making the most of what we have

Yukon Energy is seeking permission to increase the storage range on Mayo Lake, as well as remove sediment in the Mayo Lake outlet channel.



DEAR RESIDENT AND LAKE USER,

Yukon Energy is planning to submit a project proposal to the Yukon Environmental Socio-economic Assessment Board (YESAB) Mayo Designated Office later this spring for the Mayo Lake Enhanced Storage Project. We have been working with the First Nation of Na-Cho Nyäk Dun, other governments, and local interested parties to research and refine this project since 2008.

This project will help us generate more renewable electricity, on average, by using more of the water available in Mayo Lake. It would require a change to our water use licence to allow us to use up to an additional one meter of water in the lake.

At first, we would drop the lower level of water we are allowed to use on Mayo Lake by 0.5 m. After three years of monitoring, we and the First Nation of Na-Cho Nyäk Dun would determine if the lower level:

- » can be lowered by another 0.5 m,
- » should stay the same, or
- » should be raised back to the existing licence limit.

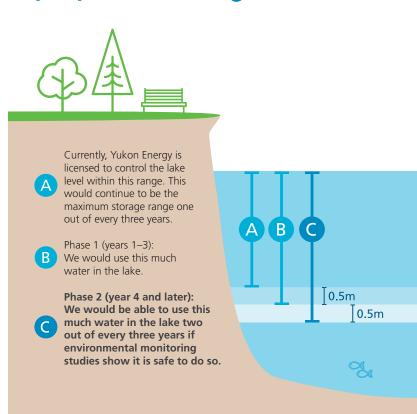
This decision would be made based on the results of our ongoing annual monitoring studies and be made according to the environmental thresholds identified in the enforceable adaptive management plan.



This project also includes the removal of sediment in Mayo Lake.

- » During Phase 1, we would remove the old cofferdam remnants, which are affecting water flows – possibly as early as spring 2021.
- » During Phase 2, if needed after several years of monitoring, we would dredge a narrow area of the main outlet channel.

proposed change



what we've heard so far

From our discussions with the First Nation of Na-Cho Nyäk Dun, other governments and area residents and users over the last decade, we've been able to learn more about issues and interests related to this project, and to develop solutions. Based on what we heard, we are proposing the following.

fish and habitat

CONCERN: Project effects on current fish and fish habitat are not well understood.

FINDINGS: Annual fish studies between 2008 and 2019 have led us to understand where and how deep lake trout spawning occurs, where lake whitefish spawn and where the important spring rearing is located. The detailed studies done to date have shown that lake trout and lake whitefish continue to do well despite low water levels during the past few years.

SOLUTION: We would continue to carefully monitor effects on fish and fish habitat and make any adjustments necessary to minimize effects of the project.

boat access

CONCERN: Low spring water levels have caused access issues for some Mayo Lake users.

FINDINGS: Access concerns are generally limited to roughly two weeks in late May or early June, after ice-off, except in drought years when the effect is extended.

SOLUTION: We installed a dam safety boom upstream of the control structure to address boating safety. We will improve the existing boat launch upstream of the control structure in spring 2020 to allow access to the outlet channel even during very low water levels. Finally, we will also remove the cofferdam remnants and dredge the outlet channel (if needed) to improve access.

Roop Lakes wetlands area

CONCERN: Effects of adjusted water levels on the Roop Lakes wetlands area.

FINDINGS: We hired water engineers to study backwater effects in the Roop Lakes wetlands. When water levels in Mayo Lake are lower (as would occasionally be the case with this project), there are no backwater effects and water levels in Roop Lakes act independently from Mayo Lake.

SOLUTION: We are committed to monitoring water levels and wetland health in the Roop Lakes. If adaptive management is needed, we will work with the First Nation of Na-Cho Nyäk Dun and regulators to review next steps.

public information session

We would like to share current information about this project with you and to hear your questions and comments before we move forward and file our project proposal with the YESAB Mayo Designated Office this spring.

Please join us for our public information session:

Tuesday, March 3, 2020 5:30–8:00 pm at the Mayo Curling Lounge

Dinner at 5:30 pm. Presentation and Q&As at 6:00 pm. If you are not able to attend, please visit **yukonenergy.ca** for more information. You can submit your questions and comments online or by email at **communications@yec.yk.ca**.

Thank you.



