

# Development of the Eutrophication Management Strategy for South Africa

Public Meeting - Background Information Document

September 2022



water & sanitation

Department:  
Water and Sanitation  
REPUBLIC OF SOUTH AFRICA

## PURPOSE

The purpose of this Background Information Document (BID) is to share the National Eutrophication Management Strategy with members of the public and to assist them to prepare for the upcoming Public meeting scheduled to take place on 22 September 2022.

The BID consists of the following items:

- Project progress and outputs;
- Draft Eutrophication Management Strategy;
- Eutrophication Management Strategy into Practice;
- Stakeholder engagement; and
- Way forward

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## 1. BACKGROUND

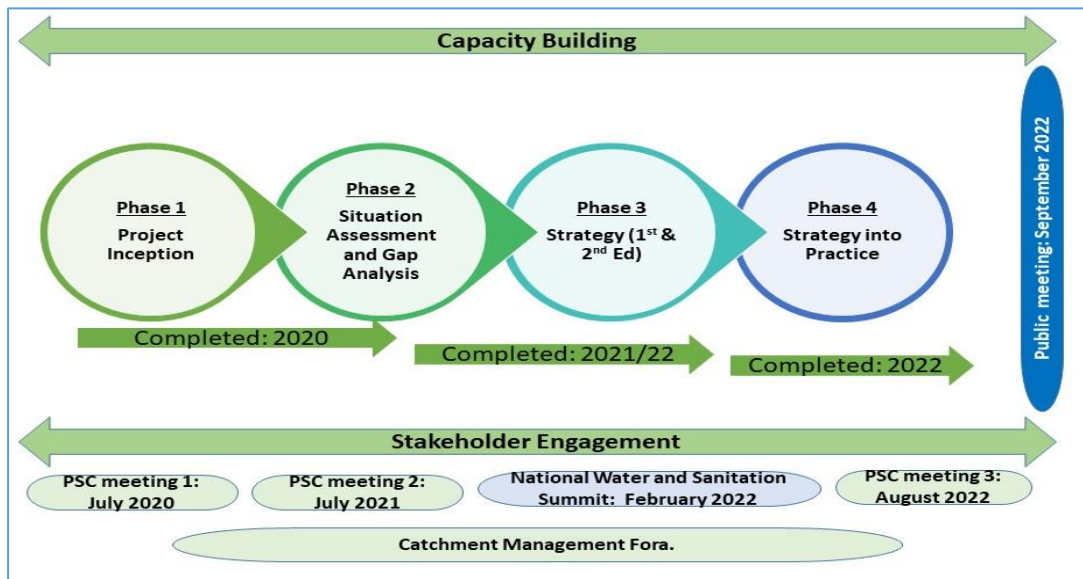
The National Water Act, 1998 (Act 36 of 1998) (NWA) provides for the protection, use, conservation, management, and control of water resources in an efficient, sustainable, and equitable manner. Chapter 3 of the NWA lays down a series of measures that are intended to ensure the comprehensive protection of all water resources. The aim of the protection of water resources is to ensure that water is available for current and future human use and to sustain our ecosystems.

Nutrient management in water resources is key to addressing and managing eutrophication. The Department has therefore completed a project to develop the National Eutrophication Management Strategy which is giving effect to the strategic objectives and actions identified in the draft Integrated Water Quality Management (IWQM) Policy (2016), IWQM strategy (2017), and the National Water and Sanitation Master Plan (2018).

## 2. STUDY PROGRESS

The National Eutrophication Management Strategy project was initiated by the DWS in 2019. The aim of the project was to develop a Eutrophication Management Strategy to address issues related to the degradation of water resources due to excessive nutrient enrichment. To date, the Eutrophication Management Strategy for South Africa (Second Edition), and Eutrophication Management Strategy into Practice (First Edition) reports have been completed. Stakeholder consultations have been undertaken through the Project Steering Committee (PSC), Catchment Management Forums, and at the ministerial level through the National Water and Sanitation Summit held in February 2022.

The development process of the project is depicted in **Figure 1** below.



**Figure 1:** Development Process of the Eutrophication Management Strategy for South Africa

## 3. PROJECT OUTPUTS

### 3.1 Project Inception

The inception phase defined the extent of the work and associated costs. It also provided the opportunity for identification, assessment, and interpretation of the nature and scope of the project and documented all the relevant information available to support the Strategy. This milestone produced an Inception Report which was distributed to the Project Steering Committee (PSC) members for comments and inputs in May 2020 and presented to external stakeholders in the first PSC meeting held on 29 July 2020.

### 3.2 Situation Assessment and Gap Analysis

This phase was aimed at identifying current as well as emerging eutrophication issues, causes, impacts, and challenges. The identification of the causes and challenges was conducted through the review of existing literature, reports, models, maps, and other relevant information. The focus was on the international water quality landscape in relation to South Africa, policy, and legislative framework, impacts of climate change on eutrophication, and overall eutrophication management challenges in South Africa. This work component also looked at the current measures in place to manage eutrophication. The below gaps were identified based on the literature studies and current measures and tools in place:

- ◆ Delay in the implementation of the protection and regulation measures (failure to implement interventions effectively);
- ◆ Inadequacy of relevant skills;
- ◆ Capacity building constraints;
- ◆ Lack of resource water quality models to implement RDM interventions; and
- ◆ Monitoring data gaps.

