

# Urban Water Management Information Requirements

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# **VERSION CONTROL**

Version	Publication date	Operative from	Operative up to and including	Description of changes
1.1	30 April 2018	30 April 2018	Open	Organisation removed from Category F spatial reporting exceptions and minor change to U10.7 description
				There were no changes to Part 6 and so the entire document takes effect on publication
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#### Introduction

This document is incorporated by reference in Part 7 of the *Water Regulations 2008* (Regulation 1.06). Its contents have effect as though they were written into the Regulations.

Parts 1 to 5 of this document specify the water information requirements for subcategories 7a, 7b, 7c and 7d in Category 7 of the *Water Regulations* 2008 (Schedule 3, Part 8—Subcategories in category 7—information about urban water management).

Part 6 of this document specifies the metadata and contextual information requirements for Category 7 water information, for the purposes of Regulation 7.11.

<u>Hyperlinks</u>: All linked references, except for the vector data files defining the spatial extent of operational boundaries (Table 1 and Table 2), are for explanatory purposes only and do not form part of this incorporated document.

#### Date of effect:

Parts 1 to 5 of this document take effect on publication.

Part 6 of this document takes effect six months after the Bureau of Meteorology notifies Category L organisations that the metadata and contextual information requirements have changed.

### **Glossary**

This glossary includes terms appearing in Parts 1 to 6 of this document, not otherwise defined in the Water Act or Water Regulations.

*Irrigation water scheme* has the same meaning as *irrigation network*, defined in Section 7 of the *Water Act 2007*.

**Plant** means the treatment plant, relevant to the particular urban water system, of the reporting organisation. It includes water treatment plants, wastewater treatment plants and water reclamation plants.

**Transfer party** means another service provider or other operational area within one's own operation. Transfer party includes: water utility; defined operational area of a utility; private water manager.

*U codes* are detailed component water volumes describing the availability, movement and use of water within urban water systems. Typically, U code volumes are at the plant or transfer party scale and provide a detailed breakdown of W indicator volumes.

*W indicators* are component water volumes describing the availability, movement and use of water within urban water systems. W indicators are the water resources indicators used to compile the urban National Performance Report. W indicator volumes are at the scale of the urban National Performance Reporting regions.

### Part 1—General water information requirements for Category 7

### W indicator and U code volume reporting requirements

Persons fulfil water information requirements for each information subcategory in Category 7 (subcategories 7a, 7b, 7c and 7d) by providing the W indicator or U code volumes listed in tables in Parts 2 to 5 in this document, as follows:

- persons listed in Person Category F and Person Category M give W indicator volumes
- persons listed in Person Category L give U code volumes, except for the following organisations which give W indicator and U code volumes for specified areas, detailed in Table 2:
  - South Australian Water Corporation (SA Water)
  - Water Corporation
  - Water NSW.

## **Spatial reporting requirements**

Unless specified in Table 1 or Table 2, persons are required to report volumes for their full area of operations.

Person Category F organisations listed in Table 1 are required to report separate volumes for each of the specified areas.

Person Category L organisations listed in Table 2 are required to report separate volumes for each of the specified areas. Table 2 also specifies whether W indicator or U code volumes must be given, for each area.

**Table 1.** Category F spatial reporting exceptions

Organisation	Area	Area boundary defined by the spatial extents contained in the vector data files hyperlinked below
Power and Water Corporation (Power and	Darwin	Cat7_F_Power_and_Water-Darwin.zip
Water)	Alice Springs	Cat7 F Power and Water-Alice Springs.zip

**Table 2.** Category L spatial reporting exceptions and reporting requirements for each area

Organisation	Area	Reporting requirement	Area boundary defined by the spatial extents contained in the vector data files hyperlinked below
South Australian Water Corporation (SA	Adelaide Metro	U code volumes	Cat7_L_SA_Water-Adelaide.zip
Water)	Corporation	W indicator volumes	Cat7_L_SA_Water-Corporation.zip
Water Corporation	Perth	U code volumes	Cat7 L Water Corp-Perth.zip
	Mandurah	U code volumes	Cat7 L Water Corp-Mandurah.zip
	Albany	W indicator volumes	Cat7_L_Water_Corp-Albany.zip
	Geraldton	W indicator volumes	Cat7 L Water Corp-Geraldton.zip
	Australind/ Eaton	W indicator volumes	Cat7_L_Water_Corp-Australind- Eaton.zip
	Bunbury	W indicator volumes	Cat7_L_Water_Corp-Bunbury.zip
	Busselton	W indicator volumes	Cat7_L_Water_Corp-Busselton.zip
	Kalgoorlie- Boulder	W indicator volumes	Cat7 L Water Corp- Kalgoorlie Boulder.zip
Water NSW	Greater Sydney	U code volumes	Cat7_L_Water_NSW- Greater_Sydney.zip
	Fish River Water Supply Scheme	W indicator volumes	Cat7 L Water NSW- Fish_River_Water_Supply_Scheme.zip

