



Australian Government

MSS025028 Assist with assessing and monitoring wetlands

Release: 1

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Modification History

Release 1. Unit code changed. Application changed. Elements changed. Performance Criteria changed. Foundation Skills populated. Range of Conditions removed. Assessment Requirements changed. Supersedes and is equivalent to MSS025013 Assist with assessing and monitoring wetlands.

Application

This unit describes the skills and knowledge required to source and collect and interpret data to assist with wetland assessment and monitoring.

This unit applies to environmental technicians and similar roles who are required to review existing data sets, plan and conduct field data collection and interpret information about the characteristics and condition of the wetlands. The information will typically be used by environmental scientists and environmental planners to develop wetland inventories, assess and monitor the condition of wetlands and/or develop wetland management plans.

This unit applies in a range of industry sectors including but not limited to stormwater management; clean water (e.g. catchments, supply and environmental flows); environmental services (e.g. monitoring of water quality); and environmental compliance, auditing and inspection.

No licensing or certification requirements exist at the time of publication. Relevant legislation, industry standards and codes of practice within Australia must be applied.

Competency Field

Environmental monitoring and technology

Elements and Performance Criteria

Elements	Performance Criteria
Elements describe the essential outcomes.	Performance criteria describe the performance needed to demonstrate achievement of the element.
1. Confirm details of assigned activities with supervisor	1.1 Clarify the scope and objectives of assigned activities, constraints and wetland components involved and any conservation measures or management plans in place 1.2 Identify regulations, standards, guidelines and workplace procedures that apply to assigned activities 1.3 Clarify the required outputs, timeframe, available resources and stakeholder involvement 1.4 Confirm assessment indices and data collection plan details for

Elements	Performance Criteria
Elements describe the essential outcomes.	Performance criteria describe the performance needed to demonstrate achievement of the element.
	target wetland 1.5 Clarify the use of survey proformas, data collection forms and/or field identification guides relevant to assigned activities 1.6 Confirm confidentiality requirements and protocols for communication with stakeholders, including local community and landowners
2. Source and review available wetland data	2.1 Obtain existing wetland data and review accuracy and relevance to field activities 2.2 Locate external sources of relevant data sets and assess their availability, price, value and limitations 2.3 Obtain selected data sets in accordance with workplace procedures 2.4 Use available data to identify known wetland boundaries, characteristics, condition and any environmental issues relevant to the study 2.5 Identify any significant information gaps
3. Plan and organise assigned field activities	3.1 Analyse field activities to identify related tasks, proformas and guides and plan efficient task sequences. 3.2 Identify risks, risk control measures and other safety and environmental requirements associated with field activities 3.3 Select and assemble field equipment and materials and check they are fit for purpose 3.4 Liaise with relevant personnel to explain scope and purpose of field activities and organise site access and obtain any permits needed 3.5 Review work plan in response to new information, changed circumstances or instructions from appropriate personnel 3.6 Update work plan and communicate changes to stakeholders
4. Conduct wetland survey and monitoring activities	4.1 Observe and record wetland characteristics and evidence of disturbance according to procedures 4.2 Collect reliable point positional data and attribute environmental data/samples for each location in accordance with data collection plan 4.3 Verify any existing geographic information system (GIS) mapping of wetland location/type 4.4 Collect representative samples using specified sampling methods and equipment

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	4.5 Obtain valid and reliable in-situ measurements using specified test methods and equipment 4.6 Ensure that monitoring data and samples are collected at the same locations and during similar seasonal and climatic conditions
5. Finalise field work	5.1 Pack and safely transport all samples, equipment and supplies back to home base 5.2 Ensure all samples and data are labelled and stored safely to ensure integrity and traceability 5.3 Ensure dispatch of collected samples for subsequent laboratory analysis 5.4 Clean and test equipment before storage
6. Contribute to assessment of wetland condition	6.1 Review field observations, measurements and/or results of laboratory analyses to identify significant trends and/or problems with data 6.2 Use given formulae and tables to assign scores, parameter values, index values and health index/rating, as appropriate 6.3 Analyse data to identify environmental issues that may impact on current wetland management objectives/practices 6.4 Report findings using a format and style that suits their intended use and in accordance with workplace guidelines 6.5 Communicate results within the specified time and in accordance with workplace confidentiality and security guidelines
7. Maintain a safe work environment	7.1 Use safe work procedures and protective equipment to ensure personal safety and that of others 7.2 Minimise environmental impacts of testing/sampling and generation of waste 7.3 Collect and/or dispose of all waste in accordance with environmental requirements and workplace procedures

Foundation Skills

This section describes those language, literacy, numeracy and employment skills that are essential to performance but not explicit in the performance criteria.

- Reading skills to interpret workplace procedures, regulations and guidelines
- Writing skills to record observations and measurements and report results
- Oral communication skills to communicate with supervisor and stakeholders and maintain confidentiality and communication protocols
- Numeracy skills to process and analyse data and use formulae and indices.

Other foundation skills essential to performance are explicit in the performance criteria of this unit.

Unit Mapping Information

Release 1. Supersedes and is equivalent to MSS025013 Assist with assessing and monitoring wetlands.

Links

Companion Volume Implementation Guides are found in VETNet -

<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=5b04f318-804f-4dc0-9463-c3fb9a3fe998>

Assessment Requirements for MSS025028 Assist with assessing and monitoring wetlands

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Performance Evidence

There must be evidence the candidate has completed the tasks outlined in the elements and performance criteria of this unit, and demonstrated the ability to:

- review at least one existing data set
- plan and conduct survey or monitoring activities to assess wetland conditions including at least 3 of the following:
 - water body dimensions, current/max water level, depth, water sources, modifications and banks
 - water quality, including visible slime, temperature, turbidity and electrical conductivity
 - (micro)biology
 - habitat potential
 - vegetation and/or flora
 - fauna
 - site disturbance
 - soil quality and/or acid sulphate soil
- process and analyse field data and/or related test results on at least one occasion to identify environmental issues that may impact on current wetland management objectives or practices.
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Knowledge Evidence

There must be evidence the candidate has knowledge of:

- basic terminology and principles of wetland assessment, monitoring and management relevant to organisation
- sources of wetland information and data sets
- defining characteristics and functions of major wetland types
- fundamental principles of ecology and assessment of site environmental indicators
- environmental factors that impact on soils, water quality, population and diversity of flora and fauna

- specific legislation, policies, standards and guidelines relevant to desktop and field activities
- procedures and equipment for collecting soil, water or (micro)biological samples and environmental measurements
- procedures and equipment for maintaining, storing and transporting samples and/or specimens to ensure their wellbeing, viability and integrity
- procedures and equipment for conducting basic spatial and environmental measurements
- workplace procedures for the recording of field data and reporting of findings
- workplace protocols for the confidentiality and security of information and communicating with the community and media
- common site hazards and control measures
- health, safety and environmental requirements, including field safety and survival principles.

Assessment Conditions

Skills must have been demonstrated in the workplace or in a simulated environment that reflects workplace conditions and contingencies. The following conditions must be met for this unit:

- use of suitable facilities, equipment and resources, including:
 - wetlands system information
 - environmental data sets
 - survey proformas and/or data collection forms
 - field identification guides and workplace procedures
 - test methods and equipment manuals
 - relevant sampling equipment, field instruments and materials
- modelling of industry operating conditions, including:
 - access to wetland/s.

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

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