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AIDS HELPLINE: 0800-0123-22 Prevention is the cure

CONTENTS • INHOUD

No.	Page No.	Gazette No.
GOVERNMENT NOTICES		
South African Qualifications Authority		
<i>Government Notices</i>		
789 National Standards Bodies Regulations: Standards Generating Body (SGB) for Nature Conservation.....	3	22602
790 do.: do	13	22602

GOVERNMENT NOTICES

SOUTH AFRICAN QUALIFICATIONS AUTHORITY

No. 789

23 August 2001

SOUTH AFRICAN QUALIFICATIONS AUTHORITY (SAQA)

In accordance with regulation 24(2)(c) of the National Standards Bodies Regulations of 28 March 1998, the Standards Generating Body (SGB) for

Nature Conservation

Registered by NSB 01 Agriculture and Nature Conservation, publishes the following unit standards based qualifications for public comment.

This notice contains the titles, fields, sub-fields, NQF levels, credits, titles and specific outcomes of the unit standards. The unit standards and qualifications can be accessed via the SAQA website at www.saqqa.org.za.

Copies may also be obtained from the Directorate of Standards Setting and Development at the SAQA offices, 659 Pienaar Street, Brooklyn, Pretoria.

Comment on the unit standards and qualifications should reach SAQA at the address below *by no later than 18 September 2001*. All correspondence should be marked **Standards Setting – SGB for Nature Conservation**, and be addressed to:

The Director: Standards Setting and
Development
SAQA
Attention: Mr D Mphuthing
Postnet Suite 248
Private Bag X 06
Waterkloof
0145

or fax to 012 - 482 0907
or e-mail to dmphuthing@saqa.co.za



pp SAMUEL B.A. ISAACS
EXECUTIVE OFFICER

SOUTH AFRICAN QUALIFICATIONS AUTHORITYEstablished in terms of Act 38 of 1995**NATIONAL CERTIFICATE IN CONSERVATION: FISHERIES RESOURCES
MANAGEMENT NQF LEVEL 5****Field:** Agriculture and Nature Conservation**Sub-field:** Nature Conservation**NQF level:** 5**Credits:** 181**Purpose of the Qualification:**

A learner assessed as competent against this qualification will be able to integrate supervisory skills and knowledge with conservation specific competence to contribute to the sustainable management of fisheries resources, ensure compliance with relevant legislation and contribute to the conservation of marine and coastal ecosystems.

This competence will contribute to the sustainability of fisheries resources while providing the learner with a basis for further learning in higher education.

The qualification has been developed to assist with professionalisation across the conservation industry.

Rationale for the qualification

Like many other aspects of life South Africa, the sector into which nature conservation falls is overwhelmingly defined by apartheid history. Despite the diversity of the sub-sectors within the sector, some patterns do exist across the sector, which are worth noting. Large enterprises have treated human resource management largely as a personnel function and directed energies and systems at the mechanisms for managing personnel rather than aligning human management with strategic priorities of organization. There are massive workplace and training inequities with regard to 'race'.

During the process of designing the qualifications, the many 'non-conservation' positions, people and areas of activity, which will need to use some of the conservation standards, must be considered. These include: tour guides, organized traditional practitioners, informal settlement, organized community, national and provincial conservation authority, development organizations and the private sector.

Learning assumed to be in place

It is assumed that the learner entering a programme leading to this qualification has achieved an FET certificate at NQF 4 or the equivalent, a Certificate in Conservation management, or has several years' relevant industry experience. The learner will have

appropriate levels of written Communication, English proficiency, Mathematics and occupational competence equivalent to at least school leaving standards.

Exit level outcomes

On achieving this qualification the learner will be able to:

- 1 Supervise operational situations in order to maximise efficiency and effectiveness.
- 2 Exercise leadership of people involved in operational situations in order to enhance their performance and productivity.
- 3 Implement, supervise and evaluate management planning practices, e.g. integrated catchment management, plant and animal management, security and legal aspects and cultural heritage management, in order to monitor progress and performance against planned goals.
- 4 Undertake supervisory and operational functions while continuously monitoring and adapting own performance as required.
- 5 Use firearms competently.
- 6 Develop a set of values and ethics regarding conservation and environmental issues.
- 7 Maintain infrastructure in conserved areas including paths and road networks.
- 8 Safely crew a vessel.
- 9 Deal with and prevent pollution.
- 10 Demonstrate understanding of the history of fishing in South Africa and how it influences current practices.
- 11 Communicate effectively with the public to further conservation awareness.

