

Prevent Sewer Overflows with Sewer Lateral Inspections

Prevent Sewer System Overflows This Rainy Season: Why Regular Sewer Lateral Inspections Matter



As the rainy season approaches, municipalities and utilities face a heightened risk of sanitary sewer overflows (SSOs). Increased precipitation leads to more groundwater infiltration and inflow (I&I), often stressing aging sewer infrastructure beyond its capacity. When sewer laterals and manholes are compromised, the result can be backups, environmental contamination, costly emergency repairs and regulatory penalties.

The key to avoiding these issues lies in proactive maintenance—specifically, regular [sewer lateral inspections](#), [manhole inspections](#) and timely rehabilitation. With technologies like [cured-in-place pipe \(CIPP\) lining](#) and [trenchless sewer repair](#), municipalities can address vulnerabilities before they escalate into system-wide failures.

This post explores how spring and early summer rains impact sewer systems, why regular inspections are essential and the most effective solutions for preventing SSOs and maintaining infrastructure integrity.

The Impact of Rainy Season on Sewer Systems

Heavy rains and increased groundwater levels during the spring and early summer place significant stress on sewer systems. When pipelines and structures are aging or damaged, they become susceptible to I&I, allowing excess water to enter the system. This added volume can overwhelm treatment facilities and cause backups into streets, basements and waterways.

Some of the most common weak points include cracked or deteriorated sewer laterals and failing manholes. Without early detection and remediation, these issues contribute to system-wide problems, including:

- SSOs
- Increased treatment costs due to excessive flow
- Structural damage to sewer mains
- Environmental violations and potential fines

Preventing these outcomes requires a proactive approach that starts with a thorough assessment of the system's condition.

Why Sewer Lateral Inspections Are Essential

While sewer mains often receive the most attention, [sewer lateral inspections](#) are just as important in managing infiltration and inflow. Sewer laterals connect individual properties to the mainline and are frequent sources of I&I due to aging materials, ground shifting and root intrusion.

Regular sewer lateral inspections help municipalities and utilities:

- Detect cracks, joint failures and misalignments
- Identify root intrusions and cross bores that compromise system integrity
- Prioritize repair or rehabilitation before problems worsen

In many cases, early intervention can prevent larger system disruptions. For example, identifying a cracked lateral early in the season allows utilities to plan for rehabilitation using CIPP lining or other trenchless sewer repair methods before the system becomes overburdened during heavy rainfall events.

Manhole Inspections and Sanitary Sewer Evaluation Studies (SSES)

Alongside laterals, manholes are common entry points for infiltration. Aging or deteriorated manhole structures allow groundwater to enter the system, particularly during rainy seasons. [Manhole inspections](#) are critical for identifying issues such as:

- Cracks and joint failures

- Corroded frames and covers
- Improper seals that allow inflow

By performing regular manhole inspections, municipalities can prioritize rehabilitation efforts and extend the life of these critical structures.

Comprehensive [SSES](#) reports take inspections a step further. These evaluations include flow monitoring, smoke testing and dye testing to locate I&I sources system-wide. The data collected during an SSES, combined with updated sewer mapping, helps utilities develop informed, long-term strategies for rehabilitation and maintenance.

Trenchless Sewer Repair and CIPP Lining: Cost-Effective Solutions

Once problem areas are identified through sewer lateral inspections or manhole inspections, the next step is [rehabilitation](#). Traditional dig-and-replace methods are costly and disruptive, often requiring extensive excavation and surface restoration. Fortunately, trenchless sewer repair methods offer a less-invasive alternative.

CIPP Lining

[CIPP lining](#) creates a new, seamless pipe within the existing damaged pipe. It's a proven solution for rehabilitating both sewer laterals and mains with minimal disruption. Some key benefits include:

- Extends the life of the pipe by 50 years or more
- Resistant to corrosion and root intrusion
- No need for large-scale excavation
- Faster project completion compared to traditional methods
- Lower total project cost when factoring in reduced labor and surface restoration

Sewer Liner Repair

For localized issues, sewer liner repair techniques such as sectional CIPP patches can restore structural integrity without lining the entire pipe. These targeted repairs address isolated defects identified during inspections and are often completed in a matter of hours.

Trenchless Sewer Repair Advantages

- Minimal disruption to traffic, landscaping and urban infrastructure
- Reduced environmental impact
- Lower risk to workers compared to open-cut excavation
- Ideal for areas with limited access and sensitive surfaces

By proactively planning trenchless sewer repair projects before peak rainfall, municipalities can avoid emergency repairs and the associated costs and delays.

The Benefits of Acting Before Peak Rainfall

Timing is critical when it comes to sewer system maintenance. By performing sewer lateral inspections, manhole inspections and rehabilitation early in the season, municipalities and utilities can:

- Reduce the likelihood of SSOs and environmental violations
- Minimize treatment costs by reducing infiltration
- Protect public health and property
- Demonstrate regulatory compliance
- Extend the lifespan of existing infrastructure
- Improve budget forecasting and capital improvement planning

Proactive action also provides flexibility in scheduling, allowing municipalities to avoid the challenges of coordinating repairs during emergency situations or peak construction season.

Conclusion

Spring and early summer rains will test the resilience of your sewer system. Don't wait until an SSO occurs to take action. Regular sewer lateral inspections, manhole inspections and comprehensive SSES reports are essential for maintaining system integrity and preventing costly failures.

When rehabilitation is needed, trenchless sewer repair methods such as CIPP lining and sewer liner repair offer cost-effective, long-lasting solutions that minimize disruption and downtime.

National Underground Group offers a full suite of services designed to help municipalities and utilities prepare their systems for the challenges of wet weather. From inspections to trenchless rehabilitation, we provide the expertise and technology needed to protect your infrastructure.