

Challenges in the provision of research support services

- The provision of logistical support for research on Antarctica and Marion Islands follows guidelines set by DEAT and international standards. Because of the extreme weather conditions and transport constraints, it is not possible for other DEAT officials to conduct an independent assessment of whether these conditions are being complied with (stated very simply).
- All industrial fisheries rights holders have to submit catch reports to this section including the size of the catch and fish caught. This information is analysed over a period of time to determine trends and the development of 3 – 5 year management procedures for different categories of fish. The section (through an outsourced contract) has trained 200 scientific observers that accompany at least 10% of all boats that go out to sea to monitor catch and are not there specifically to monitor compliance with permit conditions – the challenge is that there are too few of these observers. A preliminary analysis of results has shown that boats with scientific observers land poorer catches on average which is an indication that they are complying with permit conditions e.g. landing all fish that are caught irrespective of size.

Priority programmes for the Research, Antarctica and Islands function for the next 3-4 years

- Provide logistical support for research on Antarctica and Marion Islands - the management of the science at these sites is the responsibility of the Department of Science and Technology. There is a plan to declare these islands Marine Protected Areas which would mean even more stringent development guidelines.
- Produce annual reports on fisheries surveys and annual stock assessments of consumptive and non-consumptive species.
- To provide a description of the marine physical that is allowed by the current oceanography equipment.

**6. ACTION PLAN TO ENSURE COMPLIANCE AND IMPROVE COOPERATION**

The following table provides information on actions to be taken by DEAT to ensure compliance with environmental management policies and legislation and to improve coordination national, provincial and local government departments.

ACTION	OUTPUT	TIMEFRAME	SERVICE DELIVERY INDICATOR
<b>ENVIRONMENTAL QUALITY AND PROTECTION</b>			
<i>Environmental Impact Management</i>			
Implement the 2006 EIA Regulations and the Environmental Impact Management (EIM) provisions in NEMA	<ul style="list-style-type: none"> <li>National EIA regulations finalised and implemented</li> </ul>	2005-2010	<ul style="list-style-type: none"> <li>% of EIM applications to DEAT processed within stipulated timeframes</li> </ul>
Develop and implement a comprehensive EIM Strategy and action plan	<ul style="list-style-type: none"> <li>Review of efficiency and effectiveness of the EIA system</li> <li>Rationalisation of EIA by introduction of other more appropriate tools</li> <li>Integration of EIM in other legislative processes such as land use planning</li> </ul>	2005-2010	<ul style="list-style-type: none"> <li>Government Gazette</li> <li>Implementation guidelines</li> </ul>
Develop an integrated EIA decision support system	<ul style="list-style-type: none"> <li></li> </ul>	2005-2010	<ul style="list-style-type: none"> <li>None</li> </ul>
Establish adequate EIA governance capacity	<ul style="list-style-type: none"> <li>Training programmes</li> <li>Procedural and technical guidelines</li> <li>Structure/organogram reviews and guidelines</li> <li>Roll out of decision support tools to provincial authorities</li> <li>Financial and technical assistance to deal with backlogs</li> </ul>	2005-2010	<ul style="list-style-type: none"> <li>None</li> </ul>
Build EIA capacity amongst external stakeholders	<ul style="list-style-type: none"> <li>"Extension" services provided to people with disabilities; illiteracy or where other limiting factors prevail</li> </ul>	2005-2010	<ul style="list-style-type: none"> <li>Interested and affected parties empowered to meaningfully participate in EIA processes</li> </ul>
Transformation of the EIA practitioner industry	<ul style="list-style-type: none"> <li></li> </ul>	2005-2010	<ul style="list-style-type: none"> <li>None</li> </ul>

