
GOVERNMENT NOTICES

SOUTH AFRICAN QUALIFICATIONS AUTHORITY

No. 295

20 March 2009



SOUTH AFRICAN QUALIFICATIONS AUTHORITY (SAQA)

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

Nature Conservation

registered by Organising Field 01 – Agriculture and Nature Conservation, publishes the following Qualification and Unit Standards for public comment.

This notice contains the titles, fields, sub-fields, NQF levels, credits, and purpose of the Qualification and Unit Standards. The full Qualification and Unit Standards can be accessed via the SAQA web-site at www.saq.org.za. Copies may also be obtained from the Directorate of Standards Setting and Development at the SAQA offices, SAQA House, 1067 Arcadia Street, Hatfield, Pretoria.

Comment on the Qualification and Unit Standards should reach SAQA at the address below and **no later than 20 April 2009**. All correspondence should be marked **Standards Setting – SGB** for Nature Conservation and addressed to

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ACTING DIRECTOR: STANDARDS SETTING AND DEVELOPMENT



SOUTH AFRICAN QUALIFICATIONS AUTHORITY

QUALIFICATION:

Further Education and Training Certificate: Fisheries Resource Compliance

SAQA QUAL ID	QUALIFICATION TITLE		
66149	Further Education and Training Certificate: Fisheries Resource Compliance		
ORIGINATOR		PROVIDER	
SGB Nature Conservation			
QUALIFICATION TYPE	FIELD	SUBFIELD	
Further Ed and Training Cert	1 - Agriculture and Nature Conservation	Nature Conservation	
ABET BAND	MINIMUM CREDITS	NQF LEVEL	QUAL CLASS
Undefined	158	Level 4	Regular-Unit Stds Based

This qualification does not replace any other qualification and is not replaced by another qualification.

PURPOSE AND RATIONALE OF THE QUALIFICATION

Purpose:

The qualification is intended for learners who wish to operate as or are presently operating as fisheries officers. The skills and competencies enabled by the qualification will support career path development towards positions of senior fisheries officers, once relevant experience has been obtained in the operational environment. The successful completion of this qualification equips the qualifying learner with the skills needed to perform in the field of fisheries conservation as well as the ability to conduct more advanced law enforcement tasks on a national and regional basis.

In particular, learners qualifying against this qualification will be able to:

- > Demonstrate knowledge of marine ecology.
- > Perform duties in pursuit of marine conservation objectives.
- > Enforce legislation pertaining to marine conservation.
- > Demonstrate seamanship appropriate to the functions of a fisheries officer.

The qualification provides learners with the training required to be able to function effectively and efficiently as fisheries officers. It equips learners with knowledge of relevant aspects of marine biology, a thorough knowledge of what constitutes legal compliance (law enforcement) as part of the criminal justice system, communication skills and an understanding of ethics necessary to carry out the functions of a fisheries officer under supervision of more senior staff.

Rationale:

The commercial fishing industry contributes significantly to the country's foreign exchange earnings. However, it exploits a limited resource, and effective monitoring, control and surveillance are crucial to ensure the long-term sustainability of the industry.

The commercial fishing industry is regulated by a substantial body of Acts and Regulations, as well as international treaties and conventions aimed at protecting and regulating marine fisheries. Sustainable utilisation of marine resources depends on scientific knowledge of the

resource as well as on good management of the use of the resource. The executive arm of fisheries management provide the monitoring, control and surveillance function. Fisheries officers who have the responsibility of ensuring that management measures, such as the control of catches and that fisheries legislation, are complied with carry out this function.

The task of the fisheries officer is a complex one. To understand this statement it is necessary to take into account the wide array of duties to be performed and the intimate knowledge of the industry required to perform these duties. The fisheries officer has to act both as an agent of marine conservation law enforcement, and an educator of communities affected by marine conservation legislation.

In the event of violations of marine conservation legislation and regulations, the fisheries officer has to be competent at gathering evidence, presenting it in court and acting as a credible witness. Fisheries officers have extensive powers of search and arrest, comparable to and in some situations exceeding those of other law enforcement officials. The fisheries officer's knowledge base has to include the complete framework of legislation designed to protect marine resources.

The acquisition of recognized skills and abilities is required by the sector to meet legislative and operational requirements. This will increase growth and job opportunities whilst maintaining the objective of the protection and sustainable utilization of our natural resources.

The qualification will enable learners to apply for positions as officers employed by Marine and Coastal Management (MCM) as well as other bodies such as Ezemvelo KZN Wildlife, which are responsible for Monitoring, Control and Surveillance (MCS) in South Africa.

Given the close working relationship required for coastline protection between South Africa and its neighbouring countries such as Namibia and Mozambique, this qualification could also be utilised for the training and development of fisheries officers or their counterparts in these countries.

Fisheries officers are in direct contact with the fishing industry and have to fulfil a number of functions, including educating stakeholders about the need for fisheries management as well as encouraging and enforcing compliance.

