



**Australian Government**

# **NWPHYD004 Plan water resource management**

**Release: 2**

# NWPHYD004 Plan water resource management

## 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 plan water resource management.

It includes reviewing and planning hydrometric data management processes, guaranteeing the provision of quality data and managing water resources. It also includes collecting, analysing, storing and reporting data, using this information to inform effective policy development for effective performance and applying and adhering to legislative, regulatory and workplace policies and procedures, particularly those related 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 all 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 Performance criteria describe the performance needed to

- outcomes. demonstrate achievement of the element
- 1 Review and plan hydrometric data management processes**
    - 1.1** Design and review hydrographic network and water resource management objectives in consultation with senior management
    - 1.2** Review and analyse the data required to support the hydrographic planning and water resource management processes within the organisation
    - 1.3** Review hydrographic network data management processes to collect, analyse, store and report hydrometric data to support workplace planning needs
    - 1.4** Identify, plan and report resource requirements to meet the hydrographic data management needs
    - 1.5** Identify, plan, manage and report resource requirements to meet hydrographic network data management needs
    - 1.6** Identify future and extended uses of data and monitoring networks as part of the planning process and to ensure the most effective use of data and network
  - 2 Guarantee the provision of quality data**
    - 2.1** Develop and review work procedures and documentation used to support the collection, analysis, storage and reporting of hydrometric data as required and communicate to relevant personnel
    - 2.2** Use complex mathematical and technical processes to support the planning and operation of hydrographic monitoring and testing regimes
    - 2.3** Determine monitoring and testing priorities
    - 2.4** Prepare reports in a format suitable to support decision making and planning within the organisation
    - 2.5** Communicate purpose, use of data and outcomes of the documentation review to relevant personnel and stakeholders
    - 2.6** Plan and ensure training is provided to relevant personnel in specialist systems used in data management
  - 3 Manage water resources**
    - 3.1** Review and analyse the role of hydrometric data in the development of water resource management policy
    - 3.2** Gather, review and communicate local, national and international information regarding effective water

resource management

- 3.3 Conduct analysis of current, historic and trend data to inform the organisation's water resource management planning
- 3.4 Gather, review and communicate best practice policy regarding effective water resource management
- 3.5 Identify deficiencies in networks
- 3.6 Prepare reports according to workplace procedures and communicate with relevant personnel and stakeholders

## 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 NWPHYD018 Plan water resource management.

## 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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