Agenda – Standing Policy Committee on Water and Waste, and Environment – January 12, 2026

REPORTS

Item No. 1 Winnipeg Drinking Water Treatment Plant Deficiencies Review Quarterly Report No. 8 For The Period Ended October 31, 2025

WINNIPEG PUBLIC SERVICE RECOMMENDATION:

1. That reporting be suspended until Q4 2026 when further updates on the concrete rehabilitation and sodium hypochlorite generating projects are expected to be available.

2. That the Proper Officers of the City of Winnipeg be authorized to do all things necessary to implement the intent of the foregoing.

DECISION MAKING HISTORY:

STANDING COMMITTEE RECOMMENDATION:

On October 4, 2024, the Standing Policy Committee on Water and Waste, and Environment concurred in the recommendation of the Winnipeg Public Service, which included the following:

2. That reporting be suspended until Q1 2026 when further updates on the concrete rehabilitation and sodium hypochlorite generating projects are expected to be available.

On September 8, 2023, the Standing Policy Committee on Water, Waste and Environment concurred in the recommendation of the Winnipeg Public Service, which included the following:

2. That reporting be suspended until Q4 2024 when further updates on the WTP roof replacement and concrete rehabilitation projects are expected to be available.

On May 3, 2022, the Standing Policy Committee on Water and Waste, Riverbank Management and the Environment directed the Winnipeg Public Service to suspend quarterly reports on the matter until September, 2023, when further updates on the Water Treatment Plant Building roof replacement and concrete rehabilitation projects are expected to be available.

Councillor Lukes, Waverley West Ward, submitted a communication with respect to the matter.

On June 2, 2021, the Standing Policy Committee on Water and Waste, Riverbank Management and the Environment adopted the recommendation of the Winnipeg Public Service, as amended, and suspended reporting on the matter until May 2022, when further updates on all three remaining deficiencies are expected to be available.

On March 1, 2018, the Standing Policy Committee on Water and Waste, Riverbank Management and the Environment directed the Winnipeg Public Service to report back quarterly to Committee with updates on the status, costs and timelines of the repairs of the deficiencies of the Winnipeg Drinking Water Treatment Plant listed in report of the Manager of Engineering Services, Water and Waste Department, dated January 25, 2018.

ADMINISTRATIVE REPORT

Title: Winnipeg Drinking Water Treatment Plant Deficiencies Review Quarterly Report No. 8 For The Period Ended October 31, 2025

Critical Path: Standing Policy Committee on Water, Waste and Environment

AUTHORIZATION

Author	Department Head	CFO	CAO
C. D. Wiebe, P. Eng., CAMP, Manager of Engineering Services	Tim W. Shanks, M. Eng., P. Eng., Director of Water and Waste Department	N/A	M. Pittet, acting for J. Dunford

EXECUTIVE SUMMARY

Six problems were found since 2009, when The Winnipeg Drinking Water Treatment Plant (WTP), was built. In 2018, Council asked for regular updates on fixing these issues. These problems did not affect the quality of water from the plant.

Four out of the six problems have been fixed or don't require more work. The two problems left are about:

- the onsite sodium hypochlorite generation system, and
- the surface condition of the concrete tanks in the WTP.

In the 2025-2030 budget, $14.5 million was approved for 2025. Another $15.3 million is planned over the next five years for the WTP Asset Refurbishment and Replacement program. More money for concrete repairs will be asked for in future budgets as cost estimates are determined.

This report covers the period from August 1, 2024, to October 31, 2025. In this period:

- Construction of the WTP roof replacement finished in Q3 2024. This $7,360,000 project was completed, $16,000 under the tendered contract price.

- Preliminary design of the WTP concrete rehabilitation is complete. Detailed design of the first phase should be complete in Q2 2026, and construction start in Q4 2026. The Class 3 cost estimate for Phase 1 is $17.2 million. Phase 2 and 3 are $7.5 million and $13.3 million respectively (total of approximately $38 million).

- A consultant was hired in Q4 2025 to finish a preliminary design of the on-site sodium hypochlorite generating system. The preliminary design is scheduled to be complete in Q2 2026.

RECOMMENDATIONS

1. That reporting be suspended until Q4 2026 when further updates on the concrete rehabilitation and sodium hypochlorite generating projects are expected to be available.

2. That the Proper Officers of the City of Winnipeg be authorized to do all things necessary to implement the intent of the foregoing.

REASON FOR THE REPORT

On March 1, 2018, the Standing Policy Committee on Water and Waste, Riverbank Management and the Environment directed the Public Service to report back quarterly to the Standing Policy Committee with updates on the status, costs, and timelines for the repairs of the WTP deficiencies.

On October 4, 2024, the Standing Policy Committee on Water, Waste and Environment approved the suspension of reporting until Q1 2026, when further updates on the Water Treatment Plant roof replacement and concrete rehabilitation projects were expected to be available.

IMPLICATIONS OF THE RECOMMENDATIONS

There are no implications arising from the recommendations of this report.

Any investments required to address the WTP deficiencies are requested through the annual Capital Budget process.

HISTORY/DISCUSSION

The Winnipeg Drinking Water Treatment Plant (WTP) experienced deficiencies associated with:

- The roof on the main WTP Building
- The roofs on the Chemical Storage and Sodium Hypochlorite Buildings
- The onsite sodium hypochlorite generation system
- The dewatering cells
- The standby generators
- The concrete tanks within the WTP

None of the deficiencies identified have impacted the WTP's ability to provide potable water to the City. Water treatment has always remained in compliance with the City's Public Water System Operating Licence.

