Adopted Regulation Strategy
Lake of the Woods Control Board
June 11, 2025

The Lake of the Woods Control Board held a Regulation Meeting in Kenora on June 11, 2025, when it adopted a Regulation Strategy to guide operations through the end of October 2025. 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: (http://www.lwcb.ca/regguide/index.html).

For an update on current conditions, please refer to the Basin Data section of the Board's web site at http://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 experiencing very dry conditions, with rapidly declining inflows to the major lakes. Above normal precipitation in the last week of April quickly refilled Lake of the Woods to its summer level range, and ensured spring fisheries targets were achieved at Lac Seul. However, this would prove to be the only significant spring precipitation the basin received in 2025. May brought less than 20 mm (0.8 in) of rainfall, placing it in the 5th percentile for precipitation, and causing inflows that had peaked early in the month to drop sharply. Several wildfires developed along the Winnipeg River in Ontario and Manitoba, resulting in the temporary evacuation of four hydroelectric generation stations. By the end of May and into the first week of June, outflow reductions at both Lake of the Woods and Lac Seul were required to maintain or achieve preferred summer levels. The Board and specific interest groups agreed that given the potential for worsening dry conditions over the summer, the LWCB would convene a Regulation Call in August, to review basin conditions and discuss regulation preferences heading into the fall.

The strategy covers the period to the end of October 2025. It 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.

