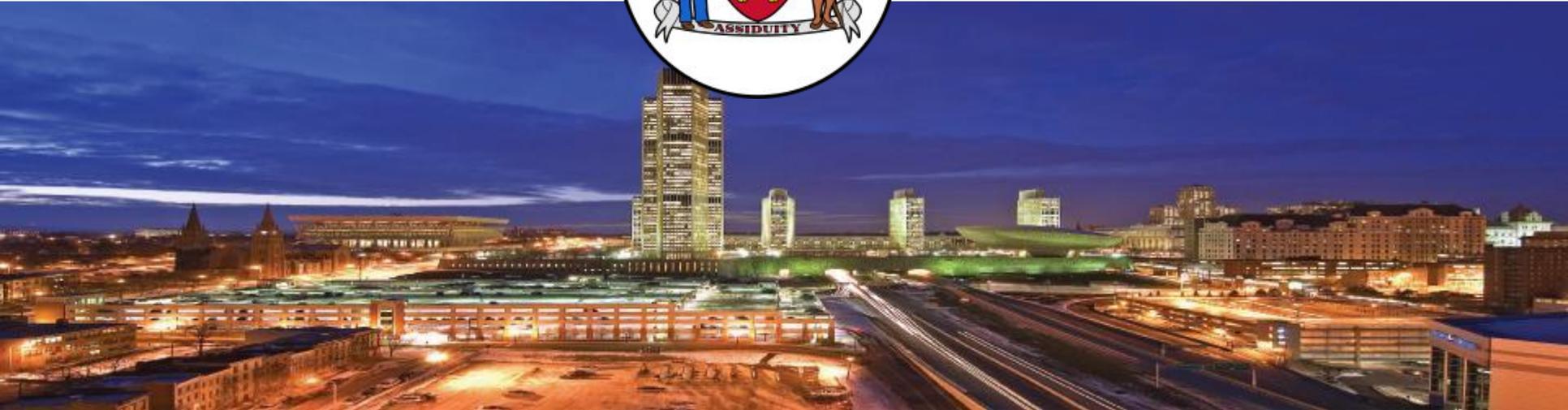
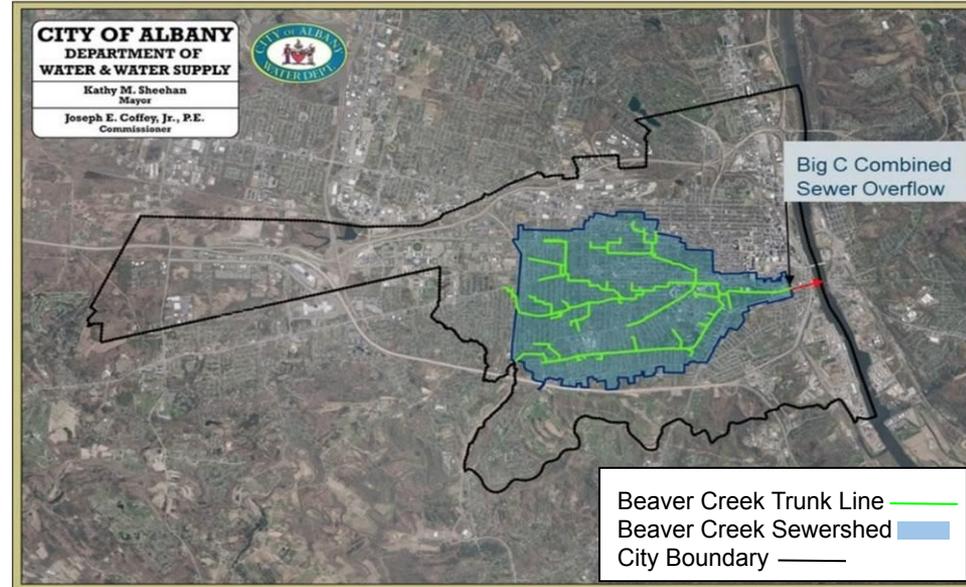


