

SUMMARY OF

Key Legislation

Concerning Water/Catchment Management
and Protection





Preface and Acknowledgements

This booklet is part of a series to support a capacity-building initiative for Catchment Forums and Water Users Associations in the Olifants-Doorn Water Management Area (WMA). This initiative is a pilot, for possible implementation elsewhere in South Africa. The booklet is therefore designed to be used throughout the country.

WWF-SA initiated the project and produced the materials with partners including FETwater. The pilot programme is implemented by the Department of Water Affairs and Forestry (DWAF), Western Cape Region, with support from Danida.

For more information on the content and the capacity-building initiative, contact the office of the Olifants-Doorn WMA Manager in DWAF, Western Cape.

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Overview

Water- and catchment management in South Africa is guided by the South African Constitution (1996) and the following key acts:

* This is the most important Act that guides the management of the natural water resources for the benefit of South African citizens and the environment

** These Acts are concerned with the provision of sufficient, safe water for all human requirements

1. National Environmental Management Act (NEMA), No. 107 of 1998
2. National Environmental Management Amendment Act, No. 7 of 2003
3. National Environmental Management: Biodiversity Act, No. 10 of 2004
4. National Water Act, No. 36 of 1998*
5. Water Services Act, No. 108 of 1997** (and the Water Services Amendment Act, No 30 of 2004).

A further Act, specifically focussing on agricultural resources, including soil and water (particularly in wetlands), and on invasive plant species, is the:

6. Conservation of Agricultural Resources Act , No. 43 of 1983.

In addition there are a number of national policies and laws concerning the management of marine resources and the coastline, which impact on the management of estuaries. These include:

7. Marine Living Resources Act, No. 18 of 1998
8. National Environmental Management: Coastal Zone Bill.

Legislation is also in place to guide land-use planning and infrastructural and other development planning processes that impact on catchment management, including:

9. Local Government: Municipal Systems Act, No. 32 of 2000
10. Development Facilitation Act, No. 67 of 1995.

One further piece of legislation designed to control and limit the environmental (and other) impacts of mining, including in coastal areas and in the sea, is the:

11. Mineral and Petroleum Resources Development Act, No. 28 of 2002.

South African Constitution

“This Constitution is the supreme law of the Republic; law or conduct inconsistent with it is invalid, and the obligations imposed by it must be fulfilled” This means that all legislation must comply with the Articles of the Constitution. These are based on a number of founding values including: *human dignity, the achievement of equality and the advancement of human rights and freedoms.*

The **‘Bill of Rights’**, chapter 2 of the Constitution, identifies in detail the **rights** to which all citizens of South Africa are entitled, and these include (among many other rights):

An electronic version of the Bill of Rights is included on the CD.

Environment

Everyone has the right

- a.** *to an environment that is not harmful to their health or well-being; and*
- b.** *to have the environment protected, for the benefit of present and future generations, through reasonable legislative and other measures that*
 - i.** *prevent pollution and ecological degradation*
 - ii.** *promote conservation and*
 - iii.** *secure ecologically sustainable development and use of natural resources while promoting justifiable economic and social development.*

Health care, food, water and social security

- 1.** *Everyone has the right to have access to*
 - a.** *health care services, including reproductive health care*
 - b.** *sufficient food and water and*
 - c.** *social security, including, if they are unable to support themselves and their dependants, appropriate social assistance.*
- 2.** *The state must take reasonable legislative and other measures, within its available resources, to achieve the progressive realisation of each of these rights.*
- 3.** *No one may be refused emergency medical treatment.*

The Constitution is especially important for Water Law:

All Government Ministries are responsible for ensuring compliance of their legislation with the terms of the South African Constitution

In relation to the responsibility for management of the water resources and the provision:

- **National government** is the custodian of the resources of water, such as rivers, wetlands, estuaries, groundwater and dams; and
- **Local government** is in charge of municipal water services.

National Environment Management Act

This Act (NEMA, Act 107 of 1998) is the overarching environmental law for the country. It is designed to give effect to the right to the environmental rights in the Constitution. All other environmental laws, including the Biodiversity Act, the Air Quality Act and the National Water Act, are extensions of NEMA.

In NEMA *“The environment is defined as the natural environment and the physical chemical, aesthetic and cultural properties of it that influence human health and well-being.”*

NEMA itself is concerned with the **protection of all aspects of the natural environment** against threats such as damage to natural resources through poor development, pollution, bad management, or over-exploitation.

To do this NEMA created a set of **environmental principles** that show government how it should act. According to the *Users Guide to NEMA*:

For example it tells government what “sustainable development” means, and says that ... the public must be actively involved when decisions are made that affect the environment.

It helps protect the environment by making government look at all the effects (“environmental impacts”) that a development can have before it is allowed to go ahead. It protects workers who refuse to do work that might harm the environment, and people who blow the whistle (give information) about others who are harming the environment.

It also makes it easier for us to solve problems and disagreements (“conflict resolution” and “conciliation”). Finally it makes it less risky for you to go to court to protect your rights when other ways of solving problems have not worked.

An electric version of the Act is included on the CD.

In addition:

NEMA makes it easier for you to protect your environmental rights than in the past. Then you could only go to court if your own health or property was being harmed. NEMA says you can go to court even when your own health or property is not affected. It says you can take legal action to enforce an environmental law or a principle of NEMA

- *to protect your own interest*
- *to protect someone else's interests who for practical reasons is unable to do so*
- *on behalf of a group of persons whose interests are affected*
- *in the public interest*
- *in the interest of protecting the environment.*

Some of the key principles of particular importance to water and catchment management are as follows:

Some Key Principles from NEMA

- Environmental management must place people and their needs at the forefront of its concern, and serve their physical, psychological, developmental, cultural and social interests equitably.
- Development must be socially, environmentally and economically sustainable.
- Sustainable development requires the consideration of all relevant factors...including:
 - i. That the disturbance of ecosystems and loss of biological diversity are avoided, or, where they cannot be altogether avoided, are minimised and remedied:*
 - ii. that pollution and degradation of the environment are avoided, or, where they cannot be altogether avoided, are minimised and remedied;*
 - iii. that the use and exploitation of non-renewable natural resources is responsible and equitable, and takes into account the consequences of the depletion of the resource;*
 - iv. that the development, use and exploitation of renewable resources and the ecosystems of which they are part do not exceed the level beyond which their integrity is jeopardised.*
- Environmental management must be integrated; acknowledging that all elements of the environment are linked and interrelated, and it must take into account the effects of decisions on all aspects of the environment and all people in the environment by pursuing the selection of the best practicable environmental option.
- Equitable access to environmental resources, benefits and services to meet basic human needs and ensure human well-being must be pursued and special measures may be taken to ensure access thereto by categories of persons disadvantaged by unfair discrimination.
- The environment is held in public trust for the people. The beneficial use of environmental resources must serve the public interest and the environment must be protected as the people's common heritage.
- Sensitive, vulnerable, highly dynamic or stressed ecosystems, such as coastal shores, estuaries, wetlands, and similar systems require specific attention in management and planning procedures, especially where they are subject to significant human resource usage and development pressure.

