



water & forestry

Department:
Water Affairs and Forestry
REPUBLIC OF SOUTH AFRICA

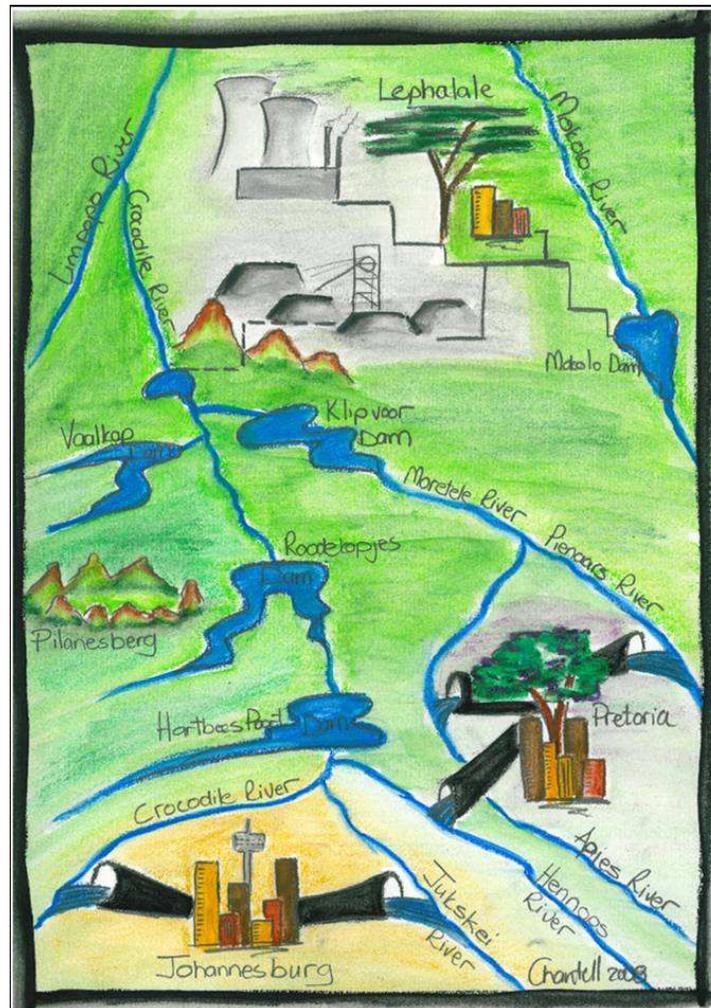
MOKOLO AND CROCODILE RIVER (WEST) WATER AUGMENTATION PROJECT (MCWAP)

De-bottlenecking of an Existing Pipeline

DEAT Registration Number: 12/12/20/1467

BASIC ASSESSMENT

BACKGROUND INFORMATION DOCUMENT



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1. PURPOSE OF BACKGROUND INFORMATION DOCUMENT AND BASIC ASSESSMENT

The purpose of this document is as follows:

- Serves as an introduction and description of the proposed de-bottlenecking of an existing pipeline owned by Exxaro in order to increase the existing supply capacity from Mokolo dam;
- Provides an overview of the Basic Assessment (BA) process;
- Provides notice to potential stakeholders to register as Interested and Affected Parties (I&APs) regarding the Mokolo Crocodile (West) Water Augmentation Project (MCWAP) De-bottlenecking; and
- To obtain the initial comments and contributions by I&APs.

According to Government Notice GN No. R. 385 (2006), "*interested and affected party*" means an interested and affected party contemplated in section 24(4)(d) of the National Environmental Management Act (No. 107 of 1998), and which in terms of that section includes –

- (a) any person, group of persons or organisation interested in or affected by an activity; and
- (b) any organ of state that may have jurisdiction over any aspect of the activity.

Focus of BID

The purpose of the BA is to identify and evaluate potential impacts, to recommend measures to avoid or reduce negative impacts and to enhance positive impacts.

2. BACKGROUND & INTRODUCTION

The current shortage in the supply of electricity in the country necessitates Eskom to fast track the building of further power stations. As a result, Eskom started construction of the new Medupi Power Station during 2007, in the Lephalale area, which lies in the Mokolo catchment. This development will require the expansion of the coal mining activities as well as other consequential secondary and tertiary developments. There is also a strong likelihood of further power stations in the area as well as petro-chemical industries. These developments are driven by the presence of extensive coal reserves in this area and are expected to result in a sharp increase in water requirements. Unfortunately, the availability of water in this area is limited. Therefore, the Department of Water Affairs and Forestry (DWAF) commissioned the Mokolo Crocodile (West) Water Augmentation Project (MCWAP) to establish how these demands can be met within the very challenging timeframes.

