

COMMUNICATION UPDATE

| то: | Mayor and Members City Council | |
|-------------------|--|--|
| DATE: | November 8, 2024 | |
| SUBJECT: | July 15 Storm - November 2024 Update - HW2404 | |
| WARD(S) AFFECTED: | City Wide | |
| SUBMITTED BY: | Shane McCauley Director, Water & Wastewater Operations Public Works Department | |
| SIGNATURE: | Ahane Mauley | |

This Communication Update is to provide Council with an overview of the operational and financial impacts of the July 2024 severe rain events.

Event Summary

Between July 10 and 24, 2024, the City of Hamilton experienced three major storms, delivering over 150mm of rainfall - nearly double the 30-year July average of 80mm. In some areas, peak rainfall rates reached 50mm per hour. These storms caused significant impacts on the stormwater management system, including flash flooding in local watercourses, partial failure of a gabion wall in Sydenham Creek, large deposits of shale and rock at key storm sewer inlets, and localized overland flooding in parts of Dundas and West Hamilton.

Preparation & Response:

Hamilton Water staff routinely inspect and clear critical storm sewer infrastructure to ensure optimal system performance. During heavy rain events, non-essential work is postponed to ensure staff can focus on weather-related emergencies. The Inlet & Outfall maintenance contractor was also brought in with heavy machinery to remove debris from key inlet structures, helping to reduce flood risk. Over 100 overtime hours were logged by staff to maintain operational coverage outside of regular business hours during these storms.

Empowered Employees.

Stormwater Asset Impacts:

Eight storm system locations suffered significant damage or blockages as a result of the storms. Appendix "A" to Communication Update HW2404 contains maps highlighting the affected locations, and Appendix "B" to Report HW2404 provides photos showing the extent of these impacts.

Portions of Sydenham Creek in Dundas experienced extreme velocities and flash flooding, resulting in significant deposition of escarpment rock and shale in the creek bed, as well as a partial failure of the gabion basket retaining wall near Park St E. A consultant assignment is currently underway, utilizing Procurement Policy 10 – Emergency Works, to assess the structural integrity of the wall and provide detailed specifications for repair or replacement.

Table 1 summarizes the emergency work performed at each location. Blockages and rock debris were promptly cleared from all affected storm sewer inlets, restoring full functionality to the assets. Warranty work for Watson's Lane and engineering work for Sydenham Creek are currently underway.

| Asset Type | Location | Work Required | Status | Notes |
|------------------------|---------------------------------------|--|-------------|---|
| Storm Sewer Inlet | Westoby Crt | Wooded debris blockages removed during storm events and post-storm removal of rock debris from inlet area | Complete | |
| Storm Sewer Inlet | King St, Dundas (York Rd Parkette) | Wooded debris blockage removal during storm event | Complete | |
| Storm Sewer Inlet | Chedoke Golf Course (East) | Wooded debris blockages removed during storm events and post-storm removal of rock debris from inlet area | Complete | 100m2 area near inlet excavated of rock debris |
| Storm Sewer Inlet | Chedoke Golf Course (West) | Wooded debris blockage removal during storm events and post-storm removal of rock debris from inlet area | Complete | 70m2 area near inlet excavated of rock debris |
| Storm Sewer Inlet | Highway 403 | Post-storm removal of rock debris from inlet area | Complete | 90m2 area near inlet excavated of rock debris |
| Storm Sewer Inlet | Sanatorium | Wooded debris blockages removed during storm events and encroaching vegetation removal in upstream watercourse | Complete | Strictly minor watercourse maintenance |
| Storm Sewer Outfall | Watson's Lane | Newly reconstructed asset, landscape restoration washed out and requires reinstatement. | In Progress | Sent to Engineering Services for warranty work |
| Watercourse | Sydenham Creek | Structural assessment underway to determine extent of damage to gabion wall structure and repair requirements | In Progress | Consultant hired; Policy 10 - Emergency Works |

Table 1

OUR Vision: To be the best place to raise a child and age successfully.

OUR Mission: To provide high quality cost conscious public services that contribute to a healthy, safe and prosperous community, in a sustainable manner.

OUR Culture: Collective Ownership, Steadfast Integrity, Courageous Change, Sensational Service, Engaged Empowered Employees.

Financial Impact:

Hamilton Water incurred \$300K in contractor costs and \$6,500 in staff overtime for the July 10 to 24 period. The Operating Budget includes emergency maintenance funds; however, the recent storms exceeded our forecasted needs. The \$300K spent was double the \$150K originally budgeted for 2024, yet there will be no net impact on the overall budget, as these additional costs can be covered by reallocating funds from other program areas and savings from proactive stormwater asset maintenance initiatives.