Principle responsibility for implementation of the NEMA rests with the national Department of Environmental Affairs and Tourism (DEA&T).

New **Environmental Impact Assessment (EIA) regulations** were published in April 2006 under Chapter 5 of NEMA. The regulations came into effect in July 2006. Activities that require a **Basic Assessment** as well as the competent authorities are listed. These include activities such as dredging, excavation, infilling and removal of soil from an estuary.

Activities identified in terms of section 24 of NEMA that require **scoping and environmental impact assessment** (i.e. a full EIA) in terms of regulations 27 to 36 (South Africa, 2006c) are also identified in a further government notice . These include, for example, development activities which exceed 20 hectares, and construction or earth moving activities in the sea or within 100m inland of the high-water mark. The regulations are especially relevant to estuaries as they are under great development pressure along the South African coast.

National Environmental Management: Biodiversity Act

The basic **purpose** of this Act is to protect all of South Africa's biodiversity (except for the marine biodiversity which is now covered by the Marine Living Resources Act). This means that all land-based (terrestrial) and water-based (aquatic) life, both inside and outside protected areas, is covered by the Biodiversity Act.

Objectives of the Biodiversity Act (NEM: BA Act 10 of 2004)

The Objectives, as stated in the Act, are:

- a. within the framework of the National Environmental Management Act, to provide for -
 - i. *the management and conservation of biological diversity within the Republic and of the components of such biodiversity*
 - ii. *the use of indigenous biological resources in a sustainable manner and*
 - iii. *the fair and equitable sharing among stakeholders of benefits arising from bioprospecting involving indigenous biological resources;*
- b. to give effect to 'ratified international agreements relating to biodiversity which are binding on the Republic
- c. to provide for co-operative governance in biodiversity management and conservation and
- d. to provide for a South African National Biodiversity Institute to assist in achieving the objectives of this Act.

The Biodiversity Act **applies to** "human activity affecting South Africa's biological diversity and its components". As such it covers all activities associated with the use of all components of our river catchments, including wetlands, rivers/streams, estuaries and groundwater, and all biodiversity dependent on these systems.

In addition: “The **application** of this Act must be guided by the national environmental management **principles** set out in section 2 of the National Environmental Management Act”.

If terms of any conflict between the Biodiversity Act and other legislation the Act says:

In the event of any conflict between a section of this Act and -

- a.** other national legislation in force immediately prior to the date of commencement of this Act, the section of this Act prevails if the conflict specifically concerns the management of biodiversity or indigenous biological resources;
- b.** provincial legislation, the conflict must be resolved in terms of section 146 of the Constitution; and
- c.** a municipal by-law, the section of this Act prevails.

In **Chapter 2** the Act provides the legal framework for the establishment, powers and duties of the **South African National Biodiversity Institute** (SANBI), which is tasked with a wide range of activities to protect and manage the country’s biodiversity.

Chapter 3 of the Act is included to:

- a.** *provide for integrated and co-ordinated biodiversity planning;*
- b.** provide for monitoring the conservation status of various components of South Africa’s biodiversity; and
- c.** promote biodiversity research.

This includes the development of **bioregional plans**, and the development, coordination and monitoring of **biodiversity management plans**.

In **Chapter 4** the focus is on **Threatened or Protected Ecosystems and Species**, with the aim to:

- *provide for the protection of ecosystems that are threatened or in need of protection to ensure their survival in the wild*
- *provide for the protection of species that are threatened or in need of protection to ensure the maintenance of their ecological integrity*
- *give effect to the Republic's obligations under international agreements regulating international trade in specimens of endangered species*
- *ensure that the utilisation of biodiversity is managed in an ecological and sustainable way.*

Ecosystems Under Threat

Section 52(2) provides the following definitions concerning ecosystems under various degrees of threat:

- critically endangered ecosystems**, being ecosystems that have undergone severe degradation of ecological structure, function or composition as a result of human intervention and are subject to an extremely high risk of irreversible transformation;
- endangered ecosystems**, being ecosystems that have undergone degradation of ecological structure, function or composition as a result of human intervention, although they are not critically endangered ecosystems;
- vulnerable ecosystems**, being ecosystems that have a high risk of undergoing significant degradation of ecological structure, function or composition as a result of human intervention, although they are not critically endangered ecosystems or endangered ecosystems; and
- protected ecosystems**, being ecosystems that are of high conservation value or of high national or provincial importance, although they are not listed in terms of paragraphs (a), (b) or (c).

In terms of the Act:

ecosystem means a dynamic complex of animal, plant and micro-organism communities and their non-living environment interacting as a functional unit;

endangered ecosystem means any ecosystem listed as an endangered ecosystem in terms of section 52(2).

Rivers and catchments can be considered as ecosystems and many of them are likely to fall under this section of the Act.

Species Under Threat

Similarly the Act addresses **species** that are threatened or in need of protection:

- a. *critically endangered species***, being any indigenous species facing an extremely high risk of extinction in the wild in the immediate future;
- b. *endangered species***, being any indigenous species facing a high risk of extinction in the wild in the near future, although they are not a critically endangered species;
- c. *vulnerable species***, being any indigenous species facing an extremely high risk of extinction in the wild in the medium-term future, although they are not a critically endangered species or an endangered species; and
- d. *protected species***, being any species which are of such high conservation value or national importance that they require national protection, although they are not listed in terms of paragraph (a), (b) or (c).

There are a number of species associated with rivers and catchments that fall under this section. These include: indigenous fish; aquatic, riparian and wetland plants; and some wetland dependent birds.

Chapter 5 is particularly relevant to the situation affecting many rivers and catchments as it is concerned with **Species and Organisms Posing Potential Threats to Biodiversity**.

The purpose here is:

- to prevent the **unauthorized introduction** and spread of alien species and invasive species to ecosystems and habitats where they do not naturally occur;
- to **manage and control** alien species and invasive species to prevent or minimize harm to the environment and to biodiversity in particular;
- to **eradicate** alien species and invasive species from ecosystems and habitats where they may harm such ecosystems or habitats; and
- to ensure that environmental assessments for purposes of permits in terms of the Genetically Modified Organisms Act, 1997 (Act No. 15 of 1997), are conducted in appropriate cases in accordance with Chapter 5 of the National Environmental Management Act.

Rivers and catchments are particularly vulnerable to invasion by alien species, with many introduced fish species impacting on indigenous species, and a host of both terrestrial and aquatic plant species spreading rapidly through catchments.

The Act provides details of restricted activities connected with alien species, and the permit conditions associated with such activities (if they do not involve species identified as 'totally prohibited'). A national list of invasive plants was supposed to have been Gazetted within two years of the publication of the Act, but this is not yet available. Each Province is also tasked with producing lists for their province.

