

Water Accounting Standards Board

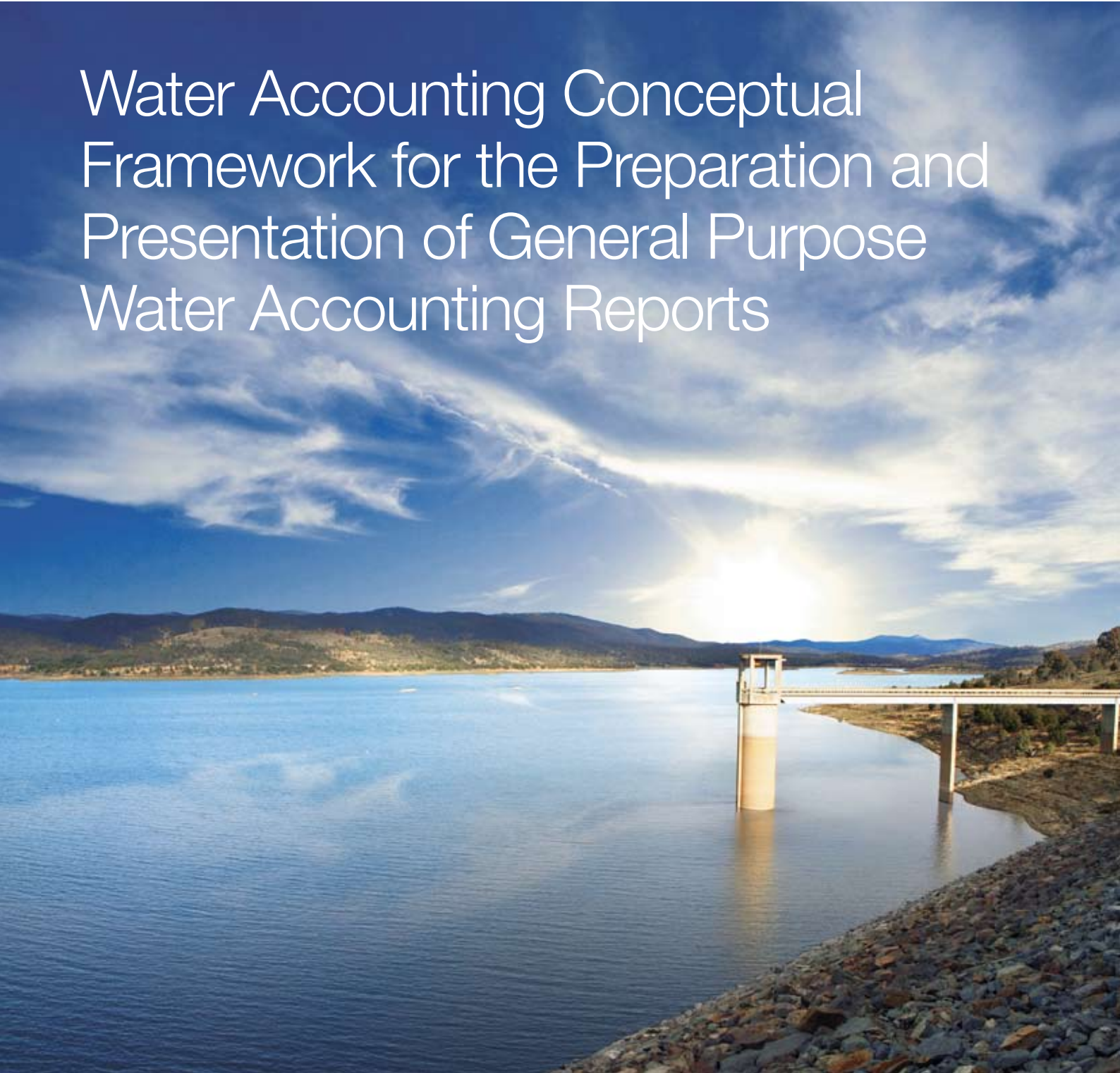
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Water Information

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Water Accounting Conceptual Framework for the Preparation and Presentation of General Purpose Water Accounting Reports



Australian Government
Bureau of Meteorology

The Water Accounting Conceptual Framework is available online at: www.bom.gov.au/water/wasb

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This water accounting conceptual framework is based upon a draft water accounting concept framework prepared by Professor Keryn G. Chalmers, Professor Jayne M. Godfrey and Associate Professor Brad N. Potter as a research project funded by the National Water Commission.

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Preamble for the Water Accounting Conceptual Framework

The Conceptual Framework for the Preparation and Presentation of General Purpose Water Accounting Reports (WACF) comprises a *Preface* and eight *Statements of Water Accounting Concepts* (SWAC). The primary purpose of the WACF is to guide the development of Australian Water Accounting Standards (AWAS) to ensure they remain cohesive and integrated. However, preparers can draw on the WACF for principle based guidance in assisting the preparation and presentation of General Purpose Water Accounting Reports (GPWAR) where AWAS is not sufficient for their requirements.

The WACF has been published for public comment. The Water Accounting Standards Board (WASB) invites feedback on the practical application of the existing WACF document. This feedback will be taken into account when the WACF is formally reviewed following the publication of the first National Water Account (NWA) at the end of 2010. Please provide any feedback on the WACF to: wasbofeedback@bom.gov.au

Comments will be put on public record unless the respondent requests confidentiality. However, such requests will not normally be granted unless supported by good reason, such as commercial confidence.

For more information visit our website at: www.bom.gov.au/water/wasb

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PREFACE

PURPOSE

1. The Council of Australian Governments' National Water Initiative (NWI, 2006, para.80) requires the development of water resource accounting to ensure that *'adequate measurement, monitoring and reporting systems are in place in all jurisdictions, to 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.'*
2. Consistent with the NWI, the purpose of this Water Accounting Conceptual Framework for the Preparation and Presentation of General Purpose Water Accounting Reports (WACF) is to underpin the development of water accounting as a robust discipline. More specifically, this conceptual framework underpins the development of Australian Water Accounting Standards (AWAS), which guide the preparation of General Purpose Water Accounting Reports (GPWAR). These reports are designed to inform users about how water resources have been sourced, managed, shared and utilised during the reporting period and to enhance public and investor confidence in the amount of water available, allocated, traded, extracted for consumptive use and recovered and managed for environmental and other public benefit outcomes.
3. Water accounting facilitates informed decision-making based upon information about water resources. Similar to the way general purpose financial reports assist financial and business decision making, GPWAR provide information that is relevant, reliable, comparable and understandable. While general purpose financial reports provide financial information for economic decision making, GPWAR provide information useful to users for making and evaluating decisions about the allocation of resources.
4. This preface identifies some users of GPWAR, the common information needs of such users and the broad types of information, consistent with those needs, that GPWAR should provide.
5. The purposes of the WACF are to:
 - a) assist water accounting standard setters to develop future AWAS consistent with the framework and to review existing AWAS
 - b) assist water accounting standard setters to promote the comparability and harmonisation of current or potential national and international water accounting regulations, and standards and procedures, relating to the preparation and presentation of GPWAR
 - c) assist preparers of GPWAR to apply AWAS and to deal with topics that have yet to form the subject of an AWAS
 - d) assist assurers to form an opinion as to whether GPWAR conform with AWAS
 - e) assist users of GPWAR to interpret the information contained in GPWAR prepared in conformity with AWAS
 - f) provide those who are interested in the work of the water accounting standard setters with information about the concepts underpinning the formulation of AWAS.

SCOPE

6. This WACF sets out the concepts that underlie the preparation and presentation of GPWAR for users unable to command the production of special purpose water accounting reports tailored to meet their particular water information needs. Among other things, the WACF defines and explains the concept of a water reporting entity for which GPWAR shall be prepared and sets out the objective of GPWAR. This objective has implications for the type of information to be included in GPWAR and for the manner in which such information is to be communicated to users. This WACF also provides guidance regarding the qualities that information should possess to meet the objective of the GPWAR and the nature and quantification of the elements of such reports. These and other matters are the subject of Statements of Water Accounting Concepts (SWAC) and of AWAS.
7. The WACF comprises the following SWAC:
 - SWAC1 Definition of the Water Reporting Entity
 - SWAC2 Objective of GPWAR
 - SWAC3 Qualitative Characteristics of GPWAR
 - SWAC4 Definition of Elements of GPWAR
 - SWAC5 Recognition of the Elements of GPWAR
 - SWAC6 Quantification of Attributes of Elements of GPWAR
 - SWAC7 Compliance Disclosures in GPWAR
 - SWAC8 Assurance of GPWAR.
8. The WACF is not an AWAS and hence does not define standards for any particular recognition, quantification or disclosure issue. Nothing in this overrides any specific AWAS.
9. The WACF is concerned with GPWAR. Such reports are directed toward the common information needs of a wide range of users. The frequency of water accounting report preparation and presentation is determined by the information needs of users and existing laws, regulations and reporting practices. Many users are likely to rely on GPWAR and such reports should, therefore, be prepared and presented with their needs in mind.
10. The nature of GPWAR is likely to vary across different types of water reporting entities. For many water reporting entities, however, GPWAR include:
 - a) a Statement of Water Assets and Water Liabilities
 - b) a Statement of Changes in Water Assets and Water Liabilities
 - c) a Statement of Physical Water Flows
 - d) a Contextual Statement
 - e) an Accountability Statement
 - f) an Assurance Statement.
11. GPWAR may also include other reports or notes that serve the needs of users who do not have the ability to command the preparation of special purpose water accounting reports. Additional schedules and supplementary information may deal, for example, with information about water quality, geographical segment information and disclosures about different aspects of the water market.

12. While the WACF is developed to underpin GPWAR and not special purpose water accounting reports, this does not preclude the use of the WACF in the preparation of special purpose water accounting reports. Some users may require, and have the power to obtain, information in addition to that contained in GPWAR. Such information would be contained in special purpose water accounting reports that have a format and content tailored to the report users' requirements. These special purpose water accounting reports are outside the scope of the WACF.
13. Special purpose water accounting reports are water accounting reports tailored to meet specific information needs of a user able to command this information and may include, for example, reports of water balances and water trade or water allocation projections that are prepared by a water authority for a bank or other lender that is assessing the authority's viability for funding of infrastructure. Another example of special purpose water accounting reports would be reports of water usage, water quality and water-related environmental impact prepared by a privately-owned mining company for the purpose of a divestiture or sale of a mine to a private investor.

Purpose of General Purpose Water Accounting Reports

14. GPWAR are not an end in themselves, but are a means of communicating relevant and reliable water information about a water reporting entity to users. The objective of GPWAR specified in the WACF, derives from the information needs of those identified as the users of GPWAR. Those needs depend, in turn, on the functions and responsibilities relating to water reporting entities and the decisions users make based on these functions and responsibilities.
15. The functions and responsibilities of the management or governing body of water reporting entities vary considerably and cover matters such as the management and control of water resources via water policy; water sharing plans or access licensing regimes; the investment in and management of infrastructure to store water and physically regulate the operation of river systems; the management of infrastructure and the delivery of urban water supply and reticulated sewerage services or rural water supply and irrigation drainage services; the economic or environmental oversight or regulation of urban water utilities or rural water service providers; and the holding of water entitlements and the management of water-dependent business enterprises. The management or governing body of a water reporting entity will often be both a provider of information to users via GPWAR and a user of information via the GPWAR of other water reporting entities. The management or governing bodies of water reporting entities influence members of the communities they serve through many means, such as by providing access to water resources, protecting the quality of water resources, delivering water or levying fees for services provided.
16. Members of communities make resource allocation decisions in respect of the information reported about water reporting entities - that is, they make reasoned choices among alternative uses of scarce resources. For example, governments and parliaments decide whether to impose restrictions on the use of water or whether to fund particular environmental or water-related programs; environmentalists decide whether to lobby for or against particular policies or projects that affect the demand or supply of water resources for particular purposes; investors decide whether to invest in water businesses, projects and products; creditors decide whether to provide resources to a water-dependent business or water management authority; individuals, businesses or other groups decide whether to donate financial or water resources to an environmental site or other public benefit outcome; employees decide whether to provide their labour services to a particular water-dependent or other water-related entity; and ratepayers and community lobby groups decide whether they should support the particular programs run by the management

or governing body of a water reporting entity. In addition, owners of water-dependent businesses and holders of water entitlements (such as irrigators) make decisions about whether to plant crops, buy or sell claims or rights to water, and utilise or store water based on information provided about water reporting entities.

