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, and meaningfully considers their concerns in the permitting process and the design of the Environmental Monitoring Plan.

The "What We Heard" report summarizes the engagement activities conducted through July 22, 2021, and the results.

Due to the ongoing COVID-19 pandemic, earlier public engagement was conducted online, via surveys and webinars. Four online webinars we held in early June. On June 18th, we held a hybrid in-person/online engagement session with members of Ts'il Kaz Koh First Nation (Burns Lake Band). In July, we held two in-person engagement sessions for the public. Between surveys (65 completed to date) and engagement sessions (66 participants), 131 people participated in engagement for the project. 58 of these self-identified as lakeshore property owners, indicating a high proportion of qualified objectors included in the engagement.

We also held meetings with the Village of Burns Lake staff and leadership, the Regional District of Bulkley Nechako staff and leadership, and leadership from Ts'il Kaz Koh First Nation and the Office of the Wet'suwet'en.

Stakeholders were informed of the opportunity to participate and given access to information about the project 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 upperfraser.ca/endako-weir.html.

Engagement sessions informed participants of the conservation goals of the project (improving habitat for Chinook, kokanee, and other fish in the Endako) and the engineering of the weir. A large majority (74%) 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 (the primary change that could affect residents), 32% of respondents believe the project will affect them significantly. However, when asked to clarify their concerns, 40% of respondents indicated concerns over high water levels or other issues that the project has no bearing on. 34% believed that the project would have no impact or a positive impact. Only 22% indicated concerns over loss of shoreline or erosion that are related to the potential impacts of the project itself.

The Village of Burns Lake Mayor and Council expressed concern over erosion, and the impact on municipal wastewater infrastructure. Due to these concerns, the UFFCA has commissioned two reports to examine the potential for impact on shoreline erosion from the average lake level increase and impact on municipal wastewater systems. The report on wastewater system impact will be presented to the Village of Burns Lake in August or September 2021, and the results of the erosion report will be included in the project monitoring plan.

Based on the population of Burns Lake (1,779), the online engagement sessions and survey reached over 7% of potential stakeholders. Furthermore, due to concerns expressed by Regional District representatives regarding internet access, and the fact that regional COVID-19 restrictions have relaxed, the UFFCA hosted two in-person engagement sessions in July.

Results of Engagement

Zoom Webinars (four sessions)

- 40 registrations
- 30 participants

Hybrid in-person/online engagement with Ts'il Kaz Koh

- 11 participants online
- 7 participants in-person

In-person engagement in Burns Lake (two sessions)

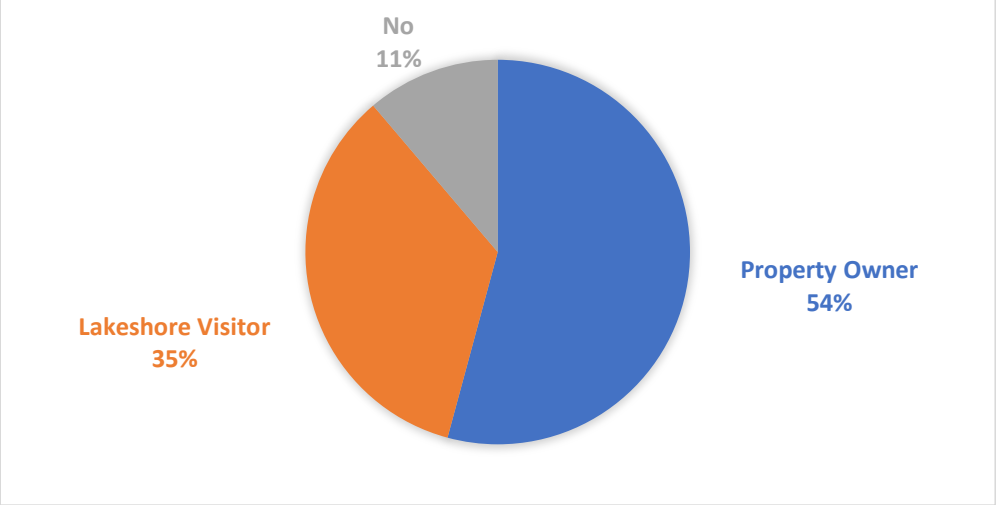
- 18 participants in-person

Survey completion:

- 65 completed surveys

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

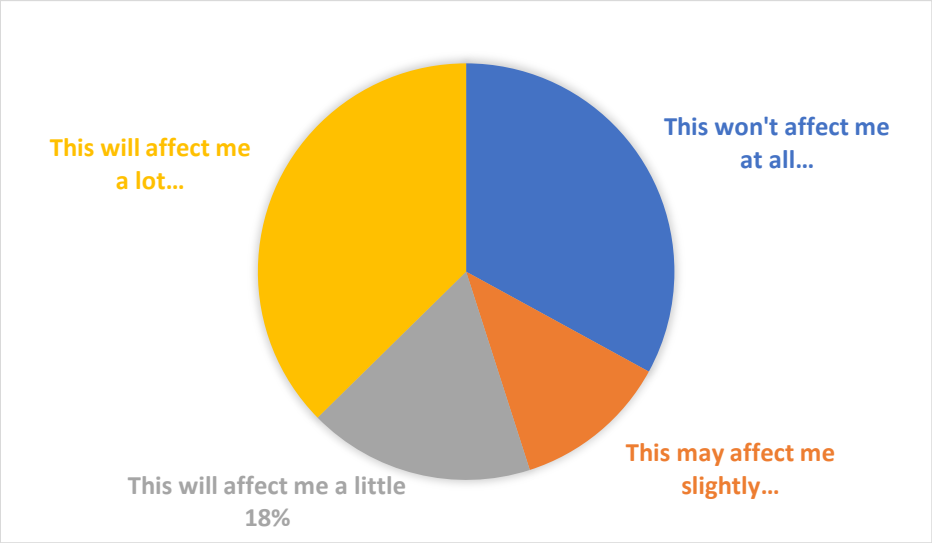
Question 1: Do you spend much time on the lakeshore of Burns Lake?



Do you spend much time on the lakeshore of Burns Lake?	
Yes – I am a lakeshore property owner	58
Yes – I enjoy spending time on the lakeshore	37
No, not really	12
Total Responses	**107**

Lakeshore property owners made more than half of those engaged, meaning that 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?*



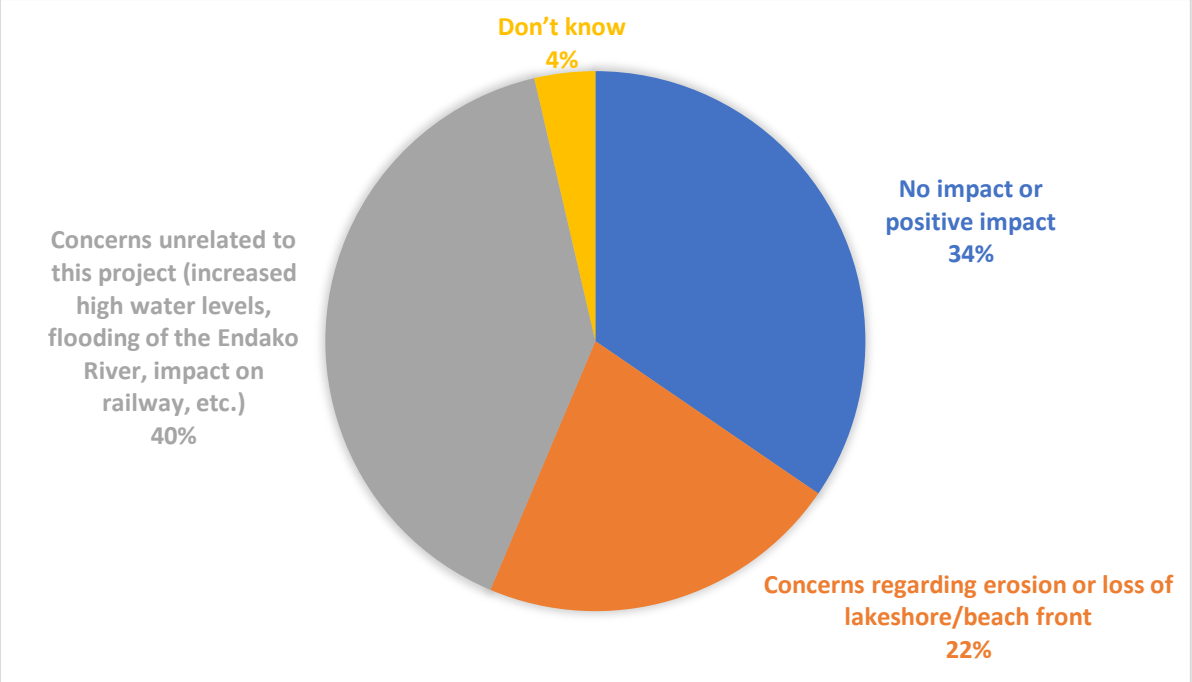
* Question text: The proposed Endako Weir will not change the high-water level in Burns Lake but will increase the average lake level by about 33 centimetres, or just over a foot. This diagram shows a sample year, including high water mark during spring melt, and the slight increase in lake levels during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