RECOGNIZE PREVIOUS LEARNING?

Y

LEARNING ASSUMED IN PLACE

It is assumed that learners accessing this qualification are competent in:

- > Communication at NQF Level 3.
- > Mathematical Literacy at NQF Level 3.

Recognition of Prior Learning:

This Qualification can be achieved wholly or in part through the Recognition of Prior Learning and the Qualification may be granted to learners who have acquired the skills and knowledge without attending formal courses providing they can demonstrate competence in the outcomes of the individual Unit Standards as required by the Fundamental, Core and Elective areas stipulated in the Qualification and by the Exit Level Outcomes.

An RPL process may also be used to credit learners with Unit Standards in which they have developed the necessary competency as a result of workplace and experiential learning.

Learners submitting themselves for RPL should be thoroughly briefed prior to the assessment, and may be required to submit a Portfolio of Evidence in the prescribed format to be assessed for formal recognition. While this is primarily a workplace-based Qualification, evidence from other areas of endeavour may be introduced if pertinent to any of the exit level outcomes.

Access to the Qualification:

There is open access.

QUALIFICATION RULES

This qualification consists of a minimum of 158 Credits composed of:

Fundamental component:

> All unit standards totalling 56 credits.

Core component:

> All unit standards totalling 94 credits are compulsory.

Elective component:

> A minimum of 8 credits from the Elective component are required.

EXIT LEVEL OUTCOMES

1. Demonstrate knowledge of marine ecology.
2. Perform duties in pursuit of marine conservation objectives.
3. Enforce legislation pertaining to marine conservation.
4. Demonstrate knowledge of seamanship appropriate to the functions of a fisheries officer.

Critical Cross-Field Outcomes:

The qualification addresses the following Critical Cross-Field Outcomes as embedded in the Exit Level Outcomes and Associated Assessment Criteria of the qualification.

Communicate effectively:

> Effective communication is enabled through the maintaining of relevant communication as per organisational requirements.

Identify and solve problems:

> Problems are identified and solved in the application of legislative compliance and the assessment of marine resources.

Collect, analyse, organise, and critically evaluate information:

> Information is collected analysed, organized and evaluated in the performing of available resources monitoring at operational level as well as the application of legislative compliance and the assessment of marine resources.

Work in a team:

> Teamwork is supported in the operational environment and the execution of Fisheries Resources responsibilities.

Maintain effective working relationships:

> The maintaining of effective working relationships is supported in the performing of fisheries officer's duties.

Use of Science and technology:

> The use of Science and Technology is supported by the use of relevant technology employed in the undertaking of resources monitoring and assessment excursions. Science and technology is likewise utilised in the application of relevant seamanship.

ASSOCIATED ASSESSMENT CRITERIA

Associated Assessment Criteria for Exit Level Outcome 1:

- 1.1 Exploitable marine species are accurately identified through the use of scientifically valid methods.
- 1.2 The interrelationships of living things with one another and with their habitats are identified with a view to furthering marine conservation objectives.
- 1.3 Measures are implemented to protect ecologically sensitive areas based on knowledge of the coastal zone.

Associated Assessment Criteria for Exit Level Outcome 2:

- 2.1 Marine conservation legislation and regulations are enforced to comply with legal requirements.
- 2.2 Stakeholders and the public are educated on marine conservation issues according to conservation programmes.
- 2.3 Methods to assess marine living resources are applied in accordance with marine population estimation protocols.
- 2.4 Management plans and procedures are put in place in ways that reflect understanding of fisheries resource management principles.
- 2.5 Management plans and procedures are implemented so as to support marine conservation objectives.

Associated Assessment Criteria for Exit Level Outcome 3:

- 3.1 Fisheries related offences are investigated by utilising relevant processes and procedures.
- 3.2 Relevant evidence is provided in support of prosecutions in a court of law.
- 3.3 Advanced knowledge of international treaties and agreements are demonstrated as it applies to South African legislation and regulations.
- 3.4 Input is made in the drafting of proposals for permit conditions in support of legislative compliance.

Associated Assessment Criteria for Exit Level Outcome 4:

- 4.1 Knowledge is demonstrated of vessel types so as to facilitate comprehensive routine onboard inspections.
- 4.2 Knowledge of fishing gear and fishing methods is demonstrated so as to enable the enforcement of legislative compliance.
- 4.3 Skills of navigation and chart work are used to plot the position and progress of a vessel within the context of fisheries compliance activities.

Integrated Assessment:

Assessment practices must be open, transparent, fair, valid, and reliable and must ensure that no learner is disadvantaged in any way whatsoever. For this purpose, an integrated assessment approach is incorporated into the Qualification. Learning, teaching and assessment are inextricably aligned. Whenever possible, the assessment of knowledge, skills, attitudes and values shown in the unit standards should be integrated through the practical application of sales and services in a Nature Conservation environment.