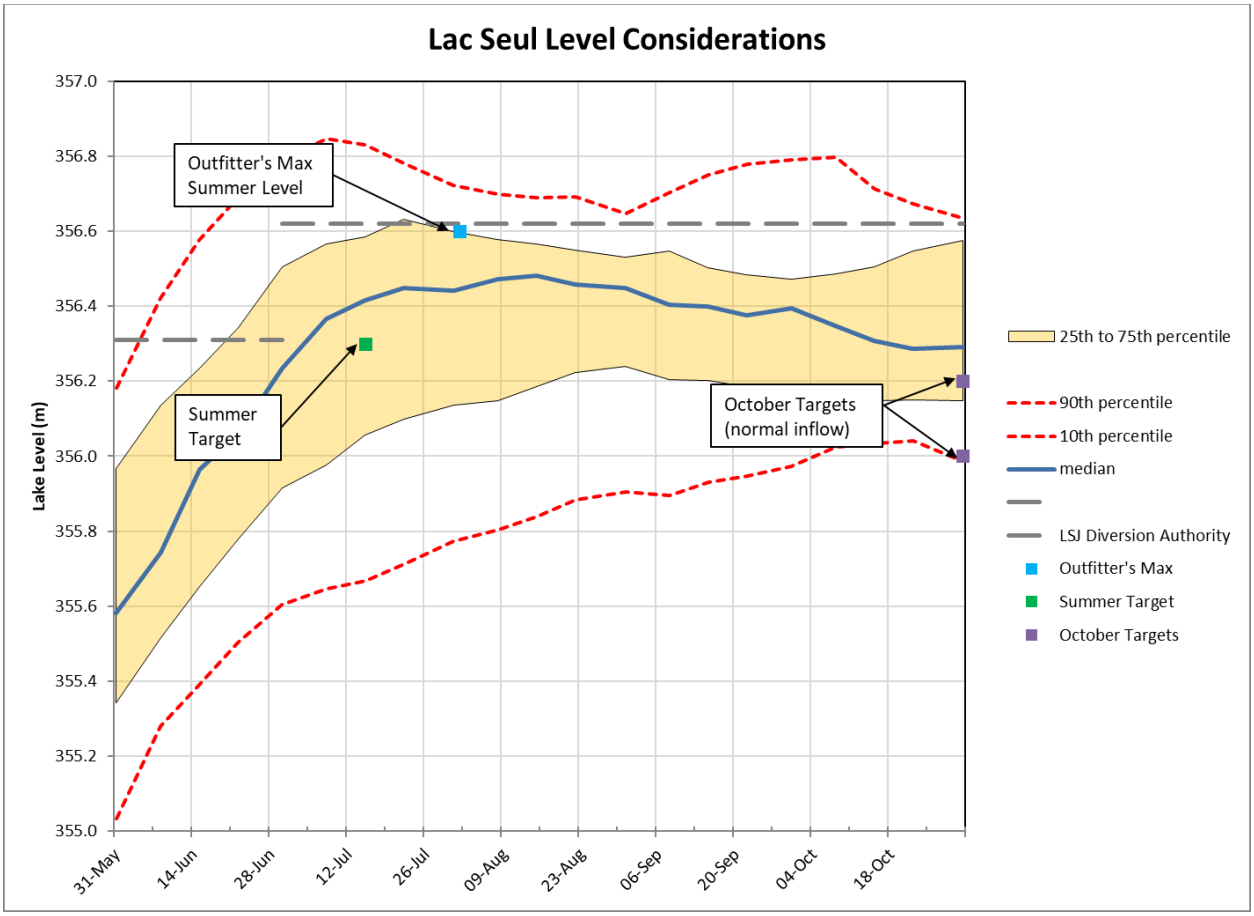
Lac Seul

A) Seasonal Considerations

Inflow to Lac Seul is in the normal range but quickly declining because of developing dry conditions. The Board has managed to allow for a steady rate of rise in lake level since mid-April. The Secretariat recommends regulation that will allow for continued refill of the lake, while balancing the need for outflow reductions during spawning season should dry conditions persist or worsen.

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

- When flow capacity exists downstream in Manitoba, the rate of rise on Lac Seul should be controlled so that the lake level remains below upper quartile.
- Lac Seul level and outflow should be managed to reduce flood risk on the lake and downstream in Ontario and Manitoba.
- Attempt to meet the preferred Lac Seul, Pakwash Lake and English River levels for the fishery and tourist outfitter interests. The Pakwash Camp Owners Association prefer a level range of 346.2 to 346.4 m (1135.8 to 1136.5 ft) on Pakwash Lake from mid-May to mid-November.
- Target a Lac Seul elevation of 356.3 m (1169.0 ft) by July 15, providing some buffer for high precipitation events that might occur in the summer, and staying well below the Lake St. Joseph diversion authority levels.
- The tourist outfitters' preferred summer maximum level for Lac Seul is 356.6 m (1170 ft).
- Supply water requested by Ontario Power Generation and Manitoba Hydro for hydroelectric energy generation; avoid spill in wet conditions and violation of low flow constraints in dry conditions.
- Maintain English River flow below 550 m^3/s at Caribou Falls to avoid levels at Grassy Narrows above 319.6 m (1048.6 ft) during the tourist season (May long weekend to after Thanksgiving).
- Use Lac Seul storage to offset Lake of the Woods high/low outflows for the benefit of users of the Winnipeg River in Manitoba.
- The Whiteshell Cottages Association prefers Nutimik Lake levels in the range of 274.78 to 275.23 m (901.5 to 903.0 ft), by managing outflow from both Lake of the Woods and Lac Seul.
- Lac Seul level and outflow should be managed to reduce the need to close the Lake St. Joseph diversion with resulting spill down the Albany River. However, the diversion should be closed to reduce impacts in the English and Winnipeg River basins under wet conditions.



B) Adopted Strategy

i) Low Inflow Conditions

- Manage outflows as necessary to achieve and maintain the lake level above 355.8 m (1167.3 ft). If the required reductions would lead to English and/or Winnipeg River flows less than minimum requirements of the provincial power utilities, a Regulation Call would be necessary to determine an appropriate balance between upstream and downstream conditions.
- Communicate with First Nation communities on Lac Seul and the English River, and with Grand Council Treaty #3 to keep communities informed of the low water conditions and to assist in the determination of an appropriate balance of upstream and downstream interests.
- Unless conditions are extremely dry, Lac Seul outflow should be no lower than 100 m^3/s to have the lake level stay above 355.8 m (1167.3 ft) while satisfying the overall objectives.
- Severely restrict outflow to maintain lake levels above 355.5 m (1166.3 ft). Again, discussions would be necessary to appropriately balance upstream and downstream interests.
- If low inflow conditions persist into the fall, target an end of October water level range between 356.1 (1168.3 ft) and 356.3 m (1169.0 ft), to provide additional storage heading into the winter period.