# Case Study: Addressing Flooding and CSOs in the City of Albany, NY

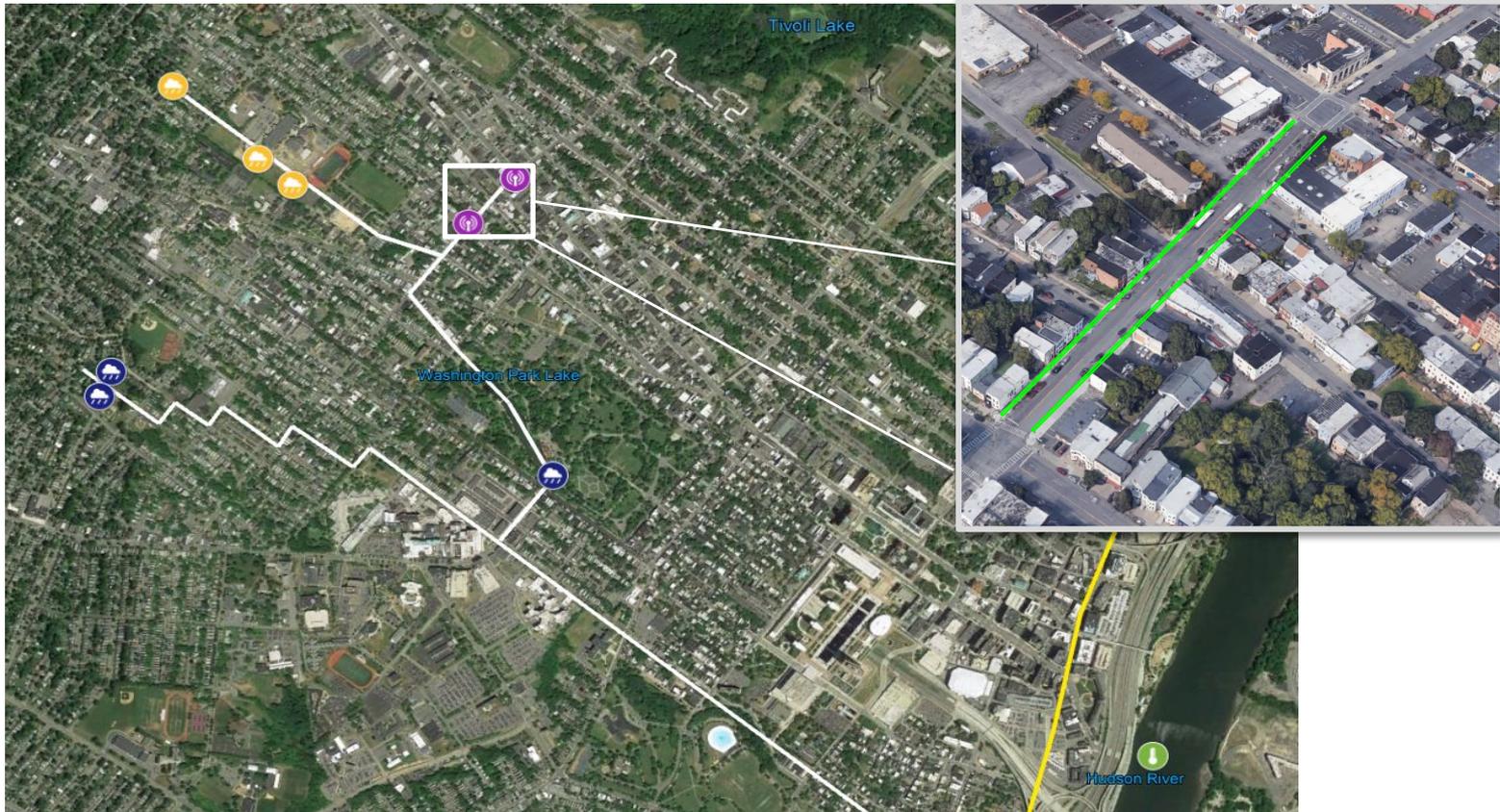


# Challenges faced by Albany

1. What are our baseline conditions and how does our system respond to storm events?
2. How do we maximize what we have and are building?
3. How will we operate and maintain our infrastructure?
4. How do we build for resiliency?

