Endako Weir Public Engagement: What We Heard

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Summary
The permit process for the Endako Weir requires a high level of public engagement that informs residents of the area about the project and its potential impacts. Engagement must also meaningfully consider residents’ concerns in the permitting process, the design of the Environmental Monitoring Plan, and the Environmental Effectiveness Monitoring Plan.

This report provides an update on the engagement activities conducted through June 25th, 2021, and their results.

Due to COVID-19, most public engagement to date was conducted online via surveys and webinars. A hybrid in-person/online session was held with members of the Ts’il Kaz Koh First Nation (Burns Lake Band) after relevant COVID restrictions were lifted. Between surveys (65 completed) and engagement sessions (48 participants), 113 people participated in engagement for this project. 49 of these participants self-identified as lakeshore property owners, indicating a high proportion of qualified objectors included in the engagement sessions.

Meetings were held with the Village of Burns Lake staff, Local Government Elected Officials, the Regional District of Bulkley Nechako Planning Department and Directors, leadership from Ts’il Kaz Koh, and staff at the Office of the Wet’suwet’en. At the request of Ts’il Kaz Koh, a hybrid community meeting was held on June 18th with both in-person and Zoom attendees.

Residents were informed of the opportunity to participate in public engagement sessions and provided access to information about the project. This was achieved through postcards sent to every resident of Burns Lake and the lakeshore around Burns Lake, social media advertising, and brochures in high-traffic areas in Burns Lake. Information about the project is collected at https://www.upperfraser.ca/endako-weir.html.

Engagement sessions informed participants of the conservation goals of the project (i.e., improving habitat for Chinook, kokanee, and other fish in the Endako) and the engineering of the weir. A large majority (68%) of those engaged were very or extremely concerned about decreasing populations of salmon. Given that the project’s objective is to improve salmon habitat, this indicates a high likelihood that the region’s residents will support the project in general. When asked about the increase in average water levels, which is the primary change that could affect residents, 37% of respondents believe the project will affect them significantly. However, when asked to clarify their concerns, 40% of respondents indicated concerns over issues that the project has no bearing on, such as high-water levels. 34% believe that the project would have no impact or a positive impact. 22% indicated concerns over loss of shoreline or erosion related to the project’s potential impacts.

The Village of Burns Lake Mayor and Council also expressed concern over erosion, and the impact on municipal wastewater infrastructure. Due to the concerns expressed, the UFFCA has commissioned two reports. The first report will assess the potential for impact on shoreline erosion from the average lake level increase, and the second to understand the interface of
groundwater with the Village wastewater treatment wells. These reports will be presented to the Village Council in mid-July. The results will likely form a set of monitoring conditions if a water license is achieved.

Based on the population of Burns Lake (1,779), the engagement sessions and survey reached over 6% of potential stakeholders. However, due to concerns expressed by Regional District representatives regarding internet access, and the fact that relevant COVID restrictions have recently been lifted, the UFFCA will be holding in-person engagement sessions in mid-July. These only became possible in mid-June. We anticipate being able to share the results of the erosion and wastewater reports at that time and will gather any new concerns that may arise.

Questions and Answers
The following questions were raised at least once during the engagement sessions. If you have further questions about the project, please contact lkrebs@krebsconsulting.ca.

1. **Will the project change the high-water level of Burns Lake?**
   a. No, the high-water level is unaffected by the weir. Since the weir is only 0.7 metres high, or a little over 2 feet when water is high during freshet, it simply flows over the weir.

2. **Will the weir be monitored once it is constructed?**
   a. Yes, the UFFCA will be legally obligated to maintain a monitoring program as part of the permit requirements. This will include water quality, continued counting of Chinook spawning, and any potential unexpected issues arising from the weir’s construction. The weir is also a mitigable structure, meaning that it can be easily modified or removed if it results in unexpected negative impacts.

3. **Are there identified archaeology or cultural heritage sites within the footprint of this area? Will there be potential for erosion of unidentified sites?**
   a. There is a registered archaeology site along the south piece of the Babine mill site. The Province does an archaeological impact assessment as part of the licensing adjudication. Because there will be no construction on the land, it is a much lower risk. The erosion report that is being prepared will be able to answer questions about unidentified sites. Ts’il Kaz Koh has also requested that a member be on-site when construction work is being completed to ensure the area’s integrity is maintained.