ii) Moderate Inflow Conditions

- If higher inflows develop, strive to keep the lake level below 356.4 m (1169.3 ft), while balancing with other interests. Outflow should be at or below 450 m^3/s to achieve these levels.
- Within the general outflow targets, supply water for hydropower production and to address English River fishery concerns.
- Where Lac Seul inflow is moderate but Winnipeg River flows in Manitoba are high, reduce outflow to store water in Lac Seul.
- Lac Seul should be regulated to target an end of October water level between 356.0 m (1168.0 ft) and 356.2 m (1168.3 ft) with outflow between 300 and 450 m^3/s.

iii) High Inflow Conditions

- Balance outflow with the rise in Lac Seul level to reduce flood risk both on Lac Seul and on downstream areas such as Pakwash Lake and the Winnipeg River in Ontario and Manitoba.
- 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.
- Outflow should remain at or below 450 m^3/s for moderately wet conditions; at or below 500 m^3/s for most conditions; and below 600 m^3/s in all but extreme conditions.
- Regulate Lac Seul outflow to as high as 550 m^3/s to prevent the lake level exceeding 356.6 m (1169.9 ft).
- The Lake St. Joseph diversion flow should be reduced to the extent necessary before Lac Seul outflow is increased above 550 m^3/s. (The Lake St Joseph Diversion falls under LWCB authority when Lac Seul level is above 356.31 m (1169 ft) in June and above 356.62 m (1170 ft) in July through December.)
- Lac Seul should be regulated to target for an end of October water level below 356.35 m (1169.1 ft) with outflow at or below 600 m^3/s.
- Once the diversion is closed, regulate outflow to as high as 700 m^3/s to prevent the lake exceeding 356.9 m (1170.9 ft) and as high as necessary to prevent the lake exceeding 357.1 m (1171.6 ft). In case of continued high inflow, strive to maintain a buffer below the top of the flood reserve level of 357.2 m (1171.9 ft) so that this storage limit is not exceeded.