DWAF separated the scope of the MCWAP Feasibility Study into five key modules. These modules and the Professional Service Providers that were appointed to undertake the work are as follows:

- The **Project Coordination and Management Module** - Ninham Shand Consulting Service in

association with PD Naidoo and Associates (PDNA) Ltd and Urban-Econ Developmental Economists.

- The **Technical Study Module** including water resources evaluation, engineering assessment of infrastructure options and environmental screening - Africon (Pty) Ltd in association with Kwezi V3, Vela VKE and specialists.
- The **Environmental Management Module** - Nema Consulting.
- The **Regional Economics Module** – no Professional Service Provider has been appointed to date.
- The **Institutional and Financial Module** will be undertaken by Trans Caledon Tunnel Authority (TCTA).

The infrastructure options considered to augment water supply to the Lephalale area include the following:

1. **De-bottlenecking** of an existing pipeline, owned by Exxaro;
2. **Phase 1:** Augment the supply from Mokolo Dam; and
3. **Phase 2:** Transfer scheme from the Crocodile River (West) to the Lephalale area.

Even though it is regarded as one single project, in terms of the Environmental Management Module, separate environmental assessments are to be conducted for the three abovementioned project components (as discussed in Section 4).

3. PROJECT DESCRIPTION

The project phase entails the de-bottlenecking of the existing pipeline that stretches from Mokolo Dam to Lephalale, which belongs to Exxaro. This will entail the construction of the first 9km of the new gravity pipeline (for Phase 1) from Wolvenfontein balancing dams, with interconnections to the existing pipeline. The new pipeline will follow the same route as the existing gravity pipe, and the servitude will be widened to accommodate the new pipeline.

The intention of the de-bottlenecking is to improve the hydraulic gradient at Rietspruitnek, where the existing pipeline passes over a high point. By utilising the existing pump station at Mokolo Dam, water could then be delivered at a rate higher than the capacity of the existing pipeline. The capacity will increase from 0.51 m³/second to 0.61 m³/second.

Refer to the Locality Map – MCWAP De-bottlenecking on page 5, for an illustration of the proposed route.

4. ENVIRONMENTAL ASSESSMENT

4.1 Process

MCWAP requires authorisation in terms of the National Environmental Management Act (No. 107 of 1998), which will be undertaken in accordance with the Environmental Impact Assessment (EIA) Regulations (Government Notice No. R385, R386 and R387). Nema Consulting was appointed by DWAF as the independent Environmental Assessment Practitioner to undertake the environmental assessment for MCWAP.

The EIA decision-making authority is the National Department of Environmental Affairs and Tourism (DEAT). The Limpopo Department of Economic Development, Environment and Tourism (LEDET) is also an important participatory authority in this process. Following pre-consultation with DEAT it was decided to submit a Class Application for the following three separate environmental assessments:

- De-bottlenecking – **Basic Assessment**;
- Phase 1 – **Scoping and EIA**; and
- Phase 2 – **Scoping and EIA**.

The separation of MCWAP into three environmental assessments is to prioritise the associated components of the project.

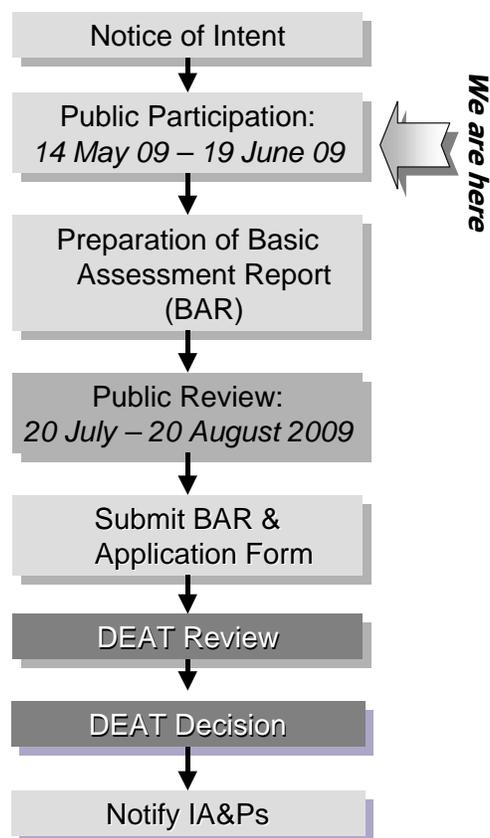
As mentioned, this BID is only for the Basic Assessment for the MCWAP De-bottlenecking. Separate environmental assessments will be conducted for Phase 1 and Phase 2 (as discussed above).

