



Australian Government

NWPSOU006 Develop and manage a flood plan

Release: 1

NWPSOU006 Develop and manage a flood plan

Modification History

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 develop and manage a flood plan.

It includes analysing and modelling data relating to flooding, developing effective management and warning systems and communicating outcomes concisely. It also includes applying and adhering to relevant legislation, industry regulations and workplace procedures.

This unit applies to those working as leaders with responsibility for the preparation of flood management strategies and flood warning systems. Those undertaking this unit would work autonomously with leadership responsibilities, while performing complex tasks in familiar contexts.

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

Pre-requisite Unit

Not applicable.

Competency Field

Source

Unit Sector

Not applicable.

Elements and Performance Criteria

ELEMENTS

Elements describe the essential outcomes.

1 Plan and prepare for flood operations

PERFORMANCE CRITERIA

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

1.1 Access and interpret historical rainfall run-off and flooding regimes of specific catchments

- | | | |
|----------|---|--|
| | 1.2 | Collate and analyse simulated, hypothetical and estimated rainfall intensity data and model catchment |
| | 1.3 | Estimate and record flood levels, extents and flow rates |
| | 1.4 | Identify and interpret storage asset specifications including regulatory requirements, industry standards and workplace procedures |
| | 1.5 | Identify resources, environment and stakeholders at risk during a flood event |
| 2 | Develop a flood plan | |
| | 2.1 | Consult with stakeholders to obtain input for flood planning |
| | 2.2 | Develop and document a plan for managing the flood impact on a storage asset |
| | 2.3 | Confirm performance measures for flood operations |
| | 2.4 | Develop plan components and activities for implementation |
| | 2.5 | Develop a flood plan according to relevant legislation, industry standards, workplace procedures and environmental requirements |
| 3 | Monitor and evaluate flood plan | |
| | 3.1 | Assess and record a flood event according to industry standards and workplace procedures |
| | 3.2 | Evaluate the roles of storage and retarding basins safety and flood attenuation strategies |
| | 3.3 | Evaluate current flood classifications and impacts according to flood plan |
| | 3.4 | Formulate planning controls for flood plain and waterway management |
| | 3.5 | Evaluate current flood warning systems according to flood plan |
| | 3.6 | Recommend and develop changes to existing flood plain and waterway management controls and warning systems |
| 4 | Report on implementation of the plan | |
| | 4.1 | Collate, analyse and record information according to workplace procedures |

- 4.2 Prepare and present reports to relevant persons
- 4.3 Communicate findings and recommendations to stakeholders according to workplace procedures and relevant regulations

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 but is not equivalent to NWPSOU028 Prepare and report on data related to flood operations.

Links

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

Assessment Requirements for NWPSOU006 Develop and manage a flood plan

Modification History

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

Performance Evidence

Evidence required to demonstrate competence in this unit must be relevant to and satisfy all the requirements of the elements and performance criteria on at least one occasion and includes:

- analysing and developing flood mitigation warning systems and strategies
- analysing, interpreting and modelling flood data
- assessing and recording a flood event
- communicating flood planning findings with stakeholders and relevant persons
- developing a flood plan including:
 - documenting an implementation plan
 - identifying plan components and activities for completion
 - specifying environmental requirements
- developing critical flood warning systems
- developing strategies to mitigate the impact of potential future floods
- identifying and interpreting storage asset specifications

Knowledge Evidence

Evidence required to demonstrate competence in this unit must be relevant to and satisfy all the requirements of the elements and performance criteria and includes knowledge of:

- catchment hydrology principles including the roles of:
 - retarding basins
 - safety and flood attenuation strategies
 - water storage
- current flood classifications and flood warning systems
- performance measures for flood operations
- relevant documentation associated with developing and managing a flood plan including:
 - industry standards
 - workplace procedures
- relevant legislation and regulatory requirements associated with developing and managing a flood plan including:
 - by-laws

- environmental legislation
- work health and safety (WHS) legislation
- planning schemes
- storage asset specifications
- water flow measurement and flow routing models

Assessment Conditions

Assessors must hold credentials specified within the Standards for Registered Training Organisations current at the time of assessment.

Assessment must satisfy the Principles of Assessment and Rules of Evidence and all regulatory requirements included within the Standards for Registered Training Organisations current at the time of assessment.

Assessment must occur in suitable workplace operational situations. Where this is not appropriate, assessment must occur in suitable simulated workplace operational situations reflecting actual workplace conditions.

Assessment processes and techniques must be appropriate to the language, literacy and numeracy requirements of the work being performed and the needs of the candidate.

Resources for assessment must include access to:

- relevant and appropriate materials, tools, facilities, equipment and personal protective equipment currently used in industry
- applicable relevant documentation including workplace procedures, industry standards, equipment specifications, regulations, codes of practice and operation manuals.

Links

Companion Volume Implementation Guides are found in VETNet -

<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=26336bc0-04e5-49d9-8c31-46c49b6a0037>