



Australian Government

NWPIRR008 Implement and coordinate an irrigation delivery system plan

Release: 1

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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 implement and coordinate an irrigation delivery system plan.

It includes coordinating and monitoring the performance of irrigation delivery systems, analysing the operation of system components, stakeholder liaison and planning. It also includes applying and adhering to relevant legislation, industry regulations and workplace procedures.

This unit applies to leaders with responsibility for implementing and coordinating irrigation delivery systems. Those undertaking this unit would work autonomously and lead personnel whilst performing sophisticated tasks in a range of contexts.

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

Pre-requisite Unit

Not applicable.

Competency Field

Irrigation

Unit Sector

Not applicable.

Elements and Performance Criteria

ELEMENTS

Elements describe the essential outcomes.

1 Develop and implement irrigation delivery system

PERFORMANCE CRITERIA

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

1.1 Confirm performance measures for the irrigation

plan	delivery system plan
	1.2 Identify and interpret legislative requirements and organisational policies for the management of irrigation delivery
	1.3 Identify stakeholder requirements and environmental factors impacting irrigation delivery
	1.4 Gather historical catchment information and evaluate as input to the planning process
	1.5 Develop an implementation strategy for irrigation delivery according to workplace procedures
	1.6 Inform relevant personnel and stakeholders of the irrigation delivery system plan according to regulatory requirements and workplace procedures
	1.7 Develop plan components and activities for implementation
	1.8 Determine responsibilities and timelines for implementation activities
2 Monitor and evaluate irrigation system operation and maintenance	2.1 Design and implement monitoring and testing programs to identify deviations of planned water system operations including quantity, quality, release and flow rates
	2.2 Evaluate delivery of water to customers and identify, investigate and report deviations from agreed service standards
	2.3 Evaluate maintenance budgets, activity programs and output target measures
	2.4 Identify, investigate and report deviations from irrigation delivery targets from plan objectives
	2.5 Identify and document links between operational problems and maintenance activities
	2.6 Provide advice and guidance to irrigation customers and stakeholders
3 Report on the implementation of the irrigation system plan	3.1 Identify, investigate and report deviations of planned water usage and quality against the irrigation delivery system plan

- 3.2 Review objectives of the irrigation delivery system and implementation plans
- 3.3 Make recommendations for changes to plan objectives and operational and maintenance 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 NWPIRR071 Implement and coordinate irrigation delivery systems.

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 NWPIRR008 Implement and coordinate an irrigation delivery system plan

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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:

- applying ratios to evaluate maintenance budgets, activity programs and output targets
- calculating timelines for implementation activities
- evaluating delivery of water to customers including:
 - flow rates
 - timelines
 - volume
- gathering, interpreting and synthesising information to underpin the implementation of the irrigation delivery system plan including:
 - agreed service standards
 - current legislation, regulatory requirements and industry standards
 - historical data
 - results of irrigation system testing and monitoring
 - stakeholder requirements
- interpreting numerical data to control and measure delivery of water to customers
- monitoring and evaluating the outcomes of the irrigation delivery system plan
- performing the activities associated with the implementation and management of the operation and maintenance of irrigation delivery systems
- planning and implementing testing processes and programs
- preparing reports and recommendations for future action
- providing advice and communicating with stakeholders and customers

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:

- agreed service standards
- irrigation system limitations
- irrigation system performance measures including:

- quality
- quantity
- release and flow rates
- monitoring and performance procedures
- operation and interlinks of total system network
- operational and maintenance problems
- relevant legislation, regulations, policies and workplace procedures associated with irrigation delivery systems
- stakeholder communication and consultation techniques

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.

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