



Australian Government

NWPIRR006 Develop and review an irrigation system plan

Release: 1

NWPIRR006 Develop and review an irrigation system 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 review an irrigation system plan.

It includes analysing total irrigation system performance, liaising with customers and stakeholders and reviewing and refining the irrigation system plan. It also includes applying and adhering to relevant legislation, industry regulations and workplace procedures.

This unit applies to leaders with responsibility for the development and review of plans for the management of irrigation 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 Prepare for irrigation system management

PERFORMANCE CRITERIA

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

1.1 Determine, interpret and analyse water quantity and quality requirements including release and flow rates

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| | 1.2 | Access, interpret and synthesise historical irrigation system capacity and delivery performance information |
| | 1.3 | Identify and interpret legislative, organisational and environmental requirements and determine system constraints impacting the delivery of irrigation water |
| 2 Develop an irrigation system plan | 2.1 | Identify and interpret irrigation system management requirements |
| | 2.2 | Identify and validate customer requirements for irrigated culture |
| | 2.3 | Consult and communicate with stakeholders and obtain input for the irrigation system plan |
| | 2.4 | Develop and document an irrigation system plan and an implementation strategy |
| | 2.5 | Identify, investigate and report breaches of customer entitlements and other usage provisions |
| 3 Review and refine the irrigation system plan | 3.1 | Evaluate operations and maintenance activities and system performance and incorporate into the irrigation system plan review |
| | 3.2 | Review objectives of the irrigation system plan and implementation strategy |
| | 3.3 | Recommend changes to plan objectives and operational and maintenance procedures |
| | 3.4 | Provide advice and guidance to 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 NWPIRR062 Develop and review irrigation system management plan.

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 NWPIRR006 Develop and review an irrigation 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:

- assessing environmental impacts
- conducting investigations
- consulting and communicating with stakeholders and customers
- determining and interpreting water quantity and quality requirements
- developing and reviewing the operation and maintenance of irrigation systems
- developing effective irrigation system plans addressing the organisation's objectives and requirements
- gathering, interpreting and synthesising information for incorporating into the irrigation system plan including:
 - customer flow rates and usage
 - delivery performance
 - historical system capacity data
 - key indicators
 - stakeholder requirements
- interpreting and applying legislation, standards and policies
- preparing reports and recommendations for changes to the objectives of the plan
- reviewing the implementation and development plan
- using data from monitoring arrangements to track performance of the irrigation system plan

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:

- customer and stakeholder expectations and requirements
- irrigation operations and maintenance activities
- legislation and regulations including:
 - channel, pipe and pump
 - customer entitlements

- flow rates
- relevant workplace policies and procedures associated with irrigation system plans
- water quantity and quality requirements including release and flow rates
- water requirements for irrigated cultures within the system

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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