ACTION	OUTPUT	TIMEFRAME	SERVICE DELIVERY INDICATOR
<b><i>Air Quality Management and Climate Change</i></b>			
Conduct the Atmospheric Pollution Act Review	<ul style="list-style-type: none"> <li>Revised APA registration certificates</li> </ul>	2006 – 2008	<ul style="list-style-type: none"> <li>Top 50 polluting sectors prioritised and all industries have been reviewed</li> <li>Competent Air Quality officers at provincial and local level</li> </ul>
Develop a National Framework to implement the National Air Quality Act	<ul style="list-style-type: none"> <li>National Framework gazetted</li> </ul>	September 2007	<ul style="list-style-type: none"> <li>Norms, standards and procedures for listing activities, declaring controlled emissions and fuels, and monitoring ambient air quality standards.</li> <li>National Air Quality Ambient Standards finalised</li> </ul>
Identify Listed Activities and the development of related emissions standards for these activities.	None	June 2008	<ul style="list-style-type: none"> <li>None</li> </ul>
Develop an Air Quality Planning Management Regime	<ul style="list-style-type: none"> <li>Guidelines and procedures for preparing Air Quality Management plans.</li> </ul>	June 2008	<ul style="list-style-type: none"> <li>Air Quality Management plans submitted by scheduled departments and provinces</li> </ul>
Implement the SA Air Quality Information System Project	<ul style="list-style-type: none"> <li>None</li> </ul>	2008 – 2010	<ul style="list-style-type: none"> <li>National integrated system provides air quality information to all stakeholders</li> </ul>
Develop an Air Quality Management Plan for the Vaal Triangle	<ul style="list-style-type: none"> <li>Vaal Triangle Air Quality Management Plan</li> </ul>	September 2007	<ul style="list-style-type: none"> <li>Improved air quality in priority area</li> </ul>
Update the Greenhouse Gas inventory	<ul style="list-style-type: none"> <li>Updated inventory</li> </ul>	Mid-2009	<ul style="list-style-type: none"> <li>Reporting on greenhouse gasses included in air quality information system</li> </ul>

ACTION	OUTPUT	TIMEFRAME	SERVICE DELIVERY INDICATOR
			<ul style="list-style-type: none"> <li>Report to UNCCC as per our commitments</li> </ul>
<b>Regulatory Services</b>			
Improving compliance and enforcement capacity at provincial and local government levels	<ul style="list-style-type: none"> <li>Increase in trained and designated Environmental Management Inspectors in provinces and local government</li> </ul>	2005-2010	None
Expanding current compliance and enforcement capacity for pollution, waste and EIA compliance and enforcement through the creation of additional posts	<ul style="list-style-type: none"> <li>Additional posts for inspectors and investigators in DEAT</li> </ul>	2005-2010	None
Implementing a compliance monitoring strategy in relation to the pollution, waste and EIA legislation	<ul style="list-style-type: none"> <li>Fully implemented compliance monitoring strategy</li> </ul>	2005-2010	None
Expanding existing national strategic compliance monitoring projects to more industry sectors	<ul style="list-style-type: none"> <li>Additional sector-based compliance and enforcement projects</li> </ul>	2005-2010	None
Improving the number of criminal cases that are prosecuted, and prosecuted successfully	<ul style="list-style-type: none"> <li>Increased number of complete criminal dockets handed to the National Prosecuting Authority for prosecution</li> </ul>	2005-2010	None
Developing preventative programmes in relation to non-compliance trends	<ul style="list-style-type: none"> <li>Preventative programmes developed and implemented</li> </ul>	2005-2010	None
<b>Pollution and Waste Management</b>			
Conclude the Permitting Backlog strategy.	<ul style="list-style-type: none"> <li>Strategy and implementation plan including estimated cost for</li> </ul>	2007-2010	<ul style="list-style-type: none"> <li>Absence of unauthorized waste disposal sites owned by local</li> </ul>

