



# Water Information Bulletin

The purpose of this Bulletin is to provide information about the amendment to the Water Regulations 2008, planned for February 2012. It replaces the December 2010 issue.

## Background

Part 7 of the Water Regulations 2008 is concerned with water information and sets out how and when that water information must be given to the Bureau of Meteorology (the Bureau). [Download the Water Regulations](#) or access the [Information Sheet](#).

The Bureau's experience working with water information since 2008 has highlighted areas where the Regulations can be improved to enhance the quality and usefulness of the information. In some cases, the amendments to Part 7 enable data providers to more easily meet their data supply obligations. In other cases, the changes enable the Bureau to better manage and understand the complex array of information it is receiving.

## Timeframe

The change to the content of Part 7 has been finalised and the Bureau expects the amendment to be made in early 2012. The exact timing depends on drafting and administrative processes outside of the Bureau's control; however the Bureau will alert data providers when the amendment is made. To allow time for data providers to adjust to the new requirements, the changes to Part 7 will not take effect until three months after the amendment to the Regulations is made. If you have questions about the changes, please email the Bureau at: [regulations@bom.gov.au](mailto:regulations@bom.gov.au)

## Restructure of the Water Regulations

As well as making content changes, the amendment restructures Part 7 of the Water Regulations. The Regulations water information framework will continue to operate in the same way, but the amended Regulations will look different. For example, the legislative drafters have simplified the structure and removed obsolete references such as to 'interim periods'. For detail of the new structure, see the Explanatory Statement which will be available at [www.comlaw.gov.au](http://www.comlaw.gov.au) after the amended Regulations are made.

## Categories and subcategories of water information

The Regulations currently contain ten categories of water information, which are further divided into subcategories. An example is Category 1 'Surface Water Information', which includes subcategory 1a '*Instantaneous watercourse level, expressed in metres relative to specified datum, and the time of the observation*'.

The text of the subcategories will change in line with the new metadata and contextual information procedures (explained below), but for most subcategories, the underlying water information required is the same as at present.

## Frequently asked questions

In early 2011, the Bureau held workshops in each capital city to discuss with data providers the proposed Regulations amendments. Our website provides [answers to questions asked at these workshops](#).





## The Amendments

### Which amendments affect my organisation?

To quickly locate in this document the changes that affect your organisation, check the following index showing the organisation categories and relevant page numbers. To find the categories that apply to your organisation go to [Regs Online](#).

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## Category headings

Two of the existing ten water information category headings will change as follows:

Category	Current heading	Revised heading
3	Information on major and minor water storages	Water storage information
6	Information about rights, allocations and trades in relation to water	Information about water rights, allocations and trades

## Metadata and contextual information

Currently under Category 10, organisations are required to provide metadata and contextual information about water information at the same time that they provide data for other categories. This information is vital to enable the Bureau to understand water information provided under Categories 1 to 9. However, Category 10 only describes the metadata and contextual information in a limited fashion, which has led to uncertainty around the specific information required.

The amendment removes Category 10 from the Regulations and refers to a new document which the Bureau will maintain online. This document called *Metadata and contextual information requirements* will set out, in much greater detail, the metadata and contextual information required to be given at the same time as the water data for each subcategory. The online document will be incorporated into the Regulations, meaning that it carries the same compliance requirements as the Regulations themselves.

### Removal of metadata from subcategories

The amendment also removes many of the existing references to metadata from the subcategories. This simplifies and standardises the subcategory text in the Regulations. For example:

**Subcategory 2a** currently reads:

**2a** *Ground water level of a bore, expressed in metres relative to specified datum, and the time of the observation*

Following the amendment, it reads:

**2a** *Ground water level, expressed in metres*

The unit of measurement in which the water information must be given remains in the text of the subcategories. As is the case now, if data providers measure the water information using a different unit of measurement, they must convert it into the unit specified in the subcategory before providing the data to the Bureau.

### Population of Metadata and contextual information requirements

The Bureau is in the process of developing the metadata and contextual information requirements. It will create a separate list of required elements for each subcategory of water information. These requirements will eventually be added to the new online document, at which stage they become a mandatory part of the Regulations.

The Bureau will notify organisations when it adds metadata element lists to the online document. Data providers will be required to give the metadata and contextual information set out in the document within six months of that notification.

Over time, the online document will grow to include most of the metadata and contextual information required to complement the Category 1 to 9 and 11 Regulations data. Until this process is complete, some categories in the online document will only contain a general requirement to provide all relevant metadata and contextual information, without specifying the detail of that metadata. This is in line with the current situation where Category 10, in most cases, does not detail the metadata requirements for all categories.



