



Southern Lakes Enhanced Storage Concept, 2015

Over the last several years, Yukon Energy has engaged regularly with Yukoners and done significant research on the idea of increased water storage in the lakes south of Whitehorse. This year, 2015, we will make a decision about whether to move the concept forward.



**YUKON
ENERGY**

The Concept

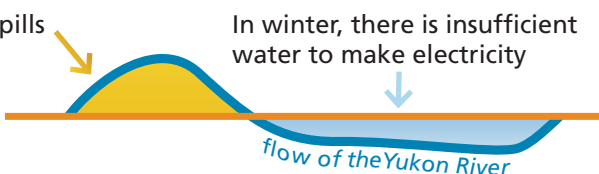
In summer and early fall, we spill a lot of water at our Whitehorse dam. But in winter, when electrical demand is at its highest, we're short of water and must burn fossil fuels to meet power demands. That is something we don't like to do, and we've heard from many Yukoners who don't want us using fossil fuels any more than necessary.

This concept would see us storing more water in Marsh, Tagish and Bennett Lakes in the fall, so it can be used later in the winter. No new dams would be needed; Yukon Energy would manage lake water levels within their natural range, using our existing Marsh Lake control structure.

In summer, surplus water spills through the dam unused

In winter, there is insufficient water to make electricity

OUR GENERATING CAPACITY:



BENEFITS OF THE PROJECT:



Making the most of what we have

Getting the most electricity we can out of our existing hydro facilities is the best thing we can do for Yukoners in terms of costs, the environment and other impacts. We are looking at other renewable options too, but enhancing what we already have must always be our priority.



Leaving a smaller footprint

This approach would have a much smaller environmental footprint than other new energy projects, is far less costly, and has fewer potential effects.



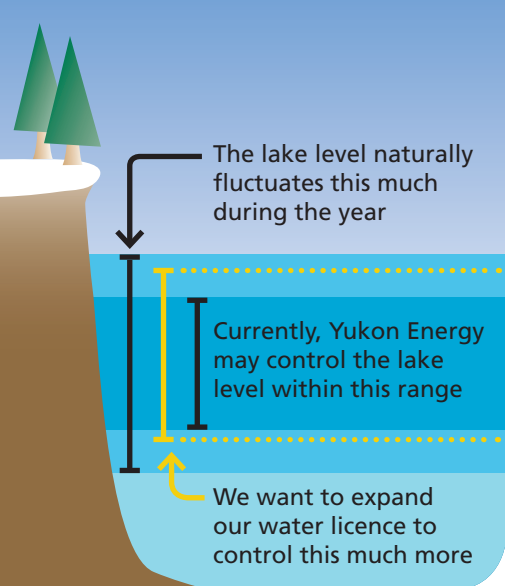
Doing something about erosion

There are already naturally occurring erosion and groundwater issues in the Southern Lakes. The mitigation work we would do as part of this project would address those issues systematically and effectively, providing a legacy benefit to Southern Lakes residents.



Reducing emissions, saving money

This concept will reduce GHG emissions by up to 5,600 tonnes a year and could displace more than two million litres of fossil fuel annually—good outcomes for both the environment and Yukoners' electricity rates.



Your Concerns

Over the past few years, we have listened to your questions, concerns and viewpoints. We have also heard from a number of you who support this concept, and Yukon Energy's proposal to provide erosion and groundwater solutions for lakeside properties. We have done a lot of research to learn if any concerns raised can be addressed. The science is telling us that we can mitigate any significant effects related to this concept.

YOU'VE ASKED ABOUT:



Erosion

Where the concept could have an impact, Yukon Energy would pay reasonable costs for multi-property shoreline protection—engineered and designed to take into account the uniqueness of each area.



Groundwater

In locations where potential impacts of the concept are likely, Yukon Energy would pay reasonable costs of property-specific septic retrofits and drainage solutions.



Fish

Our studies indicate the concept would not negatively affect fish populations, including lake trout.



Wildlife, waterfowl and wetlands

Our research shows there would not be any negative effects on wetlands, birds and wildlife.



Adaptive Management

Before the project could go ahead, limits of acceptable/unacceptable change would be set. Careful monitoring would be done to ensure there was no significant harm to the environment under the new rules. The range could be adjusted to address any issues that might arise.



What happens next?

Yukon Energy will:

Give careful consideration to the final report of the Southern Lakes Water Level Committee, as well as all other research and input we have collected.

Continue to engage with affected First Nations with the intent of reaching Project Agreements.

Continue discussions with other governments, regulators, and key stakeholders.

Meet with local residents on their properties to discuss specific erosion/groundwater solutions.

By the end of this summer, make a decision on whether to move to the next stage of this concept, which would involve thorough and detailed reviews by the Yukon Environmental and Socio-economic Assessment Board, the Yukon Water Board, and possibly the Yukon Utilities Board.



Be informed

Search "Southern Lakes" on **yukonenergy.ca** to find the studies and read all the reports on the Southern Lakes Enhanced Storage Concept.



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