17. Allocation of scarce resources will be enhanced if those who make resource allocation decisions such as the groups identified above, have the appropriate information on which to base their decisions. GPWAR aim to provide a key component of this information.
18. GPWAR can also enable the management and governing bodies of water reporting entities to demonstrate the discharge of accountability. The management and governing bodies are accountable for planning and conducting operations in ways that effectively utilise available resources sustainably and equitably. In a broader sense, because of the influence water reporting entities exert in relation to economic, environmental and social dimensions of communities, the management or governing bodies are accountable to the public at large. While the accountability of management and governing bodies of water reporting entities can be complex and depend on many factors, GPWAR provide information useful for assessing whether this responsibility has been discharged appropriately. For example, governments and parliaments assess the accountability of water managers for the management of water resources under their control – be it for economic, environmental or social (including health-related and water supply security for critical human needs) purposes. Other bases on which the accountability of managements and governing bodies may be understood include comparisons against targets, plans and policies that are either internal or external (such as operational plans, water sharing plans and jurisdictional legislation). It is understood that the accountability of these governing bodies will be detailed and discharged through the information captured in GPWAR—most notably in the Accountability Statement and the Assurance Statement.

Users and their Information Needs

19. The users of GPWAR fall into a broad range of categories. These include:
 - water users – environmental, agricultural, urban, industrial and commercial
 - investors in water dependent enterprises and related parties such as lenders, creditors, suppliers, insurers and water traders and water brokers
 - government representatives and their advisors, including water related economic, environmental and social policy makers
 - water industry regulators
 - water managers including environmental water managers and water service providers, who may be interested in not just the water entities they manage but water entities they depend on or compare to
 - groups and associations with water related interests
 - water industry consultants
 - academics
 - interested citizens.
20. Users use GPWAR in order to satisfy some of their different needs for information. The users information needs can vary enormously based on particular circumstances and the type of decisions or assessments being contemplated or undertaken. The range of information needs is likely to encompass subjects and matters such as:

- the availability, commitment and quality of water resources and associated trends
 - whether management objectives for water resource management are being met and, if not, why not
 - the development and review of water resource policy
 - the comparison (both over time for a particular water reporting entity and between similar water reporting entities) of annual water allocations, extractions, returns and of particular in-situ water levels and flows
 - the extent of water entitlement and annual water allocation trading and associated trends.
21. Another category of users of GPWAR comprises the preparers of the reports and those who contribute to the preparation. This category is likely to include managers, officers, or contractors of organisations with responsibilities for managing water resources, such as water agencies, water storage and river managers, or water utilities. Report preparers and contributors are likely to be interested in previous reports which they have prepared or helped to prepare in order to source comparative information or to show trends which are to be disclosed. They are also likely to be interested in reports of other water reporting entities in order to compare and refine report presentation and style.

APPLICATION

22. The concepts in this WACF underpin general purpose water reporting. The WACF is used as a foundation for the drafting of AWAS and can guide GPWAR preparers where an AWAS does not exist.
23. The WACF applies to the GPWAR of all water reporting entities operating in the public or the private sectors, in the for-profit and not-for-profit sector, in any industry, and operating in any state, territory, or combination of states or territories
24. Situations may arise where there is a conflict between the WACF and an AWAS. In the event of a conflict, the requirements of the AWAS prevail over those of the WACF. However, because water accounting standards are guided by the WACF, the number of cases of conflict between the WACF and the AWAS will be minimised.
25. The WACF applies to GPWAR issued after 11 May 2009.
26. The WACF will be revised as required.

CITATION

27. The WACF for the Preparation and Presentation of Water Accounting Reports is cited in AWAS as the Water Accounting Conceptual Framework, or WACF.

Comparison with International Pronouncements

28. The WACF draws upon, where useful:
- a) the Framework for the Preparation and Presentation of Financial Statements issued by the Australian Accounting Standards Board (AASB)
 - b) the Framework for the Preparation and Presentation of Financial Statements issued by the International Accounting Standards Board (IASB)
 - c) principles enunciated in other fields including natural resource management and corporate social responsibility reporting.

GLOSSARY OF TERMS

For the purposes of this Water Accounting Conceptual Framework, the glossary of terms includes:

Accountability includes, but is not limited to, responsibilities under legislation, regulations or operational plans. It also means the responsibility to provide information to enable users to make informed judgements about the management of water resources.

Accrual basis of water accounting means recording and reporting the effects of transactions, transformations and other events when the decision or commitments that give rise to them occur. This may not necessarily be the time at which water is physically transacted, transferred or transformed. Accrual water accounting ensures that transactions, transformations and other events are recorded in and reported in the reporting periods to which they relate.

Assurance means to provide independent attestation that the reports have been prepared in accordance with approved water accounting standards and other approved pronouncements governing the content of the reports and are consistent with the concepts in the WACF. Assurance reduces the risk that the information provided is incorrect.

Claims to water means a right to water or an interest or claim associated with a right to water.

Compliance means adherence to relevant externally-imposed requirements, or with broader notions of best practice relevant to water reporting entities, such as statutory requirements, regulations, rules, ordinances, or directives, in respect of which non-compliance may have, or may have had, an economic, environmental or social effect.

Group water accounting report is the water accounting report of a *group water reporting entity* presented as a single water entity.

General Purpose Water Accounting Report means a water accounting report intended to meet information needs common to users who are unable to command the preparation of water accounting reports tailored to satisfy their information needs. A general purpose water accounting report is prepared in accordance with AWAS and comprises a Contextual Statement, an Accountability Statement, *water accounting statements*, an Assurance Statement and accompanying note disclosures.

Groundwater is subsurface water in soils and geological formations that are fully saturated.

Groundwater assets are *water assets* that relate to groundwater but exclude soil moisture and water held in works underground.

Groundwater inflows are increases in the *groundwater assets* of a *water reporting entity*.

Groundwater outflows are decreases in the *groundwater assets* of a *water reporting entity*.

Group water reporting entity is a *water reporting entity* comprising individual *water entities* and for which a *group water accounting report* is required to be prepared under a regulation, statute or directive.

Legal obligation is an obligation that derives from:

- a) a contract
- b) legislation
- c) other operation of law.

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

Rights to water include a broad array of rights, with associated obligations, to access and use water or to have access to water infrastructure and may arise from common or statute law; such rights include but are not limited to: riparian rights to water in a stream; water access licence or entitlements; annual water allocations; the right to a water supply service that may be subject to restrictions; shares in water distribution infrastructure capacity; the right to trade water entitlement or annual water allocation; the right to use water on a site subject to specified conditions.

Special purpose water accounting report is a *water accounting report* tailored to meet the information needs of a user able to command this information.

Surface water is water that flows over or is stored on the surface of the earth.

Surface water assets are *water assets* that relate to surface water including *water storage* – stored or in transit – in catchments, regulated rivers and utility networks and soil moisture. Water storage in utility networks includes all water in works such as pipes regardless of whether these works are above or below the surface of the earth.

Surface water inflows are increases in the *surface water assets* of a *water reporting entity*.

Surface water outflows are decreases in the *surface water assets* of a *water reporting entity*.

Water is the liquid that descends from clouds as rain and forms streams, lakes, groundwater aquifers and seas. Water is a chemical compound comprising of two atoms of hydrogen and one atom of oxygen. Water may exist in solid, liquid or gaseous form.

Water accounting is a systematic process of identifying, recognising, quantifying, reporting, and assuring information about *water*, the rights or other claims to that *water*, and the obligations against that *water*.

“**Water accounting report** may be either a *General Purpose Water Accounting Report* or a *special purpose water accounting report*.

Water accounting statements comprise the Statement of Water Assets and Water Liabilities, the Statement of Changes in Water Assets and Water Liabilities, and the Statement of Physical Flows.

Water assets are *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 entity is a physical entity, an organisation or individual, which:

- a) holds or transfers water
- b) holds or transfers rights or other direct or indirect claims to water
- c) has inflows and/or outflows of water
- d) has responsibilities relating to the management of water.

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*.

Water reporting entity is a *water entity* in respect of which it is reasonable to expect the existence of users who depend on *General Purpose Water Accounting Reports* (GPWAR) for information about water, or rights or other claims to water, which shall be useful to them for making and evaluating decisions about the allocation of resources.

Water storage is *surface water* or *groundwater* that is stored.



Definition of the Water Reporting Entity

Statement of Water Accounting Concept SWAC 1

CITATION

1. This Statement may be cited as Statement of Water Accounting Concepts 1 *Definition of the Water Reporting Entity* (SWAC 1).

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 and explain the concept of a water reporting entity.
5. If a water entity does not meet the definition of a water reporting entity under this Statement, that does not preclude other parties with the authority to do so (for example, regulatory authorities) from imposing a requirement for water accounting reports to be prepared for that entity.
6. This Statement specifies that GPWAR shall be prepared for water reporting entities and that these reports shall comply with the WACF and AWAS.
7. This Statement does not prescribe the methods of accounting for, measuring, disclosing or presenting water-related information. Nor does it prescribe who prepares GPWAR for a water reporting entity. Such prescriptions are included in AWAS, legislation or other authoritative pronouncements.

WATER ACCOUNTING CONCEPTS

8. The following concepts shall be interpreted in the context of all paragraphs included in this Statement.
9. A glossary of terms, as outlined in the WACF, shall be read as forming part of the accounting concepts set out in this statement.

Concept of the Water Entity

10. **A water entity is a physical entity, an organisation or individual, which:**
 - a) **holds or transfers water;**
 - b) **has rights or other direct or indirect claims to water;**
 - c) **has inflows and/or outflows of water; or**
 - d) **has responsibilities relating to the management of water.**

Concept of the Water Reporting Entity

11. **A water reporting entity is a water entity in respect of which it is reasonable to expect the existence of users who depend on General Purpose Water Accounting Reports for information about water, or rights or other claims to water, which shall be useful to them for making and evaluating decisions about the allocation of resources.**

Preparation of General Purpose Water Accounting Reports

- 12. General Purpose Water Accounting Reports prepared and presented in accordance with the Water Accounting Conceptual Framework and Australian Water Accounting Standards shall be prepared in relation to water reporting entities.**

DISCUSSION

Water Accounting Reports

13. Statement of Water Accounting Concepts 2 *Objective of General Purpose Water Accounting Reports* (SWAC 2) states that GPWAR are prepared to provide users with information about a water reporting entity which is useful for making and evaluating decisions about the allocation of resources. These decisions may include, but are not limited to, decisions concerning how the physical water resource, and the rights or other claims to that resource, will be sourced, managed, shared and used. Such decisions can be informed by reports about the physical water resource and how the rights or other claims to that resource, have been sourced, managed, shared and used.
14. When GPWAR meet this decision usefulness objective they will assist users to evaluate accountability for the management of water resources.
15. If Statements of WACF and AWAS are to be effective in ensuring adequate provision of information to users of GPWAR it is necessary that GPWAR are prepared in relation to those water entities that are also water reporting entities. It is also important that GPWAR are not required for those water entities that are not water reporting entities.
16. Water accounting reports, which meet the objective of GPWAR are GPWAR. GPWAR should be prepared when it is reasonable to expect the users dependent on water accounting reports for information about water, or rights or other claims to water, which shall be useful to them for making and evaluating decisions about the allocation of resources and where these users are unable to command the preparation of Special Purpose Water Accounting reports to satisfy their information needs. Further, their information needs will have elements in common. As such, GPWAR will be required to provide users with appropriate information for making and evaluating resource allocation decisions.

The Water Reporting Entity Concept

17. While in some instances a water reporting entity will be an individual water reporting entity, in other instances a water reporting entity will comprise a group of water entities (group water reporting entity). Some entities within the group water reporting entity may be water reporting entities themselves.
18. Legislation does not define the concept of a water reporting entity; nor does it prescribe who shall prepare GPWAR in most cases. However, the *Water Act 2007* requires the Bureau of Meteorology (BOM) to compile and maintain water accounts for Australia, including a set of water accounts to be known as the National Water Account even though BOM is not directly responsible for national water management and distribution. This requirement demonstrates that the preparer of GPWAR does not need to be the water reporting entity for which those reports are prepared. This is most obvious where the water entity is a physical water entity.

