sixth unit and that support a variety of species - including species at risk. Should these important habitats be measurably affected then species themselves that are known to occur in these habitats could also be affected. The timing of any affect is also considered should it overlap with seasonal use (e.g., breeding) that may cause displacement or even mortality. The dAIR currently has 'presence, quality, and quantity of potentially suitable habitat' as an indicator. The			Section 4.6 discusses where bird species at risk and raptors have been observed within the MCR (Section 4.6.2.2.1), thereby addressing species distribution. Abundance estimates for all species at risk are difficult to determine as variation between years and sites and detectability of many species make it difficult to be certain on exact numbers. The approach of the assessment is to identify the habitats present within the Local Study Area (LSA) that would be potentially affected with the addition of a sixth unit and that support a variety of species - including species at risk. Should these important habitats be measurably affected then species themselves that are known to occur in these habitats could also be affected. The timing of any affect is also considered should it overlap with seasonal use (e.g., breeding) that may cause displacement or even mortality.	Satisfactory
201	28-Apr-16	Nicole Kapell	Ktunaxa Nation Council	Advisory Working Group	dAIR	Section 3.1.1								Assessment Process	In Table 3.1.1, indicators for federal or provincial listed mammals should include "abundance and distribution of known or expected occurrences" and "abundance, distribution and quality of suitable habitat for foraging and winter range (it is not enough to say habitat presence; the distribution of that habitat is important in terms of linkages and connectivity, as previously indicated, so please change this).	Section 4.7 discusses where mammal species at risk have been observed within the MCR (Section 4.7.2.2.1), thereby addressing species distribution. Abundance estimates for all species at risk are difficult to determine as variation between years and sites and detectability of many species make it difficult to be certain on exact numbers. The approach of the assessment is to identify the habitats present within the Local Study Area (LSA) that would be potentially affected with the addition of a sixth unit and that support a variety of species - including species at risk. Should these important habitats be measurably affected then species themselves that are known to occur in these habitats could also be affected. The timing of any affect is also considered should it overlap with seasonal use that may cause displacement or even mortality. The dAIR currently has 'presence, quality, and quantity of potentially suitable habitat' as an indicator. The			Section 4.7 discusses where mammal species at risk have been observed within the MCR (Section 4.7.2.2.1), thereby addressing species distribution. Abundance estimates for all species at risk are difficult to determine as variation between years and sites and detectability of many species make it difficult to be certain on exact numbers. The approach of the assessment is to identify the habitats present within the Local Study Area (LSA) that would be potentially affected with the addition of a sixth unit and that support a variety of species - including species at risk. Should these important habitats be measurably affected then species themselves that are known to occur in these habitats could also be affected. The timing of any affect is also considered should it overlap with seasonal use that may cause displacement or even mortality.	Satisfactory
202	28-Apr-16	Nicole Kapell	Ktunaxa Nation Council	Advisory Working Group, F TTG 3.5	dAIR	Section 3.1.1								Assessment Process	Why are listed invertebrates not included as a VC, as recommended by the Ktunaxa? Under federal and provincial legislation, these listed species have the same regulatory requirements as vertebrates. Why are cavity nesters not included as VCs? The flooding and regulation of reservoirs has had profound impacts on cavity nesters and their wildlife tree habitat along the reservoir and much like raptors, this guild should be a focus of concern for this project.	The valued components selected are representative of the environmental values affected by the Project and were determined through discussions with FN and representatives and stakeholders. The assessment of project effect on VCs provide a robust description of the environmental effects of the Project. The CDC has no records of any of the listed species potentially present (based on habitat type) anywhere near Revelstoke Reach and these have not been the focus of any WUP program within the MCR. Cavity-nesting birds are considered within the broader subcomponent of 'migratory birds'			The valued components selected are representative of the environmental values affected by the Project and were determined through discussions with FN and representatives and stakeholders. The assessment of project effect on VCs provide a robust description of the environmental effects of the Project. The CDC has no records of any of the listed species potentially present (based on habitat type) anywhere near Revelstoke Reach and these have not been the focus of any WUP program within the MCR. Cavity-nesting birds are considered within the broader subcomponent of 'migratory birds'. There are no CDC location records for any listed invertebrate species within the two Project LSAs, i.e., the Generation and Transmission LSAs. • The draft EA references invertebrates in Section 4.2, Fish and	Satisfactory

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203	28-Apr-16	Nicole Kapell	Ktunaxa Nation Council	Advisory Working Group	dAIR	Section 3.1.1								Assessment Process	In Table 3.1.1 under ungulates, indicators should include abundance, distribution and diversity of ungulate species and their movement corridors". Second indicator should read "abundance, distribution and quality of winter range habitat. (it is not enough to say habitat presence; the distribution of that habitat is important in terms of linkages and connectivity, as previously indicated, so please change this).	Project effects will not occur within UWR. "Abundance" of habitat and potential effects on it are discussed in Section 4.3.			Project effects will not occur within UWR. "Abundance" of habitat and potential effects on it are discussed in Section 4.3 of the EA.	Satisfactory
204	28-Apr-16	Nicole Kapell	Ktunaxa Nation Council	Advisory Working Group	dAIR	Section 3.1.1								Assessment Process	In Table 3.1.1, for the mammal guild, the Ktunaxa have clearly indicated in past comments that they want to see furbearers included as a sub-component, with an associated first indicator of abundance, distribution and diversity of furbearer species'. Second indicator should read "abundance, distribution and quality of habitat".	Furbearers are included in Section 4.7 but no data are available for population abundance or distribution. Habitat within the Local Study Area (LSA) is quantified in Section 4.3 - including a discussion of spatial distribution.				Satisfactory
205	28-Apr-16	Nicole Kapell	Ktunaxa Nation Council	Advisory Working Group	dAIR	Section 3.1.1								Assessment Process	In Table 3.1.1, under hydrology and fluvial geomorphology, why is only MCR considered when project description projections clearly state that RR will experience up to a 20 cm decrease in water levels in winter months during low water periods, with implications for ice formation/failure?	There will be no change to normal operating range, and daily fluctuations would be similar for REV5 and REV 6. However, on rare occasions during winter, the increase in daily fluctuations could be up to 0.2m. This is not considered to be an issue as Revelstoke Reservoir does not freeze over other than in isolated bays and inlets around and north of Downie Arm.				Satisfactory
206	28-Apr-16	Nicole Kapell	Ktunaxa Nation Council	Advisory Working Group	dAIR	Section 3.1.1								Assessment Process	In Table 3.1.1, under traffic, an associated subcomponent should be federally and provincially listed species (all vertebrates and invertebrates) migratory birds, raptors, ungulates, furbearers, and culturally important species.	Roadkill is discussed in the herptile, bird and mammal sections. Roadkill impacts to invertebrates (both baseline and predicted effects related to the Project) would be difficult to report.				Satisfactory
207	28-Apr-16	Nicole Kapell	Ktunaxa Nation Council	Advisory Working Group	dAIR	Section 3.1.1								Assessment Process	Section 3.1.1, Table 3 (Valued Components, Sub-components, indicators, by Phase and Project area) - Under ecological communities, change "Traditional Use and Knowledge" to "Culturally Important Ecosystems and Indigenous Knowledge" - Under plants, change "Traditional Use and Knowledge" to "Culturally Important Plants and Indigenous Knowledge" - Make this change to require recognition of indigenous knowledge for all relevant components and sub-components (herptiles, birds, mammals) Under hydrology and fluvial geomorphology, be clear about which side channels and wetlands will be monitored for water levels. Selection to be done with advice from Ktunaxa knowledge holders.	For further discussion with First Nations and the EAO. Water Monitoring stations have been identified and mapped based on input from Core Committee.				Satisfactory
208	28-Apr-16	Nicole Kapell	Ktunaxa Nation Council	Advisory Working Group	dAIR	Section 3.1								Table of VCs	Please add all VCs identified by Aboriginal Groups (Section C VCs) to this table, or otherwise recognize Aboriginal rights and interests as full valued components for this assessment.	We will consider all VCs identified by Aboriginal Groups in Section C for linkages to or inclusion in Part B.			All proposed VCs, including those identified by Aboriginal Groups, are summarized in Table 1 of Appendix A of the dAIR which also summarizes rationale for inclusion or exclusion as a VC.	Satisfactory

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209	28-Apr-16	Nicole Kapell	Ktunaxa Nation Council	Advisory Working Group	dAIR	Section 3.2	Table 4							Assessment Boundaries	Table 4: Please include the area where direct Project effects are anticipated above the dam in Revelstoke Reservoir (up to 20cm change per the PD) in the LSA for all wildlife and vegetation VCs, as well as for archaeology, and land use (winter travel effects).	Core Committee discussions have generally focused on potential effects downstream of Revelstoke Dam. In the REV 5 EA potential effects within the Revelstoke Reservoir were considered but were found to be negligible or none. There will be no change to normal operating range, and daily fluctuations would be similar for REV5 and REV 6. However, on rare occasions during winter, the increase in daily fluctuations could be up to 0.2m. These rare fluctuations will not effect wildlife. Effects on reservoir Archaeology sites will be assessed in EA.			Detailed descriptions of the Local Study Area are provided in Table 3 of Section 3.2 of the dAIR. Core Committee discussions have generally focused on potential effects downstream of Revelstoke Dam. In the REV 5 EA potential effects within the Revelstoke Reservoir were considered but were found to be negligible or none. There will be no change to normal operating range, and daily fluctuations would be similar for REV5 and REV 6. However, on rare occasions during winter, the increase in daily fluctuations could be up to 0.2m. These rare fluctuations will not effect wildlife. Effects on reservoir Archaeology sites will be assessed in EA.	Satisfactory
210	28-Apr-16	Nicole Kapell	Ktunaxa Nation Council	Advisory Working Group	dAIR	Section 3	Section 3.2, 3.2.2; Table 4							Assessment Process	Section 3.2 Assessment Boundaries - It is critical to include a pre-dam construction baseline as an important starting point for discussion of each VC. This context is necessary because existing dams and associated reservoir operations have had dramatic effects on area ecosystems, habitats and species, potentially already resulting in changes that are outside the natural range of variability (i.e., surpassing ecological thresholds) for a number of VCs, and particularly those that are already rare and/or of conservation concern. Section 3.2.2, Table 4 Assessment Boundaries - Please provide a rationale for 500 m boundary for ecological communities, plants, herptiles, birds, mammals relative to the RR. How does this address drying of wetlands and tributaries that may be affected by fluctuating water levels? LSA boundaries may need to follow tributaries that may be impacted upstream of the generating station.	Pre dam conditions are discussed for the VCs in the draft Application as they contribute to the overall understanding of the VCs context. However, there are no quantitative data available on pre-dam populations of wildlife, and very little quantitative data available pre-dam in general. The 500 m is reflective of discussions with the Core Committee and TTG. Revelstoke Reservoir will continue to operate as current and tributaries will not be affected.			Pre dam hydrology will be provided in Section 4.1 of the EA as outlined in Section 4.1 of the dAIR. Pre dam conditions are discussed for the VCs in the draft Application as they contribute to the overall understanding of the VCs context. However, there are no quantitative data available on pre-dam populations of wildlife, and very little quantitative data available pre-dam in general. The 500 m is reflective of discussions with the Core Committee and TTG. Revelstoke Reservoir will continue to operate as current and tributaries will not be affected.	Satisfactory
211	28-Apr-16	Nicole Kapell	Ktunaxa Nation Council	Advisory Working Group	dAIR	Section 3	Section 3.3							Assessment Process	Section 3.3 Existing Conditions: - As stated previously, including a pre-dam context discussion which refers to the natural range of variability and ecological thresholds for each VC (and how much the current condition of the VC has strayed from that) is critical for understanding the actual impacts to each VC of the Revelstoke 6 Project. Confining this discussion to Revelstoke 5 forward is not adequate.	Pre dam conditions are discussed for the VCs in the draft Application as they contribute to the overall understanding of the VCs context. However, there are no quantitative data available on pre-dam populations, and very little quantitative data available pre-dam in general.				Satisfactory
212	28-Apr-16	Nicole Kapell	Ktunaxa Nation Council	Advisory Working Group	dAIR	Section 3.1								Assessment Process	3.1, Following table, include - 'identification of threshold of significance for each VC' as a 6th bullet - Following residual effects characterization, please require a description of the level of confidence for each finding OR remove the text following the table as it is duplicating what is already required under 3.6	The text in Sections 3.6 and 3.8, and 3.9 address these points, and while there is some duplication between section 3.1 and the subsequent sections it is helpful to emphasize important steps in the assessment process.			A bullet regarding the threshold of significance has been added and the duplicate text has been removed from Section 3.1 of the dAIR.	Satisfactory

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213	28-Apr-16	Nicole Kapell	Ktunaxa Nation Council	Advisory Working Group	dAIR	Section 3.2	Section 3.2.2, Table 4							Assessment Methodology	3.2.2 , Table 4, under health pillar, please include an LSA for the generation component to confirm that health effects on the MCR, including Arrow Lakes, will be considered (e.g. methylmercury in fish or traditional foods, effects on ice dynamics and public safety) Table 4: The temporal boundary for impact to archaeological sites should be in perpetuity. These are non-renewable resources and cannot be recreated after impact.	No potential interactions between the addition of the 6th unit and presence of methyl mercury or ice dynamics are expected. The temporal boundary for archaeology reflects project duration and will be amended to also reflect the non renewable nature of heritage resources.			Spatial and temporal effects for the assessment are detailed in Table 3, Section 3.2 of the dAIR. A discussion of methyl mercury has been added to the Human Health section of the EA and is noted in Section 8.2 of the dAIR. Effects related to ice dynamics are not expected to change with the addition of the sixth unit. The temporal boundaries for archaeology presented in Table 2 of Section 3.1 of the dAIR reflects the life of the project. Section 7.2 of the dAIR has been updated to reflect the non-renewable nature of historical and archaeological resources.	Satisfactory
214	28-Apr-16	Nicole Kapell	Ktunaxa Nation Council	Advisory Working Group	dAIR	Section 3.3								Assessment Methodology	3.3, Under Existing Conditions, please require a table of predictions made and mitigations undertaken for the Rev 5 Project for all VCs, and provide, for each, all available evidence of how Rev 5 has actually performed on that parameter.	BC Hydro will provide this table			BC Hydro provided this table to First Nations in September 2016.	Satisfactory
215	28-Apr-16	Nicole Kapell	Ktunaxa Nation Council	Advisory Working Group	dAIR	Section 3.3								Assessment Methodology	3.3, Under bullet four, please specify that the Proponent must consider if and how change has occurred from a pre-development baseline, and if that change has already been significant. The pre-development baseline should reflect pre-Columbia regulation conditions (i.e., presence of salmon), and pre-Revelstoke Dam conditions.	This would entail a distinct environmental assessment of the dam development itself and is beyond the scope of this assessment. Pre dam conditions are described for VCs as appropriate (e.g. Birds, Fish, etc)				Satisfactory
216	28-Apr-16	Nicole Kapell	Ktunaxa Nation Council	Advisory Working Group	dAIR	Section 3.3		Table 5						Assessment Process	Section 3.3, Table 5: Standards and Guidance Table - Please include a reference for sampling quality of culturally important plants in this table - For each section of this table, please include Indigenous Knowledge provided by First Nation as a required input under the 'survey' column - In Table 5, please be more specific about the surveys and when (year/month) and where (construction/transmission LSA) for each VC. Also provide assurances that they comprehensively cover off the full LSA (500 m minimum), as opposed to a smaller segment of the LSA. - It seems that in many cases, current targeted surveys are not being done for this assessment. Instead, past studies are being relied upon to extract relevant information for this EA. Unfortunately, these external studies often pre-date REV5 and/or they have different objectives, and a different study area boundary, which is typically confined to the DDZ or a smaller segment of the larger LSA. Please require that "where earlier studies are relied upon, these will be considered in the context of current and comprehensive data with an adequate sampling intensity in all areas of the project footprint"	Indigenous Knowledge is incorporated as information is provided through discussions with First Nations and Part C. The studies completed for the WUP and other programs included considerable effort within the Local Study Area (LSA) and data collected are sufficient to inform the EA. RISC standards are not cited because targeted wildlife surveys were not carried out for the purposes of the assessment for any species other than songbirds, Flammulated Owl and Williamson's Sapsucker, which were done at the Capacitor Station site. Those surveys were done according to RISC methodologies as described in the EA. Most of the area within the 500 m buffer is private land and surveyors remained on the BC Hydro owned property. The site specific data supplemented with other existing information related to this eco-system is sufficient to understand the potential effects of the Project. Furthermore,				Satisfactory
217	28-Apr-16	Nicole Kapell	Ktunaxa Nation Council	Advisory Working Group	dAIR	Section 3.5								Mitigation Measures	Please add a bullet requiring a description of what input was received from First Nations and how or if it was considered in the determination of mitigations Where mitigations to Project effects are uncertain or not possible, require consideration of offsetting options to redress legacy effects of nearby past projects.	While a bullet has not been added to the dAIR, First Nations will have the opportunity to provide input on mitigation before it is finalized in the Application.			A bullet has been added to Section 3.5 of the dAIR indicating that mitigation measures proposed by First Nations will be included in the EA.	Satisfactory

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218	28-Apr-16	Nicole Kapell	Ktunaxa Nation Council	Advisory Working Group	dAIR	Section 3.8								Assessment Process	Section 3.8: Proponent's Determination of Significance - A determination of significance requires inclusion of a detailed explanation of assumptions for each VC, including any ecological/population thresholds considered in determining the current status or condition of a VC. By definition, any listed species are already considered to have surpassed criteria for one or more ecological/population thresholds, as defined by COSEWIC or the CDC, and this must be acknowledged. - Please include language to explain that the Ktunaxa will provide their own determination of significance for cultural VCs.	Significance criteria have been presented in the AIR and described in greater detail in the draft Application. Criteria associated with listed species will be described as appropriate. FN will provide their determination of impacts on rights and title in Part C					Satisfactory
219	28-Apr-16	Nicole Kapell	Ktunaxa Nation Council	Advisory Working Group	dAIR	Section 3.10								Assessment Process	Section 3.10: Cumulative Effects Assessment - Please provide more specific information on "Timber Harvesting" activities; what timeframe of future harvesting will be included in the assessment given that a 70 year time-frame is needed? - If site-specific quantitative information on future harvesting blocks is not available, then assumptions will need to be made on future harvesting (e.g., all mature timber in the operable portion of a landscape unit will be harvested at or before the time of maturity, etc.). It is not acceptable to simply ignore future harvesting if site-specific cutting plans are not made available by licensees. - What does Begbie Creek refer to as a future project; please provide more information. - It is difficult to understand how the effects of Mica Units 5 and 6 can be incorporated into the baseline with sufficient relevant information as commencement of operation of the 6th unit is not expected until late 2015. Impacts of Mica 5 and 6 operations should be considered in the context of reasonably foreseeable projects, because the cumulative effects assessment will be relying on predicted rather than observed effects.	1) timber harvest information where relevant will reference available information regarding likely harvesting plans over the timeframe of effects that may be acting cumulatively with project related effects. 2) Understood, and reasonable assumptions about future harvesting will be made as necessary 3) Begbie Creek is an independent power project proposed in 2011. We are investigating whether this project is still in development (4) The predicted operations of the Revelstoke Dam have also assumed the operation of Mica 5 & 6 (5) These will be considered as appropriate if sufficient information can be gathered.					Satisfactory
220	28-Apr-16	Nicole Kapell	Ktunaxa Nation Council	Advisory Working Group, CC 3.1, HG TTG 1.11, F TTG 3.4	dAIR	Section 3.10								Assessment Process	Please include a requirement to consider the effects of the environment on the Project, and specifically, how reasonably foreseeable or predictable climate change will, or is anticipated to, contribute to cumulative effects. The cut-off date for incorporating new projects into the cumulative effects assessment is stated as December 31st, 2015. This date should be changed as we have not been able to review the project list until now, and may have suggestions for further projects. For example, on March 9th, 2016 the KNC requested that the project consider a scenario where anadromous salmon are present in the Mid-Columbia River (see next comment). Please also include a requirement to evaluate the effects of, or performance of, the Project in a reasonably foreseeable future scenario where anadromous salmon are present in the mid-Columbia River	Effects of environment on the Project will include a discussion of climate change. We have not received any comments on other projects to date, but can consider inclusion of additional projects and information up to September 30th, 2016. Revelstoke Unit 6 project activities and operations will not preclude the ongoing potential for future fish passage or fish resource use of concern to First Nations. The Canadian Columbia River Intertribal Fisheries Commission (CCRIFC) has proposed the formation of a multiagency committee to start investigating the feasibility of salmon restoration in the Columbia. BC Hydro has agreed to participate in such a committee should it proceed.			Effects of environment on the Project will include a discussion of climate change (Section 10 of the dAIR). The date was extended to September 30th, 2016 and the list of projects considered for cumulative effects has been updated. Revelstoke Unit 6 project activities and operations will not preclude the ongoing potential for future fish passage or fish resource use of concern to First Nations. The Canadian Columbia River Intertribal Fisheries Commission (CCRIFC) has proposed the formation of a multiagency committee to start investigating the feasibility of salmon restoration in the Columbia. BC Hydro has agreed to participate in such a committee should it proceed.	Satisfactory	
221	28-Apr-16	Nicole Kapell	Ktunaxa Nation Council	Advisory Working Group	dAIR	Section 4.2.1.2								Assessment Methodology	Section 4.2.1.2 Temporal Boundaries - Please see earlier comments regarding temporal boundaries and the need to discuss a pre-dam baseline condition for all relevant VCs	Pre dam conditions are discussed for the VCs in the draft Application as they contribute to the overall understanding of the VCs context.			Pre-dam conditions are considered in the baseline for context. The baseline for the Application is the existing Revelstoke Generating Station facility with 5 operating units (REV 5).	Satisfactory	

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222	28-Apr-16	Nicole Kapell	Ktunaxa Nation Council	Advisory Working Group	dAIR	Section 4.2.5								Assessment Methodology	<p>Section 4.2.5 Residual Effects and their Significance</p> <p>- This section outlines the proposed approach for finding a significant residual effect to a VC sub-component within the LSA. Please include language to clarify that all VCs for which a residual effect is identified will be considered under the cumulative effects assessment, whether the effect is determined to be significant or not.</p> <p>- The text states "any residual effect will be determined to be significant if the effect could threaten sustainability of a VC sub-component within the LSA." Please define what is meant by sustainability here. Continued cultural use is an important aspect of this consideration for all cultural VCs and sub-components.</p> <p>- The section describes how thresholds for effects on fish and fish habitat, as well as water quality parameters, will be identified. Please describe how thresholds for other VCs will be identified, and whether they will be qualitative or quantitative.</p> <p>- The text proposes "that any residual effect will be determined to be significant if the effect could threaten sustainability of a VC Sub-Component within the LSA. A residual effect would be determined to be not significant."</p>	<p>if the Project is expected to result in a residual effect on a VC, it will be considered for a cumulative effects assessment. The process for scoping the assessment is described further in the EAO's guideline for the selection of valued components and assessment of potential effects, Section 3.5.5 : http://www.eao.gov.bc.ca/pdf/U224EAO_Valued_Components_Guideline_2013_09_09.pdf;</p> <p>In general, sustainability is defined as the maintenance of a species population or associated habitats at a size that ensures persistence of current use and occurrence at or near current levels. BC Hydro acknowledges the Ktunaxa perspective on significance criteria, and has provided greater detail on the evaluation of potential effects on listed species in the Application. Sustainability in the context of significance is explained for relevant VCs in Part B of the Application.</p>			<p>Cumulative effects are only considered for residual effects as per the EAO guidance, Section 3.5.5 : http://www.eao.gov.bc.ca/pdf/U224EAO_Valued_Components_Guideline_2013_09_09.pdf;</p> <p>Thresholds of significance will be developed as outlined in each of the VC Sections in the dAIR. In general, sustainability is defined as the maintenance of a species population or associated habitats at a size that ensures persistence of current use and occurrence at or near current levels. BC Hydro acknowledges the Ktunaxa perspective on significance criteria, and has provided greater detail on the evaluation of potential effects on listed species in the Application. Sustainability in the context of significance is explained for relevant VCs in Part B of the Application.</p>	Satisfactory
223	28-Apr-16	Nicole Kapell	Ktunaxa Nation Council	Advisory Working Group	dAIR	Section 4.3	Section 4.3.1.1							Assessment Methodology	<p>Section 4.3 Ecological Communities: 4.3.1.1 Spatial Boundaries</p> <p>- As noted above, KNC are concerned that the effects of water fluctuation and drying of tributaries / wetlands adjacent to the reservoir may impact ecological communities that are greater than 500 m away. It may be necessary to include the tributaries and a spatial buffer around them, as well as wetlands that are within up to 1 km. Please provide a rationale for the 500 m buffer, based on the extent of potential effects from changes in the water levels.</p> <p>- The proposed RSA may need to be modified if the size of the RSA relative to the LSA is too large, as this ratio has the potential to dilute effects. From a cultural use perspective, it is important to be able to access specific places and not always possible or acceptable to go elsewhere. Impacts to culturally important ecosystems must be discussed from this perspective, rather than the perspective of the supply of these ecosystems at the scale of the RSA</p>	<p>The Heritage and Archaeology candidate VC has been split into "First</p> <p>The 500 m is reflective of discussions with the Core Committee and TTG. Revelstoke Reservoir will continue to operate as current and tributaries will not be affected.</p> <p>We believe the selection of Local Study Area (LSA) and RSA reflect a reasonable area to review the potential interactions of the Project and environmental issues of concern. Should further information become available we will consider adjusting the areas as appropriate</p>				Satisfactory
224	28-Apr-16	Nicole Kapell	Ktunaxa Nation Council	Advisory Working Group	dAIR	Section 4.3.2								Assessment Methodology	<p>Section 4.3.2 Existing Conditions</p> <p>- The section states that "known occurrences and range extents of rare and sensitive habitats will be identified and mapped based on information from existing reports for all study areas and Project-specific surveys completed at the capacitor site." There appears to be no field work specifically conducted for the proposed Project other than at the capacitor station (not 500 m around it though) for a small portion of the 500 m generation LSA. Past information from existing studies was not gathered across the entire 500 for the entire construction/operation LSA. All data seems to be confined to the DDZ. Furthermore, noxious weeds are not included in the field data and are being assessed based on "existing literature", which is not adequate for this assessment. Please provide a summary of existing plant community and plant species data (i.e., plant distribution by species and quality) for KNC to assess whether current data covers the extent of the impacted area or whether additional field work is required.</p>	<p>The project is not expected to have any effects outside of the Draw Down Zone (DDZ), so reliance on data from the intensive, multi-year wildlife and vegetation monitoring programs currently ongoing in the Draw Down Zone (DDZ) is appropriate.</p> <p>With the implementation of the WUP studies there have been numerous field programs associated with CLBMON 11B4, CLBMON 12 and CLBMON 33 that produced comprehensive plant lists - recording all species observed. More than 150 species have been identified to date. A list of species is provided in Section 4.4</p>				Satisfactory

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225	28-Apr-16	Nicole Kapell	Ktunaxa Nation Council	Advisory Working Group	dAIR	Section 4.0	Section 4.3.5							Assessment Methodology	Section 4.3.5 Residual effects and their significance - As noted above, define what is meant by "the sustainability of a VC Sub-component within the LSA." - Criteria for significance of residual effects clearly differ depending on the current conservation status and acknowledged thresholds for a VC. This same comment applies to all other VC categories in the assessment, hence this proposed definition of significance is not acceptable to the Ktunaxa.	Definitions of significance have been provided in every VC Section. See response 222.			Definitions of significance have been provided in every VC Section.	Satisfactory
226	28-Apr-16	Nicole Kapell	Ktunaxa Nation Council	Advisory Working Group	dAIR	Section 4.0	Section 4.3.6							Assessment Methodology	Section 4.3.6 Cumulative effects and Their Significance - As noted above, clarify in dAIR whether cumulative effects will be assessed for all VCs that show a residual effect (whether deemed significant or not). All VCs with residual effects should be brought forward into the cumulative effects analysis. - Not only regional targets or thresholds are relevant to determine significance, but also provincial and federal criteria such as the conservation status criteria used to rank species of conservation concern. - It states that "a cumulative environmental effect would be considered significant if the effect could result in a decline in a VC Sub-Component to lower than existing current levels, where the population is predicted to be unstable and/ or unsustainable within the RSA during construction or during the life of the proposed Project." Please define "unsustainable" and "unstable". If a VC is already of federal or provincial conservation concern, it is by definition not stable and in decline because of recognized threats, hence any incremental decline would be significant.	If the Project is expected to result In a residual effect on a VC, it will be considered for a cumulative effects assessment. The process for scoping the assessment is described further in the EAO's guideline for the selection of valued components and assessment of potential effects, Section 3.5.5 : http://www.eao.gov.bc.ca/pdf/U224EAO_Valued_Components_Guideline_2013_09_09.pdf Thresholds of significance for VCs are described in the dAIR, and consider information provided by First Nations through Consultation and information-sharing. The evaluation of the VC, indicators, and methods for review are based scientific literature and the findings of previous studies and monitoring programs, as well as the experience and expertise of qualified professionals. Sustainability in the context of significance is explained as appropriate for the relevant VCs, cultural VCs are presented in Part C; in general sustainability is defined as the maintenance of a species population or			If the Project is expected to result in a residual effect on a VC, it will be considered for a cumulative effects assessment. The process for scoping the assessment is described further in the EAO's guideline for the selection of valued components and assessment of potential effects, Section 3.5.5 : http://www.eao.gov.bc.ca/pdf/U224EAO_Valued_Components_Guideline_2013_09_09.pdf Thresholds of significance for VCs are described in the dAIR, and consider information provided by First Nations through Consultation and information-sharing. The evaluation of the VC, indicators, and methods for review are based scientific literature and the findings of previous studies and monitoring programs, as well as the experience and expertise of qualified professionals. Sustainability in the context of significance is explained as	Satisfactory
227	28-Apr-16	Nicole Kapell	Ktunaxa Nation Council	Advisory Working Group	dAIR	Section 4.0	Section 4.4							Assessment Methodology	Section 4.4 Plants - See notes already made about spatial extent of impacts; 500 m may not be sufficient.Propose amending to include areas outside of 500 m buffer that may be impacted by drying or changing water levels.	No impacts are expected outside of the current Draw Down Zone (DDZ)				Satisfactory
228	28-Apr-16	Nicole Kapell	Ktunaxa Nation Council	Advisory Working Group	dAIR	Section 4.0	Section 4.4, 4.5, 4.6, 4.7							Assessment Methodology	Sections 4.4, 4.5, 4.6, 4.7 Comments from Section 4.3 re: spatial extent of impacts, defining sustainability of VCs, and determining whether VCs will be considered in cumulative effects assessment apply to all subsequent sections. Section 4.4.2 - It states that "known occurrences and range extents of rare and sensitive species will be identified and mapped based on information from existing reports for all study areas and project-specific surveys completed at the capacitor site." This is not adequate; sitespecific surveys of rare plants are needed within the entire 500 m boundary for the construction/ operation LSA. Previous studies were confined to the DDZ, which covers off only a portion of the agreed upon LSA.	Acknowledged re Sections 4.4, - 4.7 : regarding rare and sensitive species outside the Draw Down Zone (DDZ) . No impacts are expected outside of the current Draw Down Zone (DDZ)				Satisfactory

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229	28-Apr-16	Nicole Kapell	Ktunaxa Nation Council	Advisory Working Group	dAIR	Section 4.0	Section 4.5.2							Assessment Methodology Herptiles Section 4.5.2 - The proposed definition/criteria for significance of residual and cumulative effects are not acceptable for listed species for reasons previously stated. - In addition to reliance on past existing reports, site-specific surveys are required to characterise the existing conditions for all herptiles (not just painted turtles) in RR, since all previous surveys were confined to MCR. Also, a broader suite of existing reports must be considered, including reports produced by the FWCP, HCTF, and consultants. RR is known to support listed Coeur d'Alene Salamander, and surveys are needed to determine the abundance and distribution of this species, as well as western toad, etc. in the LSA. Section 4.5.5 - The proposed definition/criteria for significance of residual and cumulative effects are not acceptable for listed species for reasons previously stated.	Coeur d'Alene Salamander is discussed in Section 4.5 and is noted to occur outside the Draw Down Zone (DDZ). The project is not expected to have any effects outside of the Draw Down Zone (DDZ), so reliance on data from the intensive, multi-year wildlife and vegetation monitoring programs currently ongoing in the Draw Down Zone (DDZ) is appropriate. Significance criteria will be defined as appropriate for each VC where residual effects are identified, and will consider all input received from First Nations, Core Committee, and Stakeholders related to the selection of significance criteria.			Coeur d'Alene Salamander is discussed in Section 4.5 of the EA and is noted to occur outside the Draw Down Zone (DDZ). The project is not expected to have any effects outside of the Draw Down Zone (DDZ), so reliance on data from the intensive, multi-year wildlife and vegetation monitoring programs currently ongoing in the Draw Down Zone (DDZ) is appropriate. Significance criteria will be defined as appropriate for each VC where residual effects are identified, and will consider all input received from First Nations, Core Committee, and Stakeholders related to the selection of significance criteria.	Satisfactory
230	28-Apr-16	Nicole Kapell	Ktunaxa Nation Council	Advisory Working Group	dAIR	Section 4.0	Section 4.6.2							Assessment Methodology Birds Section 4.6.2 - In addition to reliance on past existing reports, project-specific surveys are required to characterise the existing status and conditions for all birds, since all previous surveys were confined to the DDZ. - In the case of the capacitor station, site-specific surveys must cover off the entire 500 m, and be of sufficient intensity and appropriate timing to uncover rare species if they are, according to RICs. Section 4.6.5 - The proposed definition/criteria for significance of residual and cumulative effects are not acceptable for listed species for reasons previously stated.	The bird surveys completed for the WUP included considerable effort within the Local Study Area (LSA) and data collected are sufficient to inform the EA. The project is not expected to have any effects outside of the Draw Down Zone (DDZ), so reliance on data from the intensive, multi-year wildlife and vegetation monitoring programs currently ongoing in the Draw Down Zone (DDZ) is appropriate. Most of the area within the 500 m buffer at the capacitor station is on private land and surveyors remained on the BC Hydro owned property. The site specific data supplemented with other existing information related to this ecosystem is sufficient to understand the potential effects of the Project. Furthermore, conditions within Buffer can be reasonably inferred from the site data and observations collected from the surveys. BC Hydro surveyors cannot trespass on private land in the capacitor station Local Study Area (LSA).				Satisfactory
231	28-Apr-16	Nicole Kapell	Ktunaxa Nation Council	Advisory Working Group	dAIR	Section 4.0	Section 4.7.1.1							Assessment Methodology Mammals Section 4.7.1.1 - Spatial boundaries are not adequate, given the project description and up to 20 cm incremental decreases in winter water levels projected during low flow periods, which would affect the RR and places like Downie Reach, which freeze up in winter and are known to have wildlife crossing and potentially getting trapped, injured or killed due to winter ice formation. This pathway needs to be assessed in the appropriate spatial boundary, and must include the range of species potentially impacted, such as ungulates, furbearers, rodents, (e.g., beaver/muskrat), etc. Section 4.7.2 - In addition to reliance on past existing reports, project-specific surveys are required to characterise the existing status and conditions for all mammals, since previous surveys were confined to the DDZ. - In the case of the capacitor station, site-specific surveys must cover off the entire 500 m, and be of sufficient intensity and appropriate timing to uncover rare species if they are, according to RICs. Section 4.7.5 - The proposed definition/criteria for	In the REV 5 EA potential effects within the Revelstoke Reservoir were considered but were found to be negligible or none. There will be no change to normal operating range, and daily fluctuations would be similar for REV5 and REV 6. However, on rare occasions during winter, the increase in daily fluctuations could be up to 0.2m. These rare fluctuations will not effect wildlife. The project is not expected to have any effects outside of the Draw Down Zone (DDZ), so reliance on data from the intensive, multi-year wildlife and vegetation monitoring programs currently ongoing in the Draw Down Zone (DDZ) is appropriate. Most of the area within the 500 m buffer at the capacitor station is on private land and surveyors remained on the BC Hydro owned property. The site specific data supplemented with other existing information related to this ecosystem is sufficient to understand the potential effects of the Project.				Satisfactory

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232	28-Apr-16	Nicole Kapell	Ktunaxa Nation Council	Advisory Working Group	dAIR	Section 5.1								Economy	Under Economic Background, please require a table of predictions made and mitigations undertaken for the Rev 5 Project for Economic related VCs, and provide, for each, all available evidence of how Rev 5 has actually performed on that parameter with specific reference to equity of economic benefit or impact across regional communities.	Information regarding employment at Rev 5, including the predictions made in the EAC Application and the number of local and First Nation hires is included in Section 5.2, Economy.			Information regarding employment at Rev 5, including the predictions made in the EAC Application and the number of local and First Nation hires is included in the EA, Section 5.2, Economy.	Satisfactory	
233	28-Apr-16	Nicole Kapell	Ktunaxa Nation Council	Advisory Working Group	dAIR	Section 5.2.2								Economy	Require provision of employment statistics at the regional and local First Nation level. See previous AIR comments.	Information regarding employment levels at the local, regional, and First Nation level are included in Section 5.2, Economy.				Satisfactory	
234	28-Apr-16	Nicole Kapell	Ktunaxa Nation Council	Advisory Working Group	dAIR	Section 5.3	Section 5.0 and 5.2.3 (old s. 6.2)							Economy	"Information pertaining to lessons learned/issues identified during Rev 5 Project." Please require proponent to specifically include success rates for local First Nations hires and Aboriginal hires as well as length of employment and types of employment. Evaluation of success of mitigations used in Rev 5 should be required. Include a description of barriers to meaningful First Nations employment with BC Hydro. See previous AIR comments.	Information on the number of First Nation hires on the Rev 5 Project are included in Section 5.2, Economy. Information describing the length of employment for these employees is not available. Mitigation measures to enhance First Nation opportunities at the Rev6 project in light of the experience at Rev 5 are included in the assessment.			Information on the number of First Nation hires on the Rev 5 Project are included in the EA, Section 5.2, Economy. Information describing the length of employment for these employees is not available. Mitigation measures to enhance First Nation opportunities at the Rev6 project in light of the experience at Rev 5 are included in the assessment.	Satisfactory	
235	28-Apr-16	Nicole Kapell	Ktunaxa Nation Council	Advisory Working Group	dAIR	Section 6.2								Socio-Community	Require a clear reference to Section C where indigenous socio-community considerations are dealt with – including effects on language, indigenous work force, indigenous businesses, traditional economy, and other issues.	Information from Part C will be integrated and cross-referenced throughout the Part B Economy and Socio-community Sections following receipt of Part C.				Satisfactory	
236	28-Apr-16	Nicole Kapell	Ktunaxa Nation Council	Advisory Working Group	dAIR	Section 6.2.2								Socio-Community	Please require consideration of altered aesthetics and visual quality for the reservoir area to account for sensory change / disturbance, and altered sense of place as a result of water level changes and change to shoreline vegetation / erosion as a result of the Project.	As the 6th Unit will not result in an altered aesthetic and visual quality from the base case, it is not considered in the Visual Quality Assessment.				Satisfactory	
237	28-Apr-16	Nicole Kapell	Ktunaxa Nation Council	Advisory Working Group	dAIR	Section 6.2.4								Socio-Community	Under Existing Conditions, please require a table of predictions made and mitigations undertaken for the Rev 5 Project for Socio-Community related VCs, and provide, for each, all available evidence of how Rev 5 has actually performed on that parameter with specific reference to equity of benefit or impact across regional communities.	BC Hydro has compared predicted with real effects of the addition of REV5 and this information has been incorporated in the baseline. A summary table will be provided.			Information considered for Socio Community existing conditions is outlined in Section 6.2 of the dAIR. Experience from REV5 has been incorporated in the baseline.	Satisfactory	
238	28-Apr-16	Nicole Kapell	Ktunaxa Nation Council	Advisory Working Group	dAIR	Section 6.3								Land and Resource Use	Please include the Kootenay-Boundary Land Use Plan and the Forest and Range Practices Act as two explicit bullets that will be included as sources of information.	Section 6.3, Land and Resource Use includes the Kootenay-Boundary Land Use Plan and Forest and Range Practices as sources of information.				Satisfactory	
239	28-Apr-16	Nicole Kapell	Ktunaxa Nation Council	Advisory Working Group	dAIR	Section 6.3.4								Land and Resource Use	Please require the proponent to request and allow adequate time and resources for provision of formal or informal Indigenous land and water planning objectives for the Middle Columbia River that should be considered, and consider alignment of the Project with these, OR indicate where these are addressed in Section C of the application.	BC Hydro welcomes information related to Indigenous land and water planning objectives and will incorporate this information in the Application where appropriate. Section 6.2 Socio-community Assessment and Section 6.3 Land and Resource Use will consider potential First Nations land use plans overlapping the study areas as sources of information. Effects on First Nations related to land use will be addressed in Part C of the Application.				Satisfactory	

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240	28-Apr-16	Nicole Kapell	Ktunaxa Nation Council	Advisory Working Group	dAIR	Section 7.0								Heritage Resources	Please provide rationale for why Shelter Bay was chosen for the downstream extent of LSA. Is this consistent with the extent of fluvial and erosion effects of the Project? Temporal Boundaries: Archaeological resources are non-renewable and if there is an impact then the temporal boundary is in perpetuity; not only for the length of the construction or operation of the project. Residual Effect and their Significance: The dAIR states that "the significance rating after mitigation of residual effects would be expected to be low as the mitigation strategies should have reduced the adverse effects to a level accepted by the Archaeology Branch". It is premature to already assume that an appropriate mitigation strategy can be reached in the AIR. The AIR should document how significance would be determined, and should not go so far as to say that it is expected to be low because of mitigation. We have no idea if what is possible until the effects assessment is concluded. It seems like the conclusions have already been reached based on this wording. This section assumes that the determination of significant adverse impacts and appropriate mitigation can only be decided by the BC Archaeology Branch. The KMC feel that this section is entirely inadequate. Consistent with past comments, there are well establish potential pathways of effect on human health from reservoir operations including methylmercury and public safety (e.g. alteration of ice formation, rapid water level changes). Proponent must be required to consider health effects in the reservoir areas,including Project effects on Traditional foods consumption, contaminants in wild foods, and impacts on safety of reservoir shore use.	-The Shelter Bay location was chosen early on in the Identification Phase of the Project as this was the general area similar to the Project area for Rev5. Refinement of the spatial extent of the Project often happens after the initial assessment begins because more information can shed light on effects. -The comment regarding the temporal boundary has been acknowledged and will be updated to reflect that impacts to heritage sites are irreversible and therefore would be in perpetuity. -The comment regarding the significance rating after mitigation being low is acknowledged and will be revised. -The comment regarding determination of significant adverse impacts and appropriate mitigation being decided by the Archaeology Branch is acknowledged and will be revised.			-The Shelter Bay location was chosen as it is the extent of hydrological influences of the Revelstoke Project. -The temporal boundaries for archaeology presented in Table 2 of Section 3.1 of the dAIR reflects the life of the project. Section 7.2 of the dAIR has been updated to reflect the non-renewable nature of historical and archaeological resources. -The comment regarding the significance rating after mitigation being low is acknowledged and has been removed from Section 7.2.7 of the dAIR. -determination of significant adverse impacts and appropriate mitigation has been modified in Sectin 7.2.7 of the dAIR to include consultation with First Nations.	Satisfactory
241	28-Apr-16	Nicole Kapell	Ktunaxa Nation Council	Advisory Working Group	dAIR	Section 8.0								Health		Section on Human Health. This will include methylmercury, EMF, Public safety is included in accidents and malfunctions sections.			The dAIR has been modified. Section 8, Human Health includes methylmercury and EMF. Public safety is included in the accidents and malfunctions sections.	Satisfactory
242	28-Apr-16	Nicole Kapell	Ktunaxa Nation Council	Advisory Working Group	dAIR	Section 10.0								Effects of the Environment on the project	In addition to the individual natural hazards, the application should identify any potential for synergistic effects between events (extreme weather, natural seismic and associated events, fire and effects of climate change) and potential residual impacts to any of the VCs addressed in aforementioned sections.	The effects of each of these effects (weather, seismic, etc) have been addressed it is unclear how synergistic effects of these typically rare events might be assessed (e.g. seismic event during as forest fire)			The requirements for the consideration of Effects of the Environment on the Project are in Section 10 of the dAIR. Synergistic effects of rare events are not included due to their extremely low probability.	Satisfactory
243	28-Apr-16	Nicole Kapell	Ktunaxa Nation Council	Advisory Working Group	dAIR	Section 11.2								Part C - Aboriginal Consultation	As noted above, proponent should be required to recognize that 'Aboriginal Interests' will be considered VCs and assessed as such in Part C. VCs from Part B and VCs from Part C (i.e.Aboriginal Interests) will be given equal importance and recognition.	The scope of Part C will be driven by the First Nations authors and it is expected will reflect First Nations interests.			The scope of Part C will be driven by the First Nations authors and it is expected it will reflect First Nations interests.	Satisfactory
244	28-Apr-16	Nicole Kapell	Ktunaxa Nation Council	Advisory Working Group	dAIR	Section 13.0								Part E - Management Plans and Follow-up Programs	Please broaden the "Wildlife Management Plan" to encompass the broader management context of ecosystems, habitats, wildlife and biodiversity. A more appropriate title would be "Biodiversity Management Plan" to indicate that all levels of biodiversity (from ecosystems to habitats to species and SAR) are being managed under this umbrella document. Please include an operational 'cultural management plan' or alternately a 'Ktunaxa Values Management Plan'	BC Hydro will prepare Management Plans for construction activities which will consider ecosystems and First Nations' values.				Satisfactory
245	28-Apr-16	Nicole Kapell	Ktunaxa Nation Council	Advisory Working Group	dAIR	Section 14.0								Monitoring and Follow-Up Programs	Require consideration of the role of indigenous communities in monitoring and compliance	The role of indigenous communities in monitoring and compliance will be discussed with potentially impacted First Nations during the development of mitigation and monitoring measures.				Satisfactory

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246	27-Apr-16	Robert Hutton	Secwepemc	Advisory Working Group	dAIR	Fish Resources	RR							- Kokanee - Bull Trout	BC Hydro should: - Consider the potential effect of changes in water level on spawning access for BT and KO in tributaries to the Revelstoke Reservoir, including the magnitude, duration, and frequency of drawdown during migration/spawning periods. - Include the results of the KO entrainment studies as part of this assessment, including the effects of reduced food sources for BT (i.e. juvenile KO). Rational: - BC Hydro's assessment of changes in water levels focuses on the Revelstoke Dam Forebay. These results do not reflect site specific conditions experienced in (near) spawning tributaries. Further water level changes could have significant effects on fish if tributary access is already impeded. Only 7 of 30 tagged fish were observed in spawning tributaries in a previous study (i.e. 2003; pre-Rev 5). - Entrainment of KO is directly relevant to the assessment of impacts on KO and BT populations.	Water level fluctuations in Revelstoke Reservoir are considered in the assessment as well as entrainment of kokanee. The study area encompasses the whole of Revelstoke Reservoir, not just the forebay. Detection of tagged fish in the tributaries in the 2003 study was not related to water levels or any kind of access issue.	Satisfactory		Fish and Aquatic ecosystem effects including kokanee and burbot spawning are considered in Section 4.2 of the EA as outlined in Table 1 in the Appendix A of the dAIR. Water level fluctuations in Revelstoke Reservoir are considered in the assessment as well as entrainment of kokanee. The study area encompasses the whole of Revelstoke Reservoir, not just the forebay. Detection of tagged fish in the tributaries in the 2003 study was not related to water levels or any kind of access issue.	Satisfactory
247	27-Apr-16	Robert Hutton	Secwepemc	Advisory Working Group	dAIR	Fish Resources	MC							- Whitefish - Rainbow Trout - White Sturgeon - Bull Trout - Burbot	BC Hydro should: - Consider the effects of erosion and sedimentation on habitat degradation. Current studies on erosion and sedimentation resulting from BC Hydro operations should be expanded as they are currently limited in scope (i.e. number and location of sites). Rational: - Increased erosion and sedimentation can result in fish habitat degradation, particularly with respect to spawning habitats. Anecdotal evidence suggests there are several highly eroding sites that are not currently included in BC Hydro monitoring programs.	Erosion is addressed in a separate section of the EA. Bank erosion is not considered a significant impact to fish habitat in the MCR.	Unsatisfactory	Rationale to discount erosion as a significant impact specifically to fish habitat in the MCR should be provided.	Erosion is outlined in Section 4.1 of the dAIR. Potential effects of erosion on fish and fish habitat are provided in Section 4.2. Bank erosion is not considered a significant impact to fish habitat in the MCR.	Comment will be forwarded to application review
248	27-Apr-16	Robert Hutton	Secwepemc	Advisory Working Group	dAIR	Fish Resources	TC							- Rainbow Trout - Brook Trout	BC Hydro should: - Conduct site-specific fisheries assessments to determine presence/absence. Rational: - Site specific assessments in reaches immediately adjacent to the project have not been conducted and there is some uncertainty in whether or not these reaches contain fish.	There is extensive database of fisheries information in reaches adjacent to the Revelstoke Dam and species composition is well known. Please refer to WUP studies CLBMON-16, CLBMON-17 in particular.	Unsatisfactory	Portions of these tributaries remain unsampled because of the presence of spawning kokanee (CLBMON 17: e.g., Drimmie, Begbie, and Tonkawatia Creek)	BC Hydro has conducted, and continues to conduct, numerous studies in the Mid Columbia Reach both upstream and downstream of the Revelstoke Dam. For example, studies in the Project Area for the Revelstoke Flow Management Plan of the Columbia Water Use Plan (WUP), completed and underway, include: •CLBMON-15A Middle Columbia River Physical Habitat Monitoring •CLBMON-15B Middle Columbia River Ecological Productivity Monitoring •CLBMON-16 Middle Columbia River Fish Population Indexing Surveys •CLBMON-17 Middle Columbia River Juvenile Fish Habitat Use •CLBMON-18 Middle Columbia River Adult Fish Habitat Use •CLBMON-53 Middle Columbia Juvenile Fish Stranding Assessment Specific studies considered in the Existing Conditions for fish and fish habitat in the Project Area are identified in Section 4.2.2 of the dAIR.	Comment will be forwarded to application review
249	27-Apr-16	Robert Hutton	Secwepemc	Advisory Working Group	dAIR	Fish Resources	ALL							Traditional Use and Knowledge	See general comments for VC Candidates	Concerns noted	Unsatisfactory	Further clarification requested on what action will occur based on the provided response.		Satisfactory
250	27-Apr-16	Robert Hutton	Secwepemc	Advisory Working Group	dAIR	Fish Resources	ALL							- Ecosystem Health and Function - Biodiversity	See general comments for VC Candidates	Concerns noted	Unsatisfactory	Further clarification requested on what action will occur based on the provided response.		Satisfactory
251	27-Apr-16	Robert Hutton	Secwepemc	Advisory Working Group	dAIR	Rare Plants	Dam/ MC							Federally and Provincially listed plant species	No comments at this time	No Comment required	Satisfactory			Satisfactory
252	27-Apr-16	Robert Hutton	Secwepemc	Advisory Working Group	dAIR	Rare Plants	TR							Federally and Provincially listed plant species	No comments at this time	No Comment required	Satisfactory			Satisfactory
253	27-Apr-16	Robert Hutton	Secwepemc	Advisory Working Group	dAIR	Rare Plants	All							Traditional Use and Knowledge	See general comments for VC Candidates	Concerns noted	Unsatisfactory	Further clarification requested on what action will occur based on the provided response.		Satisfactory

