



AUDIT AT A GLANCE

Department of Environmental Protection's Leak Detection Program

What questions did the audit look at?

- ▶ Did the New York City Department of Environmental Protection (DEP) effectively operate its Leak Detection Program?

Why does it matter for New Yorkers?

DEP is responsible for managing New York City's water supply, delivering more than a billion gallons of water to New Yorkers each day. Failures in that system can lead to flooding, roadway damage, service disruptions, and costly emergency repairs. DEP created the Leak Detection Program to identify leaks early and prevent water main breaks.

The audit found that DEP's program is largely reactive rather than preventive. Because DEP surveyed only a small portion of the system, most leaks were discovered after residents filed complaints or emergencies occurred, when damage and disruption were already unavoidable.

Between Fiscal Years 2023 and 2025, water main breaks increased sharply, rising 54% in FY2025 alone. During this time, only 3% of breaks were detected through proactive surveys. Limited staffing, lack of planning, and obsolete data systems prevented DEP from expanding inspections citywide. DEP lacks a formal, risk-based process for selecting survey locations, relying primarily on staff judgment based on institutional knowledge rather than objective indicators, such as pipe age, leak history, or infrastructure risk. As a result, large portions of the City's water infrastructure remain uninspected, increasing the risk of failure and undermining DEP's ability to protect critical infrastructure and public resources.

What changes did the agency commit to make following the audit?

- ▶ DEP stated that it agreed with many of the audit's recommendations, including that it develop a structured survey planning process, regularly measure and report progress, and conduct periodic reviews of proactive detection.

AUDIT FINDINGS



DEP surveyed just 27% of planned water distribution grids over a three-year period.



Of 1,314 water main breaks repaired, only 42 (3%) were identified through proactive surveys.



Water main breaks increased by 54% in FY2025



DEP does not have a formal planning process for using leak detection surveys.



Audit Recommendations¹

- 1** Develop and implement a structured, risk-based survey planning process. This includes establishing written procedures for selecting survey grids using measurable risk indicators such as the age, size, and material of water mains; prior leak history; recent construction or excavation activity; and proximity to critical infrastructure.
- 2** Regularly measure and report progress toward DEP's operational goals—surveying 30% of each borough's grids annually and achieving full coverage within three years—and use quarterly performance reviews to identify and address shortfalls.
- 3** Create a formal process for scheduling and tracking survey coverage so that work is spread across all grids, avoids unnecessary repeats, and ensures every grid is inspected within the annual and three-year cycles.
- 4** Conduct periodic reviews of proactive detection rates, repair times, and water main break trends to assess the effectiveness of the Leak Detection Program.
- 5** Given the current staffing levels, consider reevaluating the feasibility of current survey goals based on available resources, reallocating personnel, increasing training, or adding shifts to meet operational goals. Consider seeking additional funding to expand the reach and impact of the Program.
- 6** Ensure that its computer system—whether updated or new—allows for improved useability and direct traceability from survey to scan to repair, including the ability to link proactive detection results to follow-up actions and repair outcomes. The computer platform should include performance dashboards and reporting tools for program-level monitoring.

¹ In its response, DEP did not provide responses to each recommendation and stated only that it agreed with many of them.