



water & forestry

Department:
Water Affairs and Forestry
REPUBLIC OF SOUTH AFRICA

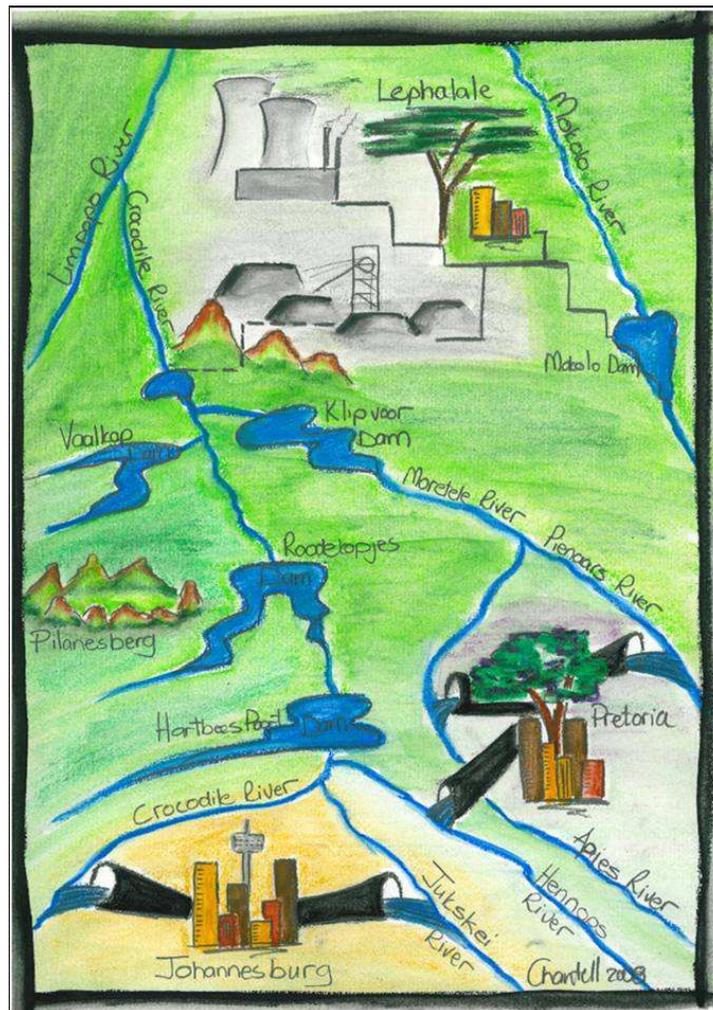
MOKOLO AND CROCODILE RIVER (WEST) WATER AUGMENTATION PROJECT (MCWAP)

Phase 1: Augment Supply from Mokolo Dam

DEAT Reference Number: 12/12/20/1465

SCOPING AND ENVIRONMENTAL IMPACT ASSESSMENT

**BACKGROUND INFORMATION DOCUMENT –
SCOPING PHASE**



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1. PURPOSE OF BACKGROUND INFORMATION DOCUMENT AND ENVIRONMENTAL IMPACT ASSESSMENT (EIA)

The purpose of this document is as follows:

- Serves as an introduction and description of the proposed construction of a pipeline parallel to the existing pipeline from Mokolo Dam to Lephalele environs in order to increase the supply capacity from Mokolo dam, and an extension towards the Steenbokpan area;
- Provides an overview of the Environmental Impact Assessment (EIA) process;
- Provides notice to potential stakeholders to register as Interested and Affected Parties (I&APs) regarding the Mokolo and Crocodile River (West) Water Augmentation Project (MCWAP) Phase 1;
- 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 EIA 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 Lephalele 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 Lephalele 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 Lephalele 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. DESCRIPTION – PHASE 1

Phase 1 entails augmenting the supply capacity from Mokolo Dam to supply in the growing water use requirement for the interim period until a transfer pipeline from the Crocodile River West can be implemented. The solution must over the long term optimally utilise the full yield from Mokolo Dam.

