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# CHAPTER 1 - WATER POLICY, WATER LAW AND WATER RESOURCES MANAGEMENT

## 1.1 THE NATIONAL WATER POLICY

Government policy since 1994 has focused strongly on equitable and sustainable social and economic development for the benefit of all South Africa's people. However, many existing laws, including the law relating to water, were not at all appropriate to achieving these objectives. The National Water Policy for South Africa (NWP), adopted by Cabinet in 1997, was introduced in response to the new direction set by government and as part of a thorough review of existing water law.

The NWP was preceded by the development of 28 Fundamental Principles and Objectives for a New South African Water Law, which are reproduced in full in Appendix A. Principle 7 is particularly relevant: it states that –

The objective of managing the quantity, quality and reliability of the Nation's water resources is to achieve optimum, long-term, environmentally sustainable social and economic benefit for society from their use.

Three fundamental objectives for managing South Africa's water resources, which are firmly grounded in the provisions of the Bill of Rights of the Constitution of South Africa, 1996 (No. 108 of 1996) arise from the Principles. These are the following -

- To achieve equitable access to water, that is, equity of access to water services, to the use
  of water resources, and to the benefits from the use of water resources.
- To achieve sustainable use of water by making progressive adjustments to water use with the objective of striking a balance between water availability and legitimate water requirements, and by implementing measures to protect water resources.
- To achieve efficient and effective water use for optimum social and economic benefit.

Important proposals to facilitate achievement of the NWP's objectives include the following:-

- Water will be regarded as an indivisible national asset. National government will act as the custodian of the nation's water resources and its powers in this regard will be exercised as a public trust.
- Water required to meet basic human needs and to maintain environmental sustainability will be guaranteed as a right, whilst water use for all other purposes will be subject to a system of administrative authorisations.
- The responsibility and authority for water resource management will be progressively decentralised by the establishment of suitable regional and local institutions. These will have appropriate community, racial and gender representation to enable all interested persons to participate.

Implementation of the Policy proposals will fundamentally change the ways in which South Africa's water resources are managed.

#### 1.2 THE NATIONAL WATER ACT

(The purpose of the National Water Act, which embodies the NWP's objectives for water resources management, is given in section 2 of the Act – see Appendix B)

The National Water Act, 1998 (No. 36 of 1998 - the Act) derives directly from the Fundamental Principles and Objectives for a New South African Water Law and the NWP's proposals for managing water resources<sup>[2]</sup>. The Act is the principal legal instrument relating to water resources management in South Africa and contains comprehensive provisions for the protection, use<sup>[3]</sup>,

development, conservation, management and control<sup>[4]</sup> of South Africa's water resources. It is these legal provisions that enable the proposals in the NWP to be implemented<sup>[5]</sup>.

The Act is not, however, the only instrument through which the objectives of the NWP will be achieved. Since water is essential for all life and human endeavours, there are many other policies and laws, administered by a number of departments in all spheres of government, which govern activities dependent on water, or affect water resources. The 1994 Water Supply and Sanitation Policy White Paper (now superseded by the Strategic Framework for Water Services, 2003)<sup>[6]</sup>, and the Water Services Act, 1997 (No. 108 of 1997), which deal with the provision of potable water and sanitation services, are particularly closely related to the Act.

In addition, the management of water as a renewable natural resource must be carried out in a manner consistent with the broad environmental policy of government and within the framework of environmental legislation, that is, the National Environmental Management Act, 1998 (No. 107 of 1998), and those parts of the Environment Conservation Act, 1989 (No. 73 of 1989), that have not yet been repealed by the more recent legislation.

Successful water resources management will therefore depend on co-operation among all spheres of government, and the active involvement of water users and other organisations and stakeholders. The necessity for an integrated approach to water resources management is discussed later in this chapter, while the relationships between water policy and law, and other relevant policies and laws, are discussed in Chapter 5.

