



water & sanitation

Department:
Water and Sanitation
REPUBLIC OF SOUTH AFRICA

National Eutrophication Management Strategy

Launch of the Cyanolakes APP Workshop

Directorate: Sources Directed Studies

Presented by:

Ms Tovhowani Nyamande

Director: Sources Directed Studies

Chief Directorate: Water Ecosystems Management

17 August 2021

CONTENTS

- **Background & Introduction**
- **South African Context**
- **Scope of Work & Project Progress**
- **Policy Statements**
- **Strategy Outline**
- **Way Forward**

BACKGROUND AND INTRODUCTION

- ❑ Chapter 3 of the National Water Act, 1998 (Act 36 of 1998) deals with the protection of water resources.

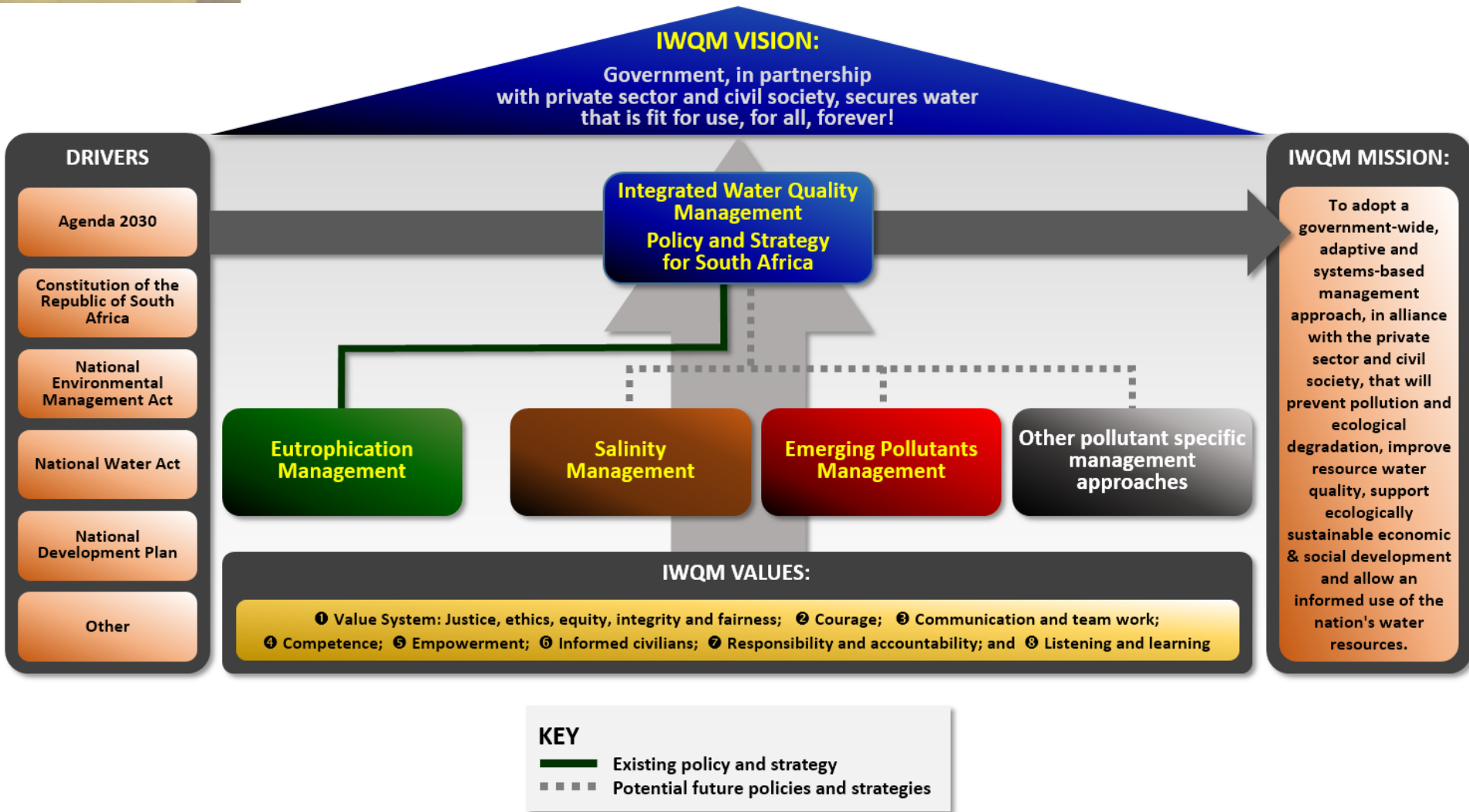
➤ **Resource Directed Measures (RDM)**

- Water Resource Classification
- Reserve Determination
- Resource Quality Objectives (RQOs)