4. **Thinking of future climate change scenarios for this region, would you consider this an adaption strategy in addition to the other objective?**
   a. Yes, this is an adaptation strategy for climate change, which has impacted the flow of the Endako River, along with the loss of forest cover. The weir is
adaptable but relies on natural inflows that could be affected by climate change. We are attempting to climate-proof the natural flows in the Endako River.

5. **Does this impact kayakers’ or swimmers’ access to the lake at all?**
   a. The water levels will remain below the historical high-water mark and above the historical low-water mark. This means you will be able to access the lake in the way you are used to doing. The difference is that the water level will be higher than usual, especially in the low flow months of July through early October, but still well below the high-water levels you see in a typical spring.

6. **Is the height and flow of Burns Lake affected by the land bridge going between Gerow Island towards Francois Lake?**
   a. Unfortunately, there is no data for this. However, this is a pinch point in the lake and that likely impacts water flow.

7. **Who’s going to clear the beaver dam once that you know where it’s put up?**
   a. Part of the ongoing monitoring and maintenance of the weir will include beaver dam prevention at the weir location. This will be a place that beavers target, so we will have to keep on top of it. Ts’il Kaz Koh members were already part of clearing a beaver dam at the site, and Ts’il Kaz Koh will continue to be part of beaver trapping as needed.

8. **What about the impact of the weir on nesting birds along the lakeshore and between Burns and Decker Lakes?**
   a. Because the water level is only shifting by a few weeks, nesting birds won’t be affected. They are already used to variable timing for freshet, so this project will fit within their expectations.

9. **Could the weir be considered a flood mitigation project? If not, could it be redesigned to reduce flooding?**
   a. The weir doesn’t change high-water levels, so it is not considered flood mitigation. We will ask the engineer about the possibility of design to reduce flooding.

10. **The engineering report said it used data from Pinkut Creek, but that’s not even connected to the Endako River watershed. Why was that data used?**
    a. The data used to model the report’s daily water level and flow information was from Water Survey Canada gauges installed on Burns Lake and the Endako River (1996-2004). However, to estimate extreme flows (e.g., 200-y flood flows), Hydrologists use a nearby gauge with a longer, more robust dataset. Pinkut Creek has a longer dataset, and the diversion to the DFO spawning channels does not
affect these peak flows. Using a method called Area Scaling, the flood flows estimates were transferred to the Endako River.

11. What about the impact of industrial activity from the Hampton Mill on the health of the Endako River? Some sludge was noticed at the site of the weir.
   a. The UFFCA will monitor the quality of the water at the weir. The sludge that was mentioned may have been the result of anaerobic bacteria decomposing plant material.

12. Is Ts’il Kaz Koh Creek (Saul Creek) being monitored by the UFFCA?
   a. Not at present, but the UFFCA can set up monitoring stations at the request of Ts’il Kaz Koh First Nation.
Results of Engagement
Webinar registration and attendance
- 40 registrations
- 30 participants
Hybrid in-person/online engagement with Ts’il Kaz Koh
- 11 participants online
- 7 participants in-person
Survey completion:
- 65 completed surveys

The following charts include data from surveys and engagement sessions answering four key questions, and discussion of further questions where relevant.

Question 1: Do you spend much time on the lakeshore of Burns Lake?

<table>
<thead>
<tr>
<th>Response</th>
<th>Count</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes -- I am a property owner on the lakeshore</td>
<td>49</td>
</tr>
<tr>
<td>Yes, I enjoy spending time on the lakeshore</td>
<td>33</td>
</tr>
<tr>
<td>No</td>
<td>10</td>
</tr>
<tr>
<td>Total Responses</td>
<td>92</td>
</tr>
</tbody>
</table>

Property owners made up most of those engaged through surveys and webinars, meaning a good proportion of lakeshore residents were represented in the engagement.
Question 2: Do you think the change in average water levels on Burns Lake will affect you?*

* Question text: The proposed Endako Weir will not change the high-water level in Burns Lake, but will increase the average lake level by about 33 centimetres, or just over 1 foot. This diagram shows a sample year, including the high-water mark during spring melt, and the slight increase in lake levels during the rest of the year. Will a change in lake levels impact you?