Many of the Act's provisions are described briefly in this document in order to provide the context for subsequent explanations of their practical application. An important provision, which is key to the achievement of Policy objectives, is the establishment by the Act of national government, acting through the Minister of Water Affairs and Forestry (the Minister), as the public trustee of the nation's water resources. (Public trusteeship is described in section 3 of the Act - see Appendix B). This provision resolves a significant difficulty of the Water Act, 1956 (No. 54 of 1956)<sup>[7]</sup>, which was based largely on the riparian system of water rights<sup>[8]</sup> and resulted in no single organisation or institution being able to exercise complete authority over water in South Africa. Public trusteeship does not mean that government owns the water, since the Preamble to the Act recognises that "water is a natural resource that belongs to all people", but it does mean that the Minister has overall responsibility and, importantly, the authority to ensure that all water everywhere in the country is managed for the benefit of all persons. This responsibility includes ensuring that water is allocated equitably, and that environmental values are promoted.

## 1.3 THE NATIONAL WATER RESOURCE STRATEGY

(The Act requires the National Water Resource Strategy to "... set out the strategies, objectives, plans guidelines and procedures of the Minister and institutional arrangements relating to the protection, use, development, conservation, management and control of water resources ... ". The Act's requirements are described in sections 5, 6 & 7, which are reproduced in full in Appendix C).

The Act requires the Minister<sup>[9]</sup> to establish a National Water Resource Strategy (NWRS) as soon as reasonably practicable by publishing a Notice in the *Government Gazette*.

The NWRS must provide information about the ways in which water resources will be managed and the institutions to be established. It must also provide quantitative information about the present and future availability of and requirements for water in each of 19 water management areas (see Chapter 2, Fig. 2.2, Part 5 of Chapter 3, and Appendix E), and propose interventions by which these may be reconciled. The NWRS must also quantify the proportion of available water in each water management area that falls under the direct control of the Minister in terms of her or his national responsibilities<sup>[10]</sup>.

## 1.3.1 The purposes of the National Water Resource Strategy

## The national framework for managing water resources

After its establishment the NWRS will provide the framework within which water resources will be managed throughout the country, because section 5(3) of the Act states that South Africa's water resources must be protected, used, developed, conserved, managed and controlled in accordance with the NWRS.

The NWRS will be legally binding since section 7 specifies that the Minister, the Director-General, other organs of State and water management institutions must give effect to its provisions when exercising any power or performing any duty in terms of the Act.

Although the NWRS is intended to be an enduring framework for water resources management, it may be amended to suit changing circumstances during the reviews specified in section 5(4)(b). However, such amendments may only be made after mandatory consultations with stakeholders. Reviews must take place at least every five years.

# The framework for the preparation of catchment management strategies

A catchment management strategy is the framework for water resources management in a water management area. The NWRS provides the framework within which all catchment management strategies will be prepared and implemented in a manner that is consistent throughout the country. In particular, in terms of section 9(b), a catchment management strategy must not be in conflict with the NWRS. It is anticipated that insights and information gathered during the development of catchment management strategies will inform the regular review of the NWRS, enabling it to remain relevant to local conditions and circumstances.

In this regard an important component of the NWRS is the data and information provided in Chapter 2 and Appendix D, which quantify water availability and water requirements in each water management area. Consideration of this information in conjunction with the Minister's national responsibilities enables the amount of water for which each catchment management agency will be responsible to be determined.

## Provision of information

In accordance with the general requirement for transparent and accountable public administration in all spheres of government, the Act requires the Minister to ensure that all aspects of water resource management that will affect other organs of State, water users and the public in general are brought to their attention. The NWRS is the vehicle by which South African society is informed of the Minister's intentions concerning water resource management. Every subsequent edition of the NWRS must also be made publicly available.

In addition, each edition of the NWRS may be formally established only when the Minister is satisfied that everyone who wishes to comment on the Proposed Strategy has been afforded an opportunity to do so, that all comments have been given careful consideration and that all changes arising from this process have been incorporated in the revised Strategy.

### Identification of development opportunities and constraints

The water availability information presented in the NWRS - for each water management area in Chapter 2, and for subdivisions of each area in Appendix D - makes it possible to identify the areas of the country in which water resources are available to support social and economic development initiatives, as well as areas in which limited water resources may be a constraint to development.

Appendix D provides a broad strategic perspective for each water management area in which, among other things, indications are given of possible developments for which available water might be used. These are however by no means definitive, and the possible opportunities and

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constraints will be investigated in more detail in the process of developing and refining the catchment management strategies.

