



**Australian Government**

**Department of Education, Employment and Workplace Relations**

# **NWP416B Coordinate and monitor water storage catchment activities**

**Revision Number: 2**

## NWP416B Coordinate and monitor water storage catchment activities

### Modification History

NWP416B Release 2: Layout adjusted. No changes to content.

NWP416B Release 1: Primary release.

### Unit Descriptor

This unit of competency describes the coordination and monitoring of activities in water storage catchments that impact on water yield and/or quality.

### Application of the Unit

This unit supports the attainment of skills and knowledge required for staff with a specific responsibility for ensuring that storage catchment activities comply with organisational and statutory requirements. The level of responsibility may vary according to the size, scope and complexity of the catchment area system.

### Licensing/Regulatory Information

Not applicable.

### Pre-Requisites

Not applicable.

### Employability Skills Information

This unit contains employability skills.

### Elements and Performance Criteria Pre-Content

Elements describe the essential outcomes of a unit of competency. Performance criteria describe the required performance needed to demonstrate achievement of the element. Where ***bold italicised*** text is used, further information is detailed in the range statement. Assessment of performance is to be consistent with the evidence guide.

## Elements and Performance Criteria

ELEMENT	PERFORMANCE CRITERIA
<b>1 Confirm the performance measures for catchment management.</b>	<ul style="list-style-type: none"><li>1.1 Identify <i>catchment management requirements</i>.</li><li>1.2 Identify <i>stakeholder</i> requirements that impact on the catchment area.</li><li>1.3 Gather <i>historical catchment information</i> and apply as required.</li><li>1.4 Identify water quality and quantity requirements.</li><li>1.5 Identify <i>environmental factors</i> and <i>issues</i> that impact on the catchment area.</li></ul>
<b>2 Monitor catchment activities.</b>	<ul style="list-style-type: none"><li>2.1 Apply monitoring and <i>testing programs</i> according to organisational procedures.</li><li>2.2 Correctly select, fit and use personal protective equipment.</li><li>2.3 Monitor catchment area usage according to the plan.</li><li>2.4 Identify, investigate and report breaches of usage provisions.</li></ul>
<b>3 Report outcomes of testing and monitoring.</b>	<ul style="list-style-type: none"><li>3.1 Analyse, record and report coordination and monitoring data according to organisational procedures and statutory requirements.</li><li>3.2 Identify and investigate current and/or potential problems and report results.</li></ul>

## Required Skills and Knowledge

This describes the essential skills and knowledge and their level, required for this unit.

### Required skills:

- interpret and apply legislation and policies
- coordinate measuring and testing activities
- conduct investigations
- assess environmental impact
- solve operational problems
- produce reports and logs
- use safety equipment and personal protective equipment
- calculate flow and capacity
- coordinate safety surveillance
- interpret plans, policies and standard operating procedures
- communicate with employees and customers
- use communication equipment
- give and receive instructions
- identify control system faults
- identify water quality risks and prepare protection strategies

### Required knowledge:

- relevant historical records
- relevant legislation
- relevant enterprise policies
- relevant technical skills
- advanced technology
- range of appropriate measuring and testing procedures
- investigation procedures
- coordination processes
- system layout
- system processes
- environmental aspects of catchment areas
- safety procedures
- policies and standard operating procedures
- relevant utilities and service bodies
- hazardous substances handling
- communication systems
- risk management principles
- risk factors and potential hazards involved with catchment area processes equipment operation, capacity and limitations
- effects of weather and conditions on operation of catchment areas
- pumping and valving systems

- control systems
- pest control specifications
- customer expectations and requirements
- occupational health and safety and environmental legislation, Acts and procedures.
- catchment management issues, including:
  - feral/native animals
  - transfer of noxious weeds
  - human interaction with the catchment including litter and waste
  - perimeter inspections
  - fire management
  - mimosa
  - policing role
  - conservation management
  - remote community catchment areas

## Evidence Guide

The evidence guide provides advice on assessment and must be read in conjunction with the Performance Criteria, Required Skills and Knowledge, the Range Statement and the Assessment Guidelines for the Training Package.

### **Critical aspects for assessment and evidence required to demonstrate competency in this unit**

The candidate should demonstrate the ability to coordinate and monitor water storage catchment activities including:

- identifying catchment management requirements
- identifying stakeholder requirements and environmental factors that impact on water storage catchment areas
- implementing monitoring and testing programs
- monitoring usage
- investigating and reporting on breaches
- reporting on monitoring activities

### **Context of and specific resources for assessment**

Access to the workplace and resources including:

- documentation that should normally be available in a water industry organisation
- relevant codes, standards, and government regulations

Where applicable, physical resources should include equipment modified for people with disabilities.

Access must be provided to appropriate learning and/or assessment support when required.

Assessment processes and techniques must be culturally appropriate, and appropriate to the language and literacy capacity of the candidate and the work being performed.

Validity and sufficiency of evidence requires that:

- competency will need to be demonstrated over a period of time reflecting the scope of the role and the practical requirements of the workplace
- where the assessment is part of a structured learning experience the evidence collected must relate to a number of performances assessed at different points in time and separated by further learning and practice
- a decision of competence should only be made when the assessor has complete confidence in the person's competence over time and in various contexts
- all assessment that is part of a structured learning experience must include a combination of direct, indirect and supplementary evidence
- where assessment is for the purpose of recognition (RCC/RPL), the evidence provided will need to be authenticated and show that it represents competency demonstrated over a period of time

- assessment can be through simulated project-based activity and must include evidence relating to each of the elements in this unit

In all cases where practical assessment is used it will be combined with targeted questioning to assess the underpinning knowledge. Questioning will be undertaken in a manner appropriate to the skill levels of the operator, any cultural issues that may affect responses to the questions, and reflecting the requirements of the competency and the work being performed.

## Range Statement

The range statement relates to the unit of competency as a whole. It allows for different work environments and situations that may affect performance. ***Bold italicised*** wording, if used in the Performance Criteria, is detailed below. Add any essential operating conditions that may be present with training and assessment depending on the work situation, needs of the candidate, accessibility of the item, and local industry and regional contexts.

***Catchment management requirements*** may include:

- relevant federal legislation
- relevant state or territory legislation
- relevant local government by-laws
- organisational needs
- codes of practice

***Stakeholders*** may include:

- state forestry bodies
- state parks authorities
- land care groups
- catchment management trusts and community groups
- environmental interest groups
- native title and indigenous groups
- state government
- water authorities
- users and customers, including:
  - recreationists
  - forestry
  - housing
  - farming
  - consumers of water
  - water authorities

***Historic catchment information*** may include:

- relevant hydrological information
- previous monitoring studies
- vegetation surveys
- anecdotal information from land holders
- geological data
- hydro-geological data

***Environmental factors that impact on the catchment area*** may include:

- flora
- fauna
- chemicals
- land degradation
- nutrients
- fire breaks
- farming practices
- land use



*Issues that impact on or relate to the catchment area* may include:

- cultural sites
- land use
- environmental issues
- other human activity

*The testing program* may be:

- on site
- in a specified laboratory
- and may include:
  - sampling and testing procedures
  - testing medium
  - frequency
  - sampling locations
  - testing variables

## **Unit Sector(s)**

Not applicable.

## **Competency field**

Collection and distribution.