Adopted Regulation Strategy
Lake of the Woods Control Board
October 28, 2026

The Lake of the Woods Control Board held a Regulation Meeting in Kenora and via teleconference on October 28, 2026, when it adopted a Regulation Strategy to guide operations through the beginning of March 2027. The strategy was formulated considering basin conditions, hydrological and meteorological forecasts, and the input of the various interests concerned with basin management. Input was provided in written and verbal reports as well as from the Board's Regulation Guide: (https://www.lwcb.ca/reg-guide/index.html).

For an update on current conditions, please refer to the Basin Data section of the Board's web site at https://www.lwcb.ca/waterflowdata.html. For regulation actions and directives taken under the strategy please see the Regulation Actions at http://www.lwcb.ca/regulation/index.html.

At the time of the Regulation Meeting, the Winnipeg River basin was still recovering from persistent drought conditions that had dominated the second half of the summer and early fall. Well below normal precipitation had caused tributary flows and lake inflows to decline rapidly, with many areas experiencing moderate to severe drought conditions and some portions of the basin ranking among the driest years on record. Inflows to the major lakes fell to the lower end of the normal range or below by mid-July, creating growing concerns about water supply heading into winter.

In response, regulation actions focused on conserving storage in Lac Seul and Lake of the Woods by progressively reducing outflows to better match declining inflows. These reductions helped stabilize lake levels through the summer and fall and preserve water in case of continued dry conditions heading into the winter. While some rainfall returned during September and October, it provided only limited improvement to drought conditions and mainly helped maintain stable lake levels. By the end of October, Lac Seul remained near its preferred target level and was well positioned to support winter flow requirements, while storage on Lake of the Woods remained below normal, with continued low outflow and winter outflows expected to also be below normal.

The strategy is focused on two periods including regulation until freeze-up (typically mid to end of November) and the winter period until early March. The strategy specifies key aims and how the Board intends to balance these under a range of possible flow conditions should they develop during the strategy period. The goal of balancing conditions across the entire basin is a complex task given the diverse nature of the different, and sometimes conflicting, interests and the largely unpredictable nature of the hydrology that drives the system.

Lac Seul

A) Seasonal Considerations

Ideal or desirable regulation objectives for the next several months, based on input provided to the Board, include the following:

Up to and During Freeze-up (mid-November)

- Until freeze-up, gradually adjust outflows to those desirable for winter outflow and end-of-winter drawdown targets.
- Regulate Lac Seul outflow to assist in providing satisfactory freeze-up conditions on the English and Winnipeg Rivers as well as on Lac Seul.
- Outfitters on Lac Seul prefer a maximum freeze-up level of 356.31 m (1169 ft).
- Manitoba Hydro prefers that flows at Slave Falls not exceed 1400 m3/s during the ice formation period to avoid frazil ice development and related issues.