Assessment of the communication, language, literacy and numeracy should be conducted in conjunction with other aspects and should use authentic Nature Conservation contexts wherever possible. A variety of methods must be used in assessment and tools and activities must be appropriate to the context in which the learner is working. Where it is not possible to assess the learner in the workplace or on-the-job, simulations, case studies, role-plays and other similar techniques should be used to provide a context appropriate to the assessment.

The term 'Integrated Assessment' implies that theoretical and practical components should be assessed together. During integrated assessments the assessor should make use of formative and summative assessment methods and assess combinations of practical, applied, foundational and reflective competencies. Assessors and moderators should make use of a range of formative and summative assessment methods. Assessors should assess and give credit for the evidence of learning that has already been acquired through formal, informal and non-formal learning and work experience.

Assessment should ensure that all Specific Outcomes, Embedded Knowledge and Critical Cross-Field Outcomes are evaluated. The assessment of the Critical Cross-Field Outcomes should be integrated with the assessment of Specific Outcomes and Embedded Knowledge. It is required that learners are able to arrange for assessment in an appropriate natural environment.

INTERNATIONAL COMPARABILITY

The main focus for International comparability for the qualification was concluded against qualifications outside of the Southern African/African continent. In particular, North America and Australia were selected for best practices due to the high regard for the developments in these countries relating to Fisheries Resource Management by the South African Fisheries Compliance industry.

In addition, the Southern African Regional Fisheries Resources Management, Control and Surveillance qualification was used for comparability so as to ensure that a National Qualification meets standards and requirements identified as best practice for Southern Africa. In addition, it should be mentioned that relevant SADC input and comparison was concluded during the scoping and development of the qualification through the inclusion of representatives in task teams involved in the European Union/SADC Fisheries Management, Control and Surveillance programmes.

The following qualifications are thus presented in support of International Comparability:

- > The Boarding Officer Course (Marine Coast Guard) North America.
- > The NQF Level 4 in Fisheries Compliance Administration - Australian Qualifications Framework.
- > The Fisheries Management, Control and Surveillance programme - European Union/SADC.

The Boarding Officer Course (Marine Coast Guard) North America:

The programme consists of a five-day course for a boarding officer. Although level descriptors and credit values could not be allocated to the programme, a substantial similarity is clearly discernible when comparing the main focus areas with those of the envisaged qualification.

The programme includes the following focus areas:

- > Application of Laws and Regulations.
- > Identify Fishing Vessels and Gear.
- > Enforce Closed Areas and Closed Seasons.
- > Execute Marine Protected Species Boarding.
- > Conduct Uninspected Passenger Vessel and Commercial Fishing Vessel Safety Inspections.
- > Inspect Permits.

- > Identify Regulated Species.
- > Inspect Turtle Excluder Devices.
- > Inspect Bycatch Reduction Devices.
- > Inspect Traps.
- > Execute Enforcement Options.
- > Prepare/Process Case Packages.

The following focus areas in the envisaged qualifications compares favourably:

- > Demonstrate knowledge of national and international fisheries legislation (Relates to: Application of Laws and Regulations).
- > Apply Legislation and regulations on marine resources and the powers of fisheries officers (Relates to: Enforce Closed Areas and Closed Seasons, Execute Marine Protected Species Boarding, Inspect Permits, Conduct Un-inspected Passenger and Commercial Fishing Vessel Inspections).
- > Report on Fish Catches (Relates to: Inspect Permits, Execute enforcement options, Identify regulated species, inspect by-catch and turtle catches).
- > Demonstrate knowledge of fishing vessels and fishing gear (Relates to: Identify Fishing vessels and Gear).
- > Comply with investigation and prosecution requirements in the Fisheries environment (Relates to Execute enforcement options and Prepare/process case packages).

The South African qualification, being longer in duration, distinguishes itself through its specific focus on Resources Management and the inclusion of the following standards:

- > Promote Conservation Awareness.
- > Integrated Coastal Zone Management.
- > Fisheries Resource Management.
- > Navigational and chart-work skills.

This is possibly resultant from a strong Conservation approach, the necessity to educate fisheries resource users (public and commercial) due to recent access to fisheries resources, and the necessity to enable navigational and chart-work skills associated with the marine environment in support of the execution of responsibilities where individuals were previously excluded from the industry in the capacity of resources management and compliance enforcement. Albeit not part of the core component of the qualification, the inclusion of communication skills and a strong emphasis on conservation ethics likewise contribute to the usefulness of the qualification both from an employment and conservation perspective.

The NQF Level 4 in Fisheries Compliance Administration - Australian Qualifications Framework:

The above qualification enabled comparison with a qualification that is outcomes and unit standard based so as to compare the envisaged unit standard based qualification with a similar qualification in the operational environment.

