Our Approach to Water Stewardship

Which Teck sites does this document apply to?
All Teck sites and projects. This does not include operations in which Teck has/had an ownership interest but is not the principal operator.

Governance and Accountability

Background
In the mining industry, water stewardship is a critical issue because processing mined materials typically uses large volumes of water. This can therefore potentially affect water quality, which in turn can affect other water users. Mine operations can demonstrate leadership in water stewardship by using water efficiently, maintaining water quality and collaboratively managing a shared water resource by engaging communities.

Communities with whom we share watersheds care about access to sufficient quantities of clean water for physical and spiritual health, quality of life, economic well-being and ecosystem health. We share these values, and our employees live in the same communities. Without adequate access to water, our operations could not function. Responsible water management is fundamental to maintaining the trust of our communities of interest. Teck recognizes that access to water is a human right, and that water is essential to stakeholders in the watersheds where we operate.

We work to manage the quantities of water we use and the quality of water as it leaves our operations and legacy properties. Water management is also a strategic priority across every business unit in terms of meeting regulatory requirements and obtaining or maintaining permits. Water-related risks can impact both our ability to operate and our communities of interest, which is why stakeholder engagement on water management topics is essential.

Accountability and Resourcing

The Board of Directors, through its Safety and Sustainability Committee, broadly oversees health, safety, environment and community policies, systems, performance and auditing, including implementation of our Health, Safety, Environment and Community (HSEC) Management Standards.

The following senior leaders are involved in implementing water management:

• The Senior Vice President, Sustainability and External Affairs reports directly to our CEO and is responsible for sustainability, health and safety, environment, community, and Indigenous affairs, including water management
• The Vice President, Environment, oversees compliance with environmental standards for projects, operations and our legacy properties, and regularly reviews environmental performance risks and strategic issues, including water

Compensation

Teck’s bonus compensation structure is based on objectives outlined through three components: corporate, business unit and personal. Across the three components, objectives related to sustainability performance (HSEC topics) affect approximately 10%–20% of the bonus as a whole. The business unit component for operations has three metrics: production (33.3%), cost (33.3%) and sustainability (33.3%) of the specific operation.
Particular members of Teck’s management team are also incentivized to manage sustainability-related issues, which can include water stewardship, primarily through the personal component of the bonus plan. In addition, all members of our senior management team have at least 5% of their annual total target bonus based on sustainability performance.

**Policies and Standards**

In 2017, we released a new Water Policy and established a Water Governance framework for improving water stewardship across Teck. Our Water Policy outlines our commitment to apply consistently strong and transparent water governance, to manage water at operations efficiently and effectively, and to collaborate to achieve responsible and sustainable water use. It defines a consistent company-wide approach to how we manage the risks and realize the opportunities related to water.

**Memberships, Partnerships and External Commitments**

We work with various local, national and international organizations and programs to support improvements in water stewardship across the industry:

- **International Council on Mining and Metals (ICMM):** A global industry association that represents leading international mining and metals companies who are required to implement the ICMM 10 Principles, including Principle 6 on environmental performance
- **COSIA:** An alliance of oil sands producers focused on accelerating improvement in environmental performance in Canada’s oil sands through collaborative action and innovation
- **UN Global Compact CEO Water Mandate:** A commitment to adopt and implement the mandate’s strategic framework and its six core elements for water management
- **International Organization for Standardization (ISO) 14000:** Ten of our 12 sites are certified to ISO 14001 for their environmental management systems

### Approach to Managing Water

#### Three-Pillar Approach

We are working to be a leader in water stewardship by moving beyond compliance and towards collaborative water management practices that focus on sustaining and restoring water resources. Our approach to water management is based on three key elements: protecting water quality, improving water use efficiency and engaging collaboratively within our watersheds.

**Protecting Water Quality**

A key component to how we manage water quality at each operation is to ensure compliance with applicable standards, regulations and permits. The other key component, beyond compliance, is undertaking aquatic life and ecosystem assessments that use scientifically rigorous evaluations and projections for ecosystem health.

Our practices include frequent monitoring of existing and reference conditions, and planning for future conditions, so that we can manage the risks and realize the opportunities related to water. As part of our practices, we report on water quality measurements and trends to relevant authorities, and adaptively manage our activities.

Each region has specific water quality considerations. For example, we actively manage water quality in the Elk Valley region of British Columbia, where Teck operates five steelmaking coal operations, and we are implementing a groundwater remediation plan at our Trail Operations in British Columbia.

