

Rehabilitation Management Guidelines for Water Resources

Background Information Document

Project Steering Committee Meeting 04

November 2023



water & sanitation
Department:
Water and Sanitation
REPUBLIC OF SOUTH AFRICA

PURPOSE

The purpose of this Background Information Document (BID) is:

- To assist Project Steering Committee (PSC) members to prepare for the upcoming PSC Meeting 04 scheduled to take place on **21 November 2023**; and
- To provide progress on the development of the Rehabilitation Management Guidelines (RMGs) for Water Resources Project i.e., Groundwater and Lakes/Dams Reports.

The BID consists of the following:

- Scope of Work and Project Progress;
- Stakeholder engagement platforms; and
- Way-forward

The Department of Water and Sanitation (DWS) study team can be reached as detailed below.

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1. BACKGROUND & INTRODUCTION

Chapter 3 of the National Water Act (NWA), (Act No. 36 of 1998) provides for the protection, use, conservation, management, and control of water resources in an efficient, sustainable, and equitable manner in South Africa. Sections 19 and 20 of NWA Chapter 3 focus on the *prevention and remedying effects of pollution* and the *control of emergency incidents*, respectively.

The protection of water resources is critical for ensuring healthy ecosystems and water availability for current and future use. To this end, sustainable development of water resources requires that water quality degradation be avoided, minimized, and remedied where applicable.

In 2020, the DWS Directorate: Sources Directed Studies (SDS) initiated an in-house project for the development of the Rehabilitation Management Guidelines for Water Resources in South Africa. The project responds to one of the objectives of the Chief Directorate: Water Ecosystems Management to conduct sources directed studies as informed by broader DWS strategic objectives.

2. PROJECT PROGRESS & DELIVERABLES

To date, the **Project Planning and Inception Phases** have been completed. These included the establishment of stakeholder engagement committees, completion of the Gap Analysis Report and Inception Report.

The **Inception Phase** was undertaken with the aim to define the project scope and review available information to establish the status quo with regard to rehabilitation practices and interventions for water resources in South Africa. The Draft Inception Report was finalized in December 2021. This phase was followed by the Situation Assessment Phase.

The **Situation Assessment Phase** involved a comprehensive review of available studies, publications, reports, projects, programmes, and initiatives that are specific to South Africa and implemented in support of rehabilitation of water resources. This review gathered detailed information in terms of rehabilitation and identified knowledge gaps. The **Draft Situation Assessment Report** was finalized in June 2022.

Five themes have been identified for the Draft RMGs developed and these have been categorized into Rivers, Wetlands, Estuaries, **Groundwater**, **Lakes** and **Dams** as per the NWA (**Figure 1**). The **Lakes** and **Dams** guidelines encompass all the components of water resources that address characteristics of watercourses (hydrology, geomorphology, water quality, habitat and biota). Conversely, the **Groundwater** guidelines are developed per water sector i.e., domestic, mining, industrial, agricultural, forestry and solid waste.

