

Water Levels on Manitouwabing Lake:

A summary of correspondence and current positions

November 4 2021 (Amended January 17 2025)

There is a lot of effort that goes into prevention of flooding when the snow melts in the spring. Water levels are lowered in the fall to accommodate the spring run-off of melting snow which puts a large amount of water into the lake and rivers in a short amount of time. In the fall, the MNR and the power companies in the province look at the weather patterns and try to estimate the snow load that will be melting in the spring. The water level on Lake Manitouwabing is controlled by the hydro power company, Bracebridge Generation Ltd. within the limits of the normal operating zone established in a resolution of the Public Utilities Commission of the Town of Parry Sound (No. 87-83). The reasons for this are two-fold. Firstly, to prevent flooding both upstream and downstream from the dam at Hurdville, and secondly, to allow enough water flow to generate hydroelectric power. Water levels are controlled by raising and lowering booms at the dam in Hurdville. Every year in late winter, the MNR and the power company evaluate whether the water level of Manitouwabing Lake needs to be lowered again before the snow starts to melt.

In the early spring of 2017 concern was raised in McKellar about the low water levels on Manitouwabing and Grey Owl lakes. Anticipating flood conditions, Bracebridge Generation Ltd. lowered the water level to 0.1 m above the normal operating zone (NOZ). Other lakes in the watershed were also being operated at the lowest levels of their NOZ, due to the possibility of flooding predicted by Bracebridge Generation based on a March 15 survey of snow conditions. Community concern was expressed that the water level should not have been dropped just before a predicted cold snap. The result was frozen water lines and other structural and property damage. Concern has also been voiced about the aquatic life which winters buried in the lake bed near the shoreline that may not have survived when the protective water was drained, causing freezing and damage to the lake ecosystem.

Background:

The normal operating zone for water levels was established in a resolution of the Public Utilities Commission of the Town of Parry Sound (No. 87-83) on August 10, 1987. A benchmark of 240.3 meters above the mean Altitude at Sea Level (mASL) was set. It was resolved that: “the water level in Lake Manitouwabing be held around the 6” below the bench mark and not less than twelve inches (12”) down from the bench mark during the months of June, July, August, September and October, subject to any conditions beyond our control”; that, “the commission endeavour to maintain the water levels not less than twenty-four inches (24”) down from the bench mark during the months of November, December, January and February”; and, that “the water level be held not less than thirty-two inches (32”) down from the bench mark during the months of March and April prior to the spring run-off, to prevent flooding.” The levels established by this resolution remain in effect in 2021.

A public meeting was held on April 20, 2017 at which a number of issues were raised, including: a question of the status of the Special Advisory Committee announced two years previously which was

designed to provide input into the implementation of the Seguin River Simplified Water Management Plan (SRSWMP) written in 2010 by the Parry Sound Power Gen as required by MNRF. (The SRSWMP was updated in 2018 (attached) by Bracebridge Generation Ltd., which merged with Parry Sound Power Gen in 2014.) Other concerns raised at the meeting were: why the lake level was lowered when a cold spell was predicted; were the relevant snow levels measured in McKellar Township or elsewhere; should the minimum and maximum levels be reviewed and revised; what was the impact on fish and marine habitat; and, would there be compensation for property damage. Actions promised by Bracebridge Generation Ltd. at the meeting were to improve communications with the municipality, to activate the Standing Advisory Committee by June 1, to regularly send water level reports and to review the event and attempt to avoid a similar event in the future.

A letter sent from the Township of McKellar on May 10, 2017 requested: formation of the Standing Advisory Committee; improved communication from Bracebridge Generation Ltd.; more sensors placed in the watershed; a recommendation that the spring draw down not only be done according to the date, but also according to predicted weather conditions; review and if needed, adjust the minimum-maximum water levels for Manitouwabing Lake at Hurdville; when snow levels are measured in the bush they should be measured locally; and lastly, a review of the watershed plan was requested in view of the flooding and erosion concerns from 2015 and the concerns about the low levels in March and April of 2017.

