

LAKE LIMERICK COUNTRY CLUB

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Special Board of Directors / Lake - Dam

Meeting Minutes (draft)

Squaxin Tribe Proposal Information Meeting. (Zoom Only)

February 9, 2024 @ 10:30 AM to 12:00 PM (noon)

Agenda:

The LLCC Board, with support from LLCC Lake /Dam Committee & Lake /Dam Long Term Lake Health Sub Committee representatives, meeting with the Squaxin Island Tribe representative Erica Marbet to discuss a Lake Management Feasibility Study for Lake Limerick.

Minutes:

President Ingwaldson called the meeting to order at 10:31am

Secretary P Paradise called roll: President Ingwaldson, Vice President M Berni, Secretary P Paradise, Director J Ingemi, Director S Saylor, Lake Dam Committee Member Brian Smith, Lake Dam Committee member Teddy Lovgren, Lake Dam Committee Member Dennis Muretta were present.

LLCC Staff present: Christy Smith

Directors M Paradise, M Robinson, D Dyson, E Springer-Johannesen, and Water Committee Chair were not present.

Invited Guest: Erica Marbet Squaxin Island Tribe Hydrologist and Water Resources Biologist

Discussion items as follows:

After introductions, E Marbet opened discussion with a brief review of the last collaborative meeting which occurred in March of 2022. The main topic of discussion was the monitoring of water temperatures, collecting data, and sharing collected data.

E Marbet shared that funding may be available to the Tribe for a feasibility study to look into how lake levels, weir flow rates thru the LLCC dam, and optimizing infrastructure can benefit both fisheries and Lake Limerick residents.

E Marbet emphasized that her primary interest is in appropriate level of flow for fisheries. The scope of her feasibility study could include Lake Limerick, Cranberry Lake, and Lake Leprechaun – as well as Mason Lake as flow management tools to enhance late summer flow for Cranberry Creek. While stream temperature is important, it is not the specific reason for today's meeting. This meeting topic is to discuss lake levels and weir board management and how they relate to water quantity.

Lake Limerick has practiced a "static" lake level management procedure of removing weir boards in October and replacing weir boards in April to an "agreed weir board height". Recently there has been discussion about actively managing lake levels by manipulating weir boards and timing, but no action has been taken to date and no consensus has been reached on what the correct lake level is/or should be. Climate change will also affect flows and weir board management. To date – the management practices for the weir system has been an effective tool for maintaining water flow requirements based on Squaxin data collected.

A watershed management approach is probably the optimum way to proceed forward and will require more resources than just Lake Limerick to participate (ie: cranberry lake). The scope of the proposal will include an outreach to the Cranberry Lake Foundation.

The Cranberry Lake Foundation has recently sought funding to remove the existing detention structure that was installed by Lake Limerick as a result of Army Corp of Engineers requirements and this would aggravate ability to control the flow volume of Cranbury Lake into Cranberry Creek and Lake Limerick. A deeper look into competing interests is needed, as there are a lot of moving parts.

Lake Limerick has been collecting data and can share it with Erica.

The source of this feasibility study is the result of the Hirst Decision in Washington State Supreme Court that requires a like for like set aside for the ground water that will be pumped from future wells (population growth) that would have normally flowed into rivers and streams. There is a draft watershed plan that addresses this issue but is not in final form yet.

An estimated budget for the proposed study is \$140,000.00 and a three year time frame. Scope items as follows:

- 1.) Estimate water budget for contributing watershed (precipitation, evaporation, groundwater flow, groundwater pumping, and stream flow)
- 2.) Compare lake levels to stream flow. The tribe has 15 years of continuous flow data for Sherwood and Cranberry Creek and lake level data for Mason Lake. Lake Limerick HOA has a record of lake level for Lake Limerick.
- 3.) Using lake and stream temperature data to ascertain whether "more warm water" is of benefit at all the stream. Surface water in the lake is warm. Warm lake water cools as it flows downstream through forested reaches.
- 4.) Field reconnaissance visits (5) and public meetings (2).
- 5.) Professional survey of lake outlet for key elevational controls, etc. Also determine most vulnerable human structures (docks, boathouses, storage, and septic systems) to rising and falling lake levels.
- 6.) Estimate lake complex and adjacent wetland storage and potential additional capacity.
- 7.) Consider modifications reengineering of flow controls at outlet (30% design)
- 8.) Include cost estimates for construction and long-term maintenance of flow control.
- 9.) Initial cultural resource review for work at both lake outlets. However no construction will be done in this feasibility study.

Squaxin Island tribe is asking for support from Lake Limerick and is requesting a letter of support from Lake Limerick for this feasibility study undertaking. Erica will provide a template letter of support along with a draft copy of the Squaxin proposal next week. The Squaxin proposal is due February 29th 2024. Erica will also reach out to Mason Lake, Mason County, and the Cranberry Lake Foundation for information and support.

This will be a lake management study and will not include water wells. In it's simplest form will answer can we raise the level of the lake in the winter and impound more water so that it can be released at a certain time in the summer? Additional topics NOT included in this study could include retrofit of irrigation system, water system leakage, and water conservation measures.

The Department of Ecology Dam Safety Office should be able to assist in determining if / and how much additional water could safely be impounded by Lake Limerick. A question of liability was also raised.

A question of dredging as a means to increase lake volume as a possible solution was asked, however, the Natural Resources Department was very displeased with the last dredging effort and how it was portrayed as a habitat project. While dredging could be considered as a possible physical solution, it would not be favorably supported.

Next steps:

- 1. A site meeting at the dam is scheduled for this afternoon at 3pm.
- 2. A letter of support
- 3. An agenda item for discussion at next board meeting for discussion and possible motion.

No decisions are required at todays.

Meeting adjourned at 11:45am Minutes taken by P Paradise, LLCC Secretary