water & forestry

Department:
Water Affairs and Forestry
REPUBLIC OF SOUTH AFRICA

SECOND DOCUMENT
FOR COMMENT
OCTOBER 2007
EIA SCOPING PHASE

GROOT LETABA RIVER WATER DEVELOPMENT PROJECT (GLeWaP)

Environmental Impact Assessment

(DEAT Ref No: 12/12/20/978)

DRAFT SCOPING REPORT

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OCTOBER 2007

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REPORT DETAILS PAGE

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Report Title:	***Draft Scoping Report***
Author:	***Terry Baker with input from various specialist***
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19/09/20

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Approved for DWAF by:

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Director: Options Analysis

PREFACE

The Department of Water Affairs and Forestry (DWAF) is currently undertaking an Environmental Impact Assessment (EIA) to investigate the environmental feasibility of raising the Tzaneen Dam, the construction of a storage dam in the Groot Letaba River and associated bulk water infrastructure (pipelines, pump stations, off-takes and reservoirs) in the Limpopo province. The EIA is being undertaken by ILISO Consulting (technical aspects) with Zitholele Consulting providing the public participation support. The EIA is being undertaken according to the EIA Regulations under Section 24 (5) of the National Environmental Management Act (NEMA), (Act No 107 of 1998) as amended in Government Notice R385, 386, 387 – Government Gazette No. 28753 of 21 April 2006.

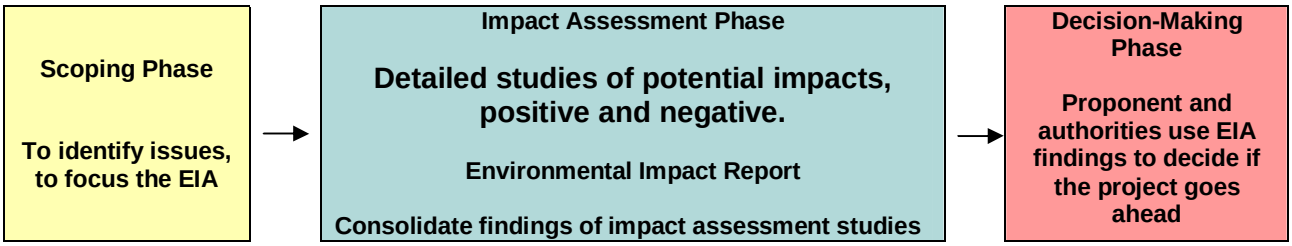
An EIA must show the authorities and the proponent what the consequences of their decisions will be in environmental, economic and social terms. An EIA is comprised of various pahses, with the Scoping Phase as the first and key phase. This is the phase during which potential issues associated with the project are scoped and identified in order that technical specialists can evaluate them during the next phase of the EIA, viz. the Impact Assessment Phase.

In accordance with the Regulations of the NEMA, Interested and Affected Parties (members of the public, the development proponent, technical specialists and the authorities) must have the opportunity to verify that all the issues they raised during Scoping have been captured, understood and considered in the investigations. This is the main purpose of the Draft Scoping Report and its Summary Report that will be available for comment from Wednesday 3 October 2007 to Wednesday, 31 October 2007.

After the public comment period, a Final Scoping Report will be submitted to the lead environmental authority, the national Department of Environmental Affairs and Tourism (DEAT) who, in close collaboration with the Limpopo Department of Finance and Economic Development[1] *, will consider the findings. DEAT will thereafter consider the scope to be covered by Specialist Studies, after which the EIA will proceed to the next phase.*

[1] Environmental Affairs is housed within these Departments.

AN EIA TYPICALLY CONSISTS OF THREE MAIN PHASES



The EIA for the proposed construction of infrastructure for the Groot Letaba River Development Project is currently in the Scoping Phase.

YOUR COMMENT ON THE DRAFT SCOPING REPORT AND ITS SUMMARY

The Draft Scoping Report and/or its Summary have been distributed to everyone that requested a copy in response to a letter in September 2007 announcing the availability of the reports for comment. Copies of the full report have also been made available at strategic public places in the project area (see page v and vi).

The following methods of public review of the Draft Scoping Report and its Summary are available:

- Completing the comment sheet enclosed with the reports
- Additional written submissions
- Comment by email, fax or telephone
- Comment during two public meetings/open houses to discuss the contents of the Draft Scoping Report, as follows:

Dates and times	Venues
Friday, 12 October 2007 from 08:30 – 13:00	Tzaneen Lodge
Saturday, 13 October 2007 from 08:30 –13:00	Runnymede Thusong Centre, Nwamitwa village

DUE DATE FOR COMMENT

Wednesday, 31 October 2007, to the public participation office at :
Anelle Odendaal / Wilheminah Mosupye, Zitholele Consulting
P O Box 6002, Halfway House, 1685
TEL: (011) 254-4855/4905, FAX: (011) 805-2100
Email: aodendaal@zitholele.co.za or wmosupye@zitholele.co.za

PUBLIC PLACES WHERE A FULL VERSION OF THE DRAFT SCOPING REPORT IS AVAILABLE

Town/area/district	Locality	Contact person	Telephone
Mokwakwaela area, Letaba	1.1.1.a.1 Mokwakwaela Multi Purpose Community Centre	Mr Shilubane	082-453 3774
Sekgosese area, Duiwelskloof, Letaba	Sekgosese Multi Purpose Community Centre	Mr MC Tshamamo	083 289 7955
Modjadjiskloof area, Letaba	Greater Letaba Local Municipality	Mrs H Kruger	(015) 309-9246/7
Letaba region	Department of Water Affairs and Forestry	Ms Morongwa Mbhalati	(076) 931 6177
Tzaneen area, City Centre	Greater Tzaneen Local Municipality Agatha Street, Civic Centre, Tzaneen	HOD: Public Participation: Mr Moroka Molale HOD Communication: Mr ZS Mkhatshwa	(015) 307 8000
Shilubane village, Tzaneen	Vula Mehlo Multi Purpose Community-Thusong Centre	HOD: Public Participation: Mr Moroka Molale HOD Communication: Mr ZS Mkhatshwa	(015) 307 8000
Tzaneen	Tzaneen Public Library	HOD: Public Participation: Mr Moroka Molale HOD Communication: Mr ZS Mkhatshwa	(015) 307 8000
Letsitele area	Letsitele Public Library	HOD Public Participation: Mr Moroka Molale HOD Communication: Mr ZS Mkhatshwa	(015) 307 8000
Haenertzburg	Haenertzburg Public Library, Mare Street, Community Centre	Ms Minnie de Villiers	(015) 276 4707
Tzaneen area, Letsitele	Agri Letaba	Mr Louis van Rooyen	(015) 345 1817
Tzaneen	Groot Letaba Water Users Association Offices	Mr Jurg Venter	(015) 307 2651
Tzaneen	Department of Water Affairs and Forestry	Mr Jakkie Venter/ Mr Isaac Nyatlo	(015) 307 3627/ 8600
Khopo village, Tzaneen	Lesedi Thusong Centre	HOD: Public Participation: Mr Moroka Molale HOD Communication: Mr ZS Mkhatshwa	(015) 307 8000
Xihoko village, Tzaneen	Xihoko Multi Purpose Community Centre	HOD: Public Participation: Mr Moroka Molale HOD Communication: Mr ZS Mkhatshwa	(015) 307 8000
Nwamitwa village, Tzaneen	Valoyi Traditional office	HOD: Public Participation: Mr Moroka Molale HOD Communication: Mr ZS Mkhatshwa