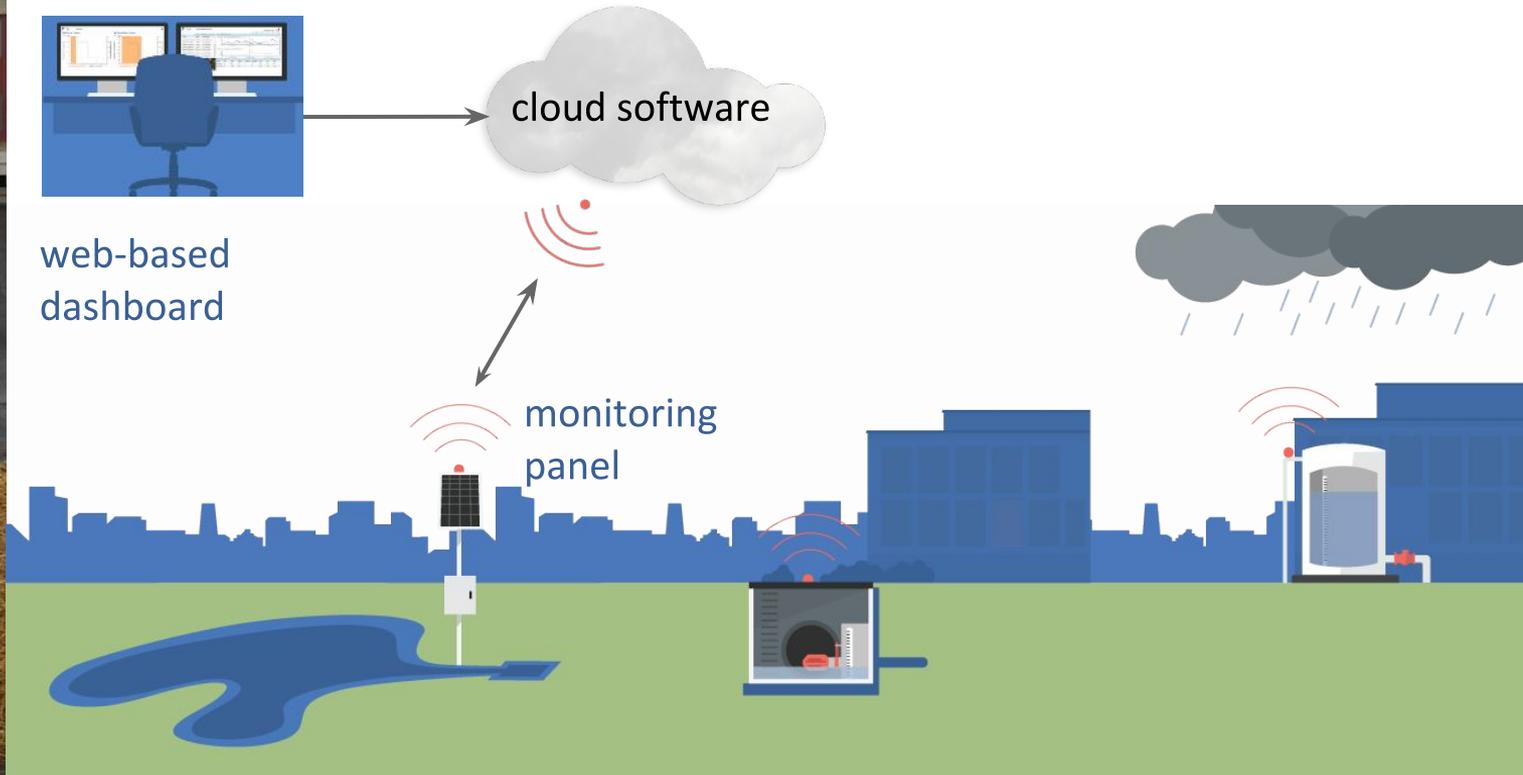


# Quail Street: Start with baseline monitoring

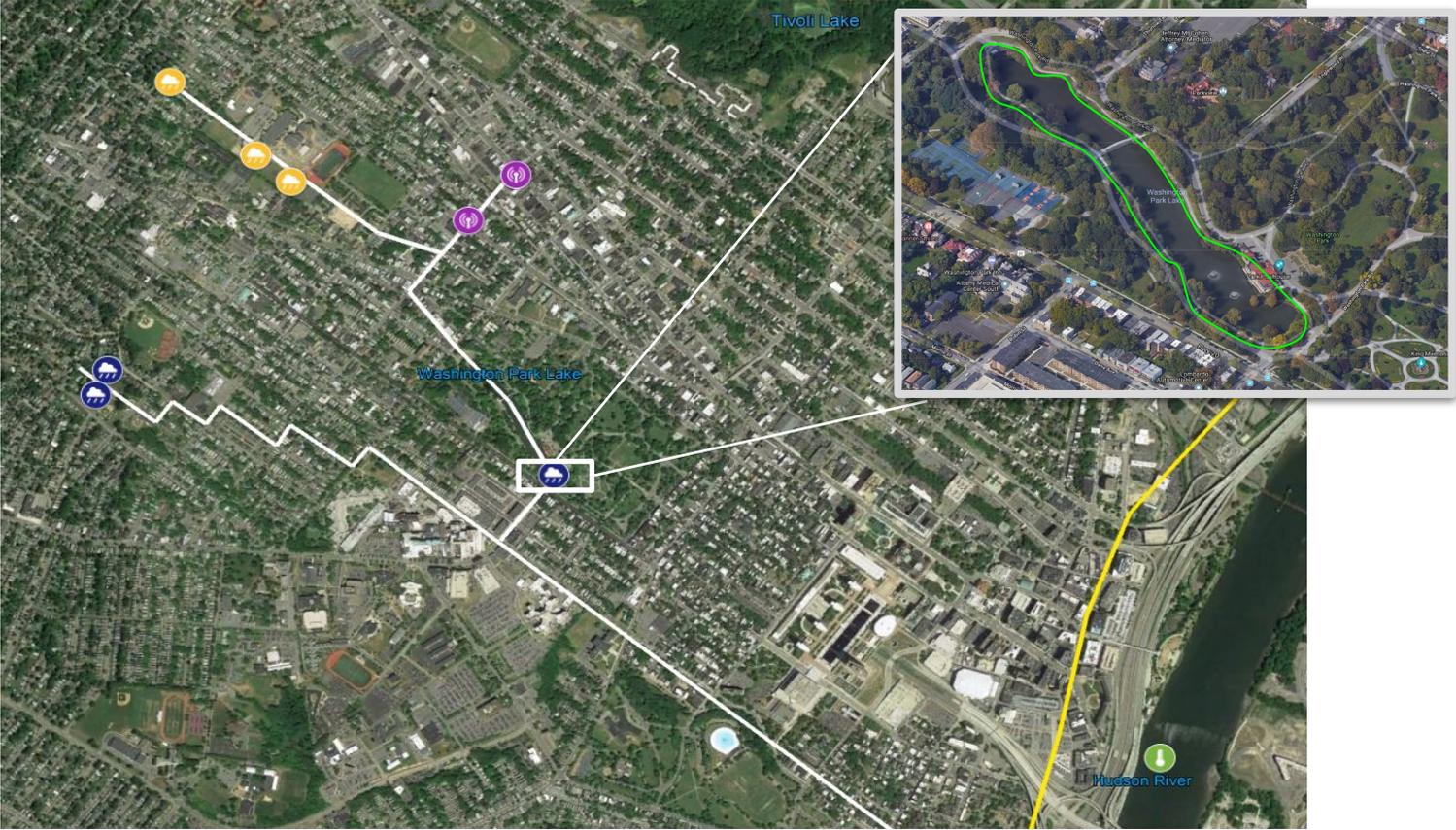




# Green infrastructure monitoring



# Washington Park Lake: Maximize existing storage