➤ **Sources Directed Measures (SDM)**

- Pollution Prevention

IWQM POLICY AND STRATEGY FOR SOUTH AFRICA



SOUTH AFRICAN CONTEXT

Definition:

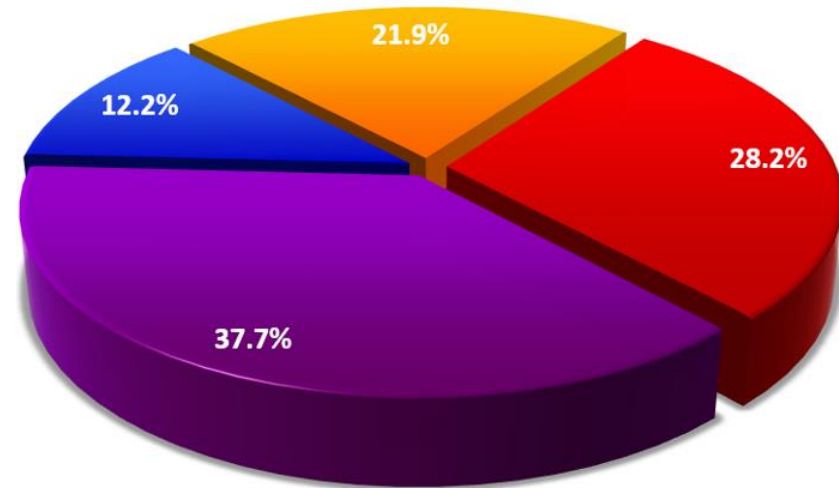
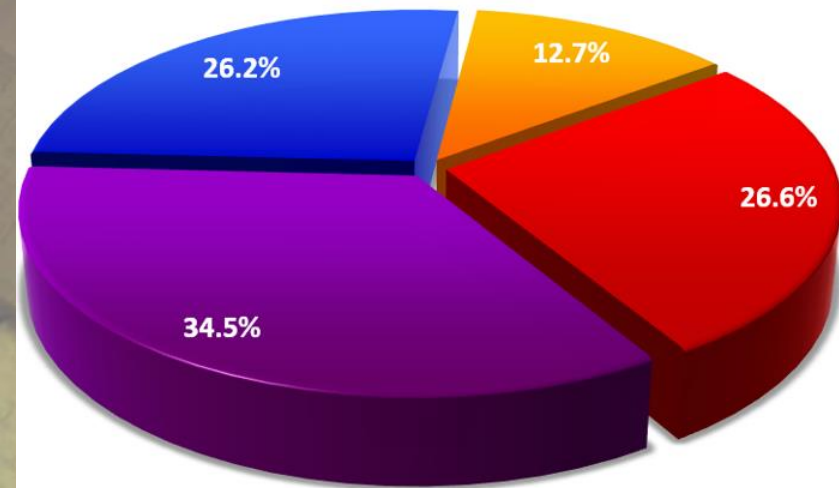
- **Eutrophication** is defined as a process of nutrient enrichment and the associated excessive plant growth such as algae and macrophytes in water bodies, which can be seen as either a natural aging process in lakes or **accelerated by human impacts (Point and Non-Point sources of pollution)**.
- Factors influencing eutrophication are **high nutrient concentrations, prolonged periods of water stagnation, conducive temperature, oxygen concentration and proper light regime.**