## Frequency of data delivery to the Bureau

The Regulations specify the required frequency of data delivery to the Bureau (for example, hourly, daily, weekly, monthly, yearly). The required frequency of data delivery for the various water information subcategories is currently detailed in Regulation 7.14. Following the amendment, this information will be contained in Schedule 2, Parts 1-7 and some of the required data delivery frequencies will change.

### Period of data within data files

Currently the period, or granularity, of data required within data files is specified in some of the information subcategory descriptions, particularly those in **categories 5 and 7**. After the amendment, this will no longer be the case.

For example:

**Subcategory 5f** currently reads:

**5f** *The total **monthly** volume of water taken by individual self extractors expressed in megalitres per month, the start and finish times of the observations and dates of the observations*

Following the amendment it reads:

**5f** *Volume of water taken by individual self extractors expressed in megalitres*

This change aims to align reporting requirements with the existing business process used by organisations. Organisations are still required to deliver **category 7** information annually with that information comprising at least 12 monthly values. A person would meet the requirement by giving the Bureau 12 separate values but could equally provide 26 separate values (ie one volume for each fortnight of the financial year) or 52 values (weekly volumes).

### Use of the term 'calendar monthly'

Currently, the Regulations use the term 'monthly'. Its meaning is defined in the *Acts Interpretation Act 1901* (the AIA Act). The AIA Act has been amended, including changes to some of its definitions such as the term 'monthly'. These changes will take effect at the end of December 2011 (see the *Acts Interpretation Act 1901* at <http://www.comlaw.gov.au>). To ensure that the monthly timeframe in the Water Regulations does not change, the Bureau's amendment substitutes the term 'calendar monthly' for 'monthly'. This administrative change does not affect data providers.

## Water information for flood warning and forecasting purposes (New Category 11)

Currently, the Regulations require organisations listed in Category H to provide water level, streamflow and precipitation data (**subcategories 1a, 1b and 4a**) on an hourly basis for the purpose of flood warning and forecasting. To better distinguish this data from that provided daily by other categories of persons, the amendment creates a new category of water information. New category 11 contains three subcategories (**11a** water level, **11b** streamflow and **11c** precipitation) to be provided hourly for flood warning and forecasting purposes. Only the subcategory number changes. There is no change in either the data or the timeframe required.

### Historical water information

The amended Regulations require data providers to give historical information for new subcategories of water information. Where historical information has already been given, it does not need to be given again for existing subcategories. An exception to this may arise in relation to amended **subcategories 6a and 6b**. Currently, these subcategories require information about water access entitlements that were issued by or under statute. The amendment broadens the information required to encompass all entitlements and rights regardless of whether or not they have been issued under statute. Consequently, those organisations that have already provided information under **subcategories 6a and 6b** may need to also provide this extra historical information that was not included in previous data deliveries. Any organisations giving **subcategories 6a and 6b** for the first time must give the full historical record for those subcategories.



## Surface water (Category 1)

Subcategories in Category 1 are amended to explicitly exclude water storages. Currently, Category 1 requires information about watercourse level and discharge. 'Watercourse' is defined broadly in the Water Act to include features such as dams, reservoirs and lakes, so there may have been some overlap between Category 1 water information and Category 3 (water storage information). For clarity, the amendment adds a definition of 'water storage' to the Regulations (see the section below on Category 3) and amends subcategories in Category 1, as follows:

Water information subcategory	Requirement
1a	Level of a watercourse (other than a water storage), expressed in metres
1b	Discharge of a watercourse (other than a water storage), expressed in cumecs

## Groundwater (Category 2)

The amendment adds a new subcategory in Category 2 for managed aquifer recharge. This has been a gap in the coverage of the Regulations.

New water information subcategory	Requirement	Clarifying comment
2c	Volume of water supplied for aquifer recharge, expressed in megalitres	Categories of persons A, B, E, F and G will be required to provide 2c data yearly.

## Water storage information (Category 3)

The amendment adds a definition of 'water storage' to the Regulations, as follows:

**water storage** – a body of water that is naturally occurring, is impounded by a constructed barrier or is within an excavation, and includes ponds, swamps, lakes, wetlands, weirs, dams, basins, reservoirs and open pits.

The water information required by two subcategories in Category 3 (water storage information) is expanded, and a new **subcategory 3da** is added. More categories of persons will be required to provide **subcategory 3f** water information:

Water information subcategory	Requirement	Clarifying comment
3a	Level of water in a major storage, expressed in metres	No change
3b	Volume of water in a major storage, expressed in megalitres	No change
3c	Volume of water released from a major storage, expressed in megalitres	3c is broadened to include all water released from a major storage, and not only the releases to watercourses
3d	Total volume of water delivered to a major storage, expressed in megalitres	3d is broadened to include all water delivered to a major storage and not only those volumes transferred between major storages.





