

### TERMS OF REFERENCE FOR A DIRECTED WRC PROJECT

KEY STRATEGIC AREA Water Resource Management and Ecosystems

**THRUST** 

**PROGRAMME** 

TITLE Guidance document on Groundwater Data collection

TOR ID 1009866

### General Objectives:

The Strategic Water Sector Cooperation (SSC) between Denmark and South Africa (DWS) is a long-term bilateral cooperation, which amongst others are contributing to the South African water sector by sharing practical experience and providing expert input into the gaps in the South African groundwater guideline municipal sphere in order to add long term value to the South African work on optimizing the utilization of groundwater. A Table of Contents (ToC) for 5 guidance documents has been developed, with special focus on the optimal use of groundwater in the current water supply mix as outlined below:

- 1. Conjunctive Use (identified as Integrated water use management)
- 2. Groundwater Scheme Development (identified as Installing groundwater schemes)
- 3. Management of Groundwater Schemes
- 4. Data collection
- 5. Protection Zones (Delineation and Protection)

One key aspect is to develop a South African groundwater management (SAGM), based on the detailed Danish methodology, international knowledge and South African specialized knowledge of the South African hydrogeology. The SAGM will be developed in an iterative approach, initially based on existing experience of both countries (and international experiences, where relevant), and afterwards further expanded and developed, based on experience from a number of case studies

### Specific Aims:

The purpose of this guidance document is to describe in practice how groundwater data should be collected, the situations where other authorities (e.g. municipalities, CMA, DWA,WUA, mines, and Dept for agriculture) supply data to be used by municipalities and how data should be stored to minimize data loss, and what data can be used for, locally, regionally and nationally. This intervention will consider:

- 1. Identify the holdings and custodian(s) of water data (specifically hydrologically important data) in the form of a gap analysis;
- 2. Clarify the protocols for data collection and collation;
- 3. Assess the quality of datasets and evaluate their reliability;
- 4. Examine the costs associated with obtaining and maintaining the identified datasets;
- 5. Catalogue the datasets;
- 6. Develop a framework for collection and storage of data;
- 7. Training of operators on how to correctly measure and record data;

#### Rationale:

### Note:

#### **Deliverables:**

- 1. Gap analysis report
- 2. A report on the methodology applied to gather relevant data and storage platforms
- 3. Training report
- 4. Workshop with key stakeholders to understand the status quo
- 5. Guidance document on Groundwater Data collection as print-ready final report

# **Expected Outputs**

# Lighthouse:

# **Knowledge Tree**

**Time Frame: 9 Months** 

Total Funds Available: (VAT Inclusive)

Year 2021/2022 R350 000,00