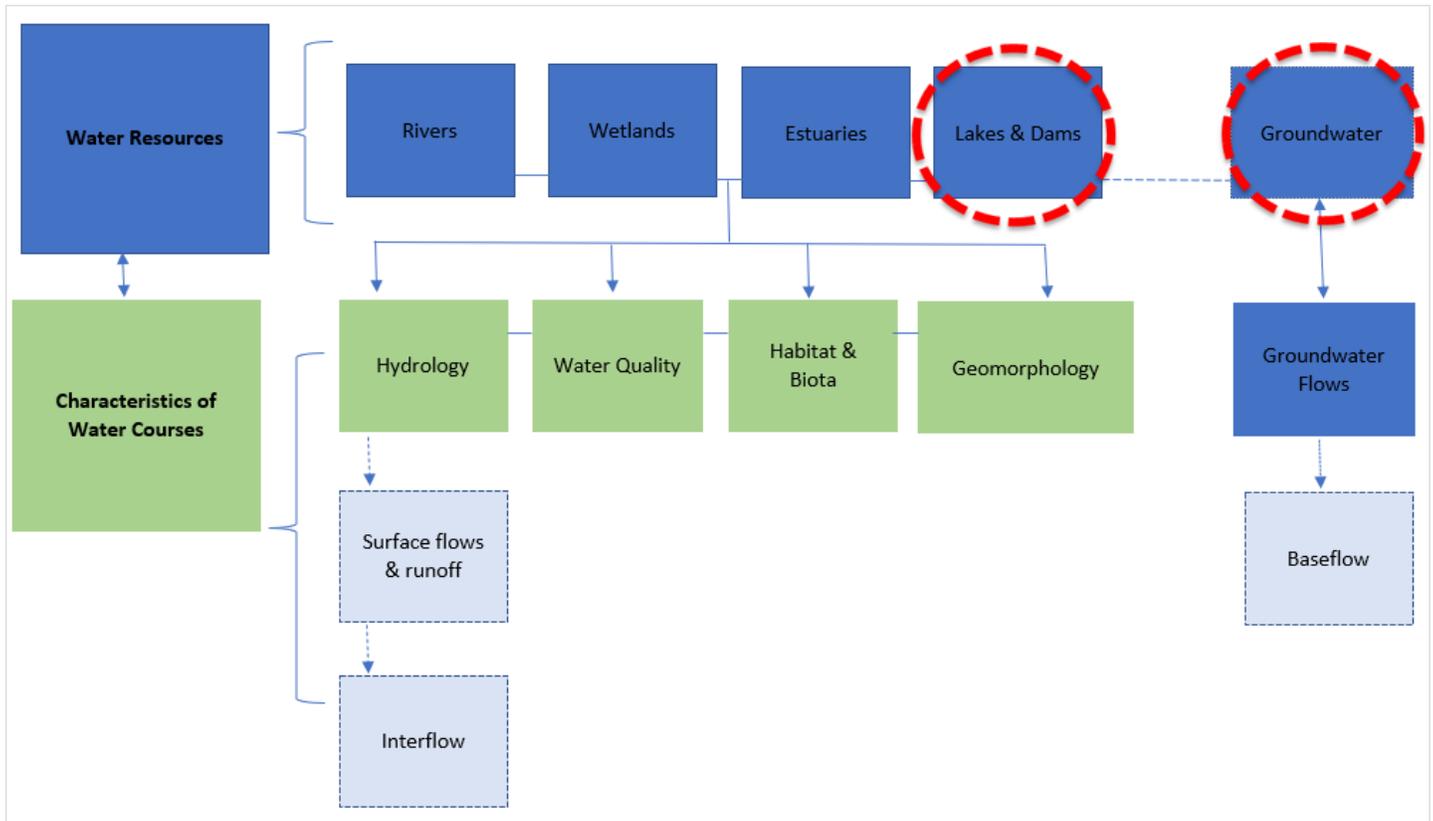


Figure 1: Components of water resources and characteristics of watercourses

The development of the RMGs for Water Resources commenced in April 2022 to provide guidance to water users on step-by-step rehabilitation measures/interventions to be followed for identified impacts. The approach followed comprises of five phases (including stakeholder engagement running concurrently with all phases), namely:

- **Diagnostic Phase** which entails determining the conditions and the type, size, and extent of impacts on characteristics of watercourses;
- **Planning and Assessment** aimed at the assessment and collation of available information from maps & datasets on the affected watercourses and the review and assessment of legal considerations;
- **Defining Rehabilitation Objectives** which provides the objectives of rehabilitation to ensure the impacts on the characteristics of watercourses are addressed;
- **Execution Phase** which involves providing recommendations on techniques and methods to address impacts identified. Consideration is also given to the protection of water resources ecosystem services, people, and livelihoods;
- **Monitoring Phase & Evaluation** which entails:
 - Monitoring of the techniques and methods employed to ensure rehabilitation interventions implemented are effective and yield the desired results;
 - Evaluation of the effectiveness of interventions against the achievement of rehabilitation objectives and outcomes; and

- Determination of maintenance objectives.

To date, the RMGs for Rivers, Wetlands, Estuaries, **Groundwater, Lakes, and Dams** have been drafted. **Figure 2 and 3** below presents the RMGs scenarios for **Groundwater, Lakes and Dams**, for the scope of the upcoming PSC meeting.