19. This Statement adopts a water reporting entity concept that is tied to the information needs of users. Users may be individuals or organisations with an interest in water resources. There is a wide range of potential users of GPWAR include, but are not limited to, industry, environmentalists, ratepayers, policy makers, and irrigators.
20. This Statement requires that water reporting entities shall be identified by reference to the existence of users who depend on GPWAR for information for making and evaluating decisions about the allocation of resources. Water -reporting entities are a subset of water entities. They may be individuals, physical entities, organisations, or an organisation that has management responsibility for a physical entity (e.g., a catchment water authority whose responsibility is for the physical catchment).
21. The concept of the water reporting entity adopted by this Statement does not depend on the sector - public or private - within which the water entity operates or the purpose for which the water entity was created - business or non-business/profit or not-for-profit. Nor does the concept of the water reporting entity depend on the manner in which the water entity is constituted – as a legal entity or other type of entity. It is a concept which is tied to the objective of GPWAR and, as noted in paragraph 12, is a concept which requires GPWAR to be prepared for water entities with users dependent on information in for making and evaluating decisions about the allocation of resources.

Identification of Whether Dependent Users Exist

22. For the purposes of this Statement, the identification of an entity as a water reporting entity is linked to the information needs of users of GPWAR for making and evaluating decisions about the allocation of resources. In many instances, it will be readily apparent whether, in relation to a water entity, there are users who depend on GPWAR as a basis for making and evaluating these decisions. User categories may include, but are not limited to, water resource and infrastructure providers, recipients of water and water services and parties performing a regulation or oversight function of water entities and water-related decisions.
23. For those water entities where it is not readily apparent that users dependent on GPWAR exist, the factors outlined in paragraphs 24 and 25 are identified as significant factors to be considered in determining whether a water reporting entity exists. Other factors may also be relevant in determining whether a water entity is a water reporting entity.

Separation of Management from Economic, Environmental or Social Interest

24. The greater the extent of the separation between management and parties with an economic, environmental or social interest in the water entity's water-related decisions, the more likely it is that there will exist users who depend on GPWAR as a basis for making and evaluating resource allocation decisions.

Economic, Environmental and Social Importance/Influence

25. The greater the economic, environmental or social importance of a water entity, the more likely it is that there will be users who depend on GPWAR as a basis for making and evaluating resource allocation decisions. Water reporting entities identified on the basis of this factor are likely to include entities with significant inflows and outflows of water; or significant holdings of water or rights or other claims to water.

Implications of Application of the Water Reporting Entity Concept

Implications of the Criteria for Identification of a Water Reporting Entity

26. The concept of the water reporting entity in this Statement is related to the information needs of users. Judgement will be required in determining whether a water entity is a water reporting entity.
27. The implications of the factors listed in paragraphs 24 and 25 are that most government departments, private water businesses and statutory authorities that play a role in water policies, water management, water allocation or water delivery will be water reporting entities. This arises because of the separation between the parties with an economic, environmental or social interest in water-related decisions and the parties responsible for making those decisions.
28. An implication of applying the water reporting entity concept to a public sector water entity is that a government as a whole, whether at the Federal, State, Territorial or local government level, would be identified as a water reporting entity because it is reasonable to expect that users will require GPWAR to facilitate their decision making in relation to the water policies, management, planning, allocation and delivery decisions made by, and accountability of, those governments. At a lower level of reporting, a number of individual statutory authorities and departments (and the entities they control) may also be defined as individual water reporting entities because of their economic, environmental or social significance. In some cases, these factors may also identify a ministerial portfolio as a water reporting entity.
29. Classification as a water reporting entity may not be constant from one reporting period to the next.

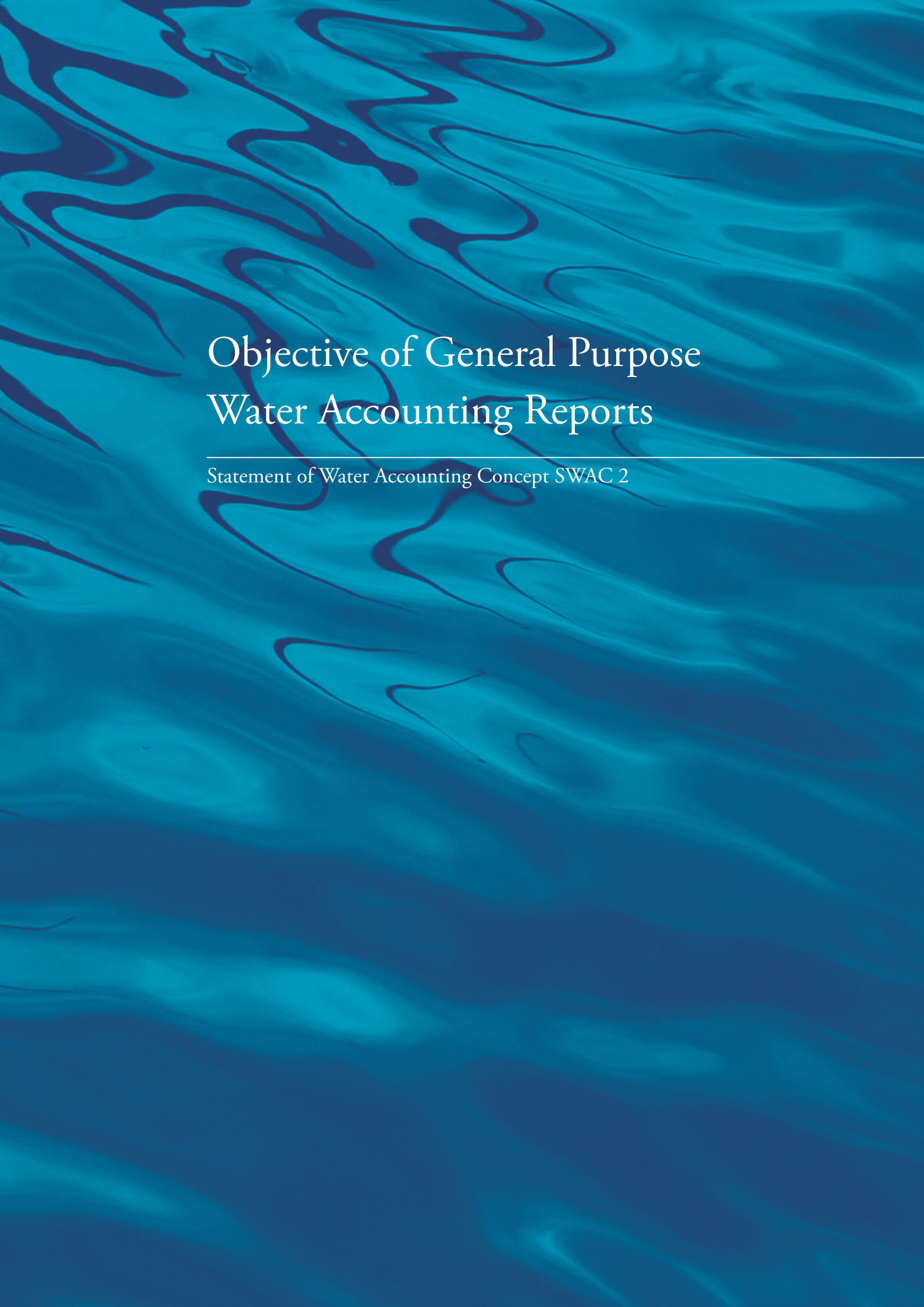
Groups of Water Entities as Water Reporting Entities

30. A water reporting entity, as defined in this Statement, can comprise a group of individual water entities. If it is reasonable to expect that there is an individual entity or a group of entities for which there are users who depend on GPWAR for information about water, or rights or other claims to water, which shall be useful to them for making and evaluating decisions about the allocation of resources, then that individual entity or group of entities is a water reporting entity. The fact that a group of individual water entities (for example, river systems within a state or territory) may collectively form a water reporting entity does not affect whether any of the individual water entities are water reporting entities in their own right.

Implications of the Water Reporting Entity Concept for Differential Reporting

31. Statements of Water Accounting Concepts and AWAS are applicable to all water reporting entities for which GPWAR are prepared.
32. Bases that have been proposed for identifying water entities for which GPWAR would not need to be prepared, but which are not supported by this Statement, include:
 - the size of the water entity
 - ownership characteristics
 - a combination of size and ownership characteristics.

33. In this Statement the need to prepare GPWAR is linked to the existence of users who depend on those reports for making and evaluating decisions about the allocation of resources. The existence of users dependent on GPWAR is not determined by either the size or the ownership characteristics of a water entity. Accordingly, the bases outlined in the preceding paragraph are not supported by this Statement. However, the water reporting entity concept enunciated in this Statement embodies a concept of differential reporting in that certain entities will not be identified as water reporting entities and thus would not be required to prepare GPWAR or comply with Statements of Water Accounting Concepts and AWAS in their preparation. The water entities for which GPWAR do not need to be prepared are those in respect of which it is reasonable to expect that users do not exist who are dependent upon information contained in GPWAR for making and evaluating decisions about the allocation of resources.



Objective of General Purpose Water Accounting Reports

Statement of Water Accounting Concept SWAC 2

CITATION

1. This Statement may be cited as Statement of Water Accounting Concepts 2 *Objective of General Purpose Water Accounting Reports* (SWAC 2).

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 and explain the objective of GPWAR.
5. This Statement specifies that the objective of GPWAR is to provide information to users who depend on those reports for information that will be useful to them for making and evaluating decisions about the allocation of resources.

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.

Concept of the Objective of General Purpose Water Accounting Reports

8. **General Purpose Water Accounting Reports shall provide information useful to users for making and evaluating decisions about the allocation of resources.**
9. **To facilitate the provision of a complete set of information useful for making and evaluating decisions about the allocation of resources, General Purpose Water Accounting Reports shall:**
 - a) **be prepared in a manner which assists users to evaluate accountability for the management of water resources;**
 - b) **disclose information that assists users to assess compliance with relevant externally-imposed requirements or with broader notions of best practice relevant to water reporting entities; and**
 - c) **include independent assurance to users as to whether the components of the reports are prepared and presented in accordance with the requirements of the Water Accounting Conceptual Framework, Australian Water Accounting Standards and other associated generally accepted water accounting practices and principles.**

DISCUSSION

Decision-making

10. Decisions about the allocation of resources may include water-related decisions such as the management or trade of water stocks and water rights or obligations over time or the provision of water-related services in the context of economic, environmental and social policies and concerns. They may also relate to non-water-related decisions such as whether to provide debt finance to the water reporting entity or to an organisation affected by the water reporting entity's operations.
11. Other decisions made by users of GPWAR may relate to the nature of water resources within a geographic area which is not subject to a significant level of human management but which may have an impact on legislation and other water policy at a broader level. For example, the nature and extent of deterioration of rivers and environmental sites may require detailed and careful analysis by relevant authorities such as governments to determine any necessary strategic and systematic policy response to ensure the river or site preservation, with implications for the environment and nearby farming and township communities. Such an analysis will be assisted by GPWAR.
12. GPWAR will meet the common needs of most users who are unable to command the production of special purpose water accounting reports to satisfy their particular user needs. Since the information needs of various users for the purposes of decisions relating to economic, environmental and social matters are many and varied, it is unlikely that GPWAR will provide all the information that each general purpose report user will need to make sound decisions and evaluations of decisions. However, GPWAR will provide most of the information common to general purpose report user needs. Such reports should, where applicable, be read in conjunction with other information prepared about water reporting entities. Relevant additional information may include jurisdictional water sharing plans, current market conditions, water quality and bio-physical indicators, trading rules and associated fees in certain jurisdictions as well as likely future policy developments and general purpose financial reports. Such information is beyond the scope of this WACF.
13. Information contained in GPWAR will help to address specific decision-making objectives such as those outlined in the National Water Initiative (2004) (NWI, 2004). These specific objectives include, but are not limited to, the preparation of water accounting information which:
 - a) can assist the implementation of a nationally-compatible market, regulatory and planning-based system of managing surface and groundwater resources for rural and urban use that optimises economic, social and environmental outcomes (NWI, 2004, para.23)
 - b) is able to meet the information needs of different water systems in respect of planning, monitoring, trading, environmental management and on-farm management (NWI, 2004, para.23)
 - c) supports 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. (NWI, 2004, para.80) This confidence will underpin decisions regarding the allocation of resources belonging to the general public or specific investors.
14. GPWAR assist decision-making, but they are not the only information that users may need to use. For example, the ability of the manager, management group or governing body of a water reporting entity to undertake sustainable water resource management will depend on climatic conditions and government policy. Information about relevant

government policy that affects the planning and management of the water resources attributable to the water reporting entity may therefore be relevant to assessments of accountability and management performance. A further example arises where a water reporting entity is subject to a water-sharing plan which incorporates minimum environmental flow rates. In such instances, when evaluating those decisions made by the manager, management group or governing body of the water reporting entity that affect the available water resources, GPWAR should be read in conjunction with information such as water sharing agreement/policy details, climate change forecasts and information about levels and distribution of annual rainfall.

