

Planning for the Future

Yukon Energy is planning for the territory's future energy needs, and we're committed to meeting the growing demand for electricity using clean energy that complements our existing hydro system. We feel it is our obligation to ensure, as much as possible, that the power we produce is from renewable sources. We believe that Northerners have a collective interest in keeping the environment clean.

To this end, Yukon Energy is looking at all possible sources of clean energy, including geo-thermal, wind, waste-to-energy, and the enhancement of our existing hydro assets. One of those enhancement concepts would provide us with more water to use at our Aishihik hydro facility. We are referring to this as the Gladstone Diversion Concept.

Gladstone Diversion

The Gladstone Lake system is approximately 40 kilometres west of Destruction Bay, between Kluane and Sekulmun Lakes. We are looking at diverting water from the Gladstone Lakes into the Sekulmun-Aishihik Lake system to produce up to an additional 18 gigawatt hours of clean electricity annually using the turbines at the Aishihik hydro facility. This would be done by building a structure that would move water from the upper reaches of Gladstone Creek into Isaac Creek, which flows into Sekulmum Lake and then into Aishihik Lake.

No decision has been made to proceed with this yet. We need to do more studies before we can determine if it is a viable project. If it is, Gladstone Diversion would need a YESAB review and a water license, along with a review by our regulator, the Yukon Utilities Board.

The concept is within the traditional territory of the Champagne and Aishihik First Nations, the Kluane First Nation and the White River First Nation. Yukon Energy is currently involved in discussions with the First Nations about the concept, as well as with stakeholders. We are committed to on-going and meaningful engagement with stakeholders, First Nation and local governments, and the public.





As mentioned on the previous page, we are in the early stages of this concept and are doing a number of studies to see if it could be a feasible project. The studies aim to understand the impacts that the concept would have on:

- Fish and fish habitat
- Birds, vegetation and wildlife
- First Nations (current and traditional use, heritage resources, traditional territory and settlement land)
- Land and river systems
- Land uses (hunting, fishing, recreation, future use)

The studies also allow us to determine the costs of the concept and its benefits in terms of power generation.

Along with the technical fieldwork, the perspectives of local First Nations and stakeholders are critical.

How You Can Be Involved

A great deal of discussion, research and planning must take place before Yukon Energy makes a decision about whether to proceed with a project. We are involving you in the early planning stages. There will be opportunities throughout the process for you to provide input and to ask questions. We welcome your involvement.

Phase 1: Define what the project might look like (the concept stage), and gather information/ conduct feasibility and environmental studies. Engage governments, stakeholders and the public.

Phase 2: Work with governments, stakeholders and the public to refine the concept and analyze what the impacts would be.

Phase 3: Prepare and submit documents for environmental and/or regulatory review. Documents will reflect public input to date.

Phase 4: Obtain all necessary permits, licenses and other authorization. Assessment and regulatory authorities take public input into account when granting or denying permits.

Phase 5: Tender construction work. Make final decision about whether to proceed with construction.





Frequently Asked Questions

Is Gladstone water needed for the third turbine at Aishihik?

No. The Gladstone Concept and the Aishihik third turbine are two separate projects. By adding a third, smaller generator at Aishihik, we'll be able to produce the same amount of power using less water. That will allow us to keep the saved water for a later time (for instance a very cold winter day), when otherwise we might have to burn diesel to supplement our hydro production. Aishihik 3 is expected to save at least \$1.2 million in diesel costs.



Is the Gladstone Diversion Concept needed to provide to power to new or potential mines?

Demand for power is growing in all sections – residential, small business, government and industrial (mining). Yukon Energy has a long-term vision to meet the territory's energy needs using clean, preferably renewable means for many years into the future. The Gladstone Diversion Concept is just one of a number of options we are exploring to help us meet the demand.



Why have you chosen the Gladstone Lakes?

This is one of several options we are considering. The Gladstone Diversion has the potential to produce up to an additional 18 gigawatt hours of electricity annually, which is significant to us. However more work needs to be done before we can determine if this is a viable project.

How will the concept affect levels in Aishihik, Kluane and Sekulman Lakes?

Preliminary studies indicate that the impact to lake levels would be slight. The amount of water being transferred would be a small percentage of the watersheds of these lakes. However we are collecting more data so that we can fully assess this. We will share the information with interested parties once we have the results.





Frequently Asked Questions (Continued)

If you go ahead with the Gladstone Diversion Concept, when will it happen?



Yukon Energy is still in the research stages of this concept. If we go ahead with this as a project, it would need a YESAB review and an amendment to Yukon Energy's existing Aishihik water license. It would also be reviewed by our regulator, the Yukon Utilities Board. All this would likely take at least two years. For now we will continue to work with First Nations, local communities and stakeholders to determine if the concept makes sense from an engineering, financial, socio-economic and environmental perspective.

If this project goes ahead, will there be jobs and economic benefits for First Nation and non-First Nation Yukoners?

For any project that Yukon Energy undertakes, we work to ensure that there are as many economic benefits as possible for First Nation and non-First Nation Yukoners. In the case of the Gladstone Diversion Concept, the summer field work has already provided employment for three members of the Champagne and Aishihik, and Kluane First Nations. Should this go ahead as a project, economic opportunities, jobs and other local benefits would be included in any agreement reached between Yukon Energy and the First Nations.



Contact Us

Yukon Energy is committed to sharing as much information as possible with First Nations, other governments, stakeholders and the public. If you wish to be added to an email list to receive regular updates or if you have questions and concerns, please contact (867) 393-5333 or <u>communications@yukonenergy.ca</u>.

Also watch our website at <u>www.yukonenergy.ca</u> for more information or our blog at <u>blog.yukonenergy.ca</u>.