Integrated assessment

Integrated assessment at the level of qualification provides an opportunity for learners to show that they are able to integrate concepts, ideas and actions across unit standards to achieve competence that is grounded and coherent in relation to the purpose of the qualification.

Integrated assessment must judge the quality of the observable performance, but also the quality of the thinking that lies behind it. Assessment tools must encourage learners to give an account of the thinking and decision-making that underpin their demonstrated performance. Some assessment practices will be of a more practical nature while others will be of a more theoretical nature. The ratio between action and interpretation is not fixed, but varies according to the type and level of qualification.

A broad range of task-orientated and theoretical assessment tools may be used, with the distinction between practical knowledge and disciplinary knowledge maintained so that each takes its rightful place.

In particular assessors should check for:

The learner must demonstrate an ability to consider a range of options and make decisions about:

1. Supervisory methods and techniques to apply in any given situation.
2. Management actions required within a conserved area.

The learner must demonstrate an understanding of:

1. The management planning process for a conserved area or a fishery.
2. The components / elements that require management actions in a conserved area or a fishery.
3. The contextual knowledge that underpins the competent management of a conserved area or fishery.

The learner must demonstrate the ability to:

1. Critically evaluate management decisions taken on the basis of available information.
2. Justify decisions made with respect to the management of a conserved area.
3. Reflect on the soundness of decisions made and on any adjustments that are made.

International comparability

The African continent with its unique wildlife, has led to the development of standards of practice unique to Africa. South Africa has taken the lead in the development of these standards, which have been widely accepted and used in the rest of Sub-Saharan Africa.

Recognition of prior learning

Any learner wishing to be directly assessed may arrange to do so, without attending further training or education. The assessor and learner will decide together on the most appropriate assessment route to be taken.

Moderation options

Anyone assessing a learner against these unit standards must be registered as an assessor with the relevant ETQA.

Any institution offering learning that will enable achievement of these unit standards or will assess these unit standards must be accredited as a provider with the relevant ETQA.

Moderation of assessment will be overseen by the relevant ETQA according to the moderation guidelines in the relevant qualification and the agreed ETQA procedures.

Therefore anyone wishing to be assessed against these unit standards may apply to be assessed by any assessment agency, assessor or provider institution, which is accredited by the relevant ETQA.

Qualification Matrix for: National Certificate in Conservation: Fisheries Resources Management (NQF5) – 181 credits

Fundamental	Level 2		Level 4		Level 5		Total
	1. Operate a personal computer 2. Organise oneself in the workplace.	6 3	1. Analyse and understand social issues	4	1. Plan and conduct a research project 2. Lead and manage teams of people 3. Apply communication skills in the workplace 4. Analyse and communicate workplace data 5. Demonstrate an understanding of professional values and ethics 6. Analyse external factors influencing people who have special needs	6 8 10 5 4 4	50
CORE	Level 2		Level 4		Level 5		Total
	1. Operate in a business 2. Maintain occupational health and safety	3 2			1. Demonstrate a basic knowledge of fisheries resources management 2. Demonstrate a working knowledge of marine organisms 3. Facilitate conservation understanding 4. Demonstrate knowledge of the fishing industry in your local area 5. Utilise knowledge of fishing techniques to ensure legal compliance 6. Apply integrated coastal zone management 7. Implement policies regarding HIV/ AIDS in the workplace 8. Construct and maintain infra-structure 9. Participate in area integrity 10. Ensure conservation compliance 11. Manage cultural heritage resources in conservation areas 12. Assess and control pollution 13. Apply basic conservation management planning 14. Provide first aid 15. Operate and maintain a vehicle in conservation areas 16. Crew a vessel	10 10 4 10 3 6 4 12 12 5 2 2 4 4 3 20	116
Elective	Level 2		Level 4		Level 5		Total
					A minimum of 15 credits should be achieved in elective which must include either unit standard 1 or 2 1. Work with marine ecosystems 2. Work with freshwater ecosystems	 15	15
Total		14		4		163	181

UNIT STANDARDS FOR CONSERVATION: FISHERIES RESOURCES MANAGEMENT**Unit Standards at NQF Level 2**

- * Title: Operate a personal computer (ID 7547)
- * Title: Organise oneself in the workplace (ID 8618)
- * Title: Operate in a business (ID 8553)
- * Title: Maintain occupational health and safety (ID 8493)

Unit Standards at NQF Level 4

- * Title: Analyse and understand social issues (ID 8591)

Unit Standards at NQF Level 5

1. Title: Demonstrate a basic knowledge of fisheries resource management
 2. Title: Demonstrate a working knowledge of marine organisms
 3. Title: Demonstrate knowledge of the fishing industry in your local area
 4. Title: Utilise knowledge of fishing techniques to ensure legal compliance
 5. Title: Apply integrated coastal zone management
 6. Title: Work with marine ecosystems
 7. Title: Work with freshwater ecosystems
 8. Title: Implement policies regarding HIV/AIDS in the workplace
- * Title: Plan and conduct a research project (ID 8663)
 - * Title: Lead and manage teams of people (ID 7859)
 - * Title: Apply workplace communication skills (ID 8647)
 - * Title: Analyse and communicate workplace data (ID 8662)
 - * Title: Demonstrate an understanding of professional values and ethics (ID 8648)
 - * Title: Analyse external factors influencing people who have special needs (ID 8570/8617)
 - * Title: Facilitate Conservation understanding (ID 8385)
 - * Title: Construct and maintain infrastructure (ID 8368)
 - * Title: Participate in area integrity practices (ID 8365)
 - * Title: Ensure conservation compliance (ID 8366)
 - * Title: Handle Weapons (ID 8350)
 - * Title: Manage cultural heritage resources in conservation (ID 8406)
 - * Title: Assess and control pollution (ID 8407)
 - * Title: Apply basic conservation management planning (ID 8388)
 - * Title: Provide first aid (ID 7854)
 - * Title: Operate and maintain a vehicle in conservation areas (ID 8370)
 - * Title: Crew a vessel (ID 8411)

Unit standards titles and specific outcomes at NQF level 2

- * Title: Operate a personal computer (ID 7547)
- * Title: Organise oneself in the workplace (ID 8618)
- * Title: Operate in a business (ID 8553)
- * Title: Maintain occupational health and safety (ID 8493)

Unit standards titles and specific outcomes at NQF level 4

- * Title: Analyse and understand social issues (ID 8591)

Unit standards titles and specific outcomes at NQF level 5**1. Title : Demonstrate a basic knowledge of fisheries resource management**

- Specific outcome 1. Use appropriate sampling methods.
Range: (Use statistically valid sampling techniques. Apply valid survey design methods.)
- Specific outcome 2. Describe the methods used to assess marine living resources.
Range: (Direct counts. Acoustic Surveys. Catch based methods)
- Specific outcome 3. Implement appropriate management tools for the sustainable management of fish resources.
Range: (Catch restrictions: bag limits; size limits. Gear restrictions: hook size; vessel restrictions. Financial methods: taxation; price fixing.)
- Specific outcome 4. Explain the biological fundamentals used to develop management plans and procedures.
Range: (Age at sexual maturity. Fecundity. Species relationships.)

2. Title : Demonstrate a working knowledge of marine organisms

- Specific outcome 1. Identify significant interactions between organisms, groups of organisms and the environment.
Range: (Predator prey relationships. Consequences of extractive use of resources. Biodiversity)
- Specific outcome 2. Identify organisms to species level by using the accepted methods of identification.
Range: (Physical examination of specimens. Morphometric characteristics, such as spine and ray counts in fish. Size and weight of species. Physical characteristics of species. Use of accepted identification guides and techniques.)
- Specific outcome 3. Consider procedures for identifying organisms that are not in their natural state.
Range: (Organisms have been processed e.g. skinned, dried. Parts of organisms, e.g. fish that have been headed and gutted.)
- Specific outcome 4. Use correct sampling procedures for assessing the efficacy of management measures.
Range: (Take unbiased samples of organisms. Take a suitable sub-sample of large catches and divide into species etc. Use correct methods of measuring species.)
- Specific outcome 5. Explain management actions in the context of biological and ecological parameters.

Range: (Local environment, biosphere, community interactions, biodiversity. Size and bag limits.)

Specific outcome 6. Describe the risks posed to marine organisms by pollution.

Range: (Solid pollutants, e.g. plastic, etc. Chemical pollution. Biological "pollution", e.g. (harmful algal blooms, eutrophication.)

Specific outcome 7. Present the findings in an acceptable way.

Range: (Evidence in court. Sworn statements. Reports.)

4. Title : Demonstrate knowledge of the fishing industry in your local area

Specific outcome 1. Identify the main role players in the local industry.

Range: (Managers of factories. Angling clubs. Boat clubs. Conservation NGOs. Civil Society. Community groups.)

Specific outcome 2. Describe the structure of the fishing industry in your local area.

Range: (Processing methods and products. Location of processing facilities. Location of factories and markets.)

Specific outcome 3. Apply knowledge of relevant legislation to interact with the stakeholders in your local area.

Range: (Fisheries regulations. Zoning. Health and safety.)

5. Title : Utilise knowledge of fishing techniques to ensure legal compliance

Specific outcome 1. Identify the types of commercial, artisanal, subsistence and recreational fishing activities that are practised in his area of operation.

Range: (Legal activities practised in the area where the person is based, i.e. Hout Bay, Port St Johns etc. Types of fishing would include, for instance, pelagic fishing, long lining, trap fishing for rock lobster.)

Specific outcome 2. Identify non-extractive activities

Range: (Organised Scuba diving tours. Whale watching. Bird watching.)

Specific outcome 3. Identify probable illegal activities in the area.

Range: (Poaching. Using illegal fishing methods. Illegal boating activities.)

Specific outcome 4. Report on own activities.

Range: (Illegal activities.)

6. Title : Apply integrated coastal zone management

Specific outcome 1. Monitor and control driving on beaches.

Range: (Selective opening and closing of areas.)

- Specific outcome 2. Report on structures and development.
Range: (Environmental Impact. Assessment processes.)
- Specific outcome 3. Manage waste.
Range: (Pollution. Landfill. Pipelines.)
- Specific outcome 4. Protect ecologically sensitive areas.
Range: (Coastal nesting and roosting sites. Salt marshes. Sensitive vegetation.)

7. Title : Work with marine ecosystems

- Specific outcome 1. Demonstrate understanding of ocean currents and how they affect area of operation.
Range: (The effect of the Agulhas and Benguela currents on the marine environment of South Africa.)
- Specific outcome 2. Describe the most important physical processes affecting fish stocks.
Range: (Up welling. Frontal systems. Thermo clines and vertical mixing.)
- Specific outcome 3. Describe the interactions and interdependence of species.
Range: (Species flip-flops. Effects of creating imbalances. Species replacement.)
- Specific outcome 4. Describe the effects of excessive predation. (Natural or Human)
Range: (Change in species composition. Changes in age at sexual maturity. Unintended effects on apparently unrelated species.)
- Specific outcome 5. Explain the role of marine protected areas.
Range: (Sanctuary areas. Reservoirs of biodiversity. Baseline study areas.)

8. Title : Work with freshwater ecosystems

- Specific outcome 1. Specific outcome 1. Describe the fundamental ecology of an estuary and a river.
Range: (Mouth dynamics. Implications of different flow regimes. Boundary between river and estuary.)
- Specific outcome 2. Identify the ecology of estuarine and river organisms.
Range: (Fish. Plants. Invertebrates. Birds and mammals.)
- Specific outcome 3. Identify human impacts on freshwater systems.
Range: (Recreation. Extraction of living resources. Effects of impoundments and water consumption. Pollution.)
- Specific outcome 4. Monitor and report on freshwater ecosystems.

Range: (Water quality and quantity. Fauna and flora including exotic invasions. Development. Water extraction.)

9. Title : Implement policies regarding HIV/AIDS in the workplace

Specific outcome 1. Describe legislation and national policies relating to HIV/AIDS in the workplace.

Specific outcome 2. Describe and analyse implicit or explicit organisational policies around HIV and AIDS in the workplace.

Range: (From a given example of organisational policy.)

Specific outcome 3. Develop appropriate HIV/AIDS policy for workplace consistent with national requirements.

Range: (Appropriately select and adapt elements of a given example.)

Specific outcome 4. Describe legislation and national policies relating to HIV/AIDS in the workplace.

Specific outcome 5. Describe and analyse implicit or explicit organisational policies around HIV and AIDS in the workplace.

Range: (From a given example of organisational policy.)

Specific outcome 6. Develop appropriate HIV/AIDS policy for workplace consistent with national requirements.

Range: (Appropriately select and adapt elements of a given example.)

No. 790

23 August 2001

SOUTH AFRICAN QUALIFICATIONS AUTHORITY (SAQA)

In accordance with regulation 24(2)(c) of the National Standards Bodies Regulations of 28 March 1998, the Standards Generating Body (SGB) for

Nature Conservation

Registered by NSB 01 Agriculture and Nature Conservation, publishes the following unit standards based qualifications for public comment.

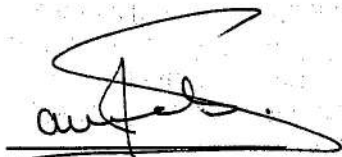
This notice contains the titles, fields, sub-fields, NQF levels, credits, titles and specific outcomes of the unit standards. The unit standards and qualifications can be accessed via the SAQA website at www.saga.org.za.

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Comment on the unit standards and qualifications should reach SAQA at the address below by *no later than 18 September 2001*. All correspondence should be marked **Standards Setting – SGB for Nature Conservation**, and be addressed to:

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Attention: Mr D Mphuthing
Postnet Suite 248
Private Bag X 06
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0145

or fax to 012 - 482 0907
or e-mail to dmphuthing@saga.co.za



pp SAMUEL B.A. ISAACS
EXECUTIVE OFFICER

SOUTH AFRICAN QUALIFICATIONS AUTHORITYEstablished in terms of Act 58 of 1995**NATIONAL CERTIFICATE IN CONSERVATION: FISHERIES RESOURCES
GUARDIANSHIP NQF LEVEL 4****Field:** Agriculture and Nature Conservation**Sub-field:** Nature Conservation**NQF level:** 4**Credits:** 135**Purpose of the Qualification:**

A learner assessed as competent against this qualification will be able to utilise conservation specific competence to contribute to the sustainable management of fisheries resources and the conservation of marine and coastal ecosystems.

This competence will contribute to the sustainability of fisheries resources while providing the learner with a basis for further learning in higher education.

The qualification has been developed to assist with professionalisation across the conservation sub-sector.

Rationale for the qualification

Like many other aspects of life South Africa, the sector into which nature conservation falls is overwhelmingly defined by apartheid history. Despite the diversity of the sub-sectors within the sector, some patterns do exist across the sector, which are worth noting. Large enterprises have treated human resource management largely as a personnel function and directed energies and systems at the mechanisms for managing personnel rather than aligning human management with strategic priorities of organization. There are massive workplace and training inequities with regard to 'race'.

During the process of designing the qualifications, the many 'non-conservation' positions, people and areas of activity, which will need to use some of the conservation standards, must be considered. These include: tour guides, organized traditional practitioners, informal settlement, organized community, national and provincial conservation authorities, development organization and the private sector.

Learning assumed to be in place

It is assumed that the learner entering a programme leading to this qualification has achieved a Conservation Certificate (NQF2), or has relevant industry experience. The learner will have communication, language proficiency and mathematics skills at NQF level 2 or equivalent.

Exit level outcomes

On achieving this qualification the learner will be able to:

- 1 Function in operational situations without regular supervision while maximising efficiency and effectiveness.
- 2 Exercise a leadership role in operational situations in order to enhance performance and productivity.
- 3 Implement management planning practices, e.g. integrated catchment management, plant and animal management, security and legal aspects and cultural heritage management, in order to monitor progress and performance against planned goals.
- 4 Undertake operational functions while continuously monitoring and adapting own performance as required.
- 5 Use firearms competently.
- 6 Develop a set of values and ethics regarding conservation and environmental issues.
- 7 Maintain infrastructure in conserved areas including paths and road networks.
- 8 Enforce compliance with fisheries legislation
- 9 Communicate effectively with the public to further conservation awareness.