ACTION	OUTPUT	TIMEFRAME	SERVICE DELIVERY INDICATOR
	municipalities to deal with their unauthorised waste disposal sites.		government.
Promulgate and implement the Waste Act.	• Waste Act promulgated and implemented	2008 - 2009	Waste Management Act promulgated
Develop, promulgate and implement the regulations that support the Waste Act	• Regulations	2008-2009	Regulations developed and promulgated
Develop National Waste Management Strategy	• Strategy for dealing with waste	2008 - 2010	Waste Management Strategy published
<b>BIODIVERSITY AND CONSERVATION</b>			
Publish and implement the National Biodiversity Framework	• Framework for biodiversity management gazetted	November 2007	None
Publish bioregional plans	• Guidelines for determination of bioregions and the preparation of and publication of bioregional plans gazetted	November 2007	• Bioregional plans published according to guidelines
Develop biodiversity management plans for species and ecosystems according to certain norms and standards	• Norms and standards for biodiversity management plans for species gazetted	November 2007	• Biodiversity management plans for species developed and published
Publish a list of ecosystems that are threatened or in need of protection according to certain criteria	• Draft list of ecosystems that are threatened or in need of protection gazetted	March 2008	• Draft list of threatened ecosystems needing protection in place
Publish regulations on threatened or protected species	• Regulations published	February 2007	• Number of threatened or protected species listed
Publish a Genetically Modified Organisms (GMO) risk assessment	• Guidelines available for conducting environmental risk assessments for	March 2008	• GMO releases supported by appropriate management

ACTION	OUTPUT	TIMEFRAME	SERVICE DELIVERY INDICATOR
framework	GMOs		practices
Development of national norms and standards for the management of elephant populations in South Africa	<ul style="list-style-type: none"> <li>Uniform national norms and standards</li> </ul>	December 2007	None
<b>Resource Use</b>			
Publish regulations on bio-prospecting, access and benefit sharing	<ul style="list-style-type: none"> <li>Bio-prospecting, Access and Benefit Sharing regulations published</li> </ul>	September 2007	<ul style="list-style-type: none"> <li>Final regulations</li> </ul>
Establish a Bio-prospecting Trust Fund	<ul style="list-style-type: none"> <li>Guideline for the administration of the Bio-prospecting Trust Fund</li> </ul>	2008	<ul style="list-style-type: none"> <li>Functional Bio-prospecting Trust Fund</li> </ul>
Review all existing benefit-sharing agreements for bio-prospecting projects	<ul style="list-style-type: none"> <li>Database of reviewed existing benefit-sharing agreements for bio-prospecting projects</li> </ul>	2008	<ul style="list-style-type: none"> <li>Number of new benefit sharing agreements</li> </ul>
Awareness raising campaign	<ul style="list-style-type: none"> <li>Communication strategy</li> </ul>	2007-2010	<ul style="list-style-type: none"> <li>Communications materials</li> <li>Number of workshops held</li> </ul>
Capacity building at the provincial level	<ul style="list-style-type: none"> <li>Training programmes</li> </ul>	2007-2010	<ul style="list-style-type: none"> <li>Number of bio-prospecting project applications to DEAT and provinces processed within stipulated timeframes</li> </ul>
Harmonise and standardise the bio-prospecting permitting system	<ul style="list-style-type: none"> <li>Uniform bio-prospecting permitting system</li> </ul>	2007-2008	<ul style="list-style-type: none"> <li>Number of bio-prospecting permits issued</li> </ul>
Facilitate negotiations between applicants and stakeholders with respect to material transfer and benefit sharing agreements	<ul style="list-style-type: none"> <li>Parties entered into Material Transfer Agreement and Benefit-Sharing Agreement</li> </ul>	2008-2010	<ul style="list-style-type: none"> <li>Number of Material Agreement and Benefit Sharing Agreement entered</li> </ul>
Develop a database of bio-prospecting projects and update continuously	<ul style="list-style-type: none"> <li>Database of bio-prospecting projects developed and often updated</li> </ul>	2008-2010	<ul style="list-style-type: none"> <li>Number of bio-prospecting projects registered</li> </ul>

