



City of North Bay Report to Council

Report No: CSBU-2022-038

Date: June 28, 2022

Originator: Adam Curran M.E.S, MCIP, RPP

Business Unit:
Community Services

Department:
Planning & Building Department

Subject: Trout Lake Study and Management Plan

Closed Session: yes ☐ no ☒

Recommendation

That City Council directs staff to initiate an Official Plan Amendment and Zoning By-law Amendment that incorporates policies and regulations based on the general direction of the "Directions Report, Trout Lake Watershed and Management Study" by J.L. Richards dated June 29, 2022.

Background

Trout Lake is located on the Canadian Shield in the Trout Lake Subwatershed, part of the Upper Ottawa-Kipawa Watershed. Trout Lake is a deep, clear, oligotrophic lake with excellent water quality (Miller Environmental Services Ltd. 2000). Trout Lake is approximately 1,887 hectares in area and includes almost 72 kilometers of shoreline. Trout Lake is comprised of two basins: Four Mile Bay (approximately 27 metres deep); and the Main Basin (approximately 63 metres deep). The study area includes the major inflowing streams into Trout Lake, which include Four Mile Lake which flows into Four Mile Bay, Lees Creek which flows into Delaney Bay, Doran's Creek which flows into the Main Basin. There are also five major inflowing streams in the East Ferris jurisdiction. The outflow is the Mattawa River which flows to Turtle Lake.

The City of North Bay has a great resource in Trout Lake; Trout Lake is the source of North Bay's drinking water and also provides private drinking water and plays an important role for recreational activities, such as boating, snowmobiling, canoeing, swimming, cross country skiing and overall enjoyment.

Trout Lake is rare and globally significant; the lake provides low nutrient concentrations and high quality lake trout habitat in the form of deep cold water with elevated dissolved oxygen concentrations and supports a naturally re-producing lake trout population.

Trout Lake is shared with the Municipality of East Ferris, whose residents also rely on the lake for private water systems and overall recreational enjoyment. Over the approximately past three decades, the City of North Bay and Municipality of East Ferris have undertaken the necessary background studies and have put rigorous planning policies around the management and overall protection of the lake. In partnership with the North Bay-Mattawa Conservation Authority, the partnership continues to monitor the health of the lake and have based our Official Plan policies and Zoning By-law provisions based on this scientific understanding and the City of North Bay's legislative authority under the Planning Act.

The City of North Bay has not completed a comprehensive review of lake quality or reviewed our current policies and provisions around the protection and management of the lake since the "Trout Lake Watershed Management Study and a Trout Lake Pollution Control Plan, Limnology and Analysis" which was completed in 1992.

The Province, through the Ministry of Environment & Climate Change Strategy, Eastern Region Technical Support Section, completed a 'Lake Capacity Assessment' of Trout Lake in February of 2018. This assessment concluded that "the phosphorus model does not predict within acceptable limits for Four Mile Bay or Trout Lake (Main Basin), as it over-predicts the spring overturn concentrations by greater than 20% of measured values. As such the model cannot be used as a planning tool to predict a background concentration (in order to set a background plus 50% objective), and therefore it cannot be used to estimate an upper limit for development" (Lake Capacity Assessment: Trout Lake, p.14, 2018).

The Assessment goes on to say "In the future, the Ministry may be open to considering a very limited release of new development lots for Trout Lake. The decision to allow or not allow new shoreline development lots will be based on a rigorous review of the long-term measured water quality data and a detailed statistical analysis of trends by the Ministry" (Lake Capacity Assessment: Trout Lake, p.15, 2018).

Based on the Provinces conclusion on their Lakeshore Assessment and the fact that the City has not done a comprehensive review since the 1990's, Council for the City of North Bay awarded a contract by Resolution No. 2021-140 to J.L. Richards & Associates Limited to *"conduct a watershed study, prepare a management plan for Trout Lake and provide planning consulting services to complete the required Official Plan Amendments and Zoning By-law Amendments"*.

J.L. Richards proposal included working with Hutchinson Environmental who has the expertise in Lake Assessment and Management. To date the consultants have prepared the following reports:

1. [Land Use Background Report, Trout Lake Watershed Study and Management Plan.](#) J.L Richards, March 28, 2022.
2. [Trout Lake Watershed Study and Management Plan – Background Report.](#) Hutchinson Environmental Sciences Ltd. September 20, 2021.
3. [Trout Lake Watershed Study and Management Plan – Issues, Opportunities and Constraints Report.](#) J.L. Richards, June 17, 2022.
4. *DRAFT Trout Lake Watershed Study and Management Plan – Existing Conditions, Issues, Opportunities and Constraints.* Hutchinson Environmental Sciences Ltd. June 29, 2022. – Attached to this Report
5. *DRAFT Directions Report – Trout Lake Watershed Study and Management Plan.* J.L Richards, June 29, 2022. – Attached to this Report

The process to date has involved four Open House meetings, meetings with stake holder groups and correspondence through email and phone calls. All of the public correspondence was considered in drafting the 'Directions Report'.

