

## MANAGE MARINE AND WETLAND RESOURCES

**UNIT CODE: ENV/OS/MGT/CR/04/6/A**

### UNIT DESCRIPTION

This unit describes the competencies required to manage marine and wetland resources. It involves utilizing marine resources, managing marine protected area (MPAs), classifying wetland ecosystems, conserving and restoring wetlands.

<b>ELEMENTS</b> These describe the key outcomes which make up workplace function.	<b>PERFORMANCE CRITERIA</b> These are assessable statements which specify the required level of performance for each of the elements. <i>Bold and italicized terms are elaborated in the Range.</i>
1. Utilize marine resources	1.1 <i>Marine ecological systems</i> is identified 1.2 Policy legislations and international conventions are applied 1.3 Classified <i>MPAs</i>
2. Manage marine protected area (MPAs)	2.1 <i>Threats to MPAs</i> are identified 2.2 Legislative and institutional framework is evaluated 2.3 MPA plan is developed 2.4 Communication strategy for the MPA is developed 2.5 MPAs are monitored and assessed 2.6 Community is sensitized 2.7 Conflicts are resolved
3. Classify wetland ecosystems	3.1 <i>Wetlands</i> are identified based on their aquatic ecosystems 3.2 Wetlands are <i>classified</i> as per the functions and values
4. Conserve wetlands	4.1 <i>Threats to wetlands</i> are identified 4.2 Wetland <i>management plan</i> is prepared. 4.3 Wetland management policies and regulations are applied 4.4 Local communities are involved in the conservation
5. Restore wetlands	5.1 Buffer zones placement is established where protective measures are needed 5.2 Water quality is monitored and improved 5.3 Community is sensitized on values and functions of wetlands 5.4 Wetlands are monitored under long term management

## RANGE

This section provides work environments and conditions to which the performance criteria apply. It allows for different work environments and situations that will affect performance.

Variable	Range
1. Marine ecological systems may include but not limited to:	<input type="checkbox"/> Estuaries <input type="checkbox"/> Mangroves <input type="checkbox"/> Coral reefs <input type="checkbox"/> Rocky shores
2. MPAs may include but not limited to:	<input type="checkbox"/> National nature reserves <input type="checkbox"/> Marine national parks <input type="checkbox"/> Locally managed marine areas
3. Threats to MPAs may include but not limited to:	<input type="checkbox"/> Piracy <input type="checkbox"/> Pollution <input type="checkbox"/> Encroachment <input type="checkbox"/> Climate change <input type="checkbox"/> Poaching <input type="checkbox"/> Sand mining
4. Wetlands may include but not limited to:	<input type="checkbox"/> Marshy <input type="checkbox"/> Swampy <input type="checkbox"/> Bog <input type="checkbox"/> Fen
5. Classified may include but not limited to:	<input type="checkbox"/> Vegetation structure and floristic <input type="checkbox"/> Geomorphic <input type="checkbox"/> Hydrology <input type="checkbox"/> Dominant water sources <input type="checkbox"/> Hydrodynamics
6. Threats to wetlands may include but not limited to:	<input type="checkbox"/> Climate change <input type="checkbox"/> Human activities <input type="checkbox"/> Invasive species
7. Management plan may include but not limited to:	<input type="checkbox"/> Baseline information <input type="checkbox"/> Wetland biodiversity <input type="checkbox"/> Monitoring and assessment

## REQUIRED SKILLS AND KNOWLEDGE

This section describes the skills and knowledge required for this unit of competency.

### Required Skills

The individual needs to demonstrate the following skills:

- Conflict resolution
- Leadership
- Monitoring and evaluation
- Communication
- Decision making
- Sensitization
- Planning and organizing
- Problem solving

### **Required knowledge**

The individual needs to demonstrate knowledge of:

- Marine ecosystem and biodiversity
- Resource mobilization
- Conservation
- MPA zoning
- Types of wetlands
- Values and functions of a wetland ecosystem
- Hydrological cycle
- Wetland management planning
- Assessment of aquatic biodiversity
- Governance of wetland management
- Flora and fauna
- Water Act and Wildlife Protection Act
- Policies, laws and regulations

### **EVIDENCE GUIDE**

This provides advice on assessment and must be read in conjunction with the performance criteria, required skills and knowledge and range.

1. Critical aspects of Competency	Assessment requires evidence that the candidate: <ul style="list-style-type: none"> <li>1.1 Identified MPAs</li> <li>1.2 Identified Marine ecological systems</li> <li>1.3 Identified threats to MPAs</li> <li>1.4 Developed MPA plan</li> <li>1.5 Monitored and assessed MPAs</li> <li>1.6 Resolved Conflicts</li> <li>1.7 Identified and classified wetlands</li> <li>1.8 Prepared wetland management plan.</li> <li>1.9 Applied wetland management policies and regulations</li> <li>1.10 Established buffer zones placement</li> </ul>
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2. Resource Implications	The following resource s should be provided: 2.1 Access to relevant workplace or appropriately simulated environment where assessment can take place 2.2 Materials relevant to the proposed activity or tasks
3. Methods of Assessment	Competency in this unit may be assessed through: 3.1 Direct Observation 3.2 Oral Questioning 3.3 Written tests
4. Context of Assessment	Competency may be assessed: 4.1 On-the-job 4.2 Off-the –job 4.3 During Industrial attachment
5. Guidance information for assessment	Holistic assessment with other units relevant to the industry sector, workplace and job role is recommended.