

# Water Stewardship Best Practices



COUNCIL OF THE  
GREAT LAKES REGION  
*Solving for Sustainability*

Implementing water stewardship best practices is critical to reducing operational and reputational risks. By proactively managing water resources through established standards, companies can safeguard supply chains, ensure regulatory compliance, and avoid costly disruptions. Acting now on best practices strengthens resilience and positions your organization for sustainable growth.

## Emerging Best Practices

Modern water stewardship is shifting from a narrow focus on site-level efficiency to a holistic approach that extends beyond the four walls of operations. Leading companies are embracing strategies that ensure water use is socially and culturally equitable, environmentally sustainable, and economically beneficial, achieved through inclusive, catchment-based action.

For organizations operating in the Great Lakes region, leadership means:

- ❖ Implementing circular water management practices—reduce, reuse, and recycle.
- ❖ Setting context-based water targets aligned with local water challenges.
- ❖ Investing in partnerships and collective action to strengthen watershed governance and resilience.

By adopting these practices, companies can drive meaningful impact, mitigate risk, and position themselves as champions of sustainable water management.

## Scale of Landscape Action

### Corporate actions

Establish the vision, targets, and investment signals that allow water stewardship to be prioritized across the business.

- Executive Advocacy: Leadership commitment to water goals.
- Water Quality Targets: Focus on withdrawal intensity and quality metrics.
- R&D Investment: Support innovation in water treatment technologies.
- Advanced Measures: Use verification tools like WAVE to prioritize sites and actions.

### Engagement actions

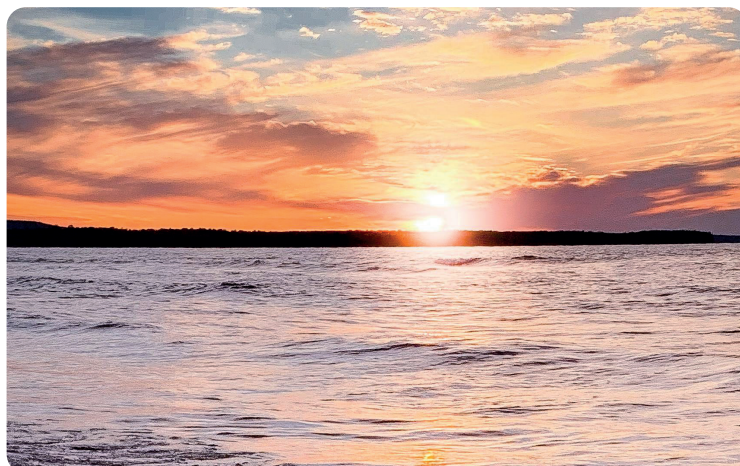
Extend water stewardship into the value chain and watershed, scaling impact.

- Public-Private Partnerships: Shared data and coordinated strategies.
- Supply Chain Engagement: Track water use across operations.
- Stakeholder Canvassing: Community input for project planning.
- Local Community Engagement: Transparency and trust-building.

### Site-level actions

Translate strategy into operational performance.

- Baseline Water Use: Metering and monitoring for informed decisions.
- "Turn It Off" Programs: Automated systems to reduce waste.
- Engineering Team Engagement: Operational improvements from the ground up.
- Digital Technologies: Real-time monitoring and analytics.



## Understanding of the Great Lakes Region

- 1. Water Use & Availability** - Water use by major sectors (thermoelectric, public supply, and industrial/agricultural) faces high uncertainty, with consumptive use projections potentially increasing up to 235% under high-growth and drier climate scenarios.
- 2. Water Quality Challenges** - Water quality in the Great Lakes remains "Fair" and "Unchanging" due to significant pollutant loads.
- 3. Governance & Policy Frameworks** - The region utilizes a robust, hierarchical framework of international agreements (like the GLWQA), federal initiatives (like the GLRI in the US and the GLPI in Canada), and regional compacts to manage water, yet effectiveness is challenged by inconsistent enforcement and policy gaps.
- 4. Corporate Water Stewardship** - Corporate water stewardship requires companies to move beyond internal efficiency to adopt culturally equitable, environmentally sustainable, and economically beneficial water use through site and catchment-based actions.
- 5. Emerging Contaminants** - Emerging Contaminants of Mutual Concern, including PFAS, microplastics, pharmaceuticals, and persistent, bioaccumulative, and toxic chemicals pose a growing health and environmental threat as they enter the water systems via wastewater effluent, agricultural runoff, and industrial discharge.
- 6. Data Tools & Gaps** - Despite the existence of robust tools like the Great Lakes Observing System (GLOS) and the USGS Water Resource Mission Area data, the region faces significant data gaps, particularly the lack of groundwater quantity/quality information, insufficient tributary water quality data (particularly in the US), and irregular monitoring intervals that inhibit effective hydrological and climate-impact modeling.

## Why Act Now?

- **Risk Mitigation:** Reduce exposure to regulatory, reputational, and operational risks in a region where consumptive use could significantly increase under high-growth, drier climate scenarios.
- **Resilience Building:** Prepare for climate-driven extremes and infrastructure vulnerabilities that threaten water security.
- **Brand Leadership:** Position your company as a champion of sustainable water management in one of the world's most critical freshwater regions.

## Call to Action for Businesses in the Great Lakes

The Great Lakes region faces mounting challenges: aging infrastructure, climate-driven variability, emerging contaminants like PFAS and microplastics, and persistent water quality issues. Leadership today means moving to transformative, catchment-based action.

Here's how your organization can lead:

- **Adopt Circular Water Management:** Reduce, reuse, and recycle water across operations to minimize withdrawals and protect freshwater resources.
- **Set Context-Based Targets:** Align water goals with local watershed realities—addressing both quantity and quality challenges.
- **Invest in Collective Action:** Partner with communities, NGOs, and industry peers to strengthen governance and build climate resilience.
- **Advance Innovation:** Support R&D for next-generation water treatment technologies and leverage digital tools for real-time monitoring.
- **Engage Beyond the Fence Line:** Extend stewardship into your supply chain and local communities to scale impact and build trust.

Commit to emerging best practices and become part of a collaborative network driving measurable impact for the Great Lakes. Your leadership today ensures water security, economic vitality, and ecological health for generations to come.

