## CASE STUDY Albany, NY



Smart watershed network management mitigates flooding and reduces combined sewer overflows to the Hudson River.

## The Challenge

Beaver Creek District, the largest sewershed within the City of Albany's combined sewer system, previously discharged over 530 million gallons average of combined sewer overflows (CSOs) to the Hudson River every year. The City has invested in several capital projects as part of its Long-Term Control Plan to address CSO and flash flooding issues, while mitigating property damage and potential health and safety hazards.

## The Solution

To maximize the benefits of those investments and optimize the performance of new infrastructure, the City's Department of Water and Water Supply and their consulting partner, CHA Consulting, Inc., has implemented a smart network utilizing the Opti platform and products across the Beaver Creek sewershed. Opti's advanced technology integrates with multiple platforms, SCADA systems, and applications to extend networks and capabilities for an efficient, smart watershed network. These integrations provide operators with peace of mind by consolidating data and streamlining operations and maintenance of assets outside the fence. The use of Opti's digital solutions for data-driven stormwater management has helped Albany protect people, property, and environment while meeting regulatory compliance.

## At a Glance

- Operating since 2017
- Coordinated control across six (6) stormwater assets
- Increased wet weather capture from 10% to 90% for only \$0.005 per gallon

"Opti helps us identify existing conditions and develop strategies to adapt to a changing environment."

Joseph E. Coffey, Jr., P.E. Commissioner, Department of Water & Water Supply



**98% Savings** \$6.4M reduction in CAPEX



RESILIENT

8X Performance
Enhanced and streamlined



PEACE OF MIND
Public Safety
Protecting 100,000 residents

## Results

Wet weather flow volume reductions were observed to increased by an average of 8X using Opti's adaptive controls as compared with modeled passive control systems.

Coordinated control across multiple assets

maximizes upstream capture while minimizing downstream overflows at the "Big C" sewer outfall and wet weather flow at the Albany

South Treatment Plant.

# 94% 93% 89% 90% Hansen Underground Detention Ryckman Surface Wetland Wetland Wetland Passive Modeled Active Control Observed Passive Modeled

Wet Weather Flow Volume Reduction

## **Partners**







## **Awards**



2018 Project of the Year Award





Recipient of 2019 Platinum Award



Albany Smart Watershed Network

## Powered by Microsoft

## **About OptiRTC**

**Opti**, an <u>Aliaxis</u> company, is the leading provider of digital adaptive stormwater control solutions. With over 300 deployments to date, Opti empowers customers and partners to address the impacts of climate change, aging infrastructure, urbanization, and water pollution, enabling them to secure the sustainability of our communities and natural resources Opti's cloud-based platform optimizes stormwater asset performance through instant actionable insights to provide economic savings, resilient solutions, and peace of mind. With our commitment to innovation, we are driving a resilient and brighter future for all.

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