Water information subcategory	Requirement	Clarifying comment
3da	Volume of water delivered to a major storage from each water source, expressed in megalitres	3da is a new subcategory. It seeks a breakdown by the water source of information provided in 3d
3e	Volume of water in a minor storage, expressed in megalitres	No change
3f	Descriptive and reference information related to major water storages owned, operated or regulated by the person	3f is simplified. Categories of persons A, B, C, D, E and F will be required to provide 3f information yearly

## Meteorological information (Category 4)

The amendment will add some new definitions to the Regulations:

**dewpoint temperature** – the temperature to which air must be cooled, at constant pressure and constant moisture content, to reach saturation.

**water-equivalent precipitation** – the depth of water that would result if solid precipitation were melted.

A new subcategory is added to Category 4 (meteorological information) as follows:

New water information subcategory	Requirement	Clarifying comment
4j	Dewpoint temperature, expressed in degrees Celsius	Categories of persons A, B, C, E, F and G will be required to provide 4j data daily

## Water use information (Category 5)

Category 5 (water use information) requires more detail about water taken. Thus, **subcategory 5a** requires the total volume of water taken from any source. New **subcategories 5aa to 5ac** seek a breakdown by source for the water taken, as follows:

Water information subcategory	Category of persons	Requirement	Timeframe
5a	A, B, E	Total volume of water taken, expressed in megalitres	Daily
5aa	A, B, E	Volume of water taken from a watercourse (other than a water storage), expressed in megalitres	Daily
5ab	A, B, E	Volume of water taken from ground water, expressed in megalitres	Daily
5ac	A, B, E	Volume of recycled water taken from another water manager, expressed in megalitres	Daily





The timeframe for provision of **subcategory 5b** will change and **subcategory 5c** is omitted from the Regulations, as shown below:

Water information subcategory	Requirement	Description of change	Category of persons affected by change
5b	Volume of water returned to a watercourse (other than a water storage), expressed in megalitres	Timeframe changed from yearly to daily	A, B, E
5c	Volume of water returned to a water storage from an irrigation network	Omitted from the Regulations because irrigation returns to storages are considered to remain within the irrigation system	A, B, E

The amendment adds new **subcategory 5ga** to require detail about recycled water taken by self extractors as follows:

Water information subcategory	Category of persons	Requirement	Timeframe
5ga	A, B	Volume of recycled water taken by self extractors from another water manager, expressed in megalitres	Yearly

## Water rights, allocations and trades (Category 6)

The Bureau has been working with the major providers of water market information to better define and describe that information. The amendments reflect the outcome of these discussions.

Category E organisations will now be required to give information under **subcategory 6a** (water access and irrigation rights). The timeframe for information provision under **subcategories 6a, 6b** and **6d** will become more frequent, as shown in the table below:

Water information subcategory	Current timeframe	Amended timeframe	Category of persons affected by change
6a	Yearly	Calendar monthly	A, B, E
6b	Yearly	Weekly	A, B, E
6d	Weekly	At the time as the announcement is made.	A, B, E

The following table shows the amended wording of subcategories in Category 6:

Water information subcategory	Requirement	Clarifying comment
6a	Water access rights and irrigation rights	6a is broadened to require information about water rights in addition to those issued under a state law  Relevant organisations that have not previously provided 6a water information, must also provide their historical data for this subcategory to the Bureau





Water information subcategory	Requirement	Clarifying comment
6b	Trades or leases of Australian water access entitlements and irrigation rights	6b is broadened to require information about trades and leases of entitlements and rights in addition to those issued under a state law  Relevant organisations that have not previously provided 6b water information must also provide their historical data for this subcategory to the Bureau
6c	Trades of Australian water allocations	6c is broadened to require information about all Australian water allocation trades. It is not limited to temporary trades and leases
6d	Formal announcements of Australian water allocations	6d is refined to ensure that all formal announcements of Australian water allocations, restrictions, and irrigation entity enhancements are required  The timeframe for provision of 6d water information is changed to require that announcements are provided at the time the announcement is made, rather than weekly.
6e	Permits to operate or construct a minor storage	6e is broadened to require information about permits to both operate and construct a minor storage
6f	Permits to self extract water from a bore	6f is unchanged
6g	Permits to self extract water from a watercourse	6g is unchanged

## Urban water management (Category 7)

Category 7 (urban water management) is extensively amended to align tightly with the hydrological aspects of the urban National Performance Reporting (NPR) framework against which urban water utilities already report. To further align with the NPR, the amendment also extends from 20 July to 31 August the requirement to give annual Category 7 information.