Accountability

15. GPWAR prepared to assist users make and evaluate decisions about the allocation of resources will also provide information for understanding and evaluating the discharge of accountability for water resources by managers, management groups or governing bodies of water reporting entities. Such information may assist users to make a range of decisions and evaluations including whether changes in regulations, water plans or other policies are required, whether emergency or extraordinary measures for irrigators and other water-dependent businesses are required and/or are feasible and whether additional investment in water infrastructure is required. Those users who wish to assess accountability do so in order that they may understand, for example, whether water management has occurred in accordance with broader pronouncements such as the NWI (2004) and Water Act (2007), other relevant legislation, jurisdictional water plans and other regulations and policies, and in light of localised climatic conditions. Other parties with regulatory or oversight function, such as auditors-general, are concerned with the accountability of managers, management groups or governing bodies of water authorities and dam and river operators in order to monitor and assess the valuation of public sector assets and the responsible use of public funds.
16. Evaluating the ability of the management or governing bodies of water reporting entities to plan and manage water resources entrusted to them will be assisted by information about how physical water resources and the rights to those resources have been sourced, managed, shared and utilised. This requires information that focuses on key water attributes such as the stocks of available water resources, the management of those resources over time and the physical water flows.

General Purpose Water Accounting Reports

17. Achieving the objective of GPWAR involves providing users with information about water reporting entities that is useful for decision-making. Users may require information relating to physical flows of water. Further, users may need information about the quantity, location, and nature of the water reporting entity's water resources and how the water is shared at a particular point in time. Users may also need information about the changes in the water resources between two points in time. Their confidence in the information provided is likely to be enhanced by statements of compliance with externally-imposed requirements or with broader notions of best practice relevant to water reporting entities, and by independent assurance that the preparation and presentation of GPWAR conforms to the requirements of Australian Water Accounting Standards (AWAS) and other associated generally accepted water accounting practices and principles.
18. In different contexts, users may not require information on all of these aspects. In such instances, a subset of this information may be reported for the water reporting entity. The information reported in the GPWAR will vary according to the nature of the water reporting entity.

Water Assets and Water Liabilities

19. Information about the water resources attributable to a water reporting entity and about trades or other changes in rights or obligations relating to water is useful in assessing and predicting the ability of the water reporting entity to equitably and sustainably manage the water resources entrusted to it. This is particularly so in light of the competing demands for those resources and given the constraints imposed by climatic conditions, government legislation and other policy. Information about water rights and obligations is useful in predicting the future availability of water resources and how future inflows may be distributed among those with a claim or right to the water resources attributable to the water reporting entity. Such information, taken together, may be used to inform predictions of the ability of the manager, management group or governing body of the water reporting entity to meet the current and future commitments against those resources as they become due. In this respect, information on the quantity, location and nature of the water resources attributable to the water reporting entity would be relevant to users, as would details of significant trades that have occurred and information about legal or equitable (including environmental) entitlements and allocations against the water resources. Such information can be provided in a Statement of Water Assets and Water Liabilities.

Changes in Water Assets and Water Liabilities

20. Information about the management of water resources attributable to the water reporting entity, prepared on an accrual basis, will assist the understanding and assessment of current and potential future changes in the availability of water resources. Information about the variability of water management practices such as allocation decisions made over time is important in this respect. It is also useful in forming predictions about how additional water resources might be employed in future should such resources become available. Information about water management and the performance of a water reporting entity in obtaining, managing, sharing or utilising water is primarily provided in a Statement of Changes in Water Assets and Water Liabilities.

Physical Water Flows

21. To achieve the objective of GPWAR, water reporting entities may provide information about how the physical water resource and the rights to that resource have been sourced, managed, shared and used.
22. Information about the management of available water resources in a Statement of Changes in Water Assets and Water Liabilities will only partially explain changes in the water resources available from a water reporting entity. Additional information about the physical flows of water attributable to the entity is also useful in assessing movements in the available resources during the reporting period and will assist in providing users with a basis to assess the ability of the entity to deliver sustainable water supply. This is particularly the case where water rights or obligations are permitted to carry over from one reporting period to the next. Information about the physical flows of water in distribution channels or watercourses can be provided in a Statement of Physical Water Flows.
23. Different elements of GPWAR may reflect different aspects of the same water related balances, transactions, transformations and events. Although each statement described in paragraphs 19-22 inclusive provides information that is different from the others, none is likely to serve only a single purpose or provide all the information necessary for particular needs of users. For example, a Statement of Changes in Water Assets and Water Liabilities provides an incomplete picture of water management unless it is used in conjunction with the Statement of Water Assets and Water Liabilities and the Statement of Physical Water Flows.

Notes and Supplementary Schedules

24. GPWAR may also include notes and supplementary schedules which provide additional relevant information about the items in the Statement of Water Assets and Water Liabilities, the Statement of Changes in Water Assets and Water Liabilities and the Statement of Physical Water Flows. They may include disaggregated information about items in the statements, narrative explanations of the material judgements and assumptions made and estimates used in preparing the statements, or disclosures about the risks and uncertainties affecting water reporting entities. Information about primary water systems or sources which comprise the water reporting entities, aspects of water quantity and quality, information relating to markets and the effect on the entity of changing climatic conditions and other factors are further examples of items that might be disclosed as supplementary information.
25. Users of GPWAR are likely to be interested in information relating to water markets not otherwise contained in particular water-related statements. Such information may include, for example, summary information about the nature of trades occurred during the relevant period by jurisdiction – specifying the source and destination of water that was traded, the quantity and nature of the water product traded and the average prices paid. In addition, useful information about water trades might include the intended use of the water.

Compliance and Assurance

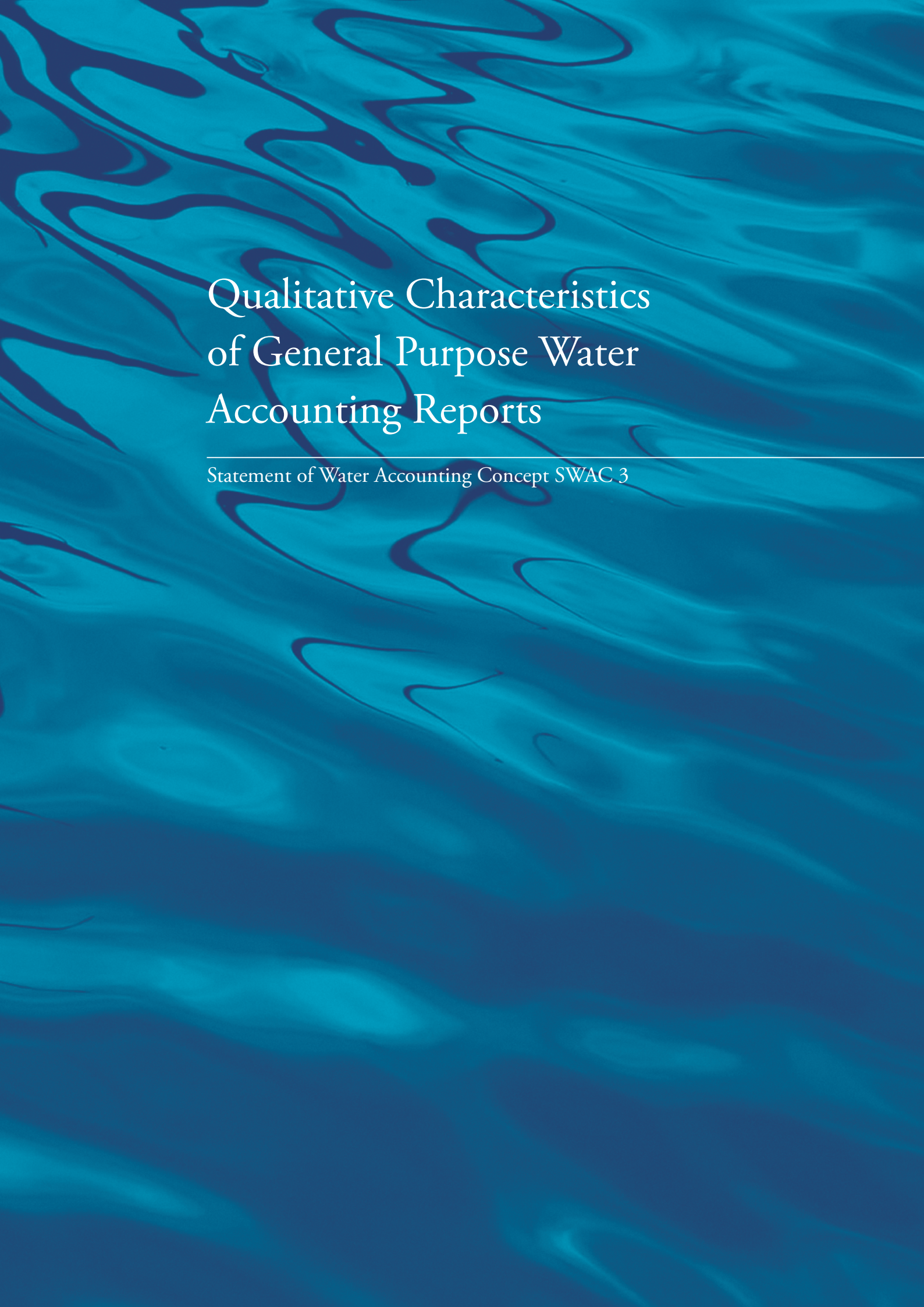
26. Concepts relating to compliance and assurance in respect of GPWAR are outlined in SWAC 7 and SWAC 8 respectively within the WACF.
27. Information about compliance is relevant to making and evaluating decisions about the allocation of water resources because knowledge of non-compliance with externally-imposed requirements, internal plans, or with broader notions of best practice relevant to water reporting entities may affect resource allocation decisions made by users. For example, information about externally-imposed compliance requirements that may be relevant to users includes performance in relation to minimum passing flows, maximum diversion rates and water saving targets, and water quality levels. Users should be able to presume that, in the absence of disclosures to the contrary, the manager, management group or governing body of the water reporting entity has complied with all relevant externally-imposed requirements. However, reporting of externally-imposed requirements and compliance with them can assist users' evaluations and decisions based upon the GPWAR.
28. Assurance refers to the attestation of whether the preparation and presentation of GPWAR conforms to the requirements of AWAS and other associated generally accepted water accounting practices and principles. The assurance function, undertaken by an independent assurance provider, is an important aspect of enhancing users' confidence in the veracity of the information being utilised to inform decision-making.

Assumptions Underlying the Preparation and Presentation of General Purpose Water Accounting Reports

29. In order to realise the objective of GPWAR should contain information that is recorded and processed in a rigorous and robust fashion. Recording water-related information using a systematic approach will facilitate meeting this objective.

Accrual Basis of Water Accounting

30. In order to meet the objective GPWAR preparation of a Statement of Water Assets and Water Liabilities or a Statement of Changes in Water Assets and Water Liabilities on an accrual basis, is likely to be required. Applying the accrual basis of water accounting means that the effects of transactions, transformations and events are recognised when the decisions or commitments that give rise to them occur. This may not necessarily be the time at which water is physically transacted, transferred or transformed. Accrual basis of water accounting ensures that transactions, transformations and events are recorded in the Statement of Water Assets and Water Liabilities or Statement of Changes in Water Assets and Water Liabilities in the periods to which they relate. For example, a legal obligation to provide water from a particular catchment area would be recognised as a water liability in relation to the water reporting entity in that reporting period, even though water has not been physically transferred in that period. GPWAR prepared on an accrual basis inform users not only of past transactions, transformations or events involving the physical transfer or transformation of water but also of commitments or obligations to transfer or transform water in the future and of resources that represent water to be transferred or transformed in the future. Hence, they provide the type of information about past transactions, transformations and events that is most useful to users in making and evaluating decisions about the allocation of resources.
31. The accrual basis of water accounting is appropriate where unused water rights or obligations continue to exist from one reporting period to the next. In some cases, the water rights or obligations do not exist across water reporting periods. In these cases, the accrual basis of water accounting may provide little additional information to users and the accrual-based Statement of Changes in Water Assets and Water Liabilities may not be needed. In such instances, the Statement of Physical Water Flows and the Statement of Water Assets and Water Liabilities will be the primary source of information to users.