The Mokolo Dam has a long term firm yield of 39.1 million m³/annum of which 10.4 million m³/annum is allocated for irrigation. This White Paper allocation of 10.4 million m³/annum is utilized by the Mokolo Irrigation Board through a current 16 or 0 million m³/annum operating rule. The remaining 28.7 million m³/annum is available to supply the municipal and industrial needs of the Lephalele and Steenbokpan areas.



Until the commissioning of Phase 2 the Mokolo

Dam will be operated at a higher risk to supply in the growing demands of the users.

The following two most viable options of transferring water from the Mokolo Dam to the end users during the first phase have been identified and investigated:

- Construct a pump station and new pipeline from Mokolo Dam to Zeeland, Matimba and Medupi power stations and from there to Steenbokpan area (to supply the development of further power stations, petro-chemical plant, coal mining activities and consequential further developments). The pipeline section between Mokolo Dam and Matimba power station will be constructed parallel (or close) to the existing pipeline for most of the route. This is regarded as the preferred option, and is shown in the accompanying locality map.
- Construct a weir, abstraction works and a high lift pump station downstream of Mokolo Dam as well as a pipeline to deliver water to Zeeland, Matimba and Medupi power stations as well as Steenbokpan.

Refer to the Locality Map – MCWAP Phase 1 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:

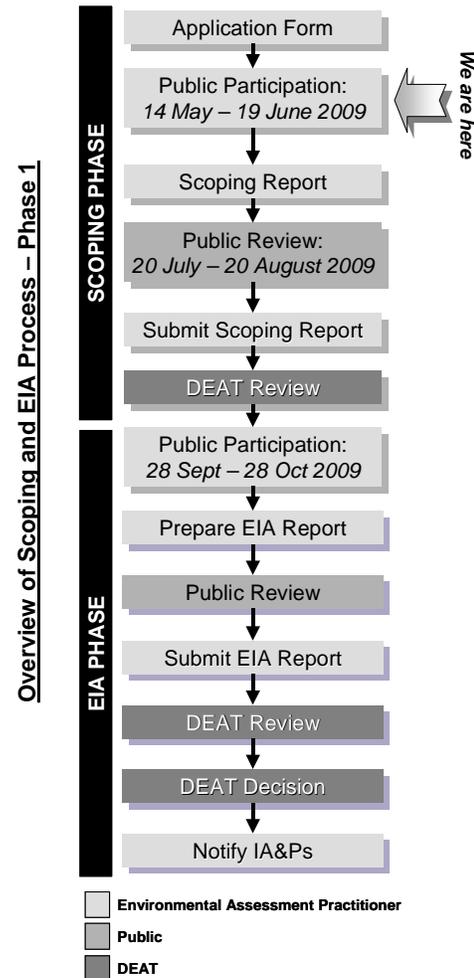
- De-bottlenecking – **Basic Assessment**;
- Phase 1 – **Scoping and EIA**; and
- Phase 2 – **Scoping and EIA**.

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

Note: The DEAT Reference Number allocated to MCWAP Phase 1 is **12/12/20/1465**

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

Refer to the diagram below for an overview of the Scoping and EIA process for MCWAP Phase 1. It is anticipated that the process will be concluded in May 2010. *Note that the dates below may change.*



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.

4.2 Specialist Studies

At this stage the following specialist studies have been identified for MCWAP Phase 1:

- 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 Phase 1 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 Scoping as well as the Environmental Impact Assessment Reports (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 Scoping and EIA reports.

The following **Open Days** (in chronological order) will be held during the Scoping phase as part of the wider consultation process. Note that I&APs are welcome to attend Open Days that are not specific to Phase 1.

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, public meetings will be held to present the findings of the Scoping Report. The details of this meeting will be confirmed.

During the EIA phase a public meeting will be convened to present *inter alia* the findings of the specialist studies and the progress of the environmental assessment. The details of the second public meeting will be communicated later on in the process.

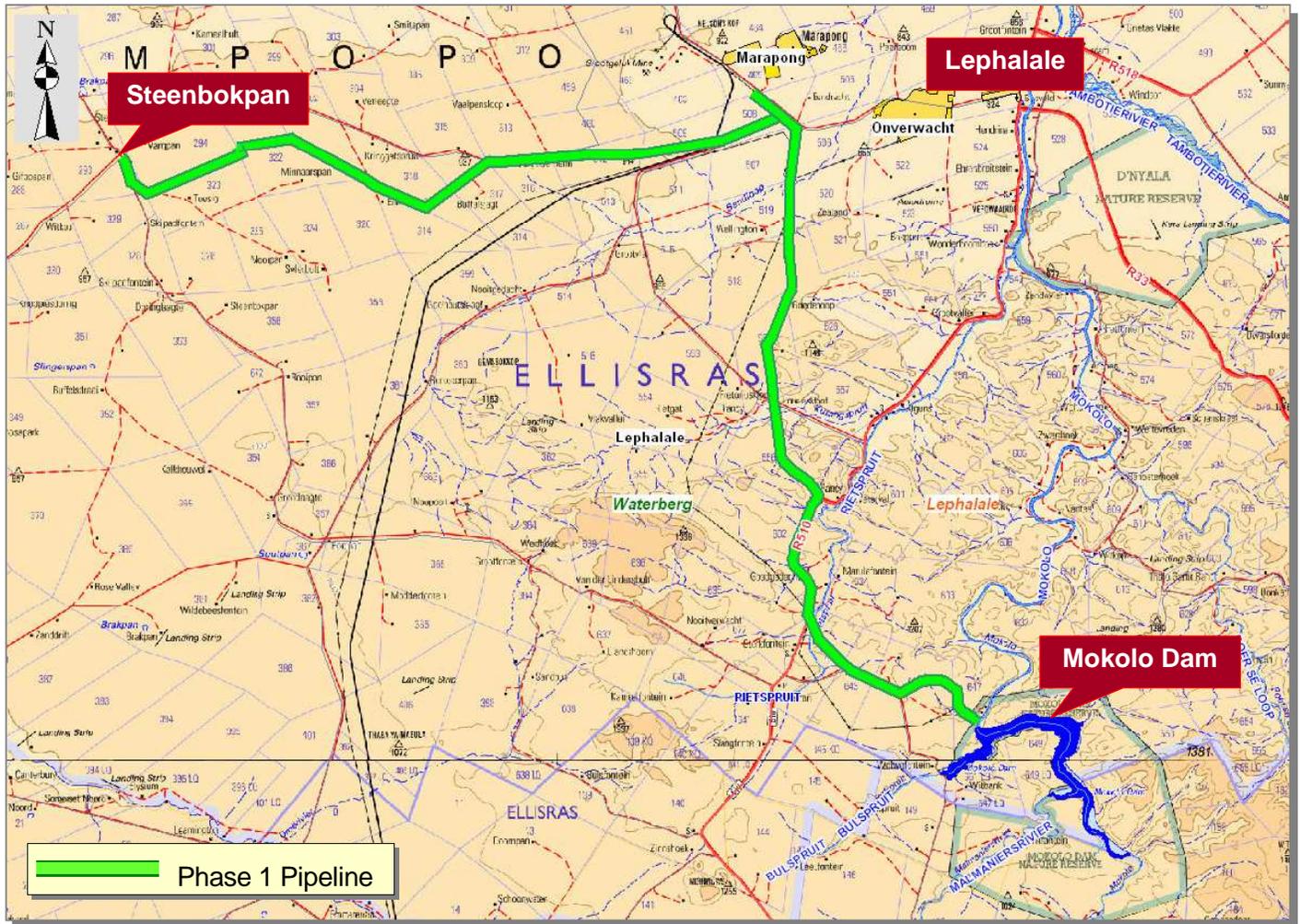
Permission to enter properties

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 Public 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



Locality Map – MCWAP Phase 1

5. CONTACT DETAILS

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



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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):**

Phase 1: Augment Supply from Mokolo Dam
DEAT Ref. No. 12/12/20/1465

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 (28 May 2009 from 08h00 – 13h00 at Mogol Conference Room)	<input type="checkbox"/> Yes	<input type="checkbox"/> No	
<u>Please include the contact details of any possible other I&APs you might be aware of:</u>			
<u>Comments:</u> <i>(note - additional pages may be included if the space provided is insufficient)</i>			