The amendment adds definitions for the following terms:

**managed aquifer recharge** – the deliberate adding of water to an aquifer

**non-potable water** – water not intended for use as drinking water

**potable water** – water intended for use as drinking water

**raw water** – untreated water

**recycled water** – treated sewage effluent, and:

- (a) includes water extracted by sewer mining and subsequently treated
- (b) does not include treated urban stormwater

**sewer mining** – the process of recovering water from a wastewater system

**trade waste sewage** – the sewage produced by any industry, business, trade or manufacturing process

**urban stormwater** – water in the urban stormwater drainage system

**urban stormwater reuse** – urban stormwater that has been treated and reused







The changes to subcategories are set out so that there is often a primary subcategory followed by a number of related component subcategories. For example, the components may break down the primary subcategory between potable and non-potable water as shown in [subcategories 7h, 7ha and 7hb](#). This new approach significantly expands the number of subcategories in Category 7, but it is essential for water balance analysis. Also, the disaggregated information will support the Bureau's National Water Account.

If organisations do not have data for additional subcategories in their possession, custody or control, they are not required to provide them.

The following table shows the new Category 7 requirements in full to highlight the relationship of the primary subcategories and their component subcategories. It also highlights the relationship between the subcategories of water information and urban NPR requirements:

Water information subcategory	Requirement	Clarifying comment and link to urban National Performance Report (W-number)
7a	Volume of water taken from surface water, expressed in megalitres	<b>7a = W1</b>
7b	Volume of water taken from ground water, expressed in megalitres	<b>7b = W2 + W25.1 + W28.3</b>
7c	Volume of water taken from marine desalination, expressed in megalitres	7c only includes water taken from marine desalination and therefore excludes desalinated groundwater and surface water which are given under 7a and 7b respectively. <b>7c = W3.1</b>
7d	Volume of recycled water taken, expressed in megalitres	7d includes the total amount of recycled water produced from sewage and taken from your organisation's sewerage infrastructure (e.g. sewage treatment plant (STP)) and used to supply your customers within the boundaries of your infrastructure operation. It excludes urban stormwater reuse. <b>7d = W4 + W22</b>
7e	Total volume of water (other than urban stormwater or recycled water) taken from infrastructure operators, expressed in megalitres	7e refers to water (potable and non-potable) supplied to you from another organisation, such as a bulk water utility and/or neighbouring water utility. The water may or may not have been purchased. The main point is that another organisation has provided your organisation with the water. The volume includes water that is subsequently exported to another water utility.  7e excludes recycled water and stormwater. It also excludes water that is included in 'volume of water taken' under subcategories 7a, 7b, 7c and 7d. <b>7e = 7ea + 7eb</b> <b>7e = W5.1 + W5.2</b>
7ea	Volume of potable water taken from infrastructure operators, expressed in megalitres	7ea is the potable component of 7e. <b>7ea = W5.1</b>





Water information subcategory	Requirement	Clarifying comment and link to urban National Performance Report (W-number)
7eb	Volume of non-potable water or raw water (other than urban stormwater or recycled water) taken from infrastructure operators, expressed in megalitres	7eb is the non-potable or raw water component, excluding water recycled from sewage or stormwater, of 7e. <b>7eb = W5.2</b>
7f	Volume of recycled water taken from infrastructure operators, expressed in megalitres	7f includes the total amount of recycled water (excluding stormwater) received by your organisation from another organisation (infrastructure operator). The water may or may not have been purchased. The main point is that another organisation provided you with the recycled water, rather than you directly taking it from your own sewerage infrastructure (e.g. sewage treatment plant). <b>7f = W6</b>
7g	Total volume of water taken, expressed in megalitres	<b>7g = 7a + 7b + 7c + 7d + 7e + 7f + 7od</b> <b>7g = W1 + W2 + W25.1 + W28.3 + W3.1 + W4 + W22 + W5.1 + W5.2 + W6 + W28.4</b>
7h	Total volume of residential water supplied (other than recycled water and urban stormwater reuse), expressed in megalitres	7h includes both potable and non-potable water supplied to residential customers located within your organisation's management area, but excludes recycled water and urban stormwater reuse.  The volume includes both total metered and estimated non-metered residential water supplied. <b>7h = 7ha + 7hb</b> <b>7h = W8.1 + W8.2</b>
7ha	Volume of potable residential water supplied (other than recycled water and urban stormwater reuse), expressed in megalitres	7ha is the potable component of 7h. <b>7ha = W8.1</b>
7hb	Volume of non-potable residential water supplied (other than recycled water and urban stormwater reuse), expressed in megalitres	7hb is the non-potable component of 7h. <b>7hb = W8.2</b>
7i	Total volume of commercial, municipal and industrial water supplied (other than recycled water and urban stormwater reuse), expressed in megalitres	7i includes both potable and non-potable water (excluding recycled water and urban stormwater reuse) supplied to commercial, municipal and industrial customers located within your organisation's management area.  The volume includes both total metered and estimated non-metered commercial, municipal and industrial water supplied. <b>7i = 7ia + 7ib</b> <b>7i = W9.1 + W9.2</b>
7ia	Volume of potable commercial, municipal and industrial water supplied (other than recycled water and urban stormwater reuse), expressed in megalitres	7ia is the potable component of 7i. <b>7ia = W9.1</b>