Qualitative Characteristics of General Purpose Water Accounting Reports

Statement of Water Accounting Concept SWAC 3

CITATION

1. This Statement may be cited as Statement of Water Accounting Concepts 3 *Qualitative Characteristics of General Purpose Water Accounting Reports* (SWAC 3).

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 describe those qualitative characteristics of GPWAR that make the information contained therein useful for making and evaluating decisions about the allocation of resources.

WATER ACCOUNTING CONCEPTS

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

Concepts of the Qualitative Characteristics of General Purpose Water Accounting Reports

7. **In order for General Purpose Water Accounting Reports to satisfy their intended objective, the information contained in those reports shall possess qualitative characteristics, or attributes, that make the information useful to report users for making and evaluating resource allocation decisions.**
8. **The principal qualitative characteristics are relevance, faithful representation, comparability, verifiability, timeliness and understandability.**
9. **Information is relevant when it influences, or has the capacity to influence, the decisions of users about the allocation of resources.**
10. **Information is a faithful representation when the information depicting economic, environmental or social phenomena is complete, neutral and free from material error.**
11. **Information is comparable when report users are able to meaningfully compare the information in General Purpose Water Accounting Reports about different water reporting entities at the same point in time or for the same reporting period, or when users can meaningfully compare the information about the same water reporting entity over time.**
12. **Information is verifiable when users of General Purpose Water Accounting Reports can be assured that information faithfully represents the phenomena that it purports to represent.**
13. **Information is timely when it is available to users of General Purpose Water Accounting Reports before it loses its relevance for resource allocation decisions.**
14. **Information is understandable if users of General Purpose Water Accounting Reports can comprehend its meaning.**
15. **Providing information in General Purpose Water Accounting Reports that satisfies the objective of usefulness is subject to materiality and cost constraints.**

DISCUSSION

Qualitative Characteristics of General Purpose Water Accounting Reports

16. The qualitative characteristics are complementary concepts. Relevance and faithful representation are fundamental concepts when considering how qualitative characteristics affect the usefulness of information. When preparing GPWAR, relevance and faithful representation should be maximised to the extent possible.
17. Comparability, verifiability, timeliness and understandability are enhancing qualitative characteristics. Enhancing characteristics make information that is relevant and faithfully represented more useful. In practice, a balancing, or trade-off, between enhancing qualitative characteristics may be necessary. Generally, the aim is to achieve an appropriate balance among the characteristics in order to meet the objective of GPWAR. For example, to achieve timeliness in the reporting of water resources it may be necessary to sacrifice some degree of verifiability.

Relevance

18. An essential quality of the information provided in GPWAR is that it is relevant to the decision-making needs of users. Information is considered to be relevant when it influences, or has the capacity to influence users' decisions about the allocation of resources. Information is capable of influencing users' decisions when it has predictive value, confirmatory value or both. Information is useful if it assists users by helping them to understand and evaluate past, present or future water events, transactions or transformations.
19. Information has predictive value if it has value as an input to predictive processes applied by users of GPWAR to form expectations about the future, for example, about future water stocks, flows and rights or claims to water. To have predictive value, information does not need to be a forecast but rather a useful input to the predictive processes of users.
20. Information about water assets and water liabilities and changes in those water assets and water liabilities during a reporting period can frequently be used as a basis for predicting the water reporting entity's future economic, environmental, or social resource position and performance in relation to water as well as other matters in which users are directly interested. Such matters may include, but are not limited to, dividend and security price movements which are affected by the management or governing body's compliance with those water rights or obligations which determine the ability of the water entity to meet its economic, environmental and social commitments as they fall due. The ability to make predictions from GPWAR is enhanced, however, by the manner in which information on past transactions, transformations and events is displayed. For example, the predictive value of statements is enhanced through the separate disclosure of unusual and infrequent items appearing in those statements, such as the water-related outcomes of extreme weather conditions that have occurred during the reporting period.
21. Information has confirmatory value if it confirms, or changes, past or present expectations. Information that confirms past expectations increases the likelihood that the outcomes or results will be as previously expected. Information that changes expectations, changes the perceived probabilities of possible outcomes. For example, information about the current level and structure of water holdings influences users' assessments of the probability that water rights or obligations will result in physical inflows or outflows of water.

22. The predictive and confirmatory roles of information are interrelated. For example, information about the current level and structure of water asset holdings and any water rights or obligations related to those holdings, is relevant to users when they endeavour to predict the extent to which additional water may be made available in response to adverse situations such as droughts. The same information plays a confirmatory role in relation to past predictions about, for example, the availability of water to drought stricken communities.

Faithful Representation

23. An essential quality of GPWAR is that information contained in the reports faithfully represents the underlying data needed to serve the decision-making needs of users. Information is considered to be a faithful representation when it is complete, neutral and free from material error. Thus, for example, elements of a statement in GPWAR should represent faithfully the transactions, transformations and events that result in reported water assets, water liabilities and net water assets of the water reporting entity at the reporting date or for the reporting period.

Complete

24. Information in GPWAR is complete if it includes all information that is necessary for faithful representation of the phenomena that it purports to represent. Information that is omitted or is false and misleading is not useful for users' decision making. For example, reporting the water asset holdings in the absence of reporting the rights or claims to the water holdings would be an omission that reduces the usefulness of the information.

Neutral

25. Information in GPWAR is a faithful representation if it is neutral, that is, it is free from bias. GPWAR are not neutral if, by the selection or presentation of information, they influence the making of a decision or judgement by the users of those reports (for example, the management groups or governing bodies of water reporting entities or potential investors in water reporting entities) in order to achieve a predetermined result or outcome.

Free from Material Error

26. Most information is subject to some risk of being less than a faithful representation of that which it purports to portray. Faithful representation does not mean that the information needs to be exact. Nor does it imply total freedom of error. The information presented in GPWAR is measured under conditions of uncertainty and thus absolute precision and freedom of error cannot be expected. There exist multiple acceptable approaches to quantifying different elements of GPWAR, and different approaches may require estimation rather than exact measurement. Accordingly, the amounts recognised in GPWAR are likely to vary according to the application of judgment about appropriate methods and estimates. Disclosures of the quantification issues may be required in such cases to render the information a faithful representation.
27. Information may sometimes be relevant but so unreliable in nature or representation that its recognition, quantification or disclosure may be potentially misleading. This may result in non-disclosure within GPWAR. In such cases, qualitative information by way of note disclosure may be appropriate.

Comparability

28. An enhancing quality of the information provided in GPWAR is comparability. Decision making involves choosing between alternatives. Information about a water reporting entity is more useful if it can be compared with similar information about other water reporting entities or with similar information about the same entity for some other reporting period or some other point in time.
29. Users must be able to compare the GPWAR of a water reporting entity through time in order to identify trends. Users must also be able to compare the GPWAR of different water reporting entities in order to evaluate their relative positions and trends in relation to water resources.
30. An important implication of the qualitative characteristic of comparability is that users are informed of the water recognition and measurement accounting policies employed in the preparation of a GPWAR any changes in those policies and the effects of such changes. Users need to be able to identify differences between the water accounting policies for like water transactions, transformations and events used in relation to the same water reporting entity from period to period and by different water reporting entities. Compliance with Australian Water Accounting Standards (AWAS), including the disclosure of the water accounting policies used by the water reporting entity, helps to achieve comparability.
31. The need for comparability should not be confused with mere uniformity and should not become an impediment to the introduction of improved water accounting standards. It is not appropriate for the preparer of GPWAR to continue accounting in the same manner for a water transaction, transformation or event if the policy adopted is inconsistent with the qualitative characteristics of relevance and faithful representation. It is also inappropriate for preparers of GPWAR to leave water accounting policies unchanged when more relevant and faithfully representative alternatives exist.
32. Because users wish to compare a water reporting entity's economic, environmental social or physical water resource position and performance in relation to water over time, it is important that GPWAR include corresponding information for the preceding, corresponding or otherwise relevant periods.

Verifiability

33. The usefulness of information provided in GPWAR is enhanced if it is verifiable. Verifiability helps assure users that the information contained in GPWAR faithfully represents what it purports to represent. Verifiability implies that different knowledgeable and independent observers could arrive at the general consensus that the information is represented without material error or bias, or that appropriate recognition or measurement principles have been applied without material error or bias.
34. Verification may be direct or indirect. Direct verification involves an amount or other representation itself being verified. For example, the existence of water rights or obligations appearing in a statement of GPWAR may be verified by accessing a register of water rights or obligations. Indirect verification involves checking the inputs and outputs associated with recognising or measuring information using the same convention or methodology. For example, recalculating the water reporting entity's estimate of ground water indirectly verifies an amount reported in the water reporting entity's GPWAR.

Timeliness

35. The usefulness of information in GPWAR is enhanced if the information is timely. If there is undue delay in the reporting of information it may lose its relevance. Preparers of GPWAR may need to balance the merits of the provision of reliable and faithfully represented information with timely reporting.

Understandability

36. The usefulness of information in GPWAR is enhanced if the information is understandable. For this purpose, users are assumed to have a reasonable knowledge of how water may be sourced, managed, shared and used. This includes having a general understanding of the economic, environmental and social impacts of the use and natural transformation of water. Users of GPWAR are also assumed to be willing to study the reported information with reasonable diligence.
37. Information about complex matters that should be included in the GPWAR because of its relevance to users' decision-making needs should not be excluded merely on the basis that it may be too difficult for some users to understand without assistance.

Constraints on General Purpose Water Reporting

38. Providing information in GPWAR may be constrained by materiality and cost.

Materiality

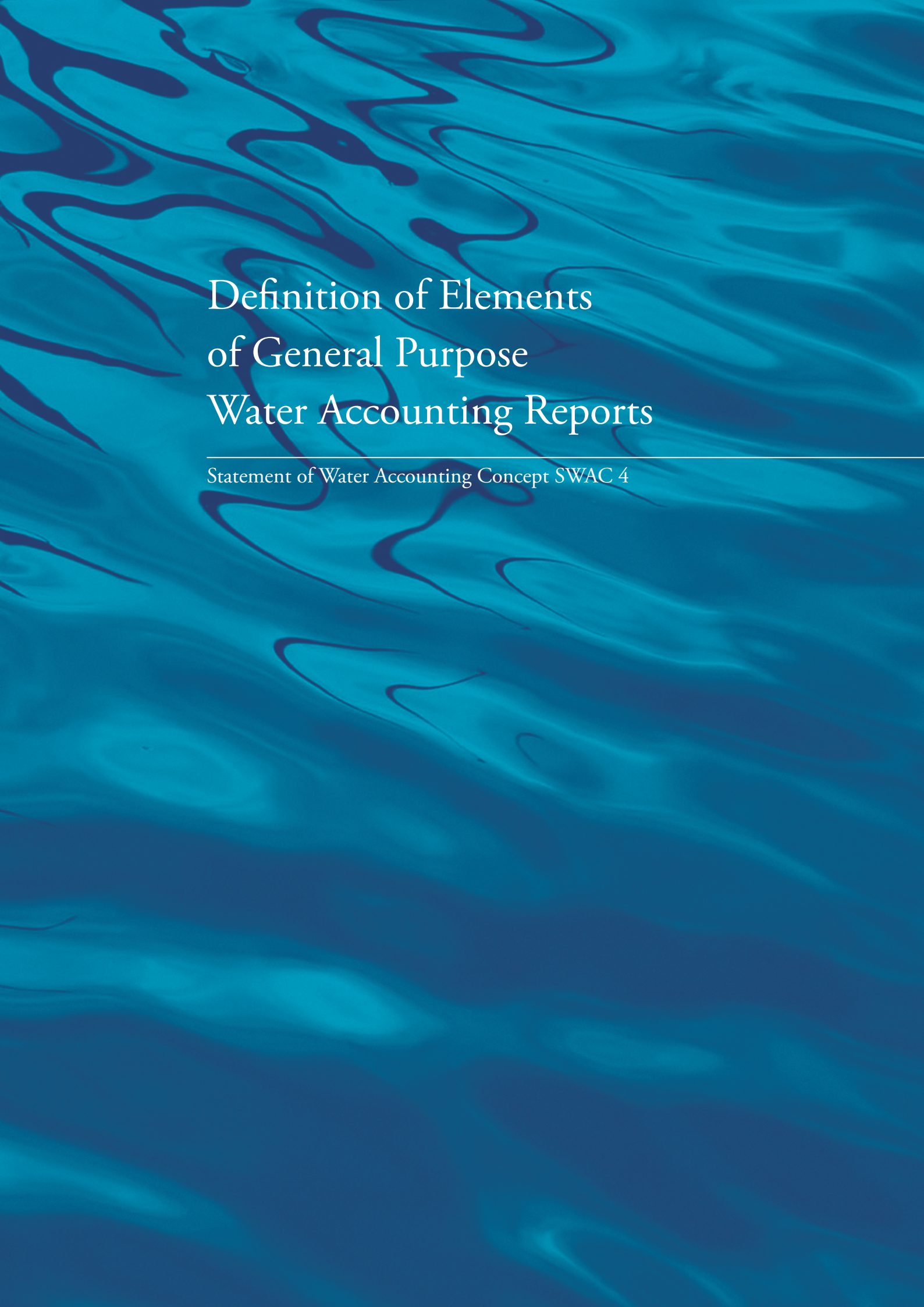
39. Information is material if its omission or misstatement could influence the water-related decisions of users taken on the basis of the GPWAR. Materiality depends on the impact of the nature and amount (volume, value or other attribute) of the item or error, as judged in the particular circumstances of its omission or misstatement on decisions made on the basis of the GPWAR. It is not possible to specify a uniform quantitative threshold at which a particular type of water related information becomes material. Nevertheless, materiality must be taken into account because material omissions or misstatements will render the information incomplete, biased or not free from error.
40. In some cases, the nature of information alone is sufficient to determine its relevance. For example, environmental flows from a particular source may be small in magnitude but may be critical for maintaining ecosystem health and therefore information about such flows is relevant to decision makers. In other cases, both the nature and amount of an item are important, and this might include, for example, the water held in catchment dams. If the volume of farm dams within a particular area is small, the reporting of this information about the water reporting entity may not be relevant. However, in instances where farm dams capture a large portion of runoff, disclosure of this information may be relevant.

