Hamilton has one of the largest combined sewer systems on the Great Lakes with a capacity of 1000 olympic-size swimming pools. Such systems are common in older developments where sewer infrastructure was not upgraded to accommodate population growth. In Hamilton, there are approximately 75,000 metres of combined sewer piping servicing an area of about 52 km².

### Storm Water Infrastructure

**Combined Trunk Sewer**

- In Hamilton, the collected storm and sanitary water in the Combined Trunk Sewer is delivered to the Woodward Wastewater Treatment Plant. The main pumping station at the wastewater plant is equipped with six working pumps and two standby pumps to lift the wastewater through the treatment plant. Each pump has the capacity to move about 2,600 litres per second of wastewater. With the six duty pumps operating, this pumping station will pump out about 1,150 million litres per day.

**Sanitary Sewers**

- During rainfall events, the City monitors rain gauges at various locations across Hamilton, including areas that are connected to a computerized system. The City is able to detect the collected storm and sanitary water to various Combined Sewer Overflow Storage Tanks to reduce the burden on the collection system.

**Combined Sewer Overflow Outfall**

- These tanks have a combined volume of over 250,000 cubic metres that can be used multiple times during the year to prevent sewer overflow from entering into Hamilton’s natural watersheds. The annual amount of sewer overflow that is captured in a Combined Sewer Overflow Storage Tank changes, based on the amount of rainfall. It is estimated that Hamilton’s six Combined Sewer Overflow Storage Tanks can average of over 2.5 million cubic metres of combined sewer overflow from entering Hamilton Harbour and Cootes Paradise.

### Watershed

**The Minor System:**

- This system consists of watersheds and designed major overland water flow routes. Roads can be designed as overland storm water flow routes. It carries the runoff that the Minor System cannot handle, including the runoff from larger, more intense storms. When the Minor System cannot handle storm water flow routes, it carries the runoff that the Major System cannot handle, including the runoff from larger, more intense storms. When the Minor System cannot handle storm water flow routes, it carries the runoff that the Major System cannot handle.

**The Major System:**

- This system consists of wastewater facilities and designed major overland water flow routes. Roads can be designed as overland storm water flow routes. It carries the runoff that the Minor System cannot handle, including the runoff from larger, more intense storms. When the Minor System cannot handle storm water flow routes, it carries the runoff that the Major System cannot handle, including the runoff from larger, more intense storms.

### Camera Inspection of Sewers on a Continuous Cycle

Using zoom camera technology helps to identify blockages within the sewer system. This helps staff to proactively deal with these blockages and eliminate the potential for sewer back-ups or spills to the environment.

### Storm Drainage Policies

The Storm Drainage Policies were adopted by Council in May 2000. These developments need to demonstrate the potential for storm water management facilities to be approved for development. The Storm Drainage Policy is to be used as a basis for developing the City’s new master plan. The process of developing the water and wastewater master plan is being integrated with the development of a new Official Plan. The City will always plan for both systems. In order to get approval to build, going forward, the City will always plan for both systems.

### Storm Water Master Plan

- The Storm Water Master Plan is concerned with the storm sewer systems in Hamilton. The Storm Water Master Plan is concerned with the storm sewer systems in Hamilton. The Storm Water Master Plan is concerned with the storm sewer systems in Hamilton. The Storm Water Master Plan is concerned with the storm sewer systems in Hamilton. The Storm Water Master Plan is concerned with the storm sewer systems in Hamilton. The Storm Water Master Plan is concerned with the storm sewer systems in Hamilton. The Storm Water Master Plan is concerned with the storm sewer systems in Hamilton.

### Water and Wastewater Master Plan

This study includes the lake based water distribution system and the lake based sanitation system. As well, the rural settlement areas of Carlisle and Greensville have been included as part of the development of the lake based systems to be potential options for these communities. The process of developing the water and wastewater master plan is being integrated with the development of the transportation master plan and storm water master plan which will be the supporting documentation to the City’s new official plan.

### Storm Infrastructure Guidelines

- The City is currently developing these guidelines for our own use and the development Woodward Wastewater Treatment Plant. For more information on these initiatives, please call 905-546-CITY (2489) or visit www.hamilton.ca.