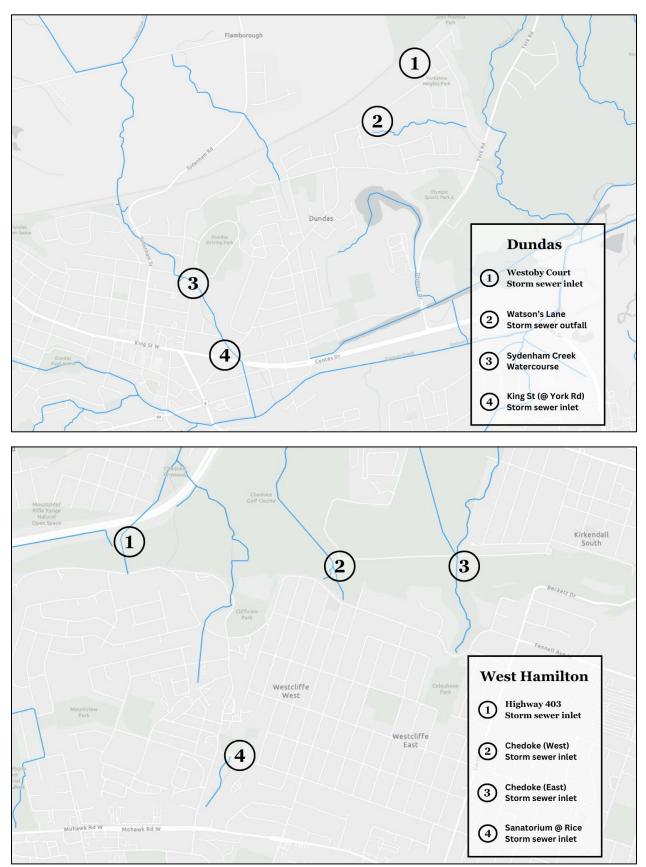
Cost estimates for the evaluation and repair of the Sydenham Creek gabion wall are still to be determined. These costs will be allocated to the 2025 budget cycle and can be funded through existing stormwater capital accounts, with no net increase to the overall budget for 2025.

APPENDICES AND SCHEDULES ATTACHED

Appendix "A" to Communication Update HW2404 – Location Maps

Appendix "B" to Communication Update HW2404 – Photos of Storm Impacts

Location Maps:



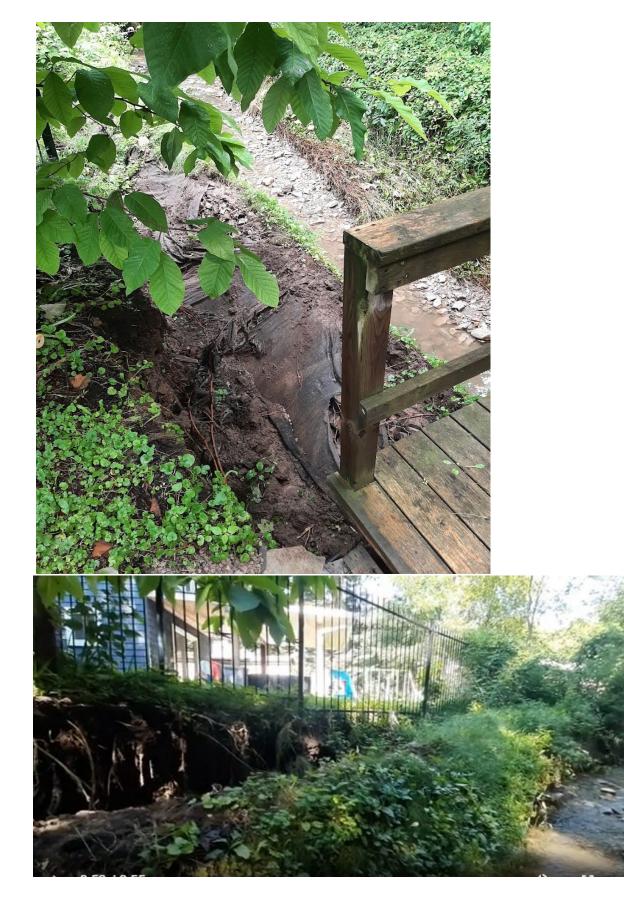
Highway 403 Inlet:



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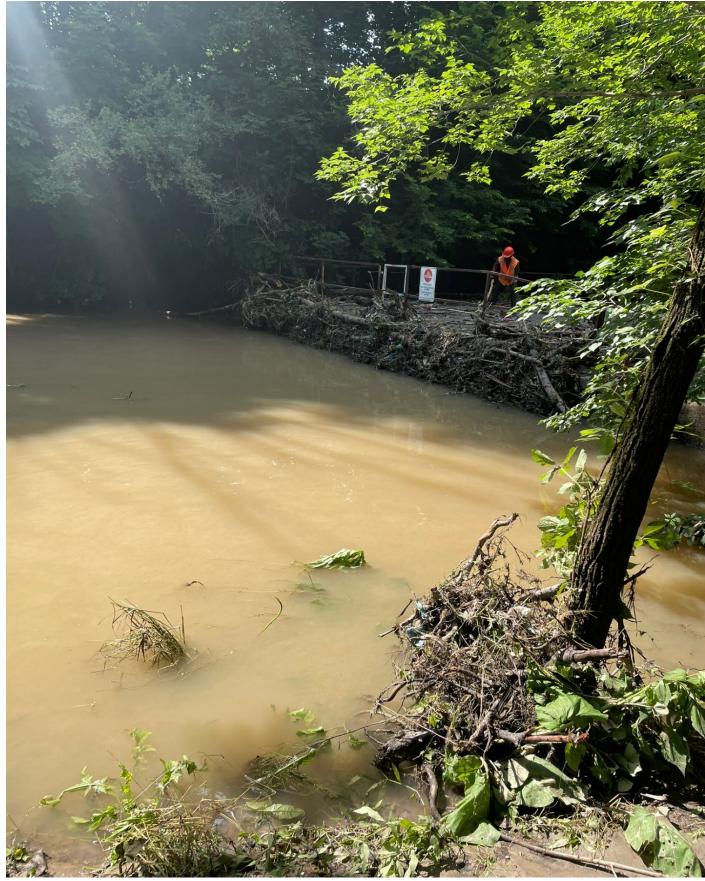
Sydenham Creek Retaining Wall:



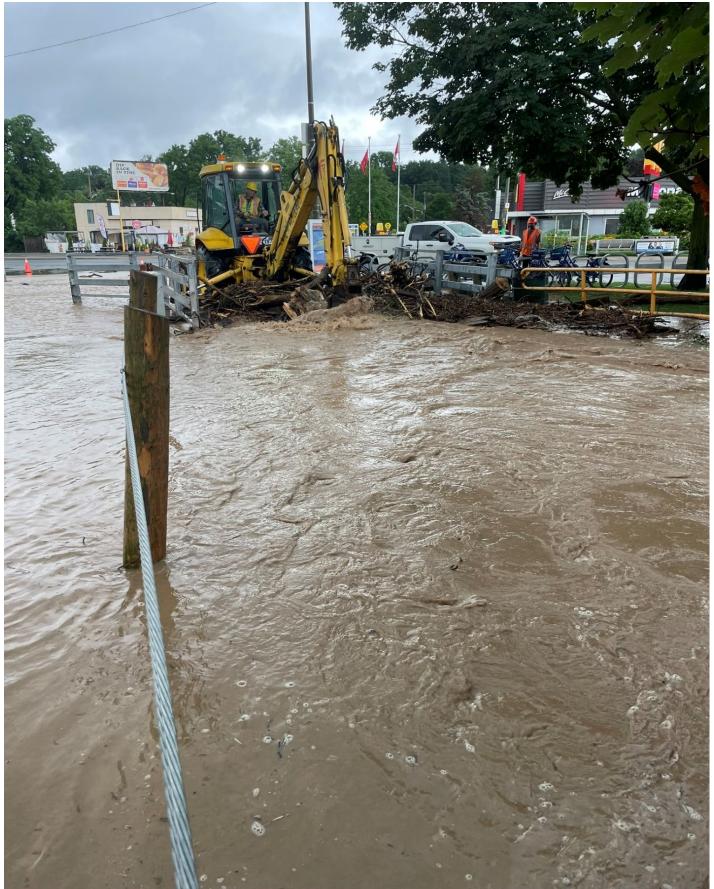
Watson's Lane:



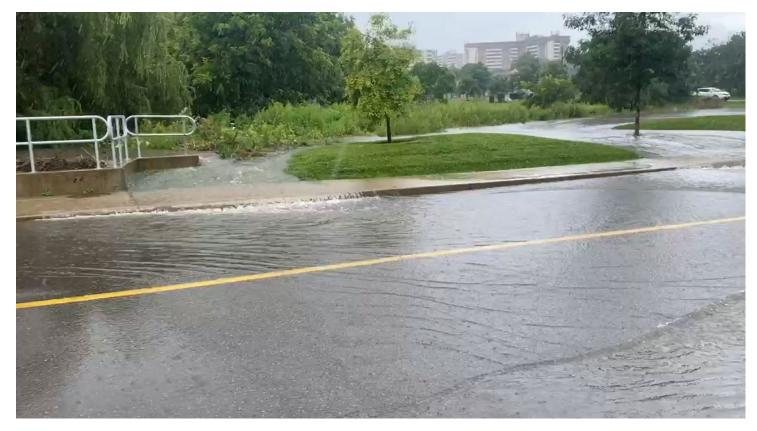
Chedoke (East):



King St (York Road Parkette):



Sanatorium & Rice:



Watson's Lane @ Westoby Crt:

