



Australian Government

NWPIRR033 Coordinate and monitor the operation of irrigation delivery systems

Release: 1

NWPIRR033 Coordinate and monitor the operation of irrigation delivery systems

Modification History

Release	Comments
1	This unit was released in NWP Water Training Package release 1.0 and meets the Standards for Training Packages. This unit supersedes and is equivalent to NWP425B Coordinate and monitor the operation of irrigation delivery systems. • Unit code updated • Content and formatting updated to comply with the new standards • All PC transitioned from passive to active voice • PC 2.1 removed • PC 2.2 reworded • PC 2.4 revised

Application

This unit describes the skills required to coordinate and monitor irrigation delivery systems to meet performance standards and including system maintenance and customer liaison.

This unit applies to those working as field and operational staff with a specific responsibility for ensuring that the operation of irrigation systems complies with organisational and statutory requirements.

The skills and knowledge described in this unit must be applied within the legislative, regulatory and policy environment in which they are carried out. Organisational policies and procedures must be consulted and adhered to.

Those undertaking this unit would work independently or in a team, while performing complex tasks ensuring minimum damage to the environment in a familiar context. However, the level of responsibility may vary according to the size, scope, location, and technical complexity of process.

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

Competency Field

Irrigation

Elements and Performance Criteria

ELEMENTS	PERFORMANCE CRITERIA
Elements describe the essential outcomes	Performance criteria describe the performance needed to demonstrate achievement of the element. Where bold italicised text is used, further information is detailed in the range of conditions section.
1. Confirm performance measures in irrigation system's management plan	1.1 Identify customer requirements for irrigated culture. 1.2 Identify environmental factors that impact on the irrigation system. 1.3 Consult historic system information and stakeholders as appropriate. 1.4 Confirm performance requirements for an irrigation system management plan.
2. Monitor and coordinate processes and resource targets	2.1 Monitor and test programs and identify, investigate and report any deviations from water quantity, quality, release or flow. 2.2 Evaluate the duration, volume and flow rates of water deliveries and identify, investigate and report deviations from agreed service levels. 2.3 Evaluate maintenance activities and report deviations from targets. 2.4 Identify and record links between operational problems and maintenance activities.
3. Report outcomes of coordination and monitoring	3.1 Analyse, record and report coordination and monitoring data. 3.2 Identify and report current and potential problems. 3.3 Make recommendations for improvements in system performance and/or customer service.

Foundation Skills

The foundation skills demands of this unit have been mapped for alignment with the Australian Core Skills Framework (ACSF). The following tables outline the performance levels indicated for successful attainment of the unit.

ACSF levels indicative of performance:

1	2	3	4	5	1	2	3	4	5	1	2	3	4	5	1	2	3	4	5	1	2	3	4	5
Learning NA					Reading					Writing					Oral communication					Numeracy				

Performance variables:

1	2	3	4	5	1	2	3	4	5	1	2	3	4	5	1	2	3	4	5
Support					Context					Text complexity					Task complexity				

Further information on ACSF and the foundation skills underpinning this unit can be found in the Foundation Skills Guide on the GSA website.

Unit Mapping Information

This unit supersedes and is equivalent to NWP425B Coordinate and monitor the operation of 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>

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Assessment Requirements for NWPIRR033 Coordinate and monitor the operation of irrigation delivery systems

Modification History

Release	Comments
1	These Assessment Requirements were released in NWP Water Training Package release 1.0 and meet the Standards for Training Packages. Assessment Requirements created drawing upon specified assessment information from superseded unit

Performance Evidence

Evidence required to demonstrate competence must satisfy all of the requirements of the elements and performance criteria. If not otherwise specified the candidate must demonstrate evidence of performance of the following on at least one occasion.

- assessing environmental impact
- operating irrigation and/or domestic stock supply system
- checking channel flow
- identifying customer requirements for irrigated culture and environmental factors that impact on the irrigation system
- consulting historic system information and stakeholders as appropriate
- confirming performance requirements for an irrigation system management plan
- implementing monitoring and testing programs and investigating and reporting deviations from planned parameters
- evaluating performance of water deliveries and investigating and reporting deviations from agreed service levels
- evaluating performance targets
- analysing and reporting data
- identifying and reporting problems
- making recommendations for system performance or customer service improvements

Knowledge Evidence

Evidence required to demonstrate competence must satisfy all of the requirements of the elements and performance criteria. If not otherwise specified the depth of knowledge demonstrated must be appropriate to the job context of the candidate.

- relevant legislation, policies and procedures
- customer expectations and requirements

- impact of the principles of hydraulics on the operation of flows
- coordination processes
- principles of scheduling
- system layout and operations
- environmental aspects of irrigation and/or stock and domestic supply system asset infrastructure
- environment, landscape and ground structure of work area
- risk factors and potential hazards of irrigation and/or domestic and stock supply systems
- equipment operation, capacity and limitations
- water flow calculations
- gravity systems
- control systems

Assessment Conditions

Competency should be assessed in an actual workplace or in a simulated environment, with access to equipment and infrastructure appropriate to the outcome. Competency should be demonstrated over time to ensure the candidate is assessed across a variety of situations.

Assessors must satisfy the NVR/AQTF mandatory competency requirements for assessors.

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