Water Accounting: Frequently Asked Questions

1. What is water accounting?

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

Water accounting will be performed in accordance with Australian Water Accounting Standards (AWASs) and the Water Accounting Conceptual Framework (WACF). These pronouncements will set out the requirements for the preparation and presentation of General Purpose Water Accounting Reports (GPWARs) for particular entities ('water reporting entities') where such reports will be useful for decision-making.

2. How does water accounting contribute to water management?

According to the National Water Initiative, water accounting will 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' (NWI, 2004 para. 80).

General purpose water accounts will inform users' decisions about the allocation of resources and enhance public and investor confidence about how water resources have been sourced, managed, shared and utilized during the reporting period.

3. Who are the users of general purpose water accounting reports?

Due to the importance of water to Australia, there will be many diverse users of general purpose water accounts. The Preface to the WACF (para. 19) identifies the following categories of users:

- 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; and
- interested citizens.

As such users cannot command their own water information, and they will rely on GPWARs to meet their information needs.

4. What is the difference between the Water Accounting Conceptual Framework (WACF) and Australian Water Accounting Standards (AWASs)?

The WACF provides the conceptual framework for water accounting. Their primary purpose is to assist with the development of AWASs and ensure that the AWASs are consistent and logical. AWASs will provide detailed requirements for the preparation and presentation of General Purpose Water Accounting Reports, and are therefore the primary source of guidance for report preparers. However, on occasion report preparers may encounter circumstances where the accounting treatment and/or disclosure is not prescribed by AWASs. In such circumstances the principles set out in the SWACs provide guidance.

Further detail on the role of the SWACs is provided in the *Preface to the Water Accounting Conceptual Framework for the Preparation and Presentation of General Purpose Water Accounting Reports*. Paragraph 5 states that the SWACs are intended to:

- a) assist water accounting standard setters to develop future Australian Water Accounting Standards consistent with the framework and to review existing Australian Water Accounting Standards;
- 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 General Purpose Water Accounting Reports;
- c) assist preparers of General Purpose Water Accounting Reports to apply Australian Water Accounting Standards and to deal with topics that have yet to form the subject of an Australian Water Accounting Standard;
- d) assist assurers to form an opinion as to whether General Purpose Water Accounting Reports conform with Australian Water Accounting Standards;
- e) assist users of General Purpose Water Accounting Reports to interpret the information contained in General Purpose Water Accounting Reports prepared in conformity with Australian Water Accounting Standards; and
- f) provide those who are interested in the work of the water accounting standard setters with information about the concepts underpinning the formulation of Australian Water Accounting Standards.

5. What are General Purpose Water Accounting Reports (GPWARs)?

Through an extensive pilot program and consultation process, the Water Accounting Development Committee has recommended that GPWARs will comprise:

- 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; and
- f) an Assurance Statement.

An important aspect of GPWARs is that they will be prepared on both a "physical flow" and "accrual" basis. The physical flow report (Statement of Physical Water Flows) will report the

flows that have actually occurred over the reporting period. In contrast, the 'accrual' reports (Statement of Water Assets and Water Liabilities and the Statement of Changes in Water Assets and Water Liabilities) adjusts for future outflows or inflows currently attributable to the entity. For example, when an allocation announcement is made, the water reporting entity recognises the volume of water allocation as an outflow *at the announcement date*. This obligation is shown on the Statement of Changes in Water Assets and Water Liabilities (and therefore the Statement of Water Assets and Water Liabilities as well). It is not shown in the Statement of Physical Flows until the allocated water has been taken or delivered.

6. What is the scope of GPWARs? Will they consider volumetric, water quality, and also financial issues (e.g. water cost, market value and trade)?

