

# SMARTCOVER



## **SMARTCOVER PREVENTS BASEMENT FLOODING DURING SPRING THAW IN ONTARIO, CANADA**

### **BACKGROUND**

Located in the heart of the Niagara region of Ontario, Canada, the town of Lincoln is one of the fastest growing municipalities and has one of the most diverse economies in the area.

The town serves six communities known for over 50 wineries, fresh fruit, vegetables, and flowers, heritage sites, and natural attractions such as the Niagara Escarpment and Lake Ontario.

In the Town of Lincoln, there are two primary wastewater collection systems with 76 kilometers of pipe

and 1,042 access chambers feeding into pumping stations, force mains, and a treatment plant.

### **THE CHALLENGE**

During Spring, the combination of snowmelt and extreme wet weather causes inflow and infiltration (I&I) that generates flows exceeding the sewage pumping station capacity.

At one critical location, there is no automatic overflow to allow relief to the pump station, so all additional flows are held in the system potentially resulting in surcharging and basement flooding.

### **THE SOLUTION**

Since June 2018 the Town of Lincoln has been monitoring the water levels within their critical sanitary sewer lines. In Spring 2019, the Town of Lincoln received a SmartCover alarm -- the highest notification level.

With the help of real-time data and advance notice from SmartCover, the Town of Lincoln response team was mobilized to the site and began temporary bypass pumping for 41 hours straight. This quick and decisive action was crucial to protecting a nearby neighborhood and residential properties from sewage flooding.

### **THE RESULTS**

Since installing SmartCover, the Town of Lincoln is able to detect and respond to I&I in their collection system more effectively. The technology allowed wastewater operators to detect and prevent overflows while eliminating basement flooding incidents in their community.

*“Since installing SmartCover, the Town of Lincoln has not experienced a single complaint relating to surcharging in the sanitary system.”*

*-- Gillian Harris, P.E., PMP  
Manager of Environmental Services, Town of Lincoln*

# **INFLOW AND INFILTRATION IS A ROOT CAUSE OF FLOODING**

*QUICK AND DECISIVE ACTION  
WAS CRUCIAL TO PROTECT  
NEIGHBORHOODS AND  
RESIDENTIAL PROPERTIES  
FROM SEWAGE FLOODING.*

*Managing I&I is  
key to preventing  
costly backflow incidents.*



## **SUMMARY:**

The Town of Lincoln successfully implemented SmartCover to protect their residents during wet season flooding. The system notifications allowed sewer operators visibility into their collection system to prevent sewer spills and avoid related fees. SmartCover technology will continue to manage the I&I challenges exacerbated by snowmelt. With the help of a smart sewer, wastewater workers are helping the Town of Lincoln continue to thrive as fast-growing municipality in Ontario.



# **SMARTCOVER**

**WE'VE GOT IT COVERED™**

[SmartCoverSystems.com](http://SmartCoverSystems.com)