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254	27-Apr-16	Robert Hutton	Secwepemc	Advisory Working Group	dAIR	Rare Plants	All							Biodiversity	See general comments for VC Candidates	Concerns noted	Unsatisfactory	Further clarification requested on what action will occur based on the provided response.	Satisfactory
255	27-Apr-16	Robert Hutton	Secwepemc	Advisory Working Group	dAIR	Rare and Sensitive Ecosystems	Dam/ MC							- Provincially list ecosystems - Wetlands	No comments at this time	No Comment required	Satisfactory		Satisfactory
256	27-Apr-16	Robert Hutton	Secwepemc	Advisory Working Group	dAIR	Rare and Sensitive Ecosystems	TR							- Provincially listed ecosystems - Designated ESAs	No comments at this time	No Comment required	Satisfactory		Satisfactory
257	27-Apr-16	Robert Hutton	Secwepemc	Advisory Working Group	dAIR	Rare and Sensitive Ecosystems	ALL							Traditional Use and Knowledge	See general comments for VC Candidates	Concerns noted	Unsatisfactory	Further clarification requested on what action will occur based on the provided response.	Satisfactory
258	27-Apr-16	Robert Hutton	Secwepemc	Advisory Working Group	dAIR	Rare and Sensitive Ecosystems	ALL							Ecosystem Health and Function	See general comments for VC Candidates	Concerns noted	Unsatisfactory	Further clarification requested on what action will occur based on the provided response.	Satisfactory
259	27-Apr-16	Robert Hutton	Secwepemc	Advisory Working Group	dAIR	Birds	Dam/ MC							- Federally and Provincially listed bird species - Migratory birds - Raptors	BC Hydro should: - Improve knowledge and studies on the effects of Rev 5 operations on bird abundance and diversity in order to determine the potential effects of Rev 6 operations. Rational: - There seems to be much uncertainty in the results, trends, and causes with respect to ongoing studies on bird abundance and diversity	The bird surveys completed for the WUP included considerable effort within the Local Study Area (LSA) and data collected are sufficient to inform the EA. WUP studies implemented since 2008 have explored a number of topics related to birds. These include CLBMON 36 - investigating the effects of reservoir operations on nesting birds; CLBMON 39 - investigating the effects of reservoir operations on neotropical songbird populations during migration; CLBMON 40 - investigating the effects of reservoir operations on waterbirds, including habitats; and CLBMON 11B2 investigated the diversity of spring migrants and habitat use in relation revegetation and wildlife enhancement activities.		The outline for assessment of birds including abundance and diversity is included in Section 4.6 of the dAIR. The bird surveys completed for the WUP included considerable effort within the Local Study Area (LSA) and data collected are sufficient to inform the EA. WUP studies implemented since 2008 have explored a number of topics related to birds. These include CLBMON 36 - investigating the effects of reservoir operations on nesting birds; CLBMON 39 - investigating the effects of reservoir operations on neotropical songbird populations during migration; CLBMON 40 - investigating the effects of reservoir operations on waterbirds, including habitats; and CLBMON 11B2 - investigated the diversity of spring migrants and habitat use in relation revegetation and wildlife enhancement activities.	Satisfactory
260	27-Apr-16	Robert Hutton	Secwepemc	Advisory Working Group	dAIR	Birds	TR							- Federally and Provincially listed bird species - Migratory birds - Raptors	No comments at this time	No Comment required	Satisfactory		Satisfactory
261	27-Apr-16	Robert Hutton	Secwepemc	Advisory Working Group	dAIR	Birds	All							Traditional Use and Knowledge	See general comments for VC Candidates	Concerns noted	Unsatisfactory	Further clarification requested on what action will occur based on the provided response.	Satisfactory
262	27-Apr-16	Robert Hutton	Secwepemc	Advisory Working Group	dAIR	Birds	All							Biodiversity	See general comments for VC Candidates	Concerns noted	Unsatisfactory	Further clarification requested on what action will occur based on the provided response.	Satisfactory
263	27-Apr-16	Robert Hutton	Secwepemc	Advisory Working Group	dAIR	Herptiles	Dam/ MC							- Federally and Provincially listed amphibian species - Federally and Provincially listed reptile species	BC Hydro should: - Improve ongoing studies the effects of changes in water levels and reservoir operations on amphibians, particularly with respect to determinations of the biological significance of these changes. Rational: - The biological significance of changes in water level and reservoir operations on amphibian abundance, mortality, and site occupancy is currently unknown. Such a circumstance makes it difficult to determine the significance of further changes/impacts.	The effects of reservoir operations is one of the questions being investigated for CLBMON-37.		The requirements for the assessment of herptiles including federally and provincially listed amphibians is provided in Section 4.5 of the dAIR. CLBMON-37 is studying the life history and habitat use of herptile populations in both the Arrow Lakes and Kinbasket Reservoirs.	Satisfactory
264	27-Apr-16	Robert Hutton	Secwepemc	Advisory Working Group	dAIR	Herptiles	TR							- Federally and Provincially listed amphibian species - Federally and Provincially listed reptile species	No comments at this time	No Comment required	Satisfactory		Satisfactory
265	27-Apr-16	Robert Hutton	Secwepemc	Advisory Working Group	dAIR	Herptiles	ALL							Traditional Use and Knowledge	See general comments for VC Candidates	Concerns noted	Unsatisfactory	Further clarification requested on what action will occur based on the provided response.	Satisfactory
266	27-Apr-16	Robert Hutton	Secwepemc	Advisory Working Group	dAIR	Herptiles	ALL							Biodiversity	See general comments for VC Candidates	Concerns noted	Unsatisfactory	Further clarification requested on what action will occur based on the provided response.	Satisfactory

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267	27-Apr-16	Robert Hutton	Secwepemc	Advisory Working Group	dAIR	Mammals	Dam/ MC							- Federally and Provincially listed mammals species - Ungulates	BC Hydro should: - Include a furbearer(s) to the list of sub-components under this VC. These species should be water level dependent and culturally important (e.g. beaver and/or muskrat) - Include Caribou to the list of sub-components Rational: - Furbearer(s) have not been considered or assessed	There are three subcomponents under the Mammals VC: Species at Risk, Ungulates, and Traditional Use and Knowledge. In the EA, caribou are included in both the Species at Risk and Ungulates discussions; however, they are discussed in more detail in the Species at Risk subsection (Southern Mountain Caribou) as it precedes the Ungulates discussion. Furbearers have been included in Section 4.7. In addition, furbearing species of cultural or economic importance to First Nations are discussed in Part C.	Unsatisfactory	Furbearers have not been specifically identified within Section 4.7 in the dAIR version dated January 23, 2017.	There are three subcomponents under the Mammals VC: Species at Risk, Ungulates, and Traditional Use and Knowledge. In the EA, caribou are included in both the Species at Risk and Ungulates discussions; however, they are discussed in more detail in the Species at Risk subsection (Southern Mountain Caribou) as it precedes the Ungulates discussion. Within the Mammals Section (Section 4.7) the sub-components include Mammal Species at Risk, Ungulates, and Traditional Use and Knowledge (species specifically identified by Aboriginal Groups that are of cultural or economic importance). Within the Traditional Use and Knowledge sub-component furbearers have been identified and a list of the species (17 in total) known or likely to occur within the Generation LSA is provided in Table 4.7-7 of the Application (found in the Description of Existing Conditions). Some of these furbearer	Satisfactory
268	27-Apr-16	Robert Hutton	Secwepemc	Advisory Working Group	dAIR	Mammals	TR							- Federally and Provincially listed mammals species - Ungulates	No comments at this time	No Comment required	Satisfactory			Satisfactory
269	27-Apr-16	Robert Hutton	Secwepemc	Advisory Working Group	dAIR	Mammals	ALL							Traditional Use and Knowledge	See general comments for VC Candidates	Concerns noted	Unsatisfactory	Further clarification requested on what action will occur based on the provided response.		Satisfactory
270	27-Apr-16	Robert Hutton	Secwepemc	Advisory Working Group	dAIR	Mammals	ALL							Biodiversity	See general comments for VC Candidates	Concerns noted	Unsatisfactory	Further clarification requested on what action will occur based on the provided response.		Satisfactory
271	27-Apr-16	Robert Hutton	Secwepemc	Advisory Working Group	dAIR	Economy	MC							- Economy Revenues (Regional & Provincial) - Employment - Accommodation - Fishery	BC Hydro should: - Provide a summary of economic, training, and employment targets and results for First Nations via the Rev 5 and Mica 5/6 projects, including whether these targets were met (or not) and why. - Include a specific measure of revenues, contract procurement, employment, training, and capacity building for each First Nation associated with the Rev 6 project. - Conduct an assessment of the economic effects on First Nations due to the Rev 6 project.	Information regarding employment levels at the local, regional, and First Nation levels, including the number of First Nation hires on the Rev 5 Project, are provided in Section 5.2 of the EA. Measures to enhance First Nation opportunities at the Rev6 project in light of the experience at Rev 5 are also included in the EA. Where appropriate, information from Part C will be integrated and cross-referenced in the Part B Economy and Socio-community Sections following receipt of Part C.	Unsatisfactory	Why is Mica 5/6 not being incorporated into the assessment?	Employment, training and economic issues related to REV 5 were considered as outlined in Section 5.2 of the dAIR. Information regarding employment levels at the local, regional, and First Nation levels, including the number of First Nation hires on the Rev 5 Project, are provided in Section 5.2 of the EA. Measures to enhance First Nation opportunities at the Rev6 project in light of the experience at Rev 5 are also included in the EA. Where appropriate, information from Part C will be integrated and cross-referenced in the Part B Economy and Socio-community Sections following receipt of Part C.	Satisfactory
272	27-Apr-16	Robert Hutton	Secwepemc	Advisory Working Group	dAIR	Economy	TR							- Economy Revenues (Regional & Provincial) - Employment - Accommodation	BC Hydro should: - Provide a summary of economic, training, and employment targets and results for First Nations via the Rev 5 and Mica 5/6 projects, including whether these targets were met (or not) and why. - Include a specific measure of revenues, contract procurement, employment, training, and capacity building for each First Nation associated with the Rev 6 project. - Conduct an assessment of the economic effects on First Nations due to the Rev 6 project.	Information regarding employment levels at the local, regional, and First Nation levels, including the number of First Nation hires on the Rev 5 Project, are provided in Section 5.2 of the EA. Measures to enhance First Nation opportunities at the Rev6 project in light of the experience at Rev 5 are also included in the EA. Where appropriate, information from Part C will be integrated and cross-referenced in the Part B Economy and Socio-community Sections following receipt of Part C.	Unsatisfactory	No response provided		Satisfactory
273	27-Apr-16	Robert Hutton	Secwepemc	Advisory Working Group	dAIR	Socio- Community	MC							- Population and Demographics - Community services and infrastructure - Traffic	See general comments for VC Candidates		Unsatisfactory	No response provided		Satisfactory

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274	27-Apr-16	Robert Hutton	Secwepemc	Advisory Working Group	dAIR	Socio- Community	TR							- Population and Demographics - Community services and infrastructure - Traffic	See general comments for VC Candidates		Unsatisfactory	No response provided		Satisfactory
275	27-Apr-16	Robert Hutton	Secwepemc	Advisory Working Group	dAIR	Land Use	RR							- Recreation - Tourism - Resource Use	See general comments for VC Candidates		Unsatisfactory	No response provided		Satisfactory
276	27-Apr-16	Robert Hutton	Secwepemc	Advisory Working Group	dAIR	Land Use	MC							- Recreation - Tourism - Resource Use	See general comments for VC Candidates		Unsatisfactory	No response provided		Satisfactory
277	27-Apr-16	Robert Hutton	Secwepemc	Advisory Working Group	dAIR	Land Use	TR							- Recreation - Tourism - Resource Use	See general comments for VC Candidates		Unsatisfactory	No response provided		Satisfactory
278	27-Apr-16	Robert Hutton	Secwepemc	Advisory Working Group	dAIR	Heritage and Archaeology	RR							- Locations with protected archaeological or historical sites, features, and artifacts BC Hydro should: - Separate Cultural Heritage and Archeology as stand-alone VCs (See general comments for VC candidates) - Improve current Reservoir Archeology Programs (RAP) to provide more comprehensive and representative information on archeological sites, landforms and landscapes and the resulting impacts due to BC Hydro operations. Specific measures and targets for erosion and water level fluctuations should be developed and linked to the ongoing impacts on archeological sites. These studies should include indigenous knowledge and assessment of the effects from an aboriginal perspective. Consideration should be given to turning over the management of the RAP to the Columbia Basin First Nations and linking to objective under First Nations Governance below.	Agree. 'First Nations Cultural Heritage' will be assessed by First Nations in Part C of the Application. 'Historical and Archaeological Heritage' will be assessed in Part B. Comments specific to the RAP will be provided to the BC Hydro RAP coordinator to share with the Columbia Technical Working Group for consideration.	Satisfactory	Agree. 'First Nations Cultural Heritage' will be assessed by First Nations in Part C of the Application. 'Historical and Archaeological Heritage' will be assessed in Part B as outlined in Section 7.2 of the dAIR. Comments specific to the RAP will be provided to the BC Hydro RAP coordinator to share with the Columbia Technical Working Group for consideration.	Satisfactory		
279	27-Apr-16	Robert Hutton	Secwepemc	Advisory Working Group	dAIR	Heritage and Archaeology	MC							- Locations with protected archaeological or historical sites, features, and artifacts BC Hydro should: - Separate Cultural Heritage and Archeology as stand-alone VCs (See general comments for VC candidates) - Improve current Reservoir Archeology Programs (RAP) to provide more comprehensive and representative information on archeological sites, landforms and landscapes and the resulting impacts due to BC Hydro operations. Specific measures and targets for erosion and water level fluctuations should be developed and linked to the ongoing impacts on archeological sites. These studies should include indigenous knowledge and assessment of the effects from an aboriginal perspective. Consideration should be given to turning over the management of the RAP to the Columbia Basin First Nations and linking to objective under First Nations Governance below.	Agree. 'First Nations Cultural Heritage' will be assessed by First Nations in Part C of the Application. 'Historical and Archaeological Heritage' will be assessed in Part B. Comments specific to the RAP will be provided to the BC Hydro RAP coordinator to share with the Columbia Technical Working Group for consideration.	Satisfactory	Agree. 'First Nations Cultural Heritage' will be assessed by First Nations in Part C of the Application. 'Historical and Archaeological Heritage' will be assessed in Part B as outlined in Section 7.2 of the dAIR. Comments specific to the RAP will be provided to the BC Hydro RAP coordinator to share with the Columbia Technical Working Group for consideration.	Satisfactory		
280	27-Apr-16	Robert Hutton	Secwepemc	Advisory Working Group	dAIR	Heritage and Archaeology	TR							- Locations with protected archaeological or historical sites, features, and artifacts BC Hydro should: - Separate Cultural Heritage and Archeology as stand-alone VCs (See general comments for VC candidates) - Improve current Reservoir Archeology Programs (RAP) to provide more comprehensive and representative information on archeological sites, landforms and landscapes and the resulting impacts due to BC Hydro operations. Specific measures and targets for erosion and water level fluctuations should be developed and linked to the ongoing impacts on archeological sites. These studies should include indigenous knowledge and assessment of the effects from an aboriginal perspective. Consideration should be given to turning over the management of the RAP to the Columbia Basin First Nations and linking to objective under First Nations Governance below.	Agree. 'First Nations Cultural Heritage' will be assessed by First Nations in Part C of the Application. 'Historical and Archaeological Heritage' will be assessed in Part B. Comments specific to the RAP will be provided to the BC Hydro RAP coordinator to share with the Columbia Technical Working Group for consideration.	Satisfactory		Satisfactory		

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281	27-Apr-16	Robert Hutton	Secwepemc	Advisory Working Group	dAIR	Heritage and Archaeology	All							- Locations with protected archaeological or historical sites, features, and artifacts	BC Hydro should: - Separate Cultural Heritage and Archeology as stand-alone VCs (See general comments for VC candidates) - Improve current Reservoir Archeology Programs (RAP) to provide more comprehensive and representative information on archeological sites, landforms and landscapes and the resulting impacts due to BC Hydro operations. Specific measures and targets for erosion and water level fluctuations should be developed and linked to the ongoing impacts on archeological sites. These studies should include indigenous knowledge and assessment of the effects from an aboriginal perspective. Consideration should be given to turning over the management of the RAP to the Columbia Basin First Nations and linking to objective under First Nations Governance below.	Agree. 'First Nations Cultural Heritage' will be assessed by First Nations in Part C of the Application. 'Historical and Archaeological Heritage' will be assessed in Part B. Comments specific to the RAP will be provided to the BC Hydro RAP coordinator to share with the Columbia Technical Working Group for consideration.	Satisfactory				Satisfactory
282	27-Apr-16	Robert Hutton	Secwepemc	Advisory Working Group	dAIR	Public Health	MC							- Noise - Air Quality - Visual	No comments at this time	No Comment required	Satisfactory				Satisfactory
283	27-Apr-16	Robert Hutton	Secwepemc	Advisory Working Group	dAIR	Public Health	TR							- Noise - Air Quality - Visual	No comments at this time	No Comment required	Satisfactory				Satisfactory
284	27-Apr-16	Robert Hutton	Secwepemc	Advisory Working Group	dAIR	First Nations Governance	TBD							TBD	BC Hydro should: - Engage First Nations in a meaningful discussion on co-management of cultural and natural resources in the Upper Columbia River. Development of relationships and trust between BC Hydro and First Nations can only be achieved through meaningful consideration and incorporation of our values and goals with respect to cultural and natural resource management.	BC Hydro will continue to engage First Nations in meaningful discussions in the management of cultural and natural resources in the Upper Columbia. The issues raised are beyond the scope of the EA for the Project.	Satisfactory				Satisfactory
285	27-Apr-16	Robert Hutton	Secwepemc	Advisory Working Group	dAIR	Plants and Ecological Communities	ALL							- Federally and Provincially listed species and ecosystems - Other species and ecosystems of interest to First Nations	BC Hydro should: - Conduct rigorous project-specific field programs to accurately describe the existing environment with respect to plants and ecological communities. - Ecosystems and species of special concern and supporting habitats within and adjacent to the proposed area of influence (see general comments) should be documented. Species and communities of special concern includes those species of interest to First Nations as well as provincially and federally-listed species of concern. - Conduct field programs to be consistent with accepted biological inventory standards and practices. - Both direct and indirect effects on all VCs should be considered. Rationale: - Proponent has committed to describing existing environment without conducting project-specific field work to verify characterization of the exiting environment. Accurate field data is essential in conducting a legitimate effects assessment.	The surveys completed for the WUP and other programs included considerable effort within the Local Study Area (LSA) and data collected are sufficient to inform the EA. Results of multi-year monitoring programs are necessary to assess wildlife and vegetation responses to reservoir operation. Time-series data are needed, especially as the operating regime is not constant but varies from year to year depending on numerous factors. Data from the WUP monitoring programs are suitable and relevant to the REV6 assessment as they provide detail on the proposed Indicators of many Sub-components - including provincially and federally-listed species of concern (and supporting habitats)	Unsatisfactory	While the WUP data compiled to date provides insight, a project-specific field program that covers sensitive ecosystems and species at risk occurrence that may be directly or indirectly affected by the proposed project should be undertaken to inform the baseline condition as described under the dAIR. Many of the WUP projects are ongoing and so findings are preliminary.		Comment will be forwarded to application review	
286	27-Apr-16	Robert Hutton	Secwepemc	Advisory Working Group	dAIR	Plants and Ecological Communities	ALL							- Traditional Use and Knowledge - Biodiversity	Comments above	Concerns noted	Unsatisfactory	Further clarification requested on what action will occur based on the provided response.			Satisfactory

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287	27-Apr-16	Robert Hutton	Secwepemc	Advisory Working Group	dAIR	Birds	ALL						<ul style="list-style-type: none">- Federally and Provincially listed bird species- Migratory birds- Raptors- Species of special interest to First Nations	<p>BC Hydro should:</p> <ul style="list-style-type: none">- Improve knowledge and studies on the effects of Rev 5 operations on bird abundance and diversity in order to determine the potential effects of Rev 6 operations.- Expand field programs to adequately describe existing conditions, habitat suitability and potential species effects as a result of the Rev 6 project – all aspects.- Conduct field programs to adequately describe current and potential use and identify species of concern, which includes species important to FN- Determine LSA based on habitat requirements of species present. <p>Rational:</p> <ul style="list-style-type: none">- There seems to be much uncertainty in the results, trends, and causes with respect to ongoing studies on bird abundance and diversity- Drawn down zones and tributary inlets on Revelstoke Reservoir likely provide critical habitat to bird species and should be included in the LSA.	<p>The surveys completed for the WUP and other programs included considerable effort within the Local Study Area (LSA) and data collected are sufficient to inform the EA. WUP studies implemented since 2008 have explored a number of topics related to birds. These include CLBMON 36 - investigating the effects of reservoir operations on nesting birds; CLBMON 39 - investigating the effects of reservoir operations on neotropical songbird populations during migration; CLBMON 40 - investigating the effects of reservoir operations on waterbirds, including habitats; and CLBMON 11B2 investigated the diversity of spring migrants and habitat use in relation revegetation and wildlife enhancement activities.</p> <p>Studies to date have focused on the Draw Down Zone (DDZ) of the Arrow Lakes Reservoir as the habitats found there are considered to be of greater use and importance to the habitat found in the Revelstoke Reservoir.</p>	Unsatisfactory	Discounting the impact of a 0.2 m increase in water levels in the reservoir should be supported by rationale, or at minimum a discussion of the potential impact. To do so, it is important to acknowledge the nature of use by wildlife in and around the project area, and identify specific sensitive areas and species. Identification of important habitats has been modeled, but there is no plan identified to validate the model or test for accuracy (asides from the bird surveys at the capacitor site).		Comment will be forwarded to application review
288	27-Apr-16	Robert Hutton	Secwepemc	Advisory Working Group	dAIR	Birds	ALL						<ul style="list-style-type: none">- Traditional Use and Knowledge- Biodiversity	Comments above	Concerns noted	Unsatisfactory	Further clarification requested on what action will occur based on the provided response.		Satisfactory
289	27-Apr-16	Robert Hutton	Secwepemc	Advisory Working Group	dAIR	Herptiles	Dam/ MC/RR						<ul style="list-style-type: none">- Federally and Provincially listed herptile species- Species of special interest to First Nations	<p>BC Hydro should:</p> <ul style="list-style-type: none">- Improve ongoing studies the effects of changes in water levels and reservoir operations on amphibians, particularly with respect to determinations of the biological significance of these changes.- Conduct biological inventory at capacitor station site to include herptile species. <p>Rational:</p> <ul style="list-style-type: none">- The biological significance of changes in water level and reservoir operations on amphibian abundance, mortality, and site occupancy is currently unknown. Such a circumstance makes it difficult to determine the significance of further changes/impacts.- Changes in water level fluctuations, duration, extent, timing, etc will potentially effect ecological communities (habitat) abundance and position within the LSA. A shift in ecological communities and functionality poses a potential threat to local populations.	<p>The effects of reservoir operations on amphibians is one of the questions being investigated for CLBMON-37. There are numerous management objectives that are part of the 10 year study including how reservoir operations affect herptile populations by monitoring abundance, diversity, distribution, productivity, and patterns of habitat use over time.</p> <p>The assessment of the effects at the capacitor station are based on the amount of area potentially affected and the suitability of the habitat to herptile species that occurs on the site. Breeding habitat for amphibians will not be affected by the construction of the capacitor station as none occurs on the BC Hydro property. Suitability for most reptile species is considered to be low to very low. This is due to the absence of habitat characteristics that define habitat quality for many species (e.g., talus, rock piles, large coarse woody debris, warm aspects).</p>	Unsatisfactory	While it is recognized that CLBMON-37 is in place to better understand reservoir oprations on herptile populations, this study is on-going and final results have not been completed to date. If there are additional studies that can support the interim information, then these should be pursued to fill information gaps.	<p>The effects of reservoir operations on amphibians is one of the questions being investigated for the 10 year CLBMON-37 study being completed under the Columbia Water Use Plan (WUP). CLBMON-37 has a number of management objectives that include how reservoir operations affect herptile populations by monitoring abundance, diversity, distribution, productivity, and patterns of habitat use over time.</p> <p>The assessment of the effects at the capacitor station are based on the amount of area potentially affected and the suitability of the habitat to herptile species that occurs on the site. Breeding habitat for amphibians will not be affected by the construction of the capacitor station as none occurs on the BC Hydro property. Suitability for most reptile species is considered to be low to very low. This is due to the absence of habitat characteristics that define habitat quality for many species (e.g., talus, rock piles, large coarse woody debris, warm aspects).</p>	Comment will be forwarded to application review
290	27-Apr-16	Robert Hutton	Secwepemc	Advisory Working Group	dAIR	Herptiles	ALL						<ul style="list-style-type: none">- Traditional Use and Knowledge- Biodiversity	See general comments for VC Candidates	Concerns noted	Unsatisfactory	Further clarification requested on what action will occur based on the provided response.		Satisfactory
291	27-Apr-16	Robert Hutton	Secwepemc	Advisory Working Group	dAIR	Mammals	ALL						<ul style="list-style-type: none">- Federally and Provincially listed mammal species- Ungulates- Fur-bearers- Species of special interest to First Nations	<p>BC Hydro should:</p> <ul style="list-style-type: none">- Field programs should include wildlife and wildlife habitat inventories that would be used in assessing potential project-specific effects on species from various taxa. Inventories should include species of special concern to First Nations. <p>Rational:</p> <ul style="list-style-type: none">- Relying on previously collected data not focused on project-specific outcomes, or multi-year programs not yet completed (such as Rev 5 monitoring works) is not deemed adequate.- Scope of assessments providing baseline information should reflect the project being assessed.- Potential for broad scale information gaps particularly with respect to biodiversity and species of special interest to First Nations.	<p>The surveys completed for the WUP and other programs included considerable effort within the Local Study Area (LSA) and data collected are sufficient to inform the EA. Results of multi-year monitoring programs are necessary to assess wildlife and vegetation responses to reservoir operation. Time-series data are needed, especially as the operating regime is not constant but varies from year to year depending on numerous factors. Data from the WUP monitoring programs are suitable and relevant to the REV6 assessment as they provide detail on the proposed Indicators of many Sub-components</p> <p>Part C will provide biodiversity and species of interest to FN information</p>	Unsatisfactory	A number of the WUP programs remain on-going or faced limitations due to operational, timing, and/or budget constraints and so many of the WUP program findings should be considered as preliminary.		Comment will be forwarded to application review

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292	27-Apr-16	Robert Hutton	Secwepemc	Advisory Working Group	dAIR	Mammals	ALL							- Traditional Use and Knowledge - Biodiversity	See general comments for VC Candidates	Concerns noted	Unsatisfactory	Further clarification requested on what action will occur based on the provided response.		Satisfactory
293	27-Apr-16	Robert Hutton	Secwepemc	Advisory Working Group	dAIR	All	ALL							General dAIR Comments - Where the proponent relies existing, or historical, reports or information to describe the existing environment from which an effects assessment is based, a review of existing information and gap analysis with respect to the proposed Rev6 project should be conducted and documented in the application submission. The scope of previous studies may not be appropriate for use on the proposed Rev6 project without supplementary studies or field verification.	The existing data were reviewed and field studies as well as modelling were initiated to address to data gaps. These included 3 field studies at the capacitor station site, the installation of water level loggers at selected sites in the MCR and the development of a new hydrological model. These studies were discussed with the FN , Core Committee and stakeholders. The existing data has been made available.	Unsatisfactory	It is acknowledged that there have been some additional field and modelling studies undertaken for the project; however, the Rev 6 specific field program remains very limited compared to other projects of this nature. The reliance on existing reports (including interim reports from the WUP program), should be supplementing the project specific field program, not forming the basis for the findings. There is too much risk inherent in this level of assumption.	The use of existing reports and information were used to inform the assessment as outlined in Section 3.3 of the dAIR. The existing data were reviewed and field studies as well as modelling were initiated to address to data gaps. These included 3 field studies at the capacitor station site, the installation of water level loggers at selected sites in the MCR and the development of a new hydrological model. These studies were discussed with the FN , Core Committee and stakeholders. The existing data has been made available.	Comment will be forwarded to application review	
294	27-Apr-16	Robert Hutton	Secwepemc	Advisory Working Group	dAIR	All	ALL							General dAIR Comments - The proponent should provide a description of the expected footprint resulting from all aspects of the project from pre-construction to various forecasted operational scenarios. Operational scenarios would include information on projected changes to water levels, fluctuations, duration and timing of events. - The proponent should consider other factors (e.g BCH projects elsewhere in the province) potentially affecting the operations of the Revelstoke Dam and associated reservoir(s) in the Columbia system.	information on operations will be provided in the EA and include system wide considerations	Satisfactory		An outline of operations is provided in Section 4.1 of the dAIR and information on operations will be provided in the EA and include system wide considerations, changes to water levels, fluctuations, duration and timing of events. Section 4.1 of the EA includes a description a map showing the maximum inundation and incremental flooding areas.	Satisfactory	
295	27-Apr-16	Robert Hutton	Secwepemc	Advisory Working Group	dAIR	All	ALL							General dAIR Comments The proponent should be conducting rigorous project-specific field programs to accurately describe the existing environment.	Rigorous field programs for many VCs are being conducted for the WUP studies - and these do describe the existing environment. Additional studies were added to understand the habitats and potential species occurrence where data was limited. The surveys completed for the WUP and other programs included considerable effort within the Local Study Area (LSA) and data collected are sufficient to inform the EA.	Unsatisfactory	It is acknowledged that there have been some additional field and modelling studies undertaken for the project; however, the Rev 6 specific field program remains very limited compared to other projects of this nature. The reliance on existing reports (including interim reports from the WUP program), should be supplementing the project specific field program, not forming the basis for the findings. There is too much risk inherent in this level of assumption.	The use of field studies and other information to assess baseline conditions is outlined in Section 3.0 of the dAIR. Rigorous field programs for many VCs are being conducted for the WUP studies - and these do describe the existing environment. Additional studies were added to understand the habitats and potential species occurrence where data was limited. The surveys completed for the WUP and other programs included considerable effort within the Local Study Area (LSA) and data collected are sufficient to inform the EA.	Comment will be forwarded to application review	
296	27-Apr-16	Robert Hutton	Secwepemc	Advisory Working Group	dAIR	All	ALL							General dAIR Comments The Environmental Assessment should include comprehensive review of potential impacts to all areas as a result of Rev6 operation. For example, upstream reservoir(s) and dam operational effects. Both direct and indirect effects to VC's should be considered.	The environmental assessment is focussed on the interactions between the Project and the VCs, including direct and indirect effects and effects related to operations. There will be no change to normal Revelstoke Reservoir operating range, and daily fluctuations would be similar for REV5 and REV 6.	Unsatisfactory	The original comment is intended to ensure that the extent of operational activities and their impacts on VC's is captured. The response speaks to normal and daily fluctuations in RR.	The spatial boundaries of the assessment are described in detail in Table 3 in Section 3.2 of the dAIR and include locations upstream and downstream of Revelstoke dam and the Transmission component near Trout Creek, west of Summerland. The environmental assessment is focussed on the interactions between the Project and the VCs, including direct and indirect effects and effects related to operations. There will be no change to normal Revelstoke Reservoir operating range, and daily fluctuations would be similar for REV5 and REV 6.	Satisfactory	
297	27-Apr-16	Robert Hutton	Secwepemc	Advisory Working Group	dAIR	All	ALL							General dAIR Comments The proponent should consider ecological critical thresholds in effects determinations.	Critical thresholds will be considered where information is available. Many WUP studies are attempting to measure how Reservoir operations affect many terrestrial species that occur within the draw down zone.	Satisfactory		Thresholds are discussed for each VC in the dAIR. Critical thresholds will be considered where information is available. Many WUP studies are attempting to measure how Reservoir operations affect many terrestrial species that occur within the draw down zone.	Satisfactory	

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298	27-Apr-16	Robert Hutton	Secwepemc	Advisory Working Group	dAIR	All	ALL							General dAIR Comments	Provide linkages between VCs and assess effects accordingly. All VCs are not mutually exclusive. E.g. Ecological communities provide habitats for flora and fauna. Changes to hydrology impact ecological community function, and so flora and fauna are also to be considered.	Ecosystem Health and Function for Biodiversity is a specific Sub-component of the Ecological Communities VC. This does consider the linkages between habitats available within the study areas and the occurrence of both flora and fauna. The assessment looks at potential changes to these communities via changes in inundation and erosion	Satisfactory		Linkages between VCs and assessed affects are mapped in Table 4 of Appendix A of the dAIR. Ecosystem Health and Function for Biodiversity is a specific Sub-component of the Ecological Communities VC. This does consider the linkages between habitats available within the study areas and the occurrence of both flora and fauna. The assessment looks at potential changes to these communities via changes in inundation and erosion	Satisfactory
299	27-Apr-16	Robert Hutton	Secwepemc	Advisory Working Group	dAIR	All	ALL							General dAIR Comments	The current process for selecting VCs and assessing cultural and environmental impacts is limiting and somewhat narrow in scope given the extent of existing impacts resulting from BC Hydro infrastructure and operations in the Upper Columbia River	The environmental assessment is focussed on the interactions between the Project and the VCs. An assessment of the broader effects of development in the Upper Columbia is beyond the scope of this assessment.	Satisfactory		The environmental assessment is focussed on the interactions between the Project and the VCs. Cultural impacts will be discussed in Part C of the EA. An assessment of the broader effects of development in the Upper Columbia is beyond the scope of this assessment.	Satisfactory
300	27-Apr-16	Robert Hutton	Secwepemc	Advisory Working Group	dAIR	All	ALL							General dAIR Comments	A comprehensive cumulative effects assessment, including past, present, and reasonably foreseeable future development and impacts within a scientifically justifiable temporal and spatial scope, should be completed. This assessment should include both cultural and environmental impacts and should include all BC Hydro infrastructure and operations associated with Mica, Revelstoke, and Keenleyside Dams (i.e. access roads, transmission lines, capacitor stations and other associated infrastructure);	Cumulative effects assessment considers the effects of past, present, and reasonably foreseeable future development where there is an interaction with the residual effects of the Proposed project.	Unsatisfactory	It is unclear by this response whether VC's that are already beyond the critical threshold (e.g., caribou, salmon, sturgeon, etc.) because of existing conditions will be addressed through this process.	The scope of the cumulative affects assessment is outlined in Section 3.10 of the dAIR. Cumulative effects assessment considers the effects of past, present, and reasonably foreseeable future development where there is an interaction with the residual effects of the Proposed project.	Satisfactory
301	27-Apr-16	Robert Hutton	Secwepemc	Advisory Working Group	dAIR	All	ALL							General dAIR Comments	Identification of baseline conditions should include characterization of conditions at (at least) 3 points in time, including pre-dam, pre-Rev 5, and pre-Rev 6. Temporal trends should be developed (estimated) for each VC to better understand the extent of past change and context of Rev 6 impacts. This analysis is necessary to adequately determine the significance and risk of further impacts;	Existing conditions describe as applicable historical conditions and past change for many of the VCs, but in some cases is limited by the data available to describe historic conditions.	Unsatisfactory	Because of the level of uncertainty and data limitations, scope should be broadened as opposed to narrowed in order to approach the assessment of impacts with an abundance of precaution.	Temporal boundaries of the assessment are detailed in Table 3 of Section 3.2 of the dAIR. Existing conditions describe as applicable historical conditions and past change for many of the VCs, but in some cases is limited by the data available to describe historic conditions.	Satisfactory
302	27-Apr-16	Robert Hutton	Secwepemc	Advisory Working Group	dAIR	All	ALL							General dAIR Comments	Robust metrics need to be used, and in some cases developed, for each of the VCs in order to understand the extent of change and potential impacts. This should be based on scientific literature and will ensure transparency and unbiased determinations. Much emphasis is currently placed on professional judgment which, in our opinion, does not constitute scientific evidence of a significance impact or lack thereof.	The evaluation of the VC, indicators, and methods for review are based scientific literature and the findings of previous studies and monitoring programs, as well as the experience and expertise of qualified professionals.	Satisfactory			Satisfactory
303	27-Apr-16	Robert Hutton	Secwepemc	Advisory Working Group	dAIR	All	ALL							General dAIR Comments	Significance thresholds should be developed for each VC, with consideration of past changes, current conditions, and the risk of further change. Risk assessments will be an important prerequisite for the determination of significance thresholds. Aboriginal perspectives on significance thresholds and acceptable risks should be considered and incorporated	Significance criteria have been presented in the AIR and described in greater detail in the draft Application. Aboriginal perspectives on significance criteria will be considered if provided.	Satisfactory		Agreed. The determination of significance is described in the AIR and described in greater detail in the draft Application. Aboriginal perspectives on significance criteria will be considered if provided.	Satisfactory
304	27-Apr-16	Robert Hutton	Secwepemc	Advisory Working Group	dAIR	All	ALL							General dAIR Comments	Determination of the reliability of information used in these assessments is paramount. We have repeatedly requested a comprehensive gap analysis of the information used in these assessments and determinations. Recognizing that BC Hydro has recently provided a comprehensive list of information and study results, there has not yet been any determination of the reliability of this information and/or critical gaps in this information.	The draft Application addresses the data sources used in the assessment and the suitability and quality of the information as a basis for conducting the assessment. Field work performed to address data gaps as been described.	Unsatisfactory	Details surrounding the reliability or limitations of the data sources have not been provided to date. This information is important in understanding whether the additional field work adequately addresses the data gaps.	The reliability of information used in the assessment is discussed in the Existing Conditions as set out in Section 3.3 of the dAIR. The draft Application addresses the data sources used in the assessment and the suitability and quality of the information as a basis for conducting the assessment. Field work performed to address data gaps as been described.	Comment will be forwarded to application review

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305	27-Apr-16	Robert Hutton	Secwepemc	Advisory Working Group	dAIR	All	ALL							General dAIR Comments Ecosystem Health and Function should be a VC, rather than just a sub-component of aquatic and terrestrial VCs. It is important to consider both top-down and bottom-up pathways, for example: o Ecosystem Health and Function as a VC considers all aquatic and terrestrial impacts on the ecosystem as a whole; and o Ecosystem Health and Function as a sub-component considers ecosystem impacts on aquatic and terrestrial resources.	Ecosystem health and function is a sub-component of Ecological Communities. The sub-component does consider the effects to the other VCs - including plants, herptiles, birds, and mammals.	Satisfactory		Ecosystem Health and Function for Biodiversity is a specific sub-component of the Ecological Communities VC as set out in Section 4.3 of the dAIR and listed in Table 2 of Section 3.1 of the dAIR. The sub-component does consider the effects to the other VCs - including plants, herptiles, birds, and mammals.	Satisfactory
306	27-Apr-16	Robert Hutton	Secwepemc	Advisory Working Group	dAIR	All	ALL							General dAIR Comments Biodiversity should also be a VC based on the same rationale provided above.	Ecosystem Health and Function for Biodiversity is a specific sub-component of the Ecological Communities VC. This does consider the linkages between habitats available within the study areas and the occurrence of both flora and fauna	Satisfactory		Ecosystem Health and Function for Biodiversity is a specific sub-component of the Ecological Communities VC as set out in Section 4.3 of the dAIR and listed in Table 2 of Section 3.1 of the dAIR. This does consider the linkages between habitats available within the study areas and the occurrence of both flora and fauna	Satisfactory
307	27-Apr-16	Robert Hutton	Secwepemc	Advisory Working Group	dAIR	All	ALL							General dAIR Comments Cultural Heritage (i.e. Traditional Land and Resource Use) should be a stand-alone VC. Sub-components to this VC would include culturally important resources (e.g. water, fish, wildlife, plants...etc.), land use (e.g. hunting, fishing, gathering, transportation, recreation, cultural sites, village sites...etc.), and archeology. Cultural Heritage and Archeology should include landforms and landscapes not covered under the BC Cultural Heritage Act. Intangible cultural heritage values should also be included, such as place names and transmission of knowledge. Past, present and future cultural heritage impacts should be assessed. Socio-community and socio-economic effects should also be a key focus and sub-component of this assessment. This assessment should include compilation of indigenous knowledge related to land and resources uses and be solely based on aboriginal perspectives of the effects of BC Hydro infrastructure and operations. The use of information from previous studies as a baseline reference is not supported. We will provide a cultural heritage assessment for the Rev 6 project. Further discussions with BC Hydro will be required to address this issue.	The Heritage and Archaeology candidate VC has been split into 'First Nations Cultural Heritage' and 'Historical and Archaeological Heritage'. 'First Nations Cultural Heritage' section will be assessed by First Nations in Part C of the Application. 'First Nations Cultural Heritage' could include the following: landforms; intangible heritage sites; traditional use & knowledge. Socio-community and socio-economic effects assessment may be included in Part C of the Application.	Unsatisfactory	While many of the components can be discussed within Part C, it is important to understand that there is a considerably more information that must be gathered to effectively conduct a cultural heritage assessment for this project.	As set out in Table 2 of Section 3.1 of the dAIR, the Heritage and Archaeology candidate VC has been split into 'First Nations Cultural Heritage' and 'Historical and Archaeological Heritage'. 'First Nations Cultural Heritage' section will be assessed by First Nations in Part C of the Application. 'First Nations Cultural Heritage' could include the following: landforms; intangible heritage sites; traditional use & knowledge. Socio-community and socio-economic effects assessment may be included in Part C of the Application.	Satisfactory
308	27-Apr-16	Robert Hutton	Secwepemc	Advisory Working Group	dAIR	All	ALL							General dAIR Comments Restoration of Salmon to the headwaters of the Columbia River system should be included in the fisheries components of the VC and EIA documents, including an assessment of the potential impacts on Salmon as well as identification of an approach to work with First Nations to restore fish passage at BC Hydro dams.	Revelstoke Unit 6 project activities and operations will not preclude the ongoing potential for future fish passage or fish resource use of concern to First Nations. The Canadian Columbia River Intertribal Fisheries Commission (CCRIFC) has proposed the formation of a multiagency committee to start investigating the feasibility of salmon restoration in the Columbia. BC Hydro has agreed to participate in such a committee should it proceed	Satisfactory		This interest is acknowledged; however, anadromous salmon are not included in the scope of the EA. Revelstoke Unit 6 project activities and operations will not preclude the ongoing potential for future fish passage or fish resource use of concern to First Nations. BC Hydro has agreed to participate in the Canadian Columbia River Intertribal Fisheries Commission (CCRIFC) multiagency committee to start investigating the feasibility of salmon restoration in the Columbia should it proceed. A venue for discussing salmon and other broader issues will be through BCH/First Nations Relationships Agreements	Satisfactory
309	25-Apr-16	Nancy Bonneau	Westbank First Nation	Advisory Working Group	dAIR	Plants								Baseline Generating Station: "provincially Blue-listed moss grass (Coleanthus subtilis) discovered in 2014 in MCR". (2015 November 24) "Two species at risk known present: 1) Western toad (Anaxyrus boreas) provincially Blue-listed, SARA listed as Special Concern. Impacts from inundation of breeding sites notes. 2) Western painted turtle (Chrysemys picta) provincially Blue-listed, SARA-listed as Special Concern.. These cannot be devalued and are of concern to Westbank First Nation.	The assessment considers the potential effects to western toad and painted turtle in the Herptile VC section (Section 4.5) and moss grass is discussed in Section 4.4 (Plants).			Western Toad, Painted Turtle, and Moss Grass are listed in the dAIR, Table 2 in Section 3.1.	Satisfactory

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310	25-Apr-16	Nancy Bonneau	Westbank First Nation	Advisory Working Group	dAIR	Birds								"Baseline – Generating Station: overall (between 2008 and 2014), 161 nests (of 32 species) failed as a direct result of reservoir operations. Reservoir levels may influence stopover habitat quality." (2015 November 24) This is in reference to migratory birds and is a concern to Westbank First Nation. Very concerning to Westbank First Nation to lose so many nests and species.	Concerns Noted - Section 4.6 (Birds) reviews the additional effect a sixth unit may have on nesting birds			Concerns Noted - Section 4.6 (Birds) reviews the additional effect a sixth unit may have on nesting birds. Refer to Section 4.6 of the dAIR.	Satisfactory	
311	25-Apr-16	Nancy Bonneau	Westbank First Nation	Advisory Working Group	dAIR	Mammals								"Baseline – Generating Station: caribou currently located south and west of Revelstoke Dam adjacent to Westside Road. Critical caribou habitat identified on east side of Revelstoke Reach and around Revelstoke. Elk, moose, deer, grizzly bear documented using drawdown zone of Arrow Lakes Reservoir. Ungulate Winter Range for caribou and mule deer.	Noted. Consideration of these species are included in the baseline.			Consideration of these species are included in the baseline. Refer to Section 4.7 of the dAIR.	Satisfactory	
312	25-Apr-16	Nancy Bonneau	Westbank First Nation	Advisory Working Group	dAIR	Mammals								Located within moose Resource Management Zone designated by Okanagan – Shuswap LRMP. Ungulate Winter Range for moose and deer."	Noted - the Mammal VC Section discusses the UWR that overlaps the proposed site for the capacitor station			Noted - the Mammal VC Section discusses the UWR that overlaps the proposed site for the capacitor station. Ungulate Winter Range is considered in Table 2 Section 3.1 of the dAIR.	Satisfactory	
313	25-Apr-16	Nancy Bonneau	Westbank First Nation	Advisory Working Group	dAIR	Mammals								What are the biological effects of the TDG? How much TDG is produced?	Information on Total Dissolved Gas is be provided in the EA.			Total Gas Pressure, a measure of TDG, is an indicator included in Table 2 of 3.1 of the dAIR. Information on Total Dissolved Gas is be provided in Section 4.2 Fish and Fish Habitat of the EA.	Satisfactory	
314	25-Apr-16	Nancy Bonneau	Westbank First Nation	Advisory Working Group	dAIR	Mammals								Primary Production: a definition is needed for Ecological Productivity. There hasn't been any discussion on effects of the possible construction of additional warehouse or expansion of existing warehouse, parking, contractors' offices, and laydown areas. The construction of any or all of these, plus additional buildings and roads not identified, may have an effect upon plants, herptiles, birds, mammals, such as displacement, ungulate winter range diffusion. Timing of construction, inundation of areas, could displace wildlife during breeding season or during calving season. Changes to wildlife habitat is a concern. Mortality crushing of birds eggs, herptiles and small mammals recording was limited to foot print. How many? What types of eggs?	"Ecological Productivity" is not included in the mammals assessment. A discussion of potential effects of construction at both the dam site and capacitor station is provided for each terrestrial VC chapter.			Sections 4.3 to 4.7	Satisfactory	
315	25-Apr-16	Nancy Bonneau	Westbank First Nation	Advisory Working Group	dAIR	Fish								Salmon restoration "What can REV6 do that would enhance and help Salmon Restoration?" Design or operation considerations to enhance salmon restoration. Looking for options, conceptual level study, create legacy document from REV6 starting point for feasibility work. Demonstrate the interaction of REV6. Have study before January 2016 to present to Core Committee. Need to understand entrainment, knowing impacts on entrainment from REV5 to REV6 impacts are not fully understood. Spawning success is also needed for consideration. Impacts of REV6 to spawning habitat. (in mid-Columbia reach: Hydraulic model, depths and velocity) Kinbasket & Revelstoke – "low level of nutrients under 50 mg/c/m2 / day" Karen Bray (November 2015). This draft AIR doesn't give any summary of the overall process and methodologies used to identify and assess the potential effects of the proposed project.	BC Hydro engaged R2 to assess any opportunities for the Project to aid in any potential future fish passage at Revelstoke Dam. The report is complete and available. The Fish Entrainment Strategy is considering entrainment at the facility as a whole. Habitat and productivity are considered in the assessment. Section 3 of the AIR covers assessment methodology and Table 4 in the Valued Components document provides a summary of intended methods for evaluating the VCs.			BC Hydro engaged R2 to assess any opportunities for the Project to aid in any potential future fish passage at Revelstoke Dam. The report is complete and available. The Fish Entrainment Strategy is considering entrainment at the facility as a whole. Habitat and productivity are considered in the assessment. Section 3 of the dAIR covers assessment methodology and Table 4 in the Valued Components document provides a summary of intended methods for evaluating the VCs.	Satisfactory	

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316	25-Apr-16	Nancy Bonneau	Westbank First Nation	Advisory Working Group	dAIR	Cumulative Effects Assessment									1) There is a need to incorporate additional intangible Value Components such as, cultural, governance, heritage and some aspects of archaeology (as defined by Syilx). 2) "Residual effects of other past, present or reasonably foreseeable projects and activities", based upon this definition Salmon should be considered as a Value Component. 3) There is also a benthic affect between the Salmon and the sturgeon, as discussed in the April 5, 2016 meeting, Sturgeon feed off of Salmon, Sturgeon numbers are stagnant and this can be related to their insufficient supply of salmon as a food source. Sturgeon numbers are a concern to Syilx Nation. 4) Baseline used for determining REV6 affects are the REV5 studies and some of those studies are still incomplete. For example, Plagec is ongoing until 2019. 5) The timeframe for gathering data needs to be disclosed, when is the field work happening for baseline studies? Time of year? Duration? 6) Value, baseline description, best practices, residual, and significance all need clear definitions. 7) A definition of Socioeconomics, from Indigenous Perspective, the ability to continue to practice traditional subsistence activities that are	1) The Heritage and Archaeology candidate VC has been split into 'First Nations Cultural Heritage' and 'Historical and Archaeological Heritage'. First Nations Cultural Heritage, including intangible value components, will be assessed by First Nations in Part C of the Application. However, if there are any Intangible Value Components identified in Section C that include additional information related to historical or archaeological resources this will be incorporated or referenced in the Historical or Archaeological Heritage Resource Section. 2) There are no potential interactions between the Project and salmon, and therefore they have not been selected as a VC. 3) This interest is acknowledged; however, anadromous salmon are not included in the scope of the EA. Revelstoke Unit 6 project activities and operations will not preclude the ongoing potential for future fish passage or fish resource use of concern to First Nations. The Canadian					Satisfactory
317	25-Apr-16	Nancy Bonneau	Westbank First Nation	Advisory Working Group	dAIR	REV5 Project, Environmental Assessment Certificate Application		Page 9, 10						Under Effects on Reservoir Water Velocities	"Although there would be a greater discharge capacity at Revelstoke Dam with the five units, the width of the withdrawal area would be widened to accommodate the unit and, consequently, velocities would essentially remain unchanged". Has this been tested and shown to be accurate?	A comparison of intake velocities will be provided in the assessment.		A comparison of intake velocities will be provided in the assessment. See Section 4.1 in the dAIR.	Satisfactory		
318	25-Apr-16	Nancy Bonneau	Westbank First Nation	Advisory Working Group	dAIR	REV5 Project, Environmental Assessment Certificate Application		Page 15						Effects on Water Velocity	"Between Revelstoke Dam and the confluence with the Jordan River (6 KM downstream), velocity is far more responsive to changes in discharge due to the reach being relatively narrow and confined. The Jordan-llellewaet reach (6 – 12 KM downstream) is wider and less confined, which leads to a lower sensitivity of velocity to discharge."Has this been tested and shown to be accurate? And also, this statement does not mention the additional volume that will be moving at an increased velocity. This does not state what the velocity is at 6 KM downstream.	Agree, generally, discharge increases more quickly in a confined channel than a wide channel with a floodplain because the cross sectional area increases more slowly in a confined channel. Hydrological characteristics including changes to discharge and velocity will be included in the assessment.		Section 4.1.2 Hydrology	Satisfactory		
319	25-Apr-16	Nancy Bonneau	Westbank First Nation	Advisory Working Group	dAIR	REV5 Project, Environmental Assessment Certificate Application		Page 35 and 36						Impacts on Bank Stability	adding a fifth unit at Revelstoke Dam would increase the hydraulic forces acting on the river bank, which could increase the potential for erosion of the river banks, particularly if they are already in an unstable or failing condition. This could result in the increased removal of slumped, fine grained sediments that have accumulated at the base of unstable or over-steepened river banks. In addition, an increase in water level fluctuations by up to 0.5 m would increase the height of the bank that is exposed to potential erosion. This effect would be greatest upstream of the Highway Bridge. The effect would decrease with distance downstream, and would be negligible 18 KM downstream of the dam (near Begbie Creek). Increased water level fluctuations and increased shear stresses on the banks would tend to increase rates of bank erosion at existing unstable bank sections."	The EA will discuss changes in bank erosion associated with REV 6		Refer to Sections 4.1.2 (Hydrology) and 4.1.3 (Fluvial Geomorphology) of the dAIR.	Satisfactory		

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320	25-Apr-16	Nancy Bonneau	Westbank First Nation	Advisory Working Group	dAIR	REV5 Project, Environmental Assessment Certificate Application		Page 38							"At the Revelstoke 5 Technical and Core Committee meetings, it was recommended that a pilot bank protection program be implemented, which could be coordinated with the revegetation program and physical works being undertaken as part of the Columbia River Water Use Plan." Has this happened? What are the results of this protection program? Success or fail?	See CLBWORKS 35			CLBWORKS 35 was initiated to develop and implement a bank erosion mitigation and monitoring program to identify and address current and future shoreline erosion concerns attributable to the Revelstoke Unit 5 project downstream of Revelstoke Dam between the TransCanada Highway Bridge and Begbie Creek. Erosion protection (bioengineering) was installed in 2010, with monitoring implemented in 2011, 2012 2013 and 2015. This project is now complete. The bioengineering treatments did not perform to effectively. Based on this experience, it has been recommended that a modified approach to bioengineering, including more robust lower bank features (such as a cobble or riprap toe), would be better able to remain stable in the characteristic flow velocity and water level environment of these sites.	Satisfactory
321	25-Apr-16	Nancy Bonneau	Westbank First Nation	Advisory Working Group, T TTG 2.10	dAIR	REV5 Project, Environmental Assessment Certificate Application		Page 39						Residual Impacts	"The monitoring and mitigation program is expected to identify and address current and future shoreline erosion concerns down stream of Revelstoke Dam. Sites identified as 'high priority' would be subject to a pilot monitoring and mitigation project to test the effectiveness of various bank protection measures. ... some residual impacts are expected to occur" What are the results of these monitoring and mitigation programs? This would have further impacts if Rev6 generator is operational. Who determined the 'high priority' sites? There were 57 commitments made in REV5; Were they met?	See CLBWORKS 33, 35 and 36 and updated REV 5 commitments table			CLBWORKS 33 is a boat launch project and is not related to shoreline erosion, it has been included in error. CLBWORKS 35 was initiated to develop and implement a bank erosion mitigation and monitoring program to identify and address current and future shoreline erosion concerns attributable to the Revelstoke Unit 5 project downstream of Revelstoke Dam between the TransCanada Highway Bridge and Begbie Creek. Erosion protection (bioengineering) was installed in 2010, with monitoring implemented in 2011, 2012 2013 and 2015. This project is now complete. The bioengineering treatments did not perform to effectively. Based on this experience, it has been recommended that a modified approach to bioengineering, including more robust lower bank features (such as a cobble or riprap toe), would be better able to remain stable in the characteristic flow velocity and water level environment of these sites.	Satisfactory
322	25-Apr-16	Nancy Bonneau	Westbank First Nation	Advisory Working Group	dAIR	Traditional Use Studies									Syl/x, including Westbank First Nation were not included within the REV5 studies.	Consultation on REV5 was carried out through the Okanagan Nation Alliance on behalf of its member communities. The Okanagan Nation Alliance provided an Aboriginal Interest and Use study related to the Project.				Satisfactory