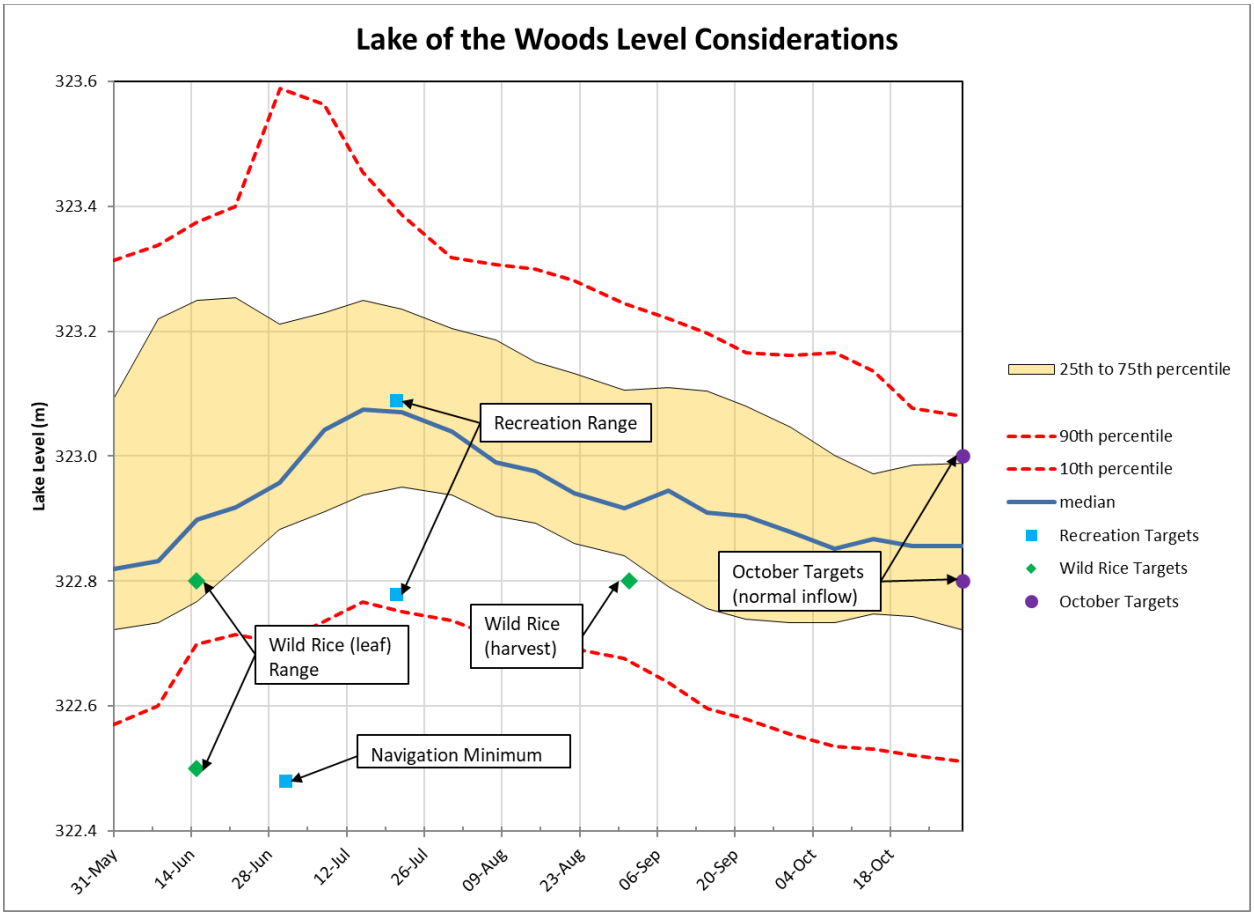
Lake of the Woods

A) Seasonal Considerations

The level of Lake of the Woods is currently in the normal range and has stabilized due to the dry conditions in May. Upstream at Rainy Lake, additional outflow reductions are expected, with refill ongoing and the rule curve only flattening out in mid-July. Inflow to Lake of the Woods will depend on local rainfall but is expected to continue declining if dry conditions persist. The Secretariat recommends adjusting outflow, gradually during active spawning, to maintain preferred summer levels within the range of 322.8 to 323.1 m (1059.0 to 1060.0 ft). Looking ahead, the Secretariat recommends regulating the lake outflow to keep the lake within this range into the fall for freeze-up if normal flow conditions prevail.

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

- Adjust lake level and outflow to achieve a balance between upstream and downstream interests, as inflow dictates.
- For loons on the Winnipeg River, flow changes during the primary incubation period (normally to about the end of June) should be avoided. About 4½ to 5 weeks of relatively steady flows are needed for nesting success. Loons can make a second or third attempt, which means they could be on their nests into August for late nesting.
- For piping plovers on Lake of the Woods, maintain lower lake levels and minimize lake level increases during their nesting and rearing season, which could extend to mid-July.
- For wild rice, the most important period for controlled and stable water levels is during the floating leaf stage from early June to mid-July. During this period, the optimal level of Lake of the Woods is between 322.5 m (1058.1 ft) and 322.8 m (1059.0 ft), although the most important consideration is that water level increases be gradual.
- Water level is also important during wild rice harvesting, which runs from about mid-August to mid-September on Lake of the Woods. If the water level is too high, the top of the plant will become submerged. If water levels are too low, the crop may be inaccessible to the harvesters' boats or canoes. Levels near 322.8 m (1059.0 ft) seem to be satisfactory.
- A significant drop in river level during the period up to mid-July could adversely impact sturgeon spawning and fry development on the Winnipeg River. The actual period of concern may vary and may be better defined each year by district fishery biologists.
- Property owners of the Lake of the Woods District Stewardship Association prefer a summer level in the range of 322.78 to 323.09 m (1059 to 1060 ft) to benefit recreation.
- For navigation, summer water levels below 322.48 m (1058 ft) can cause navigation difficulties for larger boats trying to access the Rainy River, Warroad and the Northwest Angle.
- Property owners of the Lake of the Woods District Stewardship Association on the Winnipeg River at Minaki prefer Lake of the Woods outflows to remain below 700 m3/s to avoid rising river levels and impacts to docks and other infrastructure.
- The Lake of the Woods Soil and Water Conservation District prefers to avoid high levels, as they can cause shoreline erosion, and to limit the summer peak level to no higher than 323.09 m (1060 ft).
- Within the regulation parameters for Lake of the Woods, regulate outflows to assist in meeting targets/preferences for the Winnipeg River in Manitoba.



