Agenda – Council – September 25, 2025

Report – Standing Policy Committee on Water, Waste and Environment – September 9, 2025

Item No. 3 Combined Sewer Overflow (CSO): Jefferson And Mission Timeline Update

STANDING COMMITTEE RECOMMENDATION:

On September 16, 2025, the Executive Policy Committee concurred in the recommendation of the Standing Policy Committee on Water, Waste and Environment and submitted the following to Council:

1. That this report be received as information.

Report – Standing Policy Committee on Water, Waste and Environment – September 9, 2025

DECISION MAKING HISTORY:

EXECUTIVE POLICY COMMITTEE RECOMMENDATION:

On September 16, 2025, the Executive Policy Committee concurred in the recommendation of the Standing Policy Committee on Water, Waste and Environment and submitted the matter to Council.

STANDING COMMITTEE RECOMMENDATION:

On September 9, 2025, the Standing Policy Committee on Water, Waste and Environment concurred in the recommendation of the Winnipeg Public Service and submitted the matter to the Executive Policy Committee and Council.

COUNCIL DECISION:

On March 27, 2025, Council adopted the recommendation of the Standing Policy Committee on Water, Waste and Environment which included the following:

6. That the Winnipeg Public Service report back by the third quarter of 2025 with recommendations to complete both the St. Boniface Mission District and Jefferson District Combined Sewer Overflow work in accordance with the Scenario 1 timeframe outlined in the 2019 City of Winnipeg Combined Sewer Masterplan.

ADMINISTRATIVE REPORT

Title: Combined Sewer Overflow (CSO): Jefferson And Mission Timeline Update

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

AUTHORIZATION

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

EXECUTIVE SUMMARY

The 2019 City of Winnipeg (City) Combined Sewer Overflow Master Plan (CSO Master Plan) provides Winnipeg with a path to reduce overflows into local waterways. The goal is to capture 85 percent of combined sewer overflow (CSO) volume for the 1992 Representative Year by the Provincial appointed deadline of 2045.

Council directed the Public Service to report back on whether the City will meet the Scenario 1 (City-only funding plan) timeline from the CSO Master Plan in two combined sewer districts (CSD):

- Jefferson
- Mission

Jefferson Combined Sewer District
Construction work began in the Jefferson CSD in 2012. To date, 10 of the 12 sewer separation construction contracts are complete. Approximately $64 million has been committed, with an estimated $12 million (in 2025 dollars) remaining. Once complete, this work will improve basement flooding protection in the district and divert more sewage to the treatment plant. The City expects the remainder of the separation work to be completed by 2026; this is ahead of the CSO Master Plan 2037 timeline. The in-line storage component is still expected to be completed around 2043.

Mission and Roland Combined Sewer District
The Roland CSD, along with an area around the Dugald Drain, have been incorporated into the Mission CSD area. Preliminary design work for Mission and Roland began ahead of schedule in February 2025. Based on conceptual plans, the City expects to complete construction work in these districts by 2041. To date, $5 million has been committed.

The schedule in the CSO Master Plan is conceptual in nature and will continue to be revised as the Program progresses. The City will strategically prioritize work packages to maximize program benefits and improve the water quality of Winnipeg’s lakes and rivers.

RECOMMENDATIONS

That this report be received as information.

REASON FOR THE REPORT

On March 27, 2025, during the discussion of Item 2: 2025 to 2027 Revised Sewer Volume Rates, the Council adopted the following motion:

6. That the Winnipeg Public Service report back by the third quarter of 2025 with recommendations to complete both the St. Boniface Mission District and Jefferson District Combined Sewer Overflow work in accordance with the Scenario 1 timeframe outlined in the 2019 City of Winnipeg Combined Sewer Master Plan

IMPLICATIONS OF THE RECOMMENDATIONS

There are no implications with receiving this report as information.

HISTORY/DISCUSSION

The following is an update on the progress of the Jefferson and Mission CSD sewer relief work compared to the plan outlined for the City-only funding scenario in the CSO Master Plan (referred to as Scenario 1 in the CSO Master Plan).

Background

Combined Sewer Overflows are regulated under Provincial Environment Act Licence No. 3042. The CSO Master Plan defines a program to reduce the volume and number of sewer overflows to local waterways. The goal is to capture 85 percent of CSO volume for the 1992 Representative Year by 2045. The CSO Master Plan's estimated capital cost is $1.15 billion (2019 dollars at a Class 5 estimate).

The City budgets an average of $30 million per year for the CSO Program. As part of the 2022 Capital Budget Update, Council approved additional funds of $15 million per year from 2024 through 2027 to help accelerate the Program.

