Amanda R. Dunfield
[redacted]

July 19, 2024

West Hants Regional Municipality
ATTN. WHRM Council
76 Morison Drive
Windsor, NS
B0N 2T0

RE. WINDSOR COMBINED SEWER OVERFLOWS

Good afternoon,

Please accept this letter for inclusion in correspondence for the upcoming July 23, 2024 WHRM Council meeting. It is intended to serve as a brief outline of some key points of interest regarding the extraordinarily high number of combined sewer overflow events experienced by the Windsor FloodZone in recent years, as well as the July 11, 2024 overland combined sewer overflow flooding of the same area.

1. It is understood the Cunnable Creek combined sewer system on South Stannus Street, Windsor NS was reconstructed in 2014. See below; excerpt re. combined and sanitary sewer overflows from 2009 Canadian Council of Ministers of the Environment (CCME) Canada-wide Strategy for the Management of Municipal Wastewater Effluent.

   Currently, no Canadian jurisdiction allows the construction of new combined sewers, although existing ones may be replaced or rehabilitated. The primary objective of overflow management is to reduce the impact of existing combined sewer and sanitary sewer overflows on surface waters by meeting the national standards for overflows. Further, since sanitary sewer overflows should not occur, the objective for sanitary sewer overflows is elimination through corrective measures. Jurisdictions may determine site-specific objectives.

   The national standards for combined sewer overflows are:
   • no increase in combined sewer overflow frequency due to development or redevelopment, unless it occurs as part of an approved combined sewer overflow management plan;
   • no combined sewer overflow discharge during dry weather, except during spring thaw and emergencies; and
   • removal of floatable materials where feasible (where feasible, every combined sewer overflow structure should at least be equipped with a baffle or a screen that can separate floatable materials from discharge.)

The national standards for sanitary sewer overflows are:
• sanitary sewer overflow frequencies will not increase due to development or redevelopment;
• sanitary sewer overflows will not occur during dry weather, except during spring thaw and emergencies.

***For wastewater facilities with combined sewers, the risks posed to human health and the environment by overflows can, in some cases, be greater than those posed by the continuous release of the main effluent**. Management of overflows are integrated with the management of wastewater effluent from wastewater facilities. Risk level criteria determine the risk level of the overflow location, which can then be compared with the risk level of the main effluent discharge. If the risk level of an overflow location is the same as, or higher than the main effluent, the implementation timeline for the National Performance Standards may be delayed to **a maximum of 30 years**, provided that comparable efforts to reduce the overflows is undertaken. The site-specific details will be approved in an action plan submitted by the owner.*

Timelines and Deliverables for Combined and Sanitary Sewer Overflows:
Effective immediately, jurisdictions will ensure that combined sewer overflows and sanitary sewer overflows will not increase in frequency due to development, unless it occurs as part of an approved long-term management plan. Within seven years the national overflow standards for combined sewer overflows and sanitary sewer overflows must be met. Within seven years, long term plans to reduce combined sewer overflows and capture substances will be in place and based on achieving jurisdictional overflow objectives. Monitoring and Reporting

2. The design and cost estimate was prepared by AECOM in 2012.

3. At the time of reconstruction residential streetside ditching, which assisted with minimizing the flow of stormwater both into the CSS and from the municipally owned street on to private property, was removed. This can be evidenced using Google Maps (historic views).

4. Since then, South Stannus has experienced over 15 documented overland combined sewer overflows. It is expected an inquiry under the Freedom Of Information Act will show not all occurrences have been adequately and/or appropriately reported in a timely manner to all relevant federal and provincial government agencies.

5. Long time residents report the first post reconstruction overflow experienced by some Windsor Flood Zone property owners occurred on November 2, 2014 - before project completion. The property owners say they expressed concerns, but nothing was changed.

6. There have been three significant overland combined sewer overflow flood events in the last three years. It bears mentioning the July 11, 2024 event attended by some members of council is believed to be the least significant in magnitude of these. Although sewer/stormwater levels were measured to be approximately 4 feet deep in a portion of the yard of one South Stannus Street property, levels were not checked in the lowest lying portion of lands on the properties due to safety concerns. It is reasonable to extrapolate maximum sewer/stormwater levels of 6 feet in the low-lying areas of some yards, nearing the back of the properties.

7. It was reported despite sightings of WHRM Public Works vehicles in the vicinity of South Stannus when the combined sewer overflow was in progress, the street was not immediately closed to traffic. Jennifer Moore stated she called the WHRM PW emergency line three times before the line was answered. The purpose of her call was to request the road be closed.

8. It can be shown the Cunnable Creek combined sewer system on South Stannus very frequently fails after only about 10 minutes of heavy rain. Although the July 11, 2024 rainfall may be classified as a significant rain event in totality, it did in fact stretch over several hours and had not met criteria for a significant rainfall event at the documented time of failure. CBCL's December 2023 Windsor Stormwater Study (phase 1) show Cunnable Creek does not meet 1:5 criteria. Further to this, it would appear curb and gutter on South Stannus may not meet 1:100 criteria. (WHRM MPS: minor systems design storm frequency of 1 in 5, major systems design storm frequency of 1 in 100).

9. People in the community are unwell.

10. Members of the community have made repeated requests since July 27, 2021 asking for assistance, appropriate short term mitigations and a Flood Emergency Response Plan.

11. The definition of an emergency is a serious, unexpected and often dangerous situation which poses a threat to health, safety, property or environment, requiring immediate action.

12. Areas of the Windsor FloodZone were experiencing emergent, potentially life-threatening flood conditions well in advance of an apparent WHRM EMO activation or any WHRM EMO updates to the public to advise of flood conditions and their inherent risks to personal or public safety.

13. A multi-county emergency alert was finally issued at 20:30 – by that time, flooding throughout the Windsor FloodZone had been ongoing for nearly three hours.

As anyone following this situation closely over the last three years is aware, the Windsor FloodZone has been repeatedly failed by the West Hants Regional Municipality's leadership team. The people have been failed. Again.

With regards,

Amanda Dunfield

"Staff serves council. Council serves the people. And therefore, it follows staff work for the taxpayer."