

DEPARTMENT OF WATER AFFAIRS AND FORESTRY
DIRECTORATE: NATIONAL WATER RESOURCE PLANNING



**CONTINUATION OF THE WATER RECONCILIATION STRATEGY FOR THE
KWAZULU NATAL COASTAL METROPOLITAN AREA**

TERMS OF REFERENCE

1. INTRODUCTION

The KZN Coastal Metropolitan Area (KZN Metro) stretches from the Thukela River mouth on the North Coast to the Mkomazi River on the South Coast, and from Howick in the east to Durban in the west. The bulk of the area is supplied with water from the Mgeni System (Midmar, Nagel, Albert Falls and Inanda Dams), supplemented with water transferred from the upper Mooi River (Mooi-Mgeni Transfer Scheme). The North Coast is supplied from the Hazelmere Dam on the Mdloti River and from the undeveloped Mvoti River. With the population of 5,2 million KZN Metro is the second largest concentration of population in South Africa.

The Water Reconciliation Strategy Study for the Kwazulu Natal Coastal Metropolitan Area (KZNWRS) was commissioned by the DWAF in 2006 with the purpose to develop reconciliation options which would ensure adequate supply of water for the KZN Metro well into the future. This study, which is now nearing completion, identified the current and fast growing water use to be some 400 million m³/a, exceeding the available yield of the bulk supply systems (assured for 98% of time) by some 46 million m³/a. The strategy needs to be urgently implemented to

prevent severe water shortages. For more background information about the strategy see Report No PWMA 11/000/00/0907, "Water Reconciliation Strategy Study for the Kwazulu Natal Coastal Metropolitan Areas", dated July 2009.

One of the key recommendations that was put forward in the study was the establishment of a Strategy Steering Committee. The committee will be the custodian of the strategy and will be responsible for:

- ensuring an adequate supply of water for KZN Metro,
- ensuring that the Strategy remains relevant and updated,
- monitoring and co-ordinating the implementation of the relevant actions identified in the Strategy,
- ensuring that studies are timeously undertaken by the responsible institutions so that the necessary infrastructure for augmentation of water supplies can be developed in time,
- ensuring that water conservation and water demand management are implemented,
- ensuring that the Strategy and its recommendations are appropriately communicated to major stakeholders as well as to interested or affected parties,

2. GENERAL TASK DESCRIPTION

2.1 Task Background

A high level Strategy Committee will be established to ensure that the strategy is implemented, and regularly updated, and to make recommendations on longer term planning activities required to ensure ongoing adequacy of water available in the designated area. The Strategy Steering Committee will be established with representatives nominated by the major stakeholders and role players in the KZN Metro water supply area.

For the Strategy Steering Committee to achieve its mandate, technical, scientific and administrative support will be provided by a Support Group that will be established in the near future. This support will be facilitated through DWAF's Directorate National Water Resource Planning. The Support Group will include officials from the DWAF KZN Regional Office, eThekweni, Msunduzi, iLembe, Ugu and uMgungundlovu municipalities, Umgeni Water, and other major stakeholders.

The scope of work for the Support Group includes activities such as:

- Periodic review and updating of requirement scenarios based on the latest information collected from all water users,
- Monitoring the effectiveness of the Strategy through periodic comparison of water requirements and water availability, and making recommendations to the Strategy Steering Committee regarding maintenance of the Strategy and the way forward,
- Participating in water resource protection as it relates to the Strategy, e.g. through support to the development of Catchment Management Strategies and the phasing in of the ecological Reserve for existing infrastructure,
- Supporting the Strategy Steering Committee in establishing and maintaining appropriate stakeholder engagement, e.g. keeping the public informed through press releases and public information meetings, providing regular updates of strategic issues and decisions to all local authorities and obtaining stakeholder inputs to those decisions; and
- Assisting the Strategy Steering Committee in all activities that may arise from the execution of its mandate, where such activities may require the backing of the Support Group.

The Support Group will in turn also require assistance to effectively perform its functions. A professional service provider (PSP) will need to be appointed and co-opted into the Support Group to provide scientific, technical and administrative assistance to the Support Group and to the Strategy Steering Committee itself, as and when required.

Functions of the PSP

The functions of the PSPs will be similar to those of the Support Group, but in addition they will have to do the actual collection and collation of information into documents and reports to the Strategy Steering Committee, enabling the Committee to take the necessary decisions to give effect to the Strategy. In addition, the PSP will be required to provide technical support related to strategy maintenance, preparing proposals and presentations and administrative assistance such as arranging meetings, agendas and minutes as requested.

