

**In the matter of the
ENVIRONMENTAL ASSESSMENT ACT
S.B.C. 2002, c. 43
(Act)**

and

**in the matter of an
APPLICATION
for an
Environmental Assessment Certificate
(Application)**

by

**Creek Power Inc.
(Proponent)**

for the

**Upper Lillooet Hydro Project
(Proposed Project)**

January 10, 2013

Reasons for Ministers' Decision

In accordance with the provisions of section 17(3) of the *Environmental Assessment Act*, the Minister of Environment and the Minister of Energy, Mines and Natural Gas make a decision contained in this submission, for the reasons indicated, in connection with the application by Creek Power Inc. for an Environmental Assessment Certificate for the proposed Upper Lillooet Hydro Project.

1. PURPOSE OF DOCUMENT

The purpose of this document is to provide a record of the factors that we have considered, and the rationale that we, the Minister of Environment (the Minister) and the Minister of Energy, Mines and Natural Gas (the responsible Minister), have employed in making our decision under the *Environmental Assessment Act* (the Act) on the Application for an Environmental Assessment Certificate by Creek Power Inc. (Proponent) for the proposed Upper Lillooet Hydro Project (proposed Project).

2. BACKGROUND

Project Description

The Proponent is proposing to develop three run-of-river hydroelectric facilities, located in the headwaters of the Lillooet River northwest of Pemberton, on the Upper Lillooet River, Boulder Creek, and North Creek. These three facilities would be developed as a single hydroelectric project with a combined nameplate capacity of 121 megawatts (MW). The proposed Project includes an approximately 72 kilometre (km) 230 kilovolt (kV) transmission line that connects to BC Hydro's existing transmission line near Rutherford Creek.

Conclusions of the Environmental Assessment Office

The Environmental Assessment Office (EAO) completed its review of the Application, and on November 26, 2012 referred the Application to us for decision. EAO's assessment concluded that there were adverse residual effects associated with:

- fish and fish habitat;
- wildlife and wildlife habitat;
- geophysical and hydrological environment;
- terrestrial environment;
- recreation conditions; and
- archaeological resources.

Briefings by EAO staff discussed the Environmental Assessment of the proposed Project, and emphasized that the majority of attention during Application Review was focussed on potential effects to fish and wildlife. EAO staff indicated that discussion about potential impacts to wildlife and wildlife habitat focused especially on grizzly bears, as well as mountain goats, wolverine, mule deer and moose. Particular attention was given to potential cumulative effects, impacts of construction activities and impacts to wildlife designated areas. EAO staff also indicated that discussion about potential impacts to fish and fish habitat focused on bull trout, Coho salmon, and cutthroat trout. Particular attention was given to technical aspects of the assessment and baseline information, as well as the uncertainty related to ramping (i.e. change in amount of water discharged), entrainment of cutthroat trout (i.e. fish being passed through the intake), overwintering bull trout (including freezing events), and several other issues identified in the Assessment Report.

The Assessment Report and briefings also discussed a number of potential effects that EAO determined would be fully mitigated, either by proposed Environmental Assessment Certificate conditions or subsequent permitting requirements. This included potential effects on existing tenure holders in the area.

As discussed in EAO's Assessment Report and the Recommendations of the Executive Director, none of the adverse residual effects were determined to be significant, after considering the mitigation measures that would become binding conditions of the Environmental Assessment Certificate.

Separate public comment periods of 45 days each were held during the pre-Application and Application Review stages of the proposed Project's Environmental Assessment; both included open houses in two local communities. EAO indicated that similar issues were raised by the public during the pre-Application and Application Review comment periods, including: impacts to tourism and recreation particularly for Pebble Creek hot springs and Keyhole falls; environmental impacts to fish and wildlife and their habitats; lack of oversight and enforcement of environmental protection regulations; and general policy and economic concerns related to run-of-river projects in BC. The Application Review public comments, and the Proponent's responses, were provided to us as part of the referral package.

The proposed Project is in the traditional territory of Lil'wat First Nation. EAO concluded that with the avoidance, mitigation, and accommodation measures identified during the EA process that would become binding as part of the conditional Environmental Assessment Certificate, the impact of the proposed Project on Lil'wat Nation's asserted aboriginal rights or title would be adequately minimized or avoided. EAO is satisfied that the Crown's duty to consult and accommodate has been fulfilled in relation to the issuance of an Environmental Assessment Certificate for the proposed Project.

EAO's Executive Director has recommended that a conditional Environmental Assessment Certificate be issued to the Proponent for the Upper Lillooet Hydro Project on terms and conditions that require the Proponent to comply with all design and mitigation conditions set out in the attachments to the proposed Certificate.

3. DISCUSSION OF CONSIDERATIONS

Information Sources Considered

We have reviewed and considered the referral package, produced by EAO, and received on November 26, 2012, including the:

- Assessment Report;
- Recommendations of the Executive Director; and,
- The Environmental Assessment Certificate, including Schedules A and B.

In addition, we have considered a letter to us from Lil'wat Nation dated December 20, 2012.

Grizzly Bears and Other Wildlife

We agree with EAO's assessment of the potential adverse effects, as presented in the Assessment Report and supporting material, and conclude that the assessment is adequate. The proposed Project is within the area covered by the Sea-to-Sky Land and Resource Management Plan (S2S LRMP), which was approved for full implementation by the Province in 2008. Although there are high wildlife values in area, the conditions of the Environmental Assessment Certificate ensure that the proposed Project would support or not negatively impact the achievement of the S2S LRMP's various wildlife objectives.