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323	25-Apr-16	Nancy Bonneau	Westbank First Nation	Advisory Working Group	dAIR	Archaeology		Page 34						CLBMON #50	Heritage Monitoring Wind and Wave Erosion Year 3 report Millennia Research Limited (March 21, 2012) Reported that archaeology sites were affected by the Rev5 Wind and Wave action from the Revelstoke 5 generator installation. One of the two locations studied during the field research included the Revelstoke Reach (mid-Columbia River) between Revelstoke and Shelter Bay, BC. Archaeology Site ElQm-4, "Field observations suggest that the bank bordering the southern edge of the ElQm-4 monitoring station has eroded between Years 1 and 3. . . . Erosion and "islands" of original sediment isolated from the current bank edge were recorded during Year 1 and scan data indicates these are continuing to erode." The field monitoring at this archaeology site included 50 spots of those 50 spots 28 were relocated in their original location. Also, "eight of the recorded monitoring points moved, between 10 cm and 227 cm with a median of 43 cm."	Comment acknowledged. The CLBMON-50 Wind and Wave Erosion study results for site ElQm-4 will be used in the effects assessment modelling for REV6.			Comment acknowledged. The CLBMON-50 Wind and Wave Erosion study results for site ElQm-4 will be used in the effects assessment modelling for REV6 as listed in Section 16 of the dAIR. See also Section 7 (Heritage Effects Assessment) of the dAIR.	Satisfactory
324	25-Apr-16	Nancy Bonneau	Westbank First Nation	Advisory Working Group	dAIR	Archaeology		Page 38						CLBMON #50	Archaeology Site ElQn-10, this site is on the west side of Revelstoke Reach at the mouth of Begbie Creek. "Choquette (2008) identified the site as being at potential risk of increased erosion from the Revelstoke Unit 5 project". Twenty six spots were identified as areas for monitoring at this archaeology site. Data from the monitoring program was compared to 2007 orthophoto and this shows erosion occurring.	Comment acknowledged. The CLBMON-50 Wind and Wave Erosion study results for site ElQm-4 will be used in the effects assessment modelling for REV6.			Comment acknowledged. The CLBMON-50 Wind and Wave Erosion study results for site ElQm-4 will be used in the effects assessment modelling for REV6 as listed in Section 16 of the dAIR. See also Section 7 (Heritage Effects Assessment) of the dAIR.	Satisfactory
325	25-Apr-16	Nancy Bonneau	Westbank First Nation	Advisory Working Group	dAIR	Archaeology		Page 44						CLBMON #50	Archaeology Site ElQn-12, the report on the field monitoring stated, "it appears in general that deposits at the norther end of the monitoring station are eroding and deposits are accreting toward its southern end." Other indications that erosion is occurring included in this report states, "Two of the monitoring points which could not be relocated were situated in areas of accretion and it is possible they are present but buried; one is in an area of erosion and the other in a small erosion/accretion transition. All of the items moved down slope between 14 cm and 129 cm, with a median of 37 cm, and generally moved southward, although two of the four moved to the northwest."	Comment acknowledged. The CLBMON-50 Wind and Wave Erosion study results for site ElQm-4 will be used in the effects assessment modelling for REV6.			Comment acknowledged. The CLBMON-50 Wind and Wave Erosion study results for site ElQm-4 will be used in the effects assessment modelling for REV6 as listed in Section 16 of the dAIR. See also Section 7 (Heritage Effects Assessment) of the dAIR.	Satisfactory
326	25-Apr-16	Nancy Bonneau	Westbank First Nation	Advisory Working Group	dAIR	Archaeology								CLBMON #50	Archaeology Site DIQm-15, 2013 site visit by Ursus, a human mandible was located. Again in 2014 another portion of ancestral remains were located at this same archaeology site. These are determined to be First Nation ancestry and are of very high concern to the Sylik people and are taken very seriously, the erosion caused from Revelstoke Dam has been the determining factor of First Nation ancestral remains being washed out from their final resting place. "The extra capacity provided by the sixth generating unit would allow the existing water supply to be used differently by releasing up to 20 per cent more water with all six units operating for short periods of time during high demand periods". https://www.bchydro.com/content/projects . (accessed April 25, 2016) This extra 20 percent increase in water release will have a 20 per cent increase in erosion rates on archaeology sites and vegetation downstream from the dam.	Comment acknowledged. We are currently waiting for hydrological and erosion modelling results for areas south of Shelter Bay. When these are received the Project team will revisit the spatial boundary and revise if appropriate. There are ongoing discussions in regards to management of this site through the Arrow Reservoir Archaeology Program Technical Working Group.			Section 7, Heritage Effects Assessment	Satisfactory

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327	25-Apr-16	Nancy Bonneau	Westbank First Nation	Advisory Working Group	dAIR	Capacitor Station								<p>- There hasn't been archaeological reports provided to Okanagan Nation Alliance, Westbank First Nation or Okanagan Indian Band.</p> <p>- There hasn't been wildlife studies / reports provided to Okanagan Nation Alliance, Westbank First Nation or Okanagan Indian Band.</p> <p>- There hasn't been vegetation studies / reports provided to Okanagan Nation Alliance, Westbank First Nation or Okanagan Indian Band.</p> <p>- At the station it was reported that, "habitat loss for young coniferous forest nesting and ground nesting migratory birds. Is within mule deer and moose winter range. Mortality notes were limited to foot print area and roads, and during nesting season." What about during calving season? What about Bitter root studies?</p> <p>- Dam discharge: in terms of times: "one hour per day". What does that equate to in volume? Weight? Total velocity over one hour?</p>	<p>Available background archaeological site information was provided to attendees from Okanagan Nation Alliance, Westbank First Nation, and Okanagan Indian Band on April 30, 2015 at the REV6 Archaeology Workshop. Additional background archaeological reports were provided to Okanagan Nation Alliance on February 25, 2016. Archaeology reports are also available on the REV6 Sharepoint site created for individual First Nations.</p> <p>Information pertaining to vegetation and wildlife will be provided. A list of all observed plants at the Capacitor station site is included in the EA. Calving habitat is not limited in this area; however if calving is occurring, mitigation in the Environmental Management Plan will be considered.</p> <p>Dam discharge is commonly represented as cubic metres per second or cubic feet per second. More details will be provided in the Application.</p>			Information pertaining to ungulates is Provided in Section 4.7 Mammals. Information pertaining to dam discharge is provided in Sectin 4.1.2 Hydrology	Satisfactory
328	25-Apr-16	Nancy Bonneau	Westbank First Nation	Advisory Working Group, T TTG 2.10	dAIR	BC Hydro's Action Items from Core Committee meetings:							BC Hydro's Action Items from Core Committee meetings:	<p>In meeting # 2 BC Hydro's Action Item was to Provide a summary of the status of REV5 and other previous process commitments, but this hasn't happened, the BC Hydro status as of June 8, 2015 states this is ongoing.</p> <p>In Meeting # 2 BC Hydro's Action Item was to examine REV5 predicted vs. actual effects as part of the development of the REV6 assessments, as of April 29, 2015 this is stated as ongoing. No updates were given to Sylix on this action item. The base line used for REV6 is the information from the REV5 studies, so if this information isn't provided, how can Sylix, the Environmental Assessment Office or the general public understand effects of REV6?</p> <p>In meeting #3 BC Hydro's Action Item was to circulate the work plan for the REV6 Socio-economic assessment for input from the Community, Subcommittee. The status as of June 8, 2015 was ongoing. However, Sylix didn't receive this work plan, BC Hydro hired Golder Associates, to conduct a preliminary study on Sylix Socio-economics without Sylix input, guidance or direction. The information that was presented by Golder associates, on February 25, 2016, was inaccurate, they used only web based information and didn't attempt to contact Westbank First Nation. Okanagan</p>	<p>BC Hydro has now completed an update summary of the status of Rev 5 commitments and predicted vs actual effects will be provided. The February 25th 2016 Golder meeting provided an overview of the Socio-economic work plan and sought input into the proposed methodology for Socio-economic effects assessment from the Sylix. Capacity funding was made available to Schedule C Nations to undertake related socio-economic studies/assessments.</p>				Satisfactory
329	26-Apr-16	Dawn Machin	Okanagan Indian Band	Advisory Working Group	dAIR									<p>Impacts to future restoration of salmon (throughout lifecycles) needs to be addressed? Also, ecosystem or holistic planning doesn't seem to be addressed.</p>	<p>Revelstoke Unit 6 project activities and operations will not preclude the ongoing potential for future fish passage or fish resource use of concern to First Nations. The Canadian Columbia River Intertribal Fisheries Commission (CCRIFC) has proposed the formation of a multiagency committee to start investigating the feasibility of salmon restoration in the Columbia. BC Hydro has agreed to participate in such a committee should it proceed.</p> <p>Ecosystem Health will be considered in the Application.</p>	Not satisfactory	<p>ALL COMMENTS BELOW ARE CONSIDERED TO BE "ROUND 2" COMMENTS ON THE DAIR DOCUMENT. OKIB EXPECTS THE DAIR TO BE REVISED BASED ON THESE COMMENTS. IF CHANGE IS NOT AGREED TO BY BC HYDRO, A FULSOME EXPLANATION AND RESPONSE IN THIS TABLE IS REQUIRED. <u>IN ADDITION, OKIB EXPECTS THE EAO TO CONSULT DIRECTLY WITH OKIB ON ALL OUTSTANDING ISSUES - AS DEFINED BY OUR NATION HEREIN - PRIOR TO ISSUING A FINAL AIR. ACCEPTANCE OF THE PROPONENT'S RATIONALE WITHOUT CONSULTATION WITH OKIB IS NOT MEANINGFUL CONSULTATION.</u></p> <p>Restoration of salmon to the Columbia is a matter of utmost importance to OKIB. Inasumuch, cumulative effects of the proposed project must be assessed and whole-system ecosystem planning and stewardship must be adopted in order to achieve restoration goals. See Round 2 comments in lines 153, 154, 155. <u>Until these comments are addressed, this comment will remain unaddressed.</u></p>	<p>Salmon are not present in the regional study area of the Columbia River, therefore salmon restoration is beyond the scope of this assessment. BC Hydro recognizes the importance of this issue in the Columbia River and refers the OKIB to the CCRIFC as previously defined, and in which BC Hydro is committed to participate in and work with OKIB and other interested stakeholders to find a solution.</p> <p>A venue for discussion of salmon and other broader issues will be through BCH/First Nations Relationship Agreements.</p>	Satisfactory

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330	26-Apr-16	Dawn Machin	Okanagan Indian Band	Advisory Working Group	dAIR										Impacts of invasive species (potentially introduced through use of recreation areas) on the environment?	Introduction of invasive species through construction activities will be addressed in the Environmental Management Plan.	Not satisfactory	Invasive species are of concern in both the terrestrial and aquatic environments. As per this comment, OKIB is particularly concerned about invasive species introduced through potential increase in recreation use among other effect pathways. BCH does not address this concern adequately here or in the dAIR. <u>OKIB requires that the dAIR be revised to include explicit reference to consideration of potential introduction of invasive aquatic species in section 4.2 Fish and Fish Habitat, as well as in Section 13.0 Environmental Management Plan.</u>	Invasive species were considered in the Plant and Land and Resource Use Sections and are noted in Appendix A, Table 2 in the dAIR. Aquatic invasive species are included in Section 4.2 Fish and Fish Habitat and is included in the dAIR Section 13.0 Management Plans	Satisfactory
331	26-Apr-16	Dawn Machin	Okanagan Indian Band	Advisory Working Group	dAIR										Are there any issues with the TOR for the project?	The Application Information Requirements (essentially the TOR for the EA) is under review as part of the EA and consultative process	Satisfactory			Satisfactory
332	26-Apr-16	Dawn Machin	Okanagan Indian Band	Advisory Working Group	dAIR										Significant changes are determined by the proponent, so how do we ensure that our communities concerns are adequately addressed.	BC Hydro will continue to work with communities to understand and find appropriate ways to respond to community concerns.		BCHs response has not in any way addressed this comment. OKIB requests resources to be able to identify qualitative and quantitative thresholds for determining significance ourselves, and to be able to <u>do our own significance estimation and determination according to these self-identified thresholds. This request would be satisfied if a fulsome cumulative effects assessment were to be commissioned as requested in our cover letter.</u>	BCH has provided funding for First Nations to assess effects on their interests related to the REV 6 project. A venue for discussion of broader issues will be through BCH/First Nations Relationship Agreements.	Satisfactory
333	26-Apr-16	Fabian Alexis	Okanagan Indian Band	Advisory Working Group	dAIR									POTENTIAL EFFECTS FOR REV 6	In the AIR document we recommend change all references from ABORIGINAL TO INDIGENOUS	BC Hydro has requested direction from the EAO on this topic	Satisfactory		0	Satisfactory
334	26-Apr-16	Fabian Alexis	Okanagan Indian Band	Advisory Working Group	dAIR									POTENTIAL EFFECTS FOR REV 6	Bank stabilization and erosion is concern; How will BCH monitor, evaluate and modify weak, unstable areas?	Potential effects on erosion are being considered in the EA.	Not satisfactory	OKIBs concerns regarding bank stabilization are two fold: 1) ecological and 2) historical/archeological. To these ends, BCH has not adequately addressed OKIB concerns regarding erosion and bank stability. <u>OKIB requires that effects related to erosion and bank stabilization are addressed in both section 4.3 Ecological Communities VC and section 7.0 Heritage Effects VC, as well as in the Sediment and Erosion Control Plan, the Water Quality Monitoring Plan and the Environmental Monitoring Plan. Please ensure reference to this issue is explicit in each of these sections.</u>	Potential effects on erosion are being considered in the EA. Refer to Section 4.1 of the dAIR.	Satisfactory
335	26-Apr-16	Fabian Alexis	Okanagan Indian Band	Advisory Working Group	dAIR									POTENTIAL EFFECTS FOR REV 6	Failed re-vegetation on right bank of Columbia (Big Eddy Side Channel). What measures are being taken to continue to revegetate with high level flooding of reservoir?	Potential effects on vegetation are being considered in the EA.	Not satisfactory	OKIB is highlighting concerns attributable to ongoing, current effects of the existing Revelstoke Generating Units. Failure to revegetate the river bank adjacent to the Big Eddy Side Channel is an issue that requires immediate attention and solutions from BCH. OKIB requires that BCH provide information on the measures they are taking to immediately address this issue, and address the existing condition, mitigation measures, action plan and cumulative effects of this revegetation failure, and any lessons learned. Please add this information requirement to sections 4.3 Ecological communities, 4.4 plants, 6.0 social effects, 13 management plans, and Part C. (Note: OKIB would like a measure to be included in the Riparian and Sensitive Sites Management Plan and the Environmental Monitoring Plan).	The current effects of the existing Revelstoke Generating Units will be described in the existing conditions sections for each VC in the application. The focus of the environmental assessment is the potential changes in the VC's related to the installation and operation for the sixth unit. Potential effects on vegetation are being considered in the EA as outlined in Section 4.1 of the dAIR. Erosion related information is provided in the existing conditions section of Sections 4.3 Ecological Communities and in the Social Background Section of the Socio-economic Section 6.1	Satisfactory

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336	26-Apr-16	Fabian Alexis	Okanagan Indian Band	Advisory Working Group	dAIR									POTENTIAL EFFECTS FOR REV 6	What are all the valued components that the three Indigenous groups identified in the EA process?	A workshop was held on July 23/2014 to build an understanding of valued components (VCs) process from issue identification to selection of VCs for use in the Environmental Assessment (EA) and to provide a forum for direct input into the development of VCs. Issues, candidate VCs and VCs were identified with input from potentially affected FN. The process is described in greater depth in Appendix A of dAIR (VC selection document).	Not satisfactory	OKIB unfortunately were not able to attend the meetings. Upon review of Table 1 (Appendix A), we see that candidate VCs were identified by "Aboriginal groups" and other parties. OKIB have several concerns with the VCs. These are: (a) water quality was eliminated as a VC because only potential interaction is deemed to be through accidents effect pathways - <u>Add water quality as a VC</u> (rationale: water quality has the potential to be impacted via sedimentation resulting from water flow and river morphological changes. Description of sediment quality and dispersion will need to be characterized, and potentially feed into the fish and fish habitat assessment). (b) Dust and air impacts eliminated as effects can be fully mitigated by standard environmental management practices - <u>Add air quality as a VC</u> (rationale: if there is potential for interaction between the proposed Project activities and this valued component, please bring this forward as a VC then identify what the management practices are to demonstrate they can indeed eliminate effects).	Water Quality was assessed with respect to this Project. However, it was not identified as a stand alone VC as it formed an intermediate step along the identified pathway of effects. Water was not the end receptor, Fish were. As a result, water quality in the Revelstoke Reservoir was studied to support the Fish and Fish Habitat VC. A report was created on the Water Quality baseline and can be appended to the Application for reference. Air Quality was assessed for this Project. However, it was not identified as a VC because it forms an intermediate step along the pathway of identified Project-related effects. The end receptors, those VCs affected by potential changes in Air Quality include, herptiles, birds and community wellbeing VCs. A description of the potential changes in Air Quality as result of the Project, including potential dust and air eliminate effects .	Satisfactory
337	26-Apr-16	Fabian Alexis	Okanagan Indian Band	Advisory Working Group	dAIR									POTENTIAL EFFECTS FOR REV 6	Historically the salmon is not listed as a valued component and BCH has not mitigated for fish loss since Revelstoke Dam was constructed; how will loss of harvest, sustenance, and ceremonial and species restoration be mitigated?	This interest is acknowledged; however, anadromous salmon are not included in the scope of the EA. Revelstoke Unit 6 project activities and operations will not preclude the ongoing potential for future fish passage or fish resource use of concern to First Nations. The Canadian Columbia River Intertribal Fisheries Commission (CCRIFC) has proposed the formation of a multiagency committee to start investigating the feasibility of salmon restoration in the Columbia. BC Hydro has agreed to participate in such a committee should it proceed	Not satisfactory	OKIB is interested in questions related to the cumulative impacts of the proposed project. As such, it is imperative that the historical context is properly understood to demonstrate the seriousness of impact on OKIB's right to fish over time. The activities presented herein are <i>not</i> amenable to restoration activities and, indeed, may make it more difficult to conduct any desired restoration activities. OKIB acknowledges that BC Hydro is participating in the CCRIFC and requests that BC Hydro play an active role in this initiative and supports ONA to participate as well. OKIB requires BC Hydro make the following changes to the AIR: <u>(a) at the end of Section 4.2.1.2 Temporal boundaries (fish and fish habitat), add the following: "For cumulative effects assessment, boundaries will extend to pre-dam time period on Columbia River (i.e. pre-1938 when Bonneville dam was built).</u> <u>(b) an AIR requirement for identifying appropriate measures that address cumulative effects and support restoration activities (which may include some existing measures like resources for the CCRIFC).</u>	Salmon are not present in the regional study area of the Columbia River, therefore salmon restoration is beyond the scope of this assessment. BC Hydro recognizes the importance of this issue in the Columbia River and refers the OKIB to the CCRIFC as previously defined, and in which BC Hydro is committed to participate in and work with OKIB and other interested stakeholders to find a solution. The temporal boundaries of the cumulative effects assessments, where conducted, consider the effects of past projects and activities (Please see dAIR Section 3.10.)	Satisfactory
338	26-Apr-16	Fabian Alexis	Okanagan Indian Band	Advisory Working Group	dAIR									POTENTIAL EFFECTS FOR REV 6	Has BCH discussed with other hydro dams such as Waneta, Chief Joseph and Grand Coulee the issue of no fish passage at these facilities?? If not, this needs to be included in the Columbian water treaty talks and negotiations.	Revelstoke Unit 6 project activities and operations will not preclude future fish passage or fish resource use of concern to First Nations. The Canadian Columbia River Intertribal Fisheries Commission (CCRIFC) has proposed the formation of a multiagency committee to start investigating the feasibility of salmon restoration in the Columbia. BC Hydro has agreed to participate in such a committee should it proceed	Not satisfactory	OKIB agrees that the Revelstoke Unit 6 Project will not preclude future fish passage or fish resource use; however, the proposed activity results in effects operating in the same direction of effect as the previous BC Hydro impacts on these values (in other words, installation of Unit 6 is <i>not</i> a restoration activity). As such, consideration of these larger questions regarding cumulative effects and related stewardship initiatives are warranted and should be included in the EA Application and EA methodology. Please see above two requests. If these are addressed, this comment is also addressed.	Consideration of these larger questions regarding cumulative effects and related stewardship initiatives are warranted, however it is not appropriate to consider them as part of this environmental assessment process. In addition, see responses 337 and 329. A venue for discussion of broader issues will be through BCH/First Nations Relationship Agreements.	Satisfactory

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339	26-Apr-16	Fabian Alexis	Okanagan Indian Band	Advisory Working Group	dAIR								POTENTIAL EFFECTS FOR REV 6	Traditional use studies need to be conducted by First Nation groups not just for Revelstoke Reservoir but expand focus scope to Keenleyside Dam; Dam study area (52 kms) is too small area to focus on.	BC Hydro provides funding to First Nations for TUS. The First Nation communities define the areas to be studied based on their relationship to the land and resource use.	Not satisfactory	OKIB was not contacted by BC Hydro regarding funding for a TUS. As stated in our original comment OKIB is very interested in undertaking a TUS. As our comments note, above, our interest is in regional and cumulative effects on the Columbia as it relates to Aboriginal rights. <u>OKIB requests that funding be commensurate with our interest in conducting a regional cumulative effects assessment to include a temporal scope to pre -1938 when the Upper Columbia River was home to salmon. We expect this project would not be required for every small EA, but would be something the federal and provincial governments would be interested in supporting. This is our desired future and BC Hydro's proposal does not support OKIB in achieving this.</u>	The capacity funding provided to OKIB includes funding for TUS studies that were identified by OKIB.	Satisfactory	
340	26-Apr-16	Fabian Alexis	Okanagan Indian Band	Advisory Working Group	dAIR								POTENTIAL EFFECTS FOR REV 6	Assessment of current and future fish habitat for fish is not clearly defined and determined. Every situation is done through modelling; for example during peak discharge for Rev 6 plus WL will this degrade/scour out sturgeon and resident fish spawning?	Assessment of maximum discharge effects on downstream fish and fish habitat is included in the VC.	Not satisfactory	Section 4.2 (and associated appendices) does not specifically include conducting studies on the potential ecosystem effects to fish and fish habitatVCs at maximum discharge. OKIB requests that water flow and velocity be specifically listed in the following sections related to Fish and Fish Habitat: 1) as an environmental pillar in all three associated sub-components of the Fish and Fish Habitat VC in table 3, and 2) as a proposed indicator for all three sub-components of the Fish and Fish Habitat VC in Table 4, Section 2.4 of Appendix A.	Flow and velocity are described in the interactions columns of Appendix A and are prominent in the example pathway of effects. The Indicator description in the dAIR will be changed from Fish Habitat (bank type, substrate) to Fish Habitat (velocity) as that matches the assessment. BC Hydro is not directing First Nations in how to author Part C, and therefore has not designated specific indicators beyond "Information provided by Aboriginal communities or Aboriginal coordinators" for all Traditional Use and Knowledge Sub-Components. The First Nations authors of Part C may choose to include velocity as an indicator in their contributions.	Satisfactory	
341	26-Apr-16	Fabian Alexis	Okanagan Indian Band	Advisory Working Group	dAIR								POTENTIAL EFFECTS FOR REV 6	How will BCH ensure fish will remain and feed after high discharge? Will high discharge blow out all the fish food?	Assessment of the potential effects of higher discharge is included in the EA using a combination of modelling, existing data and knowledge, and expert opinion.	Not satisfactory	Potential effects of higher discharge rates is not explicitly included in any proposed indicators relative to Fish and Fish Habitat nor are the proposed methods for review and data collection adequate to fully understand the potential ecological impacts of flow rates and water velocity to fish and fish habitat. OKIB requests that water velocity be included as a proposed indicator for the Fish and Fish Habitat VC (Table 4, Section 2.4, Appendix A). Upon inclusion as a proposed indicator BCH must also include further detail on the proposed methodology that will be used to assess this indicator.	The Indicator description in the dAIR was changed from Fish Habitat (bank type, substrate) to Fish Habitat (velocity) to match the Assessment. An overview of the methodology is provided in the dAIR Section 3.3 and details of the methodology to assess fish and fish habitat is included in Section 4.2.	Satisfactory	
342	26-Apr-16	Fabian Alexis	Okanagan Indian Band	Advisory Working Group	dAIR								POTENTIAL EFFECTS FOR REV 6	Traditional Use Study (TUS) – All should be done by Indigenous groups not hired hand consultants.	BC Hydro has provided funds to Nations to undertake Rev 6 TUS. The choice of consultants is at the discretion of the Nations.	Not satisfactory	As per above comment, OKIB was not contacted by BC Hydro regarding funding for a TUS.	The capacity funding provided to OKIB includes funding for TUS studies that were identified by OKIB.	Satisfactory	
343	26-Apr-16	Fabian Alexis	Okanagan Indian Band	Advisory Working Group	dAIR								POTENTIAL EFFECTS FOR REV 6	Economic development – Regional, local, and First Nations businesses and contracting profiles – Revelstoke Reservoir and transmission/capacitor these studies need FN involvement	BC Hydro agrees and welcomes the involvement of First Nations in Economic Development assessments.	Not satisfactory	OKIB is developing a socio-economic baseline, including a workforce readiness survey. 1) <u>OKIB requires that the results from this Nation-specific socioeconomic study be incorporated into the Economic Effects Assessment section of the EA.</u> 2) <u>So that OKIB can ensure our information is not misrepresented, OKIB requires a copy of the Application be provided in advance of submission to the EAO for review and comment.</u> 3) Further, <u>OKIB requests that the EAO host a specific socioeconomic sub-working group, and OKIB will participate in it.</u>	1) BC Hydro will make every reasonable effort to incorporate information received before filing the application. 2) OKIB will have the opportunity to review and comment on the Application once it is filed. Any modifications to the material can be made at this time. 3) EAO to respond	Satisfactory. EAO will hold a sub-working group meetings as required upon further review during Application Review.	
344	26-Apr-16	Fabian Alexis	Okanagan Indian Band	Advisory Working Group	dAIR								POTENTIAL EFFECTS FOR REV 6	Number of First Nation workers during construction and monitoring; this needs to be negotiated and direct awarded	The number of First Nation workers during construction and monitoring will be addressed during mitigation and monitoring discussions	Not satisfactory	See comment above.	As above	Satisfactory	

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345	26-Apr-16	Fabian Alexis	Okanagan Indian Band	Advisory Working Group	dAIR									POTENTIAL EFFECTS FOR REV 6	Human Health – Electromagnetic effects. What studies have been done on humans and animals and is it cancer causing?	A discussion of EMF as it is applicable to this project will be included in the EA	Not satisfactory	EMF is a significant perceived risk to OKIB members. <u>We request that a thorough assessment of the effects of changes in EMF be included in section 8.2 Human Health and that communications materials (print and presentation) about the effects of EMF are developed for distribution to our membership.</u>	EMF assessment is included in Section 8.2. A booklet entitled "Understanding Electric and Magnetic Fields" is available on bchydro.com	Satisfactory
346	26-Apr-16	Fabian Alexis	Okanagan Indian Band	Advisory Working Group	dAIR									POTENTIAL EFFECTS FOR REV 6	For the capacitor station under the Okanagan Nation Alliance, why is Upper Simikameen Band and no other Bands included on the list?	For the Capacitor Station, Upper Simikameen are identified by the BC EAO on Schedule B indicating that Upper Simikameen are to be notified about the Project. Other Okanagan bands including Pentiction Indian Band and West Bank First Nation are identified on Schedule C which indicates they are to be consulted about the Project	Satisfactory		0	Satisfactory
347	26-Apr-16	Fabian Alexis	Okanagan Indian Band	Advisory Working Group	dAIR									POTENTIAL EFFECTS FOR REV 6	Under abbreviations and acronyms mission is OKIB – Okanagan Indian Band and SNTC – Shuswap Nation Tribal Council	Agreed, to be updated.	Satisfactory		Agreed, updated.	Satisfactory
348	26-Apr-16	Fabian Alexis	Okanagan Indian Band	Advisory Working Group	dAIR									POTENTIAL EFFECTS FOR REV 6	What is the estimated lifespan of Rev 1-4? Are there plans to update those generators? If so, when?	The life span of Units 1-4 is estimated to be 50 years, BC Hydro will be upgrading items on a component by component basis as needed.	Satisfactory	OKIB requests that the AIR be revised to include <u>lifespan and upgrading plans for the existing dam components</u> under bullet #7 in section 1.1 Description of the Proposed project.	dAIR to be updated : the life span of Units 1-4 is estimated to be 50 years, BCH will be upgrading items on a component by component basis as needed.	Satisfactory
349	26-Apr-16	Fabian Alexis	Okanagan Indian Band	Advisory Working Group	dAIR									POTENTIAL EFFECTS FOR REV 6	Acknowledgement of the significance of water for Sylix peoples; water management and the protection of aquatic ecosystems need to be addressed	BC Hydro acknowledges the importance of water for Sylix people and will continue to seek the input of Sylix in areas of water management and the protection of aquatic ecosystems.	Not satisfactory	OKIB Water Rights go hand in hand with water management and the protection of aquatic ecosystems. See comments in lines 153, 167 and 169. If those comments are addressed, then this item is also addressed.	The dAIR has been updated in Section 4.1 to include the acknowledgement of the intrinsic and cultural value of water to First Nations. The application addresses intrinsic and cultural values of water in Part C. Aquatic ecosystems are assessed as outlined in Section 4.2 of the dAIR, fish and fish habitat and terrestrial ecosystems that may interact with aquatic ecosystems are assessed as outlined in Section 4.3, Ecological Communities .	Satisfactory
350	26-Apr-16	Fabian Alexis	Okanagan Indian Band	Advisory Working Group	dAIR									POTENTIAL EFFECTS FOR REV 6	First Nations Water Rights	To be considered in Part C of the EA.	Not satisfactory	Part C of the dAIR does not make mention of specific requirements for water rights to be considered. As outlined above, changes to fish and fishing rights are a serious concern for OKIB. Water quality and flow is therefore also a serious concern as it is directly related to fish, fishing, and navigation based Aboriginal rights, as well as the right to clean water that is tied directly to hunting and fishing and habitation rights. Given the extreme openness to the dAIR (notably the information requirements for Part C on pages 63 and 64), <u>OKIB would like to conduct our own effects assessment based on self-identified indicators and thresholds with regards to our rights, interests, health and wellbeing.</u> It is critical and OKIB is closely involved in any information to be published on our membership and our rights to avoid misrepresentation and having potentially prejudicial information on the public record.	OKIB has the opportunity to address water rights in a fashion selected by OKIB in Part C. BC Hydro will work closely with First Nations to ensure that information collected on their membership is properly conveyed.	Satisfactory
351	26-Apr-16	Fabian Alexis	Okanagan Indian Band	Advisory Working Group	dAIR									POTENTIAL EFFECTS FOR REV 6	Water quality and quantity – for fish and humans	Water quality and quantity for fish is discussed in the Fish and Fish Habitat VC section. There are no potential interactions between the Project and water quality or quantity related to human use.	Not satisfactory	As previously stated, OKIB requests that water quality be added as a VC.	Water Quality was assessed with respect to this Project. However, it was not identified as a stand alone VC as it formed an intermediate step along the identified pathway of effects. Water was not the end receptor, Fish were. As a result, water quality in the Revelstoke Reservoir was studied to support the Fish and Fish Habitat VC. A report was created on the Water Quality baseline and can be appended to the Application for reference.	Satisfactory

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352	26-Apr-16	Fabian Alexis	Okanagan Indian Band	Advisory Working Group	dAIR									POTENTIAL EFFECTS FOR REV 6	Loss of harvesting and gathering – culturally important plants, animals and minerals (food, sustenance, medicinal, ceremonial)	To be considered in Part C of the EA.	Not satisfactory	See comment above. Clearly, Part C does not specify information requirements in sufficient detail to allay the concerns that water rights and loss of harvesting and gathering rights will be assessed appropriately.	OKIB has the opportunity to address water rights and loss of harvesting and gathering rights in a fashion selected by OKIB in Part C	Satisfactory
353	26-Apr-16	Fabian Alexis	Okanagan Indian Band	Advisory Working Group	dAIR									POTENTIAL EFFECTS FOR REV 6	Birds nesting in flood plain- no recovery or mitigation for loss	Bird nest mortality is an indicator and is discussed within the Bird VC Section	Satisfactory	OKIB requests that BCH give equal weighting to "equivalent experience" when it comes to hiring monitors and field technicians. <u>OKIB requests to have an Okanagan Nation knowledge-holders participate in fieldwork surveys related to birds and bird nesting sites.</u>	BC Hydro will continue to involve First Nations including consideration of equivalent experience and knowledge holders when hiring monitors and field technicians. Bird nest mortality is an indicator (Table 2 Section 3.1) and is discussed within the Bird VC Section 4.6.	Satisfactory
354	26-Apr-16	Fabian Alexis	Okanagan Indian Band	Advisory Working Group	dAIR									POTENTIAL EFFECTS FOR REV 6	BCH does not have to rescue stranded fish or other aquatic species; they need to be held accountable and have recovery plans	BC Hydro fulfils its obligations with respect to fish stranding.	Satisfactory	OKIB requests that BCH give equal weighting to "equivalent experience" when it comes to hiring monitors and field technicians. We would like to see <u>Okanagan Nation knowledge-holders participate in fieldwork surveys related to fish and fish habitat</u> and 2)that recovery plans for fish stranding be detailed in the 'Mitigation Measures' and 'Residual Effects and their Significance' sections of the Fish and Fish Habitat section	BC Hydro will continue to involve First Nations including consideration of equivalent experience and knowledge holders when hiring monitors and field technicians. Recovery plans for construction related fish stranding will be developed as required.	Satisfactory
355	26-Apr-16	Fabian Alexis	Okanagan Indian Band	Advisory Working Group	dAIR									POTENTIAL EFFECTS FOR REV 6	Critical habitat and resources; protection or ecological process for example SARA	The only critical habitat identified within the two Local Study Area (LSA)s is related to caribou. This is discussed within the Mammal VC Section	Not satisfactory	Eventhough Caribou may be the only SARA listed species with critical habitat in the LSA, there are a number of other species of conservation concern listed federally (SARA) and provincially (red and blue) within the project area (e.g. white sturgeon, bull trout, burbot, kokanee). OKIB requests that plans for mitigating effects on these sensitive species be addressed in their respective sections of the EA and within the Environmental Management Plan.	The assesement of White Sturgeon, Bull Trout, Burbot, and kokanee is specifically addressed in Section 4.2 of the dAIR. If there are environmental effects on these species, the required mitigation measures will be described in the application.	Satisfactory
356	26-Apr-16	Fabian Alexis	Okanagan Indian Band	Advisory Working Group	dAIR									POTENTIAL EFFECTS FOR REV 6	Economic and social effects assessment needs to be done by First Nations not consultants hired by BCH	Capacity funding has been provided to support First Nations in undertaking economic and social effects assessment	Not satisfactory	OKIB has not yet signed a capacity agreement with BCH and as a result, only limited capacity funding has been issued to date. <u>OKIB requests that funds to engage in the EA, as well as funds to conduct a socioeconomic effects assessment as per our proposal, be released as soon as possible</u> to ensure that we are able to meet deadline imposed by BCH. OKIB would also like to ensure that the employment readiness, ability to take advantage and preferred futures are monitored within the Economic pillar (Table 3, p.10 of the dAIR); that food security be included as an indicator in the health pillar (Table 3, p.11).	There is a signed capacity funding agreement with BC Hydro. The current agreement is being amended to include socio-economic effects assessment. Employment readiness and food security specific to First Nations will be included in Part C.	Satisfactory
357	26-Apr-16	Fabian Alexis	Okanagan Indian Band	Advisory Working Group	dAIR									POTENTIAL EFFECTS FOR REV 6	First Nation communities need to benefit with long term jobs from Rev 6 – research studies, monitoring, evaluation	BC Hydro will continue to work with First Nations to identify and maximize potential benefits associated with Rev 6.	Not satisfactory	As per comment above, <u>OKIB requests that the results from our own socioeconomic study be incorporated into the Economic Effects Assessment.</u>	The information will be incorporated into Section 6.2 (Socio-Community) of the EA.	Satisfactory
358	26-Apr-16	Fabian Alexis	Okanagan Indian Band	Advisory Working Group	dAIR									POTENTIAL EFFECTS FOR REV 6	Impacts on riparian areas, loss of diversity and habitat for animals and plants	The assessment of biodiversity and riparian areas is included within the Ecological Communities VC Section.	Satisfactory		The requirements for the assessment of biodiversity and riparian areas are included in Section 4.3, Ecological Communities, of the dAIR.	Satisfactory

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359	26-Apr-16	Fabian Alexis	Okanagan Indian Band	Advisory Working Group	dAIR									POTENTIAL EFFECTS FOR REV 6	Dam and energy production – its footprint impacts on habitat, social, cultural significances	Concerns noted	Not satisfactory	OKIB is interestested in ensuring that cumulative effects and legacy impacts of the Revelstoke Dam on habitat, social and cultural aspects are assessed. Consideration of these larger questions regarding cumulative effects and related initiatives are warranted and should be included in the EA Application and EA methodology. See comments in lines 153-155 above.	The current effects of the existing Revelstoke Generating Units will be described in the existing conditions sections for each VC in the application. The focus of the environmental assessment is the potential changes in the VC's related to the installation and operation for the sixth unit. Consideration of these larger questions regarding cumulative effects and related stewardship initiatives are warranted, however it is not appropriate to consider them as part of this environmental assessment process.	Satisfactory
360	26-Apr-16	Fabian Alexis	Okanagan Indian Band	Advisory Working Group	dAIR									POTENTIAL EFFECTS FOR REV 6	BC Hydro is very slow to provide capacity funding to OKIB community but still pressures to have certain aspects of EA process done that is not adequate consultation	Capacity Funding Agreement has been signed with OKIB.	Not satisfactory	This is incorrect. A capacity agreement has not yet been signed with OKIB. <u>OKIB requests that a capacity agreement be signed as soon as possible.</u>	A capacity funding agreement with OKIB incorporating an agreed upon budget exists.	Satisfactory
361	26-Apr-16	Amy Spoinka	Ministry of Energy and Mines	Advisory Working Group	dAIR										Under the Assessment of Potential socio-economic effects, extend estimation of local government expenditures and revenues to include regional expenditures and revenues as well.	The Local Study Area (LSA) for the Local Government Finance VC includes Revelstoke and the Electoral Area B of the Columba Shuswap Regional District. Other economic VCs including Labour Market and Economic development are assessed at the regional level (i.e. Columbia Shuswap Regional District).			A description of the Local Study Area including maps is provided in the Preface to the dAIR. The Local Study Area (LSA) for the Local Government Finance VC includes Revelstoke and the Electoral Area B of the Columbia Shuswap Regional District. Other economic VCs including Labour Market and Economic development are assessed at the regional level (i.e. Columbia Shuswap Regional District).	Satisfactory
362	26-Apr-16	Alan Mason	Core-Committee Alan Mason	Advisory Working Group	dAIR			Page 22							4th line : Cut off for cumulative effects assessment is listed as Dec 31, 2015??	The cut off date has been revised to September 30th, 2016.			0	Satisfactory
363	26-Apr-16	Alan Mason	Core-Committee Alan Mason	Advisory Working Group	dAIR			Page 41							last paragraph references all city planning documents. Please ensure the Revelstoke ICSP is specifically referenced throughout when mention is made of city planning documents	The Revelstoke ICSP is specifically referenced in regard to affordable housing in Section 6.2, Socio-community.			Rental housing availability and affordability and housing market inventory and sales are indicators for accomodation. These are listed in Table 2 Section 3.1 and outlined in Section 6.2 of the dAIR. The Revelstoke ICSP is specifically referenced in regard to affordable housing in Section 6.2, Socio-community.	Satisfactory
364	26-Apr-16	Alan Mason	Core-Committee Alan Mason	Advisory Working Group	dAIR			Page 46							bullets at top: ensure mention is made of project contribution to affordable housing	Availability and affordability of rental housing and temporary accommodation is assessed in Section 6.2, Socio-community assessment.			0	Satisfactory
365	26-Apr-16	Alan Mason	Core-Committee Alan Mason	Advisory Working Group	dAIR	VC		Page 2							2nd last paragraph: ensure mention of erosion to golf course lands.	Erosion and inundation of golf course lands are addressed in Section 6.3 Land and Resource Use.			The golf course is noted in Table 1 Appendix A of the dAIR. The potential for erosion and inundation of golf course lands are addressed in Section 6.3 Land and Resource Use in the EA.	Satisfactory
366	26-Apr-16	Alan Mason	Core-Committee Alan Mason	Advisory Working Group	dAIR	VC	Cell 6	Page 12							cell 6 references dust and air emissions. This could be a major issue with several gravel extraction projects underway or proposed for the Westside Rd area. Cumulative impacts from all these projects could be a concern.	mitigation measures for dust and air emissions during construction will be provided in the Environmental Management Plan			Dust and air emissions are noted in Table 1 of Appendix A to the dAIR. Air quality is an IC.	Satisfactory
367	26-Apr-16	Alan Mason	Core-Committee Alan Mason	Advisory Working Group	dAIR	VC	Cell 7	Page 13							cell 7 mentions "Bathville Rd.". I'm not sure where that is.	More context in cell 7 will be provided to clarify location of Bathville rd. near the proposed capacitor station in Summerland.			More context in cell 7 of Table 1 in Appendix A of the dAIR has been provided to clarify location of Bathville rd. near the proposed capacitor station in Summerland.	Satisfactory
368	26-Apr-16	Alan Mason	Core-Committee Alan Mason	Advisory Working Group	dAIR	VC	Cell 42	Page 20							Mt Biking should be noted as another activity that could be impacted	Section 6.3, Land and Resource Use considers Project effects on Outdoor Recreation and Tourism activities including mountain biking.			Section 6.3 of the EA (Land and Resource Use) considers Project effects on Outdoor Recreation and Tourism activities including mountain biking.	Satisfactory
369	26-Apr-16	Alan Mason	Core-Committee Alan Mason	Advisory Working Group	dAIR	VC		Page 26							should recreation be included in this chart?	There is no effect pathway between the Socio-community VCs increased demand on accommodation and increased demand for local infrastructure.				Satisfactory

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370	26-Apr-16	Alan Mason	Core-Committee Alan Mason	Advisory Working Group	dAIR	VC	Cell 2	Page 28							like to see noise be included as a VC rather than an IC?	Noise has been selected as an IC because it is a pathway of effect to potential receptors including birds and herptiles. The potential effects related to changes in noise are adequately addressed in the assessment.			Noise has been selected as an IC because it is a pathway of effect to potential receptors including birds and herptiles. The potential effects of noise on project VCs and subcomponents is outlined in Table 4 of Appendix A of the dAIR.	Satisfactory
371	26-Apr-16	Alan Mason	Core-Committee Alan Mason		dAIR	VC	Cell 8	Page 43							Community Infrastructure and Service. Proposed methods should also include study of the timing of the workforce influx. There are periods when there are more workers than others; the pattern is not uniform. That is good info to have for planning mitigation measures.	Information regarding timing workforce requirements throughout the construction period is presented in Section 6.2 Socio-Community and informs analysis tied to workforce requirements.			Assessment of temporal effects on labour market is outlined in Section 5.2 of the dAIR. Information regarding timing workforce requirements throughout the construction period is presented in Section 5.2 Socio-Community of the EA and informs analysis tied to workforce requirements .	Satisfactory
372	3-May-16	Christina Yamada	Interior Health	Advisory Working Group	dAIR									Groundwater and Surface Water Quality	This should be selected as a VC due to impacts from increased sediment and erosion, changes in quality due to diverting watercourses to facilitate access, removal of draft tube plug material, impacts from treatment of construction process water and changes to flow velocity and water levels (see #15 in Table 1 of Valued Components Draft Report).	There are no planned diversions of watercourses associated with this project. There were no residual effects associated with the plug removal during the Revelstoke 5 project and similarly no residual effects associated with plug removal for the 6th unit are expected. Treatment for construction process water is regulated and permitted through other government processes. Changes to flow velocity and water levels are not expected to result in a measurable change in water quality or human health.	Not satisfactory	The proponent has not addressed changes to water quality due to increased sediment and erosion.	Potential Project changes in water quality will be described in the application. Data used in the assessment is taken from current and ongoing studies. These current data are also compared to earlier data to evaluate trends and provide context.	Satisfactory
373	3-May-16	Christina Yamada	Interior Health	Advisory Working Group	dAIR									Human Health	The proponent has not considered impacts on human health from project effects on groundwater and surface water quality (see above) and country foods (see above and Appendix A of draft AIR).	There are no planned diversions of watercourses associated with this project. There were no residual effects associated with the plug removal during the Revelstoke 5 project and similarly no residual effects associated with plug removal for the 6th unit are expected. Treatment for construction process water is regulated and permitted through other government processes. Changes to flow velocity and water levels are not expected to result in a measurable change in water quality or human health. Consideration of effects on country foods will be addressed in Part C of the Application.	Not satisfactory	Consider impacts on human health from effects on water quality due to increased sediment and erosion.	For REV 6 project, there is no interaction between project effects and water quality that can be linked to human health.	Satisfactory
374	3-May-16	Christina Yamada	Interior Health	Advisory Working Group	dAIR									Noise	The project will change ambient sound during construction yet the proponent has not considered the impacts on humans as a receptor.	The localized nature of the changes in sound, short duration, and the experience related to the Revelstoke 5 indicate that health effects related to noise associated with the Project are not expected.	Satisfactory		0	Satisfactory

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375	25-Mar-16	Michael Zimmer	Okanagan Indian Band	Advisory Working Group	dAIR								Fish Passage	<ul style="list-style-type: none"> currently there are no considerations for fish passage at REV. Fish (sturgeon, bull trout, kokanee, rainbow trout, mountain whitefish, largescale and longnose sucker, burbot) migrate through the Columbia River Revelstoke Reach or are entrained by REV and have no means of moving upstream of REV. concurrent aboriginal (and basin-wide, non-aboriginal stakeholders) interests include reintroduction of anadromous fishes (i.e., salmon) throughout their historical range including upstream of REV. how will fish passage limitations be mitigated? 	This interest is acknowledged: however, anadromous salmon are not included in the scope of the EA. Revelstoke Unit 6 project activities and operations will not preclude the ongoing potential for future fish passage or fish resource use of concern to First Nations. The Canadian Columbia River Intertribal Fisheries Commission (CCRIFC) has proposed the formation of a multiagency committee to start investigating the feasibility of salmon restoration in the Columbia. BC Hydro has agreed to participate in such a committee should it proceed	Not satisfactory	OKIB's rights and interests in the project area have been significantly impacted over time, especially with regards to fish. Our interest in related to cumulative impacts of the proposed project. See comments in lines 154 and 155. If those comments are addressed, this comment is also addressed.	Salmon are not present in the regional study area of the Columbia River, therefore salmon restoration is beyond the scope of this assessment. BC Hydro recognizes the importance of this issue in the Columbia River and refers the OKIB to the CCRIFC as previously defined, and in which BC Hydro is committed to participate in and work with OKIB and other interested stakeholders to find a solution. Consideration of these larger questions regarding cumulative effects and related stewardship initiatives are warranted, however it is not appropriate to consider them as part of this environmental assessment process. The temporal boundaries of the cumulative effects assessments, where conducted, consider the effects of past projects and activities (Please see dAIR Section 3.10.)	Satisfactory
376	25-Mar-16	Michael Zimmer	Okanagan Indian Band	Advisory Working Group	dAIR								Velocity	<ul style="list-style-type: none"> increase in maximum discharge from 75 to 93 kcsf will increase downstream velocities. What effect will this have on holding (swimming speeds), feeding (foraging ability, food availability), and spawning (suitable habitat, redd/nest/egg scour) of all fish listed above, and include the weaker swimming minnows and sculpin (red side shiner, peamouth, sculpin spp.)? SARA listed sturgeon in the Arrow/Revelstoke complex are only known to spawn in the Columbia River adjacent Revelstoke Golf Course (a few kms downstream of REV). How will REV 6 affect spawning and larval dispersal/survival? Spawning of Bull Trout, Rainbow Trout, and Mountain Whitefish downstream of REV? potential spawning use (habitat suitability) of re-introduced anadromous fishes? increased velocity will exacerbate substrate movement (boulder, cobble, gravel, sand, etc.). How will this affect (macro) pool and riffle and (micro) interstitial habitats downstream? how will important substrates (boulder, cobble, gravel, sand) be replenished with little to no substrate migration from above REV? how will primary (algae) and secondary (benthos/invertebrates) production and 	These issues are considered and descibed in the EA.	Not satisfactory	Increases to downstream velocities at maximum discharge pose a significant risk to fish and fish habitat, but this is not currently explicitly included as a proposed indicator for the fish and fish habitat VC. OKIB requests that flow rates and water velocity be included as an indicator for the Fish and Fish habitat VC. See comments in lines 157 and 158. If those comments are addressed, this comment is also addressed.	The Indicator description in the dAIR was changed from Fish Habitat (bank type, substrate) to Fish Habitat (velocity) as that matches the assessment. Methodological details are included in the application Section 4.2 Fish and Fish Habitat	Satisfactory
377	25-Mar-16	Michael Zimmer	Okanagan Indian Band	Advisory Working Group	dAIR								Stranding	<ul style="list-style-type: none"> higher fluctuations in flows will 1) inundate higher elevations in the "floodplain" below REV, 2) subsequent higher velocities will cause fish to seek lower velocity areas in these areas, 3) dropping flows will exacerbate stranding risk and kills higher periods of higher flows may support colonization of newly wetted habitats by algae and benthos (insects, arthropods, mussels). Dropping of flows post colonization may increase kills 	Stranding is discussed in the Fish and Fish Habitat VC	Not satisfactory	Increases to downstream velocities at maximum discharge pose a significant risk to fish and fish habitat, but this is not currently explicitly included as a proposed indicator for the fish and fish habitat VC. OKIB requests that flow rates and water velocity be included as an indicator for the Fish and Fish habitat VC. See comments in lines 157 and 158. If those comments are addressed, this comment is also addressed.	Stranding is discussed in the Fish and Fish Habitat VC, Appendix A, Section 4.2 and Table 2 Section 3.1 of the dAIR. The Indicator description in the dAIR was changed from Fish Habitat (bank type, substrate) to Fish Habitat (velocity) as that matches the assessment. Methodological details are included in the application. Section 4.2 fish and Fish Habitat	Satisfactory
378	25-Mar-16	Michael Zimmer	Okanagan Indian Band	Advisory Working Group	dAIR								Water Quality	<ul style="list-style-type: none"> Water temperature will influence spawning behavior of fishes. Also, important to note any temperature changes (different from current operations) on spawning of sturgeon. changes in Total dissolved gases and pressure on aquatic life downstream? What will be the effect on turbidity/clarity from the increase in discharge? 	Water quality is discussed in the Fish and Fish Habitat VC	Not satisfactory	Water quality is discussed in the Fish and Fish Habitat VC, however the proposed methodology relevant to Water Quality as it relates to Fish and Fish Habitat is reliant on existing studies (Table 4, Section 2.4, Appendix A). OKIB requests that all water quality assessments related to the Fish and Fish Habitat VC are conducted using current data (conducted within the last 12 months) and up-to-date modelling, in addition to the proposed use of existing studies.	Water quality is an indicator of the Fish and Fish Habitat VC as noted in Table 2 of Section 3.1 of the dAIR. Water quality data used in the assessment is taken from current and ongoing studies. Data available as of Nov 1, 2015 when the assessment was written is used in the report. These current data are also compared to earlier data to evaluate trends and provide context.	Satisfactory

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379	29-May-14	Don Whyte	Property Owner	Letter										Proposed Capacitor Station -Summerland Area	<p>Opportunity to discuss issues:</p> <ul style="list-style-type: none">- industrial nature thus reduce the property value and general desirability of the area- potential negative impacts from noise, light pollution, aesthetics , health impacts, recreational potential and moose habitat due to the potential new capacitor station in the Summerland area.	<p>We can advise that environmental assessment at the capacitor station site included wildlife studies. BC Hydro will work with the community if the capacitor station were to be built we would certainly work with the community through our public engagement process to address any concerns related to noise, lighting, aesthetics, recreation and health. All BC Hydro facilities and infrastructure meet the safety and health guidelines set out for electric and magnetic fields (EMF). For more information about EMF, please visit BC Hydro's website: https://www.BC Hydro.com/safety-outages/keeping-communities-safe/health-electricity.html, including a link to a booklet called Understanding Electric and Magnetic Fields [PDF].</p>			<p>We can advise that environmental assessment at the capacitor station site included wildlife studies, see Sections 4.7 through 4.9 of the dAIR. BC Hydro will work with the community if the capacitor station were to be built we would certainly work with the community through our public engagement process to address any concerns related to noise, lighting, aesthetics, recreation (see Section 6 of the dAIR) and health. All BC Hydro facilities and infrastructure meet the safety and health guide lines set out for electric and magnetic fields (EMF). For more information about EMF, please visit BC Hydro's website: https://www.BC Hydro.com/safety-outages/keeping-communities-safe/health-electricity.html, including a link to a booklet called Understanding Electric and Magnetic Fields [PDF]. These issues are discussed in Section 4.1 Air and Noise, Section 6 Social</p>	Satisfactory
381	16-Jun-14	Don Whyte	Property Owner	Other (Email)										Reply : Bathville Reponse Letter	<p>Is there a date when the decision is made that it is to "go ahead" or not. Is it possible that we be notified that this project is no longer on the table; or will this be something that is perpetually looming as a possibility.</p>	<p>Currently, the earliest in-service date is 2021. To meet this date, we would need to initiate the construction in 2017. This time frame may be extended, as the planned in-service date is 2025.</p>		0		Satisfactory
382	16-Jun-14	Don Whyte	Property Owner	Letter										Reply : Bathville Reponse Letter	<p>We see media reports indicating the new turbines are being built and preparations made to install into the dam. Is there a possibility that the turbine work will be completed but the capacitor station in our area will not be needed or built? Or is it more likely that if the turbine work is undertaken to completion the capacitor station will be needed?</p>	<p>No physical work is currently underway at the dam as part of the Revelstoke 6 Project. The turbines currently being installed are for the Mica 5 & 6 Project at the Mica Dam and Generating Station located 135 kilometres north of Revelstoke. That project is not related to the potential need for a capacitor station at the BC Hydro property on Bathville Road. The capacitor station will only be required if the REV6 project proceeds.</p>		0		Satisfactory
383	16-Jun-14	Don Whyte		Letter										Reply : Bathville Reponse Letter	<p>List of BC Hydro capacitor stations located within the southern interior of BC. Also, please identify any capacitor stations that are located within a residential area where people's homes are located within a kilometer of the capacitor site.</p>	<p>We currently have eleven capacitor stations in operation on the BC Hydro system. We don't know have any capacitor stations in the vicinity of the capacitor station site on Bathville Road.</p>		<p>No map will be provided as other capacitor stations are operated province wide and are not related to this project. Capacitor stations within the southern interior of BC are the Gulchon Creek Capacitor Station near Logan Lake and the Seymour Arm Capacitor Station located near Seymour Arm.</p>	Satisfactory	
384	16-Jun-14	Don Whyte		Letter										Reply : Bathville Reponse Letter	<p>We would like to understand the reason why BC Hydro chose the Bathville Road location option over the potential location on the Summerland/Princeton road.</p>	<p>The BC Hydro-owned property on Bathville Road was selected due to its suitability for a capacitor station given factors such as its proximity to the transmission line, elevation, access, topography and the location along this particular 500,000 volt transmission line which links the Vaseux Substation near Oliver to the Nicola Substation near Merritt.</p>		0		Satisfactory
385	9-Jul-14	Don Whyte		Other (Email)										Reply : Proposed Capacitor Station - Summerland Area	<p>Please provide the location of any one of the number that you mention that are located in close proximity to a residential community. Particularly if such a situation exists within the southern interior of BC.</p>	<p>BC Hydro is preparing this information</p>		0		Satisfactory