Cost

41. The balance between benefit and cost is a pervasive constraint. The benefits derived from information should exceed the cost of providing it. The evaluation of benefits and costs is, however, substantially a judgemental process with the assessment being more qualitative than quantitative, and often incomplete.
42. The benefits of providing information in GPWAR include better resource allocation decision making, and favourable effects on public relations. It may also facilitate better decisions by water managers if the provision of information for general- reporting purposes enhances the quality of information used internally.

43. The costs of preparing GPWAR include the costs of collecting, processing, verifying and disseminating the information contained therein. Users incur additional costs of analysis and interpretation.
44. The costs do not necessarily fall explicitly on those users who enjoy the benefits. Benefits may also be enjoyed by users other than those for whom the information is prepared; for example, the provision of further information to the community may reduce lobbying in relation to water pricing or distribution and thereby also reduce the attendant financial and non-financial costs. For these reasons, it is difficult to apply a cost-benefit test in any particular case. Nevertheless, water accounting standard-setters in particular, as well as the preparers and users of GPWAR, should be aware of this constraint. Water accounting standard setters should recognise explicitly the cost-benefit trade-off in developing water accounting standards.
45. In assessing accountability in relation to the decisions made by the management or governing body of a water reporting entity, the impact of cost on the information reported should be acknowledged. For example, with stream gauging the resource manager may be faced with the following trade-off:
 - a) install and maintain a relatively small number of gauges to a high standard, covering a small proportion of the catchment, reasoning that flows in the balance of the catchment can be estimated by hydrographic correlation techniques; or
 - b) install and maintain a larger number of gauges to a lower standard, but covering a higher proportion of the catchment.

In such instances, the relevance and faithful representation of the related information included in GPWAR must be carefully considered and communicated to report users.



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.

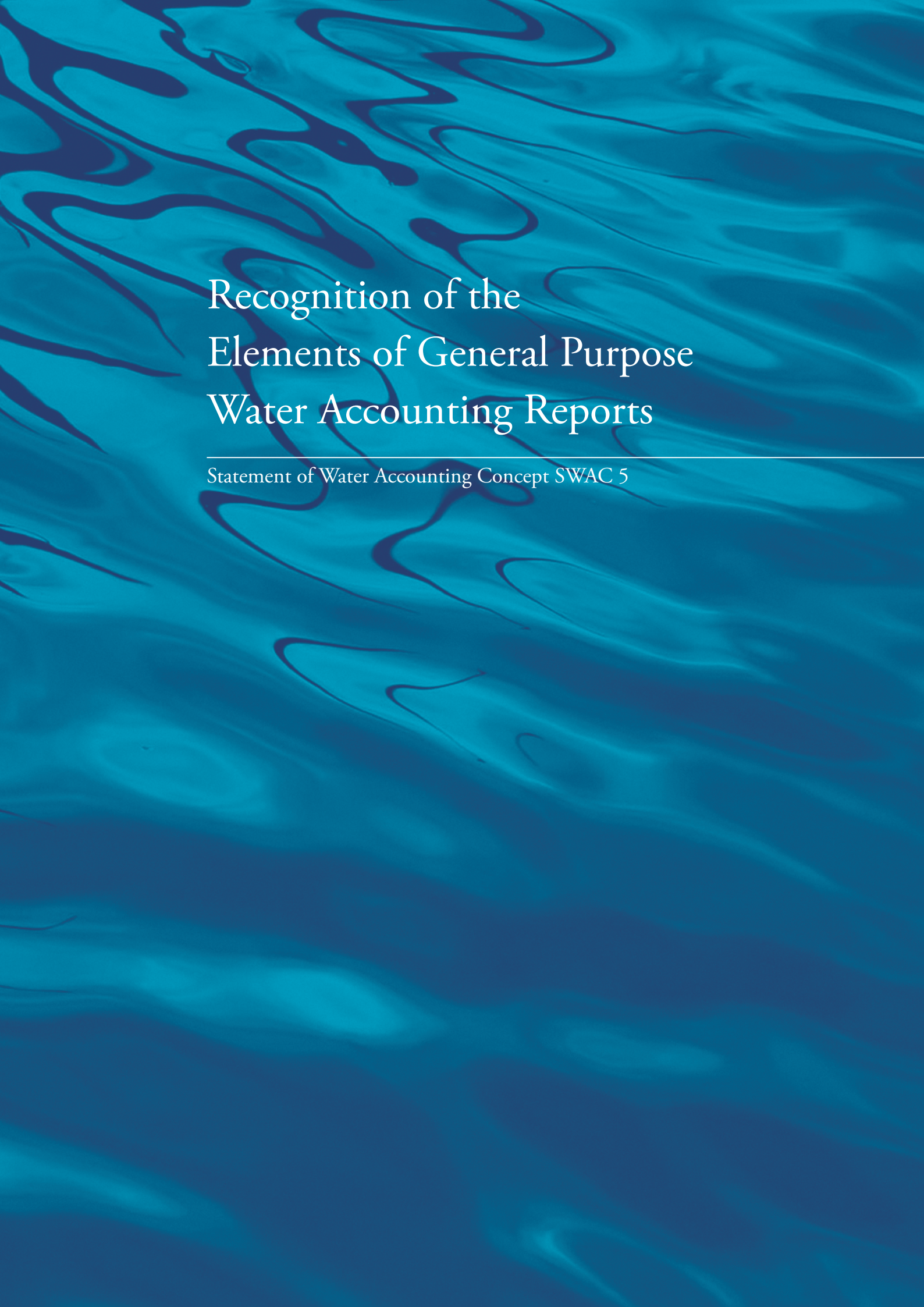
35. A present obligation is distinct from a future obligation. A decision by the management of a water reporting entity to acquire water assets in the future does not, of itself, give rise to a present obligation. An obligation normally arises only when the water asset is delivered or the water reporting 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.



Recognition of the Elements of General Purpose Water Accounting Reports

Statement of Water Accounting Concept SWAC 5

CITATION

1. This Statement may be cited as Statement of Water Accounting Concepts 5 *Recognition of the Elements of General Purpose Water Accounting Reports* (SWAC 5).

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 specify the recognition criteria for the elements of GPWAR.
5. This Statement specifies the recognition criteria for elements of GPWAR, consistent with the objective of general purpose water accounting as outlined in SWAC 2 and also with the qualitative characteristics of information contained in the reports as set out in SWAC 3.

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.

Recognition of the Elements of General Purpose Water Accounting Reports

8. **Recognition is the process of recording elements of General Purpose Water Accounting Reports in statements within those General Purpose Water Accounting Reports.**
9. **An item that meets the definition of a water asset shall be recognised in a particular statement within the General Purpose Water Accounting Reports if:**
 - a) **it is probable that future benefits associated with the item will be derived by the individual or organisation that is a water reporting entity, or by a group of stakeholders of a physical water entity that is a water reporting entity; and**
 - b) **the item has an attribute that can be quantified with representational faithfulness; and**
 - c) **the attribute that can be quantified with representational faithfulness is the appropriate unit of account for the particular statement.**
10. **An item that meets the definition of a water liability shall be recognised in a particular statement within the General Purpose Water Accounting Report if:**
 - a) **it is probable that the obligation will result in a decrease in the water reporting entity's assets or an increase in another water liability when an obligation is discharged; and**
 - b) **the item has an attribute that can be quantified with representational faithfulness; and**

- c) the attribute that can be quantified with representational faithfulness is the appropriate unit of account for the particular statement.
11. An item that meets the definition of net water assets shall be recognised in a particular statement within the General Purpose Water Accounting Report if:
 - a) the water assets and water liabilities giving rise to the net water assets are recognised in the general purpose water accounting report; and
 - b) the item has an attribute that can be quantified with representational faithfulness; and
 - c) the attribute that can be quantified with representational faithfulness is the appropriate unit of account for the particular statement.
 12. An item that meets the definition of a change in a water asset or a change in a water liability shall be recognised in a particular statement within the General Purpose Water Accounting Report if:
 - a) it is probable that there has been a change in a water asset or a change in a water liability; and
 - b) the water asset or water liability that has increased or decreased is recognised in the General Purpose Water Accounting Reports; and
 - c) the change in the water asset or water liability has an attribute that can be quantified with representational faithfulness; and
 - d) the attribute that can be quantified with representational faithfulness is the appropriate unit of account for the particular statement.

DISCUSSION

The Probability of Future Benefit or Present Obligation

13. For the purpose of this Statement of Water Accounting Concepts, the notion of probability is used in the recognition criteria to refer to the degree of uncertainty that:
 - a) in the case of water assets, the future benefits associated with the item will be derived by the individual or organisation that is a water reporting entity, or by a group of stakeholders of a physical water entity that is a water reporting entity; and
 - b) in the case of water liabilities, the item will result in a decrease in the water reporting entity's assets or an increase in another water liability when an obligation is discharged; and
 - c) in the case of a change in a water asset or a change in a water liability, there has been a change in the underlying water asset or water liability.
14. If an outcome or occurrence is probable, it is more likely than not likely.
15. The notion of probability is in keeping with the uncertainty that characterises the environment in which water reporting entities operate. Assessments of the degree of uncertainty attaching to future benefits and present obligations are made on the basis of the evidence available when the GPWAR are prepared. For example, while water stored in a dam for irrigation purposes may normally meet the definition of a water asset, if that water becomes so saline or so contaminated that it is unfit for irrigation or alternative uses, it may be reasonable to assume that the water is unlikely to provide future benefits to either the water reporting entity (e.g. the organisation that manages the dam) or the stakeholders of a physical water entity that is a water reporting entity. In such cases, recognition of the water as a water asset is not appropriate.

16. In the case of a water liability, some claims or other rights against the water held by a water reporting entity may be unlikely to result in either a decrease in the water reporting entity's assets or an increase in another water liability. This could arise, for example, when a dam breaks and the water reporting entity managing the dam is unable to deliver water within the period for which the claims or other rights against the water are current, and the claim or right provides no recourse to water beyond that period. Another example arises where a customer has claims against the water held by a water reporting entity but the water reporting entity is unlikely to supply water to that customer because the customer has failed to pay fees for water access and is unlikely to do so. In such instances, if it is more unlikely than likely that there will be a decrease in the water reporting entity's water assets or an increase in another water liability when the obligation is discharged, a water liability should not be recognised.