We acknowledge that the two main grizzly bear population units that overlap the proposed Project are threatened and currently slowly recovering. It is imperative that this recovery is not jeopardized, and we remain committed to implementing the objectives of the S2S LRMP, including the completion of grizzly bear recovery plans. With respect to the proposed Project we note that permanent new or improved roads and direct habitat impacts have been minimized. Access during winter would not increase during operation of the proposed Project, as the main Lillooet Forest Service road would remain unploughed in winter, except in case of emergency.

The S2S LRMP includes an objective of minimizing grizzly bear mortality and displacement due to road access and human-bear interactions. An indicator of this objective was the density of roads that are accessible by two-wheel drive vehicles (outside of urban areas), with a target for their density to remain less than 0.6 km/km². The assessment of the proposed Project and cumulative effects indicates that two-wheel drive road density would remain below the S2S LRMP's target level for all landscape units.

Although the proposed Project would create a 72 km long transmission line, any new projects that may consider utilizing the transmission line would need to receive their own regulatory approvals, and would be scrutinized for their potential impact to grizzly bears, wildlife and other values. The proposed Project is presently the only project in the area that has an Electricity Purchase Agreement (EPA) with BC Hydro.

EAO undertook extensive consultation with provincial grizzly bear and wildlife experts during Application Review to reach a shared understanding of the impacts to grizzly bears and other wildlife and, where possible, to identify appropriate mitigation measures. As a result, Certificate conditions require the Proponent to adhere to practices to mitigate the impacts of construction activities, as established with provincial grizzly bear experts in a human-wildlife interaction plan. A Certificate condition also requires the Proponent to contribute funds to support important provincial grizzly bear monitoring of regional bear movement and gene flow. We conclude that appropriate Environmental Assessment Certificate conditions have been identified to, as much as possible, minimize impacts to grizzly bears and wildlife.

Fish and Fish Habitat

As with many proposed run-of-river hydroelectric projects a key concern was the potential impact of water removals on fish and invertebrates. Although there are a number of species of fish present in the river and creeks of the proposed Project, we understand that the primary

potential effect of concern was in relation to overwintering bull trout in the lower diversion reaches. In addition, we have considered the other fish, fish habitat, and related issues, such as the potential presence of Coho salmon, the presence of cutthroat trout above the diversion reach on Upper Lillooet, impacts to instream and riparian habitats, and impacts to water quality (temperature and sediment) and river channels. We note that late in Application Review the Province engaged a third-party fish expert to review key outstanding issues and that this review provided valuable input on the uncertainty and risk that the proposed Project posed to fish, particularly overwintering bull trout.

Based on the mitigation measures that would be required as part of the Environmental Assessment Certificate, as well as subsequent permits, we agree with EAO's assessment that the effects on fish and fish habitat are not significant. Particular mitigation measures include the requirement for an independent environmental monitor (who would report directly to the Province), the development of construction and operational environmental management plans (to the satisfaction of provincial experts), and adherence to approved instream flow requirements and ramping rates. The requirement to monitor winter water temperatures and freezing throughout the life of the Project, coupled with the requirement to respond in accordance with approved plans, will minimize the risk of freezing events impacting overwintering fish. In addition, the Environmental Assessment Certificate would require the Proponent to make all monitoring reports publicly available for the life of the proposed Project, creating a high level of public transparency.

Visuals and Recreation

The proposed Project was identified to have the potential to have visual impacts and impact recreation access and features, particularly Keyhole falls and Pebble Creek hot springs. We agree with EAO's assessment of these issues and the identified mitigation measures.

Public Consultation

We recognize that the Environmental Assessment of the proposed Project has garnered public attention, both from local residents and others. This has included public attention following the referral to Ministers. We have reviewed the public consultation undertaken by EAO and the Proponent during the Environmental Assessment, particularly the summary in the Assessment Report and the attached public comment tracking table, and conclude that public consultation activities were adequate and that the public comment related to the proposed Project were adequately addressed. We understand the concerns raised by the public. It is our view that all relevant project-related concerns were adequately considered and addressed during EAO's Environmental Assessment process.

First Nation Consultation

We have reviewed the First Nations consultation report, provided as a section of the Assessment Report, and conclude that the Crown has met its duty to consult, and that the potential impacts to Lil'wat Nation's aboriginal rights have been appropriately mitigated and accommodated. We also note that Lil'wat Nation indicated to us on December 20, 2012 that they had reached an

agreement with the Proponent on the terms of an Impact Benefit Agreement regarding the proposed Project and they expressed their full support for the proposed Project.

We have reviewed the recommendations of EAO's Executive Director. We note that they do not raise any additional considerations beyond those identified in the Assessment Report.

4. CONCLUSION AND DECISION

After considering the various mitigation measures and commitments developed through the Environmental Assessment process, EAO has determined that the proposed Project would have no significant adverse effects. We agree with EAO's conclusions and are satisfied that EAO has conducted a fair, transparent, inclusive, comprehensive and efficient Environmental Assessment of the proposed Project.

For the reasons discussed above, and having regard to our responsibilities under the *Environmental Assessment Act*, we have decided to issue a conditional Environmental Assessment Certificate.



Honourable Terry Lake
Minister of Environment



Honourable Rich Coleman
Minister of Energy, Mines and Natural Gas