TROPHIC STATUS OF 393 SA DAMS

1 October 2016 to 30 September 2017

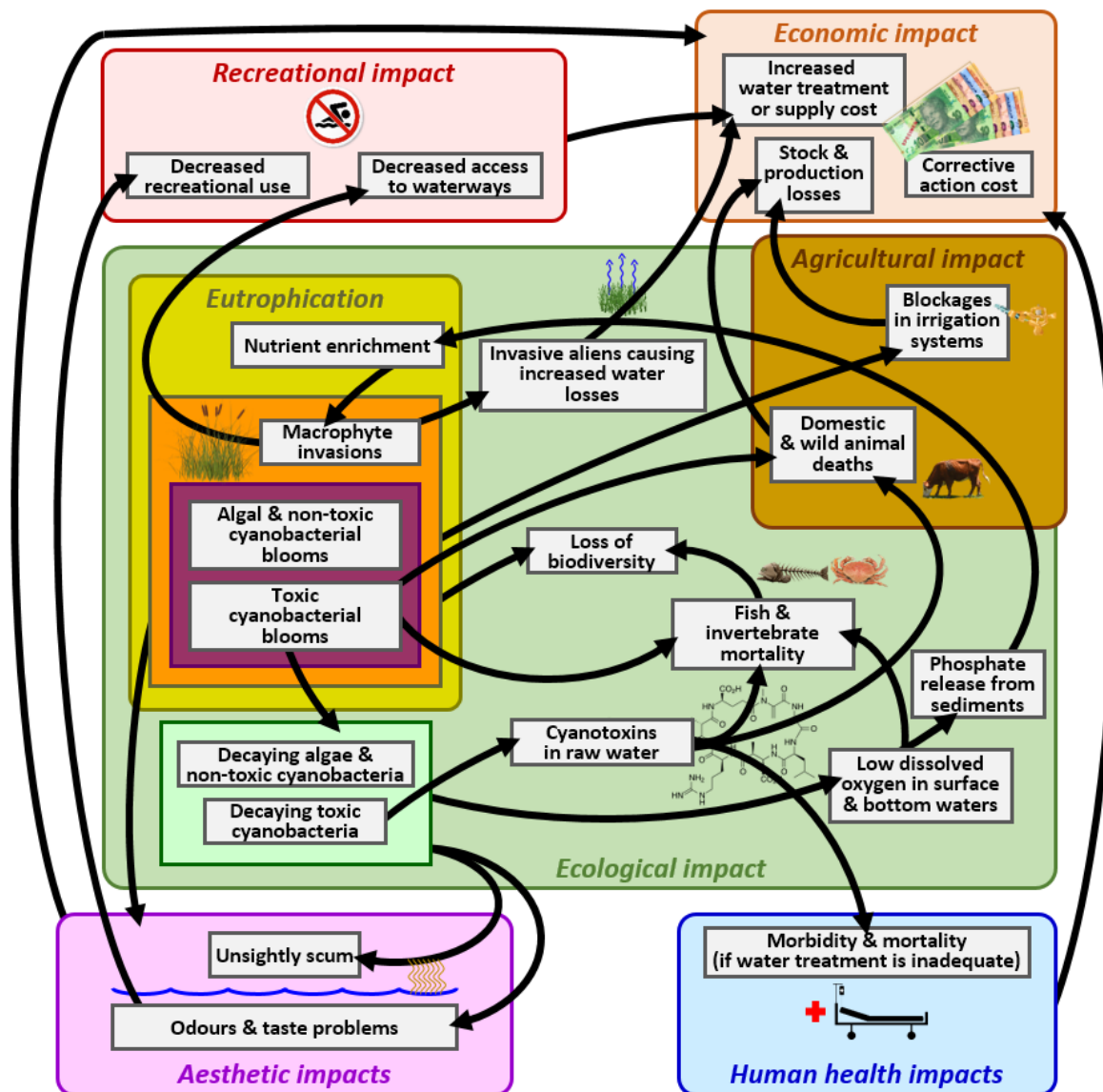


1 October 2019 to 30 September 2020

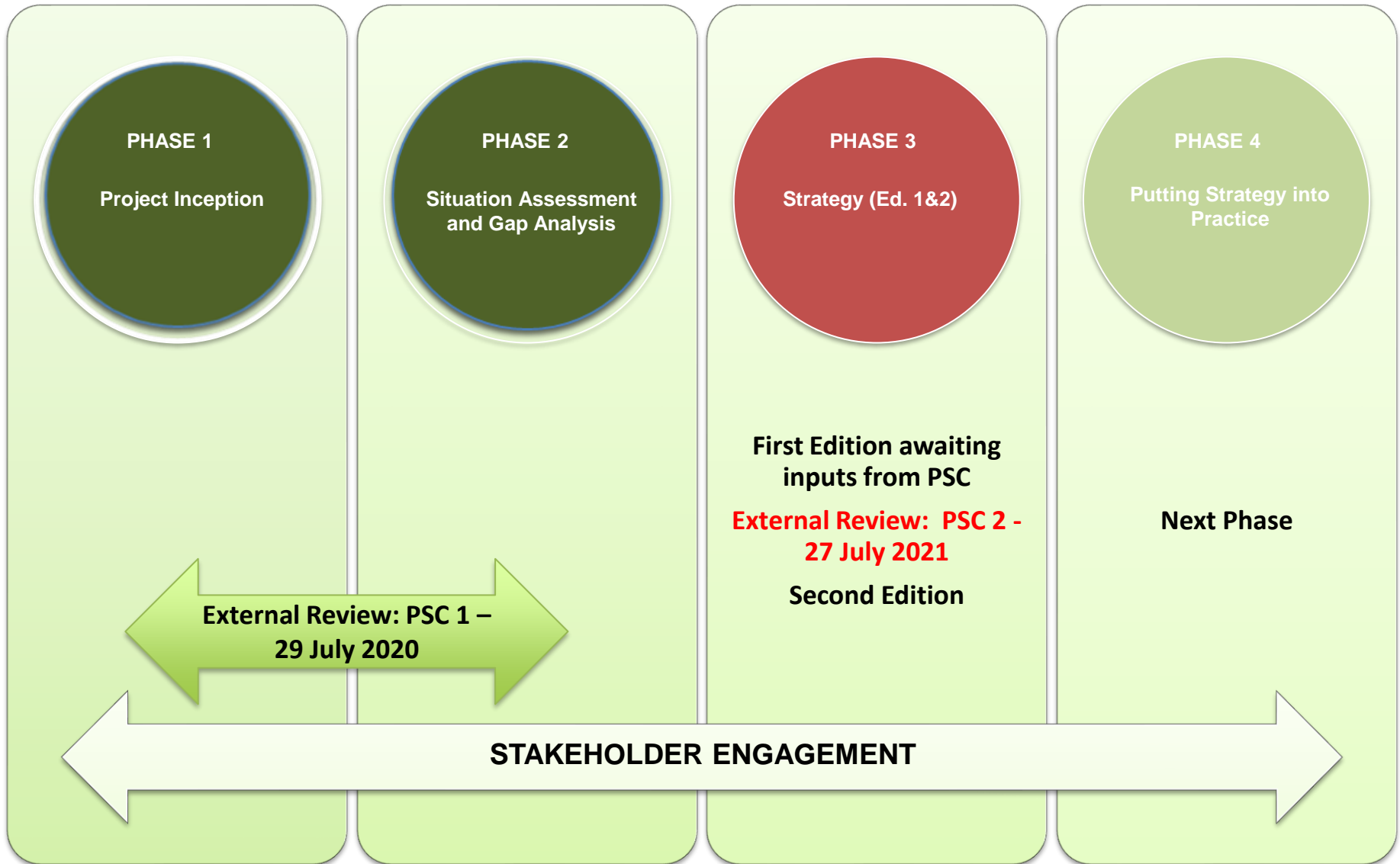


■ Oligotrophic ■ Mesotrophic ■ Eutrophic ■ Hypertrophic

EUTROPHICATION ASSOCIATED IMPACTS



NATIONAL EUTROPHICATION DEVELOPMENT PROCESS



POLICY OUTLINE – SUMMARY OF POLICY STATEMENTS

Vision: Government, in partnership with private sector and civil society, secures water that is fit-for-use, for all, for ever!

Mission: To adopt a government-wide, adaptive and systems-based management approach, in alliance with the private sector and civil society, that will improve resource water quality, prevent pollution and ecological degradation, support ecologically sustainable economic & social development and allow an informed use of the nation's water resources.