It must also be emphasised that the purpose of the NWRS is to strategically direct the management of water resources from a national perspective, and the water availability information is therefore relatively coarse. The information is not appropriate, nor is not intended to be used, for planning individual projects. These must be investigated using more detailed information, as well as being the subject of the impact assessments required by environmental legislation.

#### 1.4 INTEGRATED WATER RESOURCES MANAGEMENT

(The need for an integrated approach to water resources management is discussed in the National Water Policy. It is also explicitly acknowledged in the Preamble to the Act, which recognises that water occurs in many different forms which are all part of a unitary, inter-dependent cycle. The Preamble also recognises the need for the integrated management of all aspects of water resources).

There is increasing understanding internationally that water resources can be successfully managed only if the natural, social, economic and political environments in which water occurs and is used are taken fully into consideration.

Integrated water resources management (IWRM) may be defined as a process which promotes the co-ordinated development and management of water, land and related resources in order to maximise the resultant economic and social welfare in an equitable manner without compromising the sustainability of vital ecosystems. IWRM therefore aims to strike a balance between the use of resources for livelihoods and conservation of the resource to sustain its functions for future generations, and promotes social equity, environmental sustainability and economic efficiency. Because the resource cannot be considered separately from the people who use and manage it, a balanced mix of technological and social approaches must be used to achieve integrated management.

## The dimensions of integrated water resources management

Freshwater is a complex ecological system that has a number of dimensions. Surface water, groundwater, quantity and quality are all linked in a continuous cycle - the hydrological cycle - of rainfall, runoff from the land and infiltration into the ground, and evaporation from the surface back into the atmosphere. Each component may influence the other components and each must therefore be managed with regard to its inter-relationships with the others.

Water as a system also interacts with other systems. Human activities such as land use, waste disposal and air pollution can have major impacts on the quantity and quality of water available for human use, while the abstraction and storage of water and the discharge of waste into water resources can impact on the quality of the natural environment. These interactions must be considered and addressed by water resource managers.

Taking an even broader view, water must also be managed in the full understanding of its importance for social and economic development.

It must also be borne in mind that South Africa shares four major river basins, which together cover about 60 per cent of South Africa's land area and account for around 40 per cent of the total surface runoff, with neighbouring countries. The NWP accords high priority to harmonious relations over water with neighbouring states, and the NWA provides for water to be made available to meet international rights and obligations. The international dimensions of IWRM are therefore critically important for South Africa. The framework within which international water-related issues are addressed is discussed in more detail in Chapter 5.

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## Co-operative planning and management of water resources

The complexity of managing water as a system and its interactions with other systems is further compounded by the large number of institutions and organisations - both domestic and international - involved in the administration and management of the various systems.

The Department of Water Affairs and Forestry (the Department) is currently responsible for water resources management at national level. The Act requires the Department to ensure that its programmes are in accordance with government policy and are co-ordinated with relevant programmes of other national departments (see Chapter 5). Similarly, other departments have a responsibility to ensure that, where relevant, their programmes take account of the realities of South Africa's water situation. This is particularly important when it comes to planning developments that depend on water for their success. In these instances the availability of water must be factored into plans at the beginning of the development process. One of the purposes of the NWRS is therefore to provide sufficient information about water resources to facilitate coherent and holistic planning, as well as establishing a platform for informed interactions between water resource managers and development planners in other sectors.

In terms of the Act and the NWRS the Department is in the process of establishing 19 catchment management agencies, each operating in a defined water management area, to manage water resources at a regional level. These agencies will be responsible, among other things, for ensuring that there is consonance between their water-related plans and programmes and the plans and programmes of all other role players in the catchments they manage. The agencies will therefore have to establish co-operative relationships with a range of stakeholders, including other water management institutions, water services institutions, provincial and local government authorities, communities, water users ranging from large industries to individual irrigators, and other interested parties.

The success of integrated water resources management will therefore depend heavily on the development of a framework of co-operation among all relevant institutions, organisations and individuals. This co-operative framework must facilitate planning at all geographic scales ranging from international projects to activities on individual smallholdings, and the co-ordination of programmes.

## Integrated water resources management, poverty and gender

The need for an integrated approach to managing water resources has been articulated at a number of international meetings during the last three decades, each of which has stressed the importance of water for human survival, health and productivity. The two most recent global forums - the United Nations Millennium Summit, September 2000, and the World Summit on Sustainable Development, August 2002 - reaffirmed that people must be at the centre of the sustainable development and use of water resources. Resolutions, agreements and targets arising from these events emphasised, among other things, the importance of water in addressing poverty issues, and the importance of factoring gender considerations into all aspects of water management. In an African context these sentiments are echoed in the policy objectives of the New African Partnership for Development and the Southern African Vision for Water, Life and the Environment in the 21st Century<sup>[11]</sup>.

IWRM does not provide a complete solution to all the dimensions of poverty, but no strategy for poverty eradication will be successful unless it includes strategies for managing water. The provision of basic water and sanitation services is an essential element of water's contribution to poverty eradication, because it addresses issues of health and hygiene, and the effort required in collecting and carrying water from remote, often polluted water sources. Providing free basic services goes some way to making water affordable to the poor. Basic water services do not however make adequate provision for productive livelihoods

The rural poor, many of whom do not yet have access to reliable water supplies or sanitation services, often rely for their livelihoods on cultivating food, gathering natural products and other

water-dependent activities. But their water sources are often unreliable and insufficient, threatened by droughts and floods, and eroded or degraded by developments over which they have no control.

In South Africa water is regarded as a social, environmental and economic good. Nevertheless, after basic human needs and the requirements for maintenance of ecosystems have been satisfied, there will inevitably be competition for access to the remaining available water. It is essential that water-related policies are implemented in ways that give special attention to ensuring that the poor can meet their needs, and that they are given a voice in decisions that affect them.

In order to successfully address issues of equity IWRM must also consider gender - that is, the implications for men and women of legislation, polices, and implementation strategies and programmes, and the measures required to enable them to participate in water resources management on an equal footing. It has also been shown by international and local experience that poverty eradication initiatives are greatly enhanced by the involvement of women in all aspects of water resources management at all levels.

Women and men bring different perspectives and viewpoints to water management, and play different roles. There are however often considerable imbalances between women and men, in for instance their levels of education and the influence they are able to exercise, and these imbalances must be addressed in initiatives to capacitate the two groups to participate in decision-making. Poor black women are one of the most marginalised groups in South African society. Conscious efforts must therefore be made to involve them in water resources management processes and to ensure that the management of water contributes to meeting their needs.

Careful analysis will be required of water-related developments, whether they involve the construction of infrastructure or relate to demand-side management, to take into account the benefits and costs that accrue to women and men, and to ensure that one group does not benefit at the expense of the other. Special emphasis must be placed on the involvement of women in water resources management institutions and in policy development.

It is not possible to separate issues of poverty, race and gender, but it is necessary to understand how they interact with and impact each other. An integrated approach to managing water resources will contribute to building a society free from poverty and discrimination.

Notes to Chapter 1

<sup>1</sup> In this context "environment" means: The surroundings within which humans exist, and that are made up of (i) the land, water and atmosphere of the earth, (ii) micro-organisms, plant and animal life, (iii) any part or combination of (i) and (ii) and the inter-relationships among and between them and (iv) the physical, chemical, aesthetic and cultural properties and conditions of the foregoing that influence human health and well-being. (National Environmental Management Act, 1998, Definitions, section 1(xi)).

<sup>2</sup> "Water resource" means surface water found in watercourses (rivers and streams), impoundments (dams), wetlands and estuaries, and groundwater found in underground aquifers (see section 1(1)(xxvii)).

- The Act's definition of water use (section 21) is broad. It relates to the quantitative use of water, as well as to uses that affect water quality and the quality of the resource itself. Accordingly, water use includes abstraction and storage, all aspects of the discharge of wastes into water resources, making changes to the physical structure of rivers and streams, and use for recreational purposes. Water use also includes certain land-based and instream activities that may affect the quantity or quality of water in the resource (stream flow reduction activities, and controlled activities such as hydro-electric power generation and disposal of waste onto land). Water use is described in more detail in Part 2 of Chapter 3.
- Throughout the NWRS "managed" is used as shorthand for the Act's "protected, used, developed, conserved, managed and controlled".