Authorisation will also be required from the Department of Minerals and Energy (DME) for establishing borrow pits for the sourcing of construction material, in terms of the Mineral and Petroleum Resources Development Act (No. 28 of 2002). This process will run in parallel with the EIA.

Note: The DEAT Reference Number allocated to the MCWAP De-bottlenecking is **12/12/20/1467**

Refer to the diagram below for an overview of the Basic Assessment process. It is anticipated that the process will be concluded in January 2010. *Note that the dates below may change.*

Overview of Basic Assessment Process – De-bottlenecking



4.2 Specialist Studies

At this stage the following specialist studies have been identified for MCWAP De-bottlenecking:

- Ecological (terrestrial and aquatic) Study;
- Heritage Impact Assessment; and
- Socio-economic Study.

Additional studies may be identified as the EIA process unfolds.

4.3 Public Participation

The public participation process that is currently underway for MCWAP De-bottlenecking entails the following:

1. Developing a database of I&APs, including landowners within a 200m corridor (i.e. 100m on either side of the pipeline route), water end-users, stakeholders, authorities and the general public;
2. Notifying I&APs through the placement of notice boards and newspaper advertisements (local and

- regional newspapers), and also distributing the Background Information Document (BID);
3. Convening an Open Day to allow for project-related discussions;
 4. Granting I&APs the opportunity to review the Basic Assessment Report (to be completed later on in process); and
 5. Advertising the DEAT environmental decision in the local newspaper and notifying all registered I&APs of the decision.

I&APs are encouraged to participate in the process in order for concerns to be addressed and included in the Basic Assessment Report.

The following **Open Days** (in chronological order) will be held as part of the wider MCWAP consultation process. Note that I&APs are welcome to attend Open Days that are not specific to the De-bottlenecking.

Phase 2	
27 May 2009	
Area:	Thabazimbi
Venue:	Kumba Bioscope Hall
Time:	08h00 – 13h00
27 May 2009	
Area:	Lephalale
Venue:	Mogol Conference Room
Time:	15h30 – 19h30

Phase 1	
28 May 2009	
Area:	Lephalale
Venue:	Mogol Conference Room
Time:	08h00 – 13h00

De-bottlenecking	
28 May 2009	
Area:	Mokolo Dam Area
Venue:	Ashante Conference Venue
Time:	15h30 – 19h30

Focus of BID

Thereafter, another public meeting will be held to present the findings of the Basic Assessment Report. The details of this meeting will be confirmed.