ACTION	OUTPUT	TIMEFRAME	SERVICE DELIVERY INDICATOR
<b>MARINE AND COASTAL MANAGEMENT</b>			
<i>Integrated Coastal Management</i>			
Promulgate and implement the Coastal Zone Management Act.	• Coastal Zone Act promulgated and implemented	2008-2009	• Coastal management regime with national and provincial coastal management programmes
Establish two Marine Protected Areas	• 2 MPAs declared with management plans	2008-2009	• 2 MPA management plans
Develop and implement the National Estuarine Protocol	• Development and implementation of a National Estuarine Protocol in consultation with other role players	2008-2010	• Co-ordination of agencies involved in estuarine management
Implement the National Programme of Action for Land Based Sources of Pollution	• Development and implementation of a National Programme of Action (NPOA) in consultation with other role players	2007 – 2010	• Coordination in the management of land-based sources of pollution
Develop the South African Coastal Management Information Centre	• GIS-based information system on coastal areas	2007-2010	• Real-time GIS based information
Develop and publish a State of Coast Report.	• State of the Coast Reports	2007-2010	• Number of provincial and national state of the coast reports
Develop a regional coastal management programme as required by the Abidjan and Nairobi Conventions.	• Regional coastal management programmes	2007-2010	• Regional management plan and co-ordination
<i>Monitoring, Control and Surveillance</i>			
Strengthening of compliance partnerships with communities, the fishing industry and other enforcement agencies	Co-ordinated MCS strategies in partnership with other role players	2007-2010	Number of MOUs and co-operation agreements

ACTION	OUTPUT	TIMEFRAME	SERVICE DELIVERY INDICATOR
MCS approach with South Africa's immediate coastal;	<ul style="list-style-type: none"> <li>Implementation of SADC agreements</li> </ul>	2007-2010	<ul style="list-style-type: none"> <li>SADC agreements and number of joint patrols</li> </ul>
MCS strategies and programmes specific to the hake and abalone fishery sectors	<ul style="list-style-type: none"> <li>Increased compliance in Hake and reduced poaching in abalone fisheries</li> </ul>	2007-2010	<ul style="list-style-type: none"> <li>Integrated Hake and Abalone MCS strategies</li> </ul>
Reduction of transgressions within Marine Protected Areas and Estuaries and by off-road vehicles	<ul style="list-style-type: none"> <li>MPA and Estuarine compliance strategies</li> </ul>	2007-2010	<ul style="list-style-type: none"> <li>Number of permits, exemptions and fines issues</li> </ul>
<b>Research, Antarctica and Islands</b>			
Provide logistical support for research on Antarctica and Marion Islands		Annual	<ul style="list-style-type: none"> <li>Number of voyages resulting in the successful transportation of equipment and personnel</li> </ul>
Produce annual reports on fisheries surveys and annual stock assessments	<ul style="list-style-type: none"> <li>Annual reports and assessments</li> </ul>	Annual	<ul style="list-style-type: none"> <li>Fishing quotas and conditions informed by reliable, up-to-date, scientifically based information</li> </ul>
<b>STRUCTURES, PROCEDURES AND MECHANISMS FOR COORDINATION AND COOPERATION</b>			
Coordinate the development of a national strategy for sustainable development	<ul style="list-style-type: none"> <li>NSSD launched and implemented</li> </ul>	2008 – 2010	<ul style="list-style-type: none"> <li>National Strategy for sustainable development document and implementation reports</li> </ul>
Promote the integration of environment objectives in national, provincial and local government planning processes	<ul style="list-style-type: none"> <li>Reviewed NSDP, PGDS and IDP's reflect environment objectives</li> </ul>	2007 – 2010	<ul style="list-style-type: none"> <li>Revised NSDP, PGDS and 6 Metro IDPs reflect environment objectives by 2007</li> <li>By 2010, 25 District IDPs reflect environment objectives</li> </ul>



### SECTION THREE: ENVIRONMENTAL IMPLEMENTATION PLAN (EIP)

#### 1. OVERVIEW OF SECTION

This section provides specific information for DEAT's Environmental Implementation Plan, including:

- Description of environmental impacting functions namely: Consumptive Use of Marine Living Resources; Mariculture; and Tourism.
- Key environmental policies and legislation associated with priority functions.
- Extent of compliance with environmental policies and legislation.
- Arrangements for cooperation with the environmental sector.
- Programmes and plans to ensure compliance.

#### 2. OVERVIEW OF CORE ENVIRONMENTAL IMPACTING FUNCTIONS

DEAT's priority functions that impact on the environment include those Marine and Coastal Management functions that are concerned with the management of the consumptive use of marine living resources including the allocation of fishing rights and resource development (marine aquaculture); and the Tourism functions.

