



## TERMS OF REFERENCE FOR A DIRECTED WRC PROJECT

KEY STRATEGIC AREA	Water Resource Management and Ecosystems
THRUST	
PROGRAMME	
TITLE	Guidance document on conjunctive use (identified as Integrated Water Use Management)
TOR ID	1009863

### ***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 will be to make a cost-benefit analysis to be able to compare different water sources to each other, in order to decide the combination of water sources, best suitable from a financial, water security and environmental point of view. This intervention will consider:

1. To review water resource information with regard to creating awareness of decision-makers and end-users on which options to use and assessing the resource availability;
2. To assess options for diversifying the water mix with special emphasis on groundwater;
3. To do a cost benefit analysis relating to economics, access and availability to supply sources. Considering the implications of conjunctive water use options and impact on treatment costs;
4. Carry out stakeholder consultations with regional experts, national officials and local officials;
5. Develop a conceptual framework for the operation and maintenance of groundwater infrastructure.
6. Conduct at least one workshop/training (the training content to be delivered by the successful project team).

**Rationale:**

**Note:**

**Deliverables:**

1. Study design and project plan : Inception report indicating a detailed project plan to ensure that the project runs on time and on budget
2. Cost benefit analysis on conjunctive use options
3. Strategy O&M indicators and framework
4. Workshop report
5. Guidance document as print-ready final report

**Expected Outputs**

**Lighthouse:**

**Knowledge Tree**

**Time Frame: 9 Months**

**Total Funds Available:** (VAT Inclusive)

Year	2021/2022	R250 000,00
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