



Definition of Elements of General Purpose Water Accounting Reports

Statement of Water Accounting Concept SWAC 4

CITATION

1. This Statement may be cited as Statement of Water Accounting Concepts 4 Definition of Elements of General Purpose Water Accounting Reports (SWAC 4).

APPLICATION

2. The concepts in this Water Accounting Conceptual Framework (WACF) underpin general purpose water reporting. Unless regulation requires the adoption of the WACF, the concepts are not mandatory requirements for the preparation of general purpose water accounting reports (GPWAR).
3. The WACF applies to GPWAR issued after 11 May 2009.

INTRODUCTION

4. The purpose of this Statement is to define the elements of GPWAR.
5. This Statement defines the elements of GPWAR, consistent with the objective of GPWAR as set out in SWAC 2.

WATER ACCOUNTING CONCEPTS

6. The following concepts shall be interpreted in the context of all paragraphs included in this Statement.
7. Definitions, as outlined in the WACF Preface, shall be read as forming part of the accounting concepts set out in this Statement.

Elements of General Purpose Water Accounting Reports

8. **The elements of General Purpose Water Accounting Reports are:**
 - a) **Water assets**
 - b) **Water liabilities**
 - c) **Net water assets**
 - d) **Changes in water assets**
 - e) **Changes in water liabilities**

Water Assets

9. **A water asset is water, or the rights or other claims to water, which the water reporting entity either holds, or for which the water reporting entity has management responsibilities, and from which an individual or organisation that is a water reporting entity, or a group of stakeholders of a physical water entity, derives future benefits.**

Water Liabilities

10. **A water liability is a present obligation of the water reporting entity, the discharge of which is expected to result in a decrease in the water reporting entity's water assets or an increase in another water liability.**

Net Water Assets

11. **Net water assets are the excess of the water assets of the water reporting entity after deducting all its water liabilities.**

Changes in Water Assets

- 12. Changes in water assets are increases or decreases in the water reporting entity's water assets.**

Changes in Water Liabilities

- 13. Changes in water liabilities are increases or decreases in the water reporting entity's water liabilities.**
- 14. General Purpose Water Accounting Reports shall report water assets, water liabilities, net water assets, and changes in water assets and changes in water liabilities when this information meets the objective of General Purpose Water Accounting Reports.**

DISCUSSION

15. The objective of GPWAR is to provide information useful to users for making and evaluating decisions about the allocation of resources (SWAC 2). For an organisation or an individual that is a water reporting entity, this usefulness is served by comparisons with the entity's objectives, which may be economic, environmental or social. In the case of physical water entities that do not have objectives themselves, the usefulness of information reported derives from its information content relative to the objectives of the stakeholders of the physical water entity. These objectives might be economic, environmental or social.

Water Assets

Holds

16. An essential characteristic of a water asset that is reported for a water reporting entity is that the water reporting entity either holds, or has management responsibilities for it. A water asset can be held physically, virtually, legally or vicariously. These forms of holding are not mutually exclusive.
17. The following are examples of water assets that are held through storage or retention: water stored in dams or major supply tanks, water stored or retained by organisations or individuals, legal rights and entitlements to water that are stored electronically.
18. Legally holding water assets requires the water reporting entity to have legal possession of the water asset under the laws of the relevant jurisdiction. Examples of water assets that are legally possessed are legal rights and claims to water recorded on paper or electronically.
19. Many water assets, for example claims and other rights to water, are associated with legal rights including the right of legal control. In determining the existence of a water asset for reporting purposes, the right of legal control is not essential. Although the capacity of a water reporting entity to control benefits is usually the result of legal rights, an item may nonetheless satisfy the definition of an asset even when there is no legal control. This is always the case for a physical entity, which cannot enter into legal transactions and therefore cannot legally control water assets.
20. A natural lake cannot own claims and other rights to water. However if, for example, an authority holds rights to access water and divert it to that lake, for the purposes of this Statement of Water Accounting Concepts, the natural lake holds those rights vicariously.

