

# Queensland Water Monitoring Information

## Hydrology Archive Data Information Sheet



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# 1.0 Introduction

The Queensland Department of Regional Development, Manufacturing and Water (the Department) operates surface and groundwater monitoring networks under an approved Water Monitoring Business Framework and ISO 9001:2015 accredited Quality Management System. In accordance with the Water Monitoring Business Framework, information collected from gauging stations is primarily stream height, flow and volume.

The Department's network data can be accessed via:

## Qld Water Monitoring Information Portal

- Validated and historic streamflow data can be accessed and also downloaded. This information is validated by qualified hydrographic staff and is quality coded accordingly.
- Unverified telemetry data which can be accessed. This information is published in near- real time following automated screening for any significant inconsistencies.

Website <https://water-monitoring.information.qld.gov.au/>

Mobile Edition <https://water-monitoring.information.qld.gov.au/mobile/>

## Queensland Open Data Portal

- Streamflow data can also be accessed and downloaded via the Queensland Open Data Portal. This information is validated by qualified hydrographic staff and is quality coded accordingly.

Website <https://www.data.qld.gov.au/>

## Enquiries

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## 2.0 Validation

The Department endeavours to validate data as quickly as possible, while performance indicators aim for data to be acquired, processed and validated to a defined standard. The most recent validated data holding may be downloaded periodically from the Qld Open Data Portal.

With respect to use of data:

- Unvalidated data that is accessed via the Department's Water Monitoring Information Portal has not been rigorously assessed and the data is quality coded to identify this. Unvalidated data should be used with care as they may change after validation. These data should only be used by persons who are familiar with the characteristics of streamflow information.
- Validated data are data that has been assessed and is the best available quality at the time, however the data should always be interpreted taking into account the quality codes that have been applied.
- Hydrologic advice should be sought to assist with any data interpretation.

## 3.0 Content/ Resources

The Department supplies Time Series water monitoring data as compressed ZIP archives. The ZIP archives are:

FILE NAME	DESCRIPTION
RDMW_SDVR_OPEN.ZIP	Time Series Stage, Discharge, Volume, Rainfall for Open Gauging Stations
RDMW_SDVR_CLOSED.ZIP	Time Series Stage, Discharge, Volume, Rainfall for Closed Gauging Stations
RDMW_TSWQ_OPEN.ZIP	Time Series Water Quality for Open Gauging Stations
RDMW_TSWQ_CLOSED.ZIP	Time Series Water Quality Closed Gauging Stations
RDMW_RAIN.ZIP	Time Series Rainfall for Open and Closed Stations
RDMW_ART.ZIP	Time Series Artesian Equivalent Level for Open and Closed Stations
RDMW_SUBART.ZIP	Time Series Groundwater Level for Open and Closed Stations
RDMW_WM.WQX.CSV.ZIP	Discrete Water Quality for Monitoring Projects

## 4.0 Metadata and File Types

### 4.1 Metadata Files

FILE NAME	DESCRIPTION
Stream_Gauging_Station_Network_2019-20.PDF	Surface Water Monitoring Network Index
Groundwater_Network_2019-20.PDF	Groundwater Monitoring Network Index
Standalone_Pluviograph_Network_2019-20.PDF	Standalone Pluviograph Network Index
Surface_Water_Ambient_Network_2019-21.PDF	Surface Water Ambient Water Quality Network Index
RDMW_Stream_Gauging_Station_Network_2019-20.CSV	Spatial data for Stream Gauging Station Network
RDMW_Groundwater_Network_2019-20.CSV	Spatial data for Groundwater Network
RDMW_Rainfall_Site.CSV	Spatial data for Rainfall Sites
RDMW_Surface_Water_Ambient_Network_2019-21.CSV	Surface Water Quality Network
RDMW_DA_QUALITY.CSV	Quality Code Mapping
RDMW_WQX_VARIABLES.CSV	Discrete Water Quality Variable Codes and Units
RDMW_Hydrology_Archive_Data_Information_Sheet.PDF	Hydrology Archive Data Information Sheet (this document)

## 5.0 Index of data extract types

CSV Data File Type construction: [Station].[TYPE].CSV

TXT Data File Type construction: [Station].SR.TXT

WQX Data File Type construction: RDMW\_WM.WQX.CSV

### 5.1 Point Hydrologic Data

TYPE	Description
PS	Point Stage (i.e. 'Gauge Height') as measured
PD	Point Discharge as stored *
SS	Point Stage (i.e. 'Subartesian Equivalent Water Level') as measured
AS	Point Stage (i.e. 'Artesian EPS') as measured
PR	Point Rainfall as measured