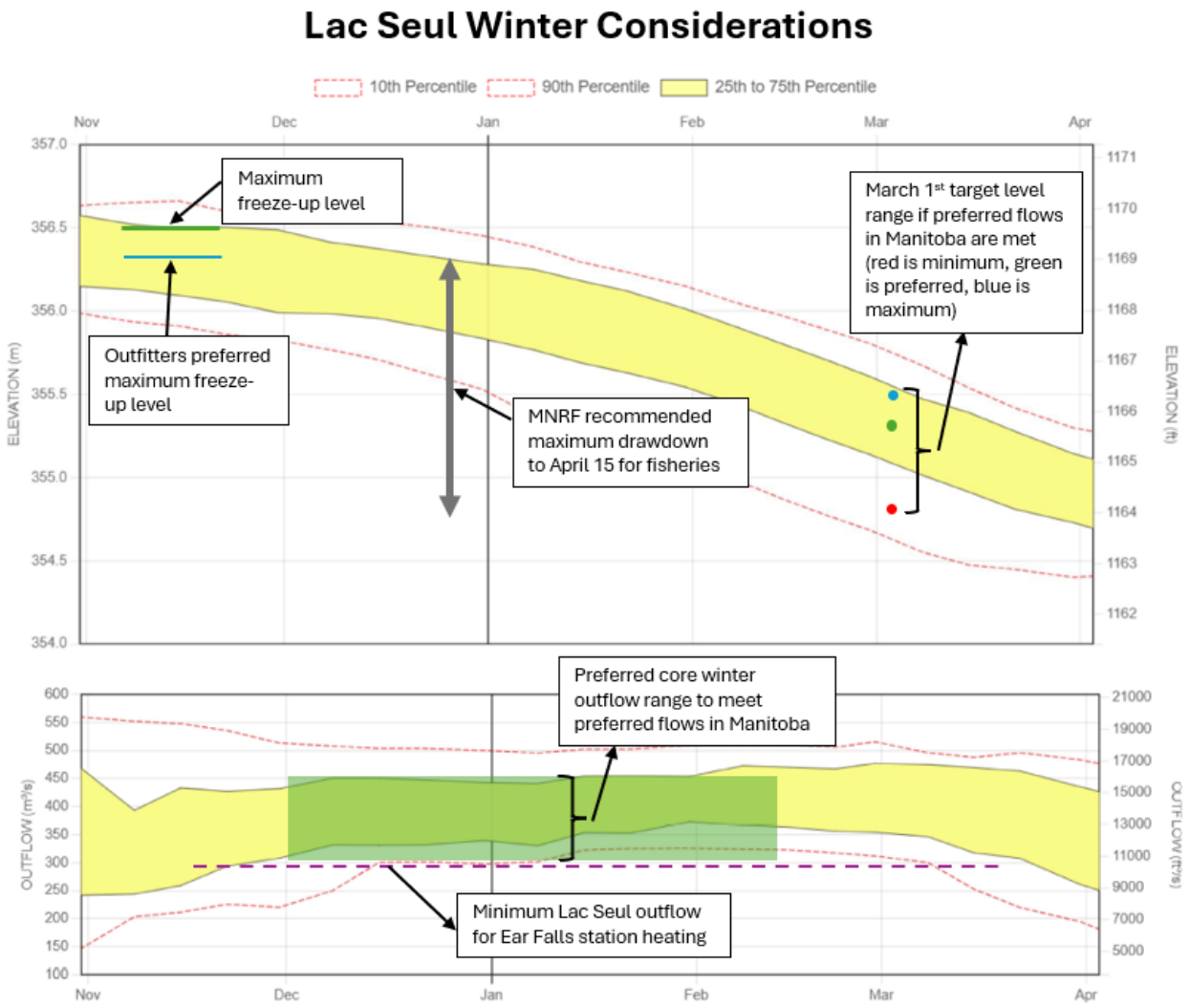
Hydropower Flows

- Operate Lac Seul primarily as a hydropower reservoir to meet winter operation requirements of downstream hydropower plants and provide core winter power demands in Ontario and Manitoba, but with consideration of other interests.
- Ontario Power Generation's minimum flows required for plant heating during the winter are:
    a. 292 m^3/s at Ear Falls GS.
    b. 200 m^3/s at Manitou Falls GS for cold temperatures and 300 m^3/s for extremely cold temperatures
    c. 200 m^3/s at Caribou Falls GS.
- Manitoba Hydro's minimum flows required for hydropower production and plant heating are 170 m^3/s until mid-November, 340 m^3/s from mid to end of November and mid-February to mid-March, as well as 625 m^3/s during the core winter period from December to mid-February at Slave Falls.
- Manitoba Hydro's preferred flow for the core-winter months from mid-November to end of March is between 675 and 960 m3/s at Slave Falls.

Winter Considerations

- MNRF recommends limiting winter drawdown on Lac Seul to:
    a. No more than 1.5 m to protect eggs of fall spawning fish (i.e. to minimize whitefish egg exposure and mortality).
    b. Provide adequate spring spawning conditions in shoals that are sensitive to varying water levels.
- Use Lac Seul storage to offset Lake of the Woods high/low outflow for the benefit of users of the Winnipeg River in Manitoba.
- Whiteshell Cottagers Association prefers winter levels at Nutimik Lake, no higher than 275.23 m (903 ft) to avoid ice damage. High flows can also lead to ice jams and cause localized flooding.
- Avoid closing the Lake St. Joseph diversion with resulting spill down the Albany River.
- The end-of-winter (April 15) target level for Lac Seul should be evaluated in March at the LWCB Regulation meeting to account for conditions and forecasts at that time.

A graphical representation of the winter considerations is included in the figure on the next page.



B) Adopted Strategy

Regulation of Lac Seul will focus on maintaining storage until freeze up to provide the bulk of the outflow required for the core winter period. The Board has managed outflows to position the lake level at the top of the end-of-October target range for dry conditions, near 356.3 m (1169.0 ft), and this will allow outflow to be increased to the normal range over the winter. Since outflow from Lake of the Woods is expected to be low, drawdown of Lac Seul should be monitored carefully while providing the required outflow for the core winter period. Drought conditions prevail across the English River basin and there is uncertainty in how the snowpack will develop this winter and the resulting water supply for refill in the spring.