Do you think the change in average water levels on Burns Lake will affect you?	
This won't affect me at all	30
This will affect me slightly	10
This will affect me a little	15
This will affect me a lot	32
Total Responses	87

At the in-person engagement sessions in Burns Lake, there were several participants who felt that they did not have enough information (at that point in the session) to say whether the change in water level would affect their use of the lakeshore. In the **online survey**, respondents who indicated they would be affected in any way by the change in water level were given an opportunity to elaborate on their concerns about water levels (question text: How will this change in water levels affect you?)

These survey responses can be broken 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 you can see in the following chart and table, many of the concerns that were raised are not related to the weir project.

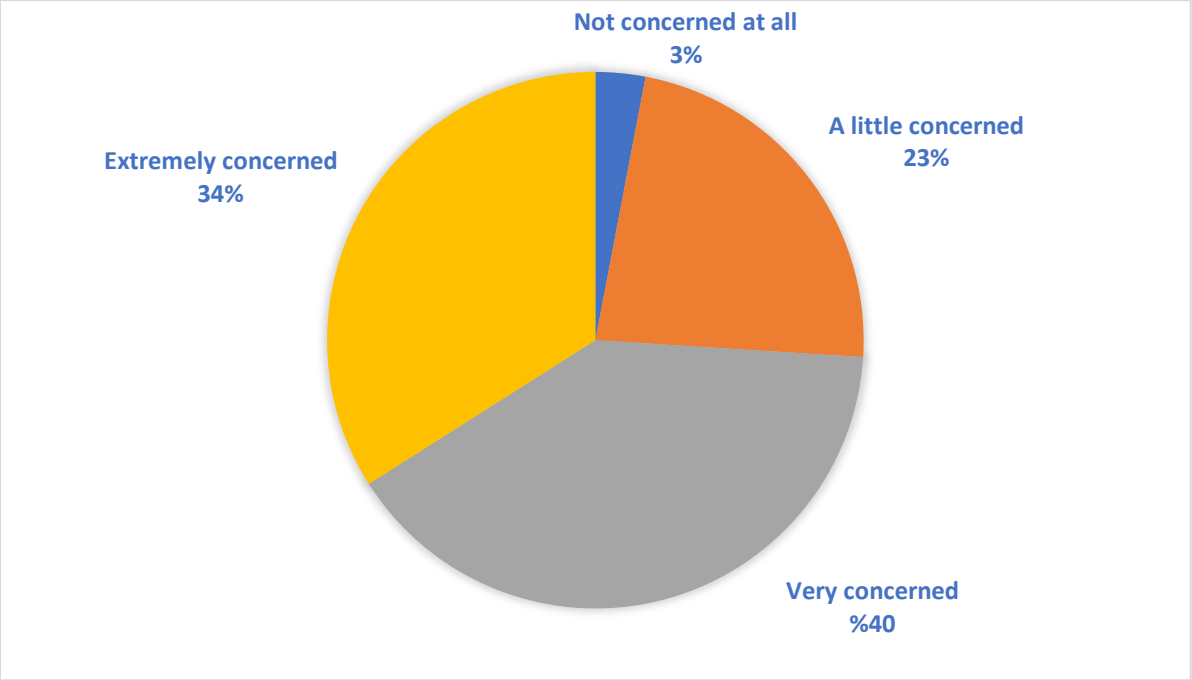
Breakdown of concerns about the project:



Category	Responses
No impact or positive impact	19
Concerns regarding erosion or loss of lakeshore/beach front	12
Concerns unrelated to this project (increased high-water levels, flooding of the Endako River, impact on railway, etc.)	22
Don't know	2
Total Responses	55

As mentioned previously, an engineering report on erosion is currently being conducted; results of that report will be shared with all survey respondents and engagement session participants.