# Hansen & Ryckman: Maximize new infrastructure



# Continuous Monitoring and Adaptive Control (CMAC)



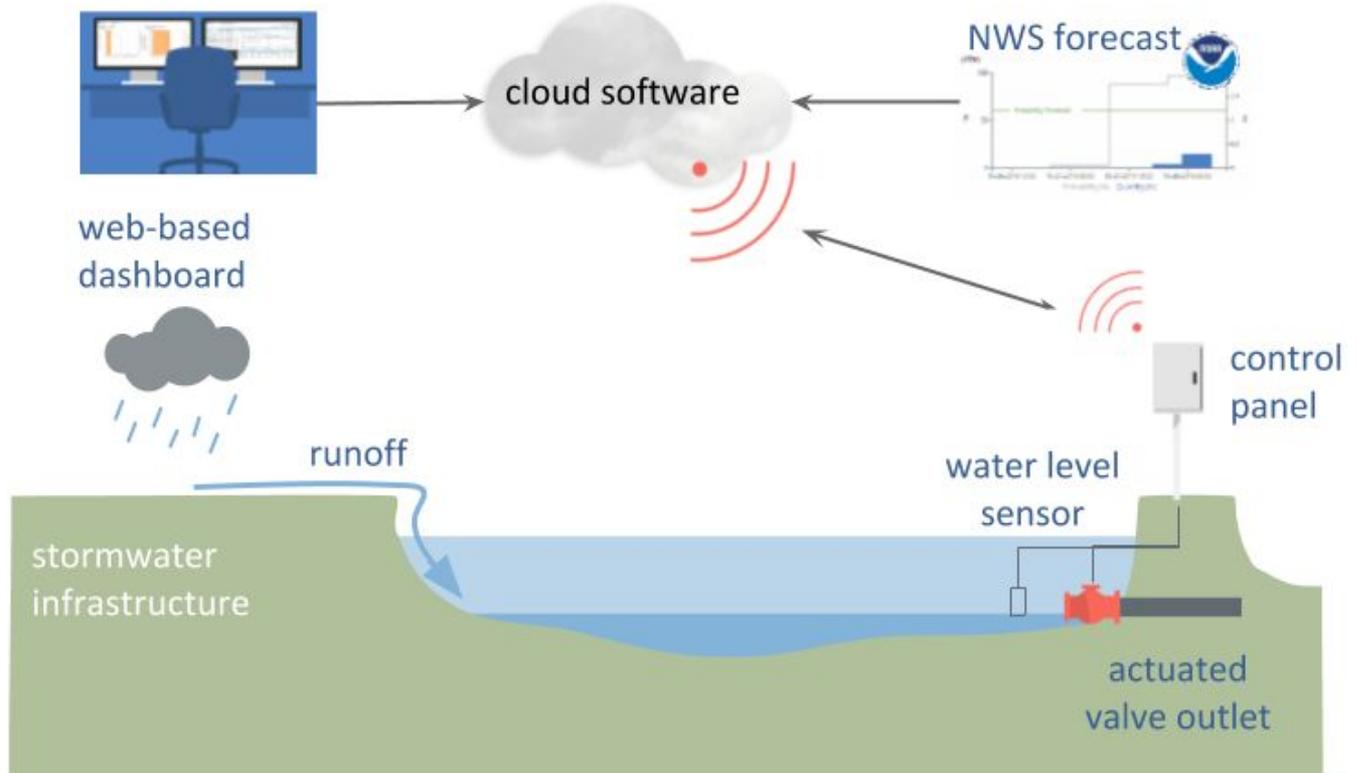
Washington Park Lake



Hansen Constructed Wetland

