



## Report to Council

Department: Infrastructure Services  
Division: Infrastructure Services  
Date: February 2, 2026  
Prepared by: Kevin Girard, P.Eng., MBA  
Director, Infrastructure Services  
Report Number: Infrastructure Services-2025-03  
Subject: 2025 Flood Event  
Number of Pages: 9 (plus 15 attached)

### **Recommendation(s)**

**That** Infrastructure Services-2025-03 entitled, “2025 Flood Event” prepared by Kevin Girard, Director, Infrastructure Services dated February 2, 2026 be received.

**That** Council direct administration to amend By-Law No. 2366, being the Subsidy Program By-Law, to remove the requirement for a minimum of two quotes.

### **Purpose**

To provide Council with:

1. A debriefing report on the flooding that occurred in Harrow and Colchester on September 24, 2025, including actions and initiatives undertaken by the Town to address and mitigate flooding, and

2. A detailed overview of the municipal drains bounded by County Road 50 from Erie Road to County Road 41, including the number of drains, their capacity, and the legislative ability of Council to initiate drainage works.

## **Background and Discussion**

Following a significant rainfall event that resulted in flooding, Council at its meeting on October 20, 2025 passed the following resolutions:

### **R25-10-488**

*Moved by Mayor Bondy*

*Seconded by Brad Allard*

***That*** Council direct Administration to provide a report detailing the state of Municipal Drains bounded by County Road 50 from Erie Road to County Road 41 in the Town of Essex and that such report include the number of drains, capacity of drains, and whether or not Council has any ability to implement drainage works without a petition from residents.

- and -

### **R25-10-489**

*Moved by Mayor Bondy*

*Seconded by Katie McGuire-Blais*

***That*** Council direct Administration to provide a debriefing report on the flooding that occurred in Harrow on September 24, 2025. This report should include updates on actions or initiatives that the Town is doing to help address this flooding.

*That* Administration review the requirement to obtain two quotes as part of the approval process for the Town's flooding subsidy program.

This report has been prepared to satisfy both motions.

**September 24 Flood Event – Debrief and Observations**

On September 24, 2025, the Town of Essex experienced an extreme rainfall event that affected the hamlets of Harrow and Colchester, resulting in localized surface and basement flooding.

Environment and Climate Change Canada (ECCC) reported rainfall totals exceeding **190mm** (approximately **7.5in**) in the Harrow region over a 24-hour period which is among the highest one-day totals recorded in recent history. The storm also produced bursts of rainfall intensities between **25-30mm/h**. From the ECCC website, the following hourly rainfall data was extracted for Council:

<b>Time (a.m.)</b>	<b>Total Rainfall (avg over 60mins)</b>
8:00	1.9mm (0.08in)
9:00	15.1mm (0.60in)
10:00	36.3mm (1.43in)
11:00	56.8mm (2.24in)

This magnitude of rainfall significantly exceeded the design standards for local storm sewer and drainage systems which are typically designed for a 1:2 to 1:5 year storm. In addition, the Town’s sanitary systems experience significant inflow and infiltration which lead to the pumping station design flows also being exceeded for multiple hours. Overall, municipal infrastructure did operate well and as designed. Some operational observations can be found in the table below:

# OPERATIONAL OBSERVATIONS

## Harrow

Infrastructure Component	Observations & Reports
<b>Storm Sewers</b>	Functioned as designed but surcharged during peak rainfall causing flooding
<b>Catch Basins &amp; Ditches</b>	Reports of blockages from storm debris and vegetation exacerbated localized ponding.
<b>Pumpstations</b>	Remained operational and ran well before and after event. OCWA and Environmental Services Staff completed manual inspections during and after storm event. Stations experienced significant surcharging.
<b>Roads</b>	Roads in the area experienced flooding. Some in excess of 12 inches. Temporary flooding was observed on roadways and some private property. Flooding on roadways was significant, especially in the northwest quadrant of Harrow. There were no observations of structural damage to roads.
<b>Sanitary Sewers</b>	Increased inflow and infiltration noted at the Harrow Lagoon Pumpstation. Pumpstation and system surcharging occurred around 11:10am and was restored to normal levels around 7:00pm. Basement flooding reported in the Roseborough/Centre Street area.
<b>Treatment Facility</b>	No By-pass or overflow event occurred.

