



Australian Government

Department of Education, Employment and Workplace Relations

RTC5504A Develop a management plan for a designated area

Release: 1

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Modification History

Not applicable.

Unit Descriptor

This competency standard covers the process of developing a management plan for a designated natural resource area. It requires the ability to define the need for a management plan, undertake preliminary planning activities, prepare a site description, analyse site information, identify management strategies and prepare the management plan. Developing a management plan for a natural resource area requires knowledge of management planning principles and issues, basic civil design, environmental assessment, survey and analysis techniques, native fauna and flora, pest plant and animals, revegetation techniques, wildlife habitats, and soil, plant and water testing processes and procedures.

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Application of the Unit

Not applicable.

Licensing/Regulatory Information

Not applicable.

Pre-Requisites

Not applicable.

Employability Skills Information

Not applicable.

Elements and Performance Criteria Pre-Content

Not applicable.

Elements and Performance Criteria

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Element	Performance Criteria
1 Define the need for a management plan	1.1 Management plan objectives are identified for the designated area. 1.2 Brief is agreed in consultation with client. 1.3 Planning team including specialists and consultants is identified.
2 Undertake preliminary planning activities	2.1 Major stakeholders are identified. 2.2 Availability of specialists to assist in management planning work is ascertained and contracts are prepared where required. 2.3 Timelines for development of the management plan and reporting arrangements to client are established. 2.4 Resources required for the development of management strategies are identified.
3 Prepare a site description	3.1 Landscape values of the area are identified and mapped. 3.2 Physical features and characteristics of the area are identified and mapped. 3.3 Land uses, including current, cultural, and historical modifications, are researched and their effects on the natural resource area are determined and recorded. 3.4 Physical condition of site is assessed and documented 3.5 Biological characteristics of the site are documented.

- 4 Analyse site information and description
 - 4.1 Information is evaluated in terms of core principles and objectives.
 - 4.2 Documents produced including plans, technical reports and maps.
 - 4.3 Priorities and key **conservation issues** are determined.
 - 4.4 Longitudinal projections of continuing impacts are prepared.
 - 4.5 **Land capability** is assessed.
 - 4.6 Opportunities and constraints to meeting planning objectives and goals are identified and documented.
 - 4.7 **Presentation** to stakeholders/clients is undertaken and feedback incorporated into planning documentation.
- 5 Identify management strategies
 - 5.1 **Management strategies** are identified that address defined objectives.
 - 5.2 Management strategies are designed to alleviate existing impacts or to target management actions.
 - 5.3 Management strategies are costed and compared to existing budgets and **available resources**.
 - 5.4 Staging of work is planned to prioritise outcomes and management resource allocation.
 - 5.5 Consultation with stakeholders/clients is undertaken and feedback incorporated into planning documentation.
- 6 Prepare the management plan
 - 6.1 Site information and management strategies are documented into a draft management plan for consultation.
 - 6.2 Consultation with stakeholders and clients is undertaken according to enterprise guidelines.
 - 6.3 Changes are made to the draft plan, and a final plan is prepared and presented to client

Required Skills and Knowledge

Not applicable.

Evidence Guide

What evidence is required to demonstrate competence for this standard as a whole?

Competence in developing a management plan for a natural resource area requires evidence that the person is able to work with a team to develop a management plan for an area that will address management objectives in accordance with the client's requirements for the area. The skills and knowledge required to develop a management plan for an area must be **transferable** to different work environments. For example, this could include different areas, environments and management objectives.

What specific knowledge is needed to achieve the performance criteria?

Knowledge and understanding are essential to apply this standard in the workplace, to transfer the skills to other contexts and to deal with unplanned events. The knowledge requirements for this competency standard are listed below:

Management planning principles and issues.

Basic civil design.

Environmental assessment, survey and analysis techniques and practical application to a range of habitats and landscapes.

Native fauna and flora identification physiology, habitat requirements, and seasonal and nutritional influences on life cycle.

Pest plant and animal and disease identification, physiology, control techniques, and equipment, pesticides and habitat requirements.

Techniques and strategies for use in the management, rehabilitation and enterprise use of a range of native Australian habitats, species and landscapes.

Indigenous flora regeneration and revegetation techniques, equipment and methods of application in relation to a range of landscape characteristics.

Management and rehabilitation techniques for the wildlife and habitat relevant to the natural resource area.

Wildlife habitats associated with the natural resource area and local geographic region.

Soil, plant and water testing processes and procedures, interpretation and application of results.

What specific skills are needed to achieve the performance criteria?

To achieve the performance criteria, appropriate literacy and numeracy levels as well as some complementary skills are required. These include the ability to:

Define the need for a management plan.

Undertake preliminary planning activities.

Prepare a site description.

Analyse site information and description.

Identify management strategies.

Prepare the management plan.

What processes should be applied to this competency standard?

There are a number of processes that are learnt throughout work and life, which are required in all jobs. They are fundamental processes and generally transferable to other work functions. Some of these are covered by the **key competencies**, although others may be added. The questions below highlight how these processes are applied in this competency standard. Following each question a number in brackets indicates the level to which the key competency needs to be demonstrated where 0 = not required, 1 = perform the process, 2 = perform and administer the process and 3 = perform, administer and design the process.

1. How can **communication of ideas and information (3)** be applied?

Oral and written communication with implementation team, clients, suppliers, consultants, government agencies, community organisations, industry contacts and senior management is required.