Section 75 of this Chapter concerns control of invasive species:

Control and Eradication of Listed Invasive Species

- 1. Control and eradication of a listed invasive species must be carried out by means of methods that are appropriate for the species concerned and the environment in which it occurs.*
- 2. Any action taken to control and eradicate a listed invasive species must be executed with caution and in a manner that may cause the least possible harm to biodiversity and damage to the environment.*
- 3. The methods employed to control and eradicate a listed invasive species must also be directed at the offspring, propagating material and re-growth of such invasive species in order to prevent such species from producing offspring, forming seed, regenerating or re-establishing itself in any manner.*
- 4. The Minister must ensure the coordination and implementation of programmes for the prevention, control or eradication of invasive species.*
- 5. The Minister may establish an entity consisting of public servants to coordinate and implement programmes for the prevention, control or eradication of invasive species.*

Section 76 then identifies particular responsibilities in relation to the control of invasive species:

Responsibilities for Control of Alien Species

1. The **management authority of a protected area** preparing a management plan for the area in terms of the Protected Areas Act must incorporate into the management plan an invasive species control and eradication strategy.
2.
 - a. **All organs of state in all spheres of government** must prepare an invasive species monitoring, control and eradication plan for land under their control, as part of their environmental plans in accordance with section 11 of the National Environmental Management Act.
 - b. The invasive species monitoring, control and eradication plans of **municipalities** must be part of their integrated development plans.
3. The Minister may request the **Institute (SANBI) to assist municipalities** in performing their duties in terms of subsection (2).
4. An invasive species monitoring, control and eradication plan must include-
 - a. a detailed list and description of any listed invasive species occurring on the relevant land
 - b. a description of the parts of that land that are infested with such listed invasive species
 - c. an assessment of the extent of such infestation
 - d. a status report on the efficacy of previous control and eradication measures
 - e. the current measures to monitor, control and eradicate such invasive species
 - f. measurable indicators of progress and success, and indications of when the control plan is to be completed.

Principle responsibility for implementation of the NEM:BA rests with the national Department of Environmental Affairs and Tourism (DEA&T)

Further chapters in the Act cover issues such as Genetically Modified Organisms (GMOs), Bioprospecting (collection for commercial purposes of indigenous biological resources), and the permits and permitting processes required for certain activities.

The National Water Act

The National Water Act (NWA, No. 36 of 1998) is the most important Act in terms of the protection and management of South Africa's water resources.

Fortunately the Department of Water Affairs and Forestry (DWAF) have produced a very user-friendly *Guide to the National Water Act* from which most of the information here has been taken. The *Guide* is intended for:

- water users,
- anyone who wants to know more about water management, and
- anyone who wants to get involved in water management.

Although it does not cover every aspect of the Act it does explain how the Act ensures that:

- everyone has access to sufficient water,
- the water resource is protected, used, developed, conserved, managed and controlled,
- proper planning takes place to implement the objectives of the National Water Act,
- the costs of managing and developing water resources are addressed, and
- water resource management institutions are established.

Mr Ronnie Kasrils, the former minister of Water Affairs and Forestry says in his preface:

The National Water Act, provides the legal framework for the effective and sustainable management of our water resources ... Central to the National Water Act is a recognition that water is a scarce and precious resource that belongs to all the people of South Africa. It also recognises that the ultimate goal of water resource management is to achieve the sustainable use of water for the benefit of all South Africans. The Act aims to protect, use, develop, conserve, manage and control water resources as a whole, promoting the integrated management of water resources with the participation of all stakeholders.

What are water resources?

A water resource includes a watercourse, surface water, estuary and aquifer. A watercourse is defined as a river or spring, a natural channel in which water flows regularly or intermittently, a wetland, lake or dam into which, or from which, water flows; and any collection of water which the Minister may, by notice in the Gazette, declare to be a watercourse, and a reference to a watercourse includes, where relevant, its bed and banks.

Why is the National Water Act important?

The National Water Act is important because it will put in place those things contained in the South African Constitution that are about water.

Water is fundamental for all life. Without water no person, plant, animal or living organism can survive.

It waters the fields of farmers; it waters the crops and stock of rural communities; it provides recreation, it supports the environment, it supports towns and cities, mines, industry, and power generation. People need water for drinking, growing and cooking food, washing, and for health. Water is a critical part of social and economic development to alleviate poverty.

South Africa is a dry country, with a low average rainfall. Our rivers are small in comparison with other countries. A number of our larger rivers are shared with other countries. Many of our existing water resources have been over-used or significantly altered. Every day people and organisations have an impact on the quality of our rivers and streams, our groundwater, and wetlands.

Many areas in the country are facing water shortages, where the requirements for water are greater than the available water. In these areas the environment is under stress and some people do not have access to potable (drinkable) water or do not get their fair share of water.

The National Water Act is important because it provides a framework to protect **water resources** against over exploitation and to ensure that there is water for social and economic development and water for the future. It is also important because it recognises that water belongs to the whole nation for the benefit of *all* people.

The difference between the National Water Act and the Water Services Act is clearly explained:

Water resources

National responsibility
NATIONAL WATER ACT
 (36 of 1998)

The National Water Act deals with the **water resource**, that is rivers, streams, dams, and groundwater. It contains rules about the way that the **water resource** (surface and groundwater) is protected, used, developed, conserved, managed and controlled in an integrated manner.

Water services

Local responsibility
WATER SERVICES ACT
 (108 of 1997)

The Water Services Act deals mainly with **water services** or potable (drinkable) water and sanitation services supplied by municipalities to households and other municipal water users. It contains rules about how municipalities should provide water supply and sanitation services.

The National Water Act is founded on Four Key Ideas:***Water belongs to all people***

The NWA was published in 1998. It manages, protects and allocates water differently. It recognises that water is a natural resource that belongs to all people in South Africa. Based on this principle it recognises the need for a more equitable (fair and equal) distribution of water. The only right to water is water for basic human needs (such as water for drinking, for food preparation and for personal hygiene) and water for the environment. The Act ensures that water for basic human needs and the environment is 'reserved' (set aside) before water is allocated for other uses.

Participation

The NWA says that people must participate in water resource management. It promotes the management of water resources at the lowest possible level. It does this through the establishment of new regional and local institutions, such as Catchment Management Agencies. These new institutions will be representative of and facilitate the involvement of communities and other stakeholders in decision making. This approach is in line with international trends towards Integrated Water Resource Management.

Water resources protected and managed as a whole

The NWA aims to protect, use, develop, conserve, manage and control water resources as a whole. Rivers, dams, wetlands, the surrounding land, groundwater, as well as human activities that influence them, will be managed as one cycle. This means that all water in the water cycle will be treated as part of the common resource.

Sustainable use for the benefit of all

The NWA does away with old apartheid ideals of privileged access. It promotes water use that is in the public interest and beneficial for the achievement of equitable and sustainable economic and social development. The NWA is a fundamental change in how water resources will be managed and accessed.