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386	9-May-16	Fabian Alexis	Okanagan Indian Band	Advisory Working Group									Additional concerns from the Sylix people	In the event of an earthquake, how safe is the Revelstoke dam?	The Revelstoke Dam is designed to withstand extreme ground motions associated with earthquakes, up to and including a peak value of 0.2g, with a very low annual likelihood of occurrence of approximately 1 in 10,000.	Not satisfactory	OKIB is evidently concerned about the ability of the dam to withstand seismic activity. <u>OKIB requires that an Emergency Management Plan be developed in Part E.</u>	The risk of a sudden failure for Mica or Revelstoke dam is extremely low, and the vast majority of dam safety incidents at Revelstoke or Mica would not result in a catastrophic dam failure, even in the case of an extreme earthquake. BC Hydro's monitoring systems are designed to provide advance warning of possible issues (including movements of known slides) and allow BC Hydro to take actions such as controlled releases of water to eliminate or reduce the risk of sudden failure. BC Hydro has a strong, internationally-recognized dam safety program that includes continual monitoring of dams to detect possible concerns and makes safety investments to ensure any deficiencies are addressed. BC Hydro's dam safety program is aligned and integrated with its water management and emergency management programs. Emergency plans are in place at all our facilities to identify and address emergency	Satisfactory
387	9-May-16	Fabian Alexis	Okanagan Indian Band	Advisory Working Group									Additional concerns from the Sylix people	What magnitude of seismic movement will Revelstoke dam sustain before breaching?	See above	Not satisfactory	See comment in line 195, above.	Confirmed line 195 of the OKIB tracking document dated Dec 12, 2016 references seismic issues	Satisfactory
388	9-May-16	Fabian Alexis	Okanagan Indian Band	Advisory Working Group									Additional concerns from the Sylix people	What studies have an occurred on aquatic insects; more importantly what effects does the practice of raising river volumes up and down every day which is known as "hydropeaking"- to meet hourly electricity demands. One American study https://www.cbbulleti	The most recent (and ongoing) study in the MCR is CLBMON-15b Mid Columbia River Ecological Productivity. Annual reports are available on the BC Hydro website.	Not satisfactory	Hydropeaking and aquatic insect health are not addressed in the dAIR. Hydropeaking has been found to impact the diversity of life downstream from a dam and should therefor be addressed in the dAIR. <u>OKIB requests that hydropeaking, its' effects and mitigations be added to the information requirements identified in section 4.3 Ecological Communities in the dAIR.</u>	Inundation associated with peaking is one of the major focuses of the assessment. The level of inundation associated with water releases with both 5 and 6 units is provided hourly for a number of downstream sites in Section 4.3 (Appendix 4.3-III). The impacts are considered for vegetation, herptiles, birds and mammals. To date the incremental effects to these groups is not measurable.	Satisfactory
389	5-Mar-15			Core Committee Meeting 2		CC 2.16							Cumulative Effects Assessment	Consider the draft federal technical guidance for cumulative effects assessment.	Though the EA is provincial, both provincial and federal guidance are considered in the Methodology.			Though the EA is provincial, both provincial and federal guidance are considered in the Methodology. See Section 3 in the dAIR.	Satisfactory
390	13-May-15			Core Committee Meeting 3, Environment Sub-Committee Meeting 2		CC 3.6, E SC 2.5							REV5 Effects	BC Hydro to determine how to best provide substantive reporting of REV5 simulations and observations through the Technical Task Groups. BC Hydro to explore the possibility of examining REV5 simulated vs. actual effects as part of the development of the REV6 assessment.	A description of the REV5 hydrology simulations vs. actual operations was reviewed with the TTG in June. The information will be included as an appendix to the Application. REV5 predicted effects vs. observations will be included in the baseline description of each VC where possible in the REV6 EA.			A description of the REV5 hydrology simulations vs. actual operations was reviewed with the TTG in June. The information will be included as an appendix to the Application. REV5 predicted effects vs. observations will be included in the baseline description of each VC where possible in the REV6 EA. An update on the status of actual vs simulated effects of REV 5 was provided to First Nations in July 2016.	Satisfactory
391	13-May-15			Core Committee Meeting 3		CC 3.8							Socio-Community	BC Hydro to circulate the work plan for the REV6 socio-economic assessment for input from the Community Sub-Committee.	Socio-economic scope of work is included in the dAIR which has been reviewed by the Core Committee and is available online. The Socio-economic work plan was circulated to the Community Sub-Committee members in November, 2015.			0	Satisfactory
392	23-Jan-14			Community Sub-Committee Meeting 1		C SC 1.1							Socio-Community	Consider the feasibility of providing training funds to Nakusp, Golden, and Salmon Arm (in addition to providing funds to Revelstoke as was done for REV 5).	This will be considered during the EA.			This will be considered during the EA. Refer to section 5.2.2 of the dAIR	Satisfactory
393	23-Jan-14			Community Sub-Committee Meeting 1		C SC 1.2							Socio-Community	Confirm the schedule for when the decision would be made regarding training funds and when they would be available if the REV 6 project goes ahead with a 2020 in-service date.	BC Hydro plans to provide the trades training funding in advance of the start of the Project Construction Phase in order to provide the opportunity for workers to obtain training in time to apply for work on the Project.			0	Satisfactory

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394	23-Jan-14			Community Sub-Committee Meeting 1		C SC 1.3								Provide the Community Sub-committee with the forecasted workers for REV 5 and the actual number of workers for REV 5. Include the actual number of local and First Nations hires for the REV 5 project.	Information regarding the forecasted and actual number of workers for Rev 5, including local and First Nations hires is included in Section 6.2 Socio-community.			Information regarding the forecasted and actual number of workers for Rev 5, including local and First Nations hires is included in the EA. Refer to section 5.2 Economy of the dAIR	Satisfactory	
395	23-Jan-14			Community Sub-Committee Meeting 1		C SC 1.4								Assess the potential effect of the REV 6 project on rental rates and rental availability in the City of Revelstoke and present the results to the Community Sub-committee.	Potential Project effects to availability and affordability of temporary accommodation in Revelstoke is addressed in Section 6.2 Socio-community.			Potential Project effects to availability and affordability of temporary accommodation in Revelstoke is addressed in Section 6.2 Socio-community of the EA. Refer to Section 6.2 of the dAIR	Satisfactory	
396	23-Jan-14			Community Sub-Committee Meeting 1		C SC 1.5								To provide accommodation space for workers with camper vans, look into the use of the Rapid Attack Base Camp that forest fighters used or other potential spaces for long-term camping.	This will be considered during the Assessment as a mitigation option.			Options for accommodation space for workers will be considered during the Assessment as a mitigation option. Refer to Section 6.2 of the dAIR, Section 6.2.2.3.2.1 Project Residual Effects on Housing and Accommodation.	Satisfactory	
397	23-Jan-14			Community Sub-Committee Meeting 1		C SC 1.6								Project team to investigate issues experienced during REV 5 construction in regards to preferential local hiring and follow-up with Community Sub-committee. These issues include: 1) potential barrier for local workers that are not members of the unions working on the project (especially if the union is not accepting new members); 2) potential misrepresentation of workers as 'local' (i.e. non-local workers may be able to get a local post office box address and new driver's license to meet the 'local' definition); 3) potential lack of awareness amongst contractors of the CHC requirements for local and First Nations hiring. Note: Also look into the REV5 and Mica 5/6 provincial audits of commitments in the Environmental Assessment Certificate to see if local/First Nations hiring was audited.	Information regarding the experience from Rev 5 regarding employment is included in Section 5.2, Economy.			Information regarding the experience from Rev 5 regarding employment is included in Section 5.2, Economy. Refer to Section 5.2 of the dAIR. Measures to enhance the training and hiring of local and First Nations workers is discussed in section 5.4.3.1.	Satisfactory	
398	23-Jan-14			Community Sub-Committee Meeting 1		C SC 1.7								Update the labour estimate for REV 6 to list person hours by trade and the corresponding union if applicable.	Labour estimates for Rev 6 are included in Section 5.2 Economy.			Labour estimates for Rev 6 are included in Section 5.2 Economy. Refer to Section 5.2 of the dAIR. The information is provided in person years by trade, Section 5.4.1.1.1, Table 5-21 Construction Occupation Demand	Satisfactory	
399	23-Jan-14			Community Sub-Committee Meeting 1		C SC 1.8								Follow-up with Columbia Basin Trust (Neil Moorth) to see if their fund could provide assistance union dues for local workers that want to work on the REV 6 project (e.g. union dues).	BC Hydro to consider.			This would be discussed as part of the Collaborative Planning for training and hiring mitigation measure	Satisfactory	
400	23-Jan-14			Community Sub-Committee Meeting 1		C SC 1.9								Follow-up with the Social and Economic Development contact at the City of Revelstoke (get contact info from Alan Mason) to inquire if there was a spike in the demand of social services during the REV 5 construction and post-construction period.	Interviews were held with representatives of the City of Revelstoke to discuss social issues during Rev 5 and concerns regarding Rev 6. This information is included in Section 6.2 Socio-community.			Interviews were held with representatives of the City of Revelstoke to discuss social issues during Rev 5 and concerns regarding Rev 6. This information is included in Section 6.2 Socio-community. Refer to Section 6.2 of the dAIR	Satisfactory	

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401	23-Jan-14			Community Sub-Committee Meeting 1		C SC 1.10								Provide update to the Community Sub-committee meeting on the Centennial Park Boat Ramp and the Old Highway Boat Launch in Revelstoke Reservoir.	BC Hydro's planned project to upgrade the ramp according to recommendations of the Columbia River WUP was cancelled by the provincial Comptroller of Water Rights after the City of Revelstoke raised concerns about the safety of the ramp. In Revelstoke Reservoir, there is an informal boat ramp just above Revelstoke Dam at 5-mile. BC Hydro does not own that boat ramp nor has any responsibility to maintain boater access at that site. To meet the public recreation clause of our water licence for Revelstoke Reservoir, BC Hydro purchased land and paid for the development of a number of recreational sites that were subsequently transferred to other organizations. These sites included Martha Creek Provincial Park, Downie Creek Recreation Site, and Columbia View Picnic Area (site just below the dam that was transferred to the City of Revelstoke and is currently leased to the Southern Interior Forestry Museum).				Satisfactory	
402	23-Jan-14			Community Sub-Committee Meeting 1		C SC 1.11								Review performance measures for Revelstoke Reservoir preferred elevation and frequency of drawdown and incorporate Community Sub-committee feedback. These performance measures will be used to evaluate the effects of REV 6 on recreational and industrial transport on the reservoir.	There will be no change to normal operating range in Revelstoke Reservoir, and daily fluctuations would be similar for REV5 and REV 6.		0		Satisfactory	
403	23-Jan-14			Community Sub-Committee Meeting 1		C SC 1.12								Provide a description of the 60 historical water years used in the GOM modeling simulations and the wet/dry/average years for province and Columbia Basin.	This will be provided in the EA.			This will be provided in the EA. Refer to Section 4.1 of the dAIR. Section 4.1.2 Hydrology and 4.1.3 Fluvial Geomorphology, 4.1.1.2 Inflow Hydrology Data Used in HYSIM and GOM	Satisfactory	
404	23-Jan-14			Community Sub-Committee Meeting 1		C SC 1.13								Review GOM simulations and HEC-RAS modelling of water surface elevations to investigate the potential incremental effect of REV 6 on flooding risk at the Revelstoke Golf Course.	Change in surface water elevations with regards to the golf course lands are addressed in Section 6.3 Land and Resource Use.			Change in surface water elevations with regards to the golf course lands are addressed in Section 6.3 Land and Resource Use.Refer to Section 6.3 of the dAIR	Satisfactory	
405	23-Jan-14			Community Sub-Committee Meeting 1		C SC 1.14								Explore the opportunity to identify solutions to improve drainage at the Revelstoke Golf Course.	Change in surface water elevations with regards to the golf course lands are addressed in Section 6.3 Land and Resource Use.			Change in surface water elevations with regards to the golf course lands are addressed in Section 6.3 Land and Resource Use.Refer to Section 6.3 of the dAIR	Satisfactory	
406	23-Jan-14			Community Sub-Committee Meeting 1		C SC 1.15								Look into if buoys in the Mid-Columbia River should be evaluated in the REV 6 process to ensure adequacy for river boating safety.	BC Hydro does not plan to install buoys in the Mid-Columbia River as part of the REV6 project as no incremental effects on public safety have been identified with the addition of the 6th Unit. To address boater safety, BC Hydro installed a public safety boom across the Columbia River downstream of Revelstoke Dam in November 2014. Large DANGER signs have also been installed on either side of the river channel.				Satisfactory	
407	23-Jan-14			Community Sub-Committee Meeting 1		C SC 1.16								Present the results of the HECRAS modeling study that will provide information on potential impacts on properties between the Revelstoke Dam and the golf course with REV 6 operations.	Potential impacts to properties assessed using a TELEMAT - 2D model, are discussed in Section 6.3.			Potential impacts to properties assessed using a TELEMAT - 2D model, are discussed in Section 6.3.Refer to Section 6.3 of the dAIR	Satisfactory	

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408	23-Jan-14			Community Sub-Committee Meeting 1		C SC 1.17								Review the available information for archaeology sites in the REV6 Project Area and: 1) explore methods for investigating the potential incremental effects of REV 6 on these sites; 2) identify data gaps, particularly in regards to Revelstoke Reservoir.	Available information for archaeology sites within the REV6 Project Area will be included in the EA. Methods for investigation the potential incremental effects of REV6 on documented archaeological sites were discussed at the November 2015 Technical Task Group (TTG) meetings and for undocumented sites will be discussed at the September 2016 TTG meetings. For the MCR archaeological modelling the REV6 Secwepemc TTG subcommittee archaeologists on behalf of the TTG is designing a methodology to address gaps and inconsistencies in the existing dataset. For the Revelstoke Reservoir activities related to the normal operating range/water fluctuations are not anticipated to interact with historical or archaeological heritage resources as no impacts to sediments where heritage resources may be situated are anticipated. However, increased daily fluctuations of Revelstoke Reservoir of up to 0.3 m during winter months have periodically occurred during REV5 operations and could continue to			Available information for archaeology sites within the REV6 Project Area will be included in the EA. Methods for investigation the potential incremental effects of REV6 on documented archaeological sites were discussed at the November 2015 Technical Task Group (TTG) meetings and for undocumented sites will be discussed at the September 2016 TTG meetings. For the MCR archaeological modelling the REV6 Secwepemc TTG subcommittee archaeologists on behalf of the TTG is designing a methodology to address gaps and inconsistencies in the existing dataset. For the Revelstoke Reservoir activities related to the normal operating range/water fluctuations are not anticipated to interact with historical or archaeological heritage resources as no impacts to sediments where heritage resources may be situated are anticipated. However, increased daily fluctuations of Revelstoke Reservoir of up to 0.3 m during winter months have periodically occurred during REV5 operations and could continue to	Satisfactory
409	23-Jan-14			Community Sub-Committee Meeting 1		C SC 1.18								Investigate the incremental effect of REV 6 on standing water (and corresponding effect to mosquitoes).	No potential interactions were identified between the Project and prevalence of mosquitoes.				Satisfactory
410	25-Jun-15			Technical Task Group - Hydrotechnical / Geophysical 1		HG TTG 1.2								For the REV5 observed operations (REV5 _o), describe the context of the 9 exceedances below the reservoir normal low elevation. Doug D. Robinson to circulate a technical memo.	The exceedances below the reservoir normal low elevation are described in Section 3.3 of the Appendix describing REV5 Operations (this appendix is referenced in section 4.1.1 of Draft 2). The drafts below El. 571.5 m occur occasionally due to unusual operational or weather-related conditions (e.g. outages at other plants, cold snaps, etc.). These events are independent of the number of units at REV, however the number of units may influence the final depth and duration of any draft below El. 571.5 m.			Completed. The exceedances below the reservoir normal low elevation are described in Section 3.3 of the Appendix describing REV5 Operations (this appendix is referenced in section 4.1.1 of Draft 2). The drafts below El. 571.5 m occur occasionally due to unusual operational or weather-related conditions (e.g. outages at other plants, cold snaps, etc.). These events are independent of the number of units at REV, however the number of units may influence the final depth and duration of any draft below El. 571.5 m.	Satisfactory
411	25-Jun-15			Technical Task Group - Hydrotechnical / Geophysical 1		HG TTG 1.9								Further review results and describe how operations are simulated to change with REV6 and Site C in operation (e.g., investigate further the potential impact of more time at minimum flow in spring with Site C). Doug D. Robinson to circulate a technical memo.	This refers to operations simulations using either the contingency resource plan (without Site C included) or the base resource plan (with Site C), and is discussed in Section 4.1.1.10.4 of Draft 2. An analysis comparing both showed an insensitivity to changes in the resource plans.				Satisfactory
412	25-Jun-15			Technical Task Group - Hydrotechnical / Geophysical 1		HG TTG 1.10								Perform a sensitivity analysis of the performance measures (PMs) with all of the different scenarios (REV5 _s , REV6 _s and REV6+WL ₃).	Sensitivity analyses will be included as appropriate.				Satisfactory
413	25-Jun-15			Technical Task Group - Hydrotechnical / Geophysical 1		HG TTG 1.11								Examine climate change by pulling water years from the record that match the archetype of predicted climate change (REV5 _s , REV6 _s and REV6+WL ₃).	A technical memo on climate change has been written by Doug D. Robinson and will be summarized for the EA.			A technical memo on climate change has been written by Doug D. Robinson and will be summarized for the EA. Climate change is discussed in Section 4.1 and Section 10 of the dAIR.	Satisfactory

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414	18-Nov-15			Technical Task Group - Hydrotechnical / Geophysical 2	BC Hydro Revelstoke Unit 6 Environmental Assessment Sediment and Geomorphology Assessment (November 2, 2015) Draft Report	HG TTG 2.4									Barry to ensure that Barry's sediment report includes a description of the difference between local events (e.g. local steepening and movement) as well as the overall big picture	Changes to local Fluvial Geomorphology are described in the EACA, Section 4.1.2 and 4.1.2.				Satisfactory
415	18-Nov-15			Technical Task Group - Fish / Aquatics 2		F TTG 2.2									EA Project Team to take a 'weight-of-evidence' approach to assessing potential fish habitat impacts in the Mid-Columbia River. TTG members provided substantive input on the task and the challenges of corroborating modelling approaches with ongoing WLR fish monitoring results. In the end, it was agreed that the best approach would be to use a weight-of-evidence approach (i.e., combining modelling results, fish monitoring results and professional judgements) on a species-by-species basis, while identifying key uncertainties.	A weight of evidence approach will be applied.		This is an analytical approach used during the assessment.		Satisfactory
416	15-Apr-16			Technical Task Group - Fish / Aquatics 3		F TTG 3.1									Regarding TDG Management strategy, BC Hydro to confirm if: 1) The draft TDG strategy is available to share with the TTG; 2) The TDG strategy will incorporate pre & post REV6 monitoring.	1. TDG Strategy will be included as an appendix to the EA. 2. Monitoring at REV will follow recommendations made in the TDG Risk Assessment (scheduled for completion this year). Pre-post monitoring would be completed where necessary to fill data gaps.				Satisfactory
417	15-Apr-16			Technical Task Group - Fish / Aquatics 3		F TTG 3.2									Regarding white sturgeon, BC Hydro to: 1) Confirm with Jamie that larval stranding is not an issue; 2) Circulate spawning substrate report.	James Crossman confirmed that larval stranding is not an issue for white sturgeon, and the spawning substrate report is available on the BC Hydro website as CLBMON-20.				Satisfactory
418	15-Apr-16			Technical Task Group - Fish / Aquatics 3		F TTG 3.3									Regarding primary productivity analyses, BC Hydro to consider: 1) Adding all months of the growing season into the assessment of primary productivity; 2) Examining the hydrological conditions of other months to see if September and April are representative; 3) Looking at different GOM years when ALR levels are different (high, medium, low) to see whether the results vary; 4) Examining and describing the characteristics of the 'wet' and 'dry' years. BC Hydro to: a) Use the 3-D model to assess whether there is a potential for near bottom velocity effects on primary productivity stripping; b) Compare 3D and 2D model results.	1) All months except for August were run through the unsteady state model. May, July, Sep and Oct are presented in the EA as being representative of operating and biologically productive months. 2) See above. 3) See Hydrology section for rationale on choosing the 1975 and 1992 water years. 4) "Wet" and "dry" years are described in the Hydrology section of the EA. a) This has been done and can be discussed at the next TTG. b) This has been done to the extent possible and will be discussed at the next TTG.				Satisfactory
419	1-Oct-15			Technical Task Group - Terrestrial / Wetlands 1		T TTG 1.1									Shawn to consider the following references suggested by Anne Moody: 1) Strategic Environmental Initiatives Program (SEIP) studies; 2) Old mapping from 80s (Anne to send); 3) Dam Impacts report by Moody, Stockner, and Slaney; 4) Chris Perrin's insect study; 5) Old mapping from 90s (Anne to send)	Information that has been received has been assessed and included where appropriate				Satisfactory
420	1-Oct-15			Technical Task Group - Terrestrial / Wetlands 1		T TTG 1.2									Shawn to consider the following references suggested by Francis: 1) Selkirk College dam impact study (Francis to send); 2) 1948 topographical maps; 3) 4-year western toad mortality study (Francis to summarize his observation in a 2-page summary); 4) John Woods Parks Canada study on reservoir elevation and Canada geese; 5) Josh Korman's analysis.	Information that has been received has been assessed and included where appropriate				Satisfactory
421	1-Oct-15			Technical Task Group - Terrestrial / Wetlands 1		T TTG 1.3									Shawn to consider the following references suggested by Marlene: 1) Dam impact reports; 2) 2002-2009 FWCP reports for herons in the Columbia Basin.	FWCP heron report (2009) has been cited. Information from the dam impact summary report has been included - notably in the Bird VC and Ecological Communities VC Sections.				Satisfactory

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422	1-Oct-15			Technical Task Group - Terrestrial / Wetlands 1		T TTG 1.5								Consider how to incorporate Josh Korman's work on vegetation bands (based on duration of inundation) in the drawdown zone. Discuss with Anne Moody.	Potential impacts have been discussed in terms of elevation bands within the Draw Down Zone (DDZ), and are consistent with more recent WUP reporting.				Satisfactory
423	13-Apr-16			Technical Task Group - Terrestrial / Wetlands 2		T TTG 2.1								SNC to review critical habitat polygons and provide an opinion of their value to caribou recovery. SNC to investigate whether the Federal government maintains a budget for caribou critical habitat.	Critical habitat for caribou is discussed within the Mammals VC Section. Awaiting response from the federal government regarding caribou management budget.				Satisfactory
424	13-Apr-16			Technical Task Group - Terrestrial / Wetlands 2		T TTG 2.2								For the construction phase, SNC to: 1) Assess potential effects of lighting on birds that are active at night; 2) Assess potential effects of increased Westside Road traffic load on herptiles.	Potential effects of lighting and increased traffic are discussed in the EA.				Satisfactory
425	13-Apr-16			Technical Task Group - Terrestrial / Wetlands 2		T TTG 2.4								SNC/BC Hydro to: 1. Consider the appropriateness of the studies being referenced in the EA. Are they answering the right questions to inform the EA of REV6+WL or other questions? Are they done at the right time and recently enough? 2. Consider providing more detail (e.g., 2-3 sentences on methodology applied) and referencing specific page numbers of reports that are cited to help guide the reader. 3. Consider adding more context to the EA on environmental thresholds for ecological communities. The question of concern is, are we approaching these thresholds?	The surveys completed for the WUP and other programs included considerable effort within the Local Study Area (LSA) and data collected are sufficient to inform the EA. The WUP studies contain information pertinent to the EA (notably information that informs a Sub-component Indicator) and was included in the EA. Additional detail was provided in the baseline sections and the citations of references followed standard practices for citation of scientific publications. The use of species within the draw down zone and effects of current operations informed the baseline of many VC reports. Where residual effects are identified, significance criteria or threshold will be described in the Application. The assessment considered current operations when determining if there was a measureable effect as a result of adding a 6th unit.				Satisfactory
426	13-Apr-16			Technical Task Group - Terrestrial / Wetlands 2		T TTG 2.5								For the capacitor site, consider how the capacitor site right-of-way is currently managed (i.e. is it mowed, do cows graze there, are chemicals used to control vegetation?) and what the winter access is like (is it plowed?).	Vegetation management (mowing) and grazing occur on the ROW. Further details regarding existing conditions at the site are provided in the EA.				Satisfactory
427	13-Apr-16			Technical Task Group - Terrestrial / Wetlands 2		T TTG 2.6								SNC / BC Hydro to: 1. Consider including a steady state modelling run for REV4 (maximum flows of 60kcfs) for context and comparison to REV5 and REV6+WL. 2. Consider including a steady state modelling run for minimum flows (5kcfs) because minimum flows also have effects. 3. Consider using an ALR elevation of 434 m (rather than 435 m as is currently done) because it is more reflective of the established vegetative community and aligns with the soft constraint target set in the WUP for bird nesting and vegetation establishment.	Model results presented in the report are based on the unsteady state as it was deemed to be more representative of future operations.				Satisfactory
428	13-Apr-16			Technical Task Group - Terrestrial / Wetlands 2		T TTG 2.7								SNC to provide a table that summarizes each location selected for unsteady state model assessment, including: 1) Site name; 2) Specific point selected (i.e., GPS coordinates and elevation); 3) Rationale for location selected (e.g., invert for water inflow/outflow); 4) VCs / Ecological significance of the site (e.g., vegetation communities, wildlife species, etc.)	This information was provided to TTG on May 26th, 2016				Satisfactory

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429	13-Apr-16			Technical Task Group - Terrestrial / Wetlands 2		T TTG 2.8								SNC to consider these questions when assessing the potential effects of going from REV5 to REV6+WL flows on sites in the MCR: 1. How much water is there (elevation, depth)? 2. How often does the water level fluctuate (frequency)? 3. How fast does the water elevation rise (ramping)? 4. How long does it stay there (duration)? 5. When does it happen (season)? 6. Can we look at these across different time scales (monthly, weekly, daily)?	For each month modelled (April, May, June, July, September) the average water level, maximum water level, minimum water level and time inundated was compared between 5 units and 6 units in operation. In addition, the hourly changes were plotted at a number of sites to show the differences between the two scenarios and the two modelled years - these were discussed in relation species use at sensitive times of the year (e.g., amphibian and bird breeding).				Satisfactory
430	13-Apr-16			Technical Task Group - Terrestrial / Wetlands 2		T TTG 2.9								SNC to consider including: 1. March – important for amphibians 2. May 1 to Sept 30 – important for the entire the growing season 3. Winter months – important for erosion	Most wetland sites for which modelling was completed (Downrie Marsh, Airport Marsh, Lower Airport Marsh, Montana Slough, Cartier Bay) did not show inundation until May or June. Modelled months for changes in inundation included April through September - excluding August. August was excluded as results were deemed to be similar for either July or September. The erosion modelling used an unsteady state model with the Arrow Lakes Reservoir at three different elevations, regardless of season.				Satisfactory
431	19-Nov-15			Archaeology TTG 1		A TTG 1.1								Eva to adjust definition of VC to account for the stratigraphic context being disturbed (e.g. the relationship between the artifacts and the location)	This was completed. VC subcomponent description now states the following: Locations with protected archaeological or historical heritage sites, landscapes, landforms, features, stratigraphy, and artifacts				Satisfactory
432	19-Nov-15			Archaeology TTG 1		A TTG 1.2								Wayne to provide correct location for Site EFQN113	Corrected location for EFQN-13 has not been provided and location recorded in Provincial Heritage Database was used for the assessment of accessibility and erosion. If the corrected location is provided general hazard erosion mapping will be used to assess whether there are any project interactions in regards to erosion.				Satisfactory
433	19-Nov-15			Archaeology TTG 1		A TTG 1.3								EA Project Team to redevelop performance measure for erosion risk to unknown sites and report back to TTG at next meeting. There was significant discussion on the proposed method for assessing effects to unknown archaeology sites. In general, the TTG discussed a process for determining erosion risk throughout the MCR (based on NHC's work), and then developing a predictive model for understanding where landforms have high potential for the presence of archaeology sites. The idea was to overlay the erosion risk areas with areas of high archaeological site potential to determine the areas of highest priority for ground-truthing and inventory. The TTG agreed that this method needed further work and the EA project team would report back on their progress in the next meeting.	Performance measures for erosion risk were revised by SNC and will be included in Draft 2 of the Application and presented at the next TTG. An archaeological potential model and a general erosion hazard model are being developed and progress will be presented at the next TTG meetings. Four teleconference meetings with interested First Nations have taken place in regards to the development of an archaeological potential model (April 28, May 10, 12, & 20 2016). This work is ongoing.				Satisfactory
434	19-Nov-15			Archaeology TTG 1		A TTG 1.5								Eva to investigate parameters used in Williston and Site C archaeological potential models	A Millennia Research Ltd report on the Archaeological Predictive Modelling for Site C was uploaded to SharePoint on March 7th, 2016. No data was available for the Williston archaeological potential model. A preliminary REV6 archaeological potential modelling approach was prepared by Millennia and provided to First Nations on May 2, 2016. Millennia also prepared and sent out additional information on model variables on May 12, 2016.				Satisfactory

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435	8-Jul-15	Revelstoke Citizen			dAIR									cummulative effects While I am lacking in technical expertise, my main concern with the document and, therefore, the approach to the proposed Environmental Assessment, is the way that the Cumulative Effects Assessment is presented/defined in the document as being limited to looking at operational effects and residual effects after mitigation. To take a precautionary approach, it should not be assumed that mitigation measures will succeed in mitigating effects, therefore a cumulative effects assessment based on residual effects that are expected after mitigation will not provide a complete picture of the actual possible cumulative effects on the environment.	Residual effects are the predicted effects of the Project after the application of mitigation measures (if required). Where there are uncertainties related to mitigation, these will be described in the Application.				Satisfactory
436	8-Jul-15	CSRD			dAIR									cummulative effects Section 3.10 of the AIR provides a list of "past, present and reasonably foreseeable future projects and activities that will, at a minimum, be considered in the cumulative effects assessment." I would suggest adding the Shelter Bay Development lands to this list as they contain a substantial number of lakefront lots.	Noted and will be added.		completed		Satisfactory
437	8-Jul-15	CSRD			dAIR									cummulative effects Throughout the BC Hydro processes to date we have only been allowed to limit our comments and concerns to the incremental impacts of each project upgrade (ie. Additional turbines at Mica and Revelstoke dams. Our concerns regarding the cumulative impacts of all large scale hydro projects, not the "footprint" issues are not taken into consideration and have not been dealt with adequately	Concern noted, however, the scope of the EA is to assess the incremental effects of the addition of a sixth generating unit to Revelstoke Dam.				Satisfactory
438	8-Jul-15	Francis Maltby			dAIR									Riparian vegetation loss as a result of erosion and/or flooding. Both mechanisms should be recognized.	Hydrological modelling has been undertaken to examine the extent of incremental changes in flooding associated with a range of potential operating scenarios. Geomorphological assessments to understand incremental changes in erosion have been completed. This information has been used to assess potential effects of vegetation loss due to erosion and inundation (Section 4.3).			Hydrological modelling has been undertaken to examine the extent of incremental changes in flooding associated with a range of potential operating scenarios, as outlined in Section 4.1 of the dAIR. Geomorphological assessments to understand incremental changes in erosion have been completed. This information has been used to assess potential effects of vegetation loss due to erosion and inundation (Section 4.3 of the dAIR).	Satisfactory
439	8-Jul-15	Francis Maltby			dAIR									The Big Eddy side channel is the only remaining large river feature of its type on the main stem between Donald BC and the Hugh Keenleyside dam at Castlegar. Its natural attributes and values should be recognized.	The Big Eddy side channel is included in Section 4.3 of the EA as a sensitive ecosystem. Section 4.3 provides information on the size, location, and descriptions of the larger wetland complexes explicitly identified by members of the Core Committee including the Big Eddy side channel. Modelling was undertaken to understand the vegetation communities as part of the sensitive ecosystem assessment in Section 4.3. The modelling information was linked with the ecosystem information to inform the assessment of potential Project effects.			Big Eddy has been added to Table 2 Section 3.1 of the dAIR. The Big Eddy side channel is included in Section 4.3 of the EA as a sensitive ecosystem. Section 4.3 provides information on the size, location, and descriptions of the larger wetland complexes explicitly identified by members of the Core Committee including the Big Eddy side channel. Modelling was undertaken to understand the vegetation communities as part of the sensitive ecosystem assessment in Section 4.3. The modelling information was linked with the ecosystem information to inform the assessment of potential Project effects.	Satisfactory
440	8-Jul-15	Francis Maltby			dAIR									The Columbia River nesting islands are eroding at an accelerated rate since the commissioning of REV 5. How will this rate accelerate with REV 6	Section 4.1.1 of the EA assesses the effects of the Project on erosion at sensitive ecosystems including the MCR Nesting Islands. The Islands were incorporated into the bathymetric and sediment surveys to assess erosion potential and bar migration.			Section 4.1 of the dAIR establishes the requirements for the Hydrology and Fluvial Geomorphology studies. Section 4.1 of the EA assesses the effects of the Project on erosion at sensitive ecosystems including the MCR Nesting Islands. The Islands were incorporated into the bathymetric and sediment surveys to assess erosion potential and bar migration.	Satisfactory

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441	8-Jul-15	Francis Maltby			dAIR									Northwest Airport Marshes may be at risk if incision is occurring in the Columbia River Channel	As discussed in Section 4.1.1.15 of the EA, the average shear stress in the channel is generally expected to remain below the threshold to mobilize coarse surface bed material in the bars and main channel of the River under the Project case; therefore, Project-related effects on bed mobility and scour are expected to be few and to be very localized in spatial extent.				Satisfactory
442	8-Jul-15	Francis Maltby			dAIR									Key areas of concern and interest are Locke Creek, Downie Marsh, and Cartier Marsh	Locke Creek, Cartier Marsh and Downie Marsh were explicitly identified by the Core Committee, and are included in Ecological Communities VC (Sections 4.3), Herptiles VC (Section 4.5), and Birds VC (Section 4.6).			These areas are noted in Table 2, Section 3.1 of the dAIR Locks Creek, Cartier Marsh and Downie Marsh were explicitly identified by the Core Committee, and are included in Ecological Communities VC (Section 4.3), Herptiles VC (Section 4.5), and Birds VC (Section 4.6).	Satisfactory
443		Francis Maltby			dAIR									Airport marsh east of the runway is not affected by Revelstoke Dam and should not be included in the assessment	Airport Marsh is considered due to its presence within the Draw Down Zone (DDZ) in the Local Study Area (LSA) (Local Study Area (LSA)). Similar to Locke Creek, Downie Marsh, Cartier Marsh, and Big Eddy side channel, the EA assesses potential effects to this particular marsh as a result of a sixth unit.			Airport Marsh is considered due to its presence within the Draw Down Zone (DDZ) in the Local Study Area (LSA). Similar to Locks Creek, Downie Marsh, Cartier Marsh, and Big Eddy side channel, the EA assesses potential effects to this particular marsh as a result of a sixth unit.	Satisfactory
444		Francis Maltby			dAIR									14 days for the rock slime metric is not appropriate	Rock slime productivity is considered in the Effective Littoral Zone (ELZ) metric. The ELZ metric is a performance measure to calculate the area of the littoral zone that remained productive throughout the growing season as a function of water surface elevation. The ELZ metric was calculated using a 10 day colonization period. Additionally, a second ELZ metric was calculated based on a more conservative estimate of a 30 day colonization period. These metrics were developed based on information in the literature.				Satisfactory
445		Francis Maltby			dAIR									"River behaviour" should be replaced with more precise terms that correctly reflect physical processes such as hydropeaking or channel incision and streambank erosion	River behaviour is a common geomorphic term used in the literature to describe the processes occurring within a river system. The fluvial geomorphology assessment involved analysis of bank erosion susceptibility, changes in channel shape and dimensions, effects of excess shear stress, water level changes, and ramping rates. These analyses were guided by output parameters of the hydraulic models (water surface elevation, flow velocity and shear stress), topographic data provided by bathymetric and LIDAR surveys, and sediment survey data from various sources spanning 2009 to 2016 (Kerr Wood Leidal 2009; Kerr Wood Leidal 2012; Clague & Roberts 2015; NHC 2016).				Satisfactory
446		Francis Maltby			dAIR									Mean river velocity does not accurately represent river behaviour such as peaking, channel incision or stream bank erosion.	Peaking, channel incision, and stream bank erosion are discussed in Section 4.1.1. of the EA. Mean river velocity is commonly used to assess channel incision or stream bank erosion. The difference between the daily max and the daily min are used to describe peaking.				Satisfactory

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447		Francis Maltby			dAIR									The assessment needs to consider recent and historic research as well as contemporary thinking on the effects and impact of river regulation on a broad range of ecosystem values	Discussion of potential effects on downstream channels following flow regulation in Section 4.1.1.14.3 of the EA incorporates findings and perspectives from historical and recent literature, including assessments from 2014 to the present. In British Columbia, long-term studies of the Peace River below the WAC Bennett Dam provide the most comprehensive assessment of morphological changes from flow regulation on a large gravel-bed river, and recent assessments of these effects have been incorporated into the EA.			Information resources are included in Section 3.3 of the dAIR. A discussion of potential effects on downstream channels following flow regulation in Section 4.1.1.14.3 of the EA incorporates findings and perspectives from historical and recent literature, including assessments from 2014 to the present. In British Columbia, long-term studies of the Peace River below the WAC Bennett Dam provide the most comprehensive assessment of morphological changes from flow regulation on a large gravel-bed river, and recent assessments of these effects have been incorporated into the EA.	Satisfactory	
CC-AM-1	2015, January	Alan Mason		Core Committee										Other For Rev 5 and for Mica 5 and 6, one of the opportunities to assist local communities was the provision by BC Hydro of funds to assist with the training of local workers so that they could gain employment at the projects. For this to be successful, the funds need to be committed a reasonable time in advance of the projects so that local workers complete the training programs in time to be ready to be hired when the projects commence. If project construction is projected to begin in 2017, it would be helpful if a funding commitment could be made soon in order to organize and deliver the training programs required for local workers.	BC Hydro plans to provide the trades training funding in advance of the start of the Project Construction Phase in order to provide the opportunity for workers to obtain training in time to apply for work on the Project.				Satisfactory	
CC-AM-2	2015, January	Alan Mason		Core Committee										Other For Rev 5, one of the most significant negative impacts of the project was the additional pressure put on rental housing by the influx of well-paid workers moving to Revelstoke to work on the project. The additional workers coming to Revelstoke were able to pay much higher rents than local residents, many of whom were displaced from their rental properties and were unable to find affordable rental properties in the community. To help mitigate this, BC Hydro provided a one-time contribution of \$250,000 to help the community develop additional affordable rental housing stock. It is anticipated that the same impact will result due to the installation of Rev 6. Similar to the argument made in #1 above, it would be helpful if BC Hydro could make a similar commitment soon so that the community can start to construct additional affordable housing units that will be available once the new workers start to arrive to work on the project. The Revelstoke Community Housing Society is close to completing the planning of a 12 unit affordable housing development in Revelstoke. A contribution to this project from BC Hydro in the next couple of months would be extremely beneficial to the development of this initiative.	The project team will work with the City of Revelstoke to find a mutually acceptable way of addressing the concerns that have been raised.			The project team will work with the City of Revelstoke to find a mutually acceptable way of addressing the concerns that have been raised. See Section 6.2 of the dAIR	Satisfactory	
CC-CL-1	2015, January	Cory Legebokow	FLNR	Core Committee							iii		Formatting	should be "Ministry of Forests, Lands, and Natural Resource Operations" (acronym - FLNR)	Accepted.				Satisfactory	
CC-CL-2	2015, January	Cory Legebokow	FLNR	Core Committee							xiii		Formatting	change acronym from MFLNRO to FLNR throughout the document	Accepted.				Satisfactory	

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CC-CL-3	2015, January	Cory Legebokow	FLNR	Core Committee							18			Fish	there may be the potential for the project to alter conditions that may be beneficial to introduced/non-native species, especially within the MCR. Although this is not a "VC", how and where should it be addressed? Perhaps it gets captured as a pressure on the fish resource VCs already identified	Invasive macrophyte species were considered in the EA. Introduction of invasive species through construction activities will be addressed in the Environmental Management Plan. Effects to Fish and Fish Habitat Section 4.2.3 The lack of measurable or distinguishable effects to the Fish and Fish Habitat VC as a result of incremental changes of the Project is a reflection of the variability and complexity of ecological interactions in the Study Area and the relative magnitude of Project influences compared to all others.			Invasive species is included in the VC document, Appendix A of the dAIR. Invasive macrophyte species were considered in the EA. Introduction of invasive species through construction activities will be addressed in the Environmental Management Plan. The lack of measurable or distinguishable effects to the Fish and Fish Habitat VC as a result of incremental changes of the Project is a reflection of the variability and complexity of ecological interactions in the Study Area and the relative magnitude of Project influences compared to all others.	Satisfactory
CC-CL-4	2015, January	Cory Legebokow	FLNR	Core Committee							18			Ecological Communities	The correct BC Gazetted name is "Locks Creek". The document states "Locke Creek". All other references should be changed accordingly	Accepted.				Satisfactory
CC-CL-5	2015, January	Cory Legebokow		Core Committee					3					Fish	same comment as above regarding the potential to alter fish habitat conditions during project Operations in a manner that could benefit non-native/introduced fish species. Consideration should be given to adding this as an Issue in Table 1 or an Intermediate Component.	Invasive macrophyte species were considered in the EA. Introduction of invasive species through construction activities will be addressed in the Environmental Management Plan. Effects to Fish and Fish Habitat Section 4.2.3 The lack of measurable or distinguishable effects to the Fish and Fish Habitat VC as a result of incremental changes of the Project is a reflection of the variability and complexity of ecological interactions in the Study Area and the relative magnitude of Project influences compared to all others.			The potential to introduce invasive species is considered in Section 6.3 of the dAIR. Fish habitat conditions are discussed in Section 4.2 of the dAIR.	Satisfactory
CC-CL-6	2015, January	Cory Legebokow		Core Committee									Table 1	Mammals	* Table 1 - Issues Scoping, Item 30 - measures should not be taken to improve habitat for moose nor should there be an effort to mitigate impacts in relation to moose productivity. Changes in seral distribution within the RR have significantly contributed to the decline of mountain caribou. Conversion to early seral as a result of anthropogenic developments (e.g forest harvesting, transmission lines) have favoured moose production which in turn has increased predation by wolves on mountain caribou. FLNR is actively managing moose to reduce numbers to pre-development levels. This potential affect may already be covered in the proposed Mammal VC;	Acknowledged. Table 1 will be updated to reflect gov't input			completed	Satisfactory
CC-CL-7	2015, January	Cory Legebokow		Core Committee									Table 4	Fish	Proposed Indicators - species assemblage should be added	Acknowledged. Table 4 will be updated to reflect gov't input			completed	Satisfactory
CC-CL-8	2015, January	Cory Legebokow		Core Committee										Mammals	Mountain caribou should be the primary species of concern when discussing effects on ungulates. I did not see any mention of this Red Listed species in the documents	Critical habitat for caribou is discussed within the Mammals VC Section. There are three subcomponents under the Mammals VC: Species at Risk, Ungulates, and Traditional Use and Knowledge. In the EA caribou are included in both the Species at Risk and Ungulates discussions; however, they are discussed in more detail in the Species at Risk subsection (Southern Mountain Caribou) as it precedes the Ungulates discussion.			See Section 4.7 (Mammals) of the dAIR. Critical habitat for caribou is discussed within the Mammals VC Section. There are three subcomponents under the Mammals VC: Species at Risk, Ungulates, and Traditional Use and Knowledge. In the EA caribou are included in both the Species at Risk and Ungulates discussions; however, they are discussed in more detail in the Species at Risk subsection (Southern Mountain Caribou) as it precedes the Ungulates discussion.	Satisfactory
CC-CL-9	2015, January	Cory Legebokow		Core Committee										Mammals	Ungulate winter ranges - I don't believe there are any designated UWR (via GAR) within the operating ranges of MCR. As a there should be no impacts during Operations	Acknowledged.				Satisfactory

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CC-FM-1	2015, January	Francis Maltby		Core Committee										AIR/VC Documents	"I find this E.A with the VCR and the AIR to be a complicated, cumbersome and not at all user friendly. ...I hope that those promoting this approach to public involvement do all the necessary work to make it understandable, accessible and meaningful to participants, to the non-specialists."	BC Hydro will work to use language that is as accessible and clear as possible in the context that these are regulatory and technical documents.				Satisfactory								
CC-FM-10	2015, January	Francis Maltby		Core Committee										Fish	The littoral zone in Lake Revelstoke. It seems the value of and the measures chosen to protect the littoral zone were decided very early in this process. I should point out this occurred with little consultation. BC Hydro specialist presented information about the zone and then quickly presented the metric that would protect it. I will affectionately call it the "14 day rock slime" metric. To the best of my knowledge the 14 day metric was derived from fisheries research in the river below the dam. Rock slime, algae, moulds and other micro-organisms, form the base of the fish food web. Algae and others feed bugs, bugs are a valuable fish food - some fish eat the slime as well I am sure. The problem, that should be obvious, is that some of the many valuable elements of the littoral zone, large plants, associated bugs, which feed not just fish but mammals and waterbirds, take much longer than 14 days to recover from de-watering in hot dry and freezing weather. In practical terms some of the littoral vegetation has been in development for a decade or more and may take years not 14 days to recover from deep drawdown events due to reservoir operations. So why choose 14 day rock slime? I would like to revisit this so that we can accurately reflect the real world.	The effects assessment will include operational changes from REV6 on Revelstoke Reservoir littoral habitat, including frequency, duration, and magnitude of reservoir elevation changes and will address incremental impacts if noted. Preliminary assessment information was provided to the Core Committee in the January 2014 Environment Subcommittee meeting (presentation by A.Leake); there are references to WLR studies CLBMON3 and CLBMON15b which form part of the baseline/existing conditions information.				The effects assessment will include operational changes from REV6 on Revelstoke Reservoir littoral habitat, including frequency, duration, and magnitude of reservoir elevation changes and will address incremental impacts if noted. Preliminary assessment information was provided to the Core Committee in the January 2014 Environment Subcommittee meeting (presentation by A.Leake); there are references to WLR studies CLBMON3 and CLBMON15b which form part of the baseline/existing conditions information. See Section 4.4 of the dAIR				There is no 14 day metric with regard to the littoral zone of Lake Revelstoke. The ELZ (Effective Littoral Zone) measure that was used to assess the incremental effect of the Project incorporated both a 10 day and a 30 day time period for colonisation based on literature				Satisfactory
CC-FM-10A	2015, January	Francis Maltby		Core Committee										Fish	Was the 21-day river productivity metric (what he refers to as 14-day rock slime in his comments) in any way used for measuring impacts in the littoral zone of the reservoir?	Productivity metrics used for rivers and lake/reservoir littoral zones are different. The littoral zone assessment was calculated using recolonization rates for periphyton of 10 days and 30 days following a minimum 24 hour exposure period.				Productivity metrics used for rivers and lake/reservoir littoral zones are different. The littoral zone assessment was calculated using recolonization rates for periphyton of 10 days and 30 days following a minimum 24 hour exposure period. See Section 4.4 of the dAIR				Satisfactory				
CC-FM-10B	2015, January	Francis Maltby		Core Committee										Fish	Is the littoral zone of the reservoir included as a VC?	As a component of the Revelstoke Reservoir ecosystem, the littoral zone is included in the Fish and Fish Habitat VC and addressed via the indicators of habitat, aquatic productivity, and water quality on that Project Area.				As a component of the Revelstoke Reservoir ecosystem, the littoral zone is included in the Fish and Fish Habitat VC and addressed via the indicators of habitat, aquatic productivity, and water quality on that Project Area. See Section 4.4 of the dAIR				Satisfactory				
CC-FM-10C	2015, January	Francis Maltby		Core Committee										Fish	Has BCH done a complete inventory on the macrophyte vegetation in the reservoir via remote sensing? (e.g., at a coarse level, does BCH know where all of the macrophyte vegetation is?)	CLBMON-55 (Revelstoke Reservoir Macrophyte Assessment) was a commitment under the REV5 EA to assess macrophytes in Revelstoke Reservoir pre-and post- Unit 5 in service date. The study included the use of high resolution SPOT satellite imagery and ground-truthing methods to map macrophyte distribution in the reservoir. The study was completed in 2014 and the final report is available on the BC Hydro website.							Satisfactory					
CC-FM-10D	2015, January	Francis Maltby		Core Committee										Fish	Has BCH established a performance measure or metric for capturing effects on macrophytes?	The effects of REV6 on macrophytes will be discussed in the EA.				The effects of REV6 on macrophytes will be discussed in the EA. See Section 4.4 of the dAIR				Satisfactory				

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CC-FM-11	2015, January	Francis Maltby		Core Committee										I would like the vague term “river behaviour” to be replaced with a more precise and useful set of terms that correctly reflect physical processes and risks. Consider this a work in progress but let’s start with these: “hydropeaking” a widely used term that describes the hydrological changes between a natural river’s behaviour and one that is controlled for flood control and or electrical generation. “Channel incision” this term accurately describes the deepening of a river’s channel as result of ongoing erosion, hydropeaking effects, and the elimination of restorative sediment inputs from upstream. It is useful to help understand the effects on water tables adjacent the river and how these put various resource values at risk. “Stream-bank erosion”, a distinct and different process than incision (they have an interesting relationship) which is best used to link erosion losses of riparian vegetation and the permanent loss of fine grained sediments to a physical process which is relatively easy to understand.	The term river behaviour will be replaced with “fluvial geomorphology”; other terms used in the assessments (such as those noted in the comment) will be described in the REV 6 Hydrotechnical and Geophysical EA reporting.			The term river behaviour will be replaced with “fluvial geomorphology”; other terms used in the assessments (such as those noted in the comment) will be described in the REV 6 Hydrotechnical and Geophysical EA reporting. See Section 4.1 of the dAIR	Satisfactory
CC-FM-12	2015, January	Francis Maltby		Core Committee										Choose a better metric than “mean river velocity”. I wish to suggest that the selection of the metric chosen to measure a range of impacts due to river behaviour suffers the same short comings as the 14 day metric does. The metric chosen is “mean river velocity”. This is perhaps the least useful metric to accurately determine the effects of hydropeaking operations on channel incision and or stream-bank erosion. What initiates erosion is the velocity of water relative to the particle size subject to being moved that suggests that the maximum velocity would have the greatest ability to erode? Over what period will mean river velocity be measured? Hourly, over an entire day, a week or a month. The longer the period measured the greater the difference between mean and maximum velocity will be, the less useful the metric becomes. Interesting to note that maximum velocity typically occurs during the time that water level is rising not when the water level is at its highest level. Mean river velocity completely ignores the fact that there are multiple daily cycles when the water goes up and down in the river channel, each of these cycles initiating another series of erosion events. The number of times that the water goes up and down and the amount that the water goes up and down	BC Hydro will examine maximum velocity at high flows, maximum velocities associated with peaking flows, changes in velocity over peaking cycle.			BC Hydro will examine maximum velocity at high flows, maximum velocities associated with peaking flows, changes in velocity over peaking cycle. See Section 4.1 of the dAIR	Satisfactory
CC-FM-2	2015, January	Francis Maltby		Core Committee									EA Process	“How do we avoid the built in bias of this process and the Regulatory environment which will lead to more “acceptable” environmental losses and damage? The process guides us into acceptance of the only the “current” state of our knowledge, it guides us to accept that what “society deems important”, as defined by professionals, only species currently “listed as threatened or endangered”. Do we accept this, can we?”	BC Hydro is undertaking an assessment process that takes into account all perspectives, rather than those of just professionals. BC Hydro is seeking input on VCs, methodologies, effects, and mitigation. The process is intended to be as open as possible, with transparency around technical issues and information. Improvements are continuously being made in the practice of environmental assessment with a recognition that it is intended to balance of wide range of issues and interests. The final decisions resides with EAO.				Satisfactory
CC-FM-3	2015, January	Francis Maltby		Core Committee						32			Ecological Communities	“Riparian vegetation loss “as a result of erosion and or flooding”. Riparian has been identified but I would like to have both mechanisms, they are different, formally recognized.”	The potential effects to vegetation communities (including riparian loss) will include factors such as erosion and flooding. These mechanisms have been considered in previous work (e.g., CLBMON 12, 33 and CLBWORKS 35, 36) and these will be further considered in the assessment of effects.			The potential effects to vegetation communities (including riparian loss) will include factors such as erosion and flooding. These mechanisms have been considered in previous work (e.g., CLBMON 12, 33 and CLBWORKS 35, 36) and these will be further considered in the assessment of effects. See Section 4.5 of the dAIR.	Satisfactory

