

WATER ACCOUNTING

**A tool for efficient utilization of
Water resources**

Dr. S. K. Gupta
M.Com, FCS, FCMA, Ph.D

Water is fundamental to life.

As competition for water increases, so too does the need to fully and consistently account for how this precious resource is shared between the economy , people and the environment.

**Water is our most precious resource.
water is the sine qua non for the
healthy functioning of almost every
aspect of the economy.**

Water is scarce and becoming scarcer.

What is water accounting

Water accounting is a systematic process of identifying, recognizing, quantifying, reporting and assuring information about water and the rights, other claims or obligations concerning water.

OBJECTIVES OF WATER ACCOUNTING

To ensure that adequate measurement, monitoring and reporting systems are in place , support public and investor confidence in the amount of water being traded, extracted for consumptive use, and recovered and managed for environmental and other public benefit outcomes

Complexities in Water as a resource and inherent challenges in water Accounting

- Measurement complexities
- Ambiguous and confusing
- water is not a discrete resource.
- Water Accounting is multidisciplinary
- Multiple Stakeholders

Benefits from Water Accounting

- Reduced water losses / leakages
- Enhance confidence in water related investment decisions
- Opportunity to demonstrate stewardship of a public good
- Improved financial performance
- Efficient use of existing supplies of water
- Improved public image/ branding
- Inform users how water resources are sourced, managed, shared and used

Water Accounting Vs Traditional Financial Accounting

- Users include multiple stakeholders for making and evaluating decisions about water (as opposed to the financial accounting focus on providing information to investors for economic decision-making).
- The primary unit of account is water volume rather than monetary currency

- Water report entities will often be geographic regions or water systems rather than organizations.
- There is likely to be a distinction between the water report entity and the report preparer
- Comparative data for several years may be needed to interpret results.

It concerns organizations that are significant users of water resources.

There are many stakeholders and there are many ways in which those stakeholders will benefit from the accessibility of information on sourcing and usage of water resources.

FRAMEWORK OF A GENERAL PURPOSE WATER ACCOUNTING REPORT

A general purpose water accounting report shall provide information useful to users of that report for making and evaluating decisions about the allocation of resources.

The elements of a general purpose water accounting report are:

- a) water assets
- b) water liabilities
- c) net water assets
- d) changes in water assets
- e) changes in water liabilities

A general purpose water accounting report comprises:

- a) a Contextual Statement
- b) an Accountability Statement
- c) a Statement of Water Assets and Water Liabilities
- d) a Statement of Changes in Water Assets and Water Liabilities
- e) a Statement of Water Flows
- f) note disclosures

Structure and content of general purpose water accounting reports

Contextual Statement

The Contextual Statement shall provide information about the water assets and water liabilities of the water report entity, including any conditions, or variations in conditions, that have an impact on the management of those water assets and water liabilities.

- details of the geographical location of the water and actual storage volumes

- The climatic conditions experienced before and during the reporting period
- Externally-imposed requirements related to managing the water assets and water liabilities of the water report entity, such as those contained in water resource management instruments
- Water sharing plans

- Policies and practices for managing water assets and water liabilities that have been adopted by the management of the water report entity
- water sharing and extraction limitations
- environmental water stewardship
- water planning and strategic initiatives

Accountability Statement

The Accountability Statement shall provide information that assists users of a general purpose water accounting report to assess whether the report has been prepared in accordance with certain laid down principles

Statement of Water Assets and Water Liabilities

The Statement of Water Assets and Water Liabilities shall provide information that assists users of a general purpose water accounting report to understand the nature and volumes of the water assets and water liabilities of a water report entity.

The Statement of Water Assets and Water Liabilities shall contain line items that present the following volumes as at the reporting date:

- a) water assets
- b) water liabilities
- c) net water assets

An item that meets the definition of a water asset shall be recognised in the Statement of Water Assets and Water Liabilities only when:

a) it is probable that future benefits associated with the item will be derived by the water report entity or stakeholders of the water report entity; and

b) the item's volume can be quantified with representational faithfulness

An item that meets the definition of a water liability shall be recognised in the Statement of Water Assets and Water Liabilities only when:

a) it is probable that the present obligation will result in a decrease in the water report entity's water assets or an increase in another water liability when the obligation is discharged

b) the item's volume can be quantified with representational faithfulness

Statement of Changes in Water Assets and Water Liabilities

The Statement of Changes in Water Assets and Water Liabilities shall contain information that assists users of a general purpose water accounting report to understand changes in the volumes and nature of the water report entity's net water assets during the reporting period.

The Statement of Changes in Water Assets and Water Liabilities shall contain line items that present the following volumes for the reporting period

- a) water asset increases
- b) water asset decreases
- c) water liability increases
- d) water liability decreases
- e) change in net water assets

Recognition criteria

An item that meets the definition of a change in a water asset or a change in a water liability shall be recognised in the Statement of Changes in Water Assets and Water Liabilities only when:

a) it is probable that there has been a change in a water asset or a change in a water liability;

b) the water asset or water liability that has increased or decreased is recognised in the Statement of Water Assets and Water Liabilities

c) the volume of change in the water asset or water liability can be quantified with representational faithfulness

Statement of Water Flows

The Statement of Water Flows shall contain information that assists users of a general purpose water accounting report to understand the nature and volumes of water flows experienced by the water report entity during the reporting period.

The Statement of Water Flows shall include line items that present the following volumes for the reporting period:

a) water inflows;

b) water outflows;

c) change in water storage;

d) opening water storage; and

e) closing water storage.

Note disclosures

The following information shall be disclosed in the notes:

a) a statement that, except for water flow information, the general purpose water accounting report has been prepared using the accrual basis of water accounting;

b) a summary of the significant water accounting policies used in the preparation of the general purpose water accounting report

The following information shall be disclosed in the summary of significant water accounting policies:

a) the quantification attribute and the unit of account used in the water accounting statements; and

b) details of other water accounting policies used in the preparation and presentation of the general purpose water accounting report that are relevant to an understanding of the water accounting statements.

Information shall be disclosed in the notes that assists users of a general purpose water accounting report to understand the future prospects of the water report entity.

a) total water assets

b) water not available to be accessed and taken or delivered within 12 months of the reporting date

c) future water commitments expected to be settled within 12 months of the reporting date

c) nature and volume of water rights, water allocations and water restrictions that relate to water assets and water liabilities of the water report entity

d) nature and volumes of water market activity that occurred during the reporting period that relates to rights or claims to water of the water report entity.

how water assets and water liabilities of the water report entity have been used during the reporting period in the pursuit of each of the following:

- a) environmental benefit
- b) social and cultural benefit
- c) economic benefit

A list of all water entities comprising the group water report entity shall be disclosed in the notes to a group water accounting report.

Water Accounting
presents an emerging
new professional
opportunity