### 5.2 Periodic Hydrologic Extracts

TYPE	Description
DM	[GS] Daily Midnight Stage (min, max, mean), Discharge (min, max, mean), Volume (total), Rainfall (total), START
DMM	[GS] Monthly Midnight Stage (min, max, mean), Discharge (min, max, mean), Volume (total), Rainfall (total), START
DMY	[GS] Yearly Midnight Stage (min, max, mean), Discharge (min, max, mean), Volume (total), Rainfall (total), START
SM	[SS] Daily Midnight Water Level (min, max, mean), Rainfall (total), START
SMM	[SS] Monthly Midnight Water Level (min, max, mean), Rainfall (total), START
SMY	[SS] Yearly Midnight Water Level (min, max, mean), Rainfall (total), START
AM	[AS] Daily Midnight EPS (min, max, mean), Rainfall (total), START
AMM	[AS] Monthly Midnight EPS (min, max, mean), Rainfall (total), START
AMY	[AS] Yearly Midnight EPS (min, max, mean), Rainfall (total), START
D9	[GS] Daily 0900 Stage (min, max, mean), Discharge (min, max, mean), Volume (total), Rainfall (total), END
D9M	[GS] Monthly 0900 Stage (min, max, mean), Discharge (min, max, mean), Volume (total), Rainfall (total), END
D9Y	[GS] Yearly 0900 Stage (min, max, mean), Discharge (min, max, mean), Volume (total), Rainfall (total), END

<b>TYPE</b>	<b>Description</b>
S9	[SS] Daily 0900 Water Level (min, max, mean), Rainfall (total), END
S9M	[SS] Monthly 0900 Water Level (min, max, mean), Rainfall (total), END
S9Y	[SS] Yearly 0900 Water Level (min, max, mean), Rainfall (total), END
A9	[AS] Daily 0900 EPS (min, max, mean), Rainfall (total), END
A9M	[AS] Monthly 0900 EPS (min, max, mean), Rainfall (total), END
A9Y	[AS] Yearly 0900 EPS (min, max, mean), Rainfall (total), END
DRM	Daily Midnight Rainfall (total), START
DR9	Daily 0900 Rainfall (total), END

Nb. START/ END indicates the period to which each record refer

## 5.3 Point Time Series Water Quality (TSWQ)

<b>TYPE</b>	<b>Description</b>
PWQ	Point Water Quality- as measured EC, Temperature, pH, Turbidity, Instantaneous Stage and Discharge

## 5.4 Periodic Time Series Water Quality Extracts

<b>TYPE</b>	<b>Description</b>
DET	Daily Midnight EC (min, max, mean), Temperature (min, max, mean), START
DPT	Daily Midnight pH (min, max, mean), Temperature (min, max, mean), START
DTU	Daily Midnight Turbidity (min, max, mean), START



## 5.5 Discrete Water Quality Sample Data

<b>TYPE</b>	<b>Description</b>
WQX	Extract containing water quality Samples and Results Data

### Column within WQX extract

STATION	Unique Site identifier
STATION NAME	Descriptive name for the station
SAMPNUM	Sample identifier
BOTTLE	The bottle number of the sample
SAMPTYPE	The type of sample
PROJECT1	Project code associated with this sample
SRCSAMP	Code describing the source of the sample
COLLSAMP	Code describing the organisation that collected the sample
COLLMETH	Code describing the collection method
PRESMETH1	Preservation method used for this sample
LABREF	Laboratory reference code
LABSAMPREF	Sample reference supplied by the laboratory
INPUTSRC	Code describing the data entry source
V	Value of Water Quality Parameter
Q	Quality Code
F	Flag

## 6.0 Time Series Data Parameters, Units

Name	Description	Variable Number
Stage	m GHt (metres Gauge Height)	100.00
Discharge	m <sup>3</sup> /sec (cubic metres per second, aka 'cumecs')	140.00
Volume	ML (megalitres)	151.00
Rainfall	mm (millimetres)	10.00
Electrical Conductivity (EC)	µS/cm (micro Siemens per centimetre)	2010.00
Temperature	°C (degrees Celsius)	2080.00
pH	pH (pH units)	2100.00
Turbidity	NTU (Nephelometric Turbidity Units)	2030.00
Bore Water Level	m (metres)	110.00
Groundwater Elevation AHD	m (metres)	111.00
Artesian Equivalent Potentiometric Surface (EPS)	m (metres)	113.00
Artesian Equivalent Potentiometric Elevation AHD (EPS)	m (metres)	114.00

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