

# The Opti Solution

**Opti** is the leading provider of digital adaptive stormwater control solutions. Opti helps communities address the impacts of climate change, aging infrastructure, urbanization, and water pollution. We empower our customers and partners, enabling them to secure the sustainability of our communities and natural resources. With our commitment to innovation, we are driving a resilient and brighter future for all.

**Opti** provides a cloud-based platform that optimizes the collection, storage and treatment of stormwater runoff by transforming passive infrastructure with Continuous Monitoring and Adaptive Control (CMAC). CMAC integrates information directly from field deployed sensors with real-time weather forecast data to directly monitor performance and make automated and predictive control decisions to actively manage stormwater storage and flows across the watershed.

Opti works with our partners and customers to achieve:

- **economic savings** by reducing infrastructure footprints on new storage, reducing capital expenses by 60–90% on retrofits, and turning stormwater into an asset.
- **resilience** 5–10× performance improvements with forecast based control and the ability to adapt behaviors as climate, watersheds and regulations evolve.
- **peace of mind** with real-time monitoring, insights, and compliance reporting.

## CMAC: One Solution, Multiple Objectives

- **Flood Mitigation**
  - Just in time storage
- **Hydromodification Reduction**
  - Minimize erosive flows
- **Combined Sewer Overflow Mitigation**
  - Optimize upstream storage and downstream release
- **Water Quality Improvement**
  - Increase residence time
- **Water Conservation**
  - Maximize reuse and capture
- **Maximize Asset Performance**
  - Improve compliance and O&M



With over 90 software-configurable parameters, CMAC can meet multiple stormwater objectives. Utilizing the Opti Software Platform integrates third-party sensors, actuators, and SCADA systems across cloud, web browsers, and communication panels. This approach transforms green and gray infrastructure into smart infrastructure through real-time data analysis, predictive analytics, and adaptive controls. Opti is revolutionizing stormwater management practices while meeting regulatory requirements and enhancing efficiency. The system goes beyond traditional approaches by providing a dynamic and intelligent framework that adapts to changing conditions. By integrating

sensors, weather forecasts, and simulations, Opti introduces a new feedback loop in stormwater management by representing downstream conditions in upstream decisions.

**Flood Mitigation:** Opti facilitates just-in-time storage by releasing stored water ahead of wet weather events, thereby creating adaptive storage capacity. Moreover, Opti aids in post-storm recovery by enabling downstream systems to receive attenuated releases, even in the absence of rain, bolstering community resilience against climate challenges.

**Hydromodification Reduction:** Opti's adaptive controls dynamically manage water flow before, during, and after wet weather events, mitigating downstream impacts such as erosion-related issues. Guided by predetermined risk metrics and predictive analytics, Opti optimizes real-time discharge rates to enhance system resiliency.

**Combined Sewer Overflow Mitigation:** Opti strategically adjusts flow rates to minimize the adverse effects of CSOs throughout wet weather events, effectively mitigating impacts on water quality and public health. Unlike conventional intelligent sewer applications, Opti dynamically controls runoff upstream, thereby reducing stormwater volume entering the combined system.

**Water Quality Improvement:** Opti enhances water quality by prolonging stormwater detention times and prioritizing nature-based solutions, allowing pollutants to settle before reaching receiving waters. This fulfills MS4 permit requirements and contributes to environmental sustainability.

**Water Conservation:** Opti's adaptive controls optimize stormwater removal and storage for reuse, maximizing land utility for diverse and sustainable purposes while meeting regulatory requirements and enhancing property efficiency.

**Maximize Asset Performance:** Opti enables proactive issue detection in stormwater management assets, reducing maintenance costs and improving operational efficiency. Continuous monitoring ensures compliance, demonstrating dedication to environmental stewardship.

## About OptiRTC

Opti, an [Aliaxis](#) company, is the creator and leading provider of Continuous Monitoring and Adaptive Control (CMAC) stormwater management 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. Opti's cloud-based platform optimizes stormwater asset performance while providing ongoing, long-term insights to inform operations and maintenance, compliance and future investment priorities, providing economic savings, resiliency and peace of mind. With our commitment to innovation, we are driving a resilient and brighter future for all. For more information, visit [www.optirtc.com](http://www.optirtc.com).