As the AWAS are developed, more detailed disclosure and accounting requirements will emerge, to the extent that they are required by users. At present, it is envisaged that:

- Volumetric information will be required to be reported under both a 'physical flow' basis (in the Statement of Physical Water Flows) and an 'accrual' basis (in the Statement of Water Assets and Water Liabilities and the Statement of Changes in Water Assets and Water Liabilities). Other information such as flow rates may be required to be disclosed either in the notes to the accounts or the contextual statement.
- Differing levels of water quality are not required to be separately accounted for (though disclosures may be required), but reported water volumes must be of appropriate quality for their intended use (i.e. 'fit for purpose').
- Financial information does not form part of the Water Accounting Statements (which comprise the Statement of Physical Water Flows, the Statement of Water Assets and Water Liabilities and the Statement of Changes in Water Assets and Water Liabilities). However disclosures of financial information (such as trades in and out of the water entity or transactions by the water entity) may be required in the notes to the accounts and/or the contextual statement.

Importantly, AWASs set out minimum reporting requirements. Water reporting entities are encouraged to disclose additional information they believe relevant to users. As noted above, the reporting and disclosure of items which are not addressed by the AWASs should be conducted in accordance with the principles set out in the WACF.

7. Who will have to prepare GPWARs?

The PAWAS [link to download page] has been released for use with the Methods Pilot for the National Water Account and public comment. Following consideration of this comment, an exposure draft of the AWAS is expected to be released by the middle of 2010. A 'water reporting entity' is a 'water entity' that has users dependent on the preparation of GPWARs in order to assist with decision-making. A 'water entity' is a very broad concept which encompasses any entity that interacts with water (geographic or otherwise).

The WACF consists of a Preface, and 8 Statements of Water Accounting Concepts (SWACs). SWAC 1 – Definition of a Water Reporting Entity formally defines these terms. SWAC 1 para. 10 defines a 'water entity' as:

- a physical entity, an organisation or individual, which:
 - (a) holds or transfers water, or rights or other direct or indirect claims to water; or
 - (b) has inflows and/or outflows of water; or

(c) has responsibilities relating to the management of water.

SWAC 1 para. 11 defines a 'water reporting entity' as:

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.

For example, a catchment, a river or a particular reach of a river would each meet the definition of a 'water entity'. However, the level of interest in each entity (which will be determined by factors such as its financial, social or environmental significance) will determine whether all, some or none of these water entities are also water reporting entities. The identification of water reporting entities will be an ongoing process.

8. Why might water reporting entities include entities other than water authorities?

The objective of General Purpose Water Accounting Reports is to provide information which is useful for decision-making. As noted above, there is a wide diversity of users of GPWARs and their information needs may also be diverse. In order to facilitate the creation of accounts which meet these needs, the definition of water reporting entities has not been restricted to a particular type of entity. Therefore, while water authorities may well be water reporting entities, other entities such as regions, organisations or individuals may also be reporting entities if users require information on their activities for decision-making. For example, while Sydney Water is a water reporting entity of which it is reasonable to expect GPWARS will be required, the state of NSW may also be obliged to produce a GPWAR that includes the water managed by Sydney Water.

9. What is the difference between a water reporting entity and a preparer of a General Purpose Water Accounting Report?

As noted above, a water reporting entity is a water entity (geographic region, organisation or individual) which is required to prepare a GPWAR. The report preparer is the entity responsible for the preparation of the GPWAR. For example, the accounts of a particular geographic region might be prepared by the appropriate State or Territory department. In some cases, where regions of interest cross political borders, other entities might also be appropriate report preparers (such as the Murray-Darling Basin Authority). As a guide, the entity which is primarily accountable for the operations of the water reporting entity will usually be the most appropriate report preparer. However, in the case of highly aggregated water reports, one organisation may take an oversight role (such as the Bureau of Meteorology in the preparation of the National Water Account).