## **Millennium Development Goals**

By 2015, using 1990 as a benchmark:-

- Halve the proportion of people living in extreme poverty and hunger
- Halve the proportion of people without access to safe drinking water (with sanitation added at the World Summit on Sustainable Development, 2002)
- · Achieve universal primary education
- Empower women and promote equity between women and men
- · Reduce under-five mortality by two-thirds
- Reduce maternal mortality by three-quarters
- Reverse the spread of killer diseases, especially HIV/AIDS and malaria
- Ensure environmental sustainability
- Develop a global partnership for development, with targets for aid, trade and debt relief

#### World Summit on Sustainable Development Plan of implementation

The Johannesburg Plan of implementation (JPoI) affirmed the Millennium Development Goals for water, and also agrees to develop integrated water resources management and water efficiency plans by 2005, through actions to, among other things -

- Develop and implement national/regional strategies, plans and programmes with regard to integrated river basin, watershed and groundwater management, and introduce measures to improve the efficiency of water infrastructure to reduce losses and increase recycling of water
- Employ the full range of policy instruments
- Improve the efficient use of water resources and promote their allocation among competing uses in a way that gives priority to the satisfaction of basic human needs and balances the requirement of preserving or restoring ecosystems and their functions
- Develop programmes for mitigating the effects of extreme water-related events
- Support the diffusion of technology and capacity-building for non-conventional water resources and conservation technologies
- Facilitate the establishment of public-private partnerships

## **NEPAD Water and Sanitation Sector Policy Objectives:**

- Ensure sustainable access to safe and adequate clean water supply and sanitation, especially for the poor
- Plan and manage water resources to become a basis for national and regional co-operation and development
- · Systematically address and sustain ecosystems, biodiversity and wildlife

<sup>&</sup>lt;sup>5</sup> In the remainder of this document the expressions "implementing the Act", "implementing the Act's provisions" and similar are used as shorthand for "implementing the National Water Policy through the provisions of the National Water Act".

The 1994 Water Supply and Sanitation Policy, which focused largely on the Department's direct role in the delivery of basic services for households, has been reviewed to account for the completion of the local government transformation process and the establishment of the local government legislative framework. Local Government can now assume full operational responsibility for its constitutional mandate for water and sanitation services, and the Department's role must change from direct service provision to that of the sector leader, regulator and supporter. The Strategic Framework for Water Services was approved by Cabinet in September 2003. It sets out a comprehensive approach to the provision of water services to eliminate the backlog in basic water services and progressively improve levels of service over time in line with the original aims of the Reconstruction and Development Programme. It also focuses on developing the institutional framework best suited to support Local Government in its responsibilities. The White Paper on Basic Household Sanitation (2001) will also be amended to ensure that it is compatible with the Strategic Framework

<sup>&</sup>lt;sup>7</sup> The National Water Act, 1998 (No. 36 of 21998) repeals the Water Act, 1956 (No. 54 of 1956).

<sup>&</sup>lt;sup>8</sup> Riparian system: Those who owned land next to rivers and streams had exclusive and in-perpetuity rights to the use of (but not ownership of) a portion of the water which flowed in them. Those who owned land under which groundwater occurred also effectively had exclusive use of the water. This was "private" water, over which the State had little or no control.

<sup>&</sup>lt;sup>9</sup> The Act imposes many duties and responsibilities on the Minister, but for practical reasons allows her or him to delegate most of them to others. See also Part 5 of Chapter 3.

<sup>&</sup>lt;sup>10</sup> The Minister's national responsibilities include the Reserve, water to meet international obligations, a "contingency" to meet projected future water needs (which may, for instance, require transfers of water between water management areas) and water use of strategic importance.

<sup>&</sup>lt;sup>11</sup> Summary of water-related outcomes from international forums:-

- Co-operate on shared rivers among member states
- Effectively address the threat of climate change
- Ensure enhanced irrigation and rain-fed agriculture to improve agricultural production and food security

# Southern African Vision for Water, Life and the Environment in the 21st Century:

A southern Africa where there is equitable and sustainable planning, use, development and management of water resources for poverty alleviation, local and national socio-economic development, regional co-operation and integration, and the environment.

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