Faithful Representation

17. A criterion for the recognition of an element of GPWAR is that it possesses an attribute that can be quantified with faithful representation. In many cases, the attribute must be estimated. The use of reasonable estimates is an essential part of the preparation of GPWAR and does not undermine their faithful representation. When, however, a reasonable estimate cannot be made, the item should not be recognised in a particular statement.
18. Elements of GPWAR that cannot be quantified directly may be estimated using various modelling techniques.
19. The representational faithfulness with which an element can be quantified is influenced by several factors, regardless of the quantification techniques used. For example, elements that can be quantified directly may be subject to measurement error due to:
 - a) the available technology and equipment used for quantification
 - b) limitations on the access to the water source for the purpose of data collection
 - c) the need for aggregation or disaggregation of data to obtain the information on the temporal or spatial scale required for reporting.
20. Similarly, in the case of elements that are quantified indirectly, models developed and used to quantify the elements may be poorly specified, thereby reducing the representational faithfulness of the quantification.
21. Factors such as those outlined in paragraphs 19 and 20 do not, of themselves, undermine the representational faithfulness of the information contained in GPWAR. Assessments of the representational faithfulness of elements disclosed in the reports are made on the basis of the evidence available when the GPWAR are prepared.
22. Consistent with SWAC 3, information has the quality of representational faithfulness when it is free from material error and bias and can be depended upon by users to represent all phenomena that it either purports to represent or could reasonably be expected to represent.
23. GPWAR should faithfully represent the transactions, transformations and other events that result in water assets, water liabilities, changes in water assets and changes in water liabilities that relate to the water reporting entity at the reporting date and that meet the recognition criteria.
24. In assessing whether the elements recognised in GPWAR faithfully represent the holdings, obligations, transactions, transformations and events intended, several factors should be considered. These factors include the temporal and spatial scales at which the information is to be recognised and the unit of account in which the relevant element

should be recognised. For example, some information such as river flows recognised in the reports may be best presented in small time-steps such as hours, days, or weeks, whereas other information, such as groundwater volume in undeveloped areas, may only need to be reported each calendar or water year and by region.

25. Most information reported in GPWAR is subject to some risk of being less than a faithful representation of the underlying substance. This is not due to bias, but rather to inherent difficulties either in identifying the transactions, transformations and other events to be quantified or in devising and applying measurement and presentation techniques that can convey messages that correspond with those transactions, transformations and events. In certain cases, the quantification of the effects of transactions, transformations and events could be so uncertain that they would not be recognised in the GPWAR. For example, it may be difficult to identify and quantify with confidence the amount of loss through seepage from a natural water source. In other cases, however, it may be appropriate to recognise such items and to disclose the risk of error surrounding their recognition and quantification.

Substance Over Form

26. If information is to faithfully represent the transactions, transformations and events that it purports to represent, it is necessary that those transactions, transformations and events are accounted for and presented in accordance with their substance and reality and not merely their legal form. The substance of transactions, transformations or events is not always consistent with their legal or contrived form. For example, the claim or other right to water may have no value because the water is unavailable and is unlikely to become available. In such circumstances, the reporting of a change in water assets would not faithfully represent the transaction entered into.

Neutrality

27. To be representationally faithful, the information contained in GPWAR must be neutral, that is, free from bias. The recognition of elements of GPWAR is not neutral if, by the selection or presentation of information, they influence the making of a decision or judgment in order to achieve a predetermined result or outcome.
28. The preparers of GPWAR must contend with the uncertainties that inevitably surround many transactions, transformations, events and circumstances. Water assets, water liabilities, changes in water assets and changes in water liabilities are recognised in the presence of such uncertainties by the disclosure of their nature and extent and by the exercise of prudence in the preparation of the GPWAR. Prudence is the inclusion of a degree of caution in the exercise of the judgments needed in making the estimates required under conditions of uncertainty, such that water assets and increases in water assets are not overstated and water liabilities and increases in water liabilities are not understated. However, the exercise of prudence does not allow, for example, the deliberate understatement of water assets and changes in water assets, or the deliberate overstatement of water liabilities and changes in water liabilities, because the GPWAR would not be neutral. In such cases, the reports would, therefore, not have the quality of representational faithfulness.

Where Recognition Criteria are not met

29. Where an item meets the definition of a water asset, water liability, or a change in water assets or a change in water liabilities but does not satisfy the recognition criteria, disclosure in the notes accompanying the GPWAR statements may be appropriate. Disclosure in the notes is appropriate if that disclosure will assist GPWAR users to make or evaluate decisions affecting the allocation of resources.



Quantification of Attributes of Elements of General Purpose Water Accounting Reports

Statement of Water Accounting Concept SWAC 6

CITATION

1. This Statement may be cited as Statement of Water Accounting Concepts 6 *Quantification of Attributes of Elements of General Purpose Water Accounting Reports* (SWAC 6).

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 describe the quantification of the attributes of elements of GPWAR that make the information contained therein useful for making and evaluating decisions about the allocation of resources.

WATER ACCOUNTING CONCEPTS

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

Concepts of the Quantification of Attributes of Elements of General Purpose Water Accounting Reports

7. **An element that is recognised in a General Purpose Water Accounting Report shall be quantified within that General Purpose Water Accounting Report.**
8. **Quantification is the process of determining the amount at which an attribute of an element of a General Purpose Water Accounting Report is recognised in a particular statement within the report.**
9. **Quantification of an attribute of an element shall involve:**
 - a) **Selecting the appropriate attribute of an element; and**
 - b) **Selecting the appropriate unit of account; and**
 - c) **Selecting the appropriate quantification approach; and**
 - d) **Using the unit of account and quantification approach to determine the amount of the attribute of the element.**
10. **The quantification of an attribute of an element recognised in a General Purpose Water Accounting Reports shall apply the combination of attribute, unit of account and quantification approach that best enables the report to faithfully represent information that is useful for making and evaluating resource allocation decisions.**

DISCUSSION

Attributes

11. An element of a GPWAR will possess an attribute that can be quantified and often it will possess more than one attribute. For example, quantifiable attributes of water assets, water liabilities, net water assets and changes in balances of water assets and water liabilities include volume, salinity or monetary value.
12. The appropriateness of the attribute to be quantified shall depend on users' information needs. For example, water volume may be an appropriate attribute for water assets of a physical water reporting entity supplying water to a township if users are interested in water supply continuity. The appropriate attribute for water assets of a desalination plant may be water salinity so that users can assess the effectiveness of the desalination process. The appropriate attribute for tradeable water rights (water assets or water liabilities) may be monetary value if users are interested in assessing the financial viability of irrigation enterprises dependant on such rights attributable to the water reporting entity.

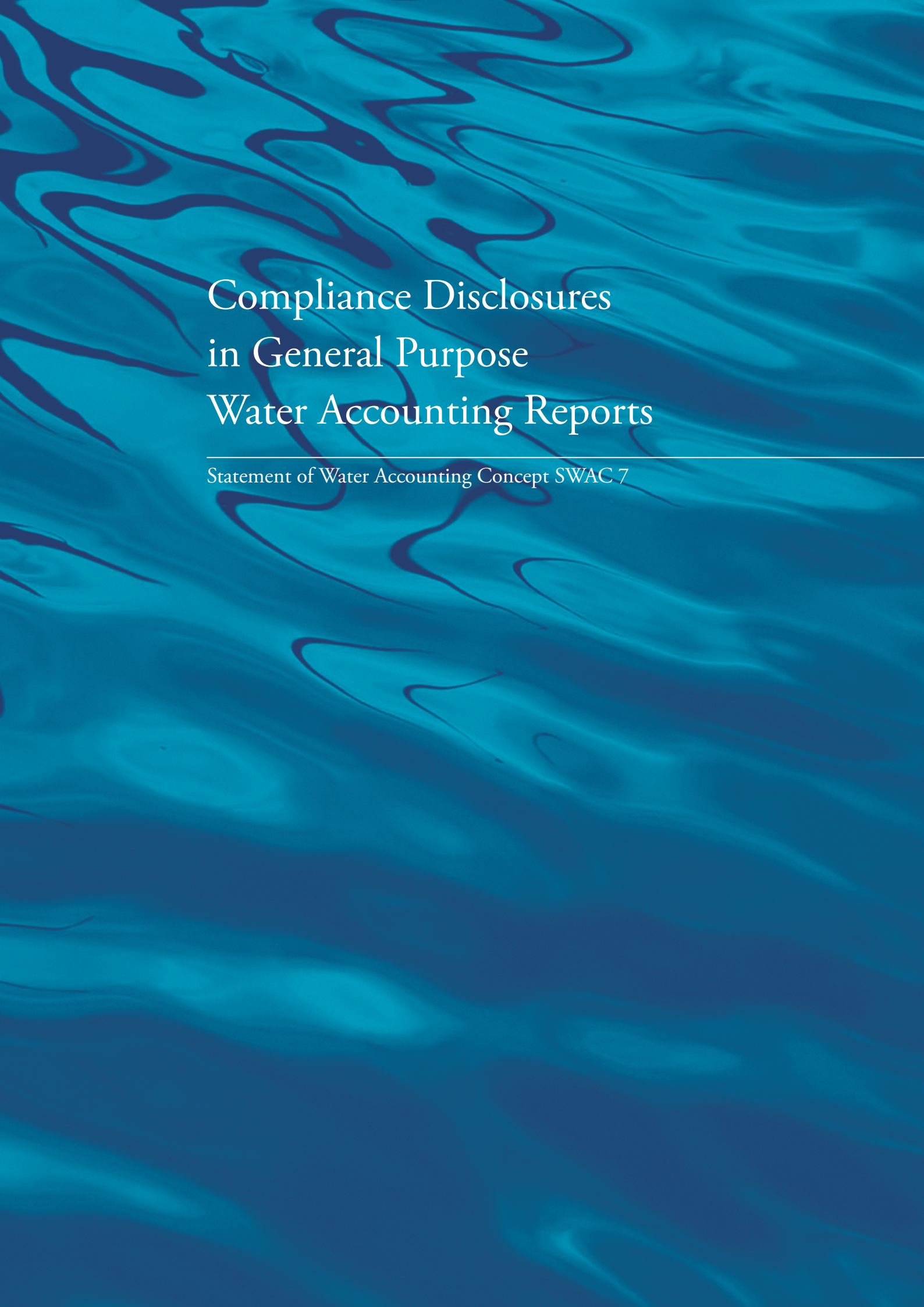
Unit of Account

13. An attribute of an element may be quantified using different units of account. For example, the volume (attribute) of water stocks (water assets element) may be quantified in units such as litres, cubic metres or gallons. Salinity (attribute) of water assets may be expressed in units of account such as milligrams of dissolved solid per litre or microSiemens per centimetre ($\mu\text{S}/\text{cm}$) at 25°C . The unit of account for assigning a monetary value to water assets, water liabilities, net water assets and changes in balances of water assets and water liabilities can be a currency or a currency adjusted for changes in purchasing power.
14. The unit of account selected shall be the unit that maximises, to the extent possible, the usefulness of the information for users' resource allocations decisions. For example:
 - a) Australian users of general purpose water accounting reports are likely to find metric volume measure more useful than imperial measures of water volume;
 - b) The precision of water salinity quantification may be more important to irrigators who are users of the GPWAR of a desalination plant relative to irrigators who are users of the GPWAR of a water reporting entity that supplies water from non saline sources. Thus, applying a cost benefit trade-off, the nature of the water reporting entity and its user groups may determine the use of milligrams of dissolved solid per litre or microSiemens per centimetre ($\mu\text{S}/\text{cm}$) at 25°C ;
 - c) In order for users to assess the financial viability of the water reporting entity during periods of hyper inflation, the monetary value (attribute) of the elements of GPWAR will be more appropriately quantified using units of currency adjusted for changes in purchasing power than unadjusted currency.

Quantification Approaches

15. An attribute of an element may often be quantified using different quantification approaches. For example, water reservoir volume losses due to sedimentation can be quantified using bathymetric surveys or multi-frequency acoustic profiling systems. Approaches to quantifying salinity include total dissolved salts (or solids) and electrical conductivity. Approaches to quantifying the monetary value of water include cost, market value and net present value.
16. All elements of a particular type (water assets, water liabilities, net water assets or changes in water assets and water liabilities) reported in a particular statement in a GPWAR should be quantified using the same attribute if those elements are to be aggregated.