# Part 2—Water information requirements for subcategory 7a: urban water supply information

# Subcategory 7a

Urban water supply information, provided as volumes and expressed in megalitres, of a kind specified for the purposes of this item in the document titled Urban Water Management Information Requirements (see regulation 1.06)

Further information about the W indicators and U codes listed below, including explanatory notes and examples, can be found in the Category 7 reporting handbook at

http://www.bom.gov.au/water/regulations/schedules/document/CategorySevenReportingHandbook.pdf.

Table 3. Component water volumes for subcategory 7a

Subcategory 7a—Urban water supply information				
Indicator	W indicator description	Code	U code description	
Sources				
	Volume of water sourced from	U1.1	Volume of surface water sourced from regulated sources, for each surface water resource	
W1	surface water	U1.2	Volume of surface water sourced from unregulated sources, for each surface water resource	
WO.	Volume of water sourced from	U2.1	Volume of groundwater sourced from regulated sources, for each groundwater resource	
W2	groundwater	U2.2	Volume of groundwater sourced from unregulated sources, for each groundwater resource	
W3.1	Volume of water sourced from desalinated marine waters	U3.1	Volume of water sourced from desalination of marine waters, for each desalination plant	
Transfers				
W5.3	Volume of water, excluding recycled water, received from other service providers or operational areas within the urban water supply system	U4.1	Volume of water, excluding recycled water, received from other service providers or operational areas within the urban water supply system, for each transfer party	

Subcategory 7a—Urban water supply information				
Indicator	W indicator description	Code	U code description	
W14.3	Volume of water, excluding recycled water, exported to other service providers or operational areas within the urban water supply system	U8.1	Volume of water, excluding recycled water, exported to other service providers or operational areas within the urban water supply system, for each transfer party	
Production	n			
W11.3	Volume of potable water produced for supply into the urban water supply system	U9	Volume of potable water produced for supply into the urban water supply system	
Use				
W8.3	Volume of water supplied to residential customers	U10.1	Volume of water supplied to residential customers	
	Volume of water supplied to non-residential customers	U10.2	Volume of water supplied to commercial, industrial and municipal customers	
		U10.3	Volume of water supplied to agricultural and individual irrigation customers	
W9.3		U10.4	Volume of water supplied to irrigation water schemes	
		U10.5	Volume of water supplied to other customers	
		U10.6	Volume of water supplied as environmental flows from the urban water supply system	
		U10.7	Volume of water supplied for own and other use	
W31	Volume of water returned to surface water from the urban water supply system	U6.1	Volume of water returned to surface water from the urban water supply system, for each surface water resource	
W13	Volume of water returned as environmental flows from outside of the urban water supply system	U14.1	Volume of water returned as environmental flows from outside the urban water supply system, for each surface water or groundwater resource	

Subcategory 7a—Urban water supply information				
Indicator	W indicator description	Code	U code description	
W10.1 Volume of non-revenue water	Valuma of non royanya water	U12.2	Volume of non-revenue water – real losses	
	U12.4	Volume of non-revenue water – apparent losses		

# Part 3—Water information requirements for subcategory 7b: urban wastewater information

# Subcategory 7b

Urban wastewater information, provided as volumes and expressed in megalitres, of a kind specified for the purposes of this item in the document titled *Urban Water Management* Information Requirements (see regulation 1.06)

Further information about the W indicators and U codes listed below, including explanatory notes and examples, can be found in the Category 7 reporting handbook at

http://www.bom.gov.au/water/regulations/schedules/document/CategorySevenReportingHandbook.pdf.