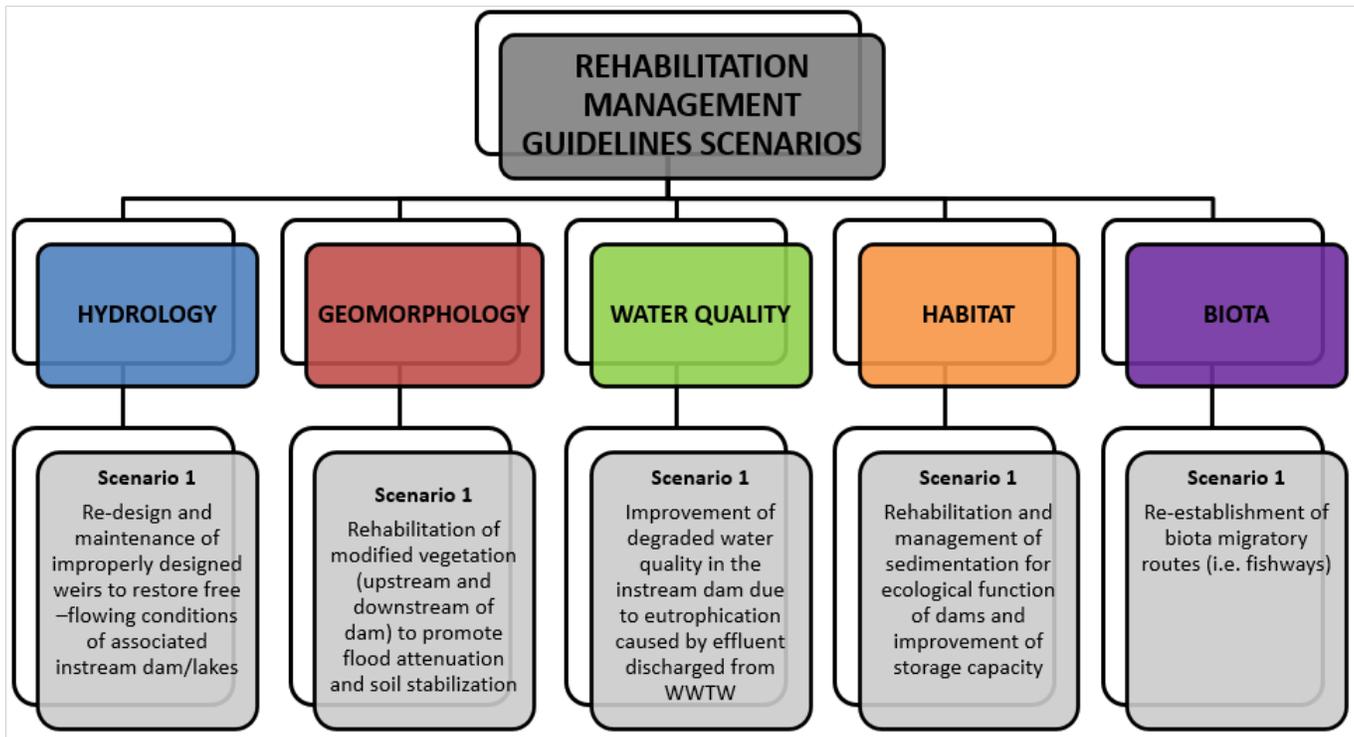
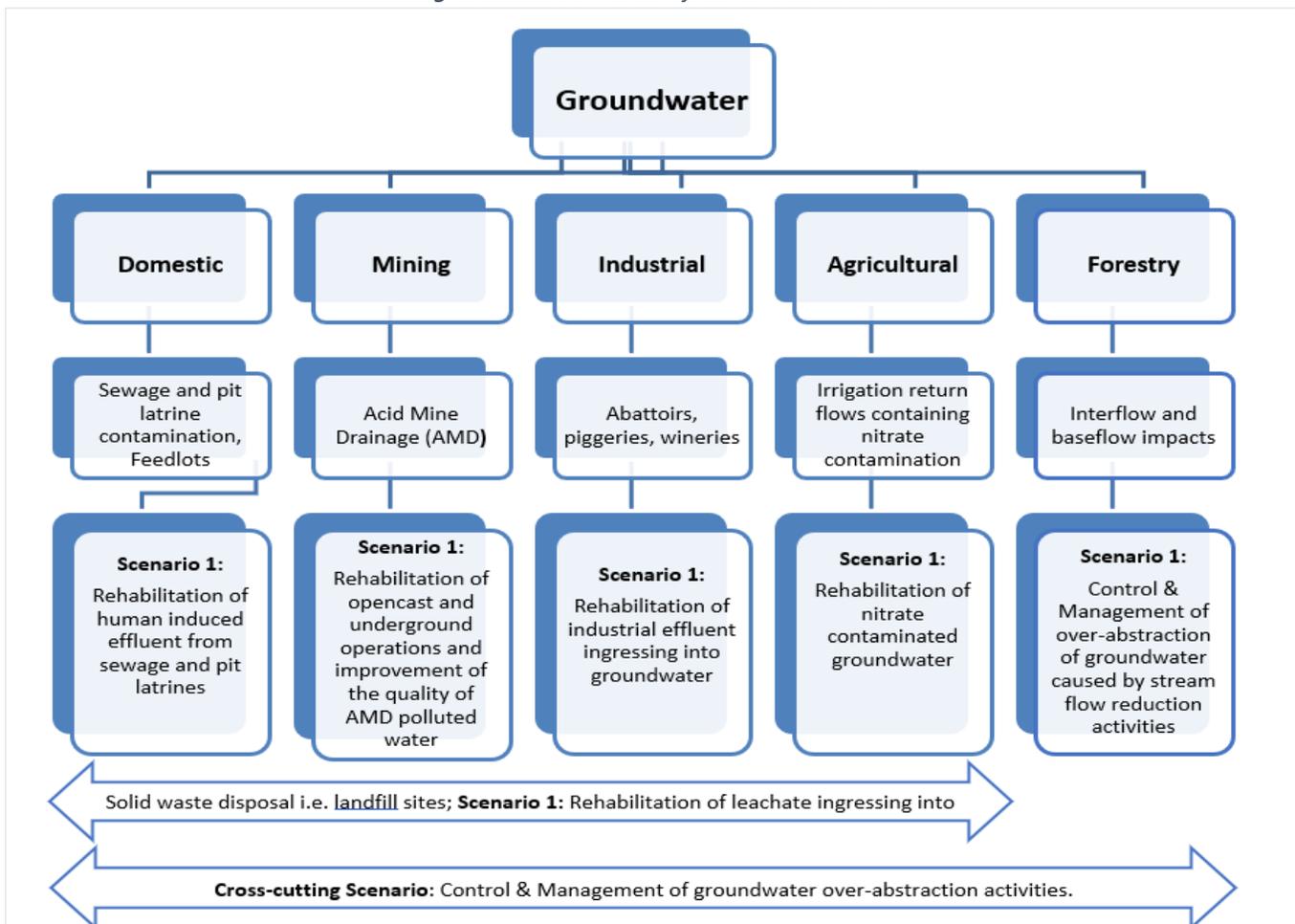


Figure 2: RMGs Scenarios for Lakes and Dams



3. STAKEHOLDER ENGAGEMENT

The process of developing the Rehabilitation Management Guidelines is stakeholder driven and strengthened by a stakeholder engagement process as required by Batho Pele Principles i.e., consultation, openness, transparency, and access to information. The project process entails consultation and engagement with all three spheres of government, civil society, and private sector, and participation of the entire water sector stakeholders in order to ensure appropriateness and acceptability of the guidelines by different sectors and role-players responsible for implementation and overall water resource management.

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 03 held on 22 August 2023 to provide progress on the development of the RMGs for Estuarine Water Resources. In addition, the RMGs for Rivers, Wetlands and Estuary themes were consulted with the Department of Forestry, Fisheries and the Environment and the Water Research Commission, amongst others, to solicit technical inputs from the wider water sector on the developed guidelines.

4. WAY FORWARD: EXTERNAL REVIEW

All project outputs and deliverables will be circulated to the PSC members for review and input as the initial step of external review. Issues and Responses Register (IRR) will be updated to capture stakeholder engagement input received during the meetings. The reviewed Draft Groundwater, Lakes and Dams RMGs Reports will be updated with all inputs received.