In 2022 and 2023, Council directed the Public Service to work towards the Provincial deadline of 2045 and to prepare a City-only funding plan to meet this. Various funding scenarios were provided in the 2024 to 2027 Water and Sewer Rates Administrative Report to illustrate the potential rate impact over the range of a Class 5 estimate.

Based on the 2019 Class 5 estimate of $1.15 billion, the current level of funding for the CSO Program is approximately equivalent to what is required to meet Council's direction to work towards the goal of achieving the 2045 deadline using City-only funding. The CSO Master Plan will be updated in 2030, when district plans are reviewed and costs and schedules are updated.

District Prioritization

The CSO Master Plan provides a conceptual plan for the City's CSDs. It is a living document that is revised as more information is collected during implementation of the CSO Program. Proposed conceptual plans are advanced to final solutions as the project goes through preliminary and detailed design.

Districts within the CSO Program are reviewed and prioritized either individually or by a group of hydraulically-connected districts. CSO work is prioritized based on various factors including, but not limited to, prior work in the district, CSO volume decrease, basement flooding level of service, water quality improvement, alignment with strategic City initiatives, synergies with other work, strategic hydraulic benefits, etc.

Jefferson Combined Sewer District

The CSO Master Plan divided the Jefferson CSD into two parts: Jefferson East and Jefferson West. Flows from Jefferson West discharge into Jefferson East, Polson and St John's CSDs. In order to achieve the 85 percent capture target, no relief work is required in Jefferson West. As a result, current work is focused only on Jefferson East. To meet the control target, the CSO Master Plan identified two control options – partial sewer separation and in-line storage.

The sewer separation work in the Jefferson East CSD is well underway and ahead of the CSO Master Plan schedule. Work in Jefferson began in 2012, prior to the CSO Master Plan, as part of the Basement Flood Relief Program when the area east of Main Street was separated. Although work in the rest of Jefferson East was originally planned to begin in 2028, strategic contract phasing allowed work to be advanced. Sewer separation work is expected to be complete in 2026. In-line storage is still planned according to the CSO Master Plan for 2042/2043. See Appendix A for the district map.

- **Approach**: Phase 1: partial sewer separation - construction of new land drainage sewers; Phase 2: in-line storage
- **Schedule** (see Table 1 below)
    - **2019 Plan Timeline**: Phase 1: 2028 – 2037; Phase 2: 2042 – 2043
    - **Actual Construction Start**: Phase 1: September 2020 (sewer separation work east of Main was completed prior to the 2019 CSO MP as part of the Basement Flood Relief Program)
    - **Progress to Date**: 10 sewer separation contracts complete
    - **Remaining Work**: 2 sewer separation contracts; in-line storage
    - **Estimated Completion**: Phase 1: 2026; Phase 2: 2043
- **Cost**
    - **2019 Cost Estimate (Class 5)**: $168 million
    - **Funds Committed to Date**: $64 million
    - **Estimated Cost to Complete (in 2025 dollars)**: Phase 1: $3 million; Phase 2: $9 million
- **Benefit**:
    - Improved basement flooding protection
    - 174 megalitres (ML) CSO volume reduction (Phase 1: ~120 ML; Phase 2: ~54 ML)

Mission and Roland Combined Sewer District

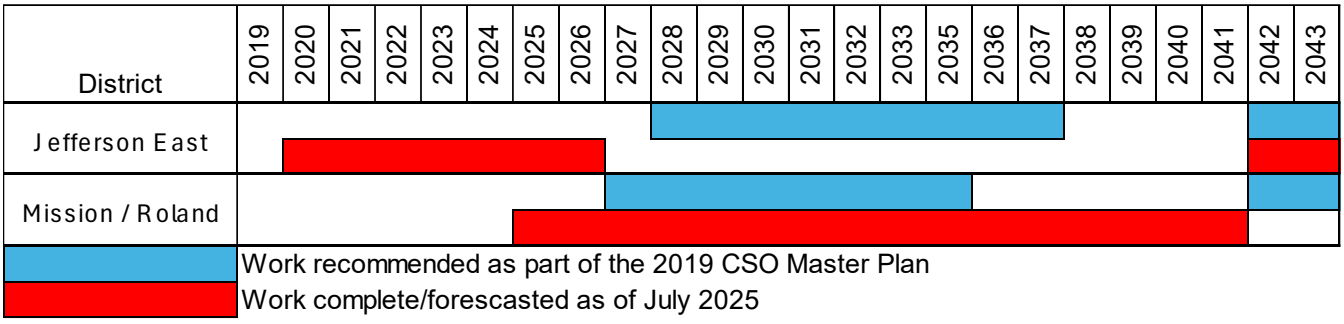
The Mission CSD is approximately 860hectare (ha) of primarily industrial land with smaller commercial and residential areas throughout the district. As part of Mission, the Roland CSD and the Dugald Drain area are included for efficiency and due to synergy. The project study area covers approximately 1,835 ha for the Mission and Roland CSDs and an additional 1,020 ha for the Dugald Drain area, see Appendix B for the Project Study Area Map.