Low Inflow Conditions

- Until freeze-up, maintain outflow no lower than 150 m^3/s.
- Winter outflow should be no lower than 150 m^3/s, with a core winter (December to mid-February) flow no lower than 250 m^3/s.

- Combined with Lake of the Woods regulation, if winter core period flows meet the minimum 625 m^3/s on the Winnipeg River in Manitoba, the Lac Seul March 1st elevation should preferably be no lower than 354.6 m (1163.4 ft). This objective takes into consideration low outflow from Lake of the Woods.
- Combined with Lake of the Woods regulation, if winter core period flows meet the preferred 675 m^3/s on the Winnipeg River in Manitoba, the Lac Seul March 1st elevation should not be allowed to decline lower than 354.8 m (1164.0 ft). This objective takes into consideration low outflow from Lake of the Woods.

Moderate Inflow Conditions

- Until freeze-up, combined with Lake of the Woods regulation, maintain minimum Winnipeg River flows above 170 m^3/s until mid-November and then above 340 m^3/s until end of November at Slave Falls.
- The Lac Seul freeze-up level should preferably be no higher than 356.5 m (1169.6 ft) with outflow no higher than 425 m^3/s and Winnipeg River flows in Manitoba below 1400 m^3/s.
- Winter outflow should be between 200 and 450 m^3/s with a core winter flow between 300 and 400 m^3/s.
- Lac Seul should be drawn down over the winter to meet hydropower requirements by supplying a core winter flow on the Winnipeg River between 675 and 960 m3/s at Slave Falls.
- Given the dry basin conditions heading into November, target a March 1st level based on snowpack development as follows:
    a. If moderate snowpack develops, target a level preferably no higher than 355.15 m (1165.2 ft) and limited to a maximum of 355.5 m (1166.3 ft) to address the risk of higher spring flows.
    b. If snowpack is below normal, target a level no higher than 355.6 m (1166.7 ft), and preferably no higher than 355.5 m (1166.3 ft), to benefit spring refill, subject to flood risk constraints.
- Regulate the level of Lac Seul so that the level on March 1st is no lower than 354.87 m (1164.4 ft).

High Inflow Conditions

- If inflow rises before freeze-up, increase outflow as appropriate to provide a reasonable balance between increased outflow and higher lake level, with due consideration of impacts on the English and Winnipeg Rivers given current low flows and levels.
- Regulate Lac Seul outflow to as high as 500 m^3/s to prevent the lake exceeding a March 1st level of 355.6 m (1166.7 ft).
- Communicate with First Nation communities on Lac Seul and the English River, and with Grand Council Treaty #3 to keep communities informed of the potential for flooding and to assist in the determination of an appropriate balance of upstream and downstream interests.
- If 500 m^3/s is insufficient outflow to stay below 355.6 m (1166.7 ft), aim to limit or close the diversion into Lac Seul whether or not the Lake St. Joseph diversion is under LWCB authority. (Note: The Board only has authority to restrict diversion flow when Lac Seul

exceeds 356.62 m in November and December, and 356.31 m from January to March. However, Manitoba can restrict diversion flow when Winnipeg River flows in Manitoba exceed 963 m^3/s and Ontario Power Generation (OPG) can also be requested to restrict diversion flow voluntarily.)

- Once the diversion is closed, increase outflow to the extent necessary to ensure that the March 1st lake level is no higher than 355.8 m (167.3 ft).
- Combined with Lake of the Woods regulation, strive to keep Winnipeg River flows in Manitoba at Slave Falls below 1600 m^3/s through the winter.

Lake of the Woods

A) Seasonal Considerations

General regulation objectives for the next several months, based on input provided to the Board, include the following:

Up to and During Freeze-up (mid-November)

- Balance freeze-up levels with winter drawdown on Lake of the Woods to reduce potential infrastructure damage from ice. LOWDSA prefers a level no higher than 322.78 m (1059 ft) at freeze-up to avoid ice forming any higher than this.
- Regulate Lake of the Woods outflow to assist in providing satisfactory freeze-up conditions on the Winnipeg River. Before an insulating layer of ice and snow forms on the river, a minimum flow of 250 m^3/s is preferred to avoid freezing of domestic water lines.
- Manitoba Hydro prefers that flows at Slave Falls not exceed 1400 m^3/s during the ice formation period to avoid frazil ice development and related issues.
- Aim to adjust Lake of the Woods outflow to set a stable core winter flow on the Winnipeg River by freeze-up and to avoid large shifts in river level that could affect ice cover and shorelines.

