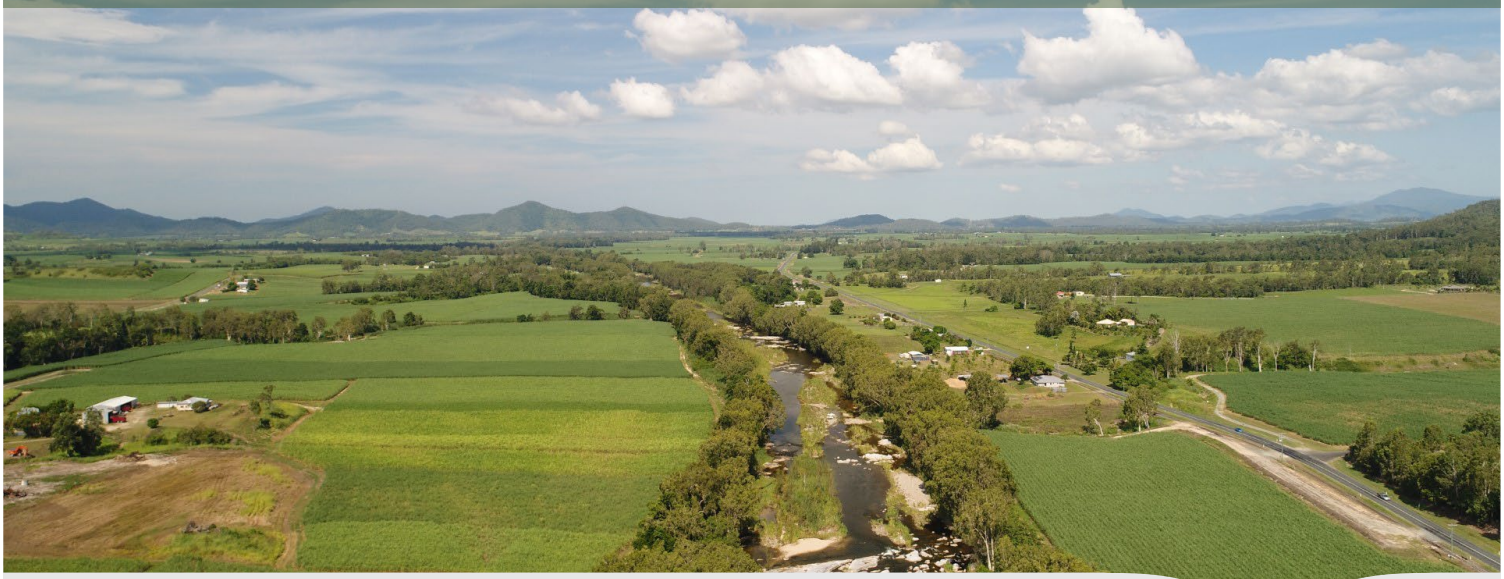
Queensland Government

Department of Regional Development, Manufacturing and Water



Queensland non-urban water measurement information standard

WM/2024/6899

Version 1.0 24 July 2024

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Acknowledgement of Traditional Owners

We respectfully acknowledge the Aboriginal and Torres Strait Islander peoples as the Traditional Owners and Custodians of this Country – the lands and seas on which we meet, live, learn, work and play. We acknowledge those of the past, the Ancestors whose strength has nurtured this land and its people, and we recognise their connection to land, sea and community. We pay our respects to them, their culture and to their Elders past and present.

This publication has been compiled by Water Management Implementation and Measurement Initiatives, Department of Regional Development, Manufacturing and Water.

Interpreter statement:

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Version history

Version	Date	Comments
1.0	24/07/2024	This standard sets out the requirements for giving information to the chief executive about water taken under a relevant authorisation as stated in Schedule 11A of the Water Regulation 2016.

Approval

Position	Name	Date
Director, Water Management Implementation and Measurement Initiatives	Toni Stiles	24 July 2024

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1. Introduction

1.1 Scope

This standard is made under section 217I of the *Water Act 2000*.

It sets out the requirements for giving information to the chief executive about water taken under a relevant authorisation, as stated in Schedule 11A of the Water Regulation 2016.

These requirements apply to both:

- a manual reading from a meter
- an electronic record made by a datalogger or telemetry device.

2. Information requirements about water take

2.1 Manual reading from a meter

This section outlines the requirements for:

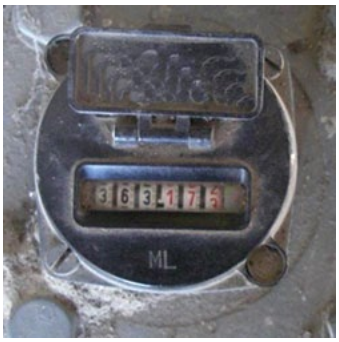
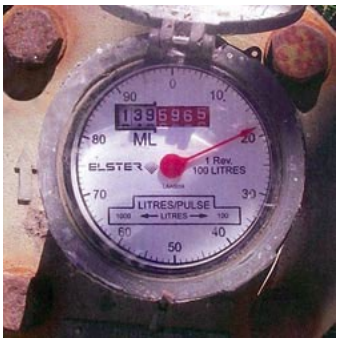
- a manual reading of a water meter (mechanical or electronic)
- the way this information is to be given to the department.