The following main focus areas are identified:

- > Fisheries Acts and regulations.
- > Investigative procedures.
- > Apprehension skills.
- > Court procedures.
- > Monitoring Fish catches for legal compliance.
- > Office procedures.
- > Elements of Shipboard safety.
- > Radio telephone.
- > Safety in fishing operations.

- > Outboard Motor Operations and Maintenance for operators.
- > Fishing technology.
- > Work team communications.
- > Computer operations.

Optional:

- > Motorbike operations.
- > 4 Wheel driving instruction.
- > Dealing with Conflict.
- > Occupational Health and Safety.

The envisaged qualification compares well in terms of the following standards:

- > Demonstrate knowledge of national and international fisheries legislation (Relates to: Fisheries Acts and Regulations).
- > Apply Legislation and regulations on marine resources and the powers of fisheries officers (Relates to: Investigative procedures, apprehension skills, Monitoring fish catches for legal compliance, Court procedures).
- > Report on Fish Catches (Relates to: Monitoring fish catches for legal compliance).
- > Demonstrate knowledge of fishing vessels and fishing gear (Relates to: Safety in fishing operations and Fishing technology).
- > Comply with investigation and prosecution requirements in the Fisheries environment (Relates to Investigative procedures).

As with the previous comparison the following standards included in the South African qualification is not included in the Australian qualification:

- > Promote Conservation Awareness.
- > Integrated Coastal Zone Management.
- > Fisheries Resource Management.
- > Navigational and chart-work skills.

In addition, the South African qualification does not include computer literacy, outboard motor maintenance and specific focus on communication devices such as radiotelephones. Communication is included in the fundamental component and additional non-marine specific transportation is not included in the South African qualification. The differences mainly support the stronger conservation approach followed in the envisaged qualification and the developing of ethics and promotion of conservation awareness yet again provides for contextualisation in the South African industry.

The Fisheries Management, Control and Surveillance programme - European Union/SADC:

Due to the strong involvement of individuals familiar with the above qualification, this qualification possibly had the most influence on the envisaged qualification in terms of best practices alignment.

The following focus areas and relation to standards included in the envisaged qualification are evident from the programme:

- > Unit 1: Survey Fishing activities at Sea (Relates to requirements of identification and knowledge about Fishing vessels and fishing gear for identification).
- > Unit 2: Survey Fishing activities from the Air [Relates to requirements of identification of vessels).
- > Unit 3: Communication.

- > Unit 4: Perform Shore Patrols (Relates to compliance with investigation and prosecution requirements).
- > Unit 5: Perform Coastal Patrols (Relates to compliance with investigation and prosecution requirements and integrated coastal zone management).
- > Unit 6: Perform inspections at places of trade and off loading (Relates to checking of legality of catches and meeting of permit and conservation requirements, species composition and reporting of fish catches as well as knowledge of international and national fisheries legislation).
- > Unit 7: Offload fish catches (Relates to Fish catches, apply legislation and regulations on marine resources and the powers of fisheries officers).
- > Unit 8: Observe fishing activities on commercial vessels (Relates to identification and knowledge about vessels and gear, legislative requirements of international and national fisheries legislation).
- > Unit 9: Administration / reporting (Relates to report on fish catches).
- > Unit 10: Collect research samples and data (Relates to conservation awareness, and fisheries resource management as well as compliance with investigation and prosecution requirements).
- > Unit 11: Take action regarding regulation infringements and suspected irregularities (Relates to apply legislation and regulations and the powers of fisheries officers as well as comply with investigation and prosecution requirements in the Fisheries Environment).
- > Unit 12: Clear a vessel (Relates to apply legislation and regulations and the powers of fisheries officers).
- > Unit 13: Organise Patrols and Inspections (Relates to Fisheries Resource Management).
- > Unit 14: First Aid (Presently not included due to the requirement to renew first aid certificates on an annual basis in terms of currency - It is a component to be addressed in the workplace).
- > Unit 15: Adhere to personal safety precautions (Included as an outcome in relevant unit standards).
- > Unit 16: Adhere to vessel safety requirements (Relates to navigation and chart-work).

Comparison should indicate a clear alignment to what is presently regarded as European Union and SADC best practices in terms of the qualification.

Conclusion:

Comparisons, in terms of the North American, Australian and European Union/SADC programmes, effectively support alignment of the envisaged qualification to recognised best practices in the international fisheries resource management environment.

The inclusion of specific focus areas including ethics, resource management and conservation awareness, is supported specifically by the approach followed in the European Union/SADC programme.

First aid is however presently excluded for the Fisheries Resource Management qualification due to the approach in South Africa where first aid certification needs to be updated on an annual basis. It was thus concluded by employer organisations, users of the qualification that first aid will be addressed as a workplace requirement rather than a qualification component.

It is concluded that comparison supports the meeting a similar approach and content in terms of training and development internationally.

