

Water Accounting Framework for the Minerals Industry - Input-Output Model

Background

Industry.

The adoption of the Input-Output Model represents the first phase in the implementation of the Minerals Industry's Water Accounting Framework. The adoption of the Input-Output Model included in this document will allow companies to align metrics and report on water use and discharge in a consistent way.

Key Requirements for First Phase Adoption of the Input-Output Model

As part of this first phase adoption, alignment with the following components of the Input-Output Model is required:

- * Definitions and Source/Destination Categories
- * Metrics/units for flow volumes
- * Reporting Structure.

MCA member company's are required to use the water accounting framework for suitable company aggregate reporting (e.g. GRI, for which the template provides guidance).

Optional Components

Local Use of Framework for water Reporting - Although not mandatory, MCA member companies are encouraged to use this framework at the site level to encourage local water reporting and communication of water use.

Water Quality Categories - While water quality categorisation is required, alignment with the water quality categories developed for the framework does not form part of this first phase adoption. While the water quality categories included have are available for use by companies, companies may wish to define their own criteria.

Use of this Template

This template is provided as a guide to assist implementation of the Input-Output Model for the water accounting framework and, if required, to satisfy the MCA member company commitment. It is not a requirement that companies use this template and it may be modified and utilised as necessary. Where individual worksheets are protected, these can be easily unlocked as there is no password.

Input-Output Model Overview

This Water Accounting Framework Input-Output model is based on the consistent representation of these water interactions, as shown in the figure below:

- (1) Inputs represent the receipt of water to the operational facility;
- (2) Outputs represent the removal of water from the operational facility; and
- (3) Diversion represents water that is moved around or through the operational facility.

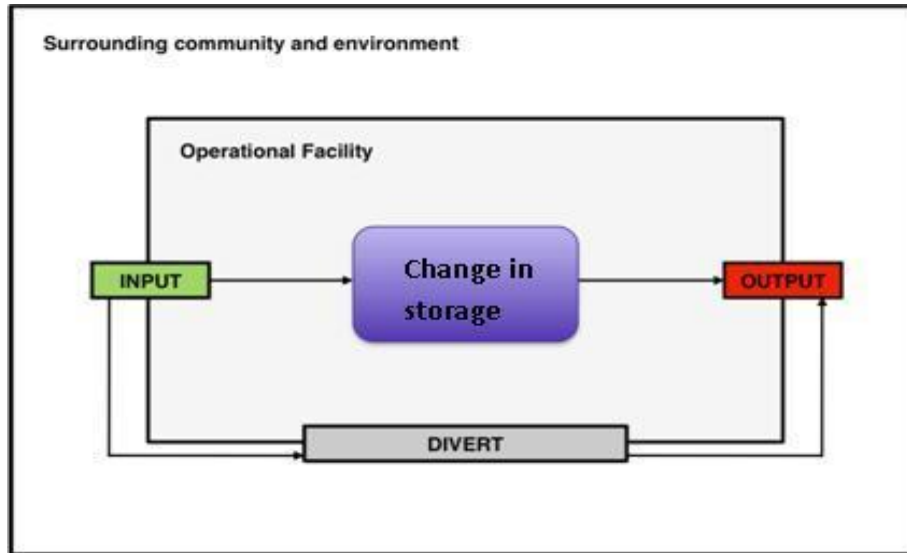


Figure 1 – Input-Output Model

The **input-output** model represents the intersection of the facility with the surrounding environment and community. It lists all inputs by source (surface water, groundwater, third-party water and sea water) and all outputs by destination (to surface water, groundwater, a third-party, the sea; to evaporation, seepage, entrainment or other).

The objective of the Input-Output model is to provide a consistent way of communicating the water information that most mining companies and operational facilities already collect. The communication of perfect, detailed water balances is not the overarching goal.

Input-Output Model Reporting Requirements

Input-Output Model Reporting requirements include:

- 1) facility as well as any conditions that have an impact on the management of those water resources;
- 2) Water Account Reporting, driven by this Input-Output Reporting Template; and
- 3) Accuracy Statement - shows the proportions of flows (by volume and / or number), which are measured, estimated or simulated. The level of confidence associated with each flow (low, medium or high) should be provided in the accuracy statement.

Implementation Guidance

Guidance on full implementation details for the Water Accounting Framework, including the Input-Output model can

www.wateraccounting.net.au.