<table>
<thead>
<tr>
<th>Do you think the change in average water levels on Burns Lake will affect you?</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>This won't affect me at all</td>
<td>30</td>
</tr>
<tr>
<td>This will affect me slightly</td>
<td>10</td>
</tr>
<tr>
<td>This will affect me a little</td>
<td>15</td>
</tr>
<tr>
<td>This will affect me a lot</td>
<td>32</td>
</tr>
<tr>
<td><strong>Total Responses</strong></td>
<td><strong>87</strong></td>
</tr>
</tbody>
</table>

Despite the high proportion of lakeshore property owners represented in the engagement, most respondents did not believe the increased water levels would significantly impact them. In the **online survey only**, respondents who indicated they would be affected in any way by the change in water level were able to elaborate on their concerns about water levels (Question Text: How will this change in water levels affect you?)

These survey responses can be split into three broad categories, plus two “I don’t know” responses: 1) No impact or a positive impact, 2) Concerns about erosion or loss of beach, 3)
Concerns unrelated to the project. As demonstrated in the following chart and table, many of the concerns that were raised are not related to the weir project.

<table>
<thead>
<tr>
<th>Category</th>
<th>Responses</th>
</tr>
</thead>
<tbody>
<tr>
<td>No impact or positive impact</td>
<td>19</td>
</tr>
<tr>
<td>Concerns regarding erosion or loss of lakeshore/beachfront</td>
<td>12</td>
</tr>
<tr>
<td>Concerns unrelated to this project (e.g., increased high-water levels, flooding of the Endako River, impact on the railway, etc.)</td>
<td>22</td>
</tr>
<tr>
<td>Don’t know</td>
<td>2</td>
</tr>
<tr>
<td><strong>Total Responses</strong></td>
<td><strong>55</strong></td>
</tr>
</tbody>
</table>

As mentioned, an engineering report on erosion is currently being conducted; the results will be shared with all survey respondents and engagement session participants.
Question 3: How concerned are you about endangered salmon populations?

<table>
<thead>
<tr>
<th>How concerned are you about declining salmon runs?</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Not concerned at all</td>
<td>3</td>
</tr>
<tr>
<td>A little concerned</td>
<td>23</td>
</tr>
<tr>
<td>Very concerned</td>
<td>30</td>
</tr>
<tr>
<td>Extremely concerned</td>
<td>27</td>
</tr>
<tr>
<td><strong>Total Responses</strong></td>
<td><strong>83</strong></td>
</tr>
</tbody>
</table>

Due to the project’s objective of improving salmon habitat, respondents were asked whether they are concerned about declining salmon populations. A significant majority (68%) indicated they were very or extremely concerned.
Question 4: Have you personally been impacted by declining salmon runs?

<table>
<thead>
<tr>
<th>Have you personally been impacted by declining salmon runs?</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Not at all</td>
<td>29</td>
</tr>
<tr>
<td>A little bit, I notice the price of wild salmon at the grocery store has gone up</td>
<td>9</td>
</tr>
<tr>
<td>Quite a bit, wild salmon is something I enjoy, and it is no longer as available as it used to be</td>
<td>38</td>
</tr>
<tr>
<td>A lot, wild salmon is an important part of my diet, and I have not had access to it in recent years.</td>
<td>12</td>
</tr>
<tr>
<td><strong>Total Responses</strong></td>
<td><strong>88</strong></td>
</tr>
</tbody>
</table>

While 33% of respondents had not been impacted by the decline in salmon runs, 57% indicated they have been impacted quite a bit or a lot.
Engagement Next Steps
The UFFCA will hold two in-person meetings in July to accommodate residents who could not participate in the online engagement.

The UFFCA will also be presenting the results of the Erosion and Wastewater Interface reports to Burns Lake Mayor and Council when those results become available (anticipated date of delivery is mid-July). The results of these reports will also be shared with everyone who participated in the engagement process through the survey and engagement sessions.