Three Key Principles:

Principles of the National Water Act

Sustainability, equity and efficiency are the principles that guide the protection, use, development, conservation, management and control of water resources.

- **Sustainability** means promoting social and economic development and at the same time ensuring that the environment is protected both now and for the future. The environment needs to be protected because it is where water comes from. If there is a good balance between using and protecting water resources then current and future water needs can be met.
- **Equity** means that everyone must have access to water and to the benefits of using water. Decisions to allocate water must be equitable (fair) to all people.
- **Efficiency** means that water should not be wasted. Water must be used to the best possible social and economic advantage.

Sustainability, equity and efficiency recognise:

- the basic human needs of present and future generations
- the need to redress (correct) past discrimination
- the need to protect water resources
- the need to share water resources with other countries
- the need to promote social and economic development through the use of water
- the need to establish representative water management institutions and
- the need to ensure participation of stakeholders and users in decisions that affect them.

Chapter 1 of the NWA concludes with identifying:

Responsibility

The Act makes it clear that the National Government, acting through the Minister of Water Affairs and Forestry is the **public trustee** of the nation's water resources.

This means that the Minister has **authority over water throughout the country**. Water is a natural resource that belongs to all people. As the public trustee of the nation's water resources, the Minister is responsible for public interest and must ensure that all water everywhere in the country is managed for the benefit of all people, including future generations.

DWAF, acting through the Minister, has the power to regulate the use, flow and control of all water in South Africa.

The Act describes the ways in which the government intends to fulfill its responsibilities.

Chapter 2 of the NWA: Key Approach

Chapter 2 of the Act explains that the key approach is through the development of a number of **water management strategies**.

The first of these is a **National Water Resource Strategy**, which needs to ensure that there will be water for basic human needs, and for socio-economic development both now and in the future. Consultation and participation by stakeholders is critical to achieve these goals.

National Water Resource Strategy

The National Water Resource Strategy must:

- Set out strategies, objectives, plans, guidelines and procedures for the overall management of the national water resource
- Determine how much water must be 'reserved' for basic human needs and for the environment (called the Reserve)
- Provide for international obligations (water resources shared with neighbouring countries through international agreements)
- Provide for future water needs
- Provide for water for strategic use (for example national power generation)
- Determine Water Management Areas
- Determine how much water is available in each Water Management Area
- Provide for transfer of water from Water Management Areas that have surpluses to water management areas that are short of water
- Set principles for water conservation and water use
- Set targets for water quality for different water resources
- Provide for the establishment of water resource management institutions (for example Catchment Management Agencies) and the inter-relationships between these institutions (co-operative governance).

The Act and the Strategy recognise the need to manage water resources in an **integrated** way, and links this to the hydrological cycle. This approach is called **Integrated Water Resource Management (IWRM)**. (See side column.)

The National Water Resource Strategy has divided the country into 19 **Water Management Area (WMAs)**. For each of these WMAs a **Catchment Management Strategy (CMS)** is to be developed. These Strategies are to be developed by **Catchment Management Agencies (CMAs)**. The Catchment Management Strategy must include various sub-strategies including a sub-strategy for the protection of water resources, which addresses the need to conserve freshwater biodiversity. The Water Research Commission has

What is Integrated Water Resource Management?

Integrated Water Resource Management is a process for co-ordinated planning and management of water, land and environmental resources. It takes into account the quantity of available water (surface and groundwater), water use, water quality, environmental and social issues as an integrated (combined) whole to ensure sustainable, equitable and efficient use.

Integrated water resource management is also about providing sufficient information about water resources for proper planning and informed decision-making between water resources managers and development planners. It requires cooperation and coordination between planners, institutions and individuals where water-related planning takes place. A further key aspect of Integrated Water Resource Management is participation of people in decision-making where decisions are decentralised.

published a document summarising the biodiversity conservation policy objectives (WRC, June 2006).

However, it will take some time before all 19 CMAs are established. While there is no CMA established in a Water Management Area, the **Minister through DWAF acts as the CMA.**

The purpose of the Catchment Management Strategy is to:

- set principles for allocating water to existing and new water users
- provide the framework for managing water resources within the Water Management Area, and
- ensure that water resources in the Water Management Area are protected, used, developed, conserved, managed and controlled.

Catchment Management Strategy

The Catchment Management Strategy must:

- Take into account the classification of water resources and water resource quality objectives and the requirements of the Reserve and international obligations (see the booklet: *Catchments, Sustainability and The Reserve* in this series)
- Set out strategies, objectives, plans, guidelines and procedures for the overall management of water resources within the WMA
- Contain a **water allocation plan** according to a set of principles
- Take into account national and regional plans (prepared under any other law) including the water services development plans (WSDPs) of municipalities
- Enable public participation in managing the water resources in the WMA
- Take into account the needs and expectations of current users and potential users.

Chapter 3: Protecting Water Resources

Government is faced with the challenge of **protecting** water resources to ensure ecologically sustainable utilisation for social and economic development.

The National Water Act provides **decision-making tools** to achieve the sustainable utilisation of water resources. South Africa is one of the first countries in the world to include the need for Environmental Water Requirements in the national legislation.

The aim of protecting water resources is to ensure that water is available for current and future human use. This is achieved by leaving enough water of

a certain quality in the water resources to maintain the overall ecological functioning of the rivers, wetlands, groundwater and estuaries. Protection of the water resource is about the **quantity** and **quality**, biota and habitats (overall health) of the nation's water resources.

To achieve the objectives of the Act and the required protection, DWAF has developed a Resource Directed Measures strategy, which includes the following:

- To establish a **classification system** and **classify** water resources
- To set the **Reserves**, and
- To determine **Resource Quality Objectives**.

A System for Classifying Water Resources

The water resource classification system provides the guidelines and procedures for classifying water resources into different classes.

Each Class in the classification system needs to state what kinds of impacts on the water resource are acceptable and what kinds of impacts are not acceptable in order to protect the resource. The Class also needs to state how much water can be used from the water resource.

Each Class represents:

- A different **level of protection** that is required for the water resource, and
- The **extent to which the water can be used**.

Classification is used in two ways:

- To define the **present** status of the water resource
- To define the state towards which the water resource needs to be managed to achieve sustainability (future state).

Determining the Class for each Water Resource

This step involves determining the Class of each significant water resource in the country, for example a river.

- What is the present state of the river?
- What are the future options for utilisation of the river?
- What are the social and economic implications of different options of utilisation?

Stakeholder participation and consultation is very important when determining the class for a water resource.

Water users should help decide what they would like their water resources to look like in the future, and they should understand the implications for them.

Determining Resource Quality Objectives

Targets or objectives are set for each water resource in terms of the level of protection the water resource requires.

