



**water & sanitation**

Department:  
Water and Sanitation  
**REPUBLIC OF SOUTH AFRICA**



**NATIONAL DEVELOPMENT PLAN**  
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# HIGH CONFIDENCE GROUNDWATER RESERVE DETERMINATION STUDY IN THE BERG CATCHMENT

PROJECT OVERVIEW — PROJECT STEERING COMMITTEE MEETING No. 3

Presented by: Philani Khoza

Date: 16 March 2023



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# Presentation Outline

- Brief background
- Study progress and milestones achieved
- Capacity building programme



# Brief background

- 24-months project: *February 2022 to February 2024*
- The primary objective of this study is *to determine a high confidence groundwater Reserve requirements (quantity and quality) to satisfy the basic human needs and to protect aquatic ecosystems for all priority water resources within the Berg catchment.*

# Study Progress and Milestones Achieved

| DELIVERABLE   | DUE DATE      |  |
|---|---------------|--|
| 1. Inception Report   | April 2022    | Finalized reports for the 2022/2023 Financial Year |
| 2.1 Gap Analysis Report   | June 2022     |  |
| 2.2 Inventory of Water Resource Models Report                                       | June 2022     |  |
| 3.1 Delineation of Water Resource Units Report                                      | August 2022   |  |
| 3.2 Ecological Reference Conditions Report  | October 2022  |  |
| 3.3 BHN and EWR Requirement Report  | February 2023 | Planned deliverables for 2023/2024 Financial Year  |
| 3.4 Operational Scenarios and its Socio-Economic and Ecological Consequences Report | May 2023      |  |
| 3.5 Evaluate Scenarios with Stakeholder's Report                                    | August 2023   |  |
| 3.6 Monitoring Programme Report   | November 2023 |  |
| 3.7 Groundwater Reserve Determination Report  | February 2024 |  |
| 3.8 Database of all information and data (incl. spatial)                            | February 2024 |  |
| 3.9 Gazette and Implement Reserve   | February 2024 |  |

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# Capacity Building Programme

| Task | Description   | Period                  |
|------|---|-------------------------|
| 2.1  | Gap Analysis and Water Resource Model Inventory: data collection, review, and analysis  | June 2022               |
| 3.1  | GRU delineation   | August 2022             |
| 3.4  | <p>Water Resource Modelling: 1 week groundwater modelling.</p> <p><b>Day 1</b> - Field trip to Cape Flats Aquifer and Table Mountain Group Aquifer – all DWS staff</p> <p><b>Day 2</b> - Introduction to Groundwater Modelling and Data Collation – in person training</p> <p><b>Day 3</b> - Conceptualization and Groundwater Model Set Up – in person training</p> <p><b>Day 4</b> - Model set up and Model Calibration – in person training</p> <p><b>Day 5</b> - Scenario Analysis and Results – in person training</p> | 23 – 27<br>January 2023 |
| 3.8  | Reserve Determination: Attend Final Reserve Determination stakeholder engagement workshop to observe how it is determined and update the reserve reporting based on stakeholder input   | January 2024            |

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- Study deliverables accessible at:  
<https://www.dws.gov.za/rdm/currentstudies/default.aspx>