

# Incentives for residential lateral replacement can improve infrastructure, ultimately health

*Pipe systems that are less vulnerable to rain-related disease risk also provide long-term returns*

## Key Message

As local governments shore up their sewer mains and manholes, privately-owned laterals must also be replaced—or else inflow and infiltration will remain problematic to the whole system.

In taking steps to reduce infiltration and inflow (I/I) into sewer systems, local governments have discovered that sewer laterals—small pipes connecting homes and businesses to the system—remain significant contributors of I/I.

I/I is water that is not supposed to be there. Either it has seeped in through porous pipes or flowed in through faulty surface connections.

If public sewer systems are the veins of society, then privately-owned sewer laterals are its capillaries.

Rehabilitating sewer mains and manholes can result in significant reductions in I/I. But if leaky laterals are not also replaced, sewer systems remain vulnerable to overflows because the influx of stormwater rapidly exceeds system capacities. This is a concern for both combined and separated sewer systems.

## Incentivizing Lateral Replacement

Deteriorating laterals can be replaced with PVC pipes expected to last 75 years or more.

Most laterals are privately owned, though because they are out of sight, laterals remain out of mind for most residential property owners. It typically costs several thousand dollars to replace them.

Lateral replacement is complicated by property rights issues. Local laws determine whether a lateral is wholly private, or if the portion in the public right-of-way is considered a public liability.

Since 2009, the city of Marshfield has operated a

Fixing residential laterals may be the biggest problem facing the stormwater management community.

## Policy Recommendation

The state should assist municipalities in incentivizing the replacement of privately-owned sewer laterals.

successful incentive program to assist residential property owners in replacing leaky laterals. Whenever the city reconstructs a street, it offers to forgive the costs of replacing the portion of the private lateral in the public right-of-way—if the property owner also pays to replace the portion under private property; about 90% of homeowners participate.

Since 1997, the city of Madison has offered to pay 75% of the cost of sanitary sewer lateral replacement from the main to the residential property line. This offer is also extended in conjunction with street reconstruction. Engineers report about 90% participation—after the deal was structured so residents could opt-out rather than opt-in.

In 2012, the city of Milwaukee began offering a public/private lateral insurance program for its residents. At a cost of \$100 per year to a nationwide insurer, lateral repair up to \$6,000 is covered under a deductible. In 2012, 10,000 citizens had enrolled.

## Benefits to Asset Management

Lateral replacement can be win-win—so long as private property owners are included in the process.

Public capital investment underwrites resilient infrastructure better prepared to handle the extreme storms predicted by climate change models.

Expected benefits include reduced risk of sewer overflows, reduced treatment plant operating costs, and the creation of private-sector contractor jobs.

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