TORONTO

REPORT FOR ACTION

Audit of Toronto Water: Stormwater and Wastewater Contract Management

Date: October 22, 2025
To: Audit Committee
From: Auditor General
Wards: All

SUMMARY

Sewer systems play a critical role in the City's stormwater and wastewater infrastructure. Maintaining the City's sewer systems in a state of good repair is essential for providing reliable sewer services to Toronto residents and businesses, and maximizing a return on assets. Aging infrastructure and lack of maintenance can lead to public health risks, harmful environmental impacts, property damage, and costly repairs.

Toronto Water manages City sewer systems, and its Capital Works Delivery unit engages construction contractors and professional consulting firms to carry out sewer, forcemain, and pump station state-of-good-repair projects. The contractor is responsible for all construction-related tasks while the consultant is responsible for overall project and contractor management.

The Auditor General's 2025 Work Plan included an audit to assess the effectiveness and efficiency of Toronto Water's stormwater asset management program, including examining sewer system inspections, maintenance, and repairs.

Our audit identified opportunities for improvement in the following areas:

A. Ensuring Projects Remain on Schedule and All Time Extensions and Liquidated Damages Are Properly Supported and Documented

B. Improving Adherence to Change Directives Process and Ensuring Change Orders Are Properly Documented, Analyzed, and Tracked

C. Implementing Better Performance Management for Consultants and Contractors

RECOMMENDATIONS

The Auditor General recommends that:

1. City Council request the General Manager, Toronto Water, to minimize project delays by actively monitoring, analyzing, and documenting the root causes and trends of delays.

2. City Council request the General Manager, Toronto Water, to:

    a. clarify consultants' scope of work and deliverables in the contract, and City policies and procedures to provide clearer guidance on evaluating time extension requests, including requiring contractors to submit substantiating documentation, and requiring consultants to fully review and validate these requests through delay analysis before consideration by the Capital Works Delivery project manager; and

    b. ensure that contractors attach all required documentation and consultants sufficiently document rationale to approve time extensions in accordance with the updated contract terms, City policies and procedures.

3. City Council request the General Manager, Toronto Water, to:

    a. ensure Capital Works Delivery project managers and external consultants follow City contract terms, policies, and procedures, relating to documenting the rationale for assessing or not assessing liquidated damages or delay claims; and

    b. improve the tracking and reconciling of delay days, clearly identifying who is responsible for the delays, to support the enforcement of liquidated damages.

4. City Council request the General Manager, Toronto Water, to:

    a. require consultants to use the City's standard change directive form before extra work begins, as required by the City's policies and procedures; and

    b. provide annual training or refreshers to project managers on Capital Works Delivery's Standard Operating Procedures and the manual.

5. City Council request the General Manager, Toronto Water, to:

    a. ensure consultants include all supporting documentation as required for review when submitting change order packages;

    b. ensure consultants follow up with contractors when the contractual deadline to submit change order request is exceeded;

c. set an appropriate timeline for consultants to review and prepare change order packages for approval and ensure Capital Works Delivery project managers follow up with consultants when the timeline is exceeded; and

d. review consultants' work more thoroughly on a sample basis to ensure quality of consultants' review and communicate the results in consultants' performance evaluations.

6. City Council request the City Manager to require all City Divisions to keep appropriate capital project information up-to-date in the City's T.O.INview database, and request relevant City Agencies and Corporations to reinforce or develop processes, to provide the City with timely and accurate capital project information to improve coordination among stakeholders.

7. City Council request the General Manager, Toronto Water, to:

    a. explore opportunities, in consultation with the City's Chief Technology Officer, to accelerate the implementation of Trimble Unity Construct, a new project management information system, to analyze change order categories and incorporate them into lessons learned to better monitor current and future projects; and

    b. enhance inter-divisional coordination, in consultation with the General Manager, Transportation Services Division, and implement improvements to the Road Disruption Activity Reporting System to support improved capital planning and delivery outcomes, including reducing delays of awarded construction contracts, through mechanisms such as multi-site permitting.