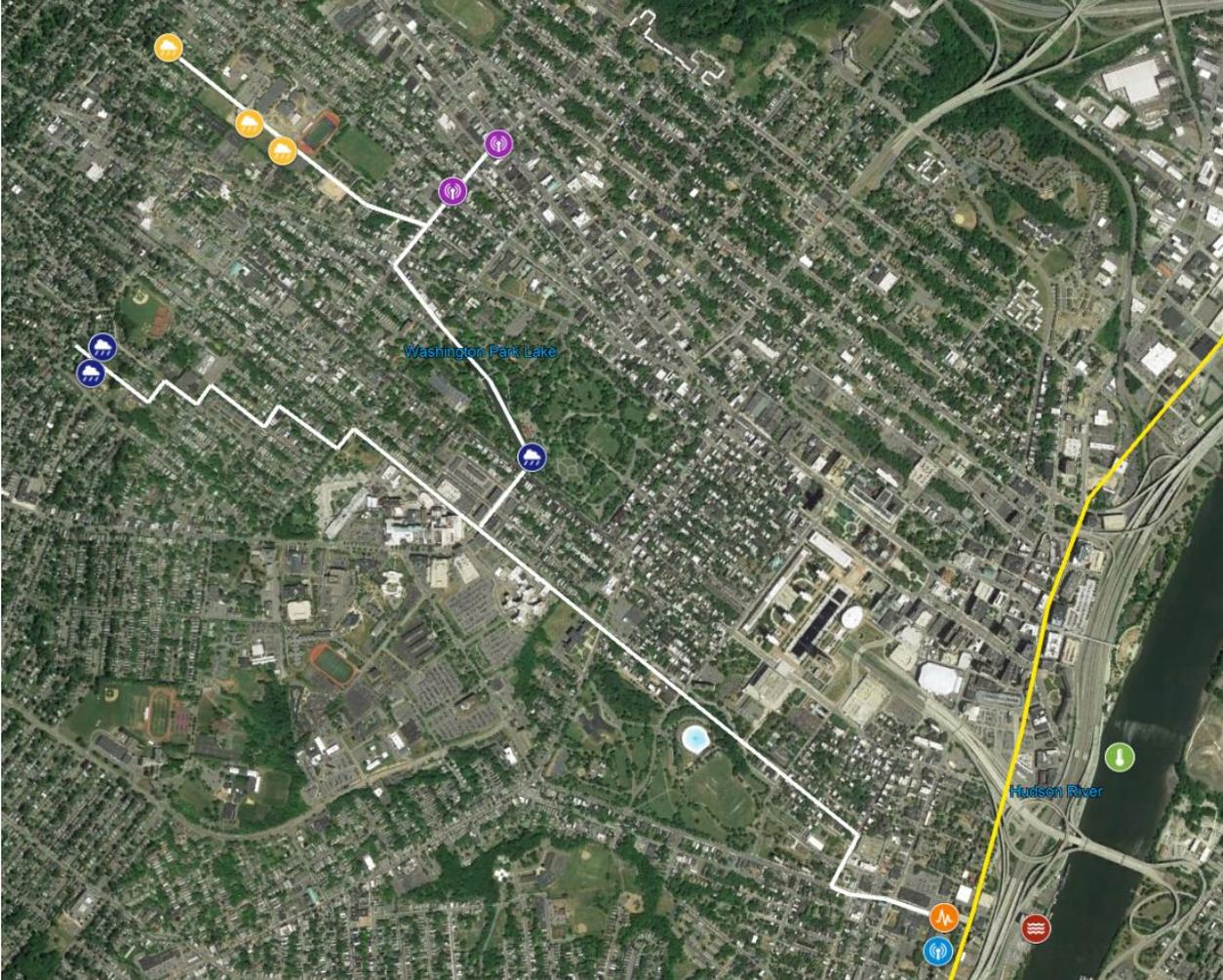


Ryckman Underground Detention

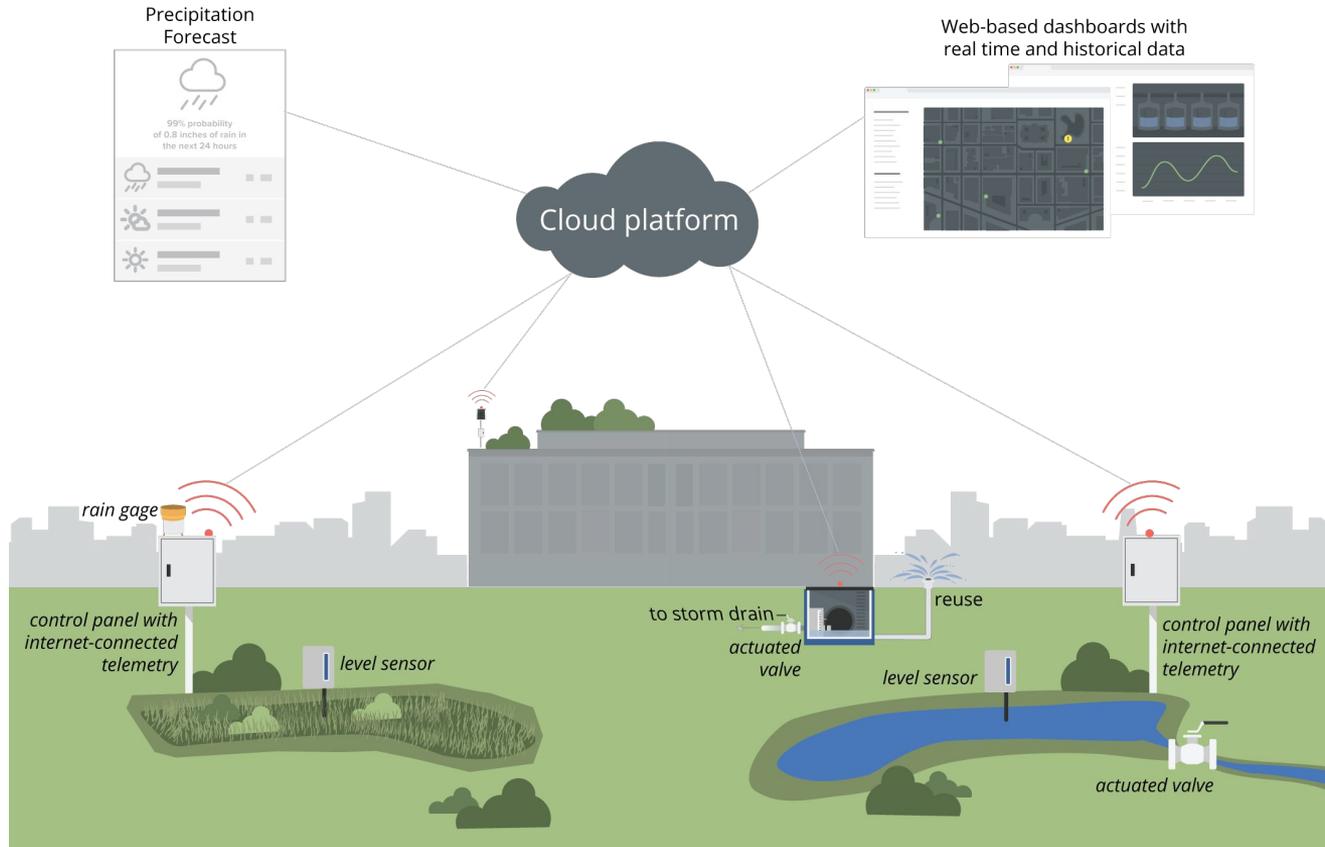


# Albany's smart infrastructure network

- Washington Park Lake
- Ryckman Wetland
- Hansen Ball Field
- High School Lower Field BC I