## Colchester

Infrastructure Component	Observations & Reports
<b>Municipal Drains</b>	Functioned as designed but surcharged during peak rainfall.
<b>Ditches &amp; Culverts</b>	Reports of blockages from debris and vegetation exacerbated localized flooding.

<b>Stormwater Pumpstations</b>	Remained operational and ran well throughout and after the event. Pumps commissioners were manually checking pumpstation levels and functionality. Stations experienced significant surcharging.
<b>Roads</b>	Roads in the area experience significant flooding, many of the beach roads in excess of 12 inches. County Road 50 was breached with flooding near Pleasure Beach Road which warranted the closure of County Road 50 and caused significant structural damage to the road. (not a Town road)
<b>Sanitary Sewers</b>	Increased inflow and infiltration noted at the Harrow Lagoon Pumpstation. Pumpstation and system surcharging occurred.
<b>Treatment Facility</b>	No By-pass or overflow event occurred.

The operational response was mobilized quickly and efficiently. Staff were dispatched immediately to problematic areas to complete inspections, drain clearing, and traffic control where possible. Our Customer Service Representatives logged a total of 25 calls to the Town’s report a problem service. All calls were followed up on and subsidies options offered, where applicable.

Council’s motion also included a direction to provide a list of municipal drains and their respective capacities. A list, along with a map is included in the appendix to this report.

Further, Council is also looking for direction on whether it has the authority under the Drainage Act to initiate improvements to municipal drains (Section 78). Where a municipal drain exists, Council does have the authority to initiate drainage works. Initiating a Section 78 will require the appointment of the Drainage Engineer and would impose significant cost onto all the lands and roads in the watershed.

Although Council has this authority, drainage improvements that would be required to resolve the extreme weather events of August 2023 and September 2025 would not be reasonable or economical to implement and would come at such a large cost that it would not be practical to impose on residents. Further, the Drainage Act process provides multiple opportunities for appeals. Therefore, it is likely that if Council initiated Drainage Works that are not widely agreeable to those residents to which the drainage works apply, the project may be subject to appeal. For this reason, it is recommended that any required or requested improvements to Municipal Drains in these areas be initiated by the users of the drain.

### **Actions and Initiatives to Combat Flooding**

On April 7, 2025, Council was provided a report from administration, lead by our CAO, on flooding mitigation initiatives and plans, which is still relevant today. In fact, this flooding event reinforces the need for the Town to undertake a Master Servicing Plan to develop a road map for infrastructure growth and improvements of existing infrastructure. The 2025 report has been appended to this report for Council's convenience.

In recent years, the frequency of significant rain events has increased tremendously. These local climate changes have caused major flooding in the Town of Essex and triggered the need for increased studies and capital spending. In addition to the improvements that the Town is completing to mitigate flooding concerns, there are many actions that private property owners can take to help mitigate surcharging and flooding of Town infrastructure. Residents are encouraged to visit the Town of Essex's website at

<https://www.essex.ca/en/live/flooding.aspx> to learn how they can mitigate private property damage, such as basement and property flooding, and also help protect the Town of Essex public infrastructure.