Water information subcategory	Requirement	Clarifying comment and link to urban National Performance Report (W-number)
7ib	Volume of non-potable commercial, municipal and industrial water supplied (other than recycled water and urban stormwater reuse), expressed in megalitres	7ib is the non-potable component of 7i. <b>7ib = W9.2</b>
7j	Total volume of water supplied, expressed in megalitres, other than the following: (a) recycled water; (b) urban stormwater reuse; (c) residential, commercial, municipal or industrial water	7j includes all the potable and non-potable water (excluding recycled water and urban stormwater reuse) supplied to customers other than residential, commercial, municipal and industrial customers located within your organisation's management area. It also includes non-revenue water. <b>Non-revenue water</b> is water not accounted for by billed water use metering. It may include delivery system losses such as leakage from water mains, water stolen or unaccounted for due to inaccurate meters, water used for fire-fighting purposes and water used for cleaning water mains. 7j includes both total metered and estimated non-metered water supplied. 7j should equate to the sum total of the component subcategories 7ja to 7je. <b>7j = 7ja + 7jb + 7jc + 7jd + 7je</b> <b>7j = W10.1 + W10.2 + W10.3 + W10.4 + W13</b>
7ja	Volume of potable water supplied (other than residential, commercial, municipal and industrial water), expressed in megalitres	7ja is the potable component of 7j. <b>7ja = W10.1</b>
7jb	Volume of non-potable water supplied, expressed in megalitres, other than the following: (a) recycled water; (b) urban stormwater reuse; (c) residential, commercial, municipal, industrial, or environmental water; (d) water supplied for agricultural irrigation or managed aquifer recharge	7jb is the non-potable component of 7j. Agricultural irrigation water is water used for agriculture. It does not include water used to irrigate municipal gardens, ovals, and parks. <b>7jb = W10.2</b>
7jc	Volume of non-potable water supplied for managed aquifer recharge (other than recycled water and urban stormwater reuse), expressed in megalitres	7jc is the non-potable component of managed aquifer recharge, excluding recycled water and stormwater. <b>7jc = W10.3</b>
7jd	Volume of non-potable water supplied for agricultural irrigation, expressed in megalitres	7jd is the non-potable agricultural irrigation water component of 7jb, excluding recycled water. <b>7jd = W10.4</b>



Water information subcategory	Requirement	Clarifying comment and link to urban National Performance Report (W-number)
7je	Volume of non-potable water supplied for environmental use (other than water supplied for managed aquifer recharge and urban stormwater reuse), expressed in megalitres	7je is the non-potable component of environmental water. <b>7je = W13</b>
7k	Total volume of potable and non-potable water supplied (other than recycled water and urban stormwater reuse), expressed in megalitres	7k includes all potable and non-potable water supplied for any use other than other infrastructure operators. It includes customers, non-revenue water, environmental flows and managed aquifer recharge. <b>7k = 7ka + 7kb</b> <b>7k = W11.1 + W11.2</b>
7ka	Volume of potable water supplied (other than recycled water and urban stormwater reuse), expressed in megalitres	7ka is the sum of the total volume of potable water supplied, excluding recycled water and urban stormwater reuse. <b>7ka = 7ha + 7ia + 7ja</b> <b>7ka = W11.1</b> <b>[W11.1 = W8.1 + W9.1 + W10.1]</b>
7kb	Volume of non-potable water supplied (other than recycled water and urban stormwater reuse), expressed in megalitres	7kb is the sum of the total volume of non-potable water supplied, excluding recycled water and urban stormwater reuse. <b>7kb = 7hb + 7ib + 7jb + 7jc + 7jd + 7je</b> <b>7kb = W8.2 + W9.2 + W10.2 + W10.3 + W13 + W10.4</b>
7kc	Volume of potable water produced (other than recycled water and urban stormwater reuse), expressed in megalitres	7kc is the volume of the total amount of water treated for potable use. <b>7kc = W11.3</b>
7l	Total volume of water supplied to infrastructure operators, expressed in megalitres	7l is the bulk potable, non-potable and recycled water and stormwater delivered to another water utility or infrastructure operator. Usually this water will be exported outside your organisation's management boundaries. It includes recycled water [W15] and urban stormwater reuse [W28.1]. <b>7l = 7la + 7lb + 7m + 7oa</b> <b>7l + W14.1 + W14.2 + W15 + W28.1</b>
7la	Volume of potable water supplied to infrastructure operators (other than recycled water and urban stormwater reuse), expressed in megalitres	7la is the potable component of 7l. <b>7la = W14.1</b>
7lb	Volume of non-potable water supplied to infrastructure operators (other than recycled water and urban stormwater reuse), expressed in megalitres	7lb is the non-potable (excluding recycled water) component of 7l. <b>7lb = W14.2</b>