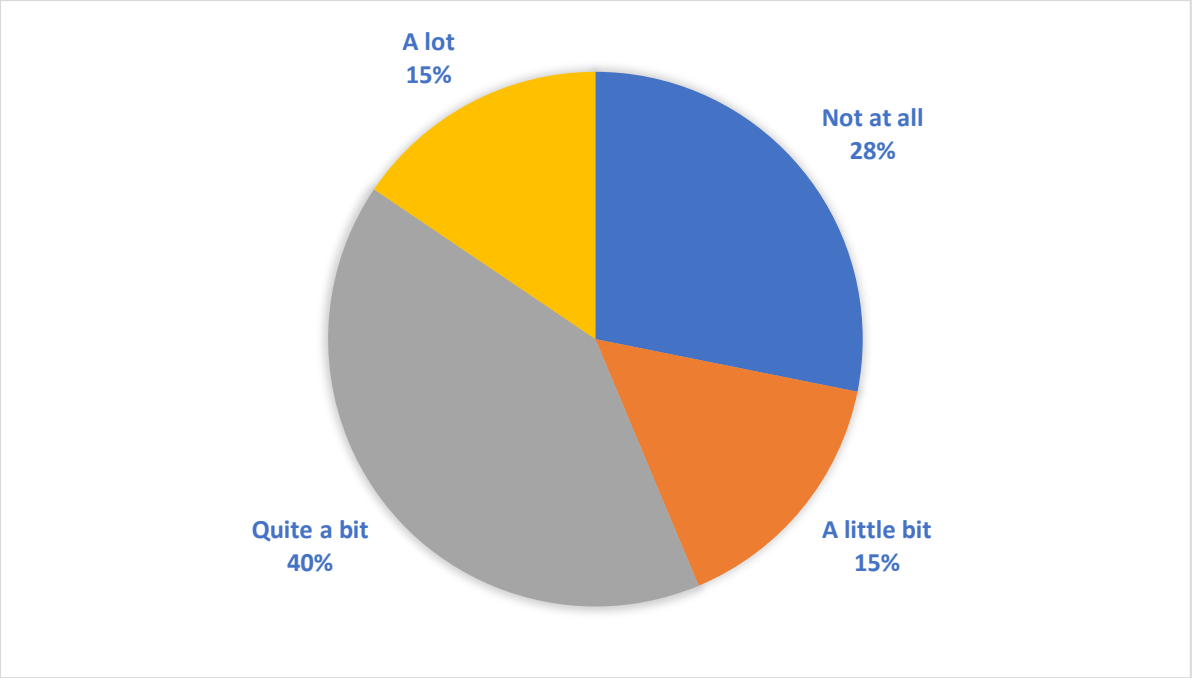
Question 3: How concerned are you about endangered salmon populations?



How concerned are you about declining salmon runs?	
Not concerned at all	3
A little concerned	23
Very concerned	40
Extremely concerned	34
Total Responses	100

Due to the project's objective of improving salmon habitat, the engagement team asked whether respondents were concerned about endangered salmon populations; a significant majority (74%) indicated they were very or extremely concerned.

Question 4: Have you personally been impacted by declining salmon runs?



Have you personally been impacted by declining salmon runs?	
Not at all	29
A little bit – I've noticed the price of wild salmon at the grocery store has gone up	16
Quite a bit – I enjoy wild salmon and it is no longer as available as it used to be	42
A lot – wild salmon is an important part of my diet and I have not had access to it	16
Total Responses	103

While 28% of respondents have not been impacted by the decline in salmon runs, 55% indicated that they have been impacted quite a bit or a lot.