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CC-FM-4	2015, January	Francis Maltby		Core Committee										Geophysical	"The Big Eddy side channel. This is the only remaining large river feature of its type on the main stem Columbia between Donald BC and the Hugh Keenlyside dam at Castlegar (about 400 kms?), which has most of the natural attributes: shrubs, trees, herbs, off-channel hydrology. Certainly that is a Value?"	BC Hydro is assessing the effects of the Project on sensitive ecosystems and we will evaluate the potential interactions of the Project on Big Eddy Side Channel. The feature is part of the 2D modelling, so some metrics such as frequency of wetting, flow rates and velocities will be available for assessment.			Section 4.3 Ecological Communities	Satisfactory
CC-FM-5	2015, January	Francis Maltby		Core Committee										Geophysical	"The Columbia River nesting islands. Full disclosure these are near my home and there are no listed species I know of in the equation. However, each morning I go to work in right now I can hear the goings on, I, other neighbourhood residents, and visitors to this community can walk to the edge of the river bank and observe a small part of the natural history of this place. That is a Valued Component?"	BC Hydro is assessing the effects of the Project on sensitive ecosystems and we will evaluate the potential interactions of the Project on the MCR Nesting Islands and determine if it meets the criteria for the candidate VC or sub-component. The islands will be incorporated into the bathymetric and sediment surveys so assessment of erosion potential, bar migration can be made.			Section 4.3 Ecological Communities and 4.6 Birds	Satisfactory
CC-FM-6	2015, January	Francis Maltby		Core Committee										Erosion Add: Changes to rates of erosion as the indicator for above effects on geophysical features Big Eddie and MCR Nesting Islands	"I believe there is nothing that can be done to prevent the loss of these islands. I have watched them for over thirty years and slowly, slowly they are being lost to the river. What has changed and it has been dramatic is the rate of loss. I have observed a dramatic acceleration of the erosion rate with the commissioning of Revelstoke Unit 5. I believe that the rate of loss will further accelerate once Unit 6 comes into operation. The worst of it is that this and other changes are occurring without "scientific" detection. Does a lack of detection become part of the lie that there is no harm being done?"	BC Hydro will be assessing the effects of erosion and flooding on sensitive ecosystems.			BC Hydro will be assessing the effects of erosion on sensitive ecosystems as per Section 4.3 Ecological Communities of the dAIR.	Satisfactory
CC-FM-7	2015, January	Francis Maltby		Core Committee							32	17		Ecological Communities	Northwest Airport Marshes, the close proximity of these marshes to the Columbia River may put them at risk to seasonal drainage and other hydrological impacts if incision is occurring in the Columbia River channel. This is due to normal linkages that would exist between the river water levels and ground water for these floodplain areas.	Acknowledged. Mechanisms that could lead to changes in ecological communities will be part of the assessment.			Acknowledged. Mechanisms that could lead to changes in ecological communities will be part of the assessment. See Sections 4.1.2 (Hydrology) and 4.1.3 (Fluvial Geomorphology) of the dAIR.	Satisfactory
CC-FM-8	2015, January	Francis Maltby		Core Committee							32	17		Ecological Communities, Sensitive Ecosystems	Key areas of concern and interest to me: Locke Creek, Downie Marsh, Cartier Marsh have been identified what remains to be seen is how the risk to these areas will be dealt with.	Acknowledged. Technical sub-groups will explore approaches for assessing the potential effects.				Satisfactory
CC-FM-9	2015, January	Francis Maltby		Core Committee										Ecological Communities, Sensitive Ecosystems	"I again wish to object to the inclusion of the main Airport Marsh, east of the runway, in this process. This marsh has high value because it is in the upper elevation of the Arrow Reservoir, the reservoir normally flood to about 440m asl, APM is at about 438.5 m. asl. It is in a very broad portion of the flood plain and the effects of hydropeaking on it will be almost negligible, it is not at risk. My fear is that it will be used as a mechanism to low-ball both the value of other wetland habitats and the impacts on them. It is not affected by the Revelstoke Dam, unit 6 or otherwise so why is it still in this process?"	The assessment will include the potential for effects of the Project on all vegetation communities within the defined study area. This study area – specific to the MCR - is selected to include areas that are affected by current operations and are therefore subject to additional change with the 6th generation unit. The hydrology model will help inform potential effects within the study area. Potential effects will be considered additively rather than averaged, so that any areas predicted to experience lesser effects will not negate consideration of other effects on other areas.				Satisfactory

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CC-JL-1	2015, January	Jody Lownds		Core Committee										Other	The North Columbia Environmental Society would like to see the Table of Commitments made as a result of the Rev 5 process to be worked into forming an "Associated Sub-Component" or an "Indicator" where they relate to a Proposed VC. For example, if there were commitments/mitigation work to be done that came out of the Rev 5 process that relate to Fish Resources, then the below additions could be made to the table at pg. 33: o Associated Sub-Component (SC): Track record of upholding prior commitments relating to this VC o Indicators: - Status/progress/completion of Study XYZ - Status/progress/completion of Mitigation Works XYZ	For each Rev 6 VC or sub-component, results of BC Hydro's compliance with previous project EAC commitments, if applicable, will be reviewed. The information available from any related monitoring and mitigation efforts will be described as part of the existing conditions, and where relevant, inform methodology and proposed mitigation. Note: The detailed Rev 5, Mica 5, and Mica 6 EAC commitment compliance reports filed by BC Hydro are available at the Environmental Assessment Office website..				Satisfactory
CC-JL-2	2015, January	Jody Lownds		Core Committee										Other	The above should be done for every Rev 5 commitment that can reasonably be linked to one of the proposed VCs in the draft document, namely: o Fish Resources o Ecological Communities o Plants o Herptiles o Birds o Mammals o Economy o Socio-Community o Land and Resource Use o Heritage and Archaeology o Human Health	Agreed, as above.				Satisfactory
CC-JL-3	2015, January	Jody Lownds		Core Committee										Other	Alternatively, "Proponent track record with successful mitigation and meeting commitments from past similar projects" should form some kind of Valued Component (though I suspect the above approach will be more workable).	Agreed as above.				Satisfactory
CC-JL-4	2015, January	Jody Lownds		Core Committee									Assessment Methodology	AIR: The NCES takes issue with the way Cumulative Effects are presented/defined in section 4.10 of the document (at pg. 25) as follows: o Cumulative effects assessment should not only be done if "residual" effects are expected o Operational effects of Mica units 1-6; Revelstoke units 1-5 and Hugh Keenleyside shouldn't be incorporated into the "baseline". Baseline should mean baseline.	BC Hydro will conduct a cumulative effects assessment in accordance with the Environmental Assessment Office's User Guide.			BC Hydro will conduct a cumulative effects assessment in accordance with the Environmental Assessment Office's User Guide. See Section 3.10 of the dAIR.	Satisfactory	
CC-RP-1	2015, January	Randy Priest		Core Committee										Wildlife/Plants	Listed Species: A number of VC's mention the need to address listed species. How can this be in that any responsibility of the licensee is only in the flooded areas? Any wildlife or plant life within the drawdown zone has come about despite the reservoir and usage. Hence how can there be any assurance that future flooding might not place the species at harm?	Listed species are considered for a number of VCs as those populations are most sensitive to change as they are limited by geography and/ or abundance. However, species and ecosystems not listed are also considered - especially those that are sensitive to additional disturbance related to the Project.			Listed species and non-listed species within the LSA/RSA are considered for a number of VCs as those populations are most sensitive to change as they are limited by geography and/ or abundance.	Satisfactory
CC-RP-2	2015, January	Randy Priest		Core Committee										Wildlife/Plants	Reference to traditional knowledge considering the above comments should then only be above the licensed operating levels, (excluding identified arch sites).	Environmental effects, including those related to Traditional Knowledge, will be assessed where there is a project impact.				Satisfactory
CC-RP-3	2015, January	Randy Priest		Core Committee										Plants	Reed Canary Grass has become a major plant species within the drawdown zone, what is the impact of this invasive species on any wildlife or plant life within the reservoir. There should be consideration given to developing a study of the overall influence and impact of this grass throughout the entire reservoir. Should be adequate strength with this issue to have it identified as a cumulative effect? Outcomes from this study will directly impact any other plant or wildlife based concerns or studies because of the Reed Canary Grass negative effect to other species.	The extent of anthropogenic influence (reservoirs, revegetation programs) will be discussed as it has shaped the existing conditions within the study area. This will be part of the discussion of effects in both the Local Study Area (LSA) and RSA.			The extent of anthropogenic influence (reservoirs, revegetation programs) will be discussed as it has shaped the existing conditions within the study area. This will be part of the discussion of effects in both the Local Study Area (LSA) and RSA. Section 4.4 of the dAIR outlines the requirements for existing conditions.	Satisfactory

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CC-RP-4	2015, January	Randy Priest		Core Committee									Plants	What is the survival rate of sedges planted as an outcome of the COL WUP because of high reservoir levels and invasive species competition?	The existing conditions of Ecological Communities is discussed in the assessment and includes the present state of habitat types within the study area.			The existing conditions of Ecological Communities is discussed in the assessment and includes the present state of habitat types within the study area. See Section 4.3 of the dAIR.	Satisfactory
CC-RP-5	2015, January	Randy Priest		Core Committee									Fish	A number of fish related studies have been conducted in the Mid Columbia from various WUP's. What has been the impact of changing populations of other fish species/invasive species on the success of these efforts or general health of native fish species?	BC Hydro's Water Use Plan (WUP) studies on fish in the Mid Columbia Reach (MCR) have been reviewed for information relevant to each Rev 6 VC or sub-component, and the information incorporated into the EA. The information available from any related monitoring and mitigation efforts will be described as part of the existing conditions, and where relevant, inform methodology and proposed mitigation. All WUP study reports are posted once available on the BC Hydro Southern Interior Water Use Planning website.			BC Hydro's Water Use Plan (WUP) studies on fish in the Mid Columbia Reach (MCR) have been reviewed for information relevant to each Rev 6 VC or sub-component, and the information incorporated into the EA. The information available from any related monitoring and mitigation efforts will be described as part of the existing conditions, and where relevant, inform methodology and proposed mitigation. All WUP study reports are posted once available on the BC Hydro Southern Interior Water Use Planning website. WUP Study references are provided in Section 16 of the dAIR.	Satisfactory
CC-RP-6	2015, January	Randy Priest		Core Committee									Hydrogeological and Geophysical	The annual reservoir curves for the Arrow result in longer periods of time that the reservoir levels during refill, summer operation and winter draw down are in and around 1420 ft. At these levels what erosion events in Revelstoke Reach will be repetitively occurring as the station cycles from 20 to 90,000CFM up to twice per day?	The effects of reservoir operations on erosion in Revelstoke Reach are discussed as part of the Hydrology and Fluvial Geomorphology Intermediate Component in the EACA			The effects of reservoir operations on erosion in Revelstoke Reach are discussed as part of the Hydrology and Fluvial Geomorphology Intermediate Component in Sections 4.1.2 and 4.1.3 of the Application, and in Section 4.1 of the dAIR.	Satisfactory
CC-RP-7	2015, January	Randy Priest		Core Committee									Hydrogeological and Geophysical	The Rev 5 assessment indicates very little erosion occurring directly below the dam and upstream of the bridge. Two events might be looked at; erosion on east bank downstream of the golf course during normal operations, erosion again when the reservoir is at full pool and full station operation, (it is unrealistic to evaluate the river at this point as being the same elevation across the entire width, natural flow and swirling will pile water higher against the east bank).	Simulated Revelstoke Dam discharges and spills, potential operational effects on hydrology, and incremental changes in bank erosion associated with the Project will be assessed in Section 4.1.1 of the EA.			Simulated Revelstoke Dam discharges and spills, potential operational effects on hydrology, and incremental changes in bank erosion associated with the Project will be assessed. Refer to Section 4.1 of the dAIR.	Satisfactory
CC-RP-8	2015, January	Randy Priest		Core Committee									Hydrogeological and Geophysical	Hydro operation forecasts seem to much too conservative in respect to projected operations, a set of river flows from low reservoir levels to max pool levels should be completed for river bed stress, erosion projections and calculated with the station operating at maximum output for a period of several days. (One must consider abnormal operations occurring over the operating life of the facility).	modelling to be completed over the full range of operating conditions expected with REV6 (Dave/Barry)			modelling to be completed over the full range of operating conditions expected with REV6. Refer to Section 4.1 of the dAIR.	Satisfactory
CC-RP-9	2015, January	Randy Priest		Core Committee									Hydrogeological and Geophysical	What were pre dam river levels in this area at 90,000cfm and then river levels at flood event flows. (Much of the above information is available from the Rev 5 Assessment Report but might want to be restated considering changes made to the Big Eddy for flood control and the addition of the three bridges).	The extent of anthropogenic influence (reservoirs, revegetation programs) will be discussed on both the Local Study Area (LSA) (Local Study Area (LSA) and Regional Study Area (RSA) levels. Hydrology and Fluvial Geomorphology related to the Project will be assessed in Section 4.1.1 of the EA.			The extent of anthropogenic influence (reservoirs, revegetation programs) will be discussed on both the Local Study Area (LSA) and Regional Study Area (RSA) levels. Hydrology and Fluvial Geomorphology requirements are outlined in Section 4.1 of the dAIR.	Satisfactory
CC-WW-1	2015, January	Warren Ward		Core Committee									Fish	Fish Resources: Review REV #5 and WUP studies	Yes, we have reviewed pertinent REV5 and WLR studies for baseline information. See Section 16 of the dAIR.			Yes, we have reviewed pertinent REV5 and WLR studies for baseline information. See Section 16 of the dAIR.	Satisfactory
CC-WW-10	2015, January	Warren Ward		Core Committee									Heritage & Archaeology	Heritage & Archaeology - Rev #5 & WUP Studies	Applicable information included in the Rev.5 study (i.e., Choquette's 1994 Heritage Resources Impact Study of the BC Hydro Revelstoke Unit 5 Project), WUP Studies, and WUP Addendum studies (including any relevant ones related to soft constraints) have been reviewed for baseline information.			Applicable information included in the Rev.5 study (i.e., Choquette's 1994 Heritage Resources Impact Study of the BC Hydro Revelstoke Unit 5 Project), WUP Studies, and WUP Addendum studies (including any relevant ones related to soft constraints) have been reviewed for baseline information. See Section 16 of the dAIR.	Satisfactory

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CC-WW-11	2015, January	Warren Ward		Core Committee										Human Health	Human Health - Rev #5 & WUP Studies	There are no applicable Rev 5 studies. A WUP study on dust control in the Arrow is available.			There are no applicable Rev 5 studies. A WUP study on dust control in the Arrow is available.	Satisfactory
CC-WW-12	2015, January	Warren Ward		Core Committee										Other	Soils - Rev #5 & WUP Studies	Applicable references related to the Intermediate Components (soils, noise, hydrology and river behavior, and traffic) from the Revelstoke Unit 5 Environmental Assessment and Water Use Planning studies have been reviewed to inform the REV6 EA. There is at least one study related to Veg and Soils analysis referenced in the REV5 Application.				Satisfactory
CC-WW-13	2015, January	Warren Ward		Core Committee										Other	Noise - Rev #5 & WUP Studies	Applicable references related to the Intermediate Components (soils, noise, hydrology and river behavior, and traffic) from the Revelstoke Unit 5 Environmental Assessment and Water Use Planning studies have been reviewed to inform the REV6 EA.			Applicable references related to the Intermediate Components (soils, noise, hydrology and river behavior, and traffic) from the Revelstoke Unit 5 Environmental Assessment and Water Use Planning studies have been reviewed to inform the REV6 EA.	Satisfactory
CC-WW-14	2015, January	Warren Ward		Core Committee										Other	Hydrology and River Behaviour	Applicable references related to the Intermediate Components (soils, noise, hydrology and river behavior, and traffic) from the Revelstoke Unit 5 Environmental Assessment and Water Use Planning studies have been reviewed to inform the REV6 EA.				Satisfactory
CC-WW-15	2015, January	Warren Ward		Core Committee										Hydrogeological and Geophysical	Monitor discharge flows and velocities and duration of event, from the Dam to where the water enters the Arrow Reservoir -at the different elevations and time of year. -Monitoring the scouring of the river bed and the erosion of the river bank. -I do not think that the planting of sedges has prevented the eroding of the banks. -We should be prepared to RIP-WRAP sections of the river with large heavy rock and certain sections of the river bed. -We should have a warning system in place when the Dam discharges water flow.	<ul style="list-style-type: none">• BC Hydro continuously monitors turbine discharge and spill discharge at the plant. Water levels downstream of REV dam are monitored at 6 (six) locations as part of the WUP CLBMON15a studies and for operational purposes in Arrow Reservoir at 2 locations (Nakusp, Fauquier). Additionally, ten (10) monitoring stations have recently been added along the MCR to monitor water level fluctuations in wetland and backchannel areas. A 2D hydraulic model has been developed to calculate channel velocities and water levels along the MCR for varying operations/seasonal scenarios.• Bed substrate and bank material surveys have been conducted to evaluate erosion potential with REV6 operations, in conjunction with the 2D model output. River bank erosion is currently being monitored at 15 locations along the MCR from near the Jordan River downstream to Shelter Bay as part of the WUP CLBWORKS #35/#36 studies.• willows and other plants were used in bioengineering trials, and was assessed & approved.			<ul style="list-style-type: none">• BC Hydro continuously monitors turbine discharge and spill discharge at the plant. Water levels downstream of REV dam are monitored at 6 (six) locations as part of the WUP CLBMON15a studies and for operational purposes in Arrow Reservoir at 2 locations (Nakusp, Fauquier). Additionally, ten (10) monitoring stations have recently been added along the MCR to monitor water level fluctuations in wetland and backchannel areas. A 2D hydraulic model has been developed to calculate channel velocities and water levels along the MCR for varying operations/seasonal scenarios.• Bed substrate and bank material surveys have been conducted to evaluate erosion potential with REV6 operations, in conjunction with the 2D model output. River bank erosion is currently being monitored at 15 locations along the MCR from near the Jordan River downstream to the Shelter Bay as part of the WUP CLBWORKS #35/#36 studies.	Satisfactory
CC-WW-16	2015, January	Warren Ward		Core Committee										Hydrogeological and Geophysical	Questions: What was the original Columbia Flow at Revelstoke, before the Dam was built? Cubic feet per second and elevation? How do we get the information that is given to the B.C. Environmental Board from the Fish & Wildlife Consultive Committees, Public and Aboriginal groups?	Where it is relevant to the assessment of a VC, in the existing conditions description BC Hydro includes a qualitative description of known conditions prior to the dam. However, incremental effects of Rev 6 will be measured from the Rev 5 baseline. The Intermediate Component "Hydrology and River Behaviour" will be assessed for incremental effects with indicators such as water levels, velocity, and erosion. (see Table 4 – Proposed Methods for Data Collection, line "Hydrology and River Behaviour" at page 42 of the dVC Document). The information referred to in the question will be available through the BC Hydro Fish and Wildlife Compensation Programs (FWCP) websites. General FWCP website, https://www.BCHydrohydro.com/about/sustainability/environmental_responsibility/compensation_programs.html?WT.mc_id=rd_bcrp				Satisfactory

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CC-WW-2	2015, January	Warren Ward		Core Committee										Ecological	Ecological Communities: Review REV #5 and WUP studies. Airport Marsh, Lock Creek, Downie Marsh and Carter Marsh. They were formed from the flooding of the Arrow Reservoir and will always be subject to the changing Water Reservoir	Yes, we have reviewed pertinent REV5 and WLR studies for baseline information.			Yes, we have reviewed pertinent REV5 and WLR studies for baseline information. See Section 16 of the dAIR	Satisfactory
CC-WW-3	2015, January	Warren Ward		Core Committee										Plants	Plants: Review REV #5 and WUP studies. Reed Canary Grass has become a major plant species in the draw down zone. The survival rate of the planted sedges, is low. We need to let the Reed Canary Grass take over.	Yes, we have reviewed pertinent REV5 and WLR studies for baseline information. Existing vegetation communities (including those that contain reed canary grass) will be described in the assessment. The response of these communities to potential hydrological changes will be part of the assessment			Yes, we have reviewed pertinent REV5 and WLR studies for baseline information. Existing vegetation communities (including those that contain reed canary grass) will be described in the assessment. The response of these communities to potential hydrological changes will be part of the assessment. See Section 16 of the dAIR	Satisfactory
CC-WW-4	2015, January	Warren Ward		Core Committee										Herptiles	Herptiles: review REV #5 and WUP studies. They are all subject to changing water levels in the Arrow Lake water levels. Review the soft constraints for the Arrow Reservoir, as they were developed to compensate for each of the different value components.	Yes, we have reviewed pertinent REV5 and WLR studies for baseline information. There are no applicable Rev 5 studies, but applicable WUP and WUP Addendum Studies (including those related to soft constraints) will be reviewed for baseline information. See CLBMON 37, 38, 11B3			Yes, we have reviewed pertinent REV5 and WLR studies for baseline information. There are no applicable Rev 5 studies, but applicable WUP and WUP Addendum Studies (including those related to soft constraints) will be reviewed for baseline information. See CLBMON 37, 38, 11B3. See Section 16 of the dAIR	Satisfactory
CC-WW-5	2015, January	Warren Ward		Core Committee										Birds	Birds: review REV #5 and WUP studies. They are all subject to changing water levels in the Arrow Lake water levels. Review the soft constraints for the Arrow Reservoir, as they were developed to compensate for each of the different value components.	Acknowledged. Applicable studies (including those related to soft constraints) have been reviewed for baseline information (e.g., CLBMON36 and 39)			Acknowledged. Applicable studies (including those related to soft constraints) have been reviewed for baseline information (e.g., CLBMON36 and 39). See Section 16 of the dAIR	Satisfactory
CC-WW-6	2015, January	Warren Ward		Core Committee										Mammals	Mammals: review REV #5 and WUP studies. They are all subject to changing water levels in the Arrow Lake water levels. Review the soft constraints for the Arrow Reservoir, as they were developed to compensate for each of the different value components.	Acknowledged. Applicable studies (including those related to soft constraints) have been reviewed for baseline information (e.g., CLBMON 11B1).			Acknowledged. Applicable studies (including those related to soft constraints) have been reviewed for baseline information (e.g., CLBMON 11B1). See Section 16 of the dAIR	Satisfactory
CC-WW-7	2015, January	Warren Ward		Core Committee										Economic	Economy - Rev #5 & WUP Studies	Yes, we have reviewed pertinent REV5, Mica 5/6 and WLR studies for baseline information.			Yes, we have reviewed pertinent REV5, Mica 5/6 and WLR studies for baseline information. See Section 16 of the dAIR	Satisfactory
CC-WW-8	2015, January	Warren Ward		Core Committee										Social	Socio/Community - Rev #5 & WUP Studies	Yes, we have reviewed pertinent REV5 and WLR studies for baseline information.			Yes, we have reviewed pertinent REV5 and WLR studies for baseline information. See Section 16 of the dAIR	Satisfactory
CC-WW-9	2015, January	Warren Ward		Core Committee										Land & Resource	Land & Resource Use - Rev #5 & WUP Studies	Yes, we have reviewed pertinent REV5 and WLR studies for baseline information.			Yes, we have reviewed pertinent REV5 and WLR studies for baseline information. See Section 16 of the dAIR	Satisfactory
FN-KNC-1	2015, January		Ktunaxa Nation Council											Other	At this time, the Ktunaxa Nation Council (KNC) are happy to see the inclusion of a Valued Component (VC) for impacts to indigenous governance and planning, and we are encouraged by inclusion of an indicator related to First Nation information for each of the biophysical VCs, but overall, the approach and requirements for including and assessing impacts to Ktunaxa rights and interests are unclear. We suggest that further discussion on three issues in particular may be useful: • We are unsure how the indicator of "information provided by First Nations communities or First Nations coordinators" will be implemented; • We want to highlight the opportunity provided by understanding the predicted vs. real effects related to installation of the recent near correlate of the Revelstoke 5 generator; and • We also want to highlight the importance of providing, as near as reasonable, a sense of the pre-disturbance (pre-Revelstoke Dam) environments in order to understand trends that have already occurred or are occurring, and to support reclamation and management of riparian and aquatic environments to re-establish similar ecosystems through operations.	See below FN-KNC-1a, FN-KNC-1b & FN-KNC-1c				Satisfactory

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FN-KNC-10	2015, January		Ktunaxa Nation Council								18		4.1	Selection of Valued Components	<ul style="list-style-type: none">• A subcomponent should be added for 'anadromous salmon restoration potential'. Indicators should include: water temperatures, spawning and incubation habitat availability (for chinook and sockeye), and passage restoration feasibility.• In addition to relative abundance and biomass, condition, size and age distribution are important indicators. Condition is one indicator of fish health; size distribution is an indicator of growth rate and prey availability; age distribution is an indicator of the resilience of the population.• Additional habitat indicators are water depth and velocity (important for sturgeon spawning and incubation and for bull trout habitat selection)• For bull trout, entrainment should also be an indicator• Similar comments for 'Commercial, aboriginal and recreational fisheries' subcomponent with respect to population and habitat indicators• Fish harvest should also be included as an indicator for both listed and other (CAR) fish species, separated into aboriginal (FN) harvest and recreational harvest.	<p>This interest is acknowledged; however, anadromous salmon are not included in the scope of the EA. Revelstoke Unit 6 project activities and operations will not preclude the ongoing potential for future fish passage or fish resource use of concern to First Nations. The Canadian Columbia River Intertribal Fisheries Commission (CCRIFC) has proposed the formation of a multiagency committee to start investigating the feasibility of salmon restoration in the Columbia. BC Hydro has agreed to participate in such a committee should it proceed</p> <p>Agreed that metrics of condition, size and age can be evaluated where data exist. Water depth and velocity will be part of the assessment using both the 2d model and the 3d modelling results from the sturgeon study. Entrainment risk screening for Revelstoke GS focussed on kokanee as the species most at risk and Entrainment Strategy focussed effort on kokanee.</p> <p>Information pertaining to sports Fishery is provided in the Assessment. Fish harvest information specific to First Nations will be provided in the Assessment.</p>			A venue for discussion of salmon and other broader issues will be through BCH/First Nations Relationship Agreements. This interest is acknowledged; however, anadromous salmon are not included in the scope of the EA. Revelstoke Unit 6 project activities and operations will not preclude the ongoing potential for future fish passage or fish resource use of concern to First Nations. The Canadian Columbia River Intertribal Fisheries Commission (CCRIFC) has proposed the formation of a multiagency committee to start investigating the feasibility of salmon restoration in the Columbia. BC Hydro has agreed to participate in such a committee should it proceed <p>Agreed that metrics of condition, size and age can be evaluated where data exist. Water depth and velocity will be part of the assessment using both the 2d model and the 3d modelling results from the sturgeon study.</p>	Satisfactory
FN-KNC-11	2015, January		Ktunaxa Nation Council								18		4.1	Selection of Valued Components	<ul style="list-style-type: none">• Re provincially listed ecosystems: should also include species composition and vegetation structure within listed ecosystems/communities as an indicator• Re provincially listed ecosystems, should also include inundation frequency, depth, duration, and seasonality as habitat indicators• Same two comments for sensitive ecosystems<ul style="list-style-type: none">• Re ecosystem health and function for biodiversity: Should read as an indicator description as follows: "Spatial extent, composition and structure of all ecosystems and habitats, including associated vegetation assemblages and wildlife."	<p>Since the Draw Down Zone (DDZ) portion of the Local Study Area (LSA) (Local Study Area (LSA)) is heavily influenced by the operations of the Arrow Lakes Reservoir and revegetation programs, the vegetation communities present in the Draw Down Zone (DDZ) are not representative of any of the provincially-listed ecological communities at risk. As such, inundation frequency, depth, and duration are not relevant.</p> <p>Within Section 4.3 sensitive ecosystems have been defined for the assessment as wetlands, old-growth forest, and riparian areas. Section 4.3 provides information on sensitive ecosystems including: the size, location, and descriptions of the larger wetland complexes explicitly identified by members of the Core Committee; descriptions of the vegetation communities (riparian) found within the Draw Down Zone (DDZ) – including amount and distribution within elevation bands; and extent of old-growth forest within the Local Study Area (LSA) (with the amount identified from available studies). The EA provides information on sensitive ecosystems including: the size, location, and descriptions of the larger wetland complexes explicitly identified by members of the Core Committee; descriptions of the vegetation communities (riparian) found within the Draw Down Zone (DDZ) – including amount and distribution within elevation bands; and extent of old-growth forest within the Local Study Area (LSA) (with the amount identified from available studies).</p>			<p>Since the Draw Down Zone (DDZ) portion of the Local Study Area (LSA) is heavily influenced by the operations of the Arrow Lakes Reservoir and revegetation programs, the vegetation communities present in the Draw Down Zone (DDZ) are not representative of any of the provincially-listed ecological communities at risk. As such, inundation frequency, depth, and duration are not relevant.</p> <p>The indicators are listed in Table 2 Section 3.1 of the dAIR. Within Section 4.3 of the EA, sensitive ecosystems have been defined for the assessment as wetlands, old-growth forest, and riparian areas. Section 4.3 of the EA provides information on sensitive ecosystems including: the size, location, and descriptions of the larger wetland complexes explicitly identified by members of the Core Committee; descriptions of the vegetation communities (riparian) found within the Draw Down Zone (DDZ) – including amount and distribution within elevation bands; and extent of old-growth forest within the Local Study Area (LSA) (with the amount identified from available studies).</p>	Satisfactory
FN-KNC-12	2015, January		Ktunaxa Nation Council								19		4.1	Selection of Valued Components	<p>Re federal or provincial listed species: first indicator should read "abundance and distribution of known occurrences of listed species". Note that "presence of suitable habitat" for listed plants is not a valid indicator based on site series modeling because rare plant occurrence is poorly correlated with site series and rare plants are often associated with microhabitat conditions that are hard to predict. These characteristics cannot be modeled according to provincial experts (J. Penny, Botanist, CDC and D. MacKillop, Regional Ecologist, FLNRO); therefore a field verification step would need to be performed to determine the proportion of polygons that actually support rare plants. Second indicator should read "abundance, distribution and quality of suitable habitat for listed species (based on verification)".</p>	<p>Acknowledged. We will review existing information from available studies (e.g., CLBMON 12, 33) to address abundance and distribution of known occurrences of listed plant species. Suitable habitat for listed species will consider the present quality of habitat within the study areas. A rare plant assessment was specifically completed at the capacitor station as part of the field studies in 2014 and rare plant occurrences have been documented as a result of ongoing vegetation work related to WUP studies.</p>			<p>Acknowledged. We will review existing information from available studies (e.g., CLBMON 12, 33) to address abundance and distribution of known occurrences of listed plant species. Suitable habitat for listed species will consider the present quality of habitat within the study areas. A rare plant assessment was specifically completed at the capacitor station as part of the field studies in 2014 and rare plant occurrences have been documented as a result of ongoing vegetation work related to WUP studies. A list of indicators is provided in Table 2, Section 3.1 of the dAIR.</p>	Satisfactory

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FN-KNC-13	2015, January		Ktunaxa Nation Council								19		4.1	Selection of Valued Components	<ul style="list-style-type: none">• Re federal or provincial listed species: first indicator should read "abundance and distribution of known occurrences of listed species". Second indicator should read "'abundance, distribution and quality of suitable habitat for listed species'".• Re migratory birds: first indicator should read "abundance, distribution and diversity of migratory bird species".• Re raptors: first indicator should read "abundance, distribution and diversity of raptor species"• Include as a guild cavity nesting birds: first indicator should read "abundance, distribution and diversity of cavity-nesting bird species"; second indicator would be "abundance, distribution and quality of suitable habitat (i.e., wildlife trees) for cavity-nesting bird species".	Acknowledged. We will review existing information from the WUP studies (e.g., CLBMON 36, 39, 40) to address abundance and distribution of known occurrences of listed and migratory bird and raptor species, as well as the abundance, distribution and quality of known suitable habitat for listed and migratory bird and raptor species. Migratory birds and raptors will include cavity nesting species.			Acknowledged. We will review existing information from available studies (e.g., CLBMON 12, 33) to address abundance and distribution of known occurrences of listed plant species. Suitable habitat for listed species will consider the present quality of habitat within the study areas. A rare plant assessment was specifically completed at the capacitor station as part of the field studies in 2014 and rare plant occurrences have been documented as a result of ongoing vegetation work related to WUP studies. A list of indicators is provided in Table 2, Section 3.1 of the dAIR. VC document was not modified, however, the assessment of the Bird VC considered the known or expected occurrence of listed species and raptors; the presence, quality and quantity of suitable habitat for listed species, and; the abundance, distribution, and diversity of migratory birds. Section 4.6 Birds	Satisfactory
FN-KNC-14	2015, January		Ktunaxa Nation Council								19		4.1	Selection of Valued Components	<ul style="list-style-type: none">• Re federal or provincial listed species: first indicator should read "abundance and distribution of known occurrences of listed species". Second indicator should read "abundance, distribution and quality of suitable habitat for listed species".	We will review existing information from the WUP studies (e.g., CLBMON 11B3, 37) to address abundance and distribution of known occurrences of listed herptile species, as well as the abundance, distribution and quality of known suitable habitat for listed herptile species.			VC document was not modified; however, the assessment of the Herptile VC considered the occurrence, abundance and distribution of herptile species per Section 4.5 Herptiles of the dAIR. We will review existing information from the WUP studies (e.g., CLBMON 11B3, 37) to address abundance and distribution of known occurrences of listed herptile species, as well as the abundance, distribution and quality of known suitable habitat for listed herptile species. Indicators are listed in Table 2, Section 3.1 in the dAIR.	Satisfactory
FN-KNC-15	2015, January		Ktunaxa Nation Council								19		4.1	Selection of Valued Components	<ul style="list-style-type: none">• Re federal or provincial listed species: first indicator should read "abundance and distribution of known occurrences of listed species". Second indicator should read "'abundance, distribution and quality of suitable habitat for listed species'".• Re ungulates: first indicator should read "abundance, distribution and diversity of ungulate species and their movement corridors". Second should read "abundance, distribution and quality of winter range habitat"• Furbearers should be included as a sub-component, with an associated first indicator of abundance, distribution and diversity of furbearer species'. Second indicator should read "abundance, distribution and quality of habitat".	We will review existing information from the WUP studies (e.g., CLBMON 11B1) and publicly available government data to address abundance and distribution of known occurrences of listed mammal/ungulate species, as well as the abundance, distribution and quality of known suitable habitat for listed mammal/ungulate species. Furbearer are included in the Mammals VC and have been included in Section 4.7 of the assessment. The following wording has been included in the assessment under the sub-component Traditional Use and Knowledge: "Furbearers have been identified as species of cultural or economic importance to First Nations"			VC document was not modified, however, we will review existing information from the WUP studies (e.g., CLBMON 11B1) and publicly available government data to address abundance and distribution of known occurrences of listed mammal/ungulate species, as well as the abundance, distribution and quality of known suitable habitat for listed mammal/ungulate species. Furbearer are included in the Mammals VC and have been included in Section 4.7 of the assessment. The following wording has been included in the assessment under the sub-component Traditional Use and Knowledge: "Furbearers have been identified as species of cultural or economic importance to First Nations" Indicators are listed in Table 2, Section 3.1 of the dAIR. Within the Mammals Section (Section 4.7) the sub-components include Mammal Species at Risk, Ungulates, and Furbearers and Knowledge.	Satisfactory
FN-KNC-16	2015, January		Ktunaxa Nation Council								20		4.1	Selection of Valued Components	Should add a sub-component re: "First Nations harvesting and other uses" including consideration of where First Nations activities 'took place, take place, or are likely to take place in the foreseeable future', alternately, please specify which VC or VCs will clearly address past, present, and planned First Nation use of lands	This information will be included in Part C.				Satisfactory

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FN-KNC-17	2015, January		Ktunaxa Nation Council								21		4.1	Selection of Valued Components	Should add a sub-component re: "Availability of country foods for healthy diets and food security"; The Ktunaxa would prefer to see a VC for healthy diet and food security in Section 15.	This information will be included in Part C.			Satisfactory
FN-KNC-18	2015, January		Ktunaxa Nation Council								17			Selection of Valued Components	<ul style="list-style-type: none"> Under many of the SCs associated with Ktunaxa rights and interests, the proponent has stated, "Information provided by First Nations communities or First Nations coordinators". This statement should be clarified. Does this mean that the proponent will use indicators specified by First Nations for the assessment, or rely on an assessment conducted by First Nations communities or coordinators? Please add confirmation that, in addition to VCs listed in table 4.1, other VCs identified by the Ktunaxa Nation or other First Nations or Aboriginal communities, and included in section 15 (Aboriginal rights) and section 16 (Aboriginal interests) will be considered fully as valued components, and will be assessed based on appropriate standards comparable to those required for VCs in table 4.1. Under associated subcomponents, the proponent should list all subcomponents that will be considered; without a full list, it is difficult to know if there are gaps. Consider adding soil/slope stability as a VC particularly with regards to erosion upstream or downstream of facilities due to increased variability in flow management 	<p>Information and value components provided by First Nations have been considered in Part B. The Heritage and Archaeology candidate VC has been split into 'First Nations Cultural Heritage' and 'Historical and Archaeological Heritage'. 'First Nations Cultural Heritage' section will be assessed by First Nations in Part C of the Application.</p> <p>Further information specific to Aboriginal Rights and Interests will be included in Part C.</p> <p>While Table 4.1 of the dAIR provides a summary of sub-components, please refer to the Assessment for a full list of sub-components.</p> <p>Potential for Project related shoreline erosion is included as an indicator in assessment of the Hydrology and Fluvial Geomorphology VC.</p>		<p>First Nations participated in the process to select VCs and indicators. Information provided by FNs will be used to assess indicators.</p> <p>Information and value components provided by First Nations have been considered in Part B. The Heritage and Archaeology candidate VC has been split into 'First Nations Cultural Heritage' and 'Historical and Archaeological Heritage'. 'First Nations Cultural Heritage' section will be assessed by First Nations in Part C of the Application.</p> <p>Further information specific to Aboriginal Rights and Interests will be included in Part C.</p> <p>While Table 2 in Section 3.1 of the dAIR provides a summary of sub-components, please refer to the Assessment for a full list of sub-components.</p>	Satisfactory
FN-KNC-19	2015, January		Ktunaxa Nation Council								22			Selection of Valued Components	<ul style="list-style-type: none"> There should be a new second bullet summarizing the availability and quality of information required to support an effective assessment; The description of existing conditions should be quantitative and qualitative; There should be a bullet added regarding the need to describe the uncertainties in the assessment with respect to current conditions, potential project affects, the effectiveness of proposed mitigations, and characterization of residual effects; 	<p>The availability and quality of data used to support the EA has been described in the respective VC sections in Part B of the Application. Extensive studies and field programs have been conducted and describe existing conditions in the Local Study Area (LSA) (Local Study Area (LSA)) and the Regional Study Area (RSA). Additional studies were added to understand the habitats and potential species occurrence where data was limited. Data used to describe baseline conditions are considered sufficient to inform the EA. Uncertainties related to the assessment are also described in the Application, e.g. related to modelling and residual effects.</p>		<p>Potential for Project related shoreline erosion is included as an indicator in assessment of the Hydrology and Fluvial Geomorphology VC.</p> <p>The availability and quality of data used to support the EA has been described in the respective VC sections in Part B of the Application. Extensive studies and field programs have been conducted and describe existing conditions in the Local Study Area (LSA) (Local Study Area (LSA)) and the Regional Study Area (RSA). Additional studies were added to understand the habitats and potential species occurrence where data was limited. Data used to describe baseline conditions are considered sufficient to inform the EA. Uncertainties related to the assessment are also described in the Application, e.g. related to modelling and residual effects. See Section 3.3 of the dAIR.</p>	Satisfactory
FN-KNC-1a	2015, January		Ktunaxa Nation Council											Other	<ul style="list-style-type: none"> We are unsure how the indicator of "Information provided by First Nations communities or First Nations coordinators" will be implemented; 	Information provided by First Nations was included in the baseline. Part C of the Application will include First Nations Cultural Heritage.			Satisfactory
FN-KNC-1b	2015, January		Ktunaxa Nation Council											Other	<ul style="list-style-type: none"> We want to highlight the opportunity provided by understanding the predicted vs. real effects related to installation of the recent near correlate of the Revelstoke 5 generator; and 	BC Hydro has compared predicted with real effects of the addition of REV5 and this information has been incorporated in the baseline. A summary table will be provided.		BC Hydro has compared predicted with real effects of the addition of REV5 and this information has been incorporated in the existing conditions. A summary table was provided to First Nations in July 2016. Results from REV5 were considered and are discussed in the existing conditions sections as noted in Sections 4.2.2 (Fish and Fish Habitat), 4.3.2 (Ecological Communities), 4.4.2 (Plants), 4.5.2 (Herptiles), 4.6.2 (Birds), 4.7.2 (Mammals), 5.2.2 (Economic), 6.2.2 (Socio-Community), and 7.2.2 (Historical and Archaeological Heritage) of the dAIR. There were no predicted effects monitored for REV5 for the Land and Resource Use or Human Health VCs, therefore, the results of REV5 are not specifically noted for these in the dAIR.	Satisfactory

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FN-KNC-1c	2015, January		Ktunaxa Nation Council											Other	<ul style="list-style-type: none">• We also want to highlight the importance of providing, as near as reasonable, a sense of the pre-disturbance (pre-Revelstoke Dam) environments in order to understand trends that have already occurred or are occurring, and to support reclamation and management of riparian and aquatic environments to re-establish similar ecosystems through operations.	BC Hydro has included a discussion of pre-Dam conditions in the baseline. This information has been considered in the effects assessment.			BC Hydro has included a discussion of pre-Dam conditions in the existing conditions subsection for all VCs. This information has been considered in the effects assessment. See Section 3.3 of the dAIR.	Satisfactory
FN-KNC-2	2015, January		Ktunaxa Nation Council											Other	In addition to VCs listed in table 4.1, other VCs identified in Section 15 (Aboriginal rights) and Section 16 (Aboriginal interests) by the Ktunaxa Nation or other First Nations or Aboriginal communities should be considered fully as valued components, and should be assessed based on appropriate standards comparable to those required for VCs in table 4.1. The KNC will approach this by including a Ktunaxa assessment on our rights and interests in Sections 15 and 16 based on analysis of VCs from other components, as well as Ktunaxa identified VCs if needed. As per our consultation agreement, the Ktunaxa and BC Hydro will work jointly to prepare a Section 15 and 16 assessment of the proposed Project, as it pertains to Ktunaxa rights and interests, that is agreeable to both parties. It is critical that a full and meaningful assessment is conducted for all valued components associated with Ktunaxa rights and interests. The KNC has included a draft Table of Contents for these sections.	BC Hydro has agreed and accepted the draft Table of Contents for Part C.				Satisfactory
FN-KNC-20	2015, January		Ktunaxa Nation Council								22			Project Interactions	<ul style="list-style-type: none">• The Proponent should be required to provide a list of all potential interactions with VCs	Project - VC interactions will be described in the relevant VC sections and a summary matrix will be provided			Project - VC interactions will be described in the relevant VC sections and a summary matrix will be provided. The VC interactions are in Appendix A of the dAIR	Satisfactory
FN-KNC-21	2015, January		Ktunaxa Nation Council								24			Evaluation of Residual Project Effects	<ul style="list-style-type: none">• The AIR should describe how residual effects will be assessed for significance, including providing quantitative thresholds and measures of significance. The assessment of residual effects should include an evaluation of how well effects of Rev 5 were accounted for, and whether there are areas in which higher than expected (or lower than expected) effects were seen. This summary should be used to inform the development of mitigations for Rev 6.	A description of how residual effects will be assessed is provided in the dAIR. A summary of the predicted effects of REV5 was made available in a separate document in September, 2016.			A description of how residual effects will be assessed is provided in Section 3.4 through 3.10 in the dAIR. A summary of the predicted effects of REV5 was provided to First Nations in July 2016.	Satisfactory
FN-KNC-22	2015, January		Ktunaxa Nation Council								25			Cumulative Effects	<ul style="list-style-type: none">• A broad range of potential effects exist on many of the VCs, from projects other than the hydro-electric projects listed. The AIR should include at a minimum the list of project types that will be included within reasonably foreseeable projects for assessing cumulative effects. The AIR should clearly state that existing cumulative effects on Ktunaxa rights and interests within the Columbia River are already significantly impacted, and any incremental impact occurs within this context• It is difficult to understand how the effects of Mica Units 5 and 6 can be incorporated into the baseline with sufficient relevant information as commencement of operation of the 6th unit is not expected until late 2015. Impacts of Mica 5 and 6 operations should be considered in the context of reasonably foreseeable projects, because the cumulative effects assessment will be relying on predicted rather than observed effects.• Reasonably foreseeable projects and activities should include the possible Columbia River Treaty 'ecosystem function' and 'stable Arrow' operational scenarios. Re climate change: <ul style="list-style-type: none">• The assessment approach should include the development of a small number (2 – 3) of 2050 and 2090 climate change scenarios.	<ul style="list-style-type: none">• The cumulative effects assessment will consider projects with the potential to interact with any residual incremental effects of Rev 6, including those other than hydroelectric projects. Cumulative effects on First Nations rights and interests will be addressed in part c of the Environmental Assessment Certificate Application. See Section 3.10 of the dAIR.• The results of the Mica units 5 and 6 monitoring will be included in the assessment.• A discussion of future operation scenarios including climate change will be included in the assessment.			<ul style="list-style-type: none">• The cumulative effects assessment will consider projects with the potential to interact with any residual incremental effects of Rev 6, including those other than hydroelectric projects. Cumulative effects on First Nations rights and interests will be addressed in part c of the Environmental Assessment Certificate Application. See Section 3.10 of the dAIR.• The results of the Mica units 5 and 6 monitoring will be included in the assessment.• A discussion of future operation scenarios including climate change will be included in the assessment. See Section 4.1 of the dAIR.	Satisfactory

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FN-KNC-22	2015, January		Ktunaxa Nation Council								25			Cumulative Effects	Responses to FN-KNC-22 continued	<ul style="list-style-type: none">• CRT: As part of the Columbia River Treaty Review, 'ecosystem function' and 'stable Arrow' operational scenarios were mitigation measures considered by the Province of BC as alternatives to the Province continuing with the Columbia River Treaty. As the Province has decided to continue with the Columbia River Treaty, these alternatives will not proceed (see 'Columbia River Treaty Review, B.C. Decision' at http://blog.gov.bc.ca/columbiarivertreaty/files/2012/03/BC_Decision_on_Columbia_River_Treaty.pdf). The extent, if any, to which the Province may pursue any part of these measures in the future as a way of enhancing the Treaty is speculative and subject to US approval. As such, they are not reasonably foreseeable and lack sufficient detail to be assessed.• Climate Change: BC Hydro has climate and hydrological projections for the Revelstoke watershed for the 2050s and 2080s produced by Pacific Climate Impacts Consortium. The projections indicate a			0	Satisfactory
FN-KNC-23	2015, January		Ktunaxa Nation Council								27			Fish	Amend sub-components and indicators in accordance with changes recommended above (section 4)	Fish and Fish Habitat Indicators pertaining to fish include relative abundance, condition and species evenness.			Fish and Fish Habitat Indicators pertaining to fish include relative abundance, condition and species evenness. Indicators are listed in Table 2 of Section 3.1 of the dAIR.	Satisfactory
FN-KNC-24	2015, January		Ktunaxa Nation Council								27			Fish	The methods with respect to habitat use and quality should include modelling of habitat conditions at a full range of reservoir elevations and Revelstoke plant discharges with respect to depth, velocity, substrate composition and habitat area.	Hydrological modelling will be done for a range of reservoir elevations and plant discharges to predict depth and velocity and habitat area. Substrate composition will be assessed.			Hydrological modelling will be done for a range of reservoir elevations and plant discharges to predict depth and velocity and habitat area. Substrate composition will be assessed. The outline of the Hydrology Section is provided in Section 4.1 of the dAIR.	Satisfactory
FN-KNC-25	2015, January		Ktunaxa Nation Council								28			Fish	"Reviewing access to tributaries and habitat information" should include WUP and other sources.	Agreed			Agreed, WUP and other information sources was considered. See Section 16 of the dAIR.	Satisfactory
FN-KNC-26	2015, January		Ktunaxa Nation Council								28			Fish	Methods with respect to the anadromous salmon restoration potential indicators should include review of available information on spawning and incubation habitat requirements (substrate, velocity, depth, temperature) for both Fraser and Columbia populations and review of available information with respect to fish passage (upstream and downstream) technologies.	This interest is acknowledged; however, anadromous salmon are not included in the scope of the EA. BC Hydro engaged R2 to assess any opportunities for the Project to aid in any potential future fish passage at Revelstoke Dam. The report is complete and available. Revelstoke Unit 6 project activities and operations will not preclude the ongoing potential for future fish passage or fish resource use of concern to First Nations. The Canadian Columbia River Intertribal Fisheries Commission (CCRIFC) has proposed the formation of a multiagency committee to start investigating the feasibility of salmon restoration in the Columbia. BC Hydro has agreed to participate in such a committee should it proceed			A venue for discussion of salmon and other broader issues will be through BCH/First Nations Relationship Agreements.	Satisfactory
FN-KNC-27	2015, January		Ktunaxa Nation Council								29			Mitigation	Effects Assessment: Bullet 2 should be amended to include consideration of a full range of mitigation options, and not simply economically and technically feasible mitigations. Then, the selection of mitigation techniques can incorporate consideration of economic and technical feasibility.	The Core Committee, First Nations, regulators or the public may propose a full range of mitigation measures for consideration, however BC Hydro is accountable to its ratepayers to ensure mitigation measures are technically feasible and can be implemented in a financially responsible manner.				Satisfactory

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FN-KNC-28	2015, January		Ktunaxa Nation Council								29			Fish	Proposed Follow-up & Monitoring: It is very clear that there will be a need for follow-up and monitoring programs with respect to potential project effects on fish resources, given the uncertainties associated with likely predicted effects arising from increased flow variability downstream of the Revelstoke Generating Station.	Proposed follow-up & monitoring will be considered as part of the assessment.			Satisfactory
FN-KNC-29	2015, January		Ktunaxa Nation Council								29			Plants	<p>Introduction:</p> <ul style="list-style-type: none"> Why is the assessment confined to existing and available information? It would be appropriate to conduct field surveys for rare plants, rather than just reviewing past information and doing a desk top exercise. Re federal or provincial listed species: first indicator should read "abundance and distribution of known occurrences of listed species". Note that "presence of suitable habitat" for listed plants is not a valid indicator based on site series modeling because rare plant occurrence is poorly correlated with site series and rare plants are often associated with microhabitat conditions that are hard to predict. These characteristics cannot be modeled according to provincial experts (J. Penny, Botanist, CDC and D. MacKillop, Regional Ecologist, FLNRO); therefore a field verification step would need to be performed to determine the proportion of polygons that actually support rare plants and this percentage would need to be applied to the modeled dataset. Second indicator should read "abundance, distribution and quality of suitable habitat for listed species" (based on verification). The subcomponents should be specified for traditional use and knowledge based on the sub-list 	<p>1)The studies completed for the WUP and other programs included considerable effort within the Local Study Area (LSA) and data collected are sufficient to inform the EA.</p> <p>2) We will review existing information from available studies (e.g., CLBMON 12, 33) to address abundance and distribution of known occurrences of listed plant species. Suitable habitat for listed species will consider the present quality of habitat within the study areas. A rare plant assessment was specifically completed at the capacitor station as part of the field studies in 2014. Rare plant occurrences have been documented in the MCR as a result of ongoing vegetation work related to WUP studies.</p> <p>3) Information provided by First Nations will be included in Part B of the EA. Part C will be authored by First Nations.</p>		0	Satisfactory
FN-KNC-3	2015, January		Ktunaxa Nation Council											Other	In order for the KNC to undertake an appropriate assessment in Sections 15 and 16, BC Hydro and its consultants will be required to share baseline data and assessment information for many VCs beyond Section 15 and 16. Please identify the timeline for sharing baseline data and draft assessments for valued components.	The baseline was provided in January 2016 and an update, along with the assessment, was provided in July 2016.			Satisfactory
FN-KNC-30	2015, January		Ktunaxa Nation Council								30			Plants	Existing conditions: • We recommend including a measure of quality for all culturally important plants encountered during surveys, as this is an important consideration for the assessment of effects to rights and interests. At a minimum including field work to assess baseline quality conditions in important cultural use areas that may be impacted by the Project, as identified by Ktunaxa knowledge holders. The Ktunaxa preference would be that this be included as an indicator for the VC suggested above.	Information pertaining to culturally important plants will be provided as part of the "Traditional Use and Knowledge" component in Part C.			Satisfactory
FN-KNC-31	2015, January		Ktunaxa Nation Council								31			Plants	Existing conditions: It is not adequate to identify habitat for rare plants; a field verification step (as indicated above) is necessary to determine the proportion of suitable habitat which actually supports rare plants.	We will review existing information from available studies (e.g., CLBMON 12, 33) to address abundance and distribution of known occurrences of listed plant species. Suitable habitat for listed species will consider the present quality of habitat within the study areas. A rare plant assessment was specifically completed at the capacitor station as part of the field studies in 2014. Rare plant occurrences have been documented in the MCR as a result of ongoing vegetation work related to WUP studies.			Satisfactory
FN-KNC-32	2015, January		Ktunaxa Nation Council								31			Plants	Effects Assessment: Bullet 2 should be amended to include consideration of a full range of mitigation options, and not simply economically and technically feasible mitigations. Then, the selection of mitigation techniques can incorporate consideration of economic and technical feasibility.	The Core Committee, First Nations, regulators or the public may propose a full range of mitigation measures for consideration, however BC Hydro is accountable to its ratepayers to ensure mitigation measures are technically feasible and can be implemented in a financially responsible manner.			Satisfactory