**Table 4.** Component water volumes for subcategory 7b

Subcategory 7b—Urban wastewater information				
Indicator	W indicator description	Code	U code description	
Wastewate	er collected			
W16	Volume of wastewater, excluding trade waste, collected	U22.3	Volume of wastewater, excluding trade waste, collected	
W17	Volume of trade waste collected	U22.2	Volume of trade waste collected	
Inflow to p	plant			
W18.4	Volume of wastewater inflows to	U23.1	Volume of wastewater inflow to wastewater treatment plants (excluding to bulk wastewater treatment plants), for each wastewater treatment plant	
	wastewater treatment plants	U23.2	Volume of wastewater inflow to bulk wastewater treatment plants, for each wastewater treatment plant	

Subcategory 7b—Urban wastewater information			
Indicator	W indicator description	Code	U code description
Transfers			
W18.2	W18.2 Volume of wastewater received from other service providers or operational areas within the urban wastewater system	U20.1	Volume of wastewater received from other service providers or operational areas within the urban wastewater system (excluding to a bulk wastewater treatment system), for each transfer party and wastewater treatment plant
		U20.3	Volume of wastewater received from other service providers to a bulk wastewater treatment system, for each transfer party and wastewater treatment plant
W18.1	Volume of wastewater exported to other service providers or operational areas within the urban wastewater system	U21.1	Volume of wastewater exported to other service providers or operational areas within the urban wastewater system, for each transfer party and wastewater treatment plant
		U20.4	Volume of treated wastewater received from own organisation, for each wastewater treatment plant
Extraction for sewer mining			
W18.3	Volume of wastewater taken through sewer mining	U83.1	Volume of wastewater taken through sewer mining, for each reclamation plant

Subcategory 7b—Urban wastewater information				
Indicator	W indicator description	Code	U code description	
Outflow fro	om plant			
W18.5	Volume of treated effluent outflows from wastewater treatment plants	U24.1	Volume of treated effluent outflow, from each wastewater treatment plant	
		U25.1	Volume of treated wastewater disposals to surface water, for each wastewater treatment plant	
W29	Volume of treated wastewater disposals	U25.2	Volume of treated wastewater disposals to landscape, for each wastewater treatment plant	
		U25.3	Volume of treated wastewater disposals to sea or estuary, for each wastewater treatment plant	
		U29.1	Volume of treated wastewater disposals back to sewer for further treatment, for each wastewater treatment plant	
		U28.4	Volume of losses during wastewater collection process	
W30	Volume of wastewater losses and discharges	U28.9	Volume of losses during wastewater treatment process	
		U28.13	Volume of losses during management of treated wastewater	

# Part 4—Water information requirements for subcategory 7c: urban recycled water information

# Subcategory 7c

Urban recycled water information, provided as volumes and expressed in megalitres, of a kind specified for the purposes of this item in the document titled Urban Water Management Information Requirements (see regulation 1.06)

Further information about the W indicators and U codes listed below, including explanatory notes and examples, can be found in the Category 7 reporting handbook at

http://www.bom.gov.au/water/regulations/schedules/document/CategorySevenReportingHandbook.pdf.

**Table 5.** Component water volumes for subcategory 7c

Subcategory 7c—Urban recycled water information				
Indicator	W indicator description	Code	U code description	
Transfers				
W6	Volume of recycled water received from other service providers or operational areas within the urban water system	U41.1	Volume of recycled water received from other service providers or operational areas within the urban water system, for each transfer party and wastewater treatment plant	
W15	Volume of recycled water exported to other service providers or operational areas within the urban water system	U42.1	Volume of recycled water exported to other service providers or operational areas within the urban water system, for each transfer party and wastewater treatment plant	
Use				
W20	Volume of recycled water supplied to residential customers	U44.1	Volume of recycled water supplied to residential customers, for each treatment plant	
		U43.5	Volume of recycled water supplied for own use, for each treatment plant	
W21	Volume of recycled water supplied to non-residential customers	U44.2	Volume of recycled water supplied to commercial, industrial and municipal customers, for each treatment plant	
		U44.3	Volume of recycled water supplied to agricultural and individual irrigation customers, for each treatment plant	

Subcategory 7c—Urban recycled water information				
Indicator	W indicator description	Code	U code description	
		U44.4	Volume of recycled water supplied to irrigation water schemes, for each treatment plant	
		U44.5	Volume of recycled water supplied for groundwater recharge, for each treatment plant	
		U44.10	Volume of recycled water supplied to other customers, for each treatment plant	
W23	Volume of recycled water supplied as environmental flows	U44.6	Volume of recycled water supplied as environmental flows, for each treatment plant	