10. When will water accounting standards be issued?

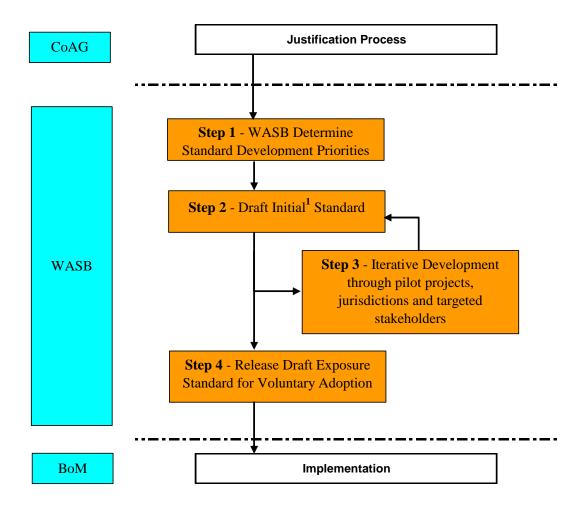
The WACF (link to download page) is now available for download. The PAWAS [link to download page] has been released for use with the Methods Pilot for the National Water Account and public comment, and is also available for download. Following consideration of this comment, an exposure draft of the AWAS is expected to be released by the middle of 2010.

11. When will water accounting standards become applicable?

The exposure draft of the AWAS will be applicable for preparing the National Water Account. There is an understanding that significant further testing of the exposure draft AWAS will occur before consideration is given to making accordance with them mandatory.

12. Will there be an opportunity to comment on future water accounting standards?

Yes. The standards released to date have been developed through a consultative process, involving many pilot sites across Australia. This process will continue, and draft standards will be distributed for comment before being finalised. They will be evaluated by targeted stakeholders before being opened up to wider public comment. The standard setting process involves a number of steps as shown in the diagram below (currently WASB is at step 3):



13. Who is developing the water accounting standards and how can I get further information?

WASB is responsible for developing the water accounting standards. Further information and contact details are available on the WASB website: www.bom.gov.au/wasb. Note that all public comments on WACF and PAWAS will not be responded to immediately, but will be

included on our feedback register for consideration during the exposure draft phase of the standards development, in 2010.

14. What, if anything, is the difference between water accounting and water reporting?

The terms 'water accounting' and 'water reporting' are often used interchangeably. Technically, however, water accounting refers to the provision of GPWARs – i.e. the information required to be prepared in accordance with AWASs and the WACF. As noted above, this information comprises a Statement of Water Assets and Water Liabilities, a Statement of Changes in Water Assets and Water Liabilities, a Statement of Physical Water Flows, a Contextual Statement, an Accountability Statement and an Assurance Statement. A report issued by a water reporting entity might also include supplementary information to the accounts in order to further inform users regarding the operations of the entity. Such information might include projections, estimates or other disclosures which management considers useful but which fall outside the scope of GPWARs.

15. What is the difference between 'statements' and 'reports'?

The term 'statements' is synonymous with 'accounts'. Therefore, as noted above, the 'report' issued by water reporting entity may include supplementary information to that in the GPWAR 'statements'.

16. What is the difference between Australian Water Accounting Standards and other water accounting standards?

Many government departments and agencies as well as other organisations have developed approaches to the quantification and reporting of water, which might be considered 'water accounting standards' in that particular jurisdiction or organisation and are utilised for the creation of various internal and external reports. In contrast, Australian Water Accounting Standards set out the nationally applicable requirements for the preparation and presentation of General Purpose Water Accounting Reports.

17. What are the differences between black letter and grey letter text in Australian Water Accounting Standards and Statements of Water Accounting Concepts?

Black letter (bold) paragraphs contain the main principles of the AWASs and SWACs. Compliance with these paragraphs will be mandatory. Grey letter paragraphs provide illustrative guidance on the application of those principles and are explanatory rather than mandatory. They are intended to assist preparers with the interpretation of the black letter paragraphs and contain elaboration on key principles, examples and references to other relevant standards.