Integrated assessment

Integrated assessment at the level of qualification provides an opportunity for learners to show that they are able to integrate concepts, ideas and actions across unit standards to achieve competence that is grounded and coherent in relation to the purpose of the qualification.

Integrated assessment must judge the quality of the observable performance, but also the quality of the thinking that lies behind it. Assessment tools must encourage learners to give an account of the thinking and decision-making that underpin their demonstrated performance. Some assessment practices will be of a more practical nature while others will be of a more theoretical nature. The ratio between action and interpretation is not fixed, but varies according to the type and level of qualification. The assessment must ascertain whether the learner is capable of adapting and combining the competences of a number of unit standards in order to carry out a complex task in an effective way.

A broad range of task-orientated and theoretical assessment tools may be used, with the distinction between practical knowledge and disciplinary knowledge maintained so that each takes its rightful place.

In particular assessors should check for:

The learner must demonstrate an ability to consider a range of options and make decisions about:

1. Ways of seeing and interpreting any given conservation situations
2. Operational methods and techniques to apply in any given situation
3. Resource management actions required in support of specified conservation agendas

The learner must demonstrate an understanding of:

1. Fisheries management planning processes
2. Components / elements / issues that require management actions
3. A knowledge of area or other contextual issues that underpin the competent management of fisheries

The learner must demonstrate the ability to:

1. On the basis of available information, critically evaluate management decisions taken
2. Justify decisions made with respect to the management of fisheries resources
3. Reflect on the soundness of decisions made and on any adjustments that might be necessary

International comparability

The African continent with its unique wildlife, has led to the development of standards of practice unique to Africa. These standards have been written by fisheries and conservation experts involved in international debates and practices in this area, and their knowledge has been captured in the structure and content of the standards.

An exercise will shortly be underway to compare and share standards in fisheries management across SADC and the results and findings will be fed into future revisions of the standards.

Recognition of prior learning

Any learner wishing to be directly assessed may arrange to do so, without attending further training or education. The assessor and learner will decide together on the most appropriate assessment route to be taken.

Moderation options

Anyone assessing a learner against these unit standards must be registered as an assessor with the relevant ETQA.

Any institution offering learning that will enable achievement of these unit standards or will assess these unit standards must be accredited as a provider with the relevant ETQA.

Moderation of assessment will be overseen by the relevant ETQA according to the moderation guidelines in the relevant qualification and the agreed ETQA procedures.

Therefore anyone wishing to be assessed against these unit standards may apply to be assessed by any assessment agency, assessor or provider institution, which is accredited by the relevant ETQA.

Qualification Matrix for : National Certificate in Conservation: Fisheries Resources Guardianship (NQF4) – 135 credits

Fundamental	Level 2		Level 4		Level 5		Total
	1. Operate a personal computer 2. Organise oneself in the workplace	6 3	1. Plan and conduct research 2. Analyse and understand social issues 3. Function in a team 4. Interact orally and in writing in the workplace 5. Collate, understand and communicate workplace data 6. Demonstrate an understanding of societal values and ethics 7. Demonstrate an understanding of issues affecting people with special needs Learners are required to take 2 credits from the sub-field of Communication & Language and 11 credits from the sub-field of Mathematical Science, both at NQF 4	6 4 4 10 5 4 4 2 11			59
CORE	Level 2		Level 4		Level 5		
	1. Perform conservation guardianship 2. Understand nature conservation issues 3. Manage cultural heritage resources in the field 4. Perform basic infra-structural maintenance 5. Demonstrate knowledge of conservation ethics 6. Identify and monitor local wildlife 7. Control problem animals 8. Collect field specimens 9. Maintain occupational health and safety	8 4 2 12 3 8 4 2 2	1. Contribute to information distribution regarding HIV/AIDS in the workplace	4	1. Handle weapons	4	53
Elective	Level 2		Level 4		Level 5		
					1. Utilise know-ledge of fishing techniques to ensure legal compliance 2. Demonstrate a working knowledge of marine organisms 3. Demonstrate knowledge of the fishing industry and relevant role-players in your local area	3 10 10	23
Total		54		54		27	135

