

Schedule "B" Table of Environmental Commitments Ramona Lake Power Project Conditional Water Licence: C131285 Water File: 2003015 Land File: 2409711

No.	Category	Commitment	Documentation with Implementation details
1	Geotechnical Risk	A detailed Terrain Stability Assessment (TSA) or geotechnical assessment will be completed in all high risk areas (Class IV Terrain) prior to undertaking construction in those areas. The results of those assessments will be used to inform appropriate project redesign and/or mitigation activities.	CEMP
2	Stream Channel Morphology	Operations shall include prescribed flow releases to ensure sediment and large wood can be transported past the Ramona Creek and Marten - s-p'il-us Creek headponds as soon as enough material has accumulated to facilitate transport. The timing of, magnitude of, and communications to the Ramona Creek licencee regarding, prescribed flow releases shall be outlined in the OPPR.	OPPR
3		If downstream reach habitat conditions are found to deteriorate during the first three years of operational monitoring, the upper project shall release flows similar in magnitude or greater than the 2 year return period from the natural lake outlet at least once every two years. These releases shall coincide with the timing of naturally high flows (e.g., fall rainy season, or during spring freshet), or an alternate low risk time of year as accepted by the Water Manager.	OPPR
4		The OEMP shall include initial geomorphic surveys, as well as a survey during year 10 of operations.	ΟΕΜΡ
5	Water Temperature	Operational monitoring shall be undertaken to determine if project induced temperature related effects in the downstream fish bearing reaches exceed prescribed thresholds. The monitoring and thresholds will be described in a Temperature Adaptive Management Plan (TAMP).	Temperature Adaptive Management Plan (OPPR)

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6		If monitoring indicates that temperature-related effects exceed prescribed thresholds, one of the following mitigations will be undertaken: (1) a selective withdrawal intake that allows water to be drawn preferentially from specific elevations, to take advantage of thermal stratification in the lake across the full range of operating levels; (2) flow management in which the diverted flow is curtailed to reduce the amount of cold water released into Ramona Creek; or (3) an alternate mitigation, all as accepted by the Water Manager. These adaptive management measures will be described in detail in a Temperature Adaptive Management Plan (TAMP).	Temperature Adaptive Management Plan (OPPR)
7		In the event that a temperature related effect is identified, a short term mitigation contingency plan accepted by the Water Manager shall be readily available for implementation (i.e., backup portable pump)	OPPR
8	Water Quality	A consolidated table summarizing all water quality and quantity monitoring activities, including locations, frequencies and parameters, to be undertaken during the construction phase shall be provided to the Water Manager for approval prior to starting instream construction activities.	СЕМР
9		A consolidated table summarizing all water quality and quantity monitoring activities, including locations, frequencies and parameters, to be undertaken during operations shall be provided to the Water Manager for approval prior to LTCD will be issued.	OPPR
10		All contact- or process-water will meet BC Water Quality Guidelines or FLNRO approved site specific criterion to prevent undue harm to aquatic resources, unless otherwise accepted by the IEM. The Engineer IE must be notified by the IEM prior to the release of process water that does not meet BC WQG or site specific objectives.	CEMP, OPPR
11		Operations will be undertaken in accordance with prescribed measures to minimize the risk that turbidity and TSS concentrations in Ramona lake and Ramona creek will exceed applicable BC WQG. These measures will include real time monitoring at sentinel locations nearby higher risk areas (e.g., delta's in Ramona Lake) and prescribed monitoring thresholds	Turbidity Monitoring and Turbidity Adaptive Management Plan (OPPR)
		which proactively initiate adaptive management measures.	

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12	Alteration due to Instream Flow	Flow will be continually provisioned throughout the day (i.e., no hydropeaking) to avoid large sub-daily changes to fish habitat quantity and connectivity in the downstream reach.	OPPR
13		Flows within the downstream, fish-bearing reaches of Ramona Creek will be monitored. If these downstream flows fall below prescribed thresholds, the licencee will minimize potential project related flow reductions by releasing flows equal to or greater than 'natural flows' that would have flown into and through Ramona Lake.	OPPR
14		In addition to the IFR conveyance tunnel(s), a short term mitigation contingency plan accepted by the Water Manager shall be readily available for implementation (i.e., backup portable pump)	OPPR
15	Habitat Connectivity	A storage/generation schedule submitted for acceptance by the Water Manager, for the Ramona Lake Component to mitigate Project effects to fish related to habitat connectivity, particularly during migration and spawning.	OPPR
16	General	The licensee will within 60 days of the issuance date of this licence provide the Water Manager with a tabulated list of all mitigation and compensation measures as described in "Narrows Inlet Hydro Project Upper & lower Ramona components: Updated Aquatic Environmental Assessments", dated April 25 2016 which are not already included in the items 1-15 above and ensures their adequate implementation.	

Afrin

Remko Rosenboom Water Manager

Dated at Surrey, British Columbia, this 14th day of November, 2016