Future Benefits

21. The future benefits embodied in a water asset may flow to the water reporting entity or to stakeholders of a physical water entity that is a water reporting entity in a number of ways. For example, a water asset may be:
 - a) used singly or in combination with other assets or water assets
 - b) exchanged for other assets or water assets
 - c) used to settle a liability or water liability
 - d) distributed to the owners of the water reporting entity or other stakeholders of the water reporting entity.

Future Benefits Related to a Water Reporting Entity

22. In the case of an individual or organisation that is a water reporting entity, future benefits derived by the water reporting entity are contributions to achieving the economic, environmental, social or other objectives of the water reporting entity.
23. Future benefits that achieve economic objectives of a water reporting entity may produce inflows of economic resources, or prevent or reduce outflows of economic resources. For example, they may be embodied in stored water that can be sold or delivered, in return for a service or levy fee, by the water reporting entity to its customers. Alternatively, they may be embodied in stored water that provides a capability to reduce cash outflows, such as when holding water lowers the costs of production relative to buying water.
24. Future benefits that achieve economic objectives of a water reporting entity may also be embodied in resources other than water itself. Examples include rights and other claims to water that can be sold by the water reporting entity or that prevents the need to install water-seeking or storage infrastructure such as wells, dams or irrigation channels.
25. Future benefits that achieve environmental objectives of a water reporting entity may produce environmental benefits, or prevent or reduce environmental degradation. For example, water stored in the dams of a park with environmental protection objectives may be released to mitigate the nature and extent of deterioration of rivers and environmental sites during drought conditions.
26. Similarly, a government or government body with an environmental protection mandate may hold rights and other claims to water for the express purpose of preventing others from using that water and preserving the amount of water *in situ* in areas of environmental degradation.
27. Future benefits that achieve social objectives of a water reporting entity may produce social benefits, or prevent loss of social benefits. For example, they may be embodied in lakes on crown land that are used for recreational or fire-fighting purposes.
28. Future benefits that achieve social objectives of a water reporting entity may also be embodied in resources other than water itself. Examples include rights and other claims to water held by a local hospital that can be used to acquire water during severe drought in order to preserve sterilisation capacity.

Future Benefits Related to a Physical Water Entity that is a Water Reporting Entity

29. Future benefits derived by a group of stakeholders of a physical water entity that is a water reporting entity are received, either directly or indirectly, by the environment, individuals and organisations and communities such as townships. The benefits can include economic, environmental and social benefits.

30. As with future benefits that achieve economic objectives of a water reporting entity, future benefits that achieve economic objectives of a water reporting entity's stakeholders may produce inflows of economic resources, or prevent or reduce outflows of economic resources. For example, they may be embodied in water in physical water entities, such as rivers, lakes, or aquifers that may be diverted to irrigate farms that derive economic benefits from sales of produce whose growth is irrigation-dependent. Alternatively, they may be embodied in water in physical water entities, such as rivers, lakes, or aquifers that provide a capability to reduce cash outflows of the stakeholders of the physical water entity. This can occur, for example, when having the water *in situ* and available for use in production of goods and services eliminates the costs of storing water in dams, tanks, or other storage infrastructure.
31. Future benefits that achieve economic objectives of a water reporting entity's stakeholders may derive from claims or other rights to water that can affect the water holdings of the physical water entity. For example, assume a power generating company holds claims or other rights to water from another jurisdiction for the purpose of transferring water into a river system that is used for profit-making hydro power generation and which will not be able to maintain sufficient flow rates to generate electricity without the claims or rights being exercised. Those rights or claims to water are water assets of the river system since they are held vicariously by the river system and enable a stakeholder in the river system (the power generation company) to derive economic benefits. They will also be water assets of the power generation company, even though they relate to water that is not owned by the power generation company. As with other water assets, this situation arises because the organisational water reporting entity is a stakeholder of the physical river system.
32. Future benefits that achieve environmental objectives of a water reporting entity's stakeholders can include environmental improvements, or prevention or reduction in environmental degradation. Water assets of a physical water entity that is a water reporting entity can include water within a river system where that water enables endangered flora and fauna to survive. They can also include claims and other rights to water held by an authority, which prevents water being extracted from the source for other purposes.
33. For physical water entities that are water reporting entities, there often exists water, or the rights or other claims to water, which a water reporting entity holds and from which a group of stakeholders of a physical water entity derives future social benefits. An example is the social benefit derived by individuals and groups using water in lakes, rivers and waterways for recreational purposes or natural spas that communities and individuals use for health and social purposes.