Impact of International Comparability on the Qualification:

Consideration was taken in particular of the European Union/SADC programmes in the identification of international standards and content. The involvement of representatives very familiar with the qualification and its content ensured effective alignment of the South African qualification with industry standards presently perceived to be best practices in the SADC region. Favourable comparison with North American and Australian qualifications simply act as confirmation of the meeting of international best practice.

ARTICULATION OPTIONS

This Qualification provides the following articulation opportunities:

Horizontal articulation:

> ID 63109; Further Education and Training Certificate: Nature Conservation: Natural Resource Guardianship Terrestrial, NQF Level 4.

Vertical articulation:

- > National Certificate: Nature Conservation, NQF Level 5.
- > National Higher Certificate: Nature Conservation, NQF Level 5.

Fisheries officers, who wish to extend their field of expertise into other areas of nature conservation guardianship, or conservation management, will find this relatively easy to achieve.

MODERATION OPTIONS

> Anyone moderating assessment of a learner, against this Qualification must be registered as a moderator with the relevant ETQA, or with an ETQA that has a Memorandum of Understanding with the relevant ETQA.

> Any institution offering learning that may enable the achievement of this Qualification must be accredited as a provider with the relevant ETQA, or with an ETQA that has a Memorandum of Understanding with the relevant ETQA.

> Assessment and moderation of assessment may be overseen by the relevant ETQA according to the policies and guidelines for assessment and moderation of that ETQA, in terms of agreements reached around assessment and moderation between various ETQAs (including professional bodies), and in terms of the moderation guideline detailed immediately below.

> Moderation must include both internal and external moderation of assessments at all exit points of the Qualification, unless ETQA policies specify otherwise. Moderation should also encompass achievement of the competence described both in individual Unit Standards as well as the integrated competence described in the Exit Level Outcomes of the Qualification.

> Anyone wishing to be assessed against this Qualification may apply to be assessed by any assessment agency, assessor or provider institution that is accredited by the relevant ETQA, or with an ETQA that has a Memorandum of Understanding with the relevant ETQA.

CRITERIA FOR THE REGISTRATION OF ASSESSORS

Anyone assessing a learner, against this Qualification must be registered as an assessor with the relevant ETQA, or with an ETQA that has a Memorandum of Understanding with the relevant ETQA.

For an applicant to register as an assessor or moderator of this Qualification the applicant needs:

- > To be declared competent in all the outcomes of the National Assessor Unit Standards.
- > To be competent in the outcomes of this Qualification.

NOTES

N/A

UNIT STANDARDS

	ID	UNIT STANDARD TITLE	LEVEL	CREDITS
Fundamental	8968	Accommodate audience and context needs in oral communication	Level 3	5
Fundamental	8969	Interpret and use information from texts	Level 3	5
Fundamental	8973	Use language and communication in occupational learning programmes	Level 3	5
Fundamental	8970	Write texts for a range of communicative contexts	Level 3	5
Fundamental	12154	Apply comprehension skills to engage oral texts in a business environment	Level 4	5
Fundamental	9015	Apply knowledge of statistics and probability to critically interrogate and effectively communicate findings on life related problems	Level 4	6
Fundamental	119462	Engage in sustained oral/signed communication and evaluate spoken/signed texts	Level 4	5
Fundamental	119469	Read/view, analyse and respond to a variety of texts	Level 4	5
Fundamental	9016	Represent analyse and calculate shape and motion in 2- and 3-dimensional space in different contexts	Level 4	4
Fundamental	7468	Use mathematics to investigate and monitor the financial aspects of personal, business, national and international issues	Level 4	6
Fundamental	119459	Write/present/sign for a wide range of contexts	Level 4	5
Core	263294	Apply knowledge of fishing vessels and fishing gear in a fisheries compliance environment	Level 4	10
Core	263314	Apply national and international fisheries legislation in the marine resources conservation environment	Level 4	10
Core	263285	Apply the principles of fisheries resource management	Level 4	10
Core	263290	Demonstrate knowledge of practical offshore navigation and chartwork	Level 4	10
Core	263286	Investigate fish catches in support of fisheries compliance	Level 4	8
Core	263289	Promote Conservation Awareness	Level 4	12
Core	263291	Apply integrated coastal zone management	Level 5	8
Core	263292	Comply with Investigation and prosecution requirements in the fisheries environment	Level 5	12
Core	253968	Develop and apply conservation ethics	Level 5	4
Core	263293	Inspect Marine Resources Conservation	Level 5	10
Elective	263288	Demonstrate knowledge of physical oceanography and meteorology	Level 3	6
Elective	263295	Demonstrate an understanding of the effects of natural phenomena and human activities on marine ecosystems	Level 4	8
Elective	263287	Gather data on important marine mammal, reptile and bird species	Level 4	15
Elective	252034	Monitor and evaluate team members against performance standards	Level 5	8

LEARNING PROGRAMMES RECORDED AGAINST THIS QUALIFICATION

None



SOUTH AFRICAN QUALIFICATIONS AUTHORITY

UNIT STANDARD:*Apply the principles of fisheries resource management*

SAQA US ID	UNIT STANDARD TITLE		
263285	Apply the principles of fisheries resource management		
ORIGINATOR	PROVIDER		
SGB Nature Conservation			
FIELD	SUBFIELD		
1 - Agriculture and Nature Conservation	Nature Conservation		
ABET BAND	UNIT STANDARD TYPE	NQF LEVEL	CREDITS
Undefined	Regular	Level 4	10

This unit standard does not replace any other unit standard and is not replaced by another unit standard.

