

Operations / Infrastructure

SUBJECT: Asset Management

County of Brant – Strategic Asset Management Policy Addendum -Wastewater Infrastructure

Policy #: Effective date:

July 1, 2025

Replaces:

Amendment date: July 1, 2025

1. Procedure Statement and Scope:

This addendum to the Strategic Asset Management Policy (SAMP) identifies the specifics in the application of the policy as it pertains to the Wastewater Infrastructure-related assets. The content of this addendum should be read in conjunction with the SAMP.

2. Principles:

Preparation of the Wastewater Infrastructure portion of the Asset Management Plan (AMP) shall consider but not be limited to the following:

Regulatory Compliance - The Municipality shall consider all applicable legislation in the development and update of its AMP, including but not limited to:

- Ontario Regulation 588/17, Asset Management Planning for Municipal Infrastructure
- The Conservation Authorities Act
- 3. The Development Charges Act, 1997 (Ontario Regulation 82/98)
- 4. The Environmental Assessment Act
- 5. The Environmental Protection Act
- The Safe Drinking Water Act 2002 (Ontario Regulation 170/03)
- 7. The Planning Act and related regulations
- 8. Municipal Act 2001, Section 44 (1)

Level of Service (LOS): The County of Brant's (the County) assets exist to deliver services to the public (more specifically property owners), and internal staff to be able to serve those property owners.

LOS are used to assess the actual services being delivered so that decisions can be made about the assets based on the service that they provide rather than simply on their technical components alone.

These standards will assist the County to understand the current state of infrastructure by identifying infrastructure deficiencies, failures and weaknesses. Knowledge of this information helps with the maximization of infrastructure performance while minimizing cost and risk.

LOS are not specifically defined by the Ontario Regulation 588/17. The regulation provides some measures but does not include targets. Therefore, the County has developed its own specific defined LOS measures and targets.

The LOS measures for the County's wastewater infrastructure will be divided into two (2) applicable categories with subsequent standards to be maintained. These categories are as follows: Customer Levels of Service and Technical (or Asset) Levels of Service.

Customer Levels of Service (CLOS) measure the LOS received by property owners. These measures will be used by the County to assess whether it delivers the desired level of service.

Technical (or Asset) Levels of Service (TLOS) measure the adequacy of the assets to deliver these services. TLOS measures are directly linked to activities and annual budgets regarding acquisition, operation, maintenance, and renewal. Asset owners and managers create, implement and control technical service levels to influence the service outcomes.

3. Application:

In coordination with the Environmental Services department, these will be the County of Brant's designated Levels of Service measures for wastewater infrastructure:

| Community Levels of Service | | | |
|-----------------------------|--|--|--|
| Service Attribute | Level of Service | Qualitative Description | |
| Reliability | Description of how stormwater can get into sanitary sewers in the municipal wastewater system, causing sewage to overflow into streets or backup into homes. | Infiltration and inflow into sanitary sewers in both groundwater and stormwater which are not intended to be in sanitary system. Infiltration can enter through variety of sources cracks in pipes, cross connections such as downspout connections, through manhole covers, etc. The County has implemented a six (6)-year rotational CCTV inspection program to review the condition. | |
| | Description of how sanitary sewers in the municipal wastewater system are designed to be resilient to avoid events described in paragraph three (3). | To minimize sewage overflow into streets and backups into homes, the County has established design standards with 0.23 l/s/ha and other measures to reduce infiltration and inflow such as: Place manholes outside of surface ponding areas and Regional flood plains; install seal tape around rings on the manholes; and implement water-tight measures when sewers are installed in high groundwater areas. | |
| | Description of the effluent that is discharged from sewage treatment plants into the municipal wastewater system. | Effluent is monitored in accordance with Ministry approval and reported annually. | |

| Technical Levels of Service | | |
|-----------------------------|--|--|
| Service Attribute | Level of Service | Qualitative Description |
| Scope | Percentage of properties connected to the municipal wastewater system, where municipal wastewater services are available. | 100% |
| Deliability | The number of connection- days per year due to wastewater backups compared to the total number of properties connected to the municipal wastewater system. | 0 |
| Reliability | The number of effluent violations per year due to wastewater discharge compared to the total number of properties connected to the municipal wastewater system. | 0 |
| | Age of sewer pipe based on condition and manufacturers specifications. | AC, Concrete, HDPE, PE, PVC – 100 years CIP, Clay, DI, Steel – 50 years |
| Performance | Condition evaluation by flush and camera and assessed based on NASSCO Pipeline Assessment Guidelines (rating of zero (0) being best to five (5) being worst). | Six (6) Years (1/6 of network per year) |
| T CHOITHANGE | Immediate repair of local break/failure. Pipes with a four (4) (poor) or five (5) (very poor) to be monitored and considered for replacement or repair. | Immediate for failures Monitored for 4/5 |
| | Treatment equipment monitored and repaired and replaced as required. | Follow Operations and Maintenance manuals for individual pieces/components |