

Stormwater Management



COUNCIL OF THE
GREAT LAKES REGION
Solving for Sustainability

Stormwater management is a strategic priority for mitigating flood risk, protecting water quality, and ensuring regulatory compliance. By investing in innovative solutions and green infrastructure that treat stormwater as a resource, companies can reduce operational disruptions, protect community health, and demonstrate clear environmental leadership.

Stormwater as a Shared Resource

Stormwater management is becoming a cornerstone of corporate water stewardship in the Great Lakes region, where aging infrastructure, intensifying rainfall, and growing impervious surfaces are increasing pressure on local water systems. For companies operating across the region, this means moving beyond site-level efficiency and toward integrated, forward-looking strategies that reduce runoff, improve water quality, and strengthen ecosystem resilience.

Traditionally viewed as a compliance obligation, stormwater management is now being recognized as a strategic asset that can drive resilience and value creation. Outdated sewer systems and climate-driven rainfall extremes pose significant physical, regulatory, and reputational risks to businesses in the Great Lakes Region. Treating stormwater as a shared resource and responsibility enables companies to:

- ❖ Reduce operational and regulatory risks by mitigating flooding, combined sewer overflows (CSOs), and water quality violations
- ❖ Lower long-term costs through green infrastructure and integrated water efficiency approaches.
- ❖ Build trust with communities, regulators, and investors by demonstrating measurable contributions to regional water health.

By embedding stormwater management into broader sustainability and risk management frameworks, companies can align environmental responsibility with business performance.

Green Infrastructure Actions

Stormwater management falls under green or gray infrastructure activities designed to capture, store, and treat runoff to improve water quality and mitigate flood or drought risks.



Green Infrastructure

- Rain gardens and bioswales: Vegetated areas that capture and infiltrate stormwater.
- Bioretention basins: Engineered depressions with soil and plants to filter runoff.
- Constructed wetlands: Treat stormwater and improve water quality.
- Permeable surfaces: Pavements that allow water infiltration.

Gray Infrastructure

- Stormwater detention or retention ponds: Capture runoff for gradual release or infiltration.
- Drainage water management systems: Control flow and reduce pollutant loads.
- Blind inlets and check dams: Slow water movement and promote infiltration.

Improve Stormwater Management



Modernize Site and System Readiness



Aging municipal infrastructure and Combined Sewer Overflow risks expose companies to operational disruption, compliance challenges, and reputational pressure.

- Businesses should assess how local system vulnerabilities intersect with their sites, invest in onsite stormwater controls, and integrate climate-informed design standards into new builds and retrofits.

Invest in High-Performing Green Infrastructure



Green roofs, bioswales, permeable pavements, and rain gardens reduce pressure on municipal systems and improve site resilience.

- Businesses can justify these investments through long-term savings in maintenance, reduced flooding, lower treatment costs, and stronger ESG performance.

Collaborate Across Watersheds



Stormwater management works best when aligned with local watershed needs.

- Companies should partner with utilities, local governments, Indigenous nations, NGOs, and community groups to leverage shared funding, streamline permitting, and support basin-wide improvements.

Measure What Matters



Quantifying outcomes builds internal and external confidence.

- Companies can use tools such as the Runoff Reduction Method or Volumetric Water Benefit Accounting (VWBA) to measure runoff avoided, pollutants captured, and co-benefits delivered, and report them transparently through CDP, AWS, and other ESG disclosures frameworks.



Build Climate-Resilient Operations



Changing rainfall patterns demand adaptive, forward-looking planning.

- Companies should integrate climate scenario modeling, redundancy, and flexible management into site strategies to maintain operational continuity and reduce long-term risk.