Goal: To manage eutrophication effectively in order to protect aquatic ecosystems and secure water resources that are fit-for-use.

CHIEF-OBJECTIVES:

- ▶ To limit anthropogenic nutrient-loading of water resources;
- ▶ To reduce excessive primary production in surface water resources;
- ▶ To protect aquatic ecosystems and their biological diversity;
- ▶ To secure water resources that are fit-for-use on a continuous basis; and
- ▶ To support ecologically sustainable development and justifiable socio-economic growth.

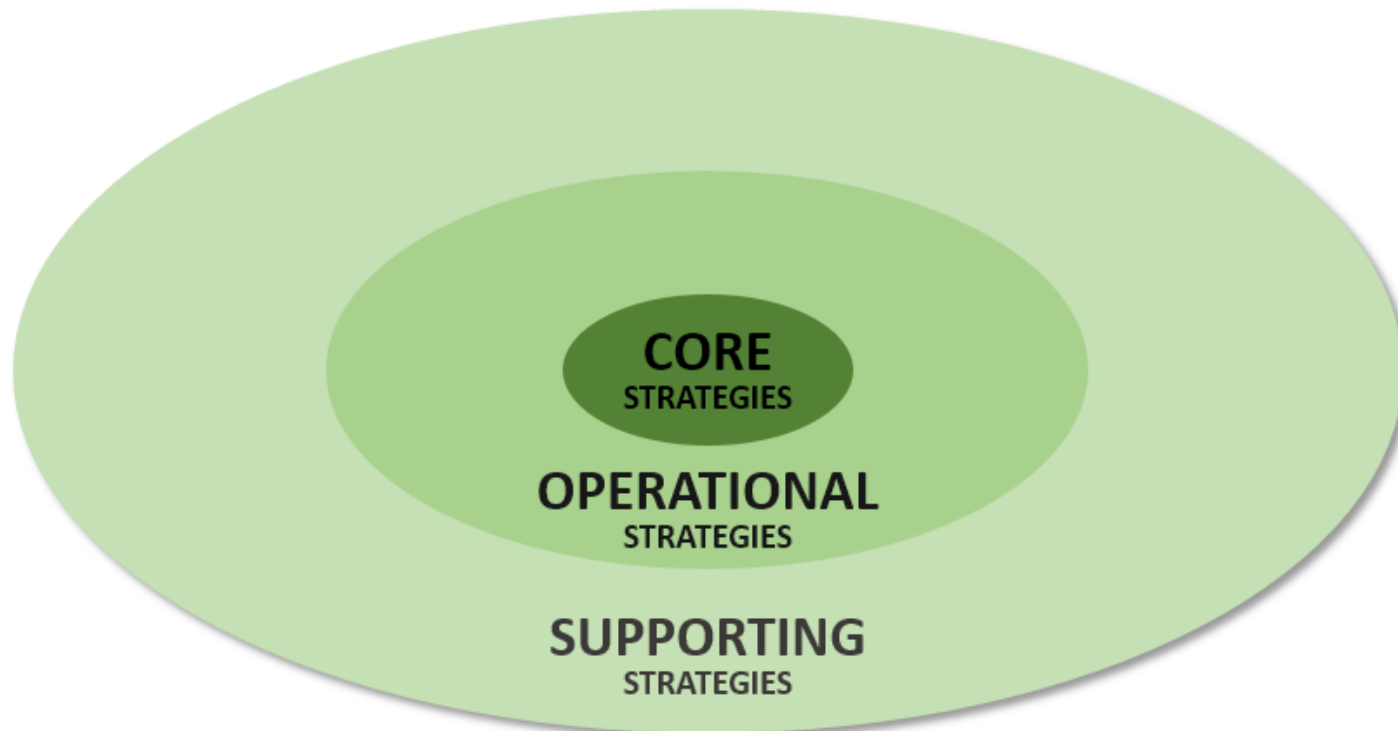
POLICY STATEMENTS 1 to 14

COMPLEMENTING OBJECTIVES:

- ▶ To appropriately resource eutrophication management, *inter alia*, by securing funding, providing human capital and equipping responsible parties;
- ▶ To promote research in relation to the management of eutrophication and the control of anthropogenic sources of nutrient enrichment;
- ▶ To promote internal and external management cooperation between government, private sector and civil society;
- ▶ To promote transparency through eutrophication-related communication and awareness creation; and
- ▶ To facilitate capacity building and the empowerment of role-players.