These objectives provide statements about:

- what the quantity of the water should be (water level, pattern, timing)
- what the water quality should be (physical, chemical and biological)
- what the condition of the instream and riparian (river bank) habitat should be
- what the condition of the aquatic (water) animal and plant life should be.

These objectives are known as the Resource Quality Objectives. The Resource Quality Objectives are a statement about how the water resource should be.

Setting the Reserve

The Reserve is the only right to water in the National Water Act. It therefore has priority over all other water use. In other words the quantity and quality of water required for the Reserve must be met before water resources can be allocated to other water users.

The Reserve comprises two parts:

- **Basic Human Needs Reserve**

The National Water Act ensures that everyone has access to sufficient water by setting aside a certain quantity of water to meet everyone's basic needs. This quantity of water set aside for basic human needs is called the Basic Human Needs Reserve.

- **Ecological Reserve**

In order to ensure that there is sufficient water of an acceptable quality in the resource, the NWA makes provision for the Ecological Reserve. The Ecological Reserve is the water that is necessary to protect the water ecosystems of the water resource. It must be safeguarded and not used for other purposes. The Ecological Reserve specifies both the quantity and quality of water that must be left in the national water resource.

The Ecological Reserve must be determined and considered before water use can be licenced.

The Minister of Water Affairs and Forestry must set the Reserve. The Reserve is determined for *every significant water resource or part thereof*. In other words, the Minister must set the quantity of water and quality of water that must remain in the water resource for basic human needs and for ecological needs.

Chapter 3 of the Act also deals with other issues affecting the water resource:

Pollution – where a water resource may become polluted or has become polluted because of activities on land. The Act states that the person who owns, controls, occupies or uses the land is responsible for preventing pollution of water resources and is also responsible to remedy (correct) the effects of the pollution. If the person responsible does not take measures to prevent pollution, the CMA (or the Minister if there is no CMA in place) may take steps to prevent pollution or to address the effects of pollution. The person or persons responsible for the pollution is also responsible for paying the costs to address the effects of the pollution.

Emergency incidents – This refers to water resources being polluted as a result of an emergency incident. For example, an accident where a harmful substance finds its way into the water resource is an emergency incident. The person who is responsible for the incident or accident is also responsible for addressing the effects of the pollution. If that person does not address the problem, the relevant CMA may take the necessary steps to correct the problem and may recover the costs from the responsible person or persons.

Chapter 3: Water Use, Regulation and Allocation

Water Use

Priorities for Water Use:

1. The Reserve (Basic Human Needs and Ecological Reserve)
2. Water to meet international rights and obligations
3. Water use of strategic importance (i.e electricity generation)
4. Water transfers between Water Management Areas
5. A contingency to meet projected future water needs
These are all National responsibilities.
6. All other uses
These are the responsibility of the CMAs.

What does water use mean?

Water use means any one of the following:

- taking water from a water resource (abstraction)
- storing water
- activities which reduce stream flow (for example, commercial forestry)
- discharging waste or water containing waste into a water resource
- controlled activities (activities which impact detrimentally on a water resource, for example irrigating land with water containing waste, or power generation activities which alter the flow of a water resource)
- changing the physical structure of rivers and streams (altering a watercourse, obstructing or diverting the flow of water in a watercourse – weirs, bridges etc.)
- removing underground water
- using water for recreational purposes (including fishing and boating).

Water use refers to doing something that has an impact on the water resource, including:

- a. the quantity of water in the resource
- b. the quality of water in the resource
- c. the environment surrounding the resource.

How Is Use Of Water Controlled?

Water use is controlled through **regulating** the way water can be used. The National Water Act regulates water use through **registration** of water use and through different types of **authorisations**.

Registration of Water Use

In order to control water use, DWAF needs to know what water use is taking place and how much water is being used from the different water resources. To find out this information, existing lawful water users are required to register their water use if they are taking and storing water, or if they cause streamflow reduction (commercial forestry).

Different Types of Water Use Authorisations

The different types of authorisations determine those water use activities which require a licence and those activities which do not require a licence. The authorization depends on the level of risk to the water resource.

DWAF may check that the existing use is legal and may check the quantity of the use. This is called **verification**. Water users who do not register their water use risk losing their existing water entitlements.

There are three types of water use authorizations:

- Small quantity of water – **schedule 1** (minimal or no risk) – no registration
- Limited water use – **general authorisations** (low risk) – registration required in most cases
- Greater water use – **water use licences** (high risk) – must register.

Some Exceptions

Continuation of existing lawful use –

If a person was already using water legally before the National Water Act came into operation then that person may register that use and continue using the water without having to apply for a licence. This is a transitional measure that the NWA allows so that existing lawful water users can continue using water under the same conditions until the water use is formally licensed.

General Authorisations –

General permission has been granted by the Minister for certain larger uses from certain less-stressed sources. This permission has been given by means of **General Authorisations** published in the *Government Gazette*. These authorisations allow a user to use water without a licence provided that the water use is within the conditions of the General Authorisation. Examples of General Authorisations include storing a limited volume of water in a dam, or abstracting a limited quantity of water from certain rivers, or from ground water sources (boreholes). A General Authorisation is only applicable to specific rivers or catchments and is not applicable to the whole country.

What is compulsory licencing?

At some stage the Minister may publish notices in the *Government Gazette* requiring **all** existing and potential water users, except for Schedule 1 users and users under General Authorisations, to apply for licences. This is called **compulsory licencing**.

Compulsory licencing may eventually be used everywhere to licence water use, but the priority areas for compulsory licencing will be areas of water shortages (where current or future demand exceeds supply) or where pollution is severe (stressed catchments).

The compulsory licencing process may also be used where it is required to assist historically excluded people to gain access to the resource as well as to:

- achieve a fair allocation of water from stressed water resources,
- improve the efficient use of water in the public interest,
- ensure efficient management of the water resource, and
- to protect water quality.

The Act describes in detail how licence applications are **evaluated**, and the **conditions** that can be attached to licences.

Water Use which does not Require a Licence

Water use with small impact on the water resource (Schedule 1 of the Act)

Schedule 1 of the NWA outlines **permissible use of water** where a licence is not required. The types of activities outlined in Schedule 1 are activities that have a **very small impact on the water resource**.

These activities include:

- taking water directly from any water resource for domestic use in your household if you have lawful access to that water,
- storing and using run-off water from a roof,
- small gardening that is not for commercial use,
- watering animals for subsistence use,
- using the water surface or surrounding land for recreational use (for example boating), and
- using water for emergencies, for example, for human consumption or firefighting.

Water Use which Requires a Licence

A user must apply for a **licence** for any **new water use** that is not listed in Schedule 1 or that is not covered by a general authorisation. Water licences are therefore used to control water use that exceeds the limits outlined in Schedule 1 and allowed for under General Authorisations.

Water use licences give existing or new water users formal authorisation to use water for productive and beneficial purposes, and specify the conditions under which the water can be used. Only a **responsible authority** can issue a licence to use water.

A responsible authority may be the Department of Water Affairs and Forestry or a CMA.