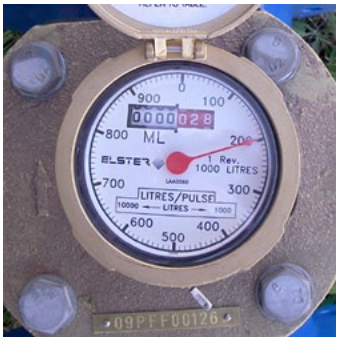
2.1.1 Reading the meter

Meter reads must include the series of numbers on the dial of your meter, including leading and trailing zeros.

Table 1 provides a guide to reading specific types of water meters.

Table 1: Guide to taking readings from specific types of water meters

	**Davies Shepherd** Provide the series of numbers on the dial of your meter including leading and trailing zeros. In this example, the reading would be 363173.
	**Elster R2000 Water Meter 80 - 125mm** Provide the series of numbers on the dial of your meter including leading and trailing zeros. In this example, the reading would be 1395965.



Elster R2000 Water Meter 150 - 300mm

Provide the series of numbers on the dial of your meter including leading and trailing zeros.

In this example, the reading would be 0000028.

Elster R1000 Water Meter 50mm - 125mm

Provide the series of numbers on the dial of your meter including leading and trailing zeros.

In this example, the reading would be 000002.

Elster R1000 Water Meter 150mm - 300mm

Provide the series of numbers on the dial of your meter including leading and trailing zeros.

In this example, the reading would be 000001.

Siemens MAG 8000 Water Meter

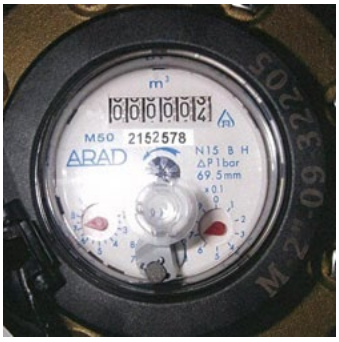
Provide the series of numbers on the dial of your meter including leading and trailing zeros.

In this example, the reading would be 00075642.

Under normal conditions the meter will display the total volume that has passed through the meter in megalitres. Pressing the key (black triangle in the yellow square) will cycle the display through the display screens:

- total volume in megalitres
- total reverse volume in megalitres
- flowrate in megalitres per day
- error status
- display test.

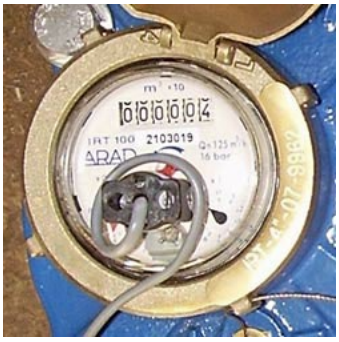
After 10 minutes without pressing the key, the display will time-out and go back to the total volume display.



Arad Multijet Water Meter

Provide the series of numbers on the dial of your meter including leading and trailing zeros.

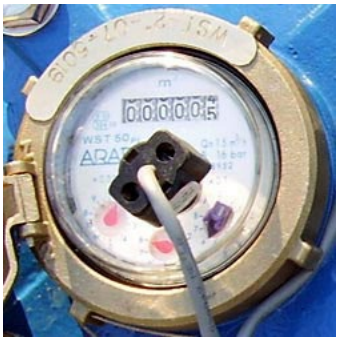
In this example, the reading would be 000004.



Arad IRT Water Meter 80mm - 250mm

Provide the series of numbers on the dial of your meter including leading and trailing zeros.

In this example, the reading would be 000004.



Arad Turbo WST Water Meter 50mm - 200mm

Provide the series of numbers on the dial of your meter including leading and trailing zeros.

In this example, the reading would be 000005.

2.1.2 Giving manual meter read information to the department

Manual meter read information about water taken under a relevant authorisation must be given to the department in one of the following ways:

- submit a meter read online
  - go to the Business Queensland website
  - search for 'Submit your water meter reading'
- submit a meter reading form – Form W2F123 Meter reading.

2.2 Electronic records about water take

This section outlines the requirements for information about water take that is recorded by an electronic device (datalogger or telemetry device) attached to a water meter or water level station.

It states:

- the information to be given (data parameters)
- the format of the information to be given (file format)
- the way the information is to be given to the department.