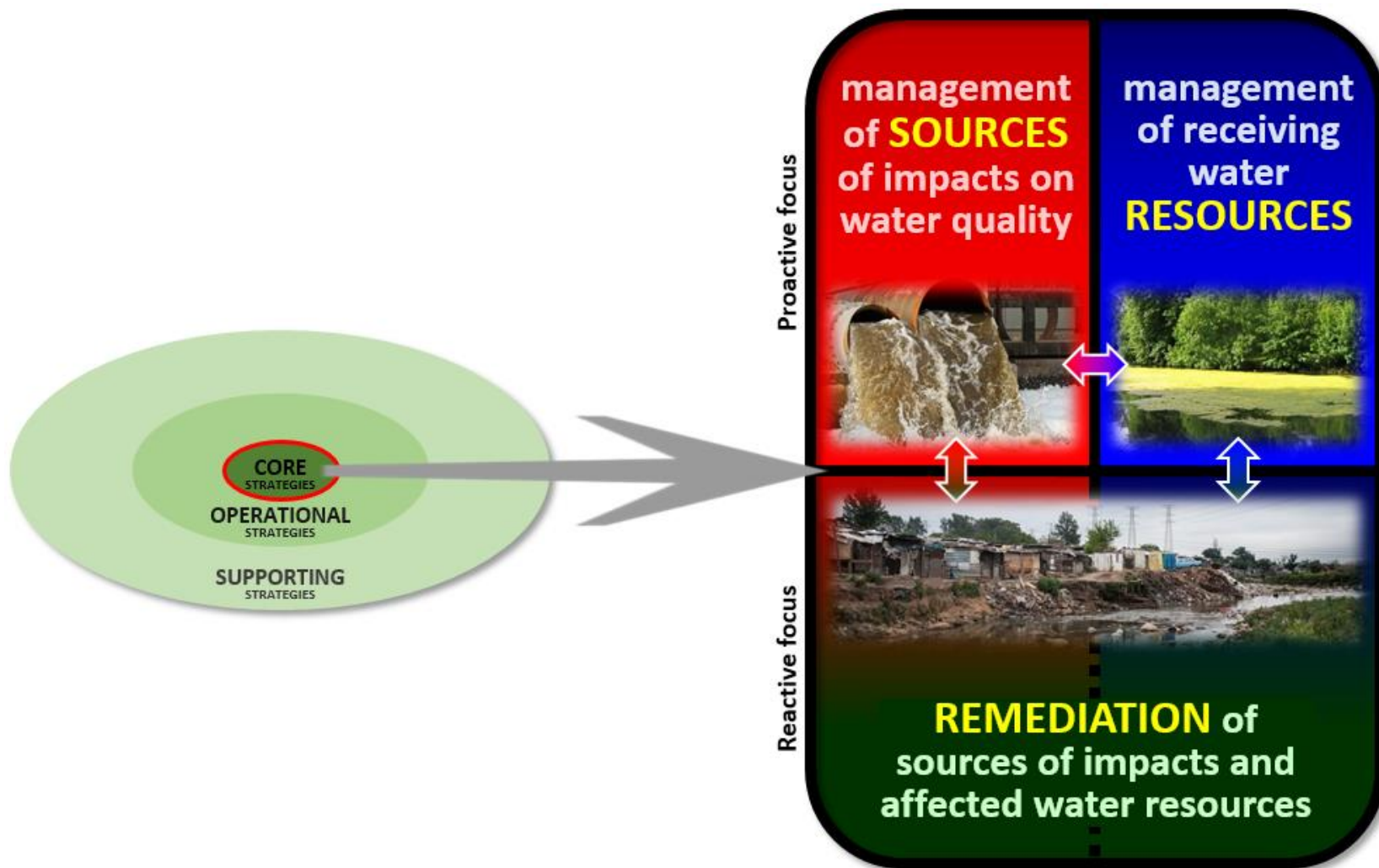
POLICY STATEMENTS 15 to 19

STRATEGY OUTLINE – 3 PARTS OF STRATEGIES

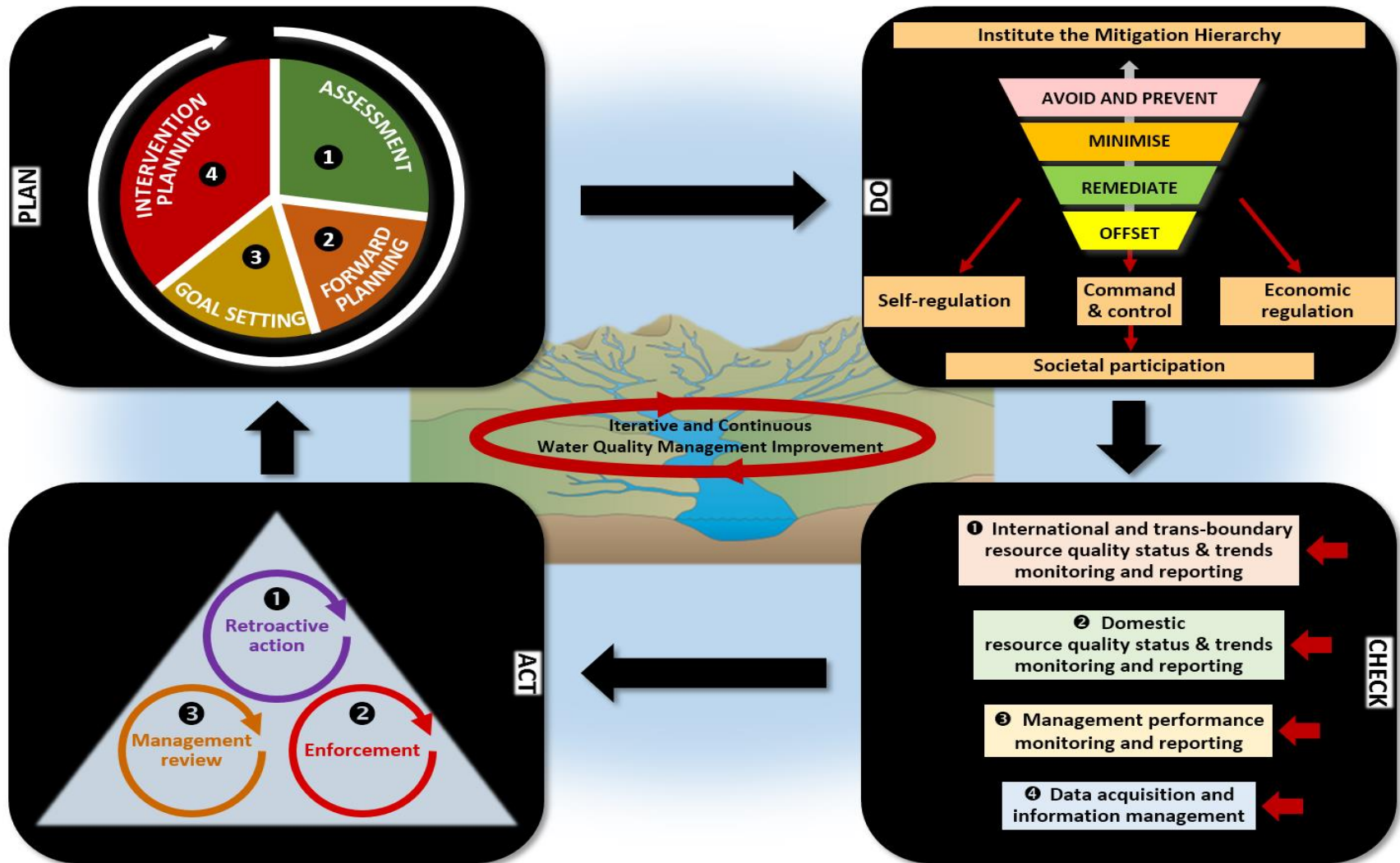


EUTROPHICATION MANAGEMENT STRATEGY FOR SOUTH AFRICA

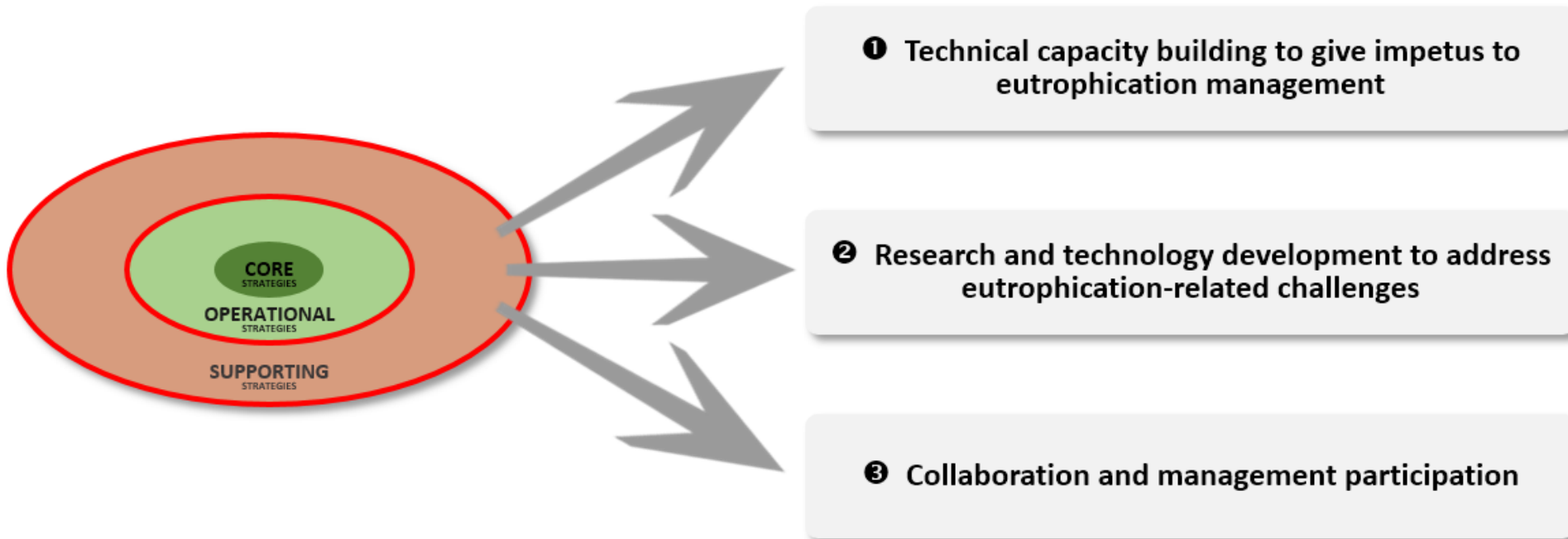
CORE STRATEGIES FOR EUTROPHICATION MANAGEMENT



OPERATIONAL STRATEGIES FOR EUTROPHICATION MANAGEMENT



SUPPORTING STRATEGIES FOR EUTROPHICATION MANAGEMENT



INFORMATION GAPS

❑ NEMP Data Gaps

WAY FORWARD

- ❑ The **implementation** of the Strategy at the **Catchment level** - aligned with the **implementation** of the following:
 - Classified Water Resources.
 - Determined & Gazetted Resource Quality Objectives (RQOs).
 - Determined & Gazetted Reserves.
 - The approved Water & Sanitation Master Plan.
 - National Water Resource Strategy.
 - Sustainable Development Goals (SDG) 6.

Project Management Team

Ms Tovhowani Nyamande

Director: Sources Directed Studies

Project Manager

Tel: 012 336 7521

Email: NyamandeT@dwa.gov.za

Ms Mmaphefo Thwala

Scientific Manager: Sources Directed Studies

Assistant Project Manager

Tel: 012 336 7928

Email: ThwalaM@dws.gov.za

Mr Samkele Mnyango

Production Scientist: Sources Directed Studies

Project Co-ordinator

Tel: 012 336 6900

Email: MnyangoS@dws.gov.za



THANK YOU!!