# Part 5—Water information requirements for subcategory 7d: urban stormwater information

# Subcategory 7d

Urban stormwater information, provided as volumes and expressed in megalitres, of a kind specified for the purposes of this item in the document titled *Urban Water Management Information Requirements* (see regulation 1.06)

Further information about the W indicators and U codes listed below, including explanatory notes and examples, can be found in the <a href="Category 7">Category 7</a> reporting handbook at

 $\underline{\text{http://www.bom.gov.au/water/regulations/schedules/document/CategorySevenReportingHandbook.pdf.}$ 

Table 6. Component water volumes for subcategory 7d

Subcategory 7d—Urban stormwater information						
Indicator	W indicator description	Code	U code description			
Use						
W28.4	Volume of urban stormwater supplied to residential customers	U62.1	Volume of urban stormwater supplied to residential customers, for each stormwater harvesting scheme			
W28.5	Volume of urban stormwater supplied to non-residential customers	U62.2	Volume of urban stormwater supplied to commercial, industrial and municipal customers, for each stormwater harvesting scheme			
		U62.3	Volume of urban stormwater supplied to agricultural and individual irrigation customers, for each stormwater harvesting scheme			
		U62.4	Volume of urban stormwater supplied to irrigation water schemes, for each stormwater harvesting scheme			
		U62.5	Volume of urban stormwater supplied for groundwater recharge, for each stormwater harvesting scheme			
		U62.6	Volume of urban stormwater supplied as environmental flows, for each stormwater harvesting scheme			
		U62.10	Volume of urban stormwater supplied to other customers, for each stormwater harvesting scheme			

# Part 6—Metadata and contextual information requirements for Category 7

For the purposes of Regulations 1.06 and 7.11 of the *Water Regulations* 2008, Part 6 of this document sets out the metadata and contextual information that must be given to the Bureau of Meteorology, at the same time as water information in Category 7.

Metadata and contextual information must be given with U code volumes only. There is no requirement to provide metadata or contextual information with W indicator volumes.

Hence, Person Categories F and M are not required to provide any metadata or contextual information with Category 7 information. Person Category L is required to give all metadata and contextual information with Category 7 information as listed in the tables below for particular U codes, if it is in a person's possession, custody or control.

Further information about the elements listed below, including descriptions and examples, can be found in the <a href="Category 7 reporting handbook">Category 7 reporting handbook</a> at <a href="http://www.bom.gov.au/water/regulations//schedules/document/CategorySevenReportingHandbook.pdf">http://www.bom.gov.au/water/regulations//schedules/document/CategorySevenReportingHandbook.pdf</a>.

U Codes U1.1, U1.2, U2.1, U2.2
Name of water resource
Name of water management area
Name of plant
Quantification method
Uncertainty
Assumptions

U Codes U3.1, U20.4, U23.1, U23.2, U24.1, U25.1, U25.2, U25.3, U29.1, U43.5, U44.1, U44.2, U44.3, U44.4, U44.5, U44.6, U44.10, U83.1	
Name of plant	
Quantification method	
Uncertainty	
Assumptions	

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U Codes U3.1, U20.4, U23.1, U23.2, U24.1, U25.1, U25.2, U25.3, U29.1, U43.5, U44.1, U44.2, U44.3, U44.4, U44.5, U44.6, U44.10, U83.1	
U Codes U4.1, U8.1	
Name of water resource	
Name of transfer party	
Quantification method	
Uncertainty	
Assumptions	

U Codes U9, U10.1, U10.2, U10.3, U10.4, U10.5, U10.6, U10.7, U12.2, U12.4, U22.2, U22.3, U28.4, U28.9, U28.13	
Quantification method	
Uncertainty	
Assumptions	

U Code U6.1, U14.1
Name of water resource
Name of water management area
Quantification method
Uncertainty
Assumptions

U Codes U20.1, U20.3, U21.1, U41.1, U42.1	
Name of plant	
Name of transfer party	
Quantification method	
Uncertainty	
Assumptions	

U Codes U62.1, U62.2, U62.3, U62.4, U62.5, U62.6, U62.10		
Name of stormwater harvesting scheme		
Quantification method		
Uncertainty		
Assumptions		