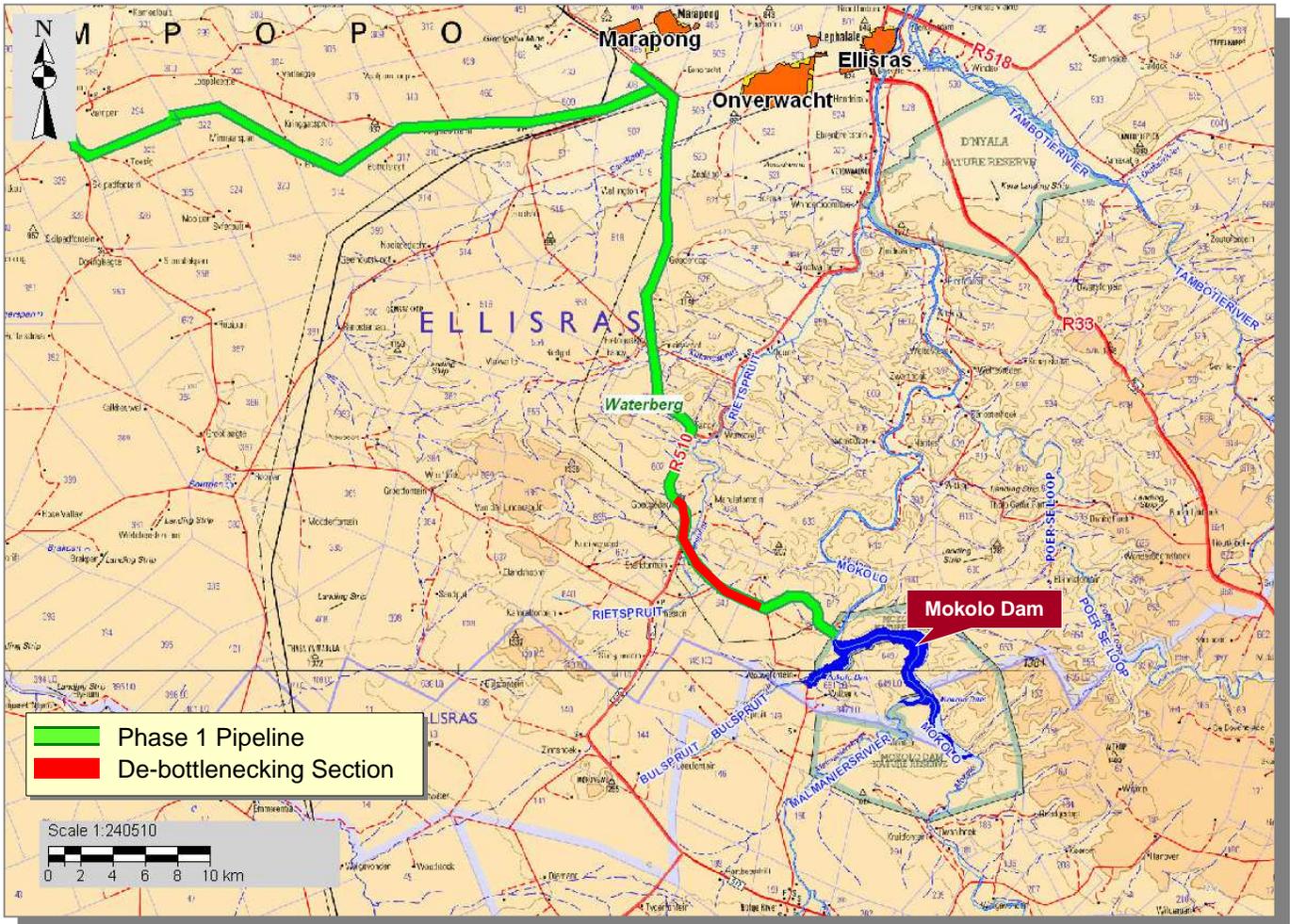
Permission to enter properties

Members of DWAF's investigating teams will be visiting the project area in the foreseeable future. Private and communal landowners are requested to kindly grant permission to enter their land. Team members will carry certificates of appointment by the DWAF as a means of identification.

4.4 Registration as I&AP and for attendance of Open Day

In order to ensure that you are registered as an I&AP, please submit your name, contact information and interest in the project by completing the attached Reply Form. It is important that you use the space provided on the Form to register for the public open day in advance. You can also provide your comments on the Reply Form. The time period for returning the Reply Form to Nema Consulting and registering as an I&AP is from:

14 May 2009 – 19 June 2009



5. CONTACT DETAILS

For any queries pertaining to the project, please contact the Environmental Assessment Practitioner below:



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Contact: Salomon Pienaar
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DWAF Project Web Page: <http://www.dwaf.gov.za/projects.asp>

Thank you for your participation



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**MOKOLO AND CROCODILE RIVER (WEST) WATER AUGMENTATION PROJECT
(MCWAP):**

De-bottlenecking of an existing pipeline
DEAT Ref. No. 12/12/20/1467

Reply Form
Registration as an Interested and Affected Party

(Complete and return by 19 June 2009 to: Salomon Pienaar)

Date:			Official use
Name of organisation: (if applicable)			Date received:
Name & Surname:			Our reference:
Address	Postal:	Physical:	Status
Tel No:			
Cell No			
Fax No:			
Email:			
Registration as an I&AP:	<input type="checkbox"/> Yes <input type="checkbox"/> No		
I would like to attend the Public Open Day on 28 May 2009 from 15h00 – 19h30 at Ashante Conference Venue (Mokolo dam area)	<input type="checkbox"/> Yes <input type="checkbox"/> No		

Please include the contact details of any possible other I&AP's you might be aware of:

Comments: *(note - additional pages may be included if the space provided is insufficient)*