**Improving Water Use Efficiency**

We continuously work on optimizing our water use and thereby minimizing our impact. We focus on reducing our fresh water intake and maximizing the reuse of water to reduce impacts on water availability at our operations in water-scarce regions.

Each operation maintains a Water Management Plan (WMP), which is a central aspect of our water management strategy. Annually, we update WMPs in conjunction with the update of each operation’s water balance. The plans describe how the operation fits into the local watershed and its associated regulatory context. WMPs also describe how we manage water now and in the future, in order to:

- Contribute to meeting our water goals
- Provide direction and strategy to address water management risks and challenges
- Establish how water management infrastructure performance will be monitored and reviewed
Site-wide water balances at each operation provide an understanding of water inputs, consumption, and reuse/recycle and discharge volumes at each operation. We use water balances as a decision-making tool to assess water management alternatives, to evaluate an operation’s water management performance and to provide water data for our company-wide reporting.

Groundwater
We monitor and model local groundwater sources to determine rates of drawdown and ensure long-term protection of these water sources. Forecasts of future availability and use are developed to guide decision-making and to ensure the aquifers are protected for the benefit of local water users in the future.

Engaging Collaboratively Within our Watersheds
Access to clean and sufficient water by users in our areas of influence is important to us and to our stakeholders. When implementing our water management practices, we consider and engage with other water users in the watersheds to promote water stewardship at all of our operations. As part of this process, we are incorporating the approach defined in ICMM’s guide to catchment-based water management to identify, evaluate and respond to water-related risks and opportunities in our watersheds.

One example of a watershed-based approach is in the Elk Valley, where five of our steelmaking coal operations are located, and where we actively engage stakeholders in the implementation of the Elk Valley Water Quality Plan.

Management in Water-Stressed Regions
Our Carmen de Andacollo and Quebrada Blanca operations, which are located in regions where water is scarce, track and monitor their water use. Viable water use and supply options are considered when planning major projects and assessing potential expansions or extensions. A broad range of scenarios is developed and assessed, including, for example, the use of desalinated water at our Quebrada Blanca Phase 2 project.

At Carmen de Andacollo Operations, Teck is a member of the Pan de Azúcar Mesa Hidrica, a regional group of stakeholders for the management of common water issues, and was central to the creation of the Culcatan Mesa Hidrica, which are multi-stakeholder forums to manage water in water-stressed areas.

Our Targets and Commitments
In 2018, we introduced two new water targets as part of our commitment towards water stewardship:

1. Reduce fresh water use at our Chilean operations by 15% by 2020
2. Zero significant water-related incidents each year

Our sustainability strategy also includes further water goals as follows.

By 2020, we will:
• Contribute to watershed management in water-stressed regions through water use efficiency projects, use of alternative water sources, water quality improvement measures, and capacity building
• Increase our understanding of groundwater and proactively assess groundwater risks
• Collaborate in developing innovative water technology and practice

By 2030, we will:
• Work within an informed understanding of ecological limits, regional issues and demands on water resources to address:
  1. Water quality: Keep clean water clean, minimize water quality deterioration and take care of affected water resources
  1. Water quantity: Minimize water use per unit of production and transition to alternative water sources
  1. Water stewardship: Contribute to water use planning in our areas of influence
Water-Related Audits

Table 1: Water-Related Audits

<table>
<thead>
<tr>
<th>Type</th>
<th>Organization</th>
<th>Items Audited</th>
</tr>
</thead>
<tbody>
<tr>
<td>External</td>
<td>International Council on Mining and Metals:</td>
<td>• New water use</td>
</tr>
<tr>
<td></td>
<td>Sustainability Report assurance</td>
<td>• Principle 6: Pursue continual improvement in environmental performance issues, such as water stewardship, energy use and climate change</td>
</tr>
<tr>
<td>External</td>
<td>ISO 14001 External Audit</td>
<td>• Components of the environmental management system at each site</td>
</tr>
<tr>
<td>Internal</td>
<td>Risk-based Health, Safety and Environment audits</td>
<td>• Adherence to regulatory and permit requirements</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Effectiveness of controls based on risk profile</td>
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</tbody>
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Following each of these audits, applicable management teams use the results to inform future actions and Teck’s five-year planning process.

We report on our performance against these indicators and our progress towards our water goals on an annual basis in our sustainability report.