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FN-KNC-33	2015, January		Ktunaxa Nation Council								32			Ecological Communities	<p>Introduction:</p> <ul style="list-style-type: none">• Re provincially listed ecosystems: should also include species composition and vegetation structure within listed ecosystems/communities as an indicator.• Re provincially listed ecosystems, should also include inundation frequency, depth, duration, and seasonality as habitat indicators.• Same two comments for sensitive ecosystems.<ul style="list-style-type: none">• Re ecosystem health and function for biodiversity: Should read as an indicator description as follows: "Spatial extent, composition and structure of all ecosystems and habitats, including associated vegetation assemblages and wildlife."• For RR and MCR – ecosystems considered should include culturally important ecosystems for the Ktunaxa, as identified by Ktunaxa knowledge holders. This would include riparian areas, aquatic ecosystems, wetlands among others any of which sustained particular plants and animals of cultural importance. The assessment should be conducted based on the approach developed by KNC, looking at impacts to culturally important ecosystems based on actual occurrences and condition of culturally important plants within potentially existing conditions - Transmission facilities	<p>First part of comment see response to FN-KNC-11.</p> <p>Since the Draw Down Zone (DDZ) portion of the Local Study Area (LSA) (Local Study Area (LSA)) is heavily influenced by the operations of the Arrow Lakes Reservoir and revegetation programs, the vegetation communities present in the Draw Down Zone (DDZ) are not representative of any of the provincially-listed ecological communities at risk. As such, inundation frequency, depth, and duration are not relevant.</p> <p>Within Section 4.3 sensitive ecosystems have been defined for the assessment as wetlands, old-growth forest, and riparian areas. Section 4.3 provides information on sensitive ecosystems including: the size, location, and descriptions of the larger wetland complexes explicitly identified by members of the Core Committee; descriptions of the vegetation communities (riparian) found within the Draw Down Zone (DDZ) – including amount</p>			<p>First part of comment see response to FN-KNC-11.</p> <p>Since the Draw Down Zone (DDZ) portion of the Local Study Area (LSA) (Local Study Area (LSA)) is heavily influenced by the operations of the Arrow Lakes Reservoir and revegetation programs, the vegetation communities present in the Draw Down Zone (DDZ) are not representative of any of the provincially-listed ecological communities at risk. As such, inundation frequency, depth, and duration are not relevant.</p> <p>Within Section 4.3 sensitive ecosystems have been defined for the assessment as wetlands, old-growth forest, and riparian areas. Section 4.3 provides information on sensitive ecosystems including: the size, location, and descriptions of the larger wetland complexes explicitly identified by members of the Core</p>	Satisfactory
FN-KNC-34	2015, January		Ktunaxa Nation Council								33			Ecological Communities	<p>Existing conditions - Transmission facilities</p> <ul style="list-style-type: none">• Why are sensitive habitats not considered as an indicator for the transmission component?	<p>Sensitive habitats will be part of the assessment for the Transmission Capacitor Station and the documents will be updated to reflect this.</p>			<p>Sensitive habitats will be part of the assessment for the Transmission Capacitor Station as indicated in Section 4.3.2 of the dAIR.</p>	Satisfactory
FN-KNC-35	2015, January		Ktunaxa Nation Council								34			Ecological Communities	<p>Effects Assessment: Bullet 2 should be amended to include consideration of a full range of mitigation options, and not simply economically and technically feasible mitigations. Then, the selection of mitigation techniques can incorporate consideration of economic and technical feasibility.</p>	<p>The Core Committee, First Nations, regulators or the public may propose a full range of mitigation measures for consideration, however BC Hydro is accountable to its ratepayers to ensure mitigation measures are technically feasible and can be implemented in a financially responsible manner.</p>				Satisfactory
FN-KNC-36	2015, January		Ktunaxa Nation Council								35			Birds	<p>Introduction:</p> <ul style="list-style-type: none">• Re federal or provincial listed species: first indicator should read "abundance and distribution of known occurrences of listed species". Second indicator should read "'abundance, distribution and quality of suitable habitat for listed species".• Re migratory birds: first indicator should read "abundance, distribution and diversity of migratory bird species".• Re raptors: first indicator should read "abundance, distribution and diversity of raptor species".• Include as a guild cavity nesting birds: first indicator should read "abundance, distribution and diversity of cavity-nesting bird species"; second indicator would be "abundance, distribution	<p>Acknowledged. We will review existing information from the WUP studies (e.g., CLBMON 36, 39, 40) to address abundance and distribution of known occurrences of listed and migratory bird and raptor species, as well as the abundance, distribution and quality of known suitable habitat for listed and migratory bird and raptor species. Migratory birds and raptors will include cavity nesting species.</p>			<p>Acknowledged. We will review existing information from the WUP studies (e.g., CLBMON 36, 39, 40) to address abundance and distribution of known occurrences of listed and migratory bird and raptor species, as well as the abundance, distribution and quality of known suitable habitat for listed and migratory bird and raptor species. Migratory birds and raptors will include cavity nesting species. The indicators are listed in Table 2 Section 3.1 of the dAIR.</p>	Satisfactory
FN-KNC-37	2015, January		Ktunaxa Nation Council								36			Mitigation	<p>Effects Assessment: Bullet 2 should be amended to include consideration of a full range of mitigation options, and not simply economically and technically feasible mitigations. Then, the selection of mitigation techniques can incorporate consideration of economic and technical feasibility.</p>	<p>The Core Committee, First Nations, regulators or the public may propose a full range of mitigation measures for consideration, however BC Hydro is accountable to its ratepayers to ensure mitigation measures are technically feasible and can be implemented in a financially responsible manner.</p>				Satisfactory
FN-KNC-38	2015, January		Ktunaxa Nation Council											Herptiles	<ul style="list-style-type: none">• Re federal or provincial listed species: first indicator should read "abundance and distribution of known occurrences of listed species". Second indicator should read "abundance, distribution and quality of suitable habitat for listed species".	<p>See response to FN-KNC-14.</p> <p>Acknowledged. We will review existing information from the WUP studies (e.g., CLBMON 1183, 37) to address abundance and distribution of known occurrences of listed herptile species, as well as the abundance, distribution and quality of known suitable habitat for listed herptile species.</p>			<p>See response to FN-KNC-14.</p> <p>Acknowledged. We will review existing information from the WUP studies (e.g., CLBMON 1183, 37) to address abundance and distribution of known occurrences of listed herptile species, as well as the abundance, distribution and quality of known suitable habitat for listed herptile species. Listed in Table 2 of Section 3.1 in the dAIR.</p>	Satisfactory

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FN-KNC-39	2015, January		Ktunaxa Nation Council								39			Herptiles	Effects Assessment: Bullet 2 should be amended to include consideration of a full range of mitigation options, and not simply economically and technically feasible mitigations. Then, the selection of mitigation techniques can incorporate consideration of economic and technical feasibility.	The Core Committee, First Nations, regulators or the public may propose a full range of mitigation measures for consideration, however BC Hydro is accountable to its ratepayers to ensure mitigation measures are technically feasible and can be implemented in a financially responsible manner.				Satisfactory	
FN-KNC-4	2015, January		Ktunaxa Nation Council											Other	We are encouraged to see the improvements in this dAIR but note that it will require additional effort from the KNC and support that was not anticipated to complete this assessment in the original scope of the Ktunaxa consultation agreement for the Revelstoke Generating Station Unit 6 EA process. The KNC requests a meeting with BC Hydro to further discuss our approach and capacity needs.	Completed in 2015				Satisfactory	
FN-KNC-40	2015, January		Ktunaxa Nation Council								40			Mammals	<ul style="list-style-type: none">• Re federal or provincial listed species: first indicator should read "abundance and distribution of known occurrences of listed species". Second indicator should read "'abundance, distribution and quality of suitable habitat for listed species".• Re ungulates: first indicator should read "abundance, distribution and diversity of ungulate species and their movement corridors". Second should read "abundance, distribution and quality of winter range habitat" <p>Re mammals:</p> <ul style="list-style-type: none">• Furbearers (e.g., mink, river otter, beaver) should be included as a sub-component, with an associated first indicator of abundance, distribution and diversity of furbearer species'. Second indicator should read "abundance, distribution and quality of habitat".	<p>See response to FN-KNC-15. Acknowledged. We will review existing information from the WUP studies (e.g., CLBMON 11B1) and publicly available government data to address abundance and distribution of known occurrences of listed mammal/ungulate species, as well as the abundance, distribution and quality of known suitable habitat for listed mammal/ungulate species.</p> <p>Furbearer are included in the Mammals VC and have been included in Section 4.7 of the assessment. The following wording has been included in the assessment under the sub-component Traditional Use and Knowledge: "Furbearers have been identified as species of cultural or economic importance to First Nations"</p>			<p>See response to FN-KNC-15. Acknowledged. We will review existing information from the WUP studies (e.g., CLBMON 11B1) and publicly available government data to address abundance and distribution of known occurrences of listed mammal/ungulate species, as well as the abundance, distribution and quality of known suitable habitat for listed mammal/ungulate species. Indicators are listed in Table 2, Section 3.1 of the dAIR.</p> <p>Furbearer are included in the Mammals VC and have been included in Section 4.7 of the assessment. The following wording has been included in the assessment under the sub-component Traditional Use and Knowledge: "Furbearers have been identified as species of cultural or economic importance to First Nations" Within the Mammals Section (Section 4.7) the sub-components include Mammal Species at Risk, Ungulates, and Traditional Use and Knowledge.</p>		Satisfactory
FN-KNC-41	2015, January		Ktunaxa Nation Council								41			Mammals	Effects Assessment: Bullet 2 should be amended to include consideration of a full range of mitigation options, and not simply economically and technically feasible mitigations. Then, the selection of mitigation techniques can incorporate consideration of economic and technical feasibility.	The Core Committee, First Nations, regulators or the public may propose a full range of mitigation measures for consideration, however BC Hydro is accountable to its ratepayers to ensure mitigation measures are technically feasible and can be implemented in a financially responsible manner.				Satisfactory	
FN-KNC-42	2015, January		Ktunaxa Nation Council								43			Economic Background	The assessment should explicitly consider First Nations employment statistics (from BC Hydro) and include a study (as background information) of how effective mitigations for Rev 5 were for increasing First Nations employment and procurement. This would provide useful context for moving forward with additional mitigations for Rev 6. The Ktunaxa preference would be to have Ktunaxa Economic Rights and Interests included as a VC in Section 15.	Information on the number of First Nation hires on the Rev 5 Project are included in Section 5.2, Economy. Information describing the length of employment for these employees is not available. Mitigation measures to enhance First Nation opportunities at the Rev6 project in light of the experience at Rev 5 are included in the assessment. First Nations economic Rights and Interests will be discussed in Part C.			Information on the number of First Nation hires on the Rev 5 Project are included in Section 5.2, Economy. Information describing the length of employment for these employees is not available. Mitigation measures to enhance First Nation opportunities at the Rev6 project in light of the experience at Rev 5 are included in the assessment. First Nations economic Rights and Interests will be discussed in Part C. The requirement for this information is outlined in Section 5.2 of the dAIR.		Satisfactory

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FN-KNC-43	2015, January		Ktunaxa Nation Council								43			Economy	Include socio-economic studies & reports from Affected First Nations; replace 'First Nation' with 'Affected First Nations' Section 6.2: Economy: <ul style="list-style-type: none">• The Economy VC should include a sub-component specific to First Nations employment and procurement-this may be included here or in section 15. 6.2 Economy - Data Sources 1. Employment and more general labour force data needs to be broken out for the Aboriginal populations in the regional, provincial and federal statistics as well as disaggregated to the individual band level (for on and off reserve members) (Note: this could be done in Section 16 or in the broader baseline but some of the Aboriginal and non-Aboriginal data needs to be together for comparative context). 2 – With the elimination of the long form census and lack of Aboriginal employment data in the Labour Force Survey, Statistics Canada data has been significantly reduced and undermined, leaving large gaps for Aboriginal data. It is not adequate to rely on existing government statistical sources. Sources may need to include First Nation survey and census data instead where those exist.	Affected First Nations are identified in Section 11 Order and listed in the Preface of the AIR. The Technical Boundaries sections of Section 6.2 Socio-community and 5.2 Economy acknowledge the limitations of Statistics Canada data generally and for Aboriginal and First Nations populations. As the limitations around statistical data are understood, wherever possible, the Socio-community and Economy Assessments will report and cross reference data provided by First Nations in Part C of the Assessment. Information regarding employment levels at the local, regional, and First Nation level are included in Section 5.2, Economy. Information on the number of First Nation hires on the Rev 5 Project are included in Section 5.2, Economy. Information describing the length of employment for these employees is not available. Mitigation measures to enhance First Nation opportunities at the Rev6 project in light of the experience at Rev 5 are			Affected First Nations are identified in Section 11 Order and listed in the Preface of the AIR. The Technical Boundaries sections of Section 6.2 Socio-community and 5.2 Economy acknowledge the limitations of Statistics Canada data generally and for Aboriginal and First Nations populations. As the limitations around statistical data are understood, wherever possible, the Socio-community and Economy Assessments will report and cross reference data provided by First Nations in Part C of the Assessment. Information regarding employment levels at the local, regional, and First Nation level are included in Section 5.2, Economy. Information on the number of First Nation hires on the Rev 5 Project are included in Section 5.2, Economy. Information describing the length of employment for these employees is not available. Mitigation measures to	Satisfactory
FN-KNC-44	2015, January		Ktunaxa Nation Council								43			Economy	6.2 Economy - Indicators for assessing VC and sub-components General data: Will employment include more than just rates- e.g. breakdowns by sector and/or length of employment? Are there indicators for education and training levels? Aboriginal data (Either in 6.2 or in Section 16). Do indicators include the following? The level of interest of band members in project employment and types of employment they are interested in. FN member training levels, interests and gaps. Barriers to accessing training and employment. Engagement of members in informal traditional employment.	Application will utilize publicly available economic conditions data and consider the indicators suggested. Further information will be provided by First Nations in Part C. This information will inform mitigation and potential monitoring.			Application will utilize publicly available economic conditions data and consider the indicators suggested. Further information will be provided by First Nations in Part C. This information will inform mitigation and potential monitoring. See Section 5.2 of the dAIR.	Satisfactory
FN-KNC-45	2015, January		Ktunaxa Nation Council								44			Economy	<u>Existing conditions</u> <ul style="list-style-type: none">• Given data gaps identified in 6.2, where the Application will describe the studies undertaken to characterize the existing conditions and trends, it may be necessary to include other studies to fill gaps in data (e.g. focus groups or First Nation survey/census data where it exists).• this section should include a description of barriers to meaningful First Nations employment with BC Hydro. Interviews with successful applicants may be a useful way to highlight strategies that have worked, to build upon for future mitigations. <ul style="list-style-type: none">• The AIR should explicitly include a section (under existing conditions) that considers impacts to the traditional economy from the Revelstoke Dam, as background context for the extent of existing impacts within the Columbia River area.	The Technical Boundaries sections of Section 6.2 Socio-community and 5.2 Economy acknowledge the limitations of Statistics Canada data generally and for Aboriginal and First Nations populations. As the limitations around statistical data are understood, wherever possible, the Socio-community and Economy Assessments will report and cross reference data provided by First Nations in Part C of the Assessment. Information regarding employment levels at the local, regional, and First Nation level are included in Section 5.2, Economy. Aboriginal procurement initiatives and measures to enhance First Nations employment opportunities at the Rev6 project will be included in the assessment. First Nations economic Rights and Interests, including Traditional economy considerations, will be discussed in Part C.			The Technical Boundaries sections of Section 6.2 Socio-community and 5.2 Economy acknowledge the limitations of Statistics Canada data generally and for Aboriginal and First Nations populations. As the limitations around statistical data are understood, wherever possible, the Socio-community and Economy Assessments will report and cross reference data provided by First Nations in Part C of the Assessment. Information regarding employment levels at the local, regional, and First Nation level are included in Section 5.2, Economy. Aboriginal procurement initiatives and measures to enhance First Nations employment opportunities at the Rev6 project will be included in the assessment. First Nations economic Rights and Interests, including Traditional economy considerations, will be discussed in Part C. See Section 5.2 of the dAIR.	Satisfactory
FN-KNC-46	2015, January		Ktunaxa Nation Council								46			Social Background	Include socio-economic studies & reports from Affected First Nations; replace 'First Nation' with 'Affected First Nations'	Affected First Nations are identified in Section 11 Order and listed in the Preface of the AIR.				Satisfactory

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FN-KNC-47	2015, January		Ktunaxa Nation Council								46			Social Background	The first sentence in the background includes social and cultural context but section 7.2 references only social and includes no indicators for culture. Where the second sentence of the first paragraph references economic effects, should that not reference social and cultural?	The Heritage and Archaeology candidate VC has been split into 'First Nations Cultural Heritage' and 'Historical and Archaeological Heritage'. 'First Nations Cultural Heritage' will be assessed by First Nations in Part C of the Application. First Nations economic Rights and Interests, including social and cultural values, may be discussed in Part C. Yes, the second sentence should reference social and cultural effects and will be updated.				Satisfactory	
FN-KNC-48	2015, January		Ktunaxa Nation Council								46			Socio-Community	Include information from Affected First Nations employment agencies; types of jobs; apprenticeship opportunities; number of employment opportunities; (track) number of Affected First Nations working on site & in what capacity Section 7.2 Socio-Community Indicators If culture is in this section – indicators will be needed such as First Nations language and cultural continuity (ability to engage in and engagement in practice of culture). It is the Ktunaxa preference that Language and Culture be included as VCs in Section 15. Will the housing baseline include quality and suitability (Indicators include housing in need of major repair, and suitability of accommodations according to the National Occupancy Standard (NOS) measures)? Safety – Potential changes to reservoir levels and downstream flows could result in ice formation changes that could impact on safety. Where does the AIR include an assessment of impacts from dam construction and traffic increases, as well as increases in hunting and fishing pressure, on Ktunaxa social and economic conditions?	Information regarding employment levels at the local, regional, and First Nation level are included in Section 5.2, Economy. The Heritage and Archaeology candidate VC has been split into 'First Nations Cultural Heritage' and 'Historical and Archaeological Heritage'. 'First Nations Cultural Heritage' section will be assessed by First Nations in Part C of the Application, and may include indicators such as language and cultural continuity. The housing baseline took into account conditions including quality and suitability. - BC Hydro does not expect changes in reservoir levels or downstream flows that would affect ice formation. - Traffic is an IC considered when assessing the Mammals and Socio-community VCs.			Information regarding employment levels at the local, regional, and First Nation level are included in Section 5.2, Economy. The Heritage and Archaeology candidate VC has been split into 'First Nations Cultural Heritage' and 'Historical and Archaeological Heritage'. 'First Nations Cultural Heritage' section will be assessed by First Nations in Part C of the Application, and may include indicators such as language and cultural continuity. The housing baseline took into account conditions including quality and suitability. - BC Hydro does not expect changes in reservoir levels or downstream flows that would affect ice formation. - Traffic is an IC considered when assessing the Mammals and Socio-community VCs. See Section 6 - Social Effects Assessment of the dAIR.		Satisfactory
FN-KNC-49	2015, January		Ktunaxa Nation Council								49			Land and Resource Use	• See comments above on Lands and Resource Use VC (section 4) • First Nations governance VC assessment should include the MCR as a result of the significant First Nations interest in this area. • The bullet re 'Introduce the assessment for land and resource use....'. Should include the elements of aboriginal rights use and values.	Issues of First Nations governance, land and resource use, Aboriginal Rights and Interests are discussed in Part C.				Satisfactory	
FN-KNC-5	2015, January		Ktunaxa Nation Council								ii			Rephrasing	Page (ii) typo; Akisnuk (AkisqnuK); Rather than use term 'First Nation' our preference would be to use 'Affected First Nations' (and define as First Nations impacted by the project) and list all First Nations impacted by the project	Typo error corrected. This section will include potentially impacted First Nations identified in the Section 11 Order.				Satisfactory	
FN-KNC-50	2015, January		Ktunaxa Nation Council								52			Heritage And Archaeology	It is not appropriate for the proponent to assess Ktunaxa intangible cultural heritage. The Ktunaxa will make this assessment on their own and describe the method and results within part c of the application. Please remove sub-components: intangible cultural heritage as they relate to the Ktunaxa. Sub-component "Locations with protected archaeological or historical sites, features, and artifacts" should be re-worded to recognize that the areas impacted by the Revelstoke 6 project have not been fully surveyed for archaeological sites and therefore there are many areas where recognized "protected" archaeological sites may exist that have not been recorded. This sub-component should be looking at areas having the potential to contain a "protected" archaeological or historical site, feature and artifact. Please remove the indicator "measurable disturbance or loss of elements essential to the preservation or character of intangible cultural heritage" as it pertains to the Ktunaxa. It is unclear how the proponent will be identifying the subcomponent "locations where First Nations Activities took place (i.e. cultural heritage sites)". It is also unclear as to the timeframe of this	Intangible cultural heritage as a sub-component has been removed. The Heritage and Archaeology candidate VC has been split into 'First Nations Cultural Heritage' and 'Historical and Archaeological Heritage'. 'First Nations Cultural Heritage' section will be assessed by First Nations in Part C of the Application. An assessment of the potential for unknown archaeological sites will be undertaken.			Intangible cultural heritage as a sub-component has been removed. The Heritage and Archaeology candidate VC has been split into 'First Nations Cultural Heritage' and 'Historical and Archaeological Heritage'. 'First Nations Cultural Heritage' section will be assessed by First Nations in Part C of the Application. An assessment of the potential for unknown archaeological sites will be undertaken. See Section 7.2 of the dAIR.		Satisfactory

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FN-KNC-51	2015, January		Ktunaxa Nation Council											Health	<p>The assessment for human health focuses on changes in electromagnetic field expected at the capacitor site.</p> <p>Potential construction phase effects need to be considered. Construction phase could impact health through:</p> <ul style="list-style-type: none">• workplace health and safety,• Increased traffic – air quality issues as well as accident risk, and increased risk of collision on roads. <p>Operation phase changes in reservoir levels or downstream flows need to be considered. These could impact health through:</p> <ul style="list-style-type: none">- impact on harvesting of traditional foods and resources (including but not limited to: small animals, burbot and migratory waterfowl)- ice formation changes, increased variability in downstream flows and potential safety risks.- Reservoir level changes – could impact air quality through increased draw down variability and related dust. <p>The Ktunaxa take an ecological approach to human health including confidence in wild foods. Given there is potential for impacts on harvesting, indicators are needed for access to and confidence in wild food. These could include First Nations diet</p>	<p>Workplace health and safety requirements consistent with Worksafe BC will be included in all contract documents, monitored, and enforced.</p> <p>Traffic and associated potential effects are discussed in the EA.</p> <p>Potential effects on traditional foods harvesting and resources will be discussed in Part C.</p> <p>BC Hydro does not expect changes in reservoir levels or downstream flows that would affect ice formation.</p> <p>There will be no change to normal operating range, and daily fluctuations would be similar for REV5 and REV 6.</p> <p>However, on rare occasions during winter, the increase in daily fluctuations could be up to 0.2m. These rare fluctuations will not effect wildlife. Reservoir ice was assessed in REV 5 with regard to potential effects to wildlife and this was determined to not be an issue. This is not considered to be an issue as Revelstoke Reservoir does not freeze over other than in isolated bays and inlets around and north of Downie Arm. Arrow Reservoir operations will not change</p>			<p>Confirmed. The potential effects of increased traffic on air quality are considered in Section 4.1.4 Air Quality and Noise.</p> <p>Workplace health and safety requirements consistent with Worksafe BC will be included in all contract documents, monitored, and enforced.</p> <p>Traffic and associated potential effects are discussed in the EA. See Section 6.2 of the dAIR.</p> <p>Potential effects on traditional foods harvesting and resources will be discussed in Part C.</p> <p>BC Hydro does not expect changes in reservoir levels or downstream flows that would affect ice formation. There will be no change to normal operating range on Revelstoke reservoir, and daily fluctuations would be similar for REV5 and REV 6. However, on rare occasions during winter, the increase in daily fluctuations could be up to 0.2m.</p>	Satisfactory
FN-KNC-52	2015, January		Ktunaxa Nation Council							59				Effects of the Environment on the project	<p>The application should identify any potential for synergistic or other cumulative effects between extreme events (weather, seismic, fore and climate change) and potential residual impacts to any of the VCs addressed in aforementioned sections. Section 11.0 re: climate change: The AIR should include modeling the likely effects of climate change on water levels upstream of Revelstoke Dam, and what these projected changes might mean for fluctuations within the reservoir, as well as downstream of the dam (Firelight).</p>	<p>The modelling and methodologies to assess the hydrological effects of the Project incorporate a broad range of climate and weather conditions. Climate change is discussed in Section 10 of the EA</p>			<p>The modelling and methodologies to assess the hydrological effects of the Project incorporate a broad range of climate and weather conditions. See Section 4.1 of the dAIR.</p>	Satisfactory
FN-KNC-53	2015, January		Ktunaxa Nation Council							60				Summary of Proposed Environmental and Operational Management Plans	<p>The AIR should include a list of these plans, to allow for review and gap analysis (Firelight).</p>	<p>A list of management plans are included in Section 13 of the AIR.</p>				Satisfactory
FN-KNC-54	2015, January		Ktunaxa Nation Council							63				Aboriginal Rights and Treaty Rights	<p>The first paragraph should be made more comprehensive by referring to aboriginal interests more generally, including First Nation treaty and aboriginal rights (including title). The AIR should require the Proponent to confirm whether a traditional use study or other indigenous knowledge-based baselines or assessment studies will be supported in relation to the proposed Project, and for which First Nations or aboriginal groups. Proponent should also clarify how the contributions of each First Nation or aboriginal group will be included in the application.</p>	<p>In the VC document, Aboriginal Interests is defined and includes claimed or proven Aboriginal Rights (title) and Treaty Rights. Available Traditional Use information and other Indigenous knowledge will inform Part B and C. The contribution of each First Nation will be described in the Application.</p>				Satisfactory
FN-KNC-55	2015, January		Ktunaxa Nation Council							67				Summary of Residual Effects	<p>Table 19.1 should include a column in which the uncertainty associated with each potential effect and the effectiveness of proposed mitigations.</p>	<p>The availability and quality of data used to support the EA has been described in the respective VC sections in Part B of the Application. Uncertainties related to the assessment are also described in the Application, e.g. related to modelling and residual effects.</p>			<p>This information will be provided in the application consistent with the requirements of 3.3 of the dAIR. Uncertainties related to the assessment are also described in the Application, e.g. related to modelling and residual effects.</p>	Satisfactory
FN-KNC-56	2015, January		Ktunaxa Nation Council							69				Summary of Mitigation and Follow up measures	<p>Table 20.1 should include a column in which the entities (both inside and outside of BC Hydro) and/or individuals responsible for implementation of the mitigation are identified</p>	<p>Bc Hydro views identification of responsible agencies as sufficient</p>				Satisfactory
FN-KNC-57	2015, January		Ktunaxa Nation Council							70				Conclusion	<p>The conclusion should include a summary of how the project, as assessed, will contribute to the stewardship, economic and other goals of First Nations.</p>	<p>The conclusion is focussed on a summary of residual effects. The summary on contributions to stewardship and , economic and other goals can be included in Sec C</p>			<p>The conclusion is focussed on a summary of residual effects. The summary on contributions to stewardship and , economic and other goals can be included in Sec C</p>	Satisfactory

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FN-KNC-59	2015, January		Ktunaxa Nation Council											Valued Components	<ul style="list-style-type: none">Revelstoke 6 baseline sections should include both a current and a pre-development baseline (at least prior to reservoir), including trend over time data, for all VCs so that decision makers can understand the context of past change to which Revelstoke 6 Project impacts would contribute.Cumulative effects, including reasonably foreseeable futures, should be estimated with consideration of foreseeable development, as well as anticipated changes in the environment including climate change and forest fire.Thresholds of significance should be clearly identified for each VC, and should consider Aboriginal perspectives.Clearly described and robust metrics should be used, and in some cases developed, for each of the VCs to better understand the extent of change and potential impacts. These metrics should be based on current scientific literature and will ensure transparency and unbiased determinations. In many cases there is a heavy reliance on judgments made by one professional, which may not, in the opinion of another, constitute evidence of a significant impact. <p><u>(Baseline Table, General Comments)</u></p>	<p>Pre and post dam conditions are included in the baseline as they contribute to the overall understanding of the VCs.</p> <p>Reasonably foreseeable future projects and environmental changes will be included in the Cumulative Effects assessment.</p> <p>Climate Change is discussed in Section 10 of the EA.</p> <p>Thresholds of significance for VCs are described in the dAIR, and consider information provided by First Nations through Consultation and information-sharing. The evaluation of the VC, indicators, and methods for review are based scientific literature and the findings of previous studies and monitoring programs, as well as the experience and expertise of qualified professionals.</p>			<p>Pre and post dam conditions are included in the baseline as they contribute to the overall understanding of the VCs. See Section 3.3 of the dAIR.</p> <p>Reasonably foreseeable future projects and environmental changes will be included in the Cumulative Effects assessment. See Section 3.10 of the dAIR.</p> <p>Climate Change and forest fires are discussed as outlined in Section 10 of the dAIR.</p> <p>Thresholds of significance for each VC are described in the dAIR, and consider information provided by First Nations through Consultation and information-sharing. The evaluation of the VC, indicators, and methods for review are based scientific literature and the findings of previous studies and monitoring programs, as well as the experience and expertise of qualified professionals.</p>	Satisfactory
FN-KNC-6	2015, January		Ktunaxa Nation Council							2				Proposed Project Description	<u>Proposed Project Description:</u> The Proponent should include a link to the Project Description in this section of the AIR.	Completed				Satisfactory
FN-KNC-60	2015, January		Ktunaxa Nation Council											Fish	<p>We don't appear to have access to the references, thus this comment may be misguided. However, the kokanee entrainment reports (e.g. Biosonics) prepared for the MCA - REV Fish Entrainment Strategy would seem to be directly relevant.</p> <p><u>(Baseline Table)</u></p>	<p>Agreed, this reference is directly relevant to entrainment and was included in development of the Entrainment Strategy for REV and review related to REV6.</p>				Satisfactory
FN-KNC-61	2015, January		Ktunaxa Nation Council											Fish	<p>#3 should indicate that 'No change in flow regime could be detected IN THE STUDY AREA could be detected after the 5th unit was online. Clearly, further upstream flow regime changes could be detected.</p> <p>Should also reference the monitoring undertaken associated with the placement of gravel/cobble adjacent to the Revelstoke golf course to attempt to increase retention of eggs and larvae within the spawning area (contact Jamie Crossman)</p> <p>What is the reason for this particular list of subcomponents? why not all species identified in the long-term fish indexing program</p> <p>Last sentence under F48 does not make sense</p> <p><u>(Baseline Table)</u></p>	<p>Changes in flow regime and habitat resulting from Rev 5, and the results of all relevant WUP studies conducted to date were considered in the baseline.</p> <p>The subcomponents selected are representative of the environmental values affected by the Project, and were determined through discussions with First Nations, regulators, and stakeholders.</p>			<p>Changes in flow regime and habitat resulting from Rev 5, and the results of all relevant WUP studies conducted to date were considered in the baseline. See Section 16 of the dAIR for a list of relevant references.</p> <p>The subcomponents selected are representative of the environmental values affected by the Project, and were determined through discussions with First Nations, regulators, and stakeholders.</p>	Satisfactory
FN-KNC-62	2015, January		Ktunaxa Nation Council											Fish	<p>BC Hydro should:</p> <ul style="list-style-type: none">include a specific measure for each species dealing with potential for increases in entrainment in different seasons due to the addition of the 6th generator. <p><u>(Baseline Table)</u></p>	<p>Entrainment Strategy risk screening concluded that kokanee were the species most at risk of entrainment at REV.</p> <p>Entrainment (specifically kokanee) is an indicator for the Fish and Fish Habitat VC.</p>			<p>Entrainment Strategy risk screening concluded that kokanee were the species most at risk of entrainment at REV. Entrainment (specifically kokanee) is an indicator for the Fish and Fish Habitat VC outlined in Section 4.2 of the dAIR.</p>	Satisfactory

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FN-KNC-63	2015, January		Ktunaxa Nation Council											<p>Fish</p> <ul style="list-style-type: none"> • Include burbot as a sub-component within RR. Background/Rationale: Burbot is a species of exceptional importance to Ktunaxa harvesters, particularly under ice in winter. Populations are very sensitive. Different species may have different risks of entrainment in different seasons. Regarding bull trout and entrainment, a recent study on the Kinbasket Reservoir (Mica Dam) showed an increased risk of entrainment of bull trout during the fall and winter months. Some of their conclusions: "Our findings indicate that increased entrainment risk of adult bull trout in the fall and winter is related to a combination of maximization of turbine operations in these seasons with concomitant changes in behavioral attributes, such as increased residence and proximity of bull trout to the intakes (presumably for foraging on kokanee) and reduced movement (perhaps limiting escape responses to accelerating water flow) during periods of cold water temperatures. Therefore, it would be prudent to explore mitigation measures, such as operating deterrent devices (for example, strobe lights, sound, screens), to prevent bull trout from approaching and becoming entrained at hydropower intakes during the fall and winter. These approaches would likely 	<p>Burbot are a subcomponent of the Fish and Fish Habitat VC which is discussed in Section 4.2.1.2.1 of the EA. Fish harvest information specific to First Nations will be included in Part C.</p> <p>The Entrainment Strategy screening of species of concern concluded that kokanee were most at risk for entrainment at REV, not Bull Trout or Burbot. Mitigative measures are included in the Entrainment Strategy.</p>			<p>Burbot are a subcomponent of the Fish and Fish Habitat VC which is discussed in Section 4.2.1.2.1 of the EA and listed in Table 2 of Section 3.1 of the dAIR. Fish harvest information specific to First Nations will be included in Part C.</p> <p>The Entrainment Strategy screening of species of concern concluded that kokanee were most at risk for entrainment at REV, not Bull Trout or Burbot. Mitigative measures are included in the Entrainment Strategy. See Section 4.2 of the dAIR.</p>	Satisfactory
FN-KNC-64	2015, January		Ktunaxa Nation Council											<p>Fish</p> <ul style="list-style-type: none"> • Consider the effects of erosion and sedimentation on habitat degradation. Current studies on erosion and sedimentation resulting from BCH operations should be expanded as they are currently limited in scope (i.e. number and location of sites). Background/Rationale: increased erosion and sedimentation can result in fish habitat degradation, particularly with respect to spawning habitats. Anecdotal evidence suggests there are several highly eroding sites that are not currently included in BCH monitoring programs. <u><i>(Baseline Table)</i></u> 	<p>The risk of incremental increases in bank erosion for the Mid Columbia River reach has been assessed in the Hydrology and Fluvial Geomorphology section.</p> <p>Quality and quantity of habitat is an indicator under the Fish and Fish Habitat VC, and includes substrate composition and sediment concentrations.</p>			<p>The risk of incremental increases in bank erosion for the Mid Columbia River reach has been assessed in the Hydrology and Fluvial Geomorphology section. See Section 4.1 of the dAIR. These potential interactions are summarized in Table 3 and 4 of Appendix A in the dAIR. Quality and quantity of habitat is an indicator under the Fish and Fish Habitat VC, and includes substrate composition and sediment concentrations. See Section 4.2 of the dAIR.</p>	Satisfactory
FN-KNC-65	2015, January		Ktunaxa Nation Council											<p>Fish</p> <ul style="list-style-type: none"> • include a measure of impact to egg and larval stranding as a result of increased variation in flow due to the Project. This will be of particular importance for Sturgeon • include a measure of impact to burbot and burbot spawning behavior as a result of changes in flow or temperature due to the Project. <p>Background/Rationale: The primary issue with sturgeon is related to egg and larval stranding due to variations in flow rates in the Columbia River. The impacts of higher peak flows in the Columbia River and seasonal timing in terms of impacts to fish and fish habitat should be considered. Please confirm the findings of any evaluation of impacts to white sturgeon spawning habitat pre and post unit 6 operations.</p> <p>With regards to burbot, it must be clear that water velocity and temperature should be included as a potential effect, as elevated discharge has negatively impacted burbot movements in winter. The greatest changes in velocity are likely to occur during the winter. Note that previous studies have identified that elevated winter discharges have been hypothesized to contribute to disrupting spawning migrations downstream of Libby Dam.</p>	<p>BC Hydro has documented sturgeon spawning in 9 of 12 years that monitoring has occurred. In only one year were eggs observed to be dewatered. This was prior to the implementation of the minimum flows. Minimum flows have increased the wetted area, and have reduced the chance of egg stranding based on the locations where eggs were found previously. The operational regime over the past decade during the 6 or so week period of the year when sturgeon are spawning rarely sees very low flows (+ ALR backwatering), but any increased variability in flows due to REV6 is likely to influence adult spawners more than have an effect of dewatering eggs. Interestingly, from the data we modelled, it appeared that some spawning events occurred during minimum flow periods, when water velocities are 1-1.5 m/s and would appear to be ideal for sturgeon. If eggs are deposited during these lower flow periods then they are not likely to be placed in areas that would become dewatered. We have ongoing annual monitoring that will assess egg</p>			<p>The Indicator "Fish habitat quality and quantity (velocity)" for listed species and Commercial / Recreational / Aboriginal (CRA) fisheries including White Sturgeon and Burbot is listed in Table 2 of the dAIR.</p>	Satisfactory

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FN-KNC-66	2015, January		Ktunaxa Nation Council											<p>Fish</p> <p>BC Hydro should:</p> <ul style="list-style-type: none"> include targeted collection of indigenous knowledge related to each of the key species (sub-components), and the potential effects of the Project on them from an indigenous knowledge perspective. Use of lands and resources by Aboriginal peoples, including fishing, should be recognized as its own VC and receive its own assessment <p>For baseline, the document states that the baseline and assessment will use available information for traditional knowledge and use. It is unclear if baseline data is adequate for all areas of cultural importance and use. <i>(Baseline Table)</i></p>	Traditional Knowledge, Traditional Land Use, and current First Nation practices will be discussed in Part C of the Application.			These questions will be addressed by First Nations as they are authoring Part C.	Satisfactory
FN-KNC-67	2015, January		Ktunaxa Nation Council											<p>Fish</p> <p>BC Hydro should:</p> <ul style="list-style-type: none"> Include a VC or sub-component that deals with (and associated metric), that deals with water levels, flow, sediment transport, and and water quality parameters. Good to see that the assessment will look at how Project may impact salmon restoration potential. Background/Rationale: Will the ecosystem health and function VC include measures of fish habitat parameters? Has there been sufficient consideration of the potential for higher flows to cause movement/erosion of substrates? Biodiversity could be treated as per the Fording Swift Chapter C assessment, which includes examining habitat connectivity, quantity and quality of habitat for rare specie and species that are most likely to be affected by Rev6, including fish, nesting birds, amphibians, culturally important plants. The Ktunaxa Nation defines biodiversity as: maintaining the health, quantity, and variability of all living things within Ktunaxa lands and waters at levels equivalent to pre-1900 conditions. Maintaining biodiversity requires the protection of individuals, populations, species, communities and habitats including ecosystem structure and processes. While the Ktunaxa recognize that their 	<p>Fish habitat parameters are assessed in the Fish and Fish Habitat VC; specifically, water quality is an indicator, and Hydrology and Fluvial Geomorphology is an Intermediate Component.</p> <p>The Ecosystem Health and Function for Biodiversity subcomponent to the Ecological Communities VC will assess spatial extent of all ecosystems and habitats, including associated vegetation assemblages and wildlife; and temporal changes to habitats within an annual cycle.</p>			<p>Fish habitat parameters are assessed in the Fish and Fish Habitat VC; specifically, water quality is an indicator, and Hydrology and Fluvial Geomorphology is an Intermediate Component. Refer to Sections 4.1 and 4.2 of the dAIR. The fish habitat parameters are located in Table 2 of Section 3.3 in the dAIR.</p> <p>The Ecosystem Health and Function for Biodiversity subcomponent to the Ecological Communities VC will assess spatial extent of all ecosystems and habitats, including associated vegetation assemblages and wildlife; and temporal changes to habitats within an annual cycle.</p> <p>Hydrology and Fluvial Geomorphology is an Intermediate Component including water levels, flow and sediment transport (including the potential for higher flows to cause movement/erosion of substrates). Fish habitat parameters</p>	Satisfactory
FN-KNC-68	2015, January		Ktunaxa Nation Council											<p>Plants</p> <p>Plants should be looked at as a component of biodiversity. See definition above. <i>(Baseline Table)</i></p>	Plants will be a VC. Biodiversity will be discussed within the context of Ecosystem Health and Function under Ecological Communities.			Plants will be a VC. Biodiversity will be discussed within the context of Ecosystem Health and Function under Ecological Communities. Section 4.4 and 4.3 of the dAIR.	Satisfactory
FN-KNC-69	2015, January		Ktunaxa Nation Council											<p>Rare and sensitive ecosystems</p> <p>BC Hydro should:</p> <ul style="list-style-type: none"> Rephrase this VC as 'Rare and Sensitive or Culturally Important Ecosystems'. Sub-component should include culturally important ecosystems (defined by occurrence of plants and animals of cultural importance) that may be impacted, but are rare or hard to find elsewhere within the territories of involved First Nations. <i>(Baseline Table)</i> 	Culturally important species and ecosystems will be identified in Part C of the EA.				Satisfactory
FN-KNC-7	2015, January		Ktunaxa Nation Council								8			<p>Hydrology and River Behaviour</p> <p><i>Hydrology and River Behaviour:</i></p> <ul style="list-style-type: none"> A section should be added to include a description of hydrologic and river behaviour conditions before Revelstoke 5 and immediately after, in order to anticipate incremental changes to the Middle Columbia River. This will be important for reducing uncertainty, planning restoration and/or mitigations for specific changes to hydrology and river behavior as well as fisheries, safety of river users and other issues of importance to the Ktunaxa. Please provide information on the condition of the river prior to regulation of the river (a pre-development baseline). It would be useful to undertake a study on how reservoir levels and MCR channels have changed over time (retrospective study using aerial photographs from pre-Revelstoke Dam), how these changes have influenced indigenous use of the river and whether actual impacts are within the bounds of what was predicted for Rev 5. 	The REV 5 EA study conducted by NHC provided an assessment of the geomorphic and sediment transport impacts of the Project at the time, including a review of air photos pre and post regulation. Limited predevelopment data is available, and pre-development assessments have not been completed.			<p>The REV 5 EA study conducted by NHC provided an assessment of the geomorphic and sediment transport impacts of the Project at the time, including a review of air photos pre and post regulation. Limited predevelopment data is available, and pre-development assessments have not been completed. See Section 4.1 (Hydrology and Fluvial Geomorphology) of the dAIR.</p> <p>How the changes have influenced indigenous use would be provided by the First Nations in Part C, and, and assessment of "REV 5 actual vs predicted" has been provided to First Nations (see line 32 above)</p>	Satisfactory

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FN-KNC-70	2015, January		Ktunaxa Nation Council											Rare and sensitive ecosystems	BC Hydro should: <ul style="list-style-type: none">include targeted collection of indigenous knowledge related to each ecosystem, and the potential effects of the Project on them from an indigenous knowledge perspective.Use of lands and resources by Aboriginal peoples, including a sub-component of culturally important plants and ecosystems, should be recognized as its own VC and receive its own assessment <u>(Baseline Table)</u>	Culturally important species and ecosystems will be identified in Part C of the EA.				Satisfactory
FN-KNC-71	2015, January		Ktunaxa Nation Council											Rare and sensitive ecosystems	BC Hydro should: <ul style="list-style-type: none">include a specific measure related to bioaccumulation of mercury or other contaminant issues, including psycho-social or perceived contamination or tainting of wild foods, potentially influenced by the Project. <u>(Baseline Table)</u>	We will evaluate whether there is currently an issue with mercury or other bioaccumulative materials associated with the dam. It is not expected that the proposed project will affect issues related to bioaccumulation or mercury.			The project will not result in water levels outside existing operating ranges, and therefore will not affect the bioaccumulation of mercury or other potential contaminants. The project itself has no introduced potential sources of mercury. A brief discussion of this is provided in the Human Health Section (8.2) of the Application.	Satisfactory
FN-KNC-72	2015, January		Ktunaxa Nation Council											Birds	BC Hydro should: <ul style="list-style-type: none">include a measure of impact to culturally important bird species as a result of the Project. Background/Rationale: Culturally important birds should be included. Results from existing studies indicate that most affected species (wrt productivity) are some waterfowl (mallard, teal spp, American Widgeon); some shore birds; short-eared owls. It would be interesting to see the results of any post-construction monitoring that was done for Rev 5, to see what the impacts were to nesting birds due to increases in river elevations. Note: through reading the communications pieces for the Columbia River WUP, it appears that little in the way of before Rev 5/ after Rev 5 comparisons have been made.The 2014 Columbia River WUP communications piece indicates that reservoir operations have a negative influence on most ground-nesting waterfowl due to nest flooding impacts. Given that monitoring occurs, it should be easy to set acceptable thresholds for impacts. Right now, soft targets are used but they seem to be often exceeded. <u>(Baseline Table)</u>	Potential effects on birds including some species of cultural importance are discussed in Section 4.6 of the EA. Further discussion of culturally important birds will be included in Part C. Studies pertaining to the impacts of Rev 5 on nesting birds have been included in the baseline.			Potential effects on birds including some species of cultural importance are discussed in Section 4.6 of the Application. Further discussion of culturally important birds will be included in Part C. Studies pertaining to the impacts of Rev 5 on nesting birds have been included in the baseline. See Section 4.6.2 in the dAIR. Consideration of potential effects of the project, proposal of avoidance / management or mitigation measures, assessment of residual effects, cumulative effects assessment, and development of follow-up strategy are set out in Sections 4.6.3 through 4.6.7 of the dAIR. The significance and confidence in assessed residual effects on birds, will be evaluated based on the characterization criteria, existing knowledge, effectiveness of proposed mitigation, and professional judgement.	Satisfactory
FN-KNC-73	2015, January		Ktunaxa Nation Council											Birds	BC Hydro should: <ul style="list-style-type: none">include targeted collection of indigenous knowledge related to each of the key species (sub-components), and the potential effects of the Project on them from an indigenous knowledge perspective. <u>(Baseline Table)</u>	Traditional Knowledge, Traditional Land Use, and current First Nation practices will be discussed in Part C of the Application.				Satisfactory
FN-KNC-74	2015, January		Ktunaxa Nation Council											Birds	<ul style="list-style-type: none">Use of lands and resources by Aboriginal peoples, including hunting of birds, should be recognized as its own VC and receive its own assessment <u>(Baseline Table)</u>	The Land and Resource Use VC assessment will consider Project-related effects on First Nations. Additional information related to use of lands and resources by Aboriginal peoples will be included in Part C of the Application.				Satisfactory

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FN-KNC-75	2015, January		Ktunaxa Nation Council											Birds	See comments re. biodiversity and fish above. An appropriate metric for biodiversity wrt bird populations should be developed. Ongoing monitoring of bird populations, including reproductive success, should be included. <i><u>(Baseline Table)</u></i>	BC Hydro will review existing information from the WUP studies (e.g., CLBMON 36, 39, 40) to address abundance and distribution of known occurrences of bird species, as well as abundance, distribution and quality of known suitable habitat for bird species (based on the WUP studies). The WUP studies address reproductive success of target species.			BC Hydro will review existing information from the WUP studies (e.g., CLBMON 36, 39, 40) to address abundance and distribution of known occurrences of bird species, as well as abundance, distribution and quality of known suitable habitat for bird species (based on the WUP studies). The WUP studies address reproductive success of target species. The list of indicators for the Bird VC are described in Table 2, Section 3.1. Requirements for the assessment of birds is outlined in Section 4.6 of the dAIR. Monitoring or other mitigation measures for VCs identified based on the effects assessment will be identified, where appropriate, in the Application.	Satisfactory
FN-KNC-76	2015, January		Ktunaxa Nation Council											Herptiles	Background/Rationale: summary says that the biological significance of any effect on amphibian populations is unknown and difficult to assess. A long-term amphibian monitoring program and associated habitat compensation would be appropriate. Note that the preliminary work done for the Columbia River WUP suggests that amphibians are negatively affected by dam operations: as reservoir elevations increased throughout the season, the total amount of available habitat decreased and some wetlands were flooded, affecting primarily western toads (from Rev 5 milestones document). Note that the Rev 5 Project review expressed concerns about the timing of influxes of cold water and how that may affect development of amphibians <i><u>(Baseline Table)</u></i>	Acknowledged. Applicable studies (including those related to soft constraints) will be reviewed for baseline information (e.g., CLBMON 37, 38, 11B3).			Acknowledged. Applicable studies (including those related to soft constraints) will be reviewed for baseline information (e.g., CLBMON 37, 38, 11B3). See Section 16 (References) of the dAIR.	Satisfactory
FN-KNC-77	2015, January		Ktunaxa Nation Council											Herptiles	BC Hydro should: • include targeted collection of indigenous knowledge related to each of the key species (amphibians), and the potential effects of the Project on them from a indigenous knowledge perspective. <i><u>(Baseline Table)</u></i>	"Traditional Use and Knowledge" will be included based on information provided by First Nations communities or First Nations co-ordinators.			"Traditional Use and Knowledge" is included based on information provided by First Nations communities or First Nations co-ordinators. See Section 3.3 of the dAIR and each VC.	Satisfactory
FN-KNC-78	2015, January		Ktunaxa Nation Council											Mammals	BC Hydro should: • add a furbearer, preferably culturally important and water level dependent (e.g. beaver or muskrat), to the list of VCs. <i><u>(Baseline Table)</u></i>	Furbearers are included in the Mammals VC and have been included in Section 4.7 of the EA. Further discussion of culturally important furbearing species will be included in Part C.			Within the Mammals Section (Section 4.7 of the EA) the sub-components include Mammal Species at Risk, Ungulates, and Traditional Use and Knowledge (species specifically identified by Aboriginal Groups that are of cultural or economic importance). Within the Traditional Use and Knowledge sub-component furbearers have been identified and a list of the species (17 in total) known or likely to occur within the Generation LSA is provided in Table 4.7-7 (found in the Description of Existing Conditions). Some of these furbearer species listed in Table 4.7-7 primarily use upland forested habitats and would rarely be found in the draw down zone. Species on the list that are closely associated with aquatic and shoreline habitats are beaver, muskrat, otter, mink, and raccoon. Potential effects to furbearers due to flooding is discussed in the Assessment of Potential Project-related Effects	Satisfactory