- **Approach**: The CSO Master Plan indicated sewer separation (Mission) and storage (Roland) as primary control options; sewer separation for both districts is being assessed as part of the preliminary design
- **Schedule** (see Table 1 below)
    - **2019 Plan Timeline**: Mission: 2027 – 2035; Roland: 2042 – 2043
    - **Actual Preliminary Design Start**: February 2025
    - **Progress to Date**: Preliminary design ongoing
    - **Remaining Work**: Detailed design and construction
    - **Estimated Completion**: 2041
- **Cost**
    - **2019 Cost Estimate (Class 5):** Mission: $143 million; Roland: $8 million
    - **Funds Committed to Date:** $6 million
    - **Estimated Cost to Complete (in 2025 dollars)**: $180 million
- **Benefit:**
    - Improved basement flooding protection, operational efficiency and sewer network capacity
    - 133 ML CSO volume reduction (Mission: ~13 ML; Roland: ~120 ML)

Preliminary design for the Mission and Roland CSDs began in February 2025. Both Mission and Roland are currently ahead of the 2019 planned start date with construction work estimated to be complete by 2041. While this exceeds the estimated completion date for Mission of 2035, it is ahead of the 2043 estimate for Roland.

Timelines have been revised due to the increased size of the project study area and complexity of the combined districts. This includes coordination with other departments and projects, stakeholder engagement, potential land acquisition, densification opportunities, coordination of construction contracts, and industry and resource constraints. As engineering design progresses, construction contract phasing will be developed, updated cost estimates will be produced and the completion dates will be revised.

Table 1: CSO Master Plan Implementation Status



CSO Program Progress

There have been a variety of program and project changes since the CSO Master Plan City-only funding scenario was developed. The CSO Master Plan implementation schedule will continue to evolve based on timing and progress of designs, contract phasing, synergies and coordination with other construction projects, and resource availability.

In addition to ongoing sewer relief work in Jefferson and Mission/Roland CSDs, work is also underway in the Cockburn/Calrossie, Armstrong, Cockburn East and Ferry Road/Riverbend CSDs. Work in Ferry Road includes the upcoming construction of the Rutland trunk sewer.

A number of opportunistic sewer separation projects have also been completed in the Hawthorne, Mager and Polson CSDs. Collaboration on strategic work outside of the CSO Program includes storm relief sewers flap gate and dewatering pumps installations in the Assiniboine, Aubrey, Cornish, Riverbend, Bannatyne, and Selkirk CSDs. All of these projects contribute to reducing CSO volume discharges.

In 2024, the City has completed an estimated one-tenth of the planned 85 percent capture sewer relief work and is reporting 77 percent of volume capture. The CSO Program is making significant progress since its implementation in 2019. The City will continue to explore opportunities to further promote CSO volume reduction and maintain regular communication with regulatory bodies and the public on the progress of the CSO Program performance.

FINANCIAL IMPACT

Financial Impact Statement

Date: 31-Jul-25

Project Name:

COMBINED SEWER OVERFLOW (CSO): JEFFERSON AND MISSION TIMELINE UPDATE

COMMENTS:

There is no financial impact associated with the recommendation of this report.

Angela Wiebe, for
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 policies through Policy 2.5 Climate Resilient Growth, by finding innovative and green solutions to land use, transportation and infrastructure capacity constraints.

> Objective: Prioritize the transition to a resilient, low-carbon future through demonstrated organizational and community leadership, and collaborative actions that mitigate and adapt to a changing climate.

This report aligns with OurWinnipeg 2045, Policy 2.19 Leverage Green Infrastructure, by adding to the value of nature preservation by using its characteristics to provide infrastructure capacity solutions.

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

WINNIPEG CLIMATE ACTION PLAN ALIGNMENT

This Report is in accordance with the Winnipeg Climate Action Plan through Strategic Opportunity #7 – Community Climate Resiliency. The CSO Master Plan identifies mitigation measures for impacts associated with climate change, and sustainable Green Infrastructure solutions, which assist to preserve natural systems for runoff volume reduction.

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: Florence Lee, P.Eng.
Date: August 15, 2025
File No.: S-734

ATTACHMENTS:
Appendix A – Jefferson East Sewer District Map
Appendix B – Mission and Roland Project Study Area Map