Currently potential users must:

- **apply** to the appropriate Regional Office of the DWAF **for a licence**; or
- **register** their water use with the Regional Office, if use is allowed under a general authorisation.

In future some of these functions will be delegated to CMAs.

Chapter 4 closes with a section of the **Regulations** developed to **implement** the Act.

Regulations on Water Use

The NWA provides the broad legal framework for water resource management. The requirements of the Act have to be implemented. Details about implementation are outlined in regulations that are issued by DWAF and published in the *Government Gazette*.

There are two sets of regulations on water use thus far:

- *Government Notice No. 704, 4 June 1999, National Water Act, 1998 (No. 36 of 1998): Regulations on the use of water for mining and related activities aimed at the protection of water resources.*
- *Government Notice No. 1352, 12 November 1999, National Water Act, 1998 (No. 36 of 1998): Regulations requiring that a water use be registered.*

Other regulations that are in preparation, or are being considered in the near future will deal with:

- limiting or restricting water use that impedes or diverts the flow of water in a watercourse; or alters a watercourse (bed, banks, etc. of the watercourse); and using water for recreational purposes,
- management practices for waste treatment,
- transactions in respect of authorisations to use water (trade), and
- financial support to promote water use by historically disadvantaged groups.

The NWA provides for the Minister to make regulations on a wide range of water use issues.

Chapter 5: Paying For Water

Chapter 5 is concerned with **paying for water**. Charges for water use are to be determined through a **Pricing Strategy**.

What is the Pricing Strategy?

The Pricing Strategy is established by a notice in the **Government Gazette**. It is the overall strategy to set water use charges to fund the following:

- water resource **management**, which is all the activities to monitor, allocate, control, protect and conserve water resources,
- water resource **development**, which is all the activities and associated costs to plan, design, construct, operate and maintain water works, and
- **use of water works**, which is the costs of distributing water.

In addition, charges can be set for:

- the achievement of **equitable and efficient allocation** of water.

The Pricing Strategy addresses the following:

- the way in which different water management areas, water use and water users are categorised to **ensure equity**,
- **charges** to be paid by water management institutions and consumers (and the basis for these charges),
- provision for **rebates** (partial refunds) when water is returned to the water resource,
- provision for some **charges to be waived** for specific users on an equitable basis (i.e. not having to pay certain charges),
- ways to **promote efficient and beneficial use** of water,
- ways to **minimise harmful impacts** on water resources,
- ways to **prevent wastage** of water, and
- ways to **support municipalities** who are water services authorities to establish **tariffs** for water services provision.

The Pricing Strategy applies only to:

- the use of raw (untreated) water/the use of a water resource, and
- charges that are set by DWAF and other water management institutions established in terms of the Act (for example CMAs).

An important aspect of water use is how the 'use' is differentiated and how 'water users' are differentiated:

How is water use differentiated?

Water use is differentiated based on the following:

- how it is taken from the resource,
- how it is supplied,
- how it is discharged or disposed of,
- the reliability of the supply that is being used,
- the quality of the water,
- the impact of returned water on the resource, and
- the water resource that is being utilised.

How are water users differentiated?

Water users are differentiated based on the following:

- the quantity of water that the user is using,
- the quantity of water that the user is returning to the resource, and
- the economic circumstances of the user.

Objectives of the Pricing Strategy

The following objectives were used to formulate the new pricing strategy:

- social equity,
- ecological sustainability,
- financial sustainability, and
- economic efficiency.

Types of Water Charges

Four types of Water Charges are included in the Strategy:

- water resource management charge,
- water resource development charge,
- charge for achieving efficient allocation of water (economic charge), and
- charge for discharging water containing waste.

Chapter 6: Powers of National government

Chapter 6 concerns the **powers of national government**.

It describes the powers and duties of the **Minister** as:

- the power to delegate,
- the power to expropriate (purchase) property,
- requirements that need to be met when making regulations,
- fulfilling the functions of a Catchment Management Agency where no CMA has been established, and
- assigning powers and duties to CMAS.

DWAF administers the Act on behalf of the Minister.

Chapter 7: Catchment Management Agencies

Chapter 7 describes the purpose and functions of **Catchment Management Agencies (CMAs)**:

What is the Purpose of a CMA?

The primary purpose of establishing a CMA is to involve local communities in water resource management. This is in line with the international trend to give effect to principles of participation to achieve Integrated Water Resource Management. A CMA manages water resources within its defined Water Management Area according to its Catchment Management Strategy.

Public participation in water resource management is one of the basic principles of catchment management. Catchment Management Agencies must ensure that all interested and affected stakeholders including poor communities that have been disadvantaged and marginalised are able to participate in the consultation processes and decisions of the CMA.

CMAs are covered in more depth in the DWAF publication on Water Management Institutions.

What are the Functions of a CMA?

When a CMA is established it has the following functions, which are called 'initial functions':

- To investigate and advise on the protection, use, development, conservation, management and control of the water resources in its Water Management Area (WMA)
- To develop a Catchment Management Strategy for its WMA
- To co-ordinate the activities of water users and water management institutions within its WMA
- To promote coordination between implementation of its Catchment Management Strategy and implementation of water services development plans by water services authorities (municipalities)
- To promote community participation in the protection, use, development, conservation, management and control of the water resources in its WMA.

Additional functions that can be delegated or assigned to a CMA are:

- General management of water resources in the WMA;
- Acting as the 'responsible authority' relating to water use and allocation of water
- Other powers and duties that the Minister can delegate (but not assign).

Chapter 8: Water Users Associations

Chapter 8 deals with the purpose and functions of **Water Users Associations (WUAs)**:

WUAs are covered in more depth in the DWAF publication on Water Management Institutions.

What is the Purpose of a WUA?

The purpose of a WUA is to enable water users to cooperate and pool their resources (financial, human resources and expertise) to more effectively carry out water-related activities. WUAs have an important role to play in respect of poverty eradication, providing food security and promoting the re-allocation of water.

Most WUAs are former irrigation boards and focus on irrigation. WUAs may also be established:

- For stream flow reduction activities such as afforestation
- For the treatment and disposal of effluent and waste
- To control the use of water for recreational and/or environmental purposes.

What are the functions of a WUA?

The functions of a WUA depend on its approved constitution and the purpose for which it was established.

The constitution of a WUA could provide for the following functions to be performed by the WUA:

- To prevent water from any water resource or waterwork being wasted
- To protect water resources and waterworks
- To prevent any unlawful water use or acts that negatively impact on the water resource
- To generally supervise the water resources and waterworks
- To regulate the flow of any watercourse
- To investigate water quality and water use
- To construct and operate and maintain waterworks for draining land or supplying water.

Remaining Chapters of the NWA

Chapter 9 describes the role of Advisory Committees:

The Act empowers the Minister to establish advisory committees. These committees can be established for different purposes and with different functions. Although these committees are primarily advisory in nature, the Minister may delegate certain powers to advisory committees.

