



The Corporation of the Municipality of Arran-Elderslie

Information Report

Report From: Chris Legge, Water & Sewer Foreman

Meeting Date: June 26, 2023

Subject: SRWS 23-04 Riverside Overflow Event

Attachments: Appendix A – Chesley Riverside Overflow Reporting

Report Summary

To provide Council with information regarding a recent extreme weather event that caused two separate overflows at the Chesley Riverside Lift Station.

Background

An extreme weather event late in the early morning hours of April 1, 2023 as well as another extreme weather event during the daytime hours of April 5, 2023 caused two separate overflow events at the Chesley Riverside Lift Station.

Analysis

In the early morning hours of April 1st, an extreme rainfall weather event caused an overflow at the Chesley Riverside Lift Station. The downpour resulted in the lift station being overwhelmed with flow and a subsequent overflow occurred allowing one cubic meter (1m³) to be released to the Saugeen River. Staff made every attempt to prevent the overflow including jockeying lift station run times, and call-in vac trucks to help with the surge of flow. Despite those efforts the lift station still went to overflow. Once the vac-truck was onsite staff were able to bring the overflow under control.

Municipal Staff collected samples at the start of the overflow event, notified the Spills Action Centre, local Health Unit, Ministry of Environment Conservation and Parks, and the Saugeen Valley Conservation Authority.

The sample results were analyzed through our lab, and final notification has been provided back to these authorities.

In addition, in the late morning hours of April 5th, another extreme rainfall event caused an overflow event at the Chesley Riverside Lift Station. The rainfall caused the Lift station pumps to be overwhelmed. This resulted in an overflow of one hundred and eighty-eight cubic metres (188 m³). Once again Staff made every attempt to prevent the overflow, including lift station level management, and called in vac trucks to prevent overflow. This storm surge was larger than could be handled by the additional measures. The volume overflowed was reduced by these control measures and only once the storm surge ended did the event end.

Municipal Staff collected samples at the start and completion of the overflow event, notified Spills Action Centre, local Health Unit, Ministry of Environment, Conservation and Parks, and the Saugeen Valley Conservation Authority. The sample results were analyzed through our lab, and final notification has been provided back to these authorities.

Other Opportunities to Implement Modifications to System/Procedures:

Council supported the department in early 2020 with the implementation of a new bylaw fee for illegal connections. This gave ratepayers a one-year period to disconnect illegal connections to the sanitary system or face increased wastewater rates.

Staff is tentatively budgeting for some sewer system upgrades, and using some of the already existing resources to begin removing some of these connections.

The Municipality received a new CLI (Consolidated Linear Infrastructure) ECA from the MOECP in November of 2022. This new (ECA) Environmental Compliance Approval, states a clause which requires a professional engineer to complete a study of comparison between wet-weather and dry-weather sewage flows for any system that has had a sewage overflow in the past 10 years. This will apply to the Chesley Sewage Collection system. This study will be completed by GSS engineering as our ORO.

Link to Strategic/Master Plan

6.1 Protecting Infrastructure, Recreation and Natural Assets

Financial Impacts/Source of Funding

Staff dealt with both overflow events as expeditiously as possible. They were called in after-hours(weekend) for the April 1st overflow event which resulted in additional overtime costs.

The event started around 2:00 am on the 1st and was resolved by 8:00am. The second overflow event began at 11:00 am on April 5th and concluded at 20:00 pm, no overtime resulted from the second event.

Additional funding was paid out to the contractor, Ron Nickason Plumbing and Heating for the vac trucks that arrived on-site after hours.

Those costs were two thousand three hundred twenty-seven dollars (\$2,327) for the two overflows.

Other associated costs for courier and processing of the additional samples for the overflow event are approximately one hundred fifty dollars (\$150) for each event, which equates to three hundred dollars (\$300) in total.

Notification to the authorities was done during regular business hours and had no financial impact on the Department.

Approved By: Sylvia Kirkwood, CAO