2. How can **information be collected, analysed and organised (3)**?

Information on the native habitat and management systems can be collected through site assessment, research, consultation with experts and own experience. This information will be analysed and organised in relation to the development of natural resource management plan objectives and resource availability. Reports including statistical and financial data will need to be generated.

3. How are **activities planned and organised (3)**?

Activities of self and other team leaders and members are planned and delegation is used to achieve outcomes.

4. How can **team work (3)** be applied?

Teamwork with colleagues, staff, experts and senior management based on effective, timely communication and consultation will help to achieve wetland management objectives.

5. How can the use of **mathematical ideas and techniques (3)** be applied?

Advanced mathematical understanding will be required to analyse data from external agents regarding project costs, and physical aspects such as dimensions, analysis results, application rates, and quantitative environmental impacts. Statistical data will need to be provided to support monitoring and evaluation of implementation of natural resource management strategies.

6. How can **problem-solving skills (3)** be applied?

Problems presented by collected data, known threats to the natural ecosystem, availability

of information and resources, reconciling environment, financial and enterprise requirements in the development of strategies, will require problem-solving skills.

7. How can the **use of technology (3)** be applied?

Technology used to gather information, prepare strategies, communicate, make presentations and keep records, may include computerised word processing, financial planning, email, internet and drafting, photography, video and slide equipment.

Are there other competency standards that could be assessed with this one?

This competency standard **could** be assessed on its own or in combination with other competencies relevant to the job function.

There is essential information about **assessing this competency standard for consistent performance** and **where and how it may be assessed**, in the Assessment Guidelines for this Training Package. All users of these competency standards must have **access** to both the **Assessment Guidelines** and the relevant **Sector Booklet**.

Range Statement

Range of Variables

The Range of Variables explains the contexts within which the performance and knowledge requirements of this standard may be assessed. The scope of variables chosen in training and assessment requirements may depend on the work situations available

What comprises a **management plan**?

Management plans define the core principles, objectives and responsibilities of the managing agent, cover the allocation of enterprise resources, and set parameters for resource access and use.

What **management plan objectives** may be identified for the natural resource area?

These may include objectives to provide habitat for wildlife and native predators (such as insect eating birds, parasitic wasps), maintain biodiversity, moderate local weather conditions (e.g., wind speed, rainfall run-off, watertable recharge, provide shade), selective removal of tree limbs for firewood and timber, selective harvest of seed for revegetation or human consumption, genetic resource for plant propagation and medicinal components, contribution to sustainable land use, aesthetic contribution to enterprise (such as a home-stay farm, for tourism).

Who may be the **client**?

The client may be a government agency or associated body, private landholder, or community group.

What **resources** may be accessed to develop the natural resource management plan?

This may include topographical, vegetation, and aerial maps, government, university and library based consultation, literature and internet resources, local written and oral histories of migrant and Aboriginal or Torres Strait Islander communities in the area, catchment area information and catchment management associations, local experts such as flora and fauna preservation, cultivation and identification community groups.

What **landscape values** are relevant to this competency standard?

Visual amenity, biodiversity, recreation and tourism, conservation, water and air quality, and cultural values.

What **features** and **characteristics** may be included in the site description?

These may include boundaries, fences, gates, slope gradient, contours, water courses, current land use, buildings and structures,

	eroded areas, saline areas, soil toxicity, waterlogged areas, water table recharge and discharge sites, water-repellent soils, predominant wind directions, annual rainfall, surface stones and rocks, soil types and specific historic or cultural features.
What historical modifications may be identified for the natural resource area?	These may include clearance, grazing, dry land and irrigated cropping, fire management for grass stimulation, and natural events, such as wildfire, flooding and drought.
What land uses may be relevant to this competency standard?	Agricultural, horticultural, silvicultural, recreational, industrial, commercial, and cultural.
What may be included under the physical condition of a site?	Impacts from weeds, pests, erosion, soil disturbance, run-off, water quality, people, vehicle intrusions, soil compaction, and adjacent land use.
What biological characteristics are relevant?	Native and introduced plants and animals, habitats, vegetation structure, and rare and endangered species.
What conservation issues may be identified for action?	Some examples of conservation issues may include priorities for protection, conservation and restoration works for key native flora and fauna species, disease and pest flora and fauna control, nutritional issues, and erosion, salinity and toxicity repair works and habitat rehabilitation and restoration of balance.
What may be included under land capability ?	Suitability of recreational use, engineering works, conservation values, wildlife potential, soil profiles, visual amenity, agricultural and horticultural production.
What presentation techniques may be utilised to effectively present a description of the wetland site?	These may include video and photographic footage, documented historical, biological, physical and cultural descriptions, graphed and charted statistics, references and illustrations.
What management strategies may be identified for the natural resource management plan?	These should address the conservation priorities identified in the site description and may include objectives to protect the natural resource area from grazing and pest animals, control pest plants and diseases, control

human impact, manage fire events (e.g., controlled use of hot and cold fires, wildfire prevention), establish vegetation links to nearby habitat islands, remove and redirect infrastructure such as roads, troughs and fences, conserve and enhance biodiversity and habitat balance, and monitor native habitats over time.

What **available resources** may influence the selection and priority of management objectives?

Resource availability issues may include private finance, government funding assistance, natural resource regulations and legislation, consideration for neighbouring enterprises, community in-kind support, existing indigenous flora and fauna, labour and existing administration facilities and infrastructure.

For more information on contexts, environment and variables for training and assessment, refer to the Sector Booklet.

Unit Sector(s)

Not applicable.