- High School Upper Field BC VI
- West Lawrence Street BC III
- Quail St GI #1 Monitoring
- Quail St GI #2 Monitoring
- Big C Monitoring
- Big C Regulator
- Big C Outfall
- USGS Stream Gage
- Beaver Cr. Trunk Sewer
- Albany Interceptor Sewer



# Smart watershed management with Opti



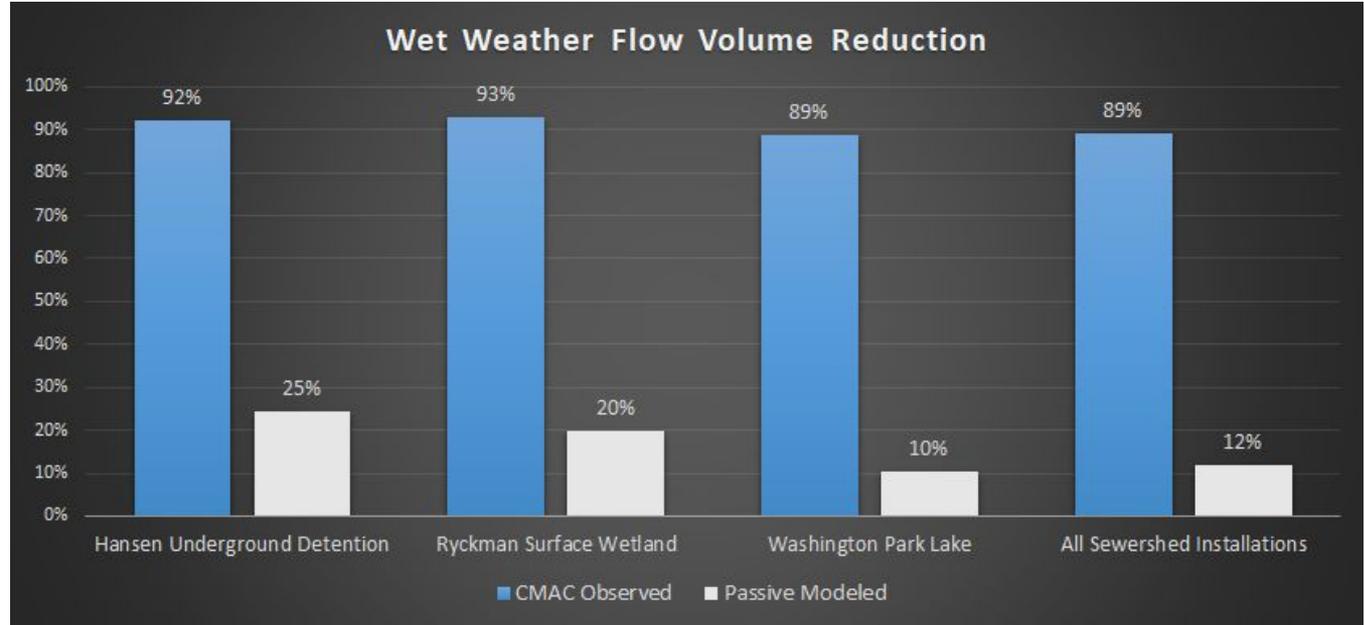
# Visibility and insight into infrastructure performance





A **6.5%** additional capital investment has led to a **6.5x** improvement in incremental wet weather performance as compared to passive control

# Opti outperforms passive infrastructure



*Dataset taken from March 1, 2018 to March 1, 2019 for all sites above*