B) Adopted Strategy

i) Low Inflow Conditions

- Limit outflow reductions to reduce risk of dewatering sturgeon eggs and larvae (possibly to mid-July).
- 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 low water conditions and to assist in the determination of an appropriate balance of upstream and downstream interests.
- Reduce outflow to as low as 150 m^3/s to prevent the lake from declining below 322.7 m (1058.7 ft) for July through September and below 322.6 m (1058.4 ft) in October.
- Maintain, or reduce, outflow to as low as 100 m^3/s to prevent to lake from declining below 322.5 m (1058.1 ft) through the regulation period.
- If Lake of the Woods level is projected to drop below 322.4 m (1057.7 ft) reduce outflow to as low as 70 m^3/s, following discussion with OMNRF and OMOECP regarding fishery and water quality concerns.
- If Lake of the Woods level is projected to drop below 322.4 m (1057.7 ft) during the regulation period, notify the City of Winnipeg such that preparations can be made to ensure that seasonal water demands are met through the period.

ii) Moderate Inflow Conditions

- Set outflows to target a summer level between 322.8 m (1059.0 ft) and 323.1 m (1060.0 ft) with outflow in the 300 m^3/s to 700 m^3/s range.
- Set outflow as high as 700 m^3/s to prevent the peak lake level from exceeding 323.0 m (1059.7 ft) for the benefit of property owners on the Winnipeg River.
- Set outflow as high as 800 m^3/s to prevent the peak lake level from exceeding 323.09 m (1060.0 ft) for the benefit of property owners on Lake of the Woods.
- Balance attempts to achieve the above preferred summer levels range with consideration of the impacts of outflows on downstream interests in both Ontario and Manitoba.
- Aim to limit Lake of the Woods outflow changes that would adversely affect nesting loons on the Winnipeg River.
- Limit outflow reductions to reduce risk of dewatering sturgeon eggs and larvae (possibly to mid-July).
- Aim to manage lake levels to limit the rate of rise of the lake for wild rice during the floating leaf stage and to benefit the piping plovers nesting at Windy Point and on the Sable Islands if nesting is reported.
- Lake of the Woods should be regulated to target for an end of October water level between 322.8 m (1059.0 ft) and 323.0 m (1059.7 ft). Target for an October 31 level no higher than 322.9 m (1059.4 ft) with an outflow of between 300 m^3/s and 700 m^3/s.

iii) High Inflow Conditions

- Balance higher water levels on the lake with the impact of high outflows downstream, both in Ontario and Manitoba.
- 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.
- An outflow of about 900 m^3/s would be appropriate to keep the lake level (or projected level) below 323.3 m (1060.7 ft). However, under some circumstances, it may be appropriate to adjust outflows to accommodate changing inflows, to provide a storage buffer to reduce the risk of higher lake levels or outflows, or to provide relief to the lake or river.
- Lake of the Woods should be regulated to target for an end of October water level between 322.8 m (1059.0 ft) and 323.0 m (1059.7 ft) with a preferred level no higher than 322.9 m (1059.4 ft) with outflow at or below 900 m^3/s.
- Outflow should be set as necessary to try to prevent the lake level (or the projected level) from rising above 323.47 m (1061.25 ft), which is the legislated top of the normal operating range.
- Where feasible in consideration of other objectives, aim to limit outflow changes to a maximum of 100 m^3/s per week.