Water Liabilities

Present Obligation

34. An essential characteristic of a water liability that is reported by a water reporting entity is that the water reporting entity has a present obligation. An obligation is a duty or responsibility to act or perform in a certain way. Obligations may be legally enforceable as a consequence of a binding contract or statutory requirement. This is normally the case, for example, with volumes of water deliverable under contract or as a consequence of an allocation announcement under a water sharing plan. Obligations also arise, however, from normal business practice, custom and a desire to maintain good business relations or act in an equitable manner. If, for example, management of an entity decides as a matter of policy to return water to the environment, even when there exists no enforceable obligation to do so, the obligation creates a water liability.

35. A present obligation is distinct from a future obligation. A decision by the management of a water reporting entity to acquire water assets in the future does not, of itself, give rise to a present obligation. An obligation normally arises only when the water asset is delivered or the water reporting entity enters into an irrevocable agreement to acquire the water asset. In the latter case, the irrevocable nature of the agreement means that the economic, environmental or social consequences of failing to honour the obligation, for example, because of the existence of a substantial penalty, leave the water entity with little, if any, discretion to avoid the outflow of water resources to another party.
36. The settlement of a present obligation that is a water liability may occur in a number of ways:
 - a) delivery of water
 - b) transfer of claims or other rights to water.
37. An obligation may also be extinguished by other means, such as the holder of claims or other rights to the water reporting entity's water waiving or forfeiting its rights, or exceptional circumstances being declared under a water sharing plan that provides for a water allocation announcement to be revoked or suspended

Net Water Assets

38. Defining net water assets as a residual is based on the view that net water assets cannot be defined independently of the water assets and water liabilities.
39. Although net water assets is defined as a residual, this element may be sub-classified in GPWAR where sub-classification will assist GPWAR for making and evaluating decisions about the allocation of resources.
40. Such classifications can be relevant to the decision-making needs of the users of General Purpose Water Accounting Reports GPWAR users when they indicate legal or other restrictions on the ability of the entity to distribute or otherwise apply its net water assets.

Changes in Water Assets and Changes in Water Liabilities

41. Changes in water assets and changes in water liabilities can occur as a result of deliberate actions, or as a consequence of events or transformations beyond the control of the water reporting entity or others.
42. For water reporting entities that manage water, changes in water assets and changes in water liabilities can be used as part of the information used to evaluate the water reporting entity's operating performance. In conjunction with information about water assets and water liabilities, information about changes in water assets and changes in water liabilities helps the water entity to discharge its accountability relating to water.
43. Changes in water assets and changes in water liabilities may be presented in different ways to provide information that is relevant for decision-making. For example, often it is reasonable to distinguish between those changes that arise in the course of the ordinary activities of the entity and those that do not. This distinction can sometimes be made on the basis that the sources of changes in water assets and changes in water liabilities are relevant in evaluating the ability of the entity to manage water effectively; for example, events such as a major cyclone in a region not normally affected by extreme weather conditions are unlikely to recur on a regular basis. When distinguishing between items in this way consideration needs to be given to the nature of the entity and its operations. Items that arise from the ordinary activities of one entity may be unusual in respect of another.
44. Distinguishing between sources of changes in water assets and changes in water liabilities (for example, precipitation *versus* purchase of water) and combining them in different ways can affect users' ability to make or evaluate decisions involving the allocation of resources.