



TERMS OF REFERENCE FOR A DIRECTED WRC PROJECT

KEY STRATEGIC AREA	Water Resource Management and Ecosystems
THRUST	
PROGRAMME	
TITLE	Guidance document on Protection Zones (Delineation and Protection)
TOR ID	1009867

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 main aim of this project is to describe how knowledge based management approaches is used to protect and delineate the groundwater resource, both from point source pollution, and as a precaution from future threats (quality and quantity). This intervention will consider:

1. Describe the importance of protection zone delineation meant to protect the abstraction point from deteriorating water quality;
2. Determine the appropriate scale needed, reason and purpose for protection – kind of protection zones and how to be protected against certain kinds of pollutants and associated impacts;
3. To develop a draft policy on aquifer protection zoning, highlighting procedures on how to report compliance issues, such as pollution incidents;
4. Develop an assessment methodology and analysis framework for identifying vulnerable aquifer systems through the use of mapping;
5. Stipulate roles and responsibilities of the various stakeholders ;
6. Conduct at least one workshop/training (the training content to be delivered by the successful project team).

Rationale:

Note:

Deliverables:

1. Desktop and primary research on local and international protection zoning practices;
2. Methodological approach used to define the capture zones;
3. Develop implementation plan for different protection zoning methodologies to be used;
4. Workshop report;
5. Guidance document on Protection Zones (Delineation and Protection) as print-ready final report

Expected Outputs

Lighthouse:

Knowledge Tree

Time Frame: 9 Months

Total Funds Available: (VAT Inclusive)

Year	2021/2022	R300 000,00
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