Advisory committees are responsible to the Minister. The Minister may make regulations concerning advisory committees in terms of the following:

- the committee's terms of reference,
- membership,
- powers,
- duties, and
- operation.

The Act obliges the Minister to establish an advisory committee to make recommendations on the composition of the Governing Board of a Catchment Management Agency.

Chapter 10 deals with International Water Management:

The National Water Act provides for the establishment of bodies to implement international agreements for the management and development of water resources that are shared with neighbouring countries.

The governance, powers and duties of these bodies is determined by the Minister in accordance with the relevant international agreements. The Minister must consult Cabinet when establishing institutions to implement international agreements.

Chapter 11 explains about Government Waterworks (Infrastructure):

The National Water Act allows Government to build, own or even buy dams and other waterworks (infrastructure), if it is in the public interest.

Government can allocate water from its own dams and waterworks in the same way that it allocates water from the resource. Government can also let people use the water surface or the land around the waterworks for recreational and other uses.

Government recovers some or all of the cost of its waterworks by charging people for the use of water from the water works. It sets the price for water use (water charge) in accordance with a National Pricing Strategy (see above).

Chapter 12 addresses the issue of the Safety of Dams:

The National Water Act contains a range of control measures to improve the safety of new and existing dams that have a safety risk.

Large dams can pose a serious risk for people and the environment. Dams that are not properly designed or which are allowed to deteriorate through improper maintenance are a particular hazard.

A dam failure can suddenly release a flood of water with the possibility of causing loss of life and property. The failure of even a small farm dam could release silt and cause damage to the environment.

The NWA puts certain measures in place to ensure that the risk of a major dam failure is minimised. A dam with a safety risk generally means a dam which stores more than 50 000 cubic metres of water and which has a wall higher than 5 metres.

No person may build a dam that poses a safety risk without a licence.

The NWA ensures that only appropriately qualified people (**approved professional persons**) are allowed to design and inspect dams that pose a safety risk.

The Act classifies dams with a safety risk and also sets out the responsibilities of these approved professional persons.

The Act requires that regular safety evaluations are undertaken of every dam that poses a safety risk.

Chapter 13 is concerned with Access to and Rights over Land, including Entry and Inspection and Servitudes.

Chapter 14 covers Monitoring, Assessment and Information:

Monitoring is regular checking of the water quality and flow in a river, dam, wetland or underground resource. Monitoring information feeds into the information system.

Information systems are used to store information on water resources, so that it can be easily used and understood by water managers and decision-makers.

Although the Department has always monitored water resources, the National Water Act formally requires the establishment of national monitoring and information systems, for all aspects of water resources.

The monitoring systems must provide for the collection of data and information so that the following can be assessed:

- water quantity,
- water quality,

- the use of water,
- rehabilitation of water resources,
- compliance with Water Resource Quality Objectives,
- the health of aquatic ecosystems, and
- atmospheric conditions which may influence water resources.

The Constitution guarantees that everyone has the right of access to any information held by the State and that national legislation must give effect to that right.

The NWA accordingly requires the Minister to establish national information systems for water resources information as soon as possible. These national information systems should contain information on:

- hydrology (rainfall and flow in rivers),
- water quality,
- groundwater, and
- water use licences and other water use authorisations.

The information systems will be used to provide data and information for a number of purposes including developing and implementing the National Water Resource Strategy and Catchment Management Strategies, for other planning, for managing disasters, and for public safety.

Chapter 15 deals with Appeals and Dispute Resolution and introduces Water Tribunals:

The NWA provides for the establishment of a Water Tribunal to hear appeals against certain decisions or directives given by responsible authorities or water management institutions, such as Catchment Management Agencies.

The Water Tribunal is not a water management institution in terms of the Act. It is an independent body. A water user may appeal to the Water Tribunal against a number of different types of decisions made by water management institutions, including decisions relating to:

- claims for costs,
- water allocation schedules,
- decisions relating to licence applications and licence conditions,
- verification of existing lawful use, and
- compensation.

Chapter 16 is concerned with Offences and Remedies:

The National Water Act lists all the things that are offences under the Act as well as the associated penalties.

Offences

Offences include both acts (activities) and omissions.

- An act which is an offence is any activity that is not permitted in terms of the Act, for example unlawfully tampering with a waterwork, or unlawfully polluting a water resource.
- An omission is a failure to do something that is required by the Act, for example failing to register an existing lawful water use, or failing to comply with the conditions that apply to the permitted water use.

Any person who contravenes (does not comply with) the Act is guilty of an offence and can be prosecuted in a court of law.

Remedies

The NWA also gives the courts and water management institutions certain powers to remedy problems when a person has been prosecuted for an offence, for example the power to remove the cause of a stream flow impedence (i.e. an in-stream dam).

Compensation for damages

If a person suffers harm or loss because of the offences (wrongful acts or omissions) of another person, the Act allows the courts to determine the damages caused and to compensate the person who has suffered the damages.

Compensation can be made in a number of different ways; it can be in the form of:

- a payment for loss or harm suffered,
- the accused (person who committed the offence) having to pay for the costs of fixing the damage caused, and
- the accused or relevant water management institution having to fix the damage caused.

Principle responsibility for implementation of the NWA rests with the National Department of Water Affairs and Forestry (DWAF)

Chapter 17 (the final chapter in the Act) covers **General and Transitional Provisions, including Liabilities and Powers and Authorisation.**

Water Services Act – WSA (No. 108 of 1997) and Water Services Amendment Act (No. 30 of 2004)

The key focus of these Acts is to develop a regulatory framework within which water services can be provided and to establish Water Service Institutions and define their roles and responsibilities. Water quality impacts on a water resource, for example as a result of such services, are still regulated under the National Water Act.

According to the DWAF publication: '*Water and Sanitation Business; The Roles and Responsibilities of Local Government and Related Institutions*' (from which most of this section is drawn) the **Water Services Act** has the following key features:

Purpose

Legislates the municipal function of providing water supply and sanitation services.

Overall Objective

To assist municipalities to undertake their role as water services authorities, and to look after the interests of consumers. It is also to clarify the role of other water services institutions, especially water services providers and water boards.

Mandate

Gets its mandate from (amongst others) Section 27 of the Bill of Rights in the Constitution...*everyone has the right to have access to sufficient food and water...*

This publication is not available in electronic format, but hard (paper) copies are available from DWAF

Main Objectives

To provide for:

- the right of access to **basic water supply and basic sanitation**
- the setting of national standards and norms and standards for **tariffs**
- the preparation of **water services development plans**
- a **regulatory framework** for water service institutions
- the establishment of **water boards and water services committees**
- the **monitoring** of water supply and sanitation services
- intervention by the Minister or the relevant Province
- **financial assistance** to water services institutions
- a national **information system**
- the **accountability** of water services providers and
- the promotion of effective water resource management and conservation.