Water information subcategory	Requirement	Clarifying comment and link to urban National Performance Report (W-number)
7m	Volume of recycled water supplied to infrastructure operators, expressed in megalitres	<p>7m refers to the volume of recycled water (potable and non-potable) delivered to another water utility or infrastructure operator.</p> <p>7m is the recycled component of 7l.</p> <p><b>7m = W15</b></p>
7n	Total volume of treated sewage discharges from a sewage discharge point, expressed in megalitres	<p>When reporting sewage discharge, all sewage discharge must be reported including:</p> <ol style="list-style-type: none"> <li>(1) discharges to surface water or the ocean within or adjacent to the organisation's geographic area of responsibility</li> <li>(2) discharges from sewage infrastructure operated by another organisation but into your organisation's geographic area of responsibility</li> <li>(3) all other sewage discharge.</li> </ol> <p>Sewage is waste from residential and non-residential properties collected and/or treated via sewerage infrastructure. It includes any volumes collected in the sewerage system due to stormwater, illegal connection inflow and infiltration to the sewerage system.</p> <p><b>7n = W29</b></p>
7na	Volume of sewage collected, expressed in megalitres	<p>Total volume of sewage collected by the utility, measured as treatment plant inflow plus sewage treated by another business on behalf of the water utility eg wholesaler. Where only treatment plant outflow is measured, record this value and comment accordingly.</p> <p><b>7na = W18</b> <b>[W18 = W16 + W17]</b></p>
7nb	Volume of sewage supplied to infrastructure operators, expressed in megalitres	<b>7nb = W18.1</b>
7nc	Volume of sewage taken from infrastructure operators, expressed in megalitres	<b>7nc = W18.2</b>
7nd	Volume of sewage taken from sewer mining, expressed in megalitres	<b>7nd = W18.3</b>
7ne	Volume of sewage measured at the inlet to a treatment works, expressed in megalitres	<p><b>7ne = 7ng + 7nh - 7nb + 7nc - 7nd</b> <b>7ne = W18.4</b> <b>[W18.4 = W16 + W17 - W18.1 + W18.2 - W18.3]</b></p>



Water information subcategory	Requirement	Clarifying comment and link to urban National Performance Report (W-number)
7nf	Volume of treated sewage effluent released from a treatment works, expressed in megalitres	<p>7nf is measured as output from the sewage treatment works. It excludes volume of recycled water supplied on-site (W24) and volume of sewage taken from sewer mining.</p> <p><b>7nf = W18.5 – W24</b></p>
7ng	Volume of sewage collected (other than trade waste sewage), expressed in megalitres	<p>Sewage received from residential, non-residential and non-trade waste sources. This includes any volumes collected in the sewage system due to stormwater, illegal connection inflow and infiltration to the sewerage system. Residential (domestic) sewage is the water borne waste derived from human origin comprising faecal matter, urine and liquid household waste from water closet pans, sinks, baths, basins and similar fixtures designed for private household use.</p> <p><b>7ng = W16</b></p>
7nh	Volume of trade waste sewage collected, expressed in megalitres	<p>Total volume of estimated and metered trade waste collected and treated by the water utility, or on behalf of the water utility. This includes any volumes of stormwater collected in the trade waste system. Trade waste (industrial waste) is the liquid waste generated from any industry, business, trade, or manufacturing process. It does not include domestic sewage.</p> <p><b>7nh = W17</b></p>
7o	Total volume of urban stormwater discharges from a stormwater discharge point, expressed in megalitres	<p>When reporting stormwater discharge, please report all stormwater discharge including those to:</p> <ol style="list-style-type: none"><li>(1) surface water or the ocean within or adjacent to the organisation's geographic area of responsibility</li><li>(2) the stormwater drainage system operated by another organisation.</li></ol> <p>This data includes all discharges of stormwater into watercourses and marine water bodies and stormwater exported to another stormwater drainage system operator.</p> <p><b>7o = W28</b></p>
7oa	Volume of urban stormwater supplied to infrastructure operators, expressed in megalitres	<p>7oa includes water for potable and non-potable urban stormwater reuse supplied to other infrastructure operators. It is a component of W14.</p> <p><b>7oa = W28.1</b></p>
7ob	Volume of urban stormwater taken from infrastructure operators, expressed in megalitres	<p>Includes water for potable and for non-potable urban stormwater reuse supplied to other infrastructure operators. It is a component of W5.</p> <p><b>7ob = W28.2</b></p>