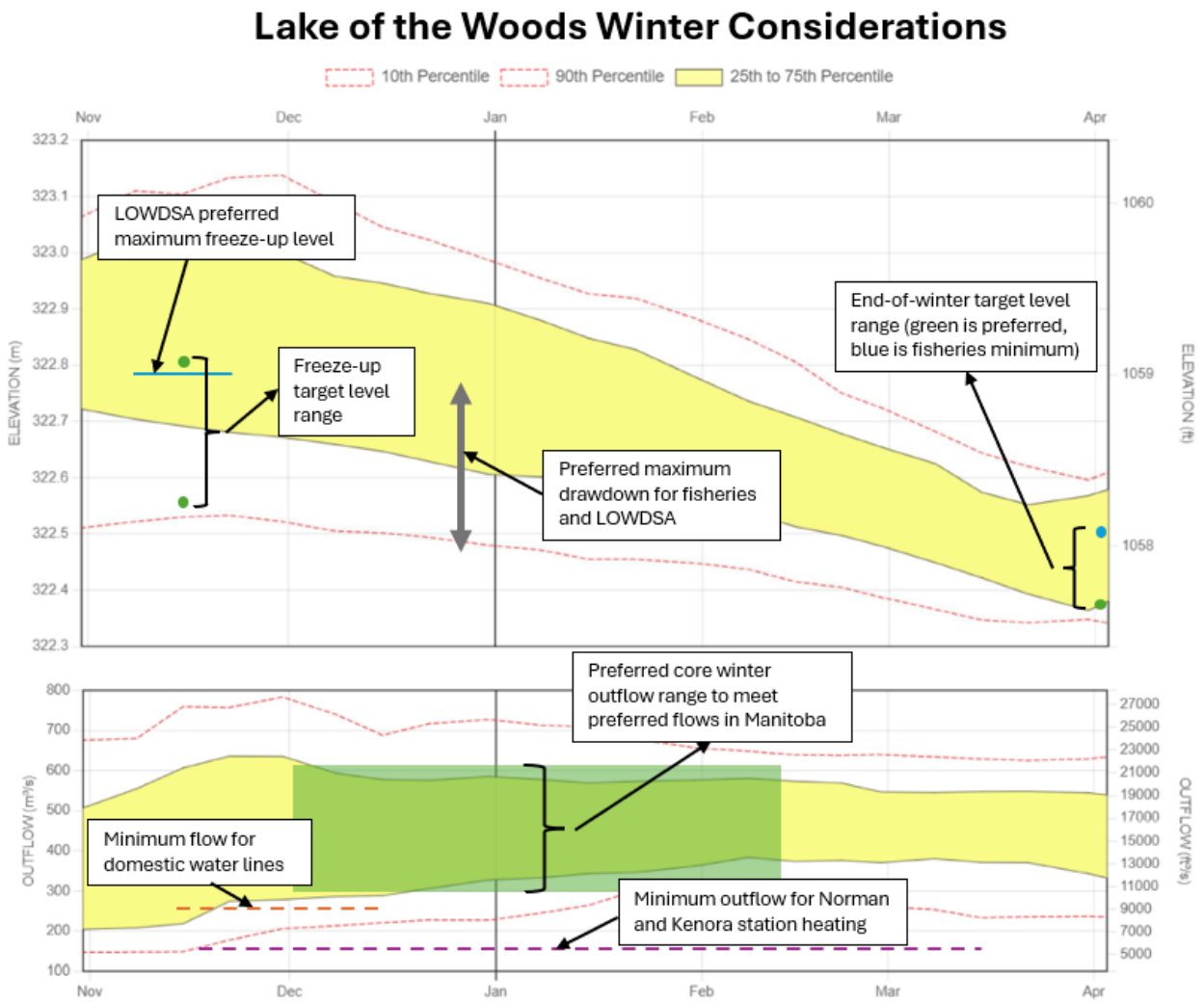
Hydropower Flows

- The preferred winter flow for FirstLight, to maximize their hydropower production, is 400 to 475 m^3/s at the Lake of the Woods outlet. OPG would prefer flows closer to 550 m^3/s at Whitedog Falls.
- Minimum flows required for plant heating during the winter are:
    a. 150 m^3/s at the Norman Dam and Kenora Powerhouse.
    b. For Whitedog GS, 0 m^3/s for temperatures -15°C and above, 180 m^3/s for temperatures lower than –15°C.
- Within the regulation parameters for Lake of the Woods, regulate outflow to assist in meeting targets/preferences for the Winnipeg River in Manitoba.
- Manitoba Hydro's minimum flows required for hydropower production and plant heating are 170 m^3/s until mid-November, 340 m^3/s from mid to end of November and mid-February to mid-March, as well as 625 m^3/s during the core winter period from December to mid-February at Slave Falls.
- Manitoba Hydro's preferred flow for the core-winter months from mid-November to end of March is between 675 and 960 m^3/s at Slave Falls.