The outcome of this project activity was a Situation Assessment and Gap Analysis Report which was distributed to PSC for comments and inputs in July 2020 and presented at the first PSC meeting held on 29 July 2020.

### 3.3 Eutrophication Management Strategy for South Africa

The Second Edition of the Eutrophication Management Strategy for South Africa report has been completed and public consultation is planned for September 2022 to solicit inputs from wider stakeholder groups. The anatomy of the Strategy Report is given in **Figure 2** below.



**Figure 2: Anatomy of the National Eutrophication Management Strategy document**

The National Eutrophication Management Strategy comprises of three (3) inter-related and mutual supportive strategies which are directed toward the realisation of the eutrophication management goal and objectives, viz.:

- ◆ Core Strategies – that are core to giving effect to the ambitions of the eutrophication management goal and policy, developed from management tools such as Resource Directed Measures, Sources Directed Measures, and Remediation Directed Measures;
- ◆ Operational Strategies – to complement the core strategies by providing additional resolution on key stages within the water quality management framework of the “Plan – Do- Check – Act”; and

- ◆ Supporting Strategies – to strengthen the supporting implementation roles such as capacity building, research, and innovation.

### 3.4 National Eutrophication Management Strategy into Practice

The final step in the development of the National Eutrophication Management Strategy (**Figure 1**) is to put the Strategy into Practice. The current **Eutrophication Management Strategy into Practice (EMSIP)** report, therefore, supports the EMSSA by providing a structured way to articulate how the EMSSA can be pragmatically implemented; and by arranging and translating all gaps, actions, and interventions identified in the EMSSA into **measurable outcomes** inclusive of **roles, responsibilities, and timeframes**.

**Table 1** presents an example of the prioritized actions and relevant authorities vs proposed timeframes.

**Table 1: Prioritized actions, responsible authorities, and timeframes. Short-term = 0 – 5 years; long-term = over five year**

TOWARDS IMPLEMENTATION			
Strategies	Type of Strategies	Prioritized Actions	Authorities
CORE STRATEGIES	SOURCE DIRECTED MANAGEMENT	<b>SHORT-TERM (0-5 years)</b>	
		Develop and implement (an) approach(s) to ensure that the conditions in water use authorisations, including those that specify WDSs, ensure compliance to statutory RDMs, specifically RQOs	DWS Head Office (HO) and Regional Offices (RO), Proto-CMA, CMAs
		Evaluate and/ or develop model by-laws, in support of local government, to limit excessive nutrient-loading and to protect raw water quality	DWS: (Water Services Regulation (WSR), Economic Regulation, Sanitation Services), COGTA, Water Service Authorities (WSA)
		Develop and gazette water management regulations for impacting sectors (e.g. feedlots, industries, etc.) that also contribute towards anthropogenic eutrophication	DWS: Regulation, DALRRD, DTI
		Compile and publish specific sector offset policies for wetlands and for water quality to enable the rolling out of offsetting for eutrophication management	DWS, DFFE
		To evaluate the suitability and/ or effectiveness of those measures that deal with the control and regulation of sources of anthropogenic eutrophication – consideration must be given to the development and publication of such regulations	DWS: Regulation
		<b>LONG-TERM (Over 5 years)</b>	
		Develop and implement a Diffuse Source Management Strategy for South Africa that harmonise with, and support the Eutrophication Management Strategy for South Africa	DWS: Mining and Industrial Waste Regulation (MIWR), WRC
		Develop and implement sector-specific action plans to reduce diffuse source pollution (in support of the Diffuse Source Management Strategy for South Africa	DWS: MIWR, Sanitation Services & water sector (i.e. Agriculture, Industrial, etc.)

## **4. STAKEHOLDER ENGAGEMENT**

The process of developing the National Eutrophication Management Strategy is stakeholder driven. The study advocates for Cooperative Governance and therefore requires consultation, engagement, and participation of all three spheres of government, civil society, the private sector, and the water sector stakeholders in order to ensure appropriateness and acceptability of the Strategy by different role-players responsible for implementation.

To date, consultations have been undertaken through the Project Steering Committee (PSC) led by DWS with the aim of providing the project team with strategic and technically sound guidance to ensure that the intended outcome of this study is achieved. The last engagement with the external members was the PSC meeting 3 held on 19 August 2022 to finalize the Eutrophication Management Strategy (second edition) as well as to discuss the Strategy into Practice Report (priority actions needed for implementation). As a final stage in this consultation, the project will be shared with the public at large at the upcoming public meeting.

## **5. WAY FORWARD**

On-going stakeholder engagements will be facilitated through the DWS Catchment Management Forums and where necessary, one-on-one sessions will be held with key role-players to ensure translation of prioritized actions into practice.

## **6. MORE INFORMATION**

More information on the Eutrophication Management Strategy for South Africa can be accessed on the DWS website: <https://www.dws.gov.za/RDM/SDCCO.aspx>