8. City Council request the General Manager, Toronto Water, to:

    a. ensure that the mark-up requirements are clearly communicated in the contract and clarified with the contractor and consultant at the start of the project;

    b. assess whether mark-ups were correctly charged in accordance with contract terms for other change orders and identify any other projects that may be affected; and

    c. strengthen the consultants and Capital Works Delivery project managers' review of mark-up on change orders to ensure compliance with the contract terms.

9. City Council request the General Manager, Toronto Water, in consultation with Legal Services, Purchasing & Materials Management Division, and Engineering and Construction Services, to review and assess the need to update City policies and procedures and training to provide guidance to project managers on when to consider adding a price adjustment mechanism in contracts for the projects they manage.

10. City Council request the General Manager, Toronto Water, to.

    a. clearly and consistently communicate inspection reporting requirements in the contracts and ensure they align with the manual;

    b. ensure consultants document their inspection in accordance with the manual;

    c. establish routine spot checks to ensure projects managed by the Capital Works Delivery unit are receiving adequate on-site inspection services from consultants, and that inspection records are complete, accurate, and regularly retained by City staff;

    d. strengthen Capital Works Delivery project manager oversight of consultant responses to Request for Information and other submissions to ensure timely responses to contractors; and

    e. ensure contractors and consultants provide all required documentation with their progress payment applications, in compliance with the contract requirements.

11. City Council request the General Manager, Toronto Water, to:

    a. ensure the project managers complete contractors' and consultants' performance evaluations in accordance with the contract and City policies and procedures;

    b. clarify with consultants the number and frequency of contractors' performance evaluations required;

    c. explore opportunities to incorporate the evaluation scores of consultants and contractors into future bid evaluations, in consultation with the Chief Procurement Officer and Legal Services; and

    d. conduct a cost and benefit analysis to assess the optimal balance between using consultants and in-house staff for certain site inspection and contract administrative activities.

12. City Council request the General Manager, Toronto Water, to:

    a. consider developing additional key performance indicators and incorporating them into contracts to establish performance standards for both consultants and contractors to encourage their performance, in consultation with Purchasing & Materials Management Division, Strategic Capital Coordination Office, and Engineering and Construction Services; and

    b. develop and monitor key performance indicators (KPIs) at the program level for the Capital Works Delivery unit, including KPIs that focus on change order and schedule management, and client unit satisfaction.

FINANCIAL IMPACT

Effective contract management is necessary to ensure that state-of-good-repair projects are delivered according to expected outcomes, and contract terms and conditions. When projects are delayed and contract changes or payments are approved without sufficient evidence or rationale, the City can be exposed to financial risk. Our report found that contractors and consultants were paid $3.11 million for material and supply price escalation, additional consulting fees, and contractors claims due to delays and approved time extensions. At the time of this report, there is an additional $3.5 million delay claim under dispute between the City and the contractor. We also found examples of approved change orders exceeding the mark-up ceiling specified in the contract, leading to overpayments of $122,781.

Addressing the recommendations in this report will help Toronto Water improve the effectiveness and efficiency of its contract management oversight of state-of-good-repair projects. The resulting financial implications of these improved processes, productivity, and any anticipated efficiencies and/or resources needed, could not be determined at the time of this report. While this audit focused on the state-of-good-repair projects, especially for local sewers, forcemains and pump stations, additional cost avoidance is possible if our recommendations are applied to other capital projects at Toronto Water.

DECISION HISTORY

The Auditor General's 2025 Work Plan included an audit to assess the effectiveness and efficiency of Toronto Water's stormwater asset management program, including examining sewer system inspections, maintenance, and repairs.

COMMENTS

A high-level summary of key audit findings is provided in the Audit at a Glance.

The attached audit report provides the Audit Committee and Council members with detailed audit results and recommendations together with management's response. Management has agreed to all 12 recommendations.

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SIGNATURE

Tara Anderson
Auditor General

ATTACHMENTS

Attachment 1: Audit of Toronto Water: Stormwater and Wastewater Contract Management