Winter Considerations

- Adjust lake level and outflow to achieve a balance between upstream and downstream interests, as inflow dictates. Plan winter drawdown to provide the appropriate balance between the various interests.
- Limit winter drawdown to the extent possible to reduce potential damage from ice. LOWDSA prefers a that drawdown be limited to 30 to 40 cm (12 to 16 in) to avoid infrastructure damage.
- MNRF recommends limiting winter drawdown on Lake of the Woods to:
    a. No more than 30 cm (12 in) to protect the eggs of fall spawning fish.
    b. An end-of-winter level no lower than 322.50 m (1058 ft) to provide adequate spring spawning conditions.
- MNRF recommends a Lake of the Woods minimum level of 322.20 m (1057.1 ft) while the lake is ice covered.
- MNRF recommends limiting winter drawdown on the Winnipeg River to no more than 1.0 m (3.0 ft).

A graphical representation of the winter considerations is included in the figure below.



B) Adopted Strategy

Regulation of Lake of the Woods will also focus on maintaining storage until freeze up. Year-to-date inflow ranks 4th lowest over the last 30 years, even lower than in 2025. The Board managed outflows over the summer and fall to achieve a level close to 322.7 m (1058.7 ft) heading into the winter. It is therefore expected that winter outflow will be lower than normal. Regulation over the winter should take into consideration the prevailing drought conditions in the basin, preferences of all interest groups, and the developing winter and snowpack conditions.

Low Inflow Conditions

- If dry conditions persist until freeze-up, conserve water to the extent possible, while balancing upstream and downstream interests.
- Winter outflow should be no lower than 150 m^3/s and preferably no lower than 200 m^3/s to assist with winter heating of hydropower stations.
- If outflow is greater than 150 m^3/s, the end-of-winter elevation should be no lower than 322.34 m (1057.5 ft).
- If snowpack is much below normal and dry conditions persist over the winter, raise the end-of-winter target elevation to 322.5 m (1058.0 ft) to benefit spring refill.
- Combined with Lac Seul regulation, aim to achieve core winter flows on the Winnipeg River in Manitoba no lower than 625 m^3/s to meet minimum winter peak period power demands. Preferentially increase Lac Seul outflow first and try to maintain an end-of-winter level on Lake of the Woods no lower than 322.34 m (1057.5 ft) in case of continued drought conditions in the spring.
- If inflow allows, and combined with Lac Seul regulation, increase outflows to achieve a flow of 675 m^3/s at Slave Falls with an end-of-winter level no lower than 322.38 m (1057.7 ft).

Moderate Inflow Conditions

- Target for a Lake of the Woods level at freeze-up between 322.55 and 322.8 m (1058.2 to 1059.1 ft), with outflow preferably between 150 and 450 m^3/s. If high or low inflow prevents reaching targets, aim to be as close as feasible.
- Combined with Lac Seul regulation, adjust Lake of the Woods outflow to meet Winnipeg River minimum flow at Slave Falls in Manitoba of 170 m^3/s up to November 15, and 340 m^3/s from November 16 to 30, and below 1400 m3/s during the ice formation period.
- Adjust winter outflow to be between 300 and 700 m^3/s and avoid large reductions in outflow that would cause levels on the Winnipeg River to drop more than 1.0 m (3.0 ft).
- Target for a preferred end-of-winter level between 322.4 and 322.5 m (1058.0 and 1057.7 ft), which aligns with the preferred maximum drawdown of 30 cm (12 in) if freeze-up levels are within the proposed target range.
- Combined with Lac Seul regulation, target winter core period flows between 675 and 960 m^3/s on the Winnipeg River at Slave Falls in Manitoba.

High Inflow Conditions

- Adjust outflow as necessary to target an end-of-winter level no higher than 322.60 m (1058.4 ft) while considering the impact of increased outflow downstream, both in Ontario and Manitoba, in balance with higher water levels on the lake.
- If winter conditions indicate above normal risk of high spring inflow, aim for end-of-winter level no higher than 322.40 m (1057.7 ft) with outflow no higher than 700 to 800 m^3/s,
- Communicate with First Nation communities on Lake of the Woods and the Winnipeg River, and with Grand Council Treaty #3 to keep communities informed of the potential for flooding and to assist in the determination of an appropriate balance of upstream and downstream interests.
- Combined with Lac Seul regulation, strive to keep Winnipeg River flows in Manitoba below 1600 m^3/s through the winter.