Within this reporting period, construction for the WTP roof replacement was completed in Q3 2024 by Flynn Canada (Tender 37-2023). Total performance was achieved slightly later in Q1 2025 due to a delay in the delivery of owner's manuals and completed warranty documentation. The total construction cost was $7.36 million, which was $16,000 below the tendered contract price.

A one-year warranty inspection will follow in Q1 2026.

The new WTP roof has a five-year contractor warranty and 10-year manufacturer warranty.

Two deficiencies remain that are in the design phases to establish long-term solutions: the onsite sodium hypochlorite generation system, and the surface condition of the concrete tanks in the WTP.

The following table provides a summary of the remaining deficiencies, the actions required to address the deficiencies, and the status of those actions.

Table 1: Actions Required to Address Remaining Deficiencies and Status

Deficiency Description	Status/Actions Required
Onsite Sodium Hypochlorite Generation System	
The WTP was originally designed to generate sodium hypochlorite onsite to disinfect water. Two equipment failures occurred within a six-month period. After the second failure, onsite generation of sodium hypochlorite was discontinued and it was purchased commercially.	Within this reporting period, RFP 671-2025 for the preliminary design of the onsite sodium hypochlorite generation system was awarded to WSP Canada Inc. in early Q4 2025. The preliminary design is scheduled to be completed by Q2 2026. Cost estimates to reestablish the system will be produced at a Class 3 level. A life-cycle cost comparison of re-establishing the system versus continuing to purchase commercial sodium hypochlorite will be performed to inform the decision to move forward with detailed design. Due to the current uncertainty in overall cost of the rehabilitation of the system, no funds have been budgeted to date.
Concrete Tanks	
The WTP has experienced surface distress to concrete in the process tanks that has been exposed to water that has undergone pH suppression.	A conceptual design report for concrete rehabilitation (RFP 84-2019) was completed in 2023. It recommended rehabilitation of concrete surfaces within the WTP. This involves the application of various types of coatings and liners. The report further recommended a multi-phased approach to rehabilitation to ensure no major outages would be required to facilitate the work. The first phase includes higher priority tanks that have experienced more aggressive deterioration, such as the filters and filter underdrains. Subsequent phases will address rehabilitation of all other structures in the WTP that required concrete rehabilitation. In Q3 2024, RFP 304-2024 for the preliminary design of all concrete rehabilitation phases, as well as detailed design and contract administration of the first phase was awarded to Hatch Ltd. Within the current reporting period, Hatch completed the preliminary design of all phases of the concrete rehabilitation project.

Concrete Tanks	
	The updated class 3 cost estimates for the project including construction, engineering, escalation, contingency, administration and financing are as follows: Phase 1: $ 17,227,000 Phase 2: $ 7,517,000 Phase 3: $ 13,248,000 Total: $ 37,992,000 Detailed design of the higher priority first phase of concrete rehabilitation has progressed to a first draft as of Q4 2025. Detailed design for this phase is scheduled to be completed in Q2 2026, with construction expected to begin in Q4 2026. The detailed design has experienced delays related to the re-design of the filter underdrain assembly components. Design deviations were required to ensure the new assembly is compatible with the existing WTP infrastructure, which requires the design of new piping and additional phasing requirements for the upgraded filters to function in parallel with the existing filters through the construction phase. The phase 1 construction is expected to take approximately four and a half years due to the complex phasing of the WTP filter rehabilitation work, ensuring that sufficient filtering redundancy is maintained for the water treatment process. Detailed design for phases 2 and 3 of the concrete rehabilitation are scheduled to start in 2030 following completion of the phase 1 rehabilitation.

The Public Service does not anticipate a significant update on the status of the remaining projects will be available until Q4 2026 and, therefore, recommends a further suspension of reporting until such time.

FINANCIAL IMPACT

Financial Impact Statement

Date: November 18, 2025

Project Name:

WINNIPEG DRINKING WATER TREATMENT PLANT DEFICIENCIES REVIEW
QUARTERLY REPORT NO. 8 FOR THE PERIOD ENDED OCTOBER 31, 2025

COMMENTS:

There are no financial implications arising from the recommendations of this report.

Should the investigations of the noted deficiencies determine additional investments are required, these costs will be identified and requested in the annual Capital Budget process.

Lucy Szkwarek, FCPA, FCGA

Lucy Szkwarek, FCPA, FCGA
Manager of Finance and Administration

CONSULTATION

This Report has been prepared in consultation with:

N/A

OURWINNIPEG POLICY ALIGNMENT

This report is in accordance with the OurWinnipeg 2045 Policy 2.18 Potable Water Conservation, by providing safe, reliable and sustainable supply of potable water.

> Objective: Protect and value ecosystems as essential components to quality of life through municipal activities and urban development.

WINNIPEG CLIMATE ACTION PLAN ALIGNMENT

Consideration was given as to whether this report connects to the Winnipeg Climate Action Plan (CAP), and it was determined that the WCAP is not applicable to this specific report.

WINNIPEG POVERTY REDUCTION STRATEGY ALIGNMENT

Consideration was given as to whether this report connects to the Winnipeg Poverty Reduction Strategy (PRS) and its Goals and Objectives, and it was determined that the PRS is not applicable to this specific report.

SUBMITTED BY

Department: Water and Waste
Division: Engineering Services
Prepared by: Ken Dyck, P. Eng.
Date: December 18, 2025
File No.: W-573(B)