Water information subcategory	Requirement	Clarifying comment and link to urban National Performance Report (W-number)
7oc	Volume of urban stormwater taken for managed aquifer recharge, expressed in megalitres	<b>7oc = W28.3</b>
7od	Volume of urban stormwater used, expressed in megalitres	7od includes potable and non-potable urban stormwater used. It excludes urban stormwater taken for managed aquifer recharge. <b>7od = W28.4</b>
7p	Total volume of recycled water supplied, expressed in megalitres	7p, and its component subcategories, is the volume of recycled water that your organisation supplies. 7p differs from 7f which focuses on recycled water imported or purchased from other infrastructure operators. 7p differs from 7m which focuses on recycled water export. 7p may include potable and non-potable water and volumes taken via sewer mining. It excludes urban stormwater reuse. <b>7p = 7pa + 7pb + 7pc + 7pd + 7pe + 7pf + 7pg + 7nd</b> <b>7p = W26</b> <b>[W26 = W20 + W21 + W22 + W23 + W24 (include W18.3) + W25 (include W25.1)]</b>
7pa	Volume of recycled water supplied for residential use, expressed in megalitres	7pa is the recycled residential water component of 7p. It includes potable and non-potable water and volumes taken via sewer mining. It excludes urban stormwater reuse. <b>7pa = W20</b>
7pb	Volume of recycled water supplied for commercial, municipal or industrial use, expressed in megalitres	7pb is the recycled commercial, municipal and industrial water component of 7p. It includes potable and non-potable water and volumes taken via sewer mining. It excludes urban stormwater reuse. <b>7pb = W21</b>
7pc	Volume of recycled water supplied for agricultural irrigation, expressed in megalitres	7pc is the recycled agricultural or irrigation water component of 7p. It includes potable and non-potable water and volumes taken via sewer mining. It excludes urban stormwater reuse. <b>7pc = W22</b>







Water information subcategory	Requirement	Clarifying comment and link to urban National Performance Report (W-number)
7pd	Volume of recycled water supplied for environmental use (other than managed aquifer recharge), expressed in megalitres	<p>7pd is the recycled environmental water component of 7p.</p> <p>It includes potable and non-potable water and volumes taken via sewer mining.</p> <p>It excludes urban stormwater reuse.</p> <p><b>7pd = W23</b></p>
7pe	Volume of recycled water supplied for on-site use, expressed in megalitres	<p>7pe is the recycled water for on-site use component of 7p.</p> <p>It includes potable and non-potable water.</p> <p>It excludes urban stormwater reuse and volumes taken via sewer mining.</p> <p><b>7pe = W24 – W18.3</b></p>
7pf	Volume of recycled water supplied for managed aquifer recharge, expressed in megalitres	<p>7pf is recycled water used for managed aquifer recharge – a component of 7p.</p> <p>It includes potable and non-potable water and volumes taken via sewer mining.</p> <p>It excludes urban stormwater reuse.</p> <p><b>7pf = W25.1</b></p>
7pg	<p>Volume of recycled water supplied, expressed in megalitres, other than the following:</p> <ul style="list-style-type: none"> <li>(a) residential, commercial, environmental, municipal or industrial water;</li> <li>(b) water supplied for agricultural irrigation, on-site use or managed aquifer recharge</li> </ul>	<p>7pg is a catchall for any other recycled water that is a component of 7p, including recycled water system losses.</p> <p>It includes potable and non-potable water.</p> <p>It excludes urban stormwater reuse and volumes taken via sewer mining.</p> <p><b>7pg = W25 – W25.1 – W18.3</b></p>

## Water restrictions (Category 8)

The Bureau is developing an online tool that will allow organisations to view and edit their water restriction information. The tool will be available ahead of the Regulations coming into effect. Organisations will be able to log onto a web page to check the information about their water restrictions regime is current and correct. If the regime changes or different restriction levels come into effect, from early 2012 organisations must update the database using this online tool.