For example, it is not meaningful to report aggregate water assets if some water assets have volumetric quantification and others in the same statement are quantified using a monetary value. Further, it is not meaningful to report aggregate water assets or water liabilities quantities if the attribute unit of account differs. For example, it is not meaningful to report aggregate water assets quantified in volume if some water assets are recognised in litres and others in cubic metres. However, aggregation of elements of GPWAR may be meaningful where approaches to quantification of an attribute to be recognised differ. For example, a water reporting entity recognising its water storages in litres can report the aggregate water storages even if the approach to determining the volume of individual water storages varies.



Compliance Disclosures in General Purpose Water Accounting Reports

Statement of Water Accounting Concept SWAC 7

CITATION

1. This Statement may be cited as Statement of Water Accounting Concepts 7 *Compliance Disclosures in General Purpose Water Accounting Reports* (SWAC 7).

APPLICATION

2. The concepts in this Water Accounting Conceptual Framework (WACF) underpin general purpose water reporting. Until regulation requires the adoption of the WACF, the concepts are not mandatory requirements for the purpose of preparing 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 and explain the requirements for compliance disclosures in GPWAR.
5. This Statement specifies the compliance disclosures in GPWAR that will help to enable the GPWAR to satisfy their intended objective, as specified 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

Scope of Compliance Disclosures

8. This Statement focuses on Compliance Disclosures relevant to the objectives of general purpose water accounting (as described in SWAC 2). This means that compliance disclosures recommended here relate specifically to water resources and water accounting issues rather than the broad responsibilities of, or in relation to, water reporting entities. Therefore, compliance disclosures regarding statutory responsibilities pertaining to public health, corporations law, occupational health and safety or other areas are not addressed by this Statement.
9. This Statement does not specify all of the many agreements, legislation and policy documents that impose compliance requirements.
10. The management of individual water reporting entities will have differing responsibilities, and will therefore be subject to differing compliance requirements, depending on their organisational mandate and geographic scope. For instance, the management of some water -reporting entities will have water distribution responsibilities requiring compliance with multiple water sharing and cap agreements, sometimes involving interstate or cross-border agreements. The management of such entities will need to disclose compliance across all relevant water sharing and cap agreements. In contrast, the management of a water reporting entity responsible only for supply within a single region may have few water sharing compliance requirements.

Concept of Compliance Disclosures in General Purpose Water Accounting Reports

- 11. General Purpose Water Accounting Reports shall disclose information that assists users to assess compliance with relevant externally-imposed requirements or with broader notions of best practice relevant to water reporting entities.**

DISCUSSION

12. The role of compliance disclosures is primarily to enhance the confidence of GPWAR users through the transparent reporting of outcomes compared to requirements.
13. Depending on the nature of the water reporting entity, compliance disclosures may be required across several distinct areas such as water sharing and cap agreements; water supply and operations; trading of water rights and obligations; environmental stewardship; and water planning and strategic initiatives.

Water Sharing and Cap Agreements

14. The regulation of water resources management is based primarily on State systems of water sharing that establish water rights and obligations. Rules which govern water sharing within any particular system will be a function of the relevant Federal Government Water Act, State or Territory government Water Acts, State, Territory and regional water sharing and/or bulk water agreements, Federal and cross-border water agreements (such as the Murray-Darling Basin Cap) and additional specific policies or agreements, such as surface water or groundwater management plans.
15. The purpose of compliance disclosures is to enable users of the reports to make informed assessments of whether compliance obligations with respect to the water reporting entity are being met. The focus of these compliance disclosures relates to aspects such as where available water was distributed and used, whether rights or obligations and use aligned with policies and procedures, and whether all relevant agreements were adhered to.
16. Compliance disclosures for water sharing are likely to include both quantitative and qualitative items. Quantitative disclosures are likely to include allocations to specific holders of water rights, both consumptive and non-consumptive, as well as quantities transferred under cross-border agreements (for example, Murray-Darling Basin Agreement) and divisions under Bulk Water or water sharing agreements. In addition, qualitative disclosures will be required against stated policies and regulations regarding water sharing processes, compliance with international treaties and compliance with relevant water resource management objectives, such as 'security of supply' targets.

Water Supply and Operations

17. Water regulations may also govern the quantity and nature of water supply, and operational requirements. For example, minimum passing flows may be defined for a specific waterway within an Act, agreement or policy. In addition, other operational constraints may be placed upon entities in relation to such matters as water deliveries, water quality, pumping rates, discharge quantities and quality, or other operational parameters.
18. A purpose of compliance disclosures for water supply and operations is to enable users of the reports to make informed estimates as to whether the management of the water-reporting entity is meeting its responsibilities in terms of actions within waterways, channels, pipes and other infrastructure, and to create transparency around water supply and operations. Examples of these compliance disclosures might include comparisons of water received or delivered with water available for rights or obligations, and the extent to which minimum passing flow requirements were met, end-of-system flows were supplied and interstate or inter-valley transfers were effected.

19. Disclosures regarding compliance with water quality requirements will also be required where relevant. For example, ensuring water delivered was of a quality sufficient to meet required levels where specified by a Drinking Water Act, Water Act or specific agreement.

Water Rights, Obligations and Trading

20. Robust water rights, obligations, and trading arrangements are essential for an efficient and effective water resource management system. Compliance disclosures for water rights, obligations and trading assist in giving users confidence about how reallocation mechanisms operate, and their effect on the water reporting entity. Several regulatory authorities have jurisdiction in relation to requirements and desirable features of water rights, obligations and trading, including the Australian Competition and Consumer Commission, the National Water Commission, State Authorities (including Auditor-Generals Departments) as well as general guidelines relating to water trading outlined in water acts.
21. Compliance disclosures regarding water rights and obligations, and trading of both rights and obligations should give users confidence that there is transparency around who owns the water and where it is going.
22. Depending on the nature of the water reporting entity, desirable compliance disclosures for water rights and obligations may include: the formation and disclosure of water registries (according to requirements of the National Water Initiative), progress towards licensing of previously unlicensed rights and obligations (for example, groundwater, unregulated diversions and farm dams), or efforts to monitor compliance with provisions relating to the rights or obligations (for example, detecting water theft, illegal connections and leakage).
23. Depending on the nature of the water reporting entity, desirable compliance disclosures regarding water trading may include: general trading information about movements between districts, and processes in place for recording and processing trading of either rights or obligations (for example, time from trade occurring to trade being recorded).

Environmental Stewardship

24. Environmental stewardship can be required by a wide range of regulatory instruments, licence conditions, agreements and treaties. Disclosures against environmental requirements will assist a wide range of stakeholders representing consumptive and non-consumptive users to make and evaluate decisions about the allocation of resources.
25. Specific compliance disclosures will depend on the reporting entity. However, examples of desirable compliance disclosures may include delivery against environmental flow targets (both event-based and minimum flows), compliance with licences issued by authorities (for example, licences issued by environmental management entities) that specify operating and discharge limits, and compliance with international agreements and treaties and relevant jurisdiction environmental protection policies.

Water Planning and Strategic Initiatives

26. The range and scope of water planning and strategic initiatives is enormous and any individual reporting entity may be subject to a variety of plans and reporting requirements. Disclosures to assist better understanding of water planning and management will improve user confidence in the importance and effectiveness of such initiatives.

Desirable compliance disclosures relating to water planning and strategic initiatives may include: adherence to processes for developing water resource plans (meetings, approvals, etc); progress on implementation of regional resource plans and water allocation plans; and improvements in the administration of water rights and obligations (for example, against National Water Initiative objectives).



Assurance of General Purpose Water Accounting Reports

Statement of Water Accounting Concept SWAC 8

CITATION

1. This Statement may be cited as Statement of Water Accounting Concepts 8 *Assurance of General Purpose Water Accounting Reports* (SWAC 8).

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. This Statement does not establish standards or provide mandatory requirements for the performance of assurance engagements in relation to GPWAR. Australian Water Accounting Standards (AWAS) contain mandatory requirements and explanatory guidance, consistent with the concepts in the WACF, for the performance of assurance engagements.
4. The WACF applies to GPWAR issued after 11 May 2009.

INTRODUCTION

5. The purpose of this Statement is to define and describe the elements and objectives of an assurance engagement for GPWAR.
6. This Statement specifies the assurance requirements that will help to enable GPWAR to satisfy their intended objective, as specified in SWAC 2.

WATER ACCOUNTING CONCEPTS

7. The following concepts shall be interpreted in the context of all paragraphs included in this Statement.
8. Definitions, as outlined in the Water Accounting Conceptual Framework Preface, shall be read as forming part of the accounting concepts set out in this statement.

Concepts of the Assurance Of General Purpose Water Accounting Reports

9. **General Purpose Water Accounting Reports shall contain an independent attestation that they reports have been prepared in accordance with approved water accounting standards and other approved pronouncements governing the content of the reports and are consistent with the concepts in the Water Accounting Conceptual Framework.**
10. **The attestation of General Purpose Water Accounting Reports shall be conducted in accordance with applicable auditing and assurance standards and ethical standards and principles related to integrity, objectivity, professional competence and due care, confidentiality and professionalism.**

DISCUSSION

Definition and Objective of an Assurance Engagement

11. “Assurance engagement” means an engagement in which an assurance practitioner expresses an opinion as to whether the GPWAR are prepared in accordance with AWAS and concepts in the WACF. This Statement does not cover assurance reports related to special purpose water accounting reports.
12. The purpose of the opinion expressed in an assurance engagement is to enhance the confidence of users of GPWAR when using those reports for making and evaluating decisions about the allocation of resources.
13. The assurance practitioner must gather sufficient appropriate evidence to provide a reasonable basis for expressing an opinion in an assurance report.
14. For the purposes of this Statement, an “assurance practitioner” means a person or an organisation, whether in the private or public sector, involved in the provision of assurance services.
15. In addition to the WACF and AWAS, assurance practitioners who perform assurance engagements shall be governed by:
 - a) any applicable code of conduct, issued by a professional body, which establishes relevant fundamental ethical principles for assurance practitioners
 - b) those quality control requirements for firms, issued by a professional body, which establish relevant standards and provide guidance on a firm’s system of quality control
 - c) any applicable auditing or assurance standards issued by a professional body
 - d) relevant legislative requirements.

Code of Conduct

16. The applicable code of conduct of a professional body provides appropriate guidance on the application of fundamental ethical principles to assurance engagements.
17. An applicable code of conduct of a professional body includes a conceptual approach to independence that takes into account, for each assurance engagement, threats to independence, accepted safeguards and the public interest. The code requires firms and members of assurance teams to identify and evaluate circumstances and relationships that create threats to independence and to take appropriate action to eliminate these threats or to reduce them to an acceptable level by the application of safeguards.

Fundamental Ethical Principles

18. The fundamental ethical principles that apply to all assurance engagements include:
 - a) Integrity. An assurance practitioner must be straightforward and honest in professional and business relationships. Integrity also implies fair dealing and truthfulness.
 - b) Objectivity. An assurance practitioner has an obligation not to compromise their professional or business judgment because of bias, conflict of interest or the undue influence of others.
 - c) Professional competence and due care. An assurance practitioner must maintain professional knowledge and skills at the level required to ensure that clients or employers receive competent professional service; and act diligently in accordance with applicable technical and professional standards when providing their services.

- d) Confidentiality. An assurance practitioner must refrain from disclosing outside the firm or employing organisation confidential information acquired as a result of professional and business relationships without proper and specific authority from the client or employer or unless there is a legal duty to disclose. Further, he/she must not use confidential information acquired as a result of professional and business relationships to their personal advantage or the advantage of third parties.
- e) Professional behaviour. An assurance practitioner must comply with relevant laws and regulations and avoid any action or omission that may bring discredit to the profession. This includes actions or omissions that a reasonable and informed third party, having knowledge of all relevant information, would conclude has a negative effect on the good reputation of the profession.

Quality Control

19. The following elements of a quality control system apply to all assurance engagements:
- a) leadership responsibilities for quality on the assurance engagement
 - b) ethical requirements
 - c) acceptance and continuance of client relationships and specific assurance engagements
 - d) assignment of assurance engagement teams
 - e) assurance engagement performance
 - f) monitoring.

For more information

Visit our website at: www.bom.gov.au/water/wasb

To comment, please send an email to: wasbofeedback@bom.gov.au



Australian Government
National Water Commission