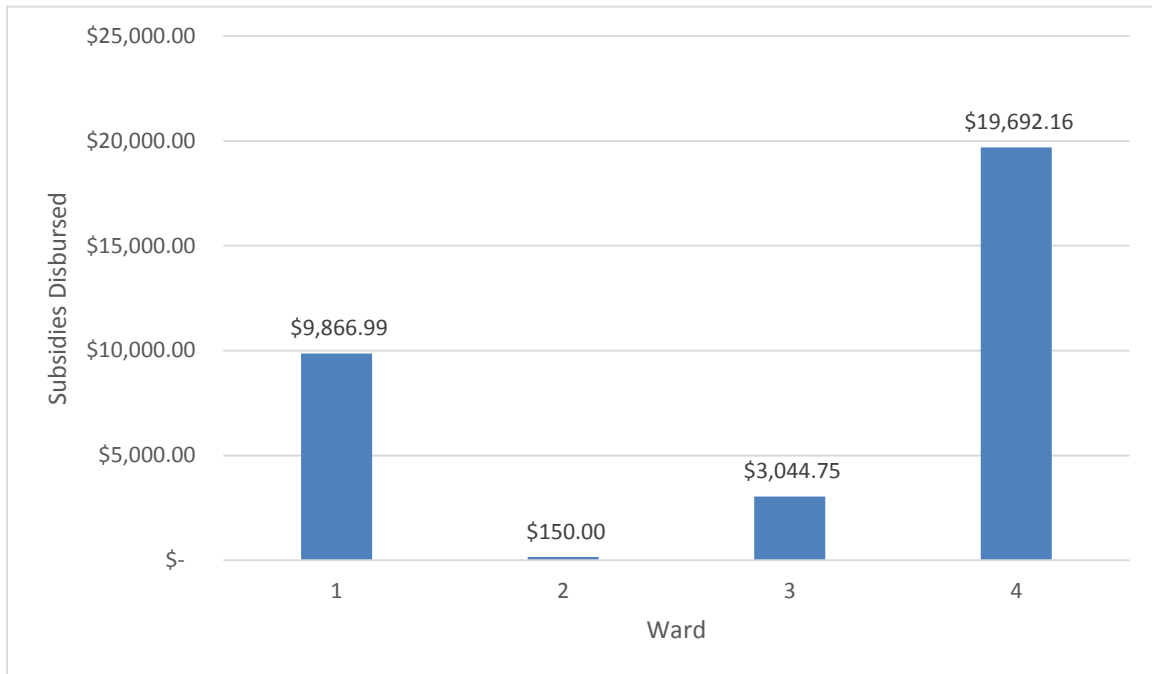
Residents can help alleviate the burden on public and private drainage systems by redirecting roof water away from underground piping by installing splashpads that direct roof water onto grassy areas. During significant rain events, downspouts connected directly to the municipal sewer systems introduce large volumes of water into storm sewers that are not designed to handle the increased volume. For this reason, the Town of Essex currently encourages residents to disconnect their downspouts from their sewer connections and divert the water onto the ground and away from buildings, wherever possible. This initiative helps to protect all properties on the Town's sewer systems.

### **Subsidy Review and Uptake**

The Town's subsidy program was last reviewed following the August 2023 flood event. A report to Council outlining proposed amendments to the program was presented to Council on March 4, 2024 and formally adopted by By-law No. 2366 on September 16, 2024.

The program saw slight uptake following each of the extreme weather events, however, the Town's budget has not been maximized by residents. Since 2019, the Town has paid out approximately \$32,754 in subsidies. The majority of which have

been backwater valves (60%) followed by sump pump installation (33%). The following figure shows the breakdown of subsidies disbursed by ward.



Since these subsidies are offered as a mutual benefit to improve private property protection and relief on Town owned water systems, success of the program would lead to significant community benefit. Following consultation with homeowners and Council, many requests were made to amend the program to remove the requirement for multiple quotes. Given the low uptake in the program and minimal risk to the Town, Administration is recommending that the requirements to obtain a minimum of two quotes for services be removed.

### **Financial Impact**

There is no financial impact as a result of this report.

## **Consultations**

Lindsay Dean, Drainage Superintendent

Norm Nussio, Manager, Operations and Drainage

Rob Mackie, Manager, Environmental Services

## **Link to Strategic Priorities**

- Embrace asset management best practices to build, maintain, and continuously improve our municipally owned infrastructure.
- Leverage our Town's competitive advantages to promote jobs and economic investment.
- Take care of our natural environment and strengthen the sense of belonging to everyone who makes Essex "home".
- Deliver friendly customer service in an efficient, effective, and transparent manner while providing an exceptional working environment for our employees.
- Build corporate-level and community-level climate resilience through community engagement and partnership and corporate objectives.

## Report Approval Details

Document Title:	2025 Flood Event - Infrastructure Services-2025-03.docx
Attachments:	- Appendix_Final.pdf
Final Approval Date:	Jan 27, 2026

This report and all of its attachments were approved and signed as outlined below:

A handwritten signature in black ink that reads "Kate Giurissevich". The signature is written in a cursive style and is positioned above the printed name.

**Kate Giurissevich, Chief Administrative Officer - Jan 27, 2026 - 12:55 PM**