2.2 Skills Required

The PSP team must have the proven skills and capacity to undertake the assignment functions described in the previous section. Some of the particular skills that would be required are:

- Experience in developing water requirement scenarios for Municipalities and irrigators.
- Experience of water resources planning including hydrology, the determination of system yields and water savings, the formulation and costing of infrastructure and other

interventions and the determination of URVs, the unit cost of water and the effect on tariffs of incorporating new infrastructure.

- Good understanding of how to undertake desktop assessments of the Reserve and to assess its effect on yields.
- Experience in utilizing the WRYM and WRPM.
- Good knowledge of the processes and time lines that must usually be followed in order to implement an intervention.
- Experience in the determination of the environmental and social impacts of interventions, in formulating mitigation measures and in obtaining approvals by the environmental authorities.
- Ability to utilize selection processes to identify the most appropriate series of options to meet various requirement scenarios.
- Ability to synthesize recommendations in a complex environment.
- Ability to interact with and successfully manage multidisciplinary teams.
- Ability to communicate and interact with senior officials, decision makers and the public.
- Ability to manage public participation processes.

3. GENERAL INFORMATION

3.1 Programme

It is envisaged that the assignment will be on-going for a period of 36 months.

3.2 Study Management

Management of PSP activities will be performed by the DWAF Directorate: National Water Resource Planning. Management meetings will take place at appropriate intervals. It is envisaged that these would coincide or be integrated with Support Group meetings, which in turn will be determined by the programme of Steering Committee Meetings. The extent technical work stemming from Steering Committee requests for support and other instructions issued by the Committee, will also influence the need for Support Group and PSP management meetings.

At this stage it is envisaged that Steering Committee meetings will take place twice a year, with Support Group/study management meetings at the same time as well as once or twice in between as required.

3.3 Evaluation Criteria

On the receipt of the proposals, the criteria shown in **Appendix A** will be used for the selection of the most suitable PSP to undertake the assignment.

4. INFORMATION TO BE PROVIDED IN THE PROPOSAL BY THE PSP

4.1 *Extent of the Proposal*

The text of the Proposal should be to the point and not longer than ten pages (A4) excluding CVs at a font size of 11 and a line spacing of 1.5.

4.2 *Summary of PSP Capacity and Capability*

The Proposal must contain information about the capacity and capability of the study leader and other key personnel in the water resources planning domain. This information should include details of appropriate educational qualifications and previous involvement in water resources planning studies. PSPs that do not have in-house capacity, capability or specific technical or scientific expertise in any particular aspect of the assignment are free to form associations or joint ventures with other PSPs that would provide the necessary services. The Proposal documentation must provide details about the nature of such collaborations. The Study Leader must be specifically identified and the main responsibility structure to support him must be briefly presented. The capability and experience of the study leader will be especially important.

4.3 *Summary of Relevant Experience*

The Proposal submission must contain brief summaries of:

- Experience in planning, implementation and management of water resource development projects in Southern Africa
- Experience of working in multi-disciplinary teams in the water resources domain
- Experience of water resource-related work in typical catchments and river systems that represent the range of catchment conditions and complexities in South Africa
- Experience in administrative inputs to meetings and related water resource study aspects.

4.3 *CVs*

Abridged CVs of all key personnel on the study team should be attached to the text of the Proposal. The extent of each abridged CV should be no longer than 1 (one) A4 page at font-size 11 and at single line spacing.

4.4 *Capacity-Building and Participation of HDIs and HDEs*

Due to the nature of the study it is difficult to define what capacity-building would be needed in the water resources management domain and therefore no targets are set for Historically Disadvantaged Individuals (HDIs) and Historically Disadvantaged Enterprises (HDEs) involvement.

PSPs are encouraged to put forward HDIs as key personnel and where appropriate, and to form associations or joint ventures with HDEs. The Proposal documentation must provide clear details about the nature of such collaborations.

A high level of HDI involvement will make for a more competitive Proposal as is evident from the evaluation criteria listed in Section 5.4.

5. ARRANGEMENTS FOR SUBMISSIONS OF PROPOSALS

5.1 Contact Persons

Enquiries about any aspect of this Proposal can be obtained from the following persons:

Ms Ntombencinci Ntlosi for administrative or procurement matters.

Telephone: 012-336 8364,

e-mail: NtlosiN@dwaf.gov.za

Mr. Niel van Wyk, Chief Engineer, DWAF Directorate: National Water Resource Planning (East) for technical matters.

Telephone: 012-336 8327,

e-mail: VanWykN@dwaf.gov.za

5.2 Deadline and Address for Submissions

Proposal documentation is to be submitted in accordance with form C2 "Invitation to Tender".