

Memorandum to the Council of Corporation of the Municipality of Temagami

Subject: Tulloch Engineering 2025 OSIM Bridge Inspection Report

Memo No: 2025-M-155

Date: June 26, 2025

Attachment: None

Prepared By: Laala Jahanshahloo - CAO/Treasurer

Recommendation

BE IT RESOLVED THAT Council receives Memo 2025-M-155 as presented;

AND FURTHER THAT Council approves that:

1. Wilson Lake Road Bridge No. 2 shall remain open to traffic provided it remains structurally safe and compliant with O. Reg. 472/10;
2. Staff be directed to pursue external funding for the rehabilitation or replacement of Wilson Lake Road Bridge No. 2 within the next 1–5 years;
3. Staff proceed with rehabilitation of Temagami Lake Access Road Bridge as funded through the 2025 capital budget;
4. Maintenance for Wilson Lake Road Bridge No. 1 shall be scheduled in the 2026–2028 capital works plan.

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1.Executive Summary

The 2025 Ontario Structure Inspection Manual (OSIM) Bridge Inspection Report, prepared by Tulloch Engineering Inc., evaluates the structural integrity and lifecycle needs of Temagami’s three municipally owned bridges. Inspections were conducted in accordance with Ontario Regulation 104/97. The report provides updated Bridge Condition Index (BCI) and Bridge Sufficiency Index (BSI) ratings, identifies current deficiencies, and outlines capital and maintenance recommendations.

Key Findings:

- Wilson Lake Road Bridge No. 2 is in poor condition with a BCI of 41 and BSI of 31, and is approaching end-of-life status.
- Temagami Lake Access Road Bridge and Wilson Lake Road Bridge No. 1 are in good structural condition, with moderate maintenance and rehabilitation recommended.
- Continued safe operation of Wilson Lake Road Bridge No. 2 is feasible with minor repairs and regular monitoring. Replacement is recommended within 1–5 years, subject to funding availability and structural performance.

2. Background

Ontario Regulation 104/97 mandates biennial bridge inspections by a professional engineer following OSIM protocols. Tulloch Engineering completed Temagami's inspections on May 12–13, 2025.

The full engineering report, prepared by Tulloch Engineering Inc., is available online, use the link below to access the full Tulloch Engineering Report – 2025 OSIM Bridge Inspection:

<https://www.temagami.ca/public/download/files/270065>

3. Bridge Performance Summary (2021–2025)

Bridge	BCI (2021)	BCI (2025)	BSI (2021)	BSI (2025)
Wilson Lake Road Bridge No. 2	48	41	39	31
Temagami Lake Access Road Bridge	74	71	66	65
Wilson Lake Road Bridge No. 1	88	89	81	82

4. Bridge Condition Overview (2025)

Bridge	BCI	BSI	Condition	Recommended Action	Key Issues
Temagami Lake Access Road	71	65	Good	Maintenance & Rehabilitation	Corrosion at abutments, erosion, asphalt surface wear
Wilson Lake Road Bridge No. 1	89	82	Good	Minor maintenance	Potholes on approach, slope grading, debris buildup
Wilson Lake Road Bridge No. 2	41	31	Poor	Continue use with monitoring	Corrosion, settlement, limited capacity, hazard signage

5. Capital Cost Summary

Work Category	Estimated Cost	Notes
Routine Maintenance	\$30,500	Minor repairs across all structures (2025–2026)
Rehabilitation	\$139,500	Temagami Lake Access Road Bridge (1–10 year plan)
Full Replacement (No. 2)	\$900,000	Wilson Lake Road Bridge No. 2 (Class D estimate if pursued by Council)

6. Estimate Classes

Work Category	Estimate Class	Notes
Routine Maintenance (All Bridges)	Class C	Based on known maintenance scope and recent cost history
Rehab – Temagami Lake Access Rd	Class C	Budget-level for 1–10 year rehab (defined scope)
Replacement – Bridge No. 2	Class D	Preliminary, subject to future design and Council approval

Note – Capital Estimate Class Definitions

- Class D: Preliminary estimate based on limited design or conceptual information.
Typical Accuracy Range: ±25–50%
- Class C: Budget-level estimate with defined scope and baseline assumptions.
Typical Accuracy Range: ±15–30%

7. Council Considerations

7.1. Primary Recommendation:

Maintain operation of Wilson Lake Road Bridge No. 2 while structurally safe and compliant with O. Reg. 472/10, with continued annual monitoring and surface repairs.

7.2. Supporting Considerations:

- Closure Contingency: Staff will report back to Council if safety degrades or regulatory thresholds are no longer met.
- Alternate Access: Redundant access routes reduce immediate risk of closure.
- Traffic Volume: Current usage does not justify urgent replacement.
- Compliance: Load posting is in place per CHBDC requirements.
- Funding Strategy: Staff will pursue senior government support for replacement.
- Operational Monitoring: Settlement and corrosion will be re-evaluated in each OSIM cycle.

7.3. Additional Actions:

- Complete planned 2025 rehabilitation for Temagami Lake Access Road Bridge using the \$120,000 capital budget allocation.
- Schedule Wilson Lake Road Bridge No. 1 for minor works in the 2026–2028 capital plan.
- Update the Asset Management Plan and 5-Year Capital Plan with revised lifecycle data and inspection results.

8. Regulatory Compliance Status

Regulatory Requirement	Status Description
Ontario Regulation 104/97	Biennial OSIM inspections completed in 2021 and 2025
Ontario Regulation 472/10	Bridge No. 2 currently meets operational and safety requirements
CHBDC Load Posting Standards	Signage and load ratings in compliance for Bridge No. 2
OSIM Protocol	Full procedural and reporting compliance achieved

9. Conclusion

- Wilson Lake Road Bridge No. 2 remains safe for continued limited use, subject to ongoing condition monitoring.
- Closure is not currently warranted and will only be recommended if safety or regulatory thresholds are exceeded.
- Replacement is advised within 1–5 years, contingent on external funding or accelerated deterioration.
- Temagami Lake Access Road Bridge and Wilson Lake Road Bridge No. 1 remain in good condition and require scheduled maintenance only.
- The Municipality continues to meet all bridge inspection and regulatory compliance requirements.