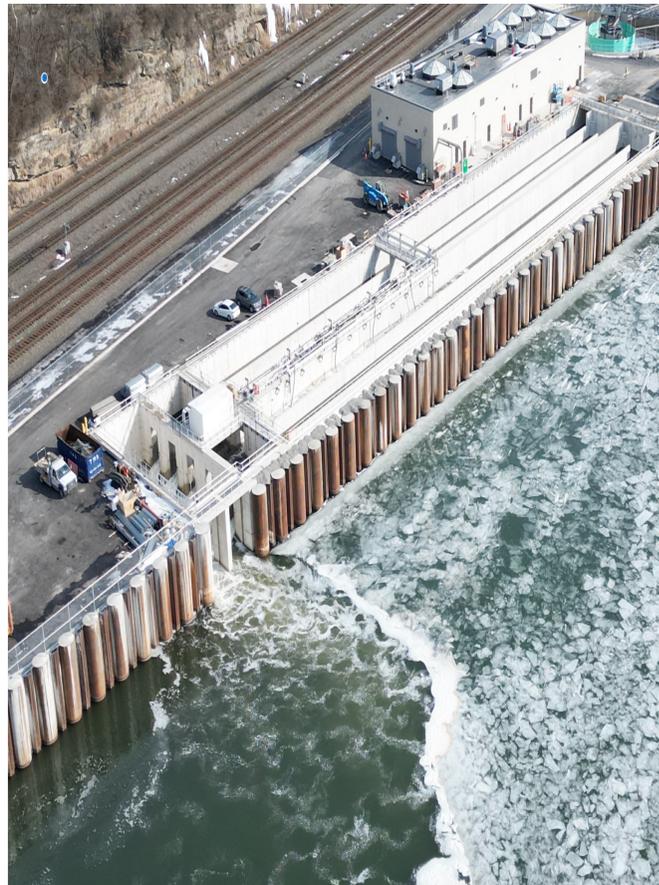


# Allegheny County Sanitary Authority (ALCOSAN) North End Plant Expansion: ALCOSAN's New Outfall

NEAA26 OPERATIONS & ENVIRONMENTAL PERFORMANCE



National Environmental  
Achievement  
AWARDS



## By the Numbers

\$2 billion Clean Water Plan

83 municipalities

2021 – River wall completed

January 16, 2025 | 3:08 p.m. – Original Ohio River outfall closed; new North End outfall commissioned

65 years (1959–2025) – Original outfall in continuous service



250 to 295  
MGD

480 MGD

600 MGD



“Start treating flow North.”

On January 16, 2025, at 3:08 p.m. – with those words from Director of Operations and Maintenance Doug Jackson, Allegheny County Sanitary Authority (ALCOSAN) shut the gate on flow from its original outfall to the Ohio River, and commissioned a new outfall at the North End of the plant.

Thus, a 65-year chapter closed, and a new wastewater operations chapter opened in Western Pennsylvania.

ALCOSAN provides wastewater treatment services to Allegheny County, Pennsylvania – including the City of Pittsburgh. Since 1959, flow from all 83 municipalities in ALCOSAN’s service area discharged into the Ohio River through the original outfall at the plant. In January, it was replaced by the larger, and more northern outfall as part of the Clean Water Plan.

Allegheny County Sanitary Authority’s long-term Clean Water Plan aims to reduce the amount of combined sewage overflow by 7 billion gallons per year and eliminate sanitary sewage overflows. To achieve this, ALCOSAN’s plan involves four major components: Regionalization, the Regional Tunnel System, the GROW Program, and Plant Expansion. The transfer from ALCOSAN’s old outfall to new is a large part of the Plant Expansion pillar.

By increasing treatment capacity, the plant expansion and outfall will decrease the number of overflows caused by stormwater. Overflows (CSO) are a major regional issue, particularly due to aging infrastructure, fragmented sewer ownership, and terrain challenges.

The new outfall moves ALCOSAN closer to its secondary treatment capacity goal of 295 million gallons per day (MGD) by the end of 2025, and an overarching project goal of 600 MGD.

The new outfall is supported by two new clarifiers and new disinfection tanks, which saw flow for the first time on January 16<sup>th</sup>. Other parts of plant expansion include:

- A new [East Headworks facility](#), which will increase the plant's preliminary treatment capacity to 600 mgd
- Two new primary sedimentation tanks, which will increase the plant's primary treatment capacity to 600 mgd
- Various upgrades to the plant's electrical system
- A new Wet Weather Pump Station to convey 120 mgd from the [Regional Tunnel System](#) to the plant for treatment

The decommissioning of the old outfall and the addition of the new one is perhaps one of the most important – and visual – components of ALCOSAN's Clean Water Plan, and is a key environmental, historical and operational milestone in wastewater treatment in Western Pennsylvania.