Generally, the studies have found that the quality of water in Trout Lake is excellent, and that North Bay and East Ferris generally have good Best Management Practices in place to manage and protect the Lake.

Hutchinson's report finds that Trout Lake is not at capacity and concludes that the Lake Assessment works and would permit additional development on the lake and inflowing streams. Hutchinson has also recommended updated and further monitoring of the Lake and to include additional best management practices.

The Directions Report recommends a calculated and cautious approach to new residential development on the Lake and inflowing streams to the Lake. The Directions Report does not recommend development that would bring the Lake to capacity or close to capacity. The proposal is to permit up to "20 percent of the total number of available lots, subject to best management practices, including septic system monitoring and continued annual lake water quality monitoring. This includes up to 83 lots in the Main Basin and 20 lots in Four Mile Bay". This total number of lots includes the lots fronting on the Lake, major inflowing streams to the Lake or back development where the septic will be located within 300m of the Lake or major inflowing stream. This proposal would require that once these lots

have been created or a certain amount of time has passed, that the Lakeshore Capacity Assessment is completed again to determine if these new lots have had their calculated impact or not. Future Councils could then decide to amend the policies based on the results.

In addition, the Directions Report recommends creating a 'Trout Lake Influence Area Overlay'. This Overlay, which is proposed to be 300m, would require that anything within the 300m would be subject to Site Plan Control and the Best Management Practices. The proposed Best Management Practices would include:

- Required Lot area of 0.4ha;
- Minimum Lot Frontage of 60m;
- Front Yard and Septic System Setback of 32m;
- Require a minimum shoreline vegetative buffer of 30m; and
- Require new and redevelopment to be entered into Site Plan Control Agreement.

The Directions Report also recommends that policies be updated to allow small expansions of legal non-complying buildings and structures. This would permit existing developed properties to add additional living space to their dwelling, provided they aren't further encroaching on the front yard setback. This recommendation would reduce the amount of Minor Variance requests for minor changes on individual properties.

The Directions Report also recommends permitting one sleeping cabin with a washroom facility located in the structure. Further development restrictions for sleeping cabins are to be reviewed and determined through the future planning process.

Staff is looking for direction from Council to prepare the Official Plan Amendments and Zoning By-law Amendments based generally on the Directions Report.

If Council Directs Staff to prepare these amendments it would follow the process required under the Planning Act; additional public meetings would be had and ultimately Council would decide to implement the policies and provisions.

Financial/Legal Implications

Financial implications would include staff time associated to preparation of the Official Plan Amendment and Zoning By-law Amendments including preparing for and attending various open house and public meetings. All other costs were approved through the award of the contract to J.L. Richards ([Report to Council CORP 2021-35](#)) and Capital Project No. 3418PZ.

Corporate Strategic Plan

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| <input checked="" type="checkbox"/> Natural North and Near | <input type="checkbox"/> Economic Prosperity |
| <input checked="" type="checkbox"/> Affordable Balanced Growth | <input type="checkbox"/> Spirited Safe Community |
| <input type="checkbox"/> Responsible and Responsive Government | |

Specific Objectives

- Protect, promote and enhance the environment in all aspects of the City's operations and plans.
- Leverage the natural environment to enhance healthy living and recreational opportunities.
- Explore and implement opportunities to streamline processes, policies and practices that make it easier and more effective to do business in North Bay.

Options Analysis

Option 1: That City Council directs staff to initiate an Official Plan Amendment and Zoning By-law Amendment that incorporates policies and regulations based on the general direction of the "Directions Report, Trout Lake Watershed and Management Study" by J.L. Richards dated June 16, 2022.

For the reasons outlined in this report, Option 1 is the recommended option. Additional public meetings will be held during the Official Plan Amendment and Zoning By-law Amendment process that will provide specific details related to implementation of the proposed directions. If approved by Council, this is likely to be brought forward in early 2023 for further consideration.

Option 2: That City Council does not direct staff to initiate an Official Plan Amendment and Zoning By-law Amendment to incorporate policies and regulations based on the general direction of the "Directions Report, Trout lake Watershed and Management Study" by J.L. Richards dated June 16, 2022.

This option is not recommended. As noted in this report, a comprehensive review of the City's Official Plan Policy and Zoning regulations for Trout Lake has not been completed since the early 1990s.

Recommended Option

Option 1 is the recommended option.

That City Council directs staff to initiate an Official Plan Amendment and Zoning By-law Amendment that incorporates policies and regulations based on the general direction of the "Directions Report, Trout Lake Watershed and Management Study" by J.L. Richards dated June 29, 2022.

Respectfully submitted,

Name: Adam Curran, M.E.S., MCIP, RPP

Title: Policy and Business Development Planner

I concur with this report and recommendation

Name Beverley Hillier, MCIP, RPP

Title: Manager, Planning & Building Services

Name Ian Kilgour, MCIP, RPP

Title: Director, Community Development and Growth

Name David Euler, P.Eng., PMP

Title: Chief Administrative Officer

Personnel designated for continuance:

Adam Curran, M.E.S., MCIP, RPP

Policy and Business Development Planner