



**Australian Government**

**NWPHYD005 Process and report  
hydrographic time series data**

**Release: 2**

# NWPHYD005 Process and report hydrographic time series data

## Modification History

Release 2: Competency Field changed from Hydrology to Hydrometric Monitoring

Release 1: This is the first release of this unit of competency in the NWP National Water Training Package

## Application

This unit involves the skills and knowledge required to process and report hydrographic time series data.

It includes compiling, interpreting, analysing and verifying data including water level (streams, lakes), rainfall, groundwater, soil moisture, evaporation, radiation, wind, temperature and electro conductivity. It also includes producing hydrometric data reports to support organisational decision making, complying with relevant environmental legislation, regulations and workplace policies. Organisational policies and procedures must be consulted and adhered to, particularly those relating to Work Health and Safety (WHS), Bureau of Meteorology, World Meteorological Organisation and Australian Standards.

This unit applies to water operators involved in the monitoring of the elements of the water cycle and their impact on the related environment. Those undertaking this unit would work autonomously, leading staff, while performing complex tasks in a broad range of contexts that could be unpredictable, including remote, confined spaces, working on or near water and working at heights.

No licensing, legislative or certification requirements apply to unit at the time of publication.

## Pre-requisite Unit

Not applicable.

## Competency Field

Hydrometric Monitoring

## Unit Sector

Not applicable.

## Elements and Performance Criteria

### ELEMENTS

### PERFORMANCE CRITERIA

Elements describe the essential outcomes.

Performance criteria describe the performance needed to demonstrate achievement of the element.

- |   |  |
|---|--|
| <b>1 Prepare for collection of data</b> | <b>1.1</b> Identify objectives of time series, stakeholder data and reporting requirements<br><br><b>1.2</b> Identify parameters and procedures for collection of hydrometric data   |
| <b>2 Retrieve time series data</b>      | <b>2.1</b> Retrieve and manage data according to workplace procedures<br><br><b>2.2</b> Apply and record field verification checks according to workplace procedures   |
| <b>3 Verify hydrometric data</b>        | <b>3.1</b> Complete field documentation and prepare working copy of data<br><br><b>3.2</b> Select data to be verified<br><br><b>3.3</b> Use standard processes, software, mathematical and scientific techniques to check, edit, verify, adjust and qualify data<br><br><b>3.4</b> Review and apply verification information and additional backup time series data sets to time series data and identify proposed adjustments to data<br><br><b>3.5</b> Use historical data, nearby sites and related parameters to validate data, identify data irregularities and ensure data integrity<br><br><b>3.6</b> Estimate failed periods required by stakeholders<br><br><b>3.7</b> Check documents according to workplace procedures and incorporate adjustments<br><br><b>3.8</b> Archive raw and processed data according to workplace procedures |
| <b>4 Prepare reports</b>                | <b>4.1</b> Prepare standard reports to check integrity of verified data<br><br><b>4.2</b> Prepare stakeholder specific reports according to workplace procedures   |

- 4.3 Prepare verified data, documentation and reports for authorisation
- 4.4 File authorised information according to workplace procedures

## Foundation Skills

Foundation skills essential to performance are explicit in the performance criteria of this unit of competency.

## Range of Conditions

Range is restricted to essential operating conditions and any other variables essential to the work environment.

## Unit Mapping Information

This unit replaces and is equivalent to NWPHYD016 Process and report hydrographic time series data.

## Links

Companion Volume implementation guides are found in VETNet -  
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=26336bc0-04e5-49d9-8c31-46c49b6a0037>

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