2.2.1 Data parameters

The tables below outline the information that is required to be recorded and given to the department.

Tables 2 and 3 outline the data parameters required for an electronic device linked to a water meter used for the measurement of surface water and underground water extraction.

- For meters that have a pulse output, use Table 2.
- For meters that do not have a pulse output, use Table 3.

Table 2: Water meters – surface water and underground water extraction – pulse output

ID	Parameter	Description	Unit
1.	Meter Ref ID	is the **unique meter reference number** of the water meter provided to the water user by the department.	Numeric
2.	Meter serial number	is the **unique serial number** of the water meter.	Alphanumeric
3.	Time	The timestamp of each 15-minute log must be 24-hour time format. All timestamps must be in the UTC/GMT+10 hours. Daylight savings time is not used.	Format: YYYY-MM-DD HH:mm:ss
4.	Volume	The 15-minute interval water take reported in Kilolitres (kL) or Megalitres (ML).	Kilolitres (kL) or Megalitres (ML).
5.	Unit	Kilolitres (kL) or Megalitres (ML).	

Table 3: Water meters – surface water and underground water extraction – other than pulse output

ID	Parameter	Description	Unit
1.	MeterID	is the **unique meter reference number** of the water meter provided to the water user by the department.	Numeric
2.	Meter serial number	is the **unique serial number** of the water meter.	Alphanumeric
3.	Time	The timestamp of each 15-minute log must be 24-hour time format. All timestamps must be in the UTC/GMT+10 hours. Daylight savings time is not used.	Format: YYYY-MM-DD HH:mm:ss
4.	Volume	The 15-minute interval water take reported in Kilolitres (kL) or Megalitres (ML).	Kilolitres (kL) or Megalitres (ML).
5.	Unit	Kilolitres (kL) or Megalitres (ML).	
6.	Cumulative Volume	Cumulative water take must be reported in Kilolitres (kL) or Megalitres (ML). The cumulative water consumption should account for the reading of the meter at the time of installation of the telemetry device, where the telemetry device is installed on an existing meter.	Kilolitres (kL) or Megalitres (ML).

Table 4 outlines the data parameters required for an electronic device that is linked to a water level station.

Table 4: Water level stations

ID	Parameter	Description
1.	Meter Ref ID	is the **unique meter reference number** of the water meter provided to the water user by the department.
2.	Meter serial number	is the **unique serial number** of the water meter.
3.	Time	The timestamp of each 15-minute log must be 24-hour time format. All timestamps must be in the Eastern Standard Time GMT+10 hours. Daylight savings time is not used. Format: YYYY-MM-DD HH:mm:ss
4.	Height	RL
5	Unit	Metres (m) or millimetres (mm).

2.2.2 File format

Electronic devices must be configured to log data according to the following file format.

File name

Files must be saved using a CSV text format. A new file must be saved per meter. The required file naming convention **must** be:

'YYYYMMDD_HHmmss_MeterRefID_Version.csv'.

Table 5: Filename naming convention

YYYYMMDD	the date expressed as ISO8601 tokens (20190311 in the example below)
HHmmss	the time expressed as ISO8601 tokens (000000 in the example below)
MeterRefID	the unique serial number of the water meter
Version	the version number of this standard. (The current version is V1 as in the example below)
filename timestamp	must match the first record in the file

An example of a file name is **20190311_000000_A525_V1.csv**.

CSV text file format

The file contents must conform to the following format and include the following three header rows:

Row 1	contains a comma separated, variable set of attributes that should include: Filename—filename of the enclosing document
Row 2	contains the names of each logged parameter
Row 3	contains the units of each logged parameter

Data rows

- Each record must be captured on a new line.
- Each record must contain no more than two parameters: time and volume.
- Parameters must occur in the order listed. The values of each parameter must conform to the tables above.

An example of a correctly formatted CSV text file is:

filename=20190311_000000_A525_123235_V0.csv
time,volume,ML
2019-03-11 12:15:01,012.12
2019-03-11 12:30:04,012.14
2019-03-11 12:38:24,012.15
2019-03-11 12:45:09,012.20
2019-03-11 13:00:03,012.21

- Time-based and event-based logs are recorded in the same file.
- Not all parameters must be logged on every row.
- Where a parameter is not logged it must be represented by **‘,’**. This ensures the column order is maintained.

2.2.3 Giving electronic records to the department

2.2.3.1 Data from a datalogger

Downloaded data must be submitted via email or other arrangement agreed by the department.

2.2.3.2 Data transmission via telemetry

Data must be transmitted from a telemetry device through an interface approved by the department.

Department of Regional Development,
Manufacturing and Water
PO Box 12898, GEORGE ST BRISBANE QLD 4003
13 QGOV (13 74 68)
info@rdmw.qld.gov.au
rdmw.qld.gov.au

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