

InBrief

Water stewardship framework

Environment and Climate Change
April 2014



Goal

The mining and metals industry delivers effective water stewardship enabling shared benefits and security of supply.

Water stewardship definition

“The use of water that is socially equitable, environmentally sustainable and economically beneficial, achieved through a stakeholder-inclusive process that involves site and catchment-based actions.”

The Alliance for Water Stewardship, March 2013

Water is a shared and finite resource, with high social, cultural, environmental and economic value. It is a basic human right and fundamental ecosystem requirement. Water is also an essential component of all mining and metals operations. However, global water resources are under increasing pressure and it is widely recognized that a holistic approach to water management is required to achieve resource sustainability and secure future access.

ICMM’s water stewardship framework outlines a standardized approach to water stewardship for the mining and metals industry, recognizing that water connects an operation to the surrounding landscape and communities. Underpinning each strategic imperative is a set of supporting activities that companies can undertake. The extent to which they are required and implemented is dependent on the level of risk and opportunity at the local level.

ICMM acknowledges that each member company is at a different stage of the water stewardship journey. This framework provides a common direction, a consistent point of reference and a shared language for member companies to continue their water stewardship journey together.

Strategic imperatives

Be transparent and accountable

Publicly report material water risks, management activities and performance.

Supporting activities

- Set a clear company direction for water, including standards, goals and commitments.
- Incorporate external and catchment/operational-level factors into the company’s approach.
- Publicly report material water stewardship risks and performance at a corporate level, using meaningful and recognized water metrics.
- Formalize water related accountabilities and responsibilities throughout the business, from corporate to operational levels.
- Promote strong external water governance, and predictable and consistent regulation.
- Identify, manage and regularly review water-related risks across the entire business.

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Engage pro-actively and inclusively

Engage stakeholders in an open and transparent manner to understand their priorities, share plans and collaborate on solutions.

- Identify and engage people and groups that may influence, be interested in or impacted by operations.
- Understand community access requirements and concerns and strive to create shared benefits.
- Collaborate or partner with others to mitigate shared risks and address shared impacts.
- Engage the supply chain and other users to explore and understand shared and sequential exposure to water risks.
- Ensure understanding within the workforce of water issues and actions.
- Explore using third party water initiatives and tools to enhance water stewardship.

Adopt a catchment-based approach

Understand the social, cultural, economic and environmental value of water at the catchment scale to identify material water stewardship risks and provide context for corporate and operational water management.

- Identify and understand catchment governance processes and requirements.
- Understand the baseline environmental water flow and quality conditions, and those required for sustainable and healthy ecosystem functioning.
- Identify and understand high value water assets so measures can be implemented for their safeguard.
- Identify existing and future water users and trends.
- Identify and assess the implications of the current and long-term cumulative impacts of operations and other users within the catchment and respond accordingly.
- Use catchment level understanding to develop site level water management plans to manage water stewardship risks and safeguard recognized high value water assets.

Effective water resource management

Manage operational water (quantity and quality) inputs, use and outputs to maximize resource sustainability, operational flexibility and economic benefit.

- Maintain a site level management plan informed by catchment level stewardship priorities.
- Consider water management requirements, risks and costs in the planning cycle, including improved consideration of water management in early project planning phases (exploration to feasibility) and provision for water management after closure.
- Promote and match, wherever technically and economically feasible, appropriate water quality sources with the operational activity.
- Promote operational water efficiency – minimize, reuse, recycle.
- Maintain a long-term water balance and evaluate usage across the project life cycle.
- Ensure that the quantity and quality of water discharges are controlled to minimize impact to the receiving environment and water assets.
- Ensure adequate flood planning and protection.
- Invest in research, technology and infrastructure (including natural) to manage water quality, increase efficiency and create opportunities for sequential and shared use.

The International Council on Mining and Metals (ICMM) was established in 2001 to improve sustainable development performance in the mining and metals industry. Today, it brings together many of the world's largest mining and metals companies as well as national and regional mining associations and global commodity associations. Our vision is one of leading companies working together and with others to strengthen the contribution of mining, minerals and metals to sustainable development.

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ICMM would like to thank all of the individuals and organizations that contributed to this InBrief. In particular, ICMM appreciates the co-operation and support of the ICMM water working group, Stuart Orr (WWF) and Veronica Nyhan Jones (IFC).

Cover photograph: Anglo American.

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Published by International Council on Mining and Metals (ICMM), London, UK.

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