Questions and Answers

The following questions were asked at least once during the online and/or in-person engagement sessions. If you have further questions about the project, please contact Lisa Krebs at lkrebs@krebsconsulting.ca.

1. **Will the project change the high-water level of Burns Lake?**
    a. No, the high-water level would be 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 would simply flow over the weir.

2. **Will the weir be monitored once it is constructed?**
    a. Yes, the UFFCA will be legally required to maintain a monitoring program as part of the permit conditions. This will include water quality, continued counting of Chinook spawning, and any potential unexpected issues that arise from the construction of the weir. The weir is also a "mitigable" structure, meaning that it can be modified easily or removed if it results in unforeseen 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. Because no structures are being built and access is by already-existing roads, there is no archaeological impact. The Province does an archaeological impact assessment as part of the licensing, and they have determined that there is no archaeological impact. The erosion report that is being prepared will be able to answer questions about unidentified sites.

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 along with loss of forest cover has impacted the flow of the Endako River. 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. The difference is that the water level will be higher than usual in the summer and fall, 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'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. **If the beaver dams are essentially doing what the weir would do, why build a weir?**
    a. There are many reasons; beaver dams do not provide fish passage, nor do they regulate water flow. They are also impermanent and are not guaranteed to be any given height, whereas we can design and build a weir to fit our needs.

9. **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.

10. **Could the weir be considered a flood mitigation project? If not, could it be redesigned to reduce flooding or lower peak flows?**
    a. The weir doesn't change high water levels, so it is not considered flood mitigation. Unfortunately, we cannot lower peak flows as the weir will be submerged during high water.

11. **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. Data from Pinkut Creek was used to model changes to the flow of the Endako River since the Pinkut system includes a similar weir. Data for Burns Lake water levels comes from monitoring stations on Burns Lake.

12. **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.

13. **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.

14. **Is the weir made entirely of rock?**
    a. Yes, it will be made of compacted rock. There will be compacted gravel on the grade with additional stacked rock.

15. **Is the structure able to be modified?**
    a. Yes, in fact it may require adjustment. Calibration/adjustment is part of the design scope.

16. **What about debris from the lake that could block the fishway?**
    a. Yes, it will have to be monitored as part of permitting, and debris will be removed as required.

17. **Where does enumeration (fish counting) occur?**
    a. 5 kilometres downstream of Shovel Creek confluence with the Endako River.

18. **Will the potential re-introduction of salmon into fish-bearing streams in the Burns Lake Community Forest impact our operations?**
    a. This should not be an issue in general since the Burns Lake Community Forest is already Forest Stewardship Council Certified, and there are higher protections for fish-bearing streams required by that certification process. It should also be noted that as restoration becomes an important part of the economic mix in the region, projects like the Endako Weir will bring in more opportunities.

19. **Burns Lake is already impacted by nutrient loading and other issues that affect the health of the lake. Will the weir cause more impacts?**
    a. If the province chooses to permit, there will be a robust monitoring program in place that will help us understand even more about the health of the lake and the fish in it. And because the weir can be easily modified or removed, if it is causing further negative impacts, measures can easily be taken.

20. If a residential well is negatively impacted by an increase in average water levels, will there be funding available?

a. Since high water levels are not likely to change, the weir should not impact wells.

21. Will the weir impact residential septic systems?

a. The weir will shift the time that annual high water occurs. High water levels will not change, so if your septic system is currently not impacted by high water, then it will not be impacted with the weir in place.

22. Who do we call if we notice an issue with the weir?

a. Contact information will be distributed and posted at the weir site. Residents will also build relationships with monitors.

23. Is there any modelling that shows extreme high water (100-year flood)? And low flows?

a. High: We looked at neighbouring systems because there wasn't enough historical data. Results were very close to natural events as water would just flow over the weir.
b. Low: We are shifting low flows by storing water for release during spawning season (Aug-Oct).

24. During peak flows, if we're holding back water with the weir and the culverts are full, what will happen?

a. In high water, the weir will be under water so it will have no influence. In low flows, the weir will work as the control.

25. Is the weir going to make it easier for beavers to build dams in the area?

a. No, we must keep the fishway clear. Maintenance and beaver dam removal from the weir will be required if the project is permitted.