UNIT STANDARDS FOR CONSERVATION: FISHERIES RESOURCES GUARDIANSHIP**Unit Standards at NQF Level 2**

- * Title: Operate a personal computer system (ID 7547)
- * Title: Organise oneself in the workplace (ID 8618)
- * Title: Perform conservation guardianship (ID 8332)
- * Title: Understand nature conservation issues (ID 8348)
- * Title: Manage cultural heritage resources in the field (ID 8346)
- * Title: Perform basic infra-structural maintenance (ID 8328)
- * Title: Demonstrate knowledge of conservation ethics (ID 8336)
- * Title: Identify and monitor local wildlife (ID 8345)
- * Title: Control problem animals (ID 8347)
- * Title: Collect field specimens (ID 8333)
- * Title: Maintain occupational health and safety (ID 8493)

Unit Standards at NQF Level 4

- * Title: Plan and conduct research (ID 8559)
- * Title: Analyse and understand social issues (ID 8591)
- * Title: Function in a team (ID 8561)
- * Title: Interact orally and in writing in the workplace (ID 8556)
- * Title: Collate, understand and communicate workplace data (ID 8558)
- * Title: Demonstrate an understanding of societal values and ethics (ID 8612)
- * Title: Demonstrate an understanding of issues affecting people with special needs (ID 8570/8617)
- * Title: Contribute to information distribution regarding HIV/AIDS in the workplace (ID 8555)

Unit Standards at NQF Level 5

1. Title: Utilise knowledge of fishing techniques to ensure legal compliance
 2. Title: Demonstrate a working knowledge of marine organisms
 3. Title: Demonstrate knowledge of the fishing industry and relevant role-players in your local area
- * Title: Handle Weapons (ID 8350)

Unit standards titles and specific outcomes at NQF level 2

- * Title: Operate a personal computer system (ID 7547)
- * Title: Organise oneself in the workplace (ID 8618)
- * Title: Perform conservation guardianship (ID 8332)
- * Title: Understand nature conservation issues (ID 8348)
- * Title: Manage cultural heritage resources in the field (ID 8346)
- * Title: Perform basic infra-structural maintenance (ID 8328)
- * Title: Demonstrate knowledge of conservation ethics (ID 8336)
- * Title: Identify and monitor local wildlife (ID 8345)
- * Title: Control problem animals (ID 8347)
- * Title: Collect field specimens (ID 8333)
- * Title: Maintain occupational health and safety (ID 8493)

Unit standards titles and specific outcomes at NQF level 4

- * Title: Plan and conduct research (ID 8559)
- * Title: Analyse and understand social issues (ID 8591)

- * Title: Function in a team (ID 8561)
- * Title: Interact orally and in writing in the workplace (ID 8556)
- * Title: Collate, understand and communicate workplace data (ID 8558)
- * Title: Demonstrate an understanding of societal values and ethics (ID 8612)
- * Title: Demonstrate an understanding of issues affecting people with special needs (ID 8570/8617)
- * Title: Contribute to information distribution regarding HIV/AIDS in the workplace (ID 8555)

Unit standards titles and specific outcomes at NQF level 5

1. Title : Utilise knowledge of fishing techniques to ensure legal compliance

Specific outcome 1. Identify the types of commercial, artisanal, subsistence and recreational fishing activities that are practised in his area of operation.

Range: (Legal activities practised in the area where the person is based, i.e. Hout Bay, Port St Johns etc. Types of fishing would include, for instance, pelagic fishing, long lining, trap fishing for rock lobster.)

Specific outcome 2. Identify non-extractive activities

Range: (Organised Scuba diving tours. Whale watching. Bird watching.)

Specific outcome 3. Identify probable illegal activities in the area.

Range: (Poaching. Using illegal fishing methods. Illegal boating activities.)

Specific outcome 4. Report on own activities.

Range: (Illegal activities.)