FUNCTIONS WITH AN IMPACT ON THE ENVIRONMENT (EIP)	
Marine and Coastal Management	Tourism
<u>Consumptive Use of Marine Living Resources</u> <ul style="list-style-type: none"> <li>• Allocate fishing rights and promote transformation in the fishing industry</li> <li>• Administer the fisheries (by means of regulating the fleet and gear types; setting limits on seasons and areas; collecting the fisheries landing information; making decisions on allocation of resources)</li> </ul>	<ul style="list-style-type: none"> <li>• Support the transformation of the tourism industry, particularly in respect of providing opportunities for black business participation in the industry.</li> <li>• Facilitate the implementation of tourism investment programmes that supports the development of South Africa as a leading international tourism destination. Undertake focused research towards promoting tourism development and transformation.</li> <li>• Manage the tourist guide registration process, promotion and awareness of tourism, human resources development and quality assurance in the tourism sector.</li> </ul>
<u>Resource Development (Marine Aquaculture)</u> <ul style="list-style-type: none"> <li>• Marine Aquaculture research</li> <li>• Marine Aquaculture management</li> <li>• Allocation of marine aquaculture rights</li> </ul>	

#### 3. CONSUMPTIVE USE OF MARINE LIVING RESOURCES

##### 3.1 FUNCTIONS AND PRIORITY FOCUS AREAS

Chapter 3 of the Marine Living Resources Act, 1998 sets in place a variety of mechanisms and procedures to facilitate fisheries planning and management for the commercial, recreational and subsistence fishing sectors. The Act makes provision for the Minister to determine total allowable catch and total applied effort, to declare special management areas and to suspend fishing in the case of an emergency where stocks are endangered.

Functions include:

- Management of 26 fisheries industries; subsistence and small scale fisheries; and recreation fishing.
- Allocation of fishing rights and quotas for fisheries industries and subsistence and small-scale fisheries.
- Administration of permits for fisheries industries; subsistence and small scale fisheries; and recreational fishing.
- Licensing of fishing vessels.

### **3.2 POTENTIAL ENVIRONMENTAL IMPACTS OF PRIORITY PROGRAMMES**

- South African fisheries include damselfishery (dominated by deep-sea trawling for Cape hakes), pelagic fishery (anchovies, pilchards and herrings), rock lobster fishery, abalone fishery and line fishery. The productiveness of coastlines varies from a highly productive West Coast, in common with other marine ecosystems throughout the world, to the considerably less productive East Coast.
- The living marine resources of South Africa have been exploited for many centuries. Expansion of this activity is limited by natural productive capacity. It is therefore necessary to limit and control the total harvesting pressure according to what the resources can sustain on a long-term basis.

### **3.3 ENVIRONMENTAL POLICIES AND LEGISLATION APPLICABLE TO THE MARINE LIVING RESOURCES**

Priority functions are required to comply with environmental policies and laws in order to manage their environmental impacts. Relevant policy and legislation includes:

- Regulations in Terms of the Marine Living Resources Act 18 of 1998.
- The Marine Living Resources Act 18 of 1998.
- National Environmental Management Act, 1998.
- White Paper on a Marine Fisheries Policy for South Africa, 1997.

### **3.4 ACTIONS TO ENSURE COMPLIANCE WITH ENVIRONMENTAL POLICIES AND LAWS**

- The Chief Directorate Research, Antarctica and Islands makes scientific recommendations based on their research on Total Allowable Catch or Effort. This information is used by the Chief Directorate Consumptive Use of Marine Living Resources to make decisions on the allocation of fishing rights, quotas and permit conditions. Permits that are issued specify the quotas and conditions of use – collectively these quotas do not exceed the recommendations of Total Allowable Catch or Effort.
- The Chief Directorate Compliance Monitoring monitors compliance with permit conditions and fishing vessel licenses (need input from this section). Every fishing vessel has to report their catch to the Compliance Monitoring officers.
- The KZN Wildlife Society provides assistance in monitoring compliance with permit conditions for recreational fishing.