In October of 2019, a presentation was made to McKellar Council by Bryan Ingram, Operations Manager of Bracebridge Power Generation, after which the council requested involvement in the review of the SRSWMP and a suggestion was made by council to raise the current minimum water level. A reply from Bryan Ingram stated that there is no formal plan review and referred to removal of water management plan expiry dates, and, plan term and mandatory reviews, due to administrative amendments to water management plans in the province resulting from the 2016 MNRF 'Maintaining Water Management Plans Technical Bulletin.' Mr. Ingram requested that, if the township wished to pursue an amendment to the SRSWMP, it should follow Section 7.3 Plan Amendments. McKellar Township Council replied with a resolution, dated Nov 4, 2019 (19-799) under section 7.3, which requested that "the Seguin River Simplified Water Management Plan (SRSWMP) review its current minimum-maximum water levels in McKellar Lakes with the MNRF" and suggested it is too low and is affecting wildlife, fish habitat and lake quality.

Upon receiving resolution 19-799, Bracebridge Generation Ltd. replied on Feb 20, 2020 with documentation of many years of water levels in the summer which were lower than the 240 m minimum. In this reply it was noted that since the 2009 implementation of the SRSWMP "there have been no events where the depth of the low water events exceeded a value greater than 0.1 m below the minimum of the plan at 240.00m" and that the average duration of low water levels has decreased from 76 days to 41 days. It was further stated that there is no ability to improve operations at Hurdville Dam within the existing WMP in order to avoid occasional low water occurrences and that drought conditions are beyond the control of Bracebridge Generation Ltd.

There was also clarification that the Township of McKellar would need to request an amendment to the plan, rather than requesting that Bracebridge Generation amend the plan. The reply stated that the amendment request from the township should contain:

- a. “Description of the changes being requested – the township needs to state if you are seeking an increase in minimum and maximum levels or something else
- b. Rationale for the changes being requested – the township has provided some rationale around water taking, water quality and ecological concerns due to low water during the summer. However do you have anything to qualify these observations, i.e. results of community ecology studies / observations. Results of water quality testing should be included with reference to reports that may be submitted as an appendix to the request and so on. How many complaints did you receive about water taking/ boat docking problems? Is the township experiencing issues delivering their programs due to low or high water levels? If so, what are they?
- c. Results of any pre-consultation completed with potentially affected parties – township should provide information on consultation to date to support this request. Do residents support this? Have residents requested this (petition to council, survey of residents, etc.)? Higher summer water levels may not be possible without higher spring levels to store the water in anticipation of hot dry summers with significant evaporation – would this be acceptable? Would there be damage to shoreline infrastructure etc? This type of information should be included in the request.
- d. Where changes in operation are proposed, a description of how the proposed changes may impact other dams subject to the WMP – the township may need to commission a small study (or complete internally) to describe this. The township should also identify potential impacts associated with the proposal as a requested change to water levels is potentially complex.
- e. Please also direct your attention to the LIRA Technical Bulletin for Maintaining Water Management Plans – Section 3.3 <https://www.ontario.ca/page/maintaining-water-management-plans> for the step by step information for preparing your request for consideration.”

On July 19, 2020 a request was sent by the township to the MNRF requesting that the ministry support the request by the township for a modest raising of the minimal water levels.

Suggestions for future action:

- A) Evaluate the results of the benthic study being carried out by GBB (completion of initial assessment expected in the fall of 2022), especially the comparison to other lakes in the area.
- B) Request that the township combine a record of the lake level monitoring from Bracebridge Generation Ltd. with a list of public complaints concerning water levels.
- C) Request that the township study the exposure of the lake bed at the shoreline to freezing conditions and the exposure to established spawning beds of water levels that are too low to enable the fish to use them for spawning. Locate these areas on a map of McKellar Township. The township could consider hiring an ecological expert to complete such a study.
- D) Determine the water level at Hurdville Dam beyond which with further lowering there is exposure to the fauna of the lake and a threat of their elimination due to freezing.
- E) Explore any actions taken following the release of the Seguin WMP Amended 2018 06 29, namely concerning the following section:

6. EFFECTIVENESS MONITORING PROGRAM

The SRSWMP effectiveness monitoring program will determine whether the operational changes arising from implementation of the WMP result in the anticipated ecological and social improvements. Specialized flow management through dam operations, identified within the SRSWMP, was intended to address/improve the sustainable minimum flow at walleye spawning sites at Hurdville Dam, Mill Lake Dam, Grey Owl Lake Dam, Harris Lake Dam, Haines Lake Dam and the CPR Trestle Dam. The dam operation changes were also intended to maintain/improve the continued enjoyment of lake-based recreational activities and waterpower production. As the SRSWMP is being implemented in two (2) Phases, effectiveness monitoring under Phase 1 will focus on those facilities with “enforceable” operation plans. However, this does not preclude monitoring of the facilities with “preliminary” operation plans, although, at these facilities monitoring efforts will be focused at establishing baseline conditions in most cases. Reporting on the results of data collection and of the effectiveness monitoring program will occur through submission of the Implementation Report, as outlined in Section 7.3.

6.1 DATA SHARING AND COMMUNICATIONS

A formal data sharing agreement will be established between MNR and Bracebridge Generation Ltd. to facilitate sharing of data collected during the SRSWMP. As part of that process, annual meetings will be organized to discuss operational matters and improve efficiencies. The annual meeting will be scheduled at a time/place convenient to both MNR and Bracebridge Generation Ltd., to review the previous year’s operations, identify operational strategies that worked well or caused problems, and develop a proactive, adaptive management style approach to communication, issue identification and resolution. The data sharing agreement will also include the following:

- survey data for structures included in this plan*
- stop log operation (including total number of stop logs after every stop log manipulation) and lake water level information for structures included in this plan*
- ecosystem data that will be collected*
- site specific bathymetric data that may be collected*
- results from a hydrologic simulation model of the watershed that may be developed* The proponent and MNR will also log public comments and/or complaints that are received relative to this plan.

6.2 STAKEHOLDERS / STEWARDSHIP

It is recognized that Bracebridge Generation Ltd.’s operation of multiple dam facilities has (Parry Sound PowerGen Corporation Seguin River Simplified Water Management Plan Section 6 – Effectiveness Monitoring Program AMEC Earth & Environmental page 6-12) created impoundments that benefit the local community. This community has a considerable vested interest in the effective management of the reservoirs. Accordingly, in addition to the immediate stakeholders responsible for the SRSWMP, working arrangements/stewardship agreements will be pursued with other watershed stakeholders to assist with monitoring, data analysis and the filling of data gaps. A short list of the many potential partners includes the following organizations/groups:

- Lorimer Lake Cottage Association*
- McKellar Lakes Homes & Cottage Association*

- *Tait's Island Cottager's Association*
- *Manitouwabing Lake Community Association*
- *Manitou-Seguín Game & Fish Club*
- *Whitefish Lake Cottagers Association*
- *Seguín Township Associations & Ratepayers*
- *Isabella Lake Ratepayer's Association*
- *Southdale Property Owners / Duck Lake*
- *Tri-Lake Cottagers Association*
- *Municipality of McDougall*
- *McKellar Township*
- *McMurrich Township*
- *Township of Seguín*
- *Municipality of Whitestone*
- *Parry Sound Snowmobile District*
- *Parry Sound Nature Club*
- *McKellar Conservation Association*

Further, the proponent and MNR will log public comments and/or complaints that are received relative to facilities associated with both "Preliminary" and "Enforceable" Operating Plans.

- F) Research the watershed associations who interact with Bracebridge Generation Ltd. and its parent company, Lakeland Holding Ltd. ([Bracebridge Generation – Generations of Waterpower](#)) Consider ways that their watershed maintenance activities could be replicated in the Seguín River watershed.
- G) Consider acting in the context of the Seguín River Watershed, following the model of the [Integrated Watershed Management - Muskoka Watershed Council](#) .

Prepared by Jennifer Ghent-Fuller, Chair, Lake Stewardship and Environmental Committee of McKellar Township for consideration by the committee. Nov 4, 2021.

Attachments:

Seguín WMP Amended 2018 06 29 (Seguín-watershed-conditions-review-30-05-2017.pdf)

Terms of Reference SRSWMP Standing Advisory Committee (ToFR-SRSWMP-SAC.pdf)

Seguín Watershed Conditions Review (Seguín-watershed-conditions-review-30-05-2017.pdf)