## Contact person required

We will be contacting organisations soon asking for a contact person to access and update the online tool. When the online water restrictions tool becomes available, the contact person will be given a unique username and password to access the online tool.

Initially, the water restrictions online tool will be used for checking and updating current information. If you have historical water restrictions data to provide, please email it to the Bureau at [waterdata@bom.gov.au](mailto:waterdata@bom.gov.au)





## Water quality (Category 9)

The term ‘*water sample collected*’ in Category 9 has been confusing because some of the parameters in Category 9 are measured directly without taking a water sample. The amendment omits the term from [subcategories 9a to 9d, 9g and 9h](#). It also amends the corresponding definitions. Further, ‘above the tidal limit’ is omitted from [subcategory 9b](#) because it is not applicable to groundwater.

None of these changes alter the data required under the subcategories.

Finally, the amendment adds a new subcategory 9ga requiring Categories of persons A, B, E, F and G to provide the pH of groundwater.

The amended definitions follow:

**electrical conductivity, in relation to water** – the capacity of the water to transmit a flow of electricity, and is a common measure of the salinity of the water

**total nitrogen concentration, in relation to a water sample** – the total concentration of all forms of nitrogen found in the water sample, including nitrate, nitrite, ammonia-N and organic forms of nitrogen

**total phosphorus concentration, in relation to a water sample** – the total concentration of all forms of phosphorus found in the water sample

**turbidity** – the measure of the light scattering properties of water, and is an indicator of the presence of suspended solids

The table shows subcategories in Category 9:

Water information subcategory	Requirement	Timeframe
9a	Electrical conductivity of surface water above the tidal limit of a watercourse, expressed in microsiemens per centimetre at 25°C	Daily
9b	Electrical conductivity of ground water, expressed in microsiemens per centimetre at 25°C	Yearly
9c	Total suspended solids concentration of surface water collected above the tidal limit of a watercourse, expressed in milligrams per litre	Yearly
9d	Turbidity of surface water above the tidal limit of a watercourse, expressed in nephelometric turbidity units	Yearly
9e	Total phosphorus concentration of a surface water sample collected above the tidal limit of a watercourse, expressed in milligrams per litre	Yearly
9f	Total nitrogen concentration of a surface water sample collected above the tidal limit of a watercourse, expressed in milligrams per litre	Yearly
9g	pH of surface water collected above the tidal limit of a watercourse	Yearly
9ga	pH of ground water	Yearly
9h	Temperature of surface water collected above the tidal limit of a watercourse, expressed in degrees Celsius	Yearly



## Water information from other water users – New Category J

The amendment makes provision for a new category of other water users to be added to the Regulations. These organisations own or operate particular sites of hydrological interest. The operations may include, for example, aquaculture, electricity generators, meat processors, mine sites and pulp mills. Throughout 2011–12, the Bureau will analyse water access entitlements and water take to determine within a water balance framework, the sites to add to the new online document that will be incorporated in the Regulations. This will enable organisations to provide water information from just the sites specified in the document, rather than from all their sites.

This part of the amendment does not take effect until a day to be notified by the Minister in the *Commonwealth of Australia Gazette*. This date will not be before 2013.

Category J organisations will be required to give the following subcategories of water information:

Item	Subcategories of water information	Required timeframe for data delivery
1	1a, 1b, 3a, 3b, 4a, 4c, 5a, 5aa, 5ab, 5ac, 5b, 9a	Daily
2	2a, 2b	Calendar monthly
3	2c, 3f, 9b, 9d, 9e, 9f, 9g, 9ga, 9h	Yearly

Additionally, Category J persons will be required to provide the following new subcategories of water information:

Water information subcategory	Requirement	Required timeframe for data delivery
5ad	Volume of water taken from mine dewatering, expressed in megalitres	Calendar monthly
5ae	Volume of water taken from marine desalination, expressed in megalitres	Daily
5af	Volume of water taken from infrastructure operators, expressed in megalitres	Daily

## Location of online documents

The URL in the Regulations showing the location of the Bureau's online documents will be changed to <http://www.bom.gov.au/water/regulations> to provide a more direct link to the documents.

## Contact us

For further information, please send us an email: [regulations@bom.gov.au](mailto:regulations@bom.gov.au)