It is in the last of these objectives where the Water Services Act links most closely with the National Water Act.

Water Services Institutions

Water Services Authority – Can only be a **municipality**

May carry out the services of a water services provider or may enter into a contract (service delivery agreement) with another water services provider.

Water Services Provider – Can be a **municipality, water board, NGO, CBO,** or a **private sector company**

Physically provides the water supply and sanitation services to consumers under contract to the water services authority.

Water Board – established by the Minister of Water Affairs and Forestry
Primary function is to provide water services to other water services institutions. It is a public water services provider.

Principle responsibility for implementation of the WSA rests with the National Department of Water Affairs and Forestry together with the National Department of Provincial and Local Government (DPLG).

Conservation of Agricultural Resources Act

The Conservation of Agricultural Resources Act (CARA, Act No. 43 of 1983) governs the sustainable utilisation of South Africa's agricultural resources and promotes the conservation of soil, water resources and local vegetation (as opposed to invasive alien vegetation). The introduction to the Act states that it is:

...to provide for control over the utilization of the natural agricultural resources of the Republic in order to promote the conservation of the soil, the water sources and the vegetation and the combating of weeds and invader plants...

Of particular relevance to catchment management are the sections dealing with soil erosion, protection of wetlands, and 'weeds' and alien invasive plants.

Specifically, CARA defines 'soil conservation work' as any work which is constructed on land for:

- the prevention of erosion or the conservation of land which is subject to erosion,
- the conservation or improvement of the vegetation or the surface of the soil,
- the drainage of superfluous surface or subterranean water, and
- the conservation or reclamation of any water source; or the prevention of the silting of dams and the pollution of water.

CARA also affords some protection to riparian vegetation as it states that permission is required from the Department of Agriculture for the removal of river bank vegetation and disturbance of the river bank itself (for all river crossings). All disturbances have to be appropriately rehabilitated.

Wetlands are also protected under this Act in that it stipulates that land users are forbidden to drain or cultivate any vleis areas without written permission.

The Act (as amended in 2001) identifies four categories of problem plants:

- **Declared weeds (category 1 plants)** – alien species prohibited on any land or water surface in South Africa; must be controlled or eradicated where possible.

An electronic version of the Act is included on the CD.

Principle responsibility for enforcement of the CARA rests with the national Department of Agriculture (DoA)

- **Declared invaders (category 2 plants)(commercial and utility plants)** – alien species allowed only in demarcated areas providing there is a permit and that steps are taken to prevent their spread.
- **Declared invaders (category 3 plants)(ornamentals)** – alien species that may no longer be planted; existing plants may remain provided that all reasonable steps are taken to prevent their spread; prohibited within the floodline of watercourses and wetlands.
- **Declared indicators of bush encroachment** – indigenous species that under certain circumstances e.g. overgrazing may cause bush densification; CARA prescribes management practices aimed at preventing bush encroachment, and at combating it where it already occurs.

Almost 400 plant species were identified in April 2007 as falling into these categories.

CARA is administered by the National Department of Agriculture (DoA), through its Directorate: Land Use and Soil Management (D:LUSM).

Marine Living Resources Act

The primary purpose of the Marine Living Resources Act (MLRA, Act No. 18 of 1998) is to protect marine living resources, through:

- establishing sustainable limits for the exploitation of resources,
- declaring fisheries management areas for the management of the species,
- approving plans for conservation, management and development,
- prohibition and control of destructive fishing methods, and
- declaring marine protected areas (MPAs).

At present estuaries are not included in MPAs, although they form extremely important components of marine systems. There is a strong move to include estuaries in MPA designations in the future.

The Marine Living Resources Act overrides all other conflicting legislation relating to marine living resources. This has resulted in some provincial and local legislation that provided effective protection for living resources being superseded before proper protection measures were put in place under the new Act.

Principle responsibility for implementation of the MLRA rests with the National Department of Environmental Affairs and Tourism (DEA&T)

White Paper on Coastal Zone Development

Principle responsibility for implementation of the NEM:CZB will rest with the National Department of Environmental Affairs and Tourism (DEA&T)

The White Paper on Coastal Zone Development (to become National Environmental Management: Coastal Zone Bill – NEM:CZB) signals a fundamental shift in thinking about the coast and ushers in a new era for coastal management. In essence, the Policy aims to achieve sustainable coastal development through a dedicated and integrated coastal management approach, in partnership with all South Africans.

The White Paper on Sustainable Coastal Development is a very progressive policy statement on coastal management, and all coastal managers in every sphere of government should be familiar with its provisions, particularly when considering development activities related to coastal resources. Apart from promoting a participative management approach, this policy document stresses the importance of recognising the value of the coast and the **absolute requirement of maintaining the diversity, health and productivity of coastal ecosystems**, since these provide the foundation for social and economic development. The White Paper also recognises the need for devolution of management responsibility from national to provincial and local levels.

The proposed Bill will have particular relevance to estuary management and development.

Local Government: Municipal Systems Act

Chapter 5 of the Municipal Systems Act (MSA, Act No. 32 of 2000) deals with Integrated Development Planning, which requires that each local authority adopt a single, inclusive plan for the development of that municipality. An Integrated Development Plan (IDP) is intended to encompass and harmonise planning over a range of sectors such as water, transport, land use and environmental management.

Principle responsibility for enforcement of the MSA rests with the National Department of Provincial and Local Government (DPLG)

Development Facilitation Act

Principle responsibility for implementation of the DFA rests with the National Department of Provincial and Local Government (DPLG)

This Act (Act No. 67 of 1995) requires the setting of Land Development Objectives, including identifying the impacts of development on natural resources such as water.

Mineral and Petroleum Resources Act

The Mineral and Petroleum Resources Act (MPRA, Act No. 28 of 2002) contains the statutory requirements regarding the enforcing of environmental protection and management of mining impacts, including sand and coastal mining. The Act requires Environmental Management Programmes (EMP) that identify a mine's impact on the environment and provide a clear programme on how these will be managed, based on an Environmental Impact Assessment (EIA). To ensure compliance with environmental issues, the Act requires consultation with each department charged with administration of any law that relates to any matter affecting the environment before an EMP may be approved. The Act is administered by the Department of Minerals and Energy.

As mining and drilling operations can have a profound impact on both water quality and quantity, and can seriously disrupt both surface water and groundwater systems, this Act is of particular importance to catchment management in many areas of South Africa.

Principle responsibility for implementation of the MLRA rests with the National Department of Minerals and Energy.

For More On Key Legislation

References and Further Reading

DWAF (Department of Water Affairs and Forestry). 2007. *Guidelines for the Development of Catchment Management Strategies: Towards Equity, Efficiency and Sustainability*. DWAF, Pretoria.

WRC (Water Research Commission). 2006. *Discussion Paper on Cross-Sector Policy Objectives for Conserving South Africa's Inland Water Biodiversity*. WRC Report No. TT 276/06.

