

# Value Chain Assessment



COUNCIL OF THE GREAT LAKES REGION  
Solving for Sustainability

Building transparency across the value chain is essential for earning stakeholder trust and meeting rising disclosure expectations. By implementing clear reporting and traceability practices, companies can demonstrate accountability, strengthen partnerships, and reduce reputational risk. Acting now positions your organization as a trusted leader in sustainable and ethical business.

## Value Chain of Water in Business Operations

Water stewardship in the Great Lakes demands more than operational efficiency; it requires a clear understanding of water-related impacts and dependencies across the entire value chain. From raw material extraction to supplier operations and product use, each step interacts differently with water quantity, quality, and accessibility.

To manage these interdependencies effectively, organizations must conduct materiality assessments that identify where water issues are most significant and prioritize actions that strengthen long-term basin resilience.

Globally recognized stewardship frameworks, such as the Alliance for Water Stewardship (AWS) Standard and the Science Based Targets for Nature (SBTN), offer the structure and guidance needed to assess risks and dependencies and translate them into credible water strategies.

## Finding Materiality of Water

Materiality refers to topics that meaningfully influence an organization's ability to create, preserve, or erode value. In water stewardship, materiality is determined by evaluating:

- ❖ **Dependencies:** How reliant a section of the value chain is on water quantity and quality.
- ❖ **Impacts:** How much a sector contributes to shared water challenges, such as pollution or depletion.



## Key Business Priorities for Water in the Value Chain

### 1. Map the Full Value Chain



Begin by identifying all stages that interact with water, from raw material extraction to suppliers, transport, manufacturing, distribution, product use, and end-of-life. A complete map ensures that no significant water dependencies or impacts are overlooked.

### 2. Identify Water Dependencies



Determine where each stage relies on water quantity, quality, infrastructure, or ecosystem services. Dependencies help reveal where business continuity may be at risk due to basin health or supply reliability.

### 3. Identify Water Impacts



Begin by identifying all stages that interact with water, from raw material extraction to suppliers, transport, manufacturing, distribution, product use, and end-of-life. A complete map ensures that no significant water dependencies or impacts are overlooked.

#### 4. Assess Risk Holistically



Effective stewardship requires evaluating risks at three levels:

- Operational: withdrawals, discharges, quality, compliance, and system reliability.
- Basin: local stress, variability, water quality, and governance conditions.
- Value Chain: upstream supplier hotspots and downstream product-related impacts.

A comprehensive view ensures that actions address the real drivers of water risk and contribute to basin-wide improvement.

#### 5. Conduct a Materiality Assessment



Use science-based materiality methods to determine which value-chain stages are most significant to business resilience and basin health. Materiality helps companies set context-based targets, direct resources effectively, and prioritize stakeholders that matter most.

#### 6. Align with Global Stewardship Frameworks



Frameworks ensure credibility, consistency, and basin-aligned action. Integrate findings with recognized frameworks such as:

- WAVE Verified for risk and dependencies alignment.
- SBTN for science-based freshwater targets.
- TNFD integrates water dependencies, impacts, and basin risks into decisionmaking.
- AWS Standard for site-level and basin-level stewardship.
- NPWI for improving availability, quality, and accessibility.
- CEO Water Mandate corporate-level guidance for policy commitments, supply-chain action, disclosure, and collective action.
- CDP Water Security supports transparency, identifying financially material water issues.

#### 7. Develop Action Pathways



Translate findings into targeted interventions, supplier engagement, procurement updates, site-level improvements, basin partnerships, and long-term investment plans.

## Driving Water Stewardship Across the Value Chain

### ❖ Map the Full Value Chain

Gain visibility into all water touchpoints from raw materials to end-of-life to uncover hidden risks and opportunities.

### ❖ Identify Critical Water Dependencies

Understand where operations and suppliers rely on water resources to protect business continuity and resilience.

### ❖ Assess Water Impacts

Quantify how your activities contribute to withdrawals, pollution, and ecosystem stress to mitigate reputational and regulatory risks.

### ❖ Evaluate Risk Holistically

Address water risk at three levels:

- Operational (compliance, reliability),
- Basin (local stress, governance),
- Value Chain (supplier and downstream exposure).

### ❖ Prioritize Through Materiality

Apply science-based methods to focus resources on the most significant risks and opportunities for both business and basin health.

### ❖ Align with Global Frameworks

Ensure credibility and investor confidence by integrating frameworks, such as AWS, SBTN, TNFD, NPWI, CEO Water Mandate, and CDP Water Security into strategy.

### ❖ Activate Action Pathways

Move from insight to impact: supplier engagement, procurement updates, site-level improvements, basin partnerships, and long-term investments. business and basin health.