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FN-KNC-79	2015, January		Ktunaxa Nation Council											Mammals	<p>BC Hydro should:</p> <ul style="list-style-type: none">include targeted collection of indigenous knowledge related to each of the key species (mammals), and the potential effects of the Project on them from a indigenous knowledge perspective.Use of lands and resources by Aboriginal peoples, including hunting or trapping of mammals, should be recognized as its own VC and receive its own assessment. <p>Background/Rationale: Has there been good documentation of the effects of the existing dam on ungulate species? Establishing a baseline for traditional knowledge and use that extends prior to the initial building of the Revelstoke Dam would be appropriate. <u>(Baseline Table)</u></p>	The Land and Resource Use VC assessment will consider Project-related effects on First Nations. Additional information related to use of lands and resources by Aboriginal peoples will be included in Part C of the Application.			The Land and Resource Use VC assessment (Section 6.3 of the dAIR) will consider Project-related effects on First Nations. Additional information related to use of lands and resources by Aboriginal peoples will be included in Part C of the Application.	Satisfactory
FN-KNC-8	2015, January		Ktunaxa Nation Council							10				Project Land Use	<p><u>Project Land Use:</u></p> <p>Will this section discuss existing First Nations land use plans and use areas, as well as existing agreements with First Nations, where relevant?</p>	First Nation Land Use information will be included in the Land and Resource Use VC; includes review of Land and Resource Use. In addition, further information will be provided in Part C.			First Nation Land Use information is included in Part C.	Satisfactory
FN-KNC-80	2015, January		Ktunaxa Nation Council											Economy	<p>BC Hydro should:</p> <ul style="list-style-type: none">include a specific measure of direct revenues, direct and indirect employment, training and capacity building, and amount of procurement anticipated for each First Nation due to the addition of a 6th generator.Include a baseline discussion addressing if economic, training, and employments targets for First Nations have been met for Revelstoke 5 and Mica? If not, why not?include a specific assessment of economic effects anticipated for each First Nation due to the addition of a 6th generator <u>(Baseline Table)</u>	<p>Information regarding employment levels at the local, regional, and First Nation levels, including the number of First Nation hires on the Rev 5 Project, are provided in Section 5.2 of the EA. Information describing the length of employment for these employees is not available. Measures to enhance First Nation opportunities at the Rev6 project in light of the experience at Rev 5 are also included in the EA. Project-related opportunities training, capacity building, procurement for First Nations will be directly discussed with BC Hydro.</p> <p>Where appropriate, information from Part C will be integrated and cross-referenced throughout the Part B Economy and Socio-community Sections following receipt of Part C.</p>			<p>Information regarding employment levels at the local, regional, and First Nation levels, including the number of First Nation hires on the Rev 5 Project, is described in the EA. Information describing the length of employment for these employees is not available. Measures to enhance First Nation opportunities at the Rev6 project in light of the experience at Rev 5 and Mica 5/6 projects are also included in the EA. This is outlined in Section 5.2 of the dAIR. Project-related opportunities training, capacity building, procurement for First Nations will be directly discussed with BC Hydro.</p> <p>Where appropriate, information from Part C will be integrated and cross-referenced throughout the Part B Economy and Socio-community Sections following receipt of Part C.</p>	Satisfactory
FN-KNC-81	2015, January		Ktunaxa Nation Council											Socio-community	<p>BC Hydro should:</p> <ul style="list-style-type: none">include a set of specific measures and targets related to social impacts, for each First Nation due to the addition of a 6th generatorinclude a specific assessment of social effects anticipated for each First Nation due to the addition of a 6th generator <u>(Baseline Table)</u>	<p>Where information is available including information presented in Part C of the EAC Application, the Socio-community VC assessment will reflect existing conditions and consider Project-related socio-community effects on Aboriginal groups.</p> <p>The Socio-community VC assessment includes assessment of potential Project effects on the above Aboriginal Groups, taking into consideration information presented by these Aboriginal Groups in Part C.</p>			<p>Specific targets and measures are provided in Section 6.2 of the dAIR. Where information is available including information presented in Part C of the EAC Application, the Socio-community VC assessment will reflect existing conditions and consider Project-related socio-community effects on Aboriginal groups.</p> <p>The Socio-community VC assessment includes assessment of potential Project effects on the above Aboriginal Groups, taking into consideration information presented by these Aboriginal Groups in Part C.</p>	Satisfactory
FN-KNC-82	2015, January		Ktunaxa Nation Council											Land Use	<p>BC Hydro should:</p> <ul style="list-style-type: none">include a set of specific measures and targets related to impacts on recreation, tourism, and resource use relevant to each First Nation due to the addition of a 6th generator <u>(Baseline Table)</u>	Project-related impacts to recreation, resource use, and tourism will be considered in the Social and Economic Effects Sections of the EA. Specific measures and targets related to impacts on recreation, tourism, and resource use for First Nations will be generated based on information provided by First Nations, and will be discussed in Part C.			Project-related impacts to recreation, resource use, and tourism will be considered in the Social and Economic Effects Sections of the EA. See Section 6.2 of the dAIR. Specific measures and targets related to impacts on recreation, tourism, and resource use for First Nations will be generated based on information provided by First Nations, and will be discussed in Part C.	Satisfactory

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FN-KNC-83	2015, January		Ktunaxa Nation Council											Heritage and archaeology	BC Hydro should: <ul style="list-style-type: none">include a set of specific measures and targets related to potential shoreline or in-stream erosion that may impact nearby or underwater archaeological sites and that may be due to the addition of a 6th generatorinclude targeted collection of indigenous knowledge related to heritage and past use, and the potential effects of the Project on heritage and archaeology from an indigenous knowledge perspective. Background/Rationale: Table notes recommendation that an archeological inventory of both Kinbasket and Revelstoke reservoirs should be undertaken. See Core Committee Report for the Rev Unit 5 Project Consultative Process. It is important to clarify the current baseline and determine how well monitoring of impacts to archeological sites was done for Rev 5. (<u>Baseline Table</u>)	The EA includes measures specific to the potential effects of erosion and water level fluctuations on heritage and archaeology sites in the MCR. Information provided by First Nations has been considered in the Heritage and Archaeology VC. Traditional Knowledge, Traditional Land Use, and current First Nation practices will be discussed in Part C of the Application.			The EA includes measures specific to the potential effects of erosion and water level fluctuations on heritage and archaeology sites in the MCR. See Section 7.2 of the dAIR. Information provided by First Nations has been considered in the Heritage and Archaeology VC. Traditional Knowledge, Traditional Land Use, and current First Nation practices will be discussed in Part C of the Application.	Satisfactory
FN-KNC-84	2015, January		Ktunaxa Nation Council											Heritage and archaeology	BC Hydro should: <ul style="list-style-type: none">include a set of specific measures and targets related to potential shoreline or in-stream erosion that may impact near shore or underwater archaeological sites and that may be due to the addition of a 6th generatorinclude targeted collection of indigenous knowledge related to heritage and past use, and the potential effects of the Project on heritage and archaeology from an indigenous knowledge perspective. Background/Rationale: HA17: In 1994 Wayne Choquette prepared an impact study for the Revelstoke Unit 5 Project. This study focused on the area along the Columbia River below Revelstoke Dam in the area where projected increase in water level fluctuation due the fifth unit was anticipated. One archaeological site was located during this study, one area where artifacts were previously found along with several possible rock shelters were also identified. (<u>Baseline Table</u>)	For the Mid-Columbia Reach portion of the Rev 6 Project we will be relying on measures that were included in the CLBMON-50 wind and wave erosion monitoring study. The development of the CLBMON-50 five year study was due to recommendations made during the Columbia River Water Use Planning process. These recommendations included an Addendum to the Water Use Plan to add additional terms and conditions to address incremental impacts of the operation of a fifth generating unit at Revelstoke Dam. Measures for the CLBMON-50 study include: distance and direction monitoring points moved, indicating whether or not monitoring points could be found year to year, and erosion or accumulation of sediments at monitoring stations. The last year of fieldwork for the CLBMON-50 Study was in 2014. Results of CLBMON50 Study are currently being prepared and will be distributed to First Nations and discussed further during Archaeological Heritage Workshops. BC Hydro will include			Indicators are provided in Table 2, Section 3.1 of the dAIR. For the Mid-Columbia Reach portion of the Rev 6 Project we will be relying on measures that were included in the CLBMON-50 wind and wave erosion monitoring study. The development of the CLBMON-50 five year study was due to recommendations made during the Columbia River Water Use Planning process. These recommendations included an Addendum to the Water Use Plan to add additional terms and conditions to address incremental impacts of the operation of a fifth generating unit at Revelstoke Dam. Measures for the CLBMON-50 study include: distance and direction monitoring points moved, indicating whether or not monitoring points could be found year to year, and erosion or accumulation of sediments at monitoring stations. The last year of fieldwork for the CLBMON-50 Study was in 2014. Results of CLBMON50	Satisfactory
FN-KNC-85	2015, January		Ktunaxa Nation Council											Heritage and archaeology	BC Hydro should: 1) Consider including intangible cultural heritage values (including place names, transmission of knowledge) under First Nations Governance or similar in part c, and remove it from part b: Heritage 2) Include use of lands and resources by Aboriginal peoples, including habitation, cultural sites, and transportation values, as its own VC with its own assessment in part c 3) Remove "locations where First Nation's Activities took place" from this section, as it will be covered by the new VC of "Use of Lands and Resources by Aboriginal Peoples", including past, present and future use. Background/Rationale: Table states that baseline data will be extracted from previous studies, including HA20 (TUS for Rev 5) and HA21 (TUS for Mica 5/6 EA). Existing information may, or may not, be adequate for assessment purposes. The KNC is developing an overall TUS strategy and does not support work which is conducted without their knowledge or in a way that does not meet the criteria in their strategy. If TUS work is conducted, the KNC will lead the process for Ktunaxa citizens in order to ensure that the information presented is	1) The Heritage and Archaeology candidate VC has been split into 'First Nations Cultural Heritage' and 'Historical and Archaeological Heritage'. Governance has been removed from Part B and is now included in Part C. 2) Agreed. 'First Nations Cultural Heritage', including use of lands and resources by Aboriginal peoples (such as habitation, cultural sites, and transportation values) will be assessed by First Nations in Part C of the EA. 3) Agreed.			Satisfactory	

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FN-KNC-86	2015, January		Ktunaxa Nation Council											Health	BC Hydro should: <ul style="list-style-type: none">include a set of specific measures and targets related to changes in air quality (especially potential for air-borne dust as a result of reservoir fluctuation), and changes in quality of wild foods and fish, with a focus on mercury accumulation within the reservoir as a result of addition of a 6th generator <i>(Baseline Table)</i>	An assessment of air quality and a discussion of mercury and their potential effects on food and fish will be included in the EA.			An assessment of air quality and a discussion of mercury and their potential effects on food and fish will be included in the EA. See Section 4.1.4 Air Quality and Noise and Section 8 Human Health of the dAIR.	Satisfactory
FN-KNC-87	2015, January		Ktunaxa Nation Council											First Nations	BC Hydro should: <ul style="list-style-type: none">include a set of specific measures and targets related to First Nations governance, including contribution or impairment of established First Nation stewardship or planning goals as a result of the Project, and progress towards, or achievement of, FPIC. <i>(Baseline Table)</i>	Governance has been removed from Part B and is now included in Part C.				Satisfactory
FN-KNC-88	2015, January		Ktunaxa Nation Council											First Nations	BC Hydro should: <ul style="list-style-type: none">Include use of lands and resources by Aboriginal peoples as its own VC with its own assessment.Consider including intangible cultural heritage values (including place names, transmission of knowledge) under this VC or similar Background/Rationale: Impacts on First Nation ability to harvest (as through ice in winter) requires a different assessment endpoint than impacts to a particular resource (such as fish populations). It may then be possible to exclude "Locations where First Nation's activities took place (i.e., cultural heritage sites)" from part b under Heritage and have it covered under this VC. This VC would be in part c and would encompass past, present and future use of lands and resources. (Baseline Table)	Use of lands and resources by Aboriginal peoples will be assessed by First Nations in Part C of the EA. Part C will also address intangible cultural heritage values.				Satisfactory
FN-KNC-89	2015, January		Ktunaxa Nation Council											Heritage Resources	The Ktunaxa Nation will be using their own traditional use and other data to make their own assessments as to impacts to intangible cultural heritage within part c.	The Heritage and Archaeology candidate VC has been split into 'First Nations Cultural Heritage' and 'Historical and Archaeological Heritage'. 'First Nations Cultural Heritage' section will be assessed by First Nations in Part C of the Application.			Yes, the Ktunaxa Nation will be using their own data as they are authors of Part C.	Satisfactory
FN-KNC-9	2015, January		Ktunaxa Nation Council											Methodological Guidance	<ul style="list-style-type: none">The diagram outlining the methods used for the environmental assessment does not suggest including a pre-development baseline. A pre-development baseline, including a description of conditions before the dam, as well as after the main construction and before Rev 5, should be included ongoing trends of impact especially to aboriginal use and how Rev 6 may reinforce those trends. A strong sense of pre-development conditions will also provide a basis for reclamation and management goals that Rev 6 should aim for in order to support hydrologic patterns and riparian ecosystems similar to pre-development	Pre dam conditions are discussed for the VCs in the draft Application as they contribute to the overall understanding of the VCs context.			Pre dam conditions are discussed for the VCs in the draft Application as they contribute to the overall understanding of the VCs context. The existing conditions are provided for each VC, this is described in Section 3.3 of the dAIR.	Satisfactory
FN-LSLIB-1	2015, January		Little Shuswap Lake IB								iii	2		Other	In addition, the development of the dAIR has been informed by the BC Hydro's Core Committee process, which has brought together federal, provincial, and local government agencies, First Nations, and stakeholders to discuss, provide input and make recommendations associated with the Project. Consultation with First Nations occurs through a separate, formal process.	Agreed. While the Core Committee provides a forum for information exchange it does not replace FN Consultation.				Satisfactory

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FN-LSLIB-10	2015, January		Little Shuswap Lake IB								13	16		Other	The Application will include a summary of the consultation activities undertaken with the identified First Nations potentially affected by the proposed project (as identified in the Section 11 Order) including the information listed at parts 3.2.1 and 3.2.2 below. The notification and consultation activities will comply with the Public Consultation Policy Regulation (B.C. Reg. 373/2002) under BCEAA and will be undertaken in accordance with the consultation provisions of the Section 11 Order.[Statement needed that clarifies that the intent of participation by First Nations in the Core Committee and related sub-committees does not replace the requirement for a distinct and separate consultation process]	Agreed: The Province of British Columbia has a duty to consult and where required, accommodate First Nations whenever a decision or activity could impact Treaty rights or asserted or established Aboriginal Rights and Title. The Province has delegated the procedural aspects of the Rev 6 consultation to BC Hydro. While the Core Committee provides a forum for information exchange it does not replace FN Consultation.			Agreed: The Province of British Columbia has a duty to consult and where required, accommodate First Nations whenever a decision or activity could impact Treaty rights or asserted or established Aboriginal Rights and Title. The Province has delegated the procedural aspects of the Rev 6 consultation to BC Hydro. While the Core Committee provides a forum for information exchange it does not replace FN Consultation.	Satisfactory
FN-LSLIB-11	2015, January		Little Shuswap Lake IB								14	6		First Nation Consultation	. To-date, the Core Committee has been an important mechanism for consultation related to the Project. [specify 'non-First Nations' consultation]	The Core Committee is a forum for information exchange and advice. First Nations participation in the Core Committee does not replace First Nation Consultation				Satisfactory
FN-LSLIB-13	2015, January		Little Shuswap Lake IB												* Locations of the plants and how close they are to rising water levels and if at risk	Hydraulic modelling will assess the effects of changes in inundation on terrestrial environments.			Hydraulic modelling will assess the effects of changes in inundation on terrestrial environments. See Section 4.4 of the dAIR for an outline of the requirements.	Satisfactory
FN-LSLIB-14	2015, January		Little Shuswap Lake IB								19		T 4-1	Mammals	Ungulates (moose, mule deer) and Caribou is included in the EA.	A discussion of effects of REV6 on Caribou is included in the EA.			A discussion of effects of REV6 on Caribou is included in the EA. Table 2, Section 3.1 has been updated. Also, see Section 4.7 of the dAIR. Moose and mule deer are indicated as Ungulates of interest in Table 2 of Section 3.1 of the dAIR.	Satisfactory
FN-LSLIB-15	2015, January		Little Shuswap Lake IB												* Impacts to Caribou populations in the area, both in short and long term	A discussion of effects of REV6 on Caribou is included in the EA.			A discussion of effects of REV6 on Caribou is included in the EA. Table 2, Section 3.1 has been updated. Also, see Section 4.7 of the dAIR.	Satisfactory
FN-LSLIB-16	2015, January		Little Shuswap Lake IB											Rephrasing	Consistency with stewardship and Land and Resource Use planning objectives. [add: 'and Land Use']	Application will consider FN Land Use - specific assessment likely in Part C.			Application will consider FN Land Use specific assessment to be included in Part C.	Satisfactory
FN-LSLIB-17	2015, January		Little Shuswap Lake IB											Land and Resource Use	Levels of harvest and users. [see also Cultural Heritage VC and associated sub-components]	This information will be included in Part C.				Satisfactory
FN-LSLIB-18	2015, January		Little Shuswap Lake IB											Cultural Heritage	Locations with protected archaeological or historical sites, features and artifacts [this sub-component should clarify that 'Archaeology' includes landforms and landscapes, not just sites as defined under the Heritage Conservation Act]	This was completed. VC subcomponent description now states the following: Locations with protected archaeological or historical heritage sites, landscapes, landforms, features, stratigraphy, and artifacts				Satisfactory
FN-LSLIB-19	2015, January		Little Shuswap Lake IB											Cultural Heritage	Locations where First Nations activities took place (i.e., cultural heritage sites) [this sub-component should clarify that Cultural Heritage as for Archaeology includes sites, landforms and landscapes not covered under the BC CHA]	These comments will be addressed in the 'First Nations Cultural Heritage' section in Part C.				Satisfactory
FN-LSLIB-2	2015, January		Little Shuswap Lake IB								iii	8		Other	Agencies, First Nations, and stakeholders involved in the development of the dAIR include: Shuswap Nation Tribal Council (SNTC): Adams Lake, Bonaparte, Kamloops, Little Shuswap, Neskonlith, Shuswap, Simpcw, Skeetchestn, Splatnin, Whispering Pines; [Shouldn't only the Bands who are actively participating in the review be listed? The current list is misleading as it shows all Bands who are currently members of the SNTC - Little Shuswap is NOT currently an SNTC member]	BC Hydro will be guided by the Section 11 Order in determining the inclusion of specific First Nations in the Environmental Assessment				Satisfactory
FN-LSLIB-20	2015, January		Little Shuswap Lake IB											Cultural Heritage	Measurable disturbance or loss of elements essential to the preservation or character of cultural heritage sites, landforms or landscapes.	First Nations Cultural Heritage will be assessed in Part C of the Application. Subcomponents will include landforms and landscapes.				Satisfactory

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FN-LSLIB-21	2015, January		Little Shuswap Lake IB							25	17		Rephrasing	3. Hugh Keenleyside Dam and its effect on Arrow Reservoir [This needs to include all associated access roads, transmission lines, capacitor stations and other associated infrastructure}	Section 4.10 Cumulative Effects, page 25: The Rev 6 environmental assessment process will take into consideration the hydrological effects of Hugh Keenleyside Dam and the operation of Arrow Reservoir. Hugh Keenleyside infrastructure effects won't be included unless there is an interaction with the Project effects.			Section 4.10 Cumulative Effects, page 25: The Rev 6 environmental assessment process will take into consideration the hydrological effects of Hugh Keenleyside Dam and the operation of Arrow Reservoir. Hugh Keenleyside infrastructure effects won't be included unless there is an interaction with the Project effects. See Section 3.10 of the dAIR	Satisfactory	
FN-LSLIB-22	2015, January		Little Shuswap Lake IB							26	7		Climate Change	Add : <ul style="list-style-type: none">Impact of climate change using various models	Climate change is discussed in Section 10 of the EA.			Updated in Section 4.1 of the dAIR	Satisfactory	
FN-LSLIB-23	2015, January		Little Shuswap Lake IB							27	20		Fish	<ul style="list-style-type: none">Commercial, Recreational and Aboriginal fisheries (CRA), as defined in the <i>Fisheries Act</i>. Does not include federal/provincial listed species above (e.g., mountain whitefish, rainbow trout, burbot, kokanee); and [why are Aboriginal fisheries lumped in here? These include all fish species list under both bullets and others not listed	CRA is a definition in the Fisheries Act which is a regulatory requirement. This bullet is meant to include all those species that are not listed as species at risk (i.e., species other than sturgeon and bull trout). The three categories taken together should encompass the existing fish community.			CRA is a definition in the Fisheries Act which is a regulatory requirement. This bullet is meant to include all those species that are not listed as species at risk (i.e., species other than sturgeon and bull trout). The three categories taken together should encompass the existing fish community. Additional information pertaining to Aboriginal Fisheries will be provided in Part C.	Satisfactory	
FN-LSLIB-24	2015, January		Little Shuswap Lake IB							27	23		Fish	Traditional Use and Knowledge [including but not limited to: anadromous fish species (future re-introduction) including sockeye salmon, chinook salmon, coho salmon, steelhead trout]	Fish resources, including salmon, are discussed in Section 4.2.2.2.3 of the EA. Further information on Traditional Use and Knowledge will be included in Part C.			Fish resources, including salmon, are discussed in Section 4.2.2.2.3 of the EA. Further information on Traditional Use and Knowledge will be included in Part C. Examples of fish species are included in 4.2 of the dAIR and the VC document.	Satisfactory	
FN-LSLIB-25	2015, January		Little Shuswap Lake IB							28	14		Rephrasing	<ul style="list-style-type: none">Knowledge provided by First Nations, including historical information, oral history and Aboriginal Technical Knowledge.	Information provided by First Nations will be included in Part B of the EA. Additionally, Part C will be authored by First Nations, and will include Traditional Use and Knowledge.			Text updated to read 'Traditional Knowledge (e.g. historical information, oral history and Aboriginal technical Knowledge) and current Aboriginal practices'. Information provided by First Nations will be included in Part B of the EA. Additionally, Part C will be authored by First Nations, and will include Traditional Use and Knowledge.	Satisfactory	
FN-LSLIB-26	2015, January		Little Shuswap Lake IB							30	8		Rephrasing	<ul style="list-style-type: none">Information provided by First Nations communities or First Nations coordinators, including historic information on changes in plant distribution over time due to climate change.	Climate change is discussed in Section 10 of the EA. Information provided by First Nations will be included in Part B of the EA. Additionally, Part C will be authored by First Nations, and will include Traditional Use and Knowledge.			Information provided by First Nations will be included in Part B of the Application. Additionally, Part C will be authored by First Nations, and will include Traditional Use and Knowledge. Traditional Use and Knowledge (species specifically identified Aboriginal Groups) is an Indicator for all VCs, as outlined in Table 2 of the dAIR.	Satisfactory	
FN-LSLIB-27	2015, January		Little Shuswap Lake IB							30	20		Climate Change	Add: <ul style="list-style-type: none">Impacts of climate change on habitat distribution for culturally important species.	Climate change is discussed in Section 10 of the EA. Information provided by First Nations will be included in Part B of the EA. Additionally, Part C will be authored by First Nations, and will include Traditional Use and Knowledge.			Information provided by First Nations will be included in Part B of the EA. Additionally, Part C will be authored by First Nations, and will include Traditional Use and Knowledge. Traditional Use and Knowledge (species specifically identified Aboriginal Groups) is an Indicator for all VCs, as outlined in Table 2 of the dAIR.	Satisfactory	
FN-LSLIB-28	2015, January		Little Shuswap Lake IB							36	17		Rephrasing	<ul style="list-style-type: none">Traditional knowledge and current First Nation practices.	Accepted. Changed to Traditional knowledge and current Aboriginal practices				Satisfactory	
FN-LSLIB-29	2015, January		Little Shuswap Lake IB							36	25		Rephrasing	<ul style="list-style-type: none">Traditional knowledge and current First Nation practices.	Accepted. Changed to Traditional knowledge and current Aboriginal practices				Satisfactory	

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FN-LSLIB-3	2015, January		Little Shuswap Lake IB								iii	8		Other	• Nicola Tribal Association (NTA): Nootka Indian Band, Nicomen Indian Band, Shackan Indian Band, Siska Indian Band, Coldwater Indian Band, Cook's Ferry Indian Band; [are these Bands actually involved or should they be listed as 'notification only'?]	BC Hydro will be guided by the Section 11 Order in determining the inclusion of specific First Nations in the Environmental Assessment				Satisfactory
FN-LSLIB-30	2015, January		Little Shuswap Lake IB								38	26		Rephrasing	• Traditional knowledge and current First Nation practices.	Accepted. Changed to Traditional knowledge and currentAboriginal practices				Satisfactory
FN-LSLIB-31	2015, January		Little Shuswap Lake IB								39	7		Rephrasing	• Traditional knowledge and current First Nation practices.	Accepted. Changed to Traditional knowledge and currentAboriginal practices				Satisfactory
FN-LSLIB-32	2015, January		Little Shuswap Lake IB								42	8		Climate change	Add: • Impacts of climate change on habitat distribution for culturally important species.	Climate change is discussed in Section 10 of the EA. Information provided by First Nations will be included in Part B of the EA. Additionally, Part C will be authored by First Nations, and will include culturally important species.			Information provided by First Nations will be included in Part B of the EA. Additionally, Part C will be authored by First Nations, and will include culturally important species.	Satisfactory
FN-LSLIB-33	2015, January		Little Shuswap Lake IB								43	16		Rephrasing	• Local Government and First Nation Finances; and	FN finances will be included where provided by First Nations.				Satisfactory
FN-LSLIB-34	2015, January		Little Shuswap Lake IB								43	23		Rephrasing	Local government and First Nation expenditures and revenues	FN expenditures will be included where provided by First Nations.				Satisfactory
FN-LSLIB-35	2015, January		Little Shuswap Lake IB								44	5		Rephrasing	Provide a description and associated map(s) of the spatial and temporal boundaries for the assessment of economic effects, including applicable administrative and jurisdictional (including First Nation Territorial) boundaries	Maps of FN Territorial boundaries are included in Part A.			Maps of FN Territorial boundaries are included in Part A as required in Section 1.1 of the dAIR.	Satisfactory
FN-LSLIB-36	2015, January		Little Shuswap Lake IB								44	14		Rephrasing	• Traditional knowledge and current First Nation practices.	Accepted. Changed to Traditional knowledge and currentAboriginal practices				Satisfactory
FN-LSLIB-37	2015, January		Little Shuswap Lake IB								46	10		Rephrasing	The sources of information will include, but are not limited to, local and regional employment agencies, business associations, Regional First Nation Corporate entities, hotels and motel, alternative accomm	Format has been changed and this paragraph has been removed.				Satisfactory
FN-LSLIB-38	2015, January		Little Shuswap Lake IB								47	22		Rephrasing	• Traditional knowledge and current First Nation practices.	Accepted. Changed to Traditional knowledge and currentAboriginal practices				Satisfactory
FN-LSLIB-39	2015, January		Little Shuswap Lake IB								47	29		Rephrasing	• Traditional knowledge and current First Nation practices.	Accepted. Changed to Traditional knowledge and currentAboriginal practices				Satisfactory
FN-LSLIB-4	2015, January		Little Shuswap Lake IB								iii	8			• Nlakapamux Nation Tribal Council (NNTC): Lytton First Nation, Oregon Jack Creek Band, Ashcroft Indian Band, Boothroyd Indian Band, Boston Bar First Nation, Skuppah Indian Band, Spuzzum First Nation; [as above]	BC Hydro will be guided by the Section 11 Order in determining the inclusion of specific First Nations in the Environmental Assessment				Satisfactory
FN-LSLIB-40	2015, January		Little Shuswap Lake IB								49	7		Rephrasing	... Revelstoke municipal land use plans, lands of interest to First Nations and First Nation Land Use Plans, and lands for traditional uses	Agreed-response should be updated based on what lanaguage is adopted.			VC document was not updated, however,First Nations Land Use Plans were considered in the assessment to insure consistency with government land use designations and land use plan objectives and policies. Section 6.3 Land and Resource Use	Satisfactory
FN-LSLIB-41	2015, January		Little Shuswap Lake IB								49	23		Rephrasing	• Introduce the assessment for land and resource use, including recreation, viewscales, cultural landscapes, agriculture, parks and conservation areas, and land tenure;	Information pertaining to Cultural Landscape will be provided in Part C.				Satisfactory
FN-LSLIB-42	2015, January		Little Shuswap Lake IB								52	4		Rephrasing	The Application will provide a general description of the existing heritage cultural heritage context and resources/values in the areas surrounding the Project. The VCs, sub components and indicators associated with the cultural heritage effects will be described in the subsequent sections.	The Heritage and Archaeology candidate VC has been split into 'First Nations Cultural Heritage' and 'Historical and Archaeological Heritage'. 'First Nations Cultural Heritage' section will be assessed by First Nations in Part C of the Application.				Satisfactory

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FN-LSLIB-43	2015, January		Little Shuswap Lake IB								53	7		Rephrasing	The assessment of archaeology and historical cultural heritage resources protected under the Heritage Conservation Act (HCA) as well as other cultural resources and values not recognized under the HCA will be based on existing and available information, including studies carried out for the assessment of the Revelstoke Unit 5 Project and associated post construction monitoring studies, and studies carried out in relation to the Columbia River Project Water Use Plan, and studies carried out under BC Hydro's Reservoir Archaeology Program (RAP). The assessment of intangible cultural heritage resources will be based on relevant background available literature, existing and available Traditional Use Studies data, and additional knowledge provided by First Nations.	The Heritage and Archaeology candidate VC has been split into 'First Nations Cultural Heritage' and 'Historical and Archaeological Heritage'. First Nations will assess 'First Nations Cultural Heritage' in Part C of the Application, which will address these comments. The 'Historical and Archaeological Heritage' has been revised to include the following: "The assessment of archaeology and historical resources protected under the Heritage Conservation Act (HCA) will be based on existing and available information, including studies carried out for the assessment of the Revelstoke Unit 5 Project and associated post construction monitoring studies, and studies carried out in relation to the Columbia River Project Water Use Plan, and studies carried out under BC Hydro's Reservoir Archaeology Program (RAP). "			The Heritage and Archaeology candidate VC has been split into 'First Nations Cultural Heritage' and 'Historical and Archaeological Heritage'. First Nations will assess 'First Nations Cultural Heritage' in Part C of the Application, which will address these comments. The 'Historical and Archaeological Heritage' has been revised to include the following: "The assessment of archaeology and historical resources protected under the Heritage Conservation Act (HCA) will be based on existing and available information, including studies carried out for the assessment of the Revelstoke Unit 5 Project and associated post construction monitoring studies, and studies carried out in relation to the Columbia River Project Water Use Plan, and studies carried out under BC Hydro's Reservoir Archaeology Program (RAP). " See Section 7.2 of the dAIR.	Satisfactory
FN-LSLIB-44	2015, January		Little Shuswap Lake IB								52	17		Rephrasing	Sub-components of the Heritage and Archaeology Cultural Heritage VC for all project areas include: -Locations with protected archaeological or cultural sites, features and artifacts; -Locations where First Nations activities took place (i.e., cultural heritage sites, landforms or landscapes); and -Intangible cultural heritage values.	The 'First Nations Cultural Heritage' and 'First Nations Cultural Heritage' sections have been updated to address these comments.			The 'First Nations Cultural Heritage' and 'First Nations Cultural Heritage' sections have been updated to address these comments. Intangible cultural heritage values are discussed in Part C. Traditional Use and Knowledge (species specifically identified Aboriginal Groups) is an Indicator for all VCs, as outlined in Table 2 of the dAIR.	Satisfactory
FN-LSLIB-45	2015, January		Little Shuswap Lake IB								52	21		Rephrasing	Measurable disturbance or loss of archaeological or historical sites/landforms and landscapes, features, and artifacts	The 'Historical and Archaeological Heritage' section has been updated to address these comments.			The 'Historical and Archaeological Heritage' section has been updated to address these comments. Table 2 and Section 7.2.2 of the dAIR have been modified to reflect these comments.	Satisfactory
FN-LSLIB-46	2015, January		Little Shuswap Lake IB								52	23		Rephrasing	Changes to the accessibility of archaeological or historical sites/landforms and landscapes, features, and artifacts	The 'Historical and Archaeological Heritage' section has been updated to address these comments.			The 'Historical and Archaeological Heritage' section has been updated to address these comments. Table 2 and Section 7.2.2 of the dAIR have been modified to reflect these comments.	Satisfactory
FN-LSLIB-47	2015, January		Little Shuswap Lake IB								52	25		Rephrasing	Measurable disturbance or loss of elements essential to the preservation or character of cultural heritage sites/landforms and landscapes	The 'Historical and Archaeological Heritage' section has been updated to address these comments.			The 'Historical and Archaeological Heritage' section has been updated to address these comments. Table 2 and Section 7.2.2 of the dAIR have been modified to reflect these comments.	Satisfactory
FN-LSLIB-48	2015, January		Little Shuswap Lake IB								52	30		Rephrasing	• Introduce the assessment for archaeology and historical cultural resources and values;	The Heritage and Archaeology candidate VC has been split into 'First Nations Cultural Heritage' and 'Historical and Archaeological Heritage'. 'First Nations Cultural Heritage' section will be assessed by First Nations in Part C of the Application.				Satisfactory

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FN-LSLIB-49	2015, January		Little Shuswap Lake IB								52	33		Rephrasing	Identify any potential deficiencies in current available information and outline actions to address these deficiencies	The existing data were reviewed and field studies as well as modelling were initiated to address to data gaps. These studies were discussed with the FN, Core Committee and stakeholders. The existing data has been made available. The language is consistent with the EAO template.			The existing data were reviewed and field studies as well as modelling were initiated to address to data gaps. These studies were discussed with the FN, Core Committee and stakeholders. The existing data has been made available. The language is consistent with the EAO template. Refer to Section 3.3 of the dAIR.	Satisfactory
FN-LSLIB-5	2015, January		Little Shuswap Lake IB								ix	23		Cultural Heritage	8.0 CULTURAL HERITAGE Resources	This has been adressed through the restructuring of archaeology and cultural heritage sections				Satisfactory
FN-LSLIB-50	2015, January		Little Shuswap Lake IB								56	15		Rephrasing	Describe interactions between the Project and archaeology and historical cultural resources/values;	The Heritage and Archaeology candidate VC has been split into 'First Nations Cultural Heritage' and 'Historical and Archaeological Heritage'. 'First Nations Cultural Heritage' section will be assessed by First Nations in Part C of the Application.				Satisfactory
FN-LSLIB-51	2015, January		Little Shuswap Lake IB								54	16		Rephrasing	<ul style="list-style-type: none">Describe linkages or pathways of effect between archaeology and historical cultural resources/values and other VCs or ICs; and	The Heritage and Archaeology candidate VC has been split into 'First Nations Cultural Heritage' and 'Historical and Archaeological Heritage'. 'First Nations Cultural Heritage' section will be assessed by First Nations in Part C of the Application.			The 'Historical and Archaeological Heritage' section has been updated to address these comments. Table 2 and Section 7.2.2 of the dAIR have been modified to reflect these comments.	Satisfactory
FN-LSLIB-52	2015, January		Little Shuswap Lake IB								54	19		Rephrasing	<ul style="list-style-type: none">Provide a description and/or associated map(s) of the spatial and temporal boundaries for the assessment of archaeology and historical cultural resources/values, including applicable administrative and jurisdictional boundaries;	First Nations Cultural Heritage will be assessed in Part C of the Application.			Archaeology is outlined in Section 7.2 of the dAIR. First Nations Cultural Heritage will be assessed in Part C of the Application.	Satisfactory
FN-LSLIB-53	2015, January		Little Shuswap Lake IB								53	6		Rephrasing	<ul style="list-style-type: none">Describe the parameters used in the assessment of archaeology and historical cultural resources/values, and identify any potential deficiencies, if applicable; and	The Heritage and Archaeology candidate VC has been split into 'First Nations Cultural Heritage' and 'Historical and Archaeological Heritage'. 'First Nations Cultural Heritage' section will be assessed by First Nations in Part C of the Application.			Archaeology is outlined in Section 7.2 of the dAIR. The Heritage and Archaeology candidate VC has been split into 'First Nations Cultural Heritage' and 'Historical and Archaeological Heritage'. 'First Nations Cultural Heritage' section will be assessed by First Nations in Part C of the Application.	Satisfactory
FN-LSLIB-54	2015, January		Little Shuswap Lake IB								53	8		Rephrasing	Describe the technical, regulatory and jurisdictional requirements and considerations affecting the scope of the assessment and whether the sampling methods utilized under the previous archaeological projects were sufficient to provide an accurate representation of potential for impact on cultural heritage sites across the landscape.	The existing data were reviewed and field studies as well as modelling were initiated to address to data gaps. These studies were discussed with the FN, Core Committee and stakeholders. The existing data has been made available. First Nations Cultural Heritage will be assessed in Part C of the Application.			Archaeology is outlined in Section 7.2 of the dAIR. The scope of the assessment is outlined in Section 7.2.3 and 7.2.4 of the dAIR. The existing data were reviewed and field studies as well as modelling were initiated to address to data gaps. These studies were discussed with the FN, Core Committee and stakeholders. The existing data has been made available. First Nations Cultural Heritage will be assessed in Part C of the Application.	Satisfactory
FN-LSLIB-55	2015, January		Little Shuswap Lake IB								53	13		Rephrasing	<ul style="list-style-type: none">The existing conditions related to archaeology and historical cultural resources/values; and	The Heritage and Archaeology candidate VC has been split into 'First Nations Cultural Heritage' and 'Historical and Archaeological Heritage'. 'First Nations Cultural Heritage' section will be assessed by First Nations in Part C of the Application.				Satisfactory
FN-LSLIB-56	2015, January		Little Shuswap Lake IB								53	14		Rephrasing	Where available traditional or local knowledge related to archaeology and historical cultural resources/values in Part C.	First Nations Cultural Heritage will be assessed in Part C of the Application.			Traditional Use and Knowledge (species specifically identified Aboriginal Groups) is an Indicator for all VCs, as outlined in Table 2 of the dAIR.	Satisfactory
FN-LSLIB-57	2015, January		Little Shuswap Lake IB								53	24		Rephrasing	Potential effects on traditional use activity sites and features identified as protected cultural heritage resources under the <i>Heritage Conservation Act</i> ;	First Nations Cultural Heritage will be assessed in Part C of the Application.			Traditional Use and Knowledge (species specifically identified Aboriginal Groups) is an Indicator for all VCs, as outlined in Table 2 of the dAIR.	Satisfactory

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FN-LSLIB-58	2015, January		Little Shuswap Lake IB								53	26		Rephrasing	The methods used to assess effects of the Project on archaeology and historical cultural resources/values and the level of confidence assigned to these potential affects given the assessment model employed;	The Heritage and Archaeology candidate VC has been split into 'First Nations Cultural Heritage' and 'Historical and Archaeological Heritage'. 'First Nations Cultural Heritage' section will be assessed by First Nations in Part C of the Application. Level of confidence is discussed in Section 3.6. Characterization of Residual Effects of the dAIR, "Articulate the level of confidence associated with the likelihood and significance determination, including a description of any uncertainty associated with the residual effect prediction."				Satisfactory
FN-LSLIB-59	2015, January		Little Shuswap Lake IB								54	6		Rephrasing	The Application will identify and characterize potential adverse residual effects taking into account the implementation of proposed mitigation and any identified inadequacy of inventory, sampling frequency and methodology.	This comment references the Transmission Facilities Section (Pg 54, AIR Ref Sec. 6), but no archaeological sampling programs have been designed for this portion of the Project. As an archaeological sampling program has been designed for the Generating Station portion of the Project the 'Historical and Archaeological Heritage' section (Pg 54, AIR Ref Section 2) has been updated to include the following: "The Application will identify and characterize potential adverse residual effects including associated uncertainty in results or limitations of sampling design taking into account the implementation of proposed mitigation."				Satisfactory
FN-LSLIB-6	2015, January		Little Shuswap Lake IB								ix			Cultural Heritage	8.1 Cultural Heritage Background	This has been addressed through the restructuring of archaeology and cultural heritage sections				Satisfactory
FN-LSLIB-60	2015, January		Little Shuswap Lake IB								54	10		Rephrasing	The Application will describe any potential cumulative effects that are likely to result from any residual effects of the Project interacting with residual effects of other projects or activities that will or may affect archaeology and historical cultural resources/values. The assessment of cumulative effects will follow the procedures described in Section 4.7.	The Heritage and Archaeology candidate VC has been split into 'First Nations Cultural Heritage' and 'Historical and Archaeological Heritage'. 'First Nations Cultural Heritage' section will be assessed by First Nations in Part C of the Application.				Satisfactory
FN-LSLIB-61	2015, January		Little Shuswap Lake IB								54	15		Rephrasing	The Application will describe any potential cumulative effects that are likely to result from any residual effects of the Project interacting with residual effects of other projects or activities that will or may affect archaeology and historical cultural resources/values. The assessment of cumulative effects will follow the procedures described in Section 4.7.	The Heritage and Archaeology candidate VC has been split into 'First Nations Cultural Heritage' and 'Historical and Archaeological Heritage'. 'First Nations Cultural Heritage' section will be assessed by First Nations in Part C of the Application.				Satisfactory
FN-LSLIB-62	2015, January		Little Shuswap Lake IB								54	27		Rephrasing	The Application will include Table 8-1 summarizing the assessment of potential effects on archaeology and historical cultural resources/values, proposed key mitigation measures and significance of any adverse residual effects.	The Heritage and Archaeology candidate VC has been split into 'First Nations Cultural Heritage' and 'Historical and Archaeological Heritage'. 'First Nations Cultural Heritage' section will be assessed by First Nations in Part C of the Application.				Satisfactory
FN-LSLIB-63	2015, January		Little Shuswap Lake IB								63	7		Rephrasing	To the extent that it is available, Traditional Knowledge (TK), Traditional Land Use (TLU) and current First Nation practices will be incorporated into the assessment of the effects of the Project on the selected VCs (Part B of the Application).	Information provided by First Nations will be included in Part B of the EA. Additionally, Part C will be authored by First Nations, and will include Traditional Knowledge, Traditional Land Use, and current First Nation practices.			Section 3.3 of the dAIR, Existing Conditions, specifies that that Application will include a description of what Traditional Ecological Knowledge (TEK), including Traditional Knowledge (e.g. historical information, oral history and Aboriginal Technical Knowledge) and current Aboriginal practices, was used in the VC assessment for each VC.	Satisfactory

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FN-LSLIB-64	2015, January		Little Shuswap Lake IB							63	20		Rephrasing	• Document BC Hydro's understanding of how the environment is valued by each potentially affected First Nation in relation to their current use or values of lands and resources for traditional purposes, including specific activities conducted in the exercise of asserted or established Aboriginal rights and treaty rights;	First Nations' current use and valuation of lands and resources will be discussed in Part C.				Satisfactory	
FN-LSLIB-7	2015, January		Little Shuswap Lake IB							xi			Cultural Heritage	8.1: Summary of Potential Cultural Heritage Effects	This has been addressed through the restructuring of archaeology and cultural heritage sections				Satisfactory	
FN-LSLIB-8	2015, January		Little Shuswap Lake IB							ix	25		Cultural Heritage	8.2 Cultural Heritage and Archaeology	This has been addressed through the restructuring of archaeology and cultural heritage sections				Satisfactory	
FN-LSLIB-9	2015, January		Little Shuswap Lake IB							x	5		Cultural Heritage	Summary of Assessment of potential Cultural Heritage Effects	This has been addressed through the restructuring of archaeology and cultural heritage sections				Satisfactory	
FN-SIB-1	2015, January		Shuswap IB							ii	2		Other	"In addition, the development of the dAIR has been informed by the BC Hydro's Core Committee process, which has brought together federal, provincial, and local government agencies, First Nations, and stakeholders to discuss, provide input and make recommendations associated with the Project ". Consultation with Aboriginal Groups occurs through a separate, formal process.	Acknowledged. While the Core Committee provides a forum for information exchange it does not replace First Nations Consultation.				Satisfactory	
FN-SIB-10	2015, January		Shuswap IB							19		T 4-1	Plants	Information provided by First Nations communities or First Nations coordinators.	Information provided by First Nations was included in the baseline.			Information provided by First Nations was included in the baseline. See Section 4.6 of the dAIR	Satisfactory	
FN-SIB-11	2015, January		Shuswap IB							19		T 4-1	Mammals	Ungulates (moose, mule deer) and Caribou. Impacts to Caribou populations in the area, both in short and long term	A discussion of effects of REV6 on Caribou is included in the EA.			A discussion of effects of REV6 on Caribou is included in the EA. See Section 4.9 of the dAIR	Satisfactory	
FN-SIB-12	2015, January		Shuswap IB										Rephrasing	Consistency with stewardship and Land and Resource Use planning objectives. [add: 'and Land Use']	Land Use is discussed in Section 6.3 of the Application.			Land Use is discussed in Section 6.3 of the Application.See Section 6.3 of the dAIR	Satisfactory	
FN-SIB-13	2015, January		Shuswap IB										Land and Resource Use	Levels of harvest and users. [see also Cultural Heritage VC and associated sub-components]	Part C of the Application will include First Nations Cultural Heritage.				Satisfactory	
FN-SIB-14	2015, January		Shuswap IB										Cultural Heritage	Locations with protected archaeological or historical sites, features and artifacts [this sub-component should clarify that 'Archaeology' includes landforms and landscapes, not just sites as defined under the Heritage Conservation Act]	The 'Historical and Archaeological Heritage' VC subcomponent has been updated to include landscapes and landforms. Part C of the Application will include First Nations Cultural Heritage.				Satisfactory	
FN-SIB-15	2015, January		Shuswap IB										Cultural Heritage	Locations where First Nations activities took place (i.e., cultural heritage sites) [this sub-component should clarify that Cultural Heritage as for Archaeology includes sites, landforms and landscapes not covered under the BCHCA	Part C of the Application will include First Nations Cultural Heritage.				Satisfactory	
FN-SIB-16	2015, January		Shuswap IB										Cultural Heritage	Measurable disturbance or loss of elements essential to the preservation or character of cultural heritage sites, landforms or landscapes.	The 'Historical and Archaeological Heritage' VC subcomponent has been updated to include landscapes and landforms. Part C of the Application will include First Nations Cultural Heritage.				Satisfactory	
FN-SIB-17	2015, January		Shuswap IB							25	17		Rephrasing	3. Hugh Keenleyside Dam and its effect on Arrow Reservoir [This needs to include all associated access roads, transmission lines, capacitor stations and other associated infrastructure]	The Rev 6 environmental assessment process will take into consideration the hydrological effects of Hugh Keenleyside Dam and the operation of Arrow Reservoir. Hugh Keenleyside infrastructure effects won't be included unless there is an interaction with the Project effects.			The Rev 6 environmental assessment process will take into consideration the hydrological effects of Hugh Keenleyside Dam and the operation of Arrow Reservoir. Hugh Keenleyside infrastructure effects will be included if there is an interaction with the Project effects.See Section 3.10 of the dAIR. Hugh Keenleyside dam impounds Arrow Reservoir. Arrow Reservoir backflows to Revelstoke at full pool (summer). Therefore, Hugh Keenleyside operations affect all VCs in the MCR. (many or most of them)	Satisfactory	
FN-SIB-18	2015, January		Shuswap IB							26	7		Climate Change	Impact of climate change using various models	Climate change is discussed in Section 10 of the EA			Climate change is discussed in Section 10 and 4.1.1 of the EA. See Section 4.1 of the dAIR	Satisfactory	

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FN-SIB-19	2015, January		Shuswap IB								27	20		Fish	Commercial, Recreational and Aboriginal fisheries (CRA), as defined in the <i>Fisheries Act</i> . Does not include federal/provincial listed species above (e.g., mountain whitefish, rainbow trout, burbot, kokanee); and [why are Aboriginal fisheries lumped in here? These include all fish species list under both bullets and others not listed	CRA is a definition in the <i>Fisheries Act</i> which is a regulatory requirement. This bullet is meant to include all those species that are not listed as species at risk (i.e., species other than sturgeon and bull trout). The three categories taken together should encompass the existing fish community.			CRA is a definition in the Fisheries Act which is a regulatory requirement. This bullet is meant to include all those species that are not listed as species at risk (i.e., species other than sturgeon and bull trout). The three categories taken together should encompass the existing fish community. See Section 4.4 of the dAIR.	Satisfactory
FN-SIB-2	2015, January		Shuswap IB								iii	8		Other	Agencies, First Nations, and stakeholders involved in the development of the dAIR include: Shuswap Nation Tribal Council (SNTC): Adams Lake, Bonaparte, Kamloops, Little Shuswap, Neskonlith, Shuswap, Simpcw, Skeetchestn, Splatsin, Whispering Pines; [Shouldn't only the Bands who are actively participating in the review be listed? The current list is misleading as it shows all Bands who are currently members of the SNTC - Little Shuswap is NOT currently an SNTC member]	BC Hydro will be guided by the Section 11 Order in determining the inclusion of specific First Nations in the Environmental Assessment and is reflected in the Aboriginal Consultation Plan.			BC Hydro will be guided by the Section 11 Order in determining the inclusion of specific First Nations in the Environmental Assessment and is reflected in the Aboriginal Consultation Plan. These are listed in the Preface of the dAIR and the requirements for consultation is outlined in Section 2, 11 and 12 of the dAIR.	Satisfactory
FN-SIB-20	2015, January		Shuswap IB								27	23		Fish	Traditional Use and Knowledge [including but not limited to: anadromous fish species (future re-introduction) including sockeye salmon, chinook salmon, coho salmon, steelhead trout]	Fish resources, including salmon, are discussed in Section 4.2.2.2.3 of the EA. Further information on Traditional Use and Knowledge will be included in Part C.			Fish resources, including salmon, are discussed in Section 4.6.2.2.3 of the EA and see Section 4.6 of the dAIR. Further information on Traditional Use and Knowledge will be included in Part C.	Satisfactory
FN-SIB-21	2015, January		Shuswap IB								28	14		Rephrasing	Knowledge provided by First Nations, including historical information, oral history and Aboriginal Technical Knowledge.	Accepted. Will be updated in the AIR.			Accepted. Will be updated in the AIR. Defined in Section 3.3 of the dAIR	Satisfactory
FN-SIB-22	2015, January		Shuswap IB								30	8		Rephrasing	Information provided by First Nations communities or First Nations coordinators, including historic information on changes in plant distribution over time due to climate change.	Climate change is discussed in Section 4.1.1 of the EA			Climate change is discussed in Section 4.1.1 of the EA. See Section 4.1 and Section 10 of the dAIR	Satisfactory
FN-SIB-23	2015, January		Shuswap IB								30	20		Climate Change	Add: • Impacts of climate change on habitat distribution for culturally important species.	Climate change is discussed in Section 4.1.1 of the EA			Climate change is discussed in Section 4.1.1 of the EA. See Section 4.1 and Section 10 of the dAIR	Satisfactory
FN-SIB-24	2015, January		Shuswap IB								36	17		Rephrasing	• Traditional knowledge and current First Nation practices.	Accepted. Changed to Traditional knowledge and current Aboriginal practices				Satisfactory
FN-SIB-25	2015, January		Shuswap IB								36	25		Rephrasing	• Traditional knowledge and current First Nation practices.	Accepted. Changed to Traditional knowledge and current Aboriginal practices				Satisfactory
FN-SIB-26	2015, January		Shuswap IB								38	26		Rephrasing	• Traditional knowledge and current First Nation practices.	Accepted. Changed to Traditional knowledge and current Aboriginal practices				Satisfactory
FN-SIB-27	2015, January		Shuswap IB								39	7		Rephrasing	• Traditional knowledge and current First Nation practices.	Accepted. Changed to Traditional knowledge and current Aboriginal practices				Satisfactory
FN-SIB-28	2015, January		Shuswap IB								42	8		Climate change	Add: • Impacts of climate change on habitat distribution for culturally important species.	Climate change is discussed in Section 4.1.1 of the EA			Climate change is discussed in Section 4.1.1 of the EA. See Section 4.1 and Section 10 of the dAIR	Satisfactory
FN-SIB-29	2015, January		Shuswap IB								43	16		Rephrasing	• Local Government and First Nation Finances; and	First Nations finances will be included where provided by First Nations.				Satisfactory
FN-SIB-3	2015, January		Shuswap IB								iii	8		Other	Nicola Tribal Association (NTA): Nookatch Indian Band, Nicomen Indian Band, Shackan Indian Band, Siska Indian Band, Coldwater Indian Band, Cook's Ferry Indian Band; [are these Bands actually involved or should they be listed as 'notification only?]	BC Hydro will be guided by the Section 11 Order in determining the inclusion of specific First Nations in the Environmental Assessment and is reflected in the Aboriginal Consultation Plan.				Satisfactory
FN-SIB-30	2015, January		Shuswap IB								43	23		Rephrasing	Local government and First Nation expenditures and revenues	First Nations expenditures and revenues will be included where provided by First Nations.				Satisfactory
FN-SIB-31	2015, January		Shuswap IB								44	5		Rephrasing	Provide a description and associated map(s) of the spatial and temporal boundaries for the assessment of economic effects, including applicable administrative and jurisdictional (including First Nation Territorial) boundaries	Maps of FN Territorial boundaries are included in Part A.			Maps of FN Territorial boundaries are included in Part A. See Section 1.1 of the dAIR	Satisfactory
FN-SIB-32	2015, January		Shuswap IB								44	14		Rephrasing	• Traditional knowledge and current First Nation practices.	Accepted. Changed to Traditional knowledge and current Aboriginal practices				Satisfactory

