wipro

Wastewater Impact Management Protect public health and prevent community disruptions with Al-powered flood prevention



Get started





Overview

The reality

Water and sewer operations need to stay ahead of blockages to keep their communities safe from flooding and in compliance with regulations.

Introducing Wastewater Impact Management >

¹ "Enforcement to Address Sewer Overflows," USEPA Office of Water, June 21, 2022.



The EPA estimates that there are as many as

75,000

sanitary sewage overflows each year in the US that can contaminate our waters and threaten public health¹

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Here's how it can help >



Wipro Wastewater Impact Management, built on the Microsoft Cloud, is an Al-driven, end-to-end, sewer monitoring system that can predict blockages and flooding to help prevent community health hazards and disruptions.

What challenge can Wastewater Impact Management help you solve?



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Floods can have profound environmental impacts, and fees for noncompliance are costly

Stay ahead of blockages to avoid adding more environmental pollutants and stay in compliance with health and safety regulations.





Floods can lead to community health hazards and widespread disruptions

> Proactively dentify and monitor high-risk areas to avert flooding.









Meet Ivan

Director of Water & Sewer Operations Challenge

Floods can have profound environmental impacts, and fees for noncompliance are costly

Last year, Ivan's city experienced several disastrous floods due to sewer system blocks that caused community disruptions, and narrowly avoided widespread health and environmental hazards. Upon inspection, the city realized it was in noncompliance with the latest health and safety regulatory requirements, which cost the department noncompliance fees on top of the expenses for repairs and maintenance.







Insight

A solution that stays ahead of blockages helps keep communities safe and cities in compliance with regulations

See the solution >

² Risk Factor, "What Will Climate Change Cost You?," First Street Foundation, 2023.
³ Aaron Bielenberg and others, "<u>US Water Infrastructure: Making Funding Count</u>" McKinsey & Company, November 24, 2021. Challenge

24.7M properties across the US are at risk of flooding²



Solution

The average US water-network pipe is

45 yrs old

with some cast-iron pipes being more than a century old³

Solution

Wastewater Impact Management offers end-to-end monitoring that predicts future blockages and helps keep systems in compliance

Empowered by AI and real-time analytics, Ivan's team can now pinpoint high-risk flooding zones based on network, historic trends, weather patterns, and more—and they can leverage IoT sensors to monitor sewer systems in real time. This helps them avoid disruptions due to blockages and flooding, maintain a healthy sewer system and environment, and stay in compliance.

See another use case



Insight







Challenge

Floods can lead to community health hazards and widespread disruptions

Lena is a homeowner who was impacted by a disastrous flooding event this year. The storm overwhelmed the city sewer system, leaving ankle-deep flooding in her basement that caused damage to her home and left her with health concerns. She's worried that with increased extreme weather predicted, flooding will not just be an isolated event, and she may need to move to keep her family safe and healthy.

Meet Lena

Utilities customer









Insight

An Al-driven, end-to-end, sewer monitoring system can help prevent the widespread community impacts of flooding

See the solution >

⁴ IPCC, Food and Water Sixth Assessment Report, October 2022.



Droughts, floods, and their associated societal damages are projected to increase with every degree of global warming, potentially doubling flood risk between

1.5° and 3°C

of warming⁴





Solution

Wastewater Impact Management helps better predict flooding to prevent health hazards and disruptions

Lena's sewer-management organization now has an end-to-end monitoring system that enables them to better predict future blockages and flooding to prevent health hazards and disruptions in her community. This allows Lena and her neighbors to trust that when future storms hit, they'll be better protected from flooding and damage.

See another use case





Insight