2. Title : Demonstrate a working knowledge of marine organisms

Specific outcome 1 Identify significant interactions between organisms, groups of organisms and the environment.

Range: (Predator prey relationships. Consequences of extractive use of resources. Biodiversity)

Specific outcome 2 Identify organisms to species level by using the accepted methods of identification.

Range: (Physical examination of specimens. Morphometric characteristics, such as spine and ray counts in fish. Size and weight of species. Physical characteristics of species. Use of accepted identification guides and techniques.)

Specific outcome 3 Consider procedures for identifying organisms that are not in their natural state.

Range: (Organisms have been processed e.g. skinned, dried. Parts of organisms, e.g. fish that have been headed and gutted.)

- Specific outcome 4 Use correct sampling procedures for assessing the efficacy of management measures.
Range: (Take unbiased samples of organisms. Take a suitable sub-sample of large catches and divide into species etc. Use correct methods of measuring species.)
- Specific outcome 5 Explain management actions in the context of biological and ecological parameters.
Range: (Local environment, biosphere, community interactions, biodiversity. Size and bag limits.)
- Specific outcome 6 Describe the risks posed to marine organisms by pollution.
Range: (Solid pollutants, e.g. plastic, etc. Chemical pollution. Biological "pollution", e.g. (harmful algal blooms, eutrophication.)
- Specific outcome 7 Present the findings in an acceptable way.
Range: (Evidence in court. Sworn statements. Reports.)

3. Title : Demonstrate knowledge of the fishing industry and relevant role-players in your local area

- Specific outcome 1 Identify the main role players in the local industry.
Range: (Managers of factories. Angling clubs. Boat clubs. Conservation NGOs. Civil Society. Community groups.)
- Specific outcome 2 Describe the structure of the fishing industry in your local area.
Range: (Processing methods and products. Location of processing facilities. Location of factories and markets.)
- Specific outcome 3 Apply knowledge of relevant legislation to interact with the stakeholders in your local area.
Range: (Fisheries regulations. Zoning. Health and safety.)
-

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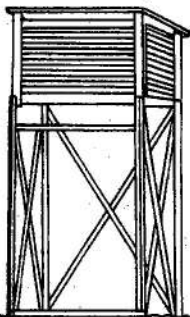
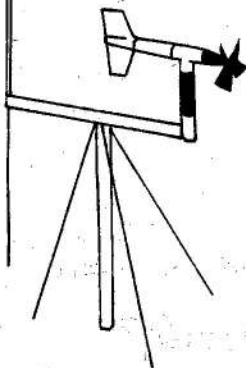
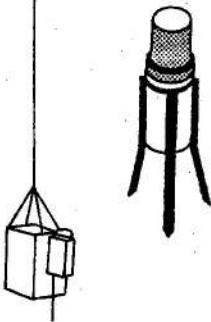
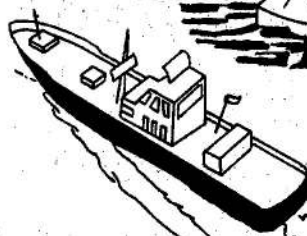
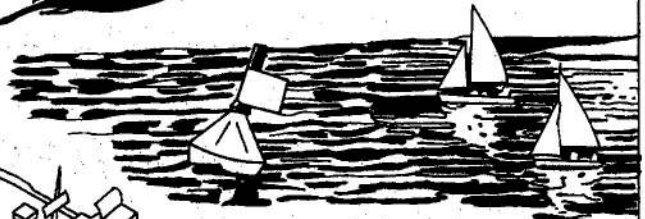
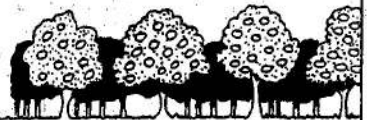
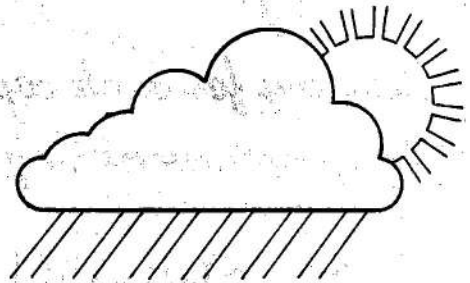
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