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FN-SIB-33	2015, January		Shuswap IB							46	10		Rephrasing	The sources of information will include, but are not limited to, local and regional employment agencies, business associations, Regional First Nation Corporate entities, hotels and motel, alternative accomm	Agreed			Agreed. See Section 5 of the dAIR	Satisfactory	
FN-SIB-34	2015, January		Shuswap IB							47	22		Rephrasing	• Traditional knowledge and current First Nation practices.	Accepted. Changed to Traditional knowledge and current Aboriginal practices				Satisfactory	
FN-SIB-35	2015, January		Shuswap IB							47	29		Rephrasing	• Traditional knowledge and current First Nation practices.	Accepted. Changed to Traditional knowledge and current Aboriginal practices				Satisfactory	
FN-SIB-36	2015, January		Shuswap IB							49	7		Rephrasing	... Revelstoke municipal land use plans, lands of interest to First Nations and First Nation Land Use Plans, and lands for traditional uses	Accepted. Changed to Traditional knowledge and current Aboriginal practices				Satisfactory	
FN-SIB-37	2015, January		Shuswap IB							49	23		Rephrasing	• Introduce the assessment for land and resource use, including recreation, viewscales, cultural landscapes, agriculture, parks and conservation areas, and land tenure;	Information pertaining to Cultural Landscape will be provided in Part C.			See Section 6.3 of the dAIR. Additional information pertaining to Cultural Landscape will be provided in Part C.	Satisfactory	
FN-SIB-38	2015, January		Shuswap IB							52	1		Rephrasing	8.0 CULTURAL HERITAGE Resources	The Heritage and Archaeology candidate VC has been split into 'First Nations Cultural Heritage' and 'Historical and Archaeological Heritage'. 'First Nations Cultural Heritage' section will be assessed by First Nations in Part C of the Application. Subcomponents for the 'First Nations Cultural Heritage' could include the following: landforms; intangible heritage sites; traditional use & knowledge. Socio-community and socio-economic effects assessment may be included in Part C of the Application.			The Heritage and Archaeology candidate VC has been split into 'First Nations Cultural Heritage' and 'Historical and Archaeological Heritage'. See Section 7.2 of the dAIR. 'First Nations Cultural Heritage' section will be assessed by First Nations in Part C of the Application. Subcomponents for the 'First Nations Cultural Heritage' could include the following: landforms; intangible heritage sites; traditional use & knowledge. Socio-community and socio-economic effects assessment may be included in Part C of the Application.	Satisfactory	
FN-SIB-39	2015, January		Shuswap IB							52	4		Rephrasing	The Application will provide a general description of the existing cultural context and resources in the areas surrounding the Project. The VCs, sub components and indicators associated with the cultural heritage effects will be described in the subsequent sections.	This has been addressed through the restructuring of archaeology and cultural heritage sections			This has been addressed through the restructuring of archaeology and cultural heritage sections. See Section 7.2 of the dAIR.	Satisfactory	
FN-SIB-4	2015, January		Shuswap IB							iii	8			Nlakapamux Nation Tribal Council (NNTC): Lytton First Nation, Oregon Jack Creek Band, Ashcroft Indian Band, Boothroyd Indian Band, Boston Bar First Nation, Skuppah Indian Band, Spuzzum First Nation; [as above]	BC Hydro will be guided by the Section 11 Order in determining the inclusion of specific First Nations in the Environmental Assessment. This is reflected in the Aboriginal Consultation Plan.				Satisfactory	
FN-SIB-40	2015, January		Shuswap IB							53	7		Rephrasing	The assessment of archaeology and cultural resources protected under the <i>Heritage Conservation Act</i> (HCA) as well as other cultural resources and values not recognized under the HCA will be based on existing and available information, including studies carried out for the assessment of the Revelstoke Unit 5 Project and associated post construction monitoring studies, and studies carried out in relation to the Columbia River Project Water Use Plan, and studies carried out under BC Hydro's Reservoir Archaeology Program (RAP).	These comments will be addressed in the 'First Nations Cultural Heritage' section.			These comments will be addressed in the Historical and Archaeological Heritage section of the EA. See Section 7.2 of the dAIR.	Satisfactory	
FN-SIB-41	2015, January		Shuswap IB							52	17		Rephrasing	Sub-components of the Cultural Heritage VC for all project areas include: ... Locations where First Nations activities took place (i.e., cultural heritage sites, landforms or landscapes);	The 'Historical and Archaeological Heritage' VC subcomponent has been updated to include landscapes and landforms. Part C of the Application will include First Nations Cultural Heritage.				Satisfactory	
FN-SIB-42	2015, January		Shuswap IB							52	21		Rephrasing	Measurable disturbance or loss of archaeological or historical sites/landforms and landscapes, features, and artifacts	The 'Historical and Archaeological Heritage' VC subcomponent has been updated to include landscapes and landforms.				Satisfactory	
FN-SIB-43	2015, January		Shuswap IB							52	23		Rephrasing	Changes to the accessibility of archaeological or historical sites/landforms and landscapes, features, and artifacts	The 'Historical and Archaeological Heritage' VC subcomponent has been updated to include landscapes and landforms.				Satisfactory	

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FN-SIB-44	2015, January		Shuswap IB								52	25		Rephrasing	Measurable disturbance or loss of elements essential to the preservation or character of cultural heritage sites/landforms and landscapes	The 'Historical and Archaeological Heritage' VC subcomponent has been updated to include landscapes and landforms. Part C of the Application will include First Nations Cultural Heritage.				Satisfactory
FN-SIB-45	2015, January		Shuswap IB								52	30		Rephrasing	<ul style="list-style-type: none">Introduce the assessment for cultural heritage resources and values;	This has been addressed through the restructuring of archaeology and cultural heritage sections			This has been addressed through the restructuring of archaeology and cultural heritage sections. See Section 7.2 of the dAIR.	Satisfactory
FN-SIB-46	2015, January		Shuswap IB								52	33		Rephrasing	Identify any potential deficiencies in current available information and outline actions to address these deficiencies	The existing data were reviewed and field studies as well as modelling were initiated to address to data gaps. These studies were discussed with the FN, Core Committee and stakeholders. The existing data has been made available. The language is consistent with the EAO template.			The existing data were reviewed and field studies as well as modelling were initiated to address data gaps. These studies were discussed with the FN, Core Committee and stakeholders. The existing data has been made available. The language is consistent with the EAO template. See Section 7.2 of the dAIR.	Satisfactory
FN-SIB-47	2015, January		Shuswap IB								56	15		Rephrasing	Describe interactions between the Project and cultural heritage resources	This has been addressed through the restructuring of archaeology and cultural heritage sections				Satisfactory
FN-SIB-48	2015, January		Shuswap IB								54	16		Rephrasing	<ul style="list-style-type: none">Describe linkages or pathways of effect between cultural heritage resources/values and other VCs or ICs; and	This has been addressed through the restructuring of archaeology and cultural heritage sections				Satisfactory
FN-SIB-49	2015, January		Shuswap IB								54	19		Rephrasing	<ul style="list-style-type: none">Provide a description and/or associated map(s) of the spatial and temporal boundaries for the assessment of cultural heritage resources/values, including applicable administrative and jurisdictional boundaries;	This has been addressed through the restructuring of archaeology and cultural heritage sections				Satisfactory
FN-SIB-5	2015, January		Shuswap IB								ix	23		Cultural Heritage	8.0 CULTURAL HERITAGE Resources	The Heritage and Archaeology candidate VC has been split into 'First Nations Cultural Heritage' and 'Historical and Archaeological Heritage'. 'First Nations Cultural Heritage' section will be assessed by First Nations in Part C of the Application. Subcomponents for the 'First Nations Cultural Heritage' could include the following: landforms; intangible heritage sites; traditional use & knowledge. Socio-community and socio-economic effects assessment may be included in Part C of the Application.			The Heritage and Archaeology candidate VC has been split into 'First Nations Cultural Heritage' and 'Historical and Archaeological Heritage'. 'First Nations Cultural Heritage' section will be assessed by First Nations in Part C of the Application. See Section 7.2 of the dAIR Subcomponents for the 'First Nations Cultural Heritage' could include the following: landforms; intangible heritage sites; traditional use & knowledge. Socio-community and socio-economic effects assessment may be included in Part C of the Application.	Satisfactory
FN-SIB-50	2015, January		Shuswap IB								53	6		Rephrasing	<ul style="list-style-type: none">Describe the parameters used in the assessment of cultural heritage resources/values, and identify any potential deficiencies, if applicable; and	Part C of the Application will include First Nations Cultural Heritage.				Satisfactory
FN-SIB-51	2015, January		Shuswap IB								53	8			<ul style="list-style-type: none">Describe the technical, regulatory and jurisdictional requirements and considerations affecting the scope of the assessment and whether the sampling methods utilized under the previous archaeological projects were sufficient to provide an accurate representation of potential for impact on cultural heritage sites across the landscape.	The existing data were reviewed and field studies as well as modelling were initiated to address to data gaps. These studies were discussed with First Nations, the Core Committee, and stakeholders. The existing data has been made available to First Nations to assess the potential effects on cultural heritage.			The existing data were reviewed and field studies as well as modelling were initiated to address to data gaps. These studies were discussed with First Nations, the Core Committee, and stakeholders. The existing data has been made available to First Nations to assess the potential effects on cultural heritage. See Section 7.2 of the dAIR.	Satisfactory
FN-SIB-52	2015, January		Shuswap IB								53	13		Rephrasing	The existing conditions related to cultural heritage resources/values;	This has been addressed through the restructuring of archaeology and cultural heritage sections				Satisfactory
FN-SIB-53	2015, January		Shuswap IB								53	14		Rephrasing	Where available traditional or local knowledge related to cultural heritage resources/values in part c	Agreed. Working with FN to determine contents of Sec C within EO guidelines			Agreed. Working with FN to determine contents of Sec C within EAO guidelines. See Section 11 of the dAIR.	Satisfactory
FN-SIB-56	2015, January		Shuswap IB								53	24		Rephrasing	<ul style="list-style-type: none">Potential effects on traditional use activity sites and features identified as protected cultural heritage resources under the <i>Heritage Conservation Act</i>;	The 'First Nations Cultural Heritage' section has been updated.				Satisfactory

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FN-SIB-57	2015, January		Shuswap IB								53	26		Rephrasing	The methods used to assess effects of the Project on cultural heritage resources/values and the level of confidence assigned to these potential affects given the assessment model employed	This has been addressed through the restructuring of archaeology and cultural heritage sections			Satisfactory	
FN-SIB-58	2015, January		Shuswap IB								54	6		Rephrasing	The Application will identify and characterize potential adverse residual effects taking into account the implementation of proposed mitigation and any identified inadequacy of inventory, sampling frequency and methodology.	The dAIR has been updated consistent with the updated template provided by the EAO.		Characterization of residual effects is outlined in Section 3.6 of the dAIR, which specifies the Application will articulate the level of confidence associated with the likelihood and significance determination, including a description of any uncertainty associated with the residual effect prediction.	Satisfactory	
FN-SIB-59	2015, January		Shuswap IB								54	10		Rephrasing	The Application will describe any potential cumulative effects that are likely to result from any residual effects of the Project interacting with residual effects of other projects or activities that will or may affect cultural heritage resources/values.	The dAIR has been updated to be consistent with the updated template provided by the EAO. The dAIR now includes effects on cultural heritage resources and values.		Sections 7.2.7 and 7.2.8 of the dAIR reference assessment of residual effects and cumulative effects for heritage resources. Potential impacts to cultural heritage will be considered in Part C of the Application, as noted in Table 1 of the dAIR.	Satisfactory	
FN-SIB-6	2015, January		Shuswap IB								ix	25		Cultural Heritage	8.2 Cultural Heritage and Archaeology	The Heritage and Archaeology candidate VC has been split into 'First Nations Cultural Heritage' and 'Historical and Archaeological Heritage'. 'First Nations Cultural Heritage' section will be assessed by First Nations in Part C of the Application. Subcomponents for the 'First Nations Cultural Heritage' could include the following: landforms; intangible heritage sites; traditional use & knowledge. Socio-community and socio-economic effects assessment may be included in Part C of the Application.			The Heritage and Archaeology candidate VC has been split into 'First Nations Cultural Heritage' and 'Historical and Archaeological Heritage'. 'First Nations Cultural Heritage' section will be assessed by First Nations in Part C of the Application. See Section 7.2 of the dAIR Subcomponents for the 'First Nations Cultural Heritage' could include the following: landforms; intangible heritage sites; traditional use & knowledge. Socio-community and socio-economic effects assessment may be included in Part C of the Application.	Satisfactory
FN-SIB-60	2015, January		Shuswap IB								54	15		Rephrasing	The Application will describe potential any cumulative effects that are likely to result from any residual effects of the Project interacting with residual effects of other projects or activities that will or may affect cultural heritage resources/values. The assessment of cumulative effects will follow the procedures described in Section 4.7.	The Heritage and Archaeology candidate VC has been split into 'First Nations Cultural Heritage' and 'Historical and Archaeological Heritage'. 'First Nations Cultural Heritage' section will be assessed by First Nations in Part C of the Application.			Satisfactory	
FN-SIB-61	2015, January		Shuswap IB								54	27		Rephrasing	The Application will include Table 8-1 summarizing the assessment of potential effects on cultural heritage resources/values, proposed key mitigation measures and significance of any adverse residual effects.	The Heritage and Archaeology candidate VC has been split into 'First Nations Cultural Heritage' and 'Historical and Archaeological Heritage'. 'First Nations Cultural Heritage' section will be assessed by First Nations in Part C of the Application.			Satisfactory	
FN-SIB-62	2015, January		Shuswap IB								63	7		Rephrasing	To the extent that it is available, Traditional Knowledge (TK), Traditional Land Use (TLU) and current First Nation practices will be incorporated into the assessment of the effects of the Project on the selected VCs (Part B and C of the Application).	Accepted. Changed to Traditional knowledge and current Aboriginal practices			Satisfactory	
FN-SIB-63	2015, January		Shuswap IB								63	20		Rephrasing	• Document BC Hydro's understanding of how the environment is valued by each potentially affected First Nation in relation to their current use or values of lands and resources for traditional purposes, including specific activities conducted in the exercise of asserted or established Aboriginal rights and treaty rights;	To be incorporated in Part C.			Satisfactory	

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FN-SIB-7	2015, January		Shuswap IB								x	5		Cultural Heritage	Summary of Assessment of potential Cultural Heritage Effects	The Heritage and Archaeology candidate VC has been split into 'First Nations Cultural Heritage' and 'Historical and Archaeological Heritage'. 'First Nations Cultural Heritage' section will be assessed by First Nations in Part C of the Application. Subcomponents for the 'First Nations Cultural Heritage' could include the following: landforms; intangible heritage sites; traditional use & knowledge. Socio-community and socio-economic effects assessment may be included in Part C of the Application.			The Heritage and Archaeology candidate VC has been split into 'First Nations Cultural Heritage' and 'Historical and Archaeological Heritage'. 'First Nations Cultural Heritage' section will be assessed by First Nations in Part C of the Application. See Section 7.2 of the dAIR Subcomponents for the 'First Nations Cultural Heritage' could include the following: landforms; intangible heritage sites; traditional use & knowledge. Socio-community and socio-economic effects assessment may be included in Part C of the Application.	Satisfactory
FN-SIB-8	2015, January		Shuswap IB								13	16		Other	The Application will include a summary of the consultation activities undertaken with the identified First Nations potentially affected by the proposed project (as identified in the Section 11 Order) including the information listed at parts 3.2.1 and 3.2.2 below. The notification and consultation activities will comply with the Public Consultation Policy Regulation (B.C. Reg. 373/2002) under BCEAA and will be undertaken in accordance with the consultation provisions of the Section 11 Order.[Statement needed that clarifies that the intent of participation by First Nations in the Core Committee and related sub-committees does not replace the requirement for a distinct and separate consultation process]	Acknowledged. While the Core Committee provides a forum for information exchange it does not replace First Nations Consultation. BC Hydro will be guided by the Section 11 Order in determining the inclusion of specific First Nations in the Environmental Assessment, and this is reflected in the Aboriginal Consultation Plan.			Acknowledged. While the Core Committee provides a forum for information exchange it does not replace First Nations Consultation. BC Hydro will be guided by the Section 11 Order in determining the inclusion of specific First Nations in the Environmental Assessment, and this is reflected in the Aboriginal Consultation Plan. See Section 2, 11 and 12 of the dAIR.	Satisfactory
FN-SIB-9	2015, January		Shuswap IB								14	6		First Nation Consultation	To-date, the Core Committee has been an important mechanism for consultation related to the Project. [specify 'non-First Nations' consultation]	The Core Committee is a forum for information exchange and advice. First Nations are welcome to attend but the Core Committee does not replace First Nation Consultation.			The Core Committee is a forum for information exchange and advice. First Nations are welcome to attend but the Core Committee does not replace First Nation Consultation. See Section 11 of the dAIR	Satisfactory
FN-STS-1	2015, January		Sexq6tkemc te Secwepemc								18		4.1	Assessment Methodology	Consider the potential effect of changes in water level on spawning access for BT and KO in tributaries to the Revelstoke Reservoir, including the magnitude, duration, and frequency of drawdown during migration/spawning periods. <u>Rational:</u> BC Hydro's assessment of changes in water levels focuses on the Revelstoke Dam Forebay. These results do not reflect site specific conditions experienced in (near) spawning tributaries. Further water level changes could have significant effects on fish if tributary access is already impeded. Only 7 of 30 tagged fish were observed in spawning tributaries in a previous study (i.e. 2003; pre-Rev 5). (Baseline Table, PA-RR, Sub component-Kokanee, Bull Trout)	The assessment will include an evaluation of REV6 effects on water level fluctuations on Revelstoke Reservoir, including magnitude, duration, and frequency across seasons. BC Hydro's assessment has included Revelstoke Reservoir as a whole, not just the forebay. Previous telemetry work on bull trout in Revelstoke Reservoir showed no tributary access issues; numbers of fish tracked into tributaries were not related to access. Additionally, kokanee escapement surveys conducted under CLBMON-2 and BC Hydro assessments of the reservoir at lower than normal water levels have not identified any access issues related to reservoir water levels.			The assessment will include an evaluation of REV6 effects on water level fluctuations on Revelstoke Reservoir, including magnitude, duration, and frequency across seasons (Section 4.1.2 Hydrology and 4.1.3 Fluvial Geomorphology of the dAIR). BC Hydro's assessment has included Revelstoke Reservoir as a whole, not just the forebay. See Section 4.1 of the dAIR. Previous telemetry work on bull trout in Revelstoke Reservoir showed no tributary access issues; numbers of fish tracked into tributaries were not related to access. Additionally, kokanee escapement surveys conducted under CLBMON-2 and BC Hydro assessments of the reservoir at lower than normal water levels have not identified any access issues related to reservoir water levels. See Section 4.1 and 4.4 of the dAIR.	Satisfactory

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FN-STS-10	2015, January		Sexqéłtkemc te Secwepemc											First Nations Governance	Engage First Nations in a meaningful discussion on co-management of cultural and natural resources in the Upper Columbia River. Development of relationships and trust between BC Hydro and First Nations can only be achieved through meaningful consideration and incorporation of our values and goals with respect to cultural and natural resource management.	The Section 11 Order of the BCEAA process identifies the scope of the Environmental Assessment, which in the case of Revelstoke Unit 6 Project, is on the incremental effects of construction and operation of the sixth unit. BC Hydro acknowledges the Sexqéłtkemc te Secwepemc comment that this scope does not include impacts resulting from all BC Hydro infrastructure and operations in the Upper Columbia River. BC Hydro is committed to engaging First Nations in meaningful discussions at the Nation level, outside of the Project, on how we might to better incorporate FN values and goals into BC Hydro's cultural and natural resource management activities in the Upper Columbia River.				Satisfactory
FN-STS-11	2015, January		Sexqéłtkemc te Secwepemc											Assessment Methodology	The current process for selecting VCs and assessing cultural and environmental impacts is limiting and somewhat narrow in scope given the extent of existing impacts resulting from the BC Hydro infrastructure and operations in the Upper Columbia River	The Section 11 Order of the BCEAA process identifies the scope of the Environmental Assessment, which in the case of Revelstoke Unit 6 Project, is on the incremental effects of construction and operation of the sixth unit. BC Hydro acknowledges the Sexqéłtkemc te Secwepemc comment that this scope does not include impacts resulting from all BC Hydro infrastructure and operations in the Upper Columbia River. BC Hydro is committed to engaging First Nations in meaningful discussions at the Nation level, outside of the Project, on how we might to better incorporate FN values and goals into BC Hydro's cultural and natural resource management activities in the Upper Columbia River.				Satisfactory
FN-STS-12	2015, January		Sexqéłtkemc te Secwepemc											Assessment Methodology	A comprehensive cumulative effects assessment, including past , present and (reasonably foreseeable) future development and impacts within a scientifically justifiable temporal and spatial scope, should be completed. This assessment should include both cultural and environmental impacts and should include all BC Hydro infrastructure and operations associated with Mica, Revelstoke and Keenleyside Dams (i.e. access roads, transmission lines, capacitor stations and other associated infrastructure)	<p>BC Hydro will be completing a comprehensive cumulative effects assessment of those VC with residual effects. The process for scoping the assessment is described further in the EAO's guideline for the selection of valued components and assessment of potential effects, Section 3.5.5 : http://www.eao.gov.bc.ca/pdf/U224EAO_Valued_Components_Guideline_2013_09_09.pdf;</p> <p>Where relevant, BC Hydro will explain if and how other past and present projects and activities have affected, or are affecting, each VC. Past and present projects will include, where applicable, Mica, Revelstoke, and Keenleyside Dams. Reasonably foreseeable future developments and impacts within a scientifically justifiable temporal and spatial scope will be included. Where applicable, both cultural and environmental impacts will be considered.</p>			<p>BC Hydro will be completing a comprehensive cumulative effects assessment of those VC with residual effects. The process for scoping the assessment is described further in the EAO's guideline for the selection of valued components and assessment of potential effects, Section 3.5.5 : http://www.eao.gov.bc.ca/pdf/U224EAO_Valued_Components_Guideline_2013_09_09.pdf; and outlined in 3.10 of the dAIR.</p> <p>Where relevant, BC Hydro will explain if and how other past and present projects and activities have affected, or are affecting, each VC. Past and present projects will include, where applicable, Mica, Revelstoke, and Keenleyside Dams. Reasonably foreseeable future developments and impacts within a scientifically justifiable temporal and spatial scope will be included. Where applicable, both cultural and environmental impacts will be considered.</p>	Satisfactory
FN-STS-13	2015, January		Sexqéłtkemc te Secwepemc											Assessment Methodology	Identification of baseline conditions should include characterization of conditions of (at least) 3 points in time, including pre-dam, pre-Rev 5 and pre-Rev 6. Temporal trends should be developed (estimated) for each VC to better understand the extent of past change and context of Rev 6 impacts. This analysis is necessary to adequately determine the significance and risk of further impacts.	Pre and post dam conditions are included in the baseline as they contribute to the overall understanding of the VCs.			<p>Pre and post dam conditions are included in the assessment as they contribute to the overall understanding of the VCs. The methodology for existing conditions is outlined in 3.3.</p>	Satisfactory

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FN-STS-14	2015, January		Sexq<kemc te Secwepemc											Assessment Methodology	Robust metrics need to be used, and in some cases developed, for each of the VCs in order to understand the extent of change and potential impacts. This should be based on scientific literature and will ensure transparency and unbiased determinations. Much emphasis is currently placed on professional judgement which, which in our opinion, does not constitute scientific evidence of a significance impact or lack thereof.	The evaluation of the VC, indicators, and methods for review are based scientific literature and the findings of previous studies and monitoring programs, as well as the experience and expertise of qualified professionals.			The evaluation of the VC, indicators, and methods for review are based scientific literature and the findings of previous studies and monitoring programs, as well as the experience and expertise of qualified professionals. See Section 16 in the dAIR.	Satisfactory
FN-STS-15	2015, January		Sexq<kemc te Secwepemc											Assessment Methodology	Significance thresholds should be developed for each VC, with consideration of past changes, current conditions, and the risk of further change. Risk assessments will be an important prerequisite for the determination of significance thresholds. Aboriginal perspectives and current on significance thresholds and acceptable risks need to be considered and incorporated.	Significance criteria have been presented in the AIR and described in greater detail in the draft Application. Inputs related to significance criteria from First Nations and regulators will be considered and made public as part of the EA process.				Satisfactory
FN-STS-16	2015, January		Sexq<kemc te Secwepemc											reliability of information	Determination of the reliability of Information used in these assessments is paramount. We have repeatedly requested a comprehensive gap analysis of the information used in these assessments and determinations. Recognizing that BC Hydro has recently provided a comprehensive list of information and study results, there has not yet been any determination of the reliability of this information and/or critical gaps in this information.	A comprehensive review of existing data was conducted and field studies as well as modelling were initiated to address to data gaps. New work included 3 field studies at the capacitor station site, the installation of water level loggers at selected sites in the MCR and the development of a new hydrological model. These studies were discussed with the FN , Core Committee and stakeholders. All existing data were made available.			A comprehensive review of existing data was conducted and field studies as well as modelling were initiated to address to data gaps. New work included 3 field studies at the capacitor station site, the installation of water level loggers at selected sites in the MCR and the development of a new hydrological model. These studies were discussed with the FN , Core Committee and stakeholders. All existing data were made available. The method for gathering existing data is outlined in Section 3.3.	Satisfactory
FN-STS-17	2015, January		Sexq<kemc te Secwepemc						33				table 3	Ecosystem Health and Function	Ecosystem Health and Function should be a VC, rather than just a sub-component of aquatic and terrestrial VCs. It is important to consider both top-down and bottom-up pathways for example: 1) Ecosystem Health and Function as a VC considers all aquatic and terrestrial impacts on the ecosystem as a whole; and 2) Ecosystem Health and Function as a sub-component considers ecosystem impacts on aquatic and terrestrial resources.	An ecosystem is defined as a biological community of interacting organisms within the environment. Ecosystem function is the biological, geochemical and other processes that occur within the ecosystem. Biodiversity is defined as the variety of organisms found within the ecosystem. These are all fairly broad terms, and rather than discussing ecosystem health and function as a whole, the EA discusses potential impacts in more manageable topics that separate aquatic from terrestrial, and terrestrial into further groups that discuss plants from animals. Recognizing that plant and animal occurrence are linked to the ecological communities present within the study area, the EA discusses the ecosystems present, how they have been formed, and what species generally use them – all within the discussion Ecological Communities. As a result, the current structure of the EA discusses what the various ecological communities are and what past and current activities have had on shaping those that are present (Section 3.1.6).			An ecosystem is defined as a biological community of interacting organisms within the environment. Ecosystem function is the biological, geochemical and other processes that occur within the ecosystem. Biodiversity is defined as the variety of organisms found within the ecosystem. These are all fairly broad terms, and rather than discussing ecosystem health and function as a whole, the EA discusses potential impacts in more manageable topics that separate aquatic from terrestrial, and terrestrial into further groups that discuss plants from animals. Recognizing that plant and animal occurrence are linked to the ecological communities present within the study area, the EA discusses the ecosystems present, how they have been formed, and what species generally use them – all within the discussion Ecological Communities. As a result, the current structure of the EA discusses what the various ecological communities are and what past and current activities have had on shaping those that are present (Section 3.1.6).	Satisfactory
FN-STS-18	2015, January		Sexq<kemc te Secwepemc						33				table 3	Biodiversity	Biodiversity should also be a VC based on the same rational provided above.	Ecosystem Health and Function for Biodiversity has been included as a sub-component for the Ecological Communities VC.			Ecosystem Health and Function for Biodiversity has been included as a sub-component for the Ecological Communities VC. See Table 2 of Section 3.1 of the dAIR.	Satisfactory

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FN-STS-19	2015, January		Sexqétkemc te Secwepemc						33				table 3	Cultural Heritage	Cultural Heritage Resource should be a stand-alone VC. Sub components to this VC would include culturally important resources (e.g. water, fish, wildlife, plants...etc.), land use (e.g. hunting, fishing, gathering, transportation, recreation, cultural sites, villages sites...etc.), and archeology. Archeology should provide landforms and landscapes covered and not covered under the BC Heritage Act Conservation Act. Intangible cultural heritage values should also be included, such as place names and transmission of knowledge. Past, present and future cultural heritage impacts should be assessed. Socio-community and socio-economic should also be a key focus and sub-component of this assessment. This assessment should also include compilation of Indigenous knowledge related to land and resources uses and be solely based on aboriginal perspectives of the effects of BC Hydro infrastructure and operations. The use of information from previous studies as a baseline reference is not supported. We will provide a cultural heritage assessment for the Rev 6 project. Further discussions with BC Hydro will be required to address this issue.	The Heritage and Archaeology candidate VC has been split into 'First Nations Cultural Heritage' and 'Historical and Archaeological Heritage'. 'First Nations Cultural Heritage' including intangible cultural heritage values will be assessed by First Nations in Part C of the Application.			Cultural heritage resources, intangible cultural heritage values, potential cultural heritage impacts, and potential socio-community and socio-economic effects will be considered in Part C of the Application, as noted in Table 1 of the dAIR. Traditional Use and Knowledge (species specifically identified Aboriginal Groups) is an indicator for all VCs, as outlined in Table 2 of the dAIR. In addition to authoring Part C, First Nations were invited to provide cultural perspectives to be included at the top of each section of Part B of the Application, and where are provided, they will be included in the Application. Aboriginal perspectives of the effects of BC Hydro infrastructure and operations may be included in Part C of the Application if desired. Part B assessment of archaeology will include landforms and landscapes as	Satisfactory
FN-STS-2	2015, January		Sexqétkemc te Secwepemc							18			4.1	Assessment Methodology	Include the results of the KO entrainment studies as part of this assessment, including the effects of reduced food sources for BT (i.e. juvenile KO). <u>Rational:</u> Entrainment of KO is directly relevant to the assessment of impacts on KO and BT populations. <i>(Baseline Table, PA-RR, Sub component-Kokanee, Bull Trout)</i>	Results from the Entrainment Strategy will be included in the REV6 assessment, specifically related to kokanee at Revelstoke Generating Station. Entrainment (specifically kokanee) is included as an indicator in Table 4-1. Additional data from CLBMON-2 on kokanee population assessments in Revelstoke Reservoir have been reviewed and included.			Strategy will be included in the REV6 assessment, specifically related to kokanee at Revelstoke Generating Station. Entrainment (specifically kokanee) is included as an indicator in Table 4-1. Additional data from CLBMON-2 on kokanee population assessments in Revelstoke Reservoir have been reviewed and included. See Section 3 and 4.4 of the dAIR	Satisfactory
FN-STS-20	2015, January		Sexqétkemc te Secwepemc						33				table 3	Restoration of Salmon	Restoration of Salmon to the headwaters of the Columbia River system should be included in the fisheries components of the VC and EIA documents, including an assessment of the potential impacts on Salmon as well as identification of an approach to work with First Nations to restore fish passage at BC hydro dams.	This interest is acknowledged; however, anadromous salmon are not included in the scope of the EA. Revelstoke Unit 6 project activities and operations will not preclude the ongoing potential for future fish passage or fish resource use of concern to First Nations. The Canadian Columbia River Intertribal Fisheries Commission (CCRIFC) has proposed the formation of a multiagency committee to start investigating the feasibility of salmon restoration in the Columbia. BC Hydro has agreed to participate in such a committee should it proceed			Satisfactory	
FN-STS-21	2015, January		Sexqétkemc te Secwepemc						34				table 3	Mammals	The proposed Mammals VC should include the impacts to the Caribou populations in the area, both in the short and long term.	A discussion of effects of REV6 on Caribou is included in the EA.			A discussion of effects of REV6 on Caribou is included in the EA. See Section 4.7 of the dAIR	Satisfactory
FN-STS-22	2015, January		Sexqétkemc te Secwepemc											Cultural Heritage	In terms of considering what impacts there are to Secwepemc title and rights, current practises must be taken into account as well as traditional and customary practices of our cultural.	Agreed, will be discussed in Part C.			Satisfactory	
FN-STS-3	2015, January		Sexqétkemc te Secwepemc										4.1	Assessment Methodology	Consider the effects of erosion and sedimentation on habitat degradation. Current studies on erosion and sedimentation resulting from BC Hydro operations should be expanded as they are currently limited in scope (i.e. number and location of sites). <u>Rational:</u> Increased erosion and sedimentation can result in fish habitat degradation, particularly with respect to spawning habitats. Anecdotal evidence suggests there are several highly eroding sites that are not currently included in BC Hydro monitoring programs. <i>(Baseline Table, PA-MC, Sub component- Whitefish, Rainbow Trout, White Sturgeon, Bull Trout, Burbot)</i>	Changes in habitat quality and quantity is an indicator under the Fish and Fish Habitat VC and includes substrate composition and sediment concentrations.			Changes in habitat quality and quantity is an indicator under the Fish and Fish Habitat VC and includes substrate composition and sediment concentrations. All the indicators are listed in Table 2 Section 3.1 of the dAIR	Satisfactory

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FN-STS-4	2015, January		Sexq<kemoc te Secwepemc								18		4.1	Assessment Methodology Conduct site-specific fisheries assessments to determine presence/absence. <u>Rational:</u> Site specific assessments in reaches immediately adjacent to the project have not been conducted and there is some uncertainty in whether or not these reaches contain fish. <i>(Baseline Table, PA-TC, Sub component-Rainbow Trout, Brook Trout)</i>	Site-specific assessments have been conducted in Revelstoke reservoir and MCR. There are no streams in the Transmission area.				Satisfactory
FN-STS-5	2015, January		Sexq<kemoc te Secwepemc								19		4.1	Assessment Methodology Improve knowledge and studies on the effects of Rev 5 operations on bird abundance and diversity in order to determine the potential effects of Rev 6 operations. <u>Rational:</u> There seems to be much uncertainty in the results, trends, and causes with respect to ongoing studies on bird abundance and diversity <i>(Baseline Table, PA-Dam/MC, Sub component-Federal and Provincial listed species , Migratory Birds, Raptors)</i>	Current baseline conditions were described using available information provided in relevant reports (e.g., CLBMON 36, 39, 40) that help us understand diversity and seasonal use in the areas potentially affected by the Project. Site specific data was supplemented with other existing information and is considered sufficient to understand the potential effects of the Project.			Current baseline conditions were described using available information provided in relevant reports (e.g., CLBMON 36, 39, 40) that help us understand diversity and seasonal use in the areas potentially affected by the Project. Site specific data was supplemented with other existing information and is considered sufficient to understand the potential effects of the Project.See Section 4.6 of the dAIR.	Satisfactory
FN-STS-6	2015, January		Sexq<kemoc te Secwepemc								19		4.1	Assessment Methodology Improve ongoing studies the effects of changes in water levels and reservoir operations on amphibians, particularly with respect to determinations of the biological significance of these changes. <u>Rational:</u> The biological significance of changes in water level and reservoir operations on amphibian abundance, mortality, and site occupancy is currently unknown. Such a circumstance makes it difficult to determine the significance of further changes/Impacts. <i>(Baseline Table, PA-Dam/MC, Sub component-Federal and Provincial listed amphibian species , Federal and Provincial listed reptile species)</i>	Current baseline conditions will be described using available information provided in relevant reports (e.g., CLBMON 37) which provide information on diversity and seasonal use in the areas potentially affected by the Project			Current baseline conditions will be described using available information provided in relevant reports (e.g., CLBMON 37) which provide information on diversity and seasonal use in the areas potentially affected by the Project.See Section 4.5 of the dAIR.	Satisfactory
FN-STS-7	2015, January		Sexq<kemoc te Secwepemc								19		4.1	Assessment Methodology Include a furbearer(s) to the list of sub-components under this VC. These species should be water level dependent and culturally important (e.g. beaver and/or muskrat) Include Caribou to the list of sub-components <u>Rational:</u> Furbearer(s) have not been considered or assessed. <i>(Baseline Table, PA-Dam/MC, Sub component-Federal and Provincial listed species, Ungulates)</i>	Caribou are included as a sub-component in mammals as a federal and provincial listed species and an ungulate. Furbearers are included in the Mammals VC and have been included in Section 4.7 of the assessment. The following wording has been included under the sub-component Traditional Use and Knowledge: "Furbearers have been identified as species of cultural or economic importance to First Nations".			Within the Mammals Section (Section 4.7) the sub-components include Mammal Species at Risk, Ungulates, and Traditional Use and Knowledge (species specifically identified by Aboriginal Groups that are of cultural or economic importance). Within the Traditional Use and Knowledge sub-component furbearers have been identified and a list of the species (17 in total) known or likely to occur within the Generation LSA is provided in Table 4.7-7 (found in the Description of Existing Conditions). Some of these furbearer species listed in Table 4.7-7 primarily use upland forested habitats and would rarely be found in the draw down zone. Species on the list that are closely associated with aquatic and shoreline habitats are beaver, muskrat, otter, mink, and raccoon. Potential effects to furbearers due to flooding is discussed in the Assessment of Potential Project-related Effects section.	Satisfactory

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FN-STS-8	2015, January		Sexqétkemc te Secwepemc								20		4.1	Assessment Methodology	Provide a summary of economic, training, and employment targets and results for First Nations via the Rev 5 and Mica 5/6 projects, including whether these targets were met (or not) and why. Include a specific measure of revenues, contract procurement, employment, training, and capacity building for each First Nation associated with the Rev 6 project. Conduct an assessment of the economic effects on First Nations due to the Rev 6 project. <i>(Baseline Table, PA-MC, Sub component-Economy Revenues (Regional & Provincial) Employment, Accommodation, Fishery)</i>	Section 5.2, Economy includes information regarding employment at Rev 5 disaggregated to show local and First Nation hiring. We will have regional assessment of economic effects . Project related opportunities Training, capacity building, procurement for First Nations needs to be directly discussed with BC Hydro. Specific assessment may fall in Part C. Section 5.2, Economy will include publically available information on economic development, income, occupations and training for the general population and Aboriginal population. The assessment will consider employment, employment income, procurement and training effects of the Project. BC Hydro understands information pertaining to First Nations rights based economy, preferred future economy, business development and procurement, income, quality, accessible and appropriate education and training and quality long-term employment will be presented in Part C. This information will be further			Section 5.2 of the EA (Economy) includes information regarding employment at Rev 5 disaggregated to show local and First Nation hiring. We will have regional assessment of economic effects . Project related opportunities Training, capacity building, procurement for First Nations needs to be directly discussed with BC Hydro. Specific assessment may fall in Part C. Section 5.2, Economy will include publically available information on economic development, income, occupations and training for the general population and Aboriginal population. The assessment will consider employment, employment income, procurement and training effects of the Project. BC Hydro understands information pertaining to First Nations rights based economy, preferred future economy, business development and procurement, income, quality,	Satisfactory
FN-STS-9	2015, January		Sexqétkemc te Secwepemc								21		4.1	Assessment Methodology	Separate Cultural Heritage and Archeology as stand alone VCs (See general comments for VC candidates) Improve current Reservoir Archeology Programs (RAP) to provide more comprehensive and representative information on archeological sites and the resulting impacts due to BC Hydro operations. Specific measures and targets for erosion and water level fluctuations should be developed and linked to the ongoing impacts on archeological sites. These studies should include indigenous knowledge and assessment of the effects from an aboriginal perspective. <i>(Baseline Table, PA-RR, Sub component-Locations with protected archaeological or historical sites, features and artifacts)</i>	Agree. 'First Nations Cultural Heritage' will be assessed by First Nations in Part C of the Application. 'Historical and Archaeological Heritage' will be assessed in Part B. Comments specific to the RAP will be provided to the BC Hydro RAP coordinator to share with the Columbia Technical Working Group for consideration.			Agree. 'First Nations Cultural Heritage' will be assessed by First Nations in Part C of the Application. Historical and Archaeological Resources is included in Section 7 of the dAIR Part B. Comments specific to the RAP will be provided to the BC Hydro RAP coordinator to share with the Columbia Technical Working Group for consideration.	Satisfactory
FN-TteS-1	2015, January		Tk'emlúps te Secwépemc											Economic	1) Project benefits do not address interests and opportunities (e.g. Revenue Sharing) for TteS and the other Secwepemc Communities. 2) Ttes requets capacity funding to retain experts and legal counsel for adequate and transparent review. 3) Potential issues include, but are not limited to, trespassing, damages, and questionable consent. Impacts include dislocation, livelihood, food supply, loss of fisheries resources, decreased property value, opportunity costs, loss of cultural practise (e.g. subsistence and cultural experience). 4) For component cumulative effects assessment, TteS requires technical experts to evaluate projects impacts. A conservative estimate of funding requirements for the environmental and socioeconomic review is 20-25 percent of the cost to produce the Environmental Assessment application.	Capacity funding has been provided for participation in consultation activities and for the preparation of Part C. 1)BC Hydro does not have a mandate to discuss revenue sharing from the Province 2) Capacity funding is available for First Nations identified in the BCEAO Section 11 Order 3)To be discussed in Part C. 4) Capacity funding is available for First Nations identified in the BCEAO Section 11 Order			Capacity funding has been provided for participation in consultation activities and for the preparation of Part C.	Satisfactory
FN-TteS-10	2015, January		Tk'emlúps te Secwépemc								33			Ecological Communities	<u>Existing Conditions – Generating Station</u> Measure the importance of current anthropological disturbance, including fragmentation at the spatial scale of both RSA and LSA. Spatial scale for the generating station is to include lands required for generating station footprint, transmission lines and Right of Way.	Acknowledged. One of the methods for describing Ecosystem Health and Function is to measure the extent of current anthropogenic disturbance including fragmentation. Spatial scale includes land for generation station footprint (no new footprint required). No new transmisson line is required, however footprint for the capacitor station is included in the assessment.			Acknowledged. One of the methods for describing Ecosystem Health and Function is to measure the extent of current anthropogenic disturbance including fragmentation. Spatial scale includes land for generation station footprint (no new footprint required). No new transmission line is required, however footprint for the capacitor station is included in the assessment. Please see Section 4.3 of the dAIR.	Satisfactory

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FN-TteS-11	2015, January		Tk'emlúps te Secwépemc								36			Birds	<u>Effects Assessment</u> Sensory disturbance to birds is to be addressed during both construction and operations phases. For select VCs, habitat impacts are to be assessed and quantified for habitats specific to unique life history characteristics (e.g. nesting, staging).	Acknowledged. Sensory disturbance to birds will be considered for construction and operations phases and timing of seasonal use.			The Application will consider sensory disturbance to birds for construction and operations phases, and timing of seasonal use. The potential for noise generated by construction activity may cause disturbance and displacement of wildlife was identified in issues scoping, as summarized in Table 1 of Appendix A of the dAIR, and resulted in identification of Noise as an IC per Table 2 of Section 3.1 of the dAIR. The effects pathway for Noise to affect birds is set out in Table 3 of Appendix A of the dAIR.	Satisfactory
FN-TteS-12	2015, January		Tk'emlúps te Secwépemc								38			Herptiles	Sensory disturbance to herptiles is to be addressed during both construction and operations phases. For select VCs, habitat impacts are to be assessed and quantified for habitats specific to unique life history characteristics (e.g. breeding, hibernation).	Acknowledged. Displacement and disturbance to herptiles will be considered for construction and operations phases and timing of seasonal use.			The Application will consider sensory disturbance to herptiles for construction and operations phases, and timing of seasonal use. The potential for noise generated by construction activity may cause disturbance and displacement of wildlife was identified in issues scoping, as summarized in Table 1 of Appendix A of the dAIR, and resulted in identification of Noise as an IC per Table 2 of Section 3.1 of the dAIR. The effects pathway for Noise to affect herptiles is set out in Table 3 of Appendix A of the dAIR.	Satisfactory
FN-TteS-13	2015, January		Tk'emlúps te Secwépemc								41			Mammals	<u>Existing Conditions – Generating Station</u> The ability for sub-adult and juvenile individuals to disperse to new environments impacts population viability and recovery. The application will describe the studies undertaken and characterize the existing conditions: <ul style="list-style-type: none">o Natal dispersal	The addition of the sixth unit will result in construction at the Dam itself. Construction support areas for storage and staging may use up to 6.7 ha of land within BC Hydro's fenced property boundary. These areas were heavily disturbed by previous construction, and are subject to on-going vegetation management. The area disrupted by construction is too small to consider natal dispersal at the population level, and the size of the disturbance is not anticipated to have a measurable impact to mammal populations. Mammal species present within the draw down zone (Draw Down Zone (DDZ)) use habitats that have developed in response to existing reservoir operations and revegetation programs, or have been created or altered via anthropogenic disturbance. Large variations currently occur in both the daily amount of water released from Revelstoke Dam and the maximum elevation (and associated timing and duration) of the Arrow Lakes Reservoir				Satisfactory
FN-TteS-14	2015, January		Tk'emlúps te Secwépemc								41			Mammals	<u>Existing Conditions – Transmission Facility</u> The ability for sub-adult and juvenile individuals to disperse to new environments impacts population viability and recovery. The application will describe the studies undertaken and characterize the existing conditions: <ul style="list-style-type: none">o Natal dispersal	The total area of the capacitor site is anticipated to be 1.4 ha, and much of this area overlaps the existing transmission line. The area is too small to consider natal dispersal at the population level and the size of the disturbance is not anticipated to have a measurable impact to mammal populations.				Satisfactory

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FN-TteS-15	2015, January		Tk'emlúps te Secwépemc								41			Mammals	<p><u>Effects Assessment</u></p> <p>Sensory disturbance to mammals is to be addressed during both construction and operations phases.</p> <p>For select VCs, habitat impacts are to be assessed and quantified for habitats specific to unique life history characteristics (e.g. foraging, hibernation).</p>	<p>Acknowledged. Displacement and disturbance to mammals will be considered for construction and operations phases and timing of seasonal use.</p> <p>Agreed, habitats impacts will be assessed in consideration of life history characteristics.</p>			<p>The Application will consider sensory disturbance to mammals for construction and operations phases, and timing of seasonal use. The potential for noise generated by construction activity may cause disturbance and displacement of wildlife was identified in issues scoping, as summarized in Table 1 of Appendix A of the dAIR, and resulted in identification of Noise as an IC per Table 2 of Section 3.1 of the dAIR.</p> <p>The effects pathway for Noise to affect mammals is set out in Table 3 of Appendix A of the dAIR.</p>	Satisfactory
FN-TteS-2	2015, January		Tk'emlúps te Secwépemc											Economic	<p>We have listed a few concerns and issues regarding retribution for past wrongs from Mica Dam. However, there needs to be capacity funding moving forward with these issues. Funding requirements for critical technical review are necessary to provide a cost estimate to current and past impacts. If left the natural world and the tribe was allowed to develop culturally and economically. This would allow time to demonstrate that TteS and the Secwepemc communities as a whole would be in a better place. Having present access the resources that the Dam destroyed and not having suffered all of those cultural impacts.</p>	<p>Capacity funding is available for First Nations identified in the BCEAO Section 11 Order</p>			<p>Capacity funding has been provided for participation in consultation activities and for the preparation of Part C.</p>	Satisfactory
FN-TteS-3	2015, January		Tk'emlúps te Secwépemc											Economic	<p>We object to the consultation process and changes to the EA process that exclude a full panel review.Tabulating issues and concerns prior to submission is not enough. Inclusion in the process through partnerships for activities not limited to archeological protection, environmental concerns, revenue sharing and taxation. We reiterate there is no mention of potential interests and opportunities for TteS and the Secwepemc. Imperative to such concerns is proponent funded agreements for employment opportunities, First Nation business contracts, and TteS representation in Project development planning.</p>	<p>The regulatory process is based on the thresholds and scope established by provincial and federal agencies. This project does not meet the criteria for a panel review. The Application will specifically identify interests as they pertain to individual FN.</p>			<p>The regulatory process is based on the thresholds and scope established by provincial and federal agencies. This project does not meet the criteria for a panel review. The Application will specifically identify interests as they pertain to individual FN in Part C.</p> <p>Capacity funding has been provided to Secwepemc bands identified in Schedule C of the Section 11 Order to support their meaningful participation in the EA process. BC Hydro is in discussions regarding proposed mitigation measures that will enhance opportunities for Secwepemc individuals and businesses to benefit from the Rev 6 Project.</p>	Satisfactory
FN-TteS-4	2015, January		Tk'emlúps te Secwépemc								13			Rephrasing	<p>Section 3.2.2 second bullet reads, 'proposed process for attempting to resolve any outstanding issues.' Please change the wording to "proposed process for working towards resolving any outstanding issues." Accomodation needs to be considered, in new case law this is a requirement.</p>	<p>The wording has been changed to reflect the new language in the EAO template.</p>				Satisfactory
FN-TteS-5	2015, January		Tk'emlúps te Secwépemc								24			Evaluation of Residual Project Effects	<p>For select Valuable Components VCs, quantify project-induced habitat loss via spatial analysis (e.g. FRAGSTATS, ALCES).</p>	<p>Project-induced habitat loss will be quantified for select VCs through spatial analysis of existing mapping provided in ongoing WUP studies (e.g., CLBMON 33, 36, 40) and modelling work.</p>			<p>Project-induced habitat loss will be quantified for select VCs through spatial analysis of existing mapping provided in ongoing WUP studies (e.g., CLBMON 33, 36, 40) and modelling work. See Section 4.3 of the dAIR</p>	Satisfactory
FN-TteS-6	2015, January		Tk'emlúps te Secwépemc								25			Cumulative Effects	<p>For select VCs, quantify cumulative habitat loss from pristine baseline conditions via spatial analysis (e.g. FRAGSTATS, ALCES).</p> <p>For cumulative effects assessment, pristine baseline conditions pre-empt:</p> <ul style="list-style-type: none">o Mica Dam and Generating station, units 1-6o Revelstoke Dam and Generating Station, units 1-5o Hugh Keenleyside Dam and its effect on Arrow Reservoir	<p>BC Hydro will assess if and how Mica, Revelstoke, and Hugh Keenleyside Dams (existing units) have affected or are affecting each VC. BC Hydro will conduct a cumulative effects assessment (CEA) for all VCs for which there is an incremental residual effect.</p>			<p>BC Hydro will assess if and how Mica, Revelstoke, and Hugh Keenleyside Dams (existing units) have affected or are affecting each VC. BC Hydro has conducted a cumulative effects assessment (CEA) for all VCs for which there is an incremental residual effect. See Section 3.10 of the dAIR.</p>	Satisfactory

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FN-TteS-7	2015, January		Tk'emlúps te Secwépemc								27			Fish <u>Introduction</u> - Calculate biomass statistics for subsistence harvest species.	Related to biomass; relative abundance, condition and species evenness are indicators in the Fish and Fish Habitat VC.			Biomass-related Indicators relative abundance, condition, and species evenness are included for both the Commercial / Recreational / Aboriginal (CRA) fisheries and Listed Species sub-components of the Fish and Fish Habitat VC in Table 2 of Section 3.1, and in Section 4.2 of the dAIR. Subsistence harvest fisheries are considered in the Aboriginal fisheries component of the CRA sub-component. Relative abundance and species evenness provide information pertaining to species composition, condition provides information on fish lengths and weights. Additional information pertaining to subsistence species from the perspective of Schedule C First Nations may be provided in Part C of the Application.	Satisfactory
FN-TteS-8	2015, January		Tk'emlúps te Secwépemc								29			Fish <u>Effects Assessment</u> Address sensory disturbance to fish during both construction and operations phases. For select VCs, habitat impacts are to be assessed and quantified for habitats specific to unique life history characteristics (e.g. spawning, juvenile rearing).	Sensory disturbance for fish species is assessed as interference with cues, e.g. migration, spawning cues, etc. that are affected by indicators such as temperature or hydrology. This will be addressed in the Application for construction activities and operations. Quality and quantity of fish habitat is included as an indicator under the VC Fish and Fish Habitat.			Sensory disturbance for fish species is assessed as interference with cues, e.g. migration, spawning cues, etc. that are affected by indicators such as temperature or hydrology. This will be addressed in the Application for operations. Temperature and hydrology will not be affected by construction. Quality and quantity of fish habitat is included as an indicator under the VC Fish and Fish Habitat in Section 4.2. Indicators are listed in Table 2 of Section 3.1 of the dAIR.	Satisfactory
FN-TteS-9	2015, January		Tk'emlúps te Secwépemc								32			Ecological Communities <u>Introduction</u> The assessment of ecological community sub-components is to be consistent between all unique communities. Sub-component's to be assessed should include: o Sensitive Ecosystems o Provincially-listed Ecosystems o Ecosystem Health and Function o Traditional Use and Knowledge	Acknowledged. The assessment of sub-components will be consistent. The following sub-components will be addressed: sensitive ecosystems, provincially-listed ecosystems, ecosystem health and function for biodiversity, and traditional use and knowledge.			Acknowledged. The assessment of sub-components will be consistent. The following sub-components will be addressed: sensitive ecosystems, provincially-listed ecosystems, ecosystem health and function for biodiversity, and traditional use and knowledge. The sub-components are listed in Table 2 of Section 3.1 of the dAIR.	Satisfactory
FN-WFN-1	2015, January		WESTBANK First Nation											EAO Process A number of problems with the exiting EAO process can be identified. WFN is troubled by the Environmental Assessment legislation. The BC Environmental Assessment Act lacks a number of important aspect, regarding First Nations involvement in the process, objectives, standards and principles for delivery, and methods for the conduct of reviews. Further, the EA process is not within the pathway to consent.	The BC Hydro EA team acknowledges Westbank First Nation's statement concerning the EAO process.				Satisfactory
FN-WFN-2	2015, January		WESTBANK First Nation											VC Identification An integral part of the EAO process is the identification of Valued Components("VC") which in turn forms the primary focus and foundation for an environmental assessment ("EA"). BC Hydro has given a deadline of April 16th, 2015 to respond to its draft VC document. In our View, VCs are neither conducive to nor respectful of maintaining and nurturing the enduring relationship BC Hydro enjoys with the Okanagan Nation including Westbank First Nation. VCs are based on methods that are tangible and quantitative in nature and rooted in western scientific methods and are unable to capture the Okanagan worldview. There is no space within the EA to adequately and meaningfully conduct the qualitative analysis that the Westbank Nation requires.	The BC Hydro EA team acknowledges Westbank First Nation's statement concerning the EAO process and the Okanagan World View.			BC Hydro has continued to discuss all aspects of this application with the Okanagan Nation.	Satisfactory

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FN-WFN-3	2015, January		WESTBANK First Nation											VC Identification	VCs are problematic on multiple levels and can have far reaching negative implications such as preventing adequate measure for cumulative impacts.	Comment noted				Satisfactory
FN-WFN-4	2015, January		WESTBANK First Nation											Assessment Methodology	The assessment process that BC Hydro undertakes for its proposed projects must include a bilateral progression that is rooted in the principles laid out in the Enduring relationship.	Acknowledged.				Satisfactory
FN-WFN-5	2015, January		WESTBANK First Nation											Process commitment	Further, we are asking BC Hydro to solidify its commitment to conduct a separate, parallel process that will ensure the review of the Revelstoke Unit 6 project is inclusive of our views, concerns and requirements to making an informed decision.	BC Hydro and Okanagan established a parallel process for the review of Revelsoke 6.				Satisfactory
	2015, January		Shuswap IB												Locations of the plants and how close they are to rising water levels and if at risk	Available information was reviewed for baseline information on known locations of plant communities (from habitat mapping) and rare species. Sources include CLBMON 12 and 33. Information provided by First Nations was included in the baseline. See Section 4.6 of the dAIR			Available information was reviewed for baseline information on known locations of plant communities (from habitat mapping) and rare species. Sources include CLBMON 12 and 33. Information provided by First Nations was included in the baseline. See Section 4.6 of the dAIR	Satisfactory
	2015, January		Shuswap IB												Impacts to Caribou populations in the area, both in short and long term	A discussion of effects of REV6 on Caribou is included in the EA.			A discussion of potential effects of REV6 on Caribou is included in the Application. Caribou will be included in the assessment as set out in Table 2 and Section 4.7.2 of the dAIR.	Satisfactory