18. My organisation appears to be a water reporting entity but so does "X", which overlaps with my water reporting entity and another water reporting entity. Is this possible? If so, how do we deal with this?

Yes, it is possible. For example, with regards to the Murray Darling Basin a GPWAR might be prepared for the part of the Basin residing in each state. In addition, a consolidated report of the Basin might be prepared by the Murray-Darling Basin Authority. Exactly which reports are ultimately prepared will depend on users' needs (SWAC 1 para. 11), but each GPWAR must comply with the requirements of AWASs and the WACF.

19. What is the difference between water accounting and financial accounting?

Australian water accounting is seeking to leverage the experience of the financial accounting community in creating water accounts. There are therefore a number of similarities between the proposed water accounting model and existing financial accounting requirements, including:

- The development of a conceptual framework to underpin the detailed standard-setting process;
- A methodology for the development of accounting standards which includes the opportunity for interested parties to comment;
- The concept of 'general purpose reports' which include both quantitative and qualitative information about the entity;
- The provision of both 'cash' (or in water accounting terms, 'physical flow') and 'accrual' accounting reports; and
- The use of 'double-entry' bookkeeping in order to ensure the reliability of reporting.

However, given the nature of water accounting there are also important differences. In particular, in water accounting:

- Users include multiple stakeholders for making and evaluating decisions about water use (as opposed the financial accounting focus on providing information to investors for economic decision making);
- The primary unit of account is water rather than money (though details of water trading may ultimately be required to be disclosed);
- Reporting entities will often be geographic regions rather than organisations;
- There may be a distinction between the reporting entity (such as a particular catchment) and the report preparer (such as a government authority);
- There is significant variation in the accuracy of water data, particularly when extensive data modelling and estimation is required;
- Comparative data for multiple years will often be necessary for meaningful interpretation of results; and
- Disclosure of compliance with water management plans may be a useful mechanism for discharging management accountability.

20. What are the differences between water reporting entities and reporting entities (as per financial accounting standards)?

Both water reporting entities and (financial) reporting entities are those entities for which users rely on general purpose reports for decision-making. However, these entities may not be consistent, as the users and their information needs may differ. The definition of water reporting entities is set out in SWAC 1, while the definition of (financial) reporting entities is set out in International Accounting Standards Committee (IASC) *Framework for the Preparation and Presentation of Financial Statements* (para. 8). Specific financial reporting obligations for Australian companies are prescribed in the Corporations Act (2001).

21. What is the difference between an "asset" and a "water asset"?

In general terms, an 'asset' is anything that provides a future benefit, while a 'water asset' is specifically water or a claim on water that provides a future benefit. For example, where a dam full of water exists, the dam itself might be considered an asset and the water within the dam a water asset. (Note, however, that if the water was held by the water entity on behalf of another water entity it would not be a water asset). Economic assets are required to be disclosed in financial accounts and water assets will be required to be disclosed in water accounts.

A water asset is formally defined by SWAC 4 as 'water, or the rights or other claims to water, which the water reporting entity ether holds, or for which the 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' (para. 9)

22. Is there an international standard setting regime for water accounting along the lines of international accounting standards?

No. Australia is the only country developing water accounting (i.e. producing general purpose reports in accordance with accounting standards based on a conceptual framework and prepared on an accrual basis using double entry accounting). The United Nations has developed a model of environmental accounting called System of Environmental Economic Accounting for Water (SEEAW), but this model is more closely related to economics than water accounting. Such information is, somewhat confusingly, often referred to as 'water accounting' though it is quite different in terms of objectives, methodology and disclosure.

Abbreviations

WACF – Framework for the Preparation and Presentation of General Purpose Water Accounting Reports (Water Accounting Conceptual Framework)

AWAS - Australian Water Accounting Standard

PAWAS - Preliminary Australian Water Accounting Standard

GPWAR - General Purpose Water Accounting Report

SWAC - Statement of Water Accounting Concepts

NWI - National Water Initiative