SPECIFIC OUTCOME 1

Describe the methods used to assess marine living resources.

SPECIFIC OUTCOME 2

Use biological fundamentals within the context of fisheries resource management.

SPECIFIC OUTCOME 3

Apply the principles of fisheries resource management in an operational environment.

QUALIFICATIONS UTILISING THIS UNIT STANDARD

	ID	QUALIFICATION TITLE	LEVEL
Core	66149	Further Education and Training Certificate: Fisheries Resource Compliance	Level 4



SOUTH AFRICAN QUALIFICATIONS AUTHORITY

UNIT STANDARD:

Investigate fish catches in support of fisheries compliance

SAQA US ID	UNIT STANDARD TITLE		
263286	Investigate fish catches in support of fisheries compliance		
ORIGINATOR	PROVIDER		
SGB Nature Conservation			
FIELD	SUBFIELD		
1 - Agriculture and Nature Conservation	Nature Conservation		
ABET BAND	UNIT STANDARD TYPE	NQF LEVEL	CREDITS
Undefined	Regular	Level 4	8

This unit standard does not replace any other unit standard and is not replaced by another unit standard.

SPECIFIC OUTCOME 1

Select sub-samples from a fish catch through the use of approved scientific methods.

SPECIFIC OUTCOME 2

Assess the size and species composition of a catch on a fishing vessel.

SPECIFIC OUTCOME 3

Report on fishing and post harvest practices as they apply to fisheries compliance requirements.

QUALIFICATIONS UTILISING THIS UNIT STANDARD

	ID	QUALIFICATION TITLE	LEVEL
Core	66149	Further Education and Training Certificate: Fisheries Resource Compliance	Level 4



SOUTH AFRICAN QUALIFICATIONS AUTHORITY

UNIT STANDARD:*Gather data on important marine mammal, reptile and bird species*

SAQA US ID	UNIT STANDARD TITLE		
263287	Gather data on important marine mammal, reptile and bird species		
ORIGINATOR	PROVIDER		
SGB Nature Conservation			
FIELD	SUBFIELD		
1 - Agriculture and Nature Conservation	Nature Conservation		
ABET BAND	UNIT STANDARD TYPE	NQF LEVEL	CREDITS
Undefined	Regular	Level 4	15

This unit standard does not replace any other unit standard and is not replaced by another unit standard.

SPECIFIC OUTCOME 1

Use field guides and other aids to accurately identify the major pelagic bird species.

SPECIFIC OUTCOME 2

Identify the important marine mammal and reptile species that occur within an Exclusive Economic Zone.

SPECIFIC OUTCOME 3

Determine the status of incidental mortality of marine mammal, reptile and bird species in an area of operation.

SPECIFIC OUTCOME 4

Gather data on marine mammal, reptile and bird species in relation to fishing operations.

QUALIFICATIONS UTILISING THIS UNIT STANDARD

	ID	QUALIFICATION TITLE	LEVEL
Elective	66149	Further Education and Training Certificate: Fisheries Resource Compliance	Level 4



SOUTH AFRICAN QUALIFICATIONS AUTHORITY

UNIT STANDARD:

Demonstrate knowledge of physical oceanography and meteorology

SAQA US ID	UNIT STANDARD TITLE		
263288	Demonstrate knowledge of physical oceanography and meteorology		
ORIGINATOR	PROVIDER		
SGB Nature Conservation			
FIELD	SUBFIELD		
1 - Agriculture and Nature Conservation	Nature Conservation		
ABET BAND	UNIT STANDARD TYPE	NQF LEVEL	CREDITS
Undefined	Regular	Level 3	6

This unit standard does not replace any other unit standard and is not replaced by another unit standard.

SPECIFIC OUTCOME 1

Identify the main physical features governing the oceanographic environment around South Africa.

SPECIFIC OUTCOME 2

Explain the impact of practical meteorology as it applies to the area of operation.

SPECIFIC OUTCOME 3

Explain coastal processes impacting on an operational environment.

QUALIFICATIONS UTILISING THIS UNIT STANDARD

	ID	QUALIFICATION TITLE	LEVEL
Elective	66149	Further Education and Training Certificate: Fisheries Resource Compliance	Level 4



SOUTH AFRICAN QUALIFICATIONS AUTHORITY

UNIT STANDARD:**Promote Conservation Awareness**

SAQA US ID		UNIT STANDARD TITLE	
263289		Promote Conservation Awareness	
ORIGINATOR		PROVIDER	
SGB Nature Conservation			
FIELD		SUBFIELD	
1 - Agriculture and Nature Conservation		Nature Conservation	
ABET BAND	UNIT STANDARD TYPE	NQF LEVEL	CREDITS
Undefined	Regular	Level 4	12

This unit standard does not replace any other unit standard and is not replaced by another unit standard.

SPECIFIC OUTCOME 1

Identify the purpose of the promotion of conservation awareness as it applies to the marine environment.

SPECIFIC OUTCOME 2

Identify Conservation awareness intervention requirements in an area of operation.

SPECIFIC OUTCOME 3

Promote conservation awareness in an area of operation.

QUALIFICATIONS UTILISING THIS UNIT STANDARD

ID	QUALIFICATION TITLE	LEVEL
Core 66149	Further Education and Training Certificate: Fisheries Resource Compliance	Level 4



SOUTH AFRICAN QUALIFICATIONS AUTHORITY

UNIT STANDARD:

Demonstrate knowledge of practical offshore navigation and chartwork

SAQA US ID	UNIT STANDARD TITLE		
263290	Demonstrate knowledge of practical offshore navigation and chartwork		
ORIGINATOR		PROVIDER	
SGB Nature Conservation			
FIELD		SUBFIELD	
1 - Agriculture and Nature Conservation		Nature Conservation	
ABET BAND	UNIT STANDARD TYPE	NQF LEVEL	CREDITS
Undefined	Regular	Level 4	10

This unit standard replaces:

US ID	Unit Standard Title	NQF Level	Credits	Replacement Status
110017	Demonstrate knowledge of practical offshore navigation and chartwork	Level 5	8	Will occur as soon as 263290 is registered

SPECIFIC OUTCOME 1

Demonstrate the use navigational aids in an operational environment.

SPECIFIC OUTCOME 2

Use nautical charts to plot the position of a vessel at sea.

SPECIFIC OUTCOME 3

Use navigational aids to determine the position of a vessel at sea.

QUALIFICATIONS UTILISING THIS UNIT STANDARD

	ID	QUALIFICATION TITLE	LEVEL
Core	66149	Further Education and Training Certificate: Fisheries Resource Compliance	Level 4



SOUTH AFRICAN QUALIFICATIONS AUTHORITY

UNIT STANDARD:***Apply integrated coastal zone management***

SAQA US ID	UNIT STANDARD TITLE		
263291	Apply integrated coastal zone management		
ORIGINATOR		PROVIDER	
SGB Nature Conservation			
FIELD		SUBFIELD	
1 - Agriculture and Nature Conservation		Nature Conservation	
ABET BAND	UNIT STANDARD TYPE	NQF LEVEL	CREDITS
Undefined	Regular	Level 5	8

This unit standard replaces:

US ID	Unit Standard Title	NQF Level	Credits	Replacement Status
12398	Apply integrated coastal zone management	Level 5	6	Will occur as soon as 263291 is registered

SPECIFIC OUTCOME 1

Explain the rationale for integrated coastal management.

SPECIFIC OUTCOME 2

Use legislation and public awareness to protect ecologically sensitive areas.

SPECIFIC OUTCOME 3

Monitor and control driving on beaches.

SPECIFIC OUTCOME 4

Support the day-to-day implementation of integrated coastal zone management strategies.

QUALIFICATIONS UTILISING THIS UNIT STANDARD

	ID	QUALIFICATION TITLE	LEVEL
Core	66149	Further Education and Training Certificate: Fisheries Resource Compliance	Level 4



SOUTH AFRICAN QUALIFICATIONS AUTHORITY

UNIT STANDARD:

Comply with Investigation and prosecution requirements in the fisheries environment

SAQA US ID	UNIT STANDARD TITLE		
263292	Comply with Investigation and prosecution requirements in the fisheries environment		
ORIGINATOR		PROVIDER	
SGB Nature Conservation			
FIELD		SUBFIELD	
1 - Agriculture and Nature Conservation		Nature Conservation	
ABET BAND	UNIT STANDARD TYPE	NQF LEVEL	CREDITS
Undefined	Regular	Level 5	12

This unit standard does not replace any other unit standard and is not replaced by another unit standard.

SPECIFIC OUTCOME 1

Exercise the powers conferred on fisheries inspectors.

SPECIFIC OUTCOME 2

Follow procedures for gathering and processing evidence for prosecuting offenders.

SPECIFIC OUTCOME 3

Prepare a case docket in accordance with prosecution requirements.

SPECIFIC OUTCOME 4

Present exhibits in support of a prosecution process.

QUALIFICATIONS UTILISING THIS UNIT STANDARD

	ID	QUALIFICATION TITLE	LEVEL
Core	66149	Further Education and Training Certificate: Fisheries Resource Compliance	Level 4



SOUTH AFRICAN QUALIFICATIONS AUTHORITY

UNIT STANDARD:

Inspect Marine Resources Conservation

SAQA US ID	UNIT STANDARD TITLE		
263293	Inspect Marine Resources Conservation		
ORIGINATOR	PROVIDER		
SGB Nature Conservation			
FIELD	SUBFIELD		
1 - Agriculture and Nature Conservation	Nature Conservation		
ABET BAND	UNIT STANDARD TYPE	NQF LEVEL	CREDITS
Undefined	Regular	Level 5	10

This unit standard does not replace any other unit standard and is not replaced by another unit standard.

SPECIFIC OUTCOME 1

Provide an overview of the powers conferred on fisheries officers as they apply to legislation specific to fisheries compliance.

SPECIFIC OUTCOME 2

Define offences specific to fisheries compliance as described in the legislative framework.

SPECIFIC OUTCOME 3

Exercise the powers conferred on fisheries inspectors.

QUALIFICATIONS UTILISING THIS UNIT STANDARD

	ID	QUALIFICATION TITLE	LEVEL
Core	66149	Further Education and Training Certificate: Fisheries Resource Compliance	Level 4



SOUTH AFRICAN QUALIFICATIONS AUTHORITY

UNIT STANDARD:

Apply knowledge of fishing vessels and fishing gear in a fisheries compliance environment

SAQA US ID	UNIT STANDARD TITLE		
263294	Apply knowledge of fishing vessels and fishing gear in a fisheries compliance environment		
ORIGINATOR		PROVIDER	
SGB Nature Conservation			
FIELD		SUBFIELD	
1 - Agriculture and Nature Conservation		Nature Conservation	
ABET BAND	UNIT STANDARD TYPE	NQF LEVEL	CREDITS
Undefined	Regular	Level 4	10

This unit standard does not replace any other unit standard and is not replaced by another unit standard.

SPECIFIC OUTCOME 1

Distinguish between various types of fishing vessels used in the main fisheries.

SPECIFIC OUTCOME 2

Identify commonly used types of fishing gear.

SPECIFIC OUTCOME 3

Identify the deck gear used in association with the fishing gear used in commercial fishing.

SPECIFIC OUTCOME 4

Take appropriate action in response to observed infringements.

QUALIFICATIONS UTILISING THIS UNIT STANDARD

	ID	QUALIFICATION TITLE	LEVEL
Core	66149	Further Education and Training Certificate: Fisheries Resource Compliance	Level 4



SOUTH AFRICAN QUALIFICATIONS AUTHORITY

UNIT STANDARD:

Demonstrate an understanding of the effects of natural phenomena and human activities on marine ecosystems

SAQA US ID	UNIT STANDARD TITLE		
263295	Demonstrate an understanding of the effects of natural phenomena and human activities on marine ecosystems		
ORIGINATOR		PROVIDER	
SGB Nature Conservation			
FIELD		SUBFIELD	
1 - Agriculture and Nature Conservation		Nature Conservation	
ABET BAND	UNIT STANDARD TYPE	NQF LEVEL	CREDITS
Undefined	Regular	Level 4	8

This unit standard does not replace any other unit standard and is not replaced by another unit standard.

SPECIFIC OUTCOME 1

Demonstrate an understanding of the interaction and inter-dependence of species in relation to the conserving of species in the marine environment.

SPECIFIC OUTCOME 2

Explain the impact of physical processes on fish stocks.

SPECIFIC OUTCOME 3

Explain the effects of excessive predation from a natural and human perspective.

QUALIFICATIONS UTILISING THIS UNIT STANDARD

	ID	QUALIFICATION TITLE	LEVEL
Elective	66149	Further Education and Training Certificate: Fisheries Resource Compliance	Level 4



SOUTH AFRICAN QUALIFICATIONS AUTHORITY

UNIT STANDARD:

Apply national and international fisheries legislation in the marine resources conservation environment

SAQA US ID	UNIT STANDARD TITLE		
263314	Apply national and international fisheries legislation in the marine resources conservation environment		
ORIGINATOR		PROVIDER	
SGB Nature Conservation			
FIELD		SUBFIELD	
1 - Agriculture and Nature Conservation		Nature Conservation	
ABET BAND	UNIT STANDARD TYPE	NQF LEVEL	CREDITS
Undefined	Regular	Level 4	10

This unit standard does not replace any other unit standard and is not replaced by another unit standard.

SPECIFIC OUTCOME 1

Determine the impact of national and international legislation on fisheries resources protection and conservation.

SPECIFIC OUTCOME 2

Institute legal proceedings and prosecutions on operational level.

SPECIFIC OUTCOME 3

Draft a report on legal findings according to operational requirements.

QUALIFICATIONS UTILISING THIS UNIT STANDARD

	ID	QUALIFICATION TITLE	LEVEL
Core	66149	Further Education and Training Certificate: Fisheries Resource Compliance	Level 4