

Harbour Clean-Up Completion

October 31, 2014

Harbour Clean-Up is something the City of Saint John committed to – for our public health, our natural environment, and general community and economic development.

A waterfront and waterways free of untreated sewage will allow the City to meet its environmental obligations for municipal wastewater. The project will also enhance quality of life in the City.

A lot of work and preparation over many years has gone into bringing Saint John closer to its goal of a clean harbour.

Project History

Common Council adopted a plan for Harbour Clean-Up in October 2006. The Plan of Action for Saint John Harbour Clean-Up was sent to the Province of New Brunswick and the Government of Canada in November 2006. Funding for the Harbour Clean-Up program was announced in March 2007.

The Province of New Brunswick committed funding in October 2006. A Contribution Agreement was signed in September 2008 between the Government of Canada and the City covering the Federal share. The Contribution Agreement consists of: the Eastern Wastewater Treatment Facility; and a collection and pumping system to send all wastewater to one of three major treatment facilities.

Construction of the Eastern Wastewater Treatment Facility began in April 2009 and was completed in 2011.

The wastewater collection and pumping system requires 24 new lift stations and forcemains/collector sewers be constructed.

To date construction on 23 of the lift stations is complete with only the Mill Street – Sanitary Lift Station construction remaining to be completed.

Mill Street Lift Station, the last piece of infrastructure needed to complete the project, was commissioned in October 2014.

Quick Facts

- The City of Saint John had one of the oldest municipal sewage systems in North America dating back to the 1880s. In 1993, when the City developed its waste water treatment strategy, only 40 percent of the system users were serviced with wastewater treatment. This meant 60

percent of the wastewater discharging into the Harbour went untreated via raw sewage outfalls (23,000 m³/day).

- Saint John’s primary wastewater treatment system now comprises three treatment facilities and 68 lift stations. All three treatment plants provide secondary level treatment and are exceeding demanding Canadian standards (CBOD₅: 3.9 mg/l average, SS: 7.5 mg/l average).
- The project included Installation of 11,263 meters of New Gravity Sanitary Sewer and installation of 13,068 meters of New Sanitary Sewer Forcemain.

Project Milestones

1993	2010*	2014
<i>The wastewater strategy is developed</i>	<i>The Harbour Clean-Up Project begins</i>	<i>Completion of the Harbour Clean-Up Project</i>
40% of system users serviced with treatment	56% of system users serviced with treatment	100% of system users serviced with treatment
23,000 m ³ /day of wastewater discharged untreated	16,000 m ³ /day of wastewater discharged untreated	0 m ³ /day of wastewater discharged untreated

* wastewater treated: West (76%), Millidgeville (85%) and East/Central (43%)

How do you “clean up” the harbour?

The Harbour Clean-Up is a series of projects to redirect old sewer pipes that currently empty into the harbour, to wastewater treatment facilities.

There are two main projects: building the Eastern Wastewater Treatment Facility and building a collection and pumping system to move all wastewater to one of three major wastewater treatment facilities. The goal of the project is to eliminate every point where untreated sewage empties into the harbour.

A **lift station** is a point in the sewer system where the wastewater needs to be pumped (lifted) to a higher elevation so that gravity can be used to bring the wastewater to the treatment facility.

A **forcemain** is a pipe that transports sewage under pressure from a lift station to a point where other pumps or gravity can take over in moving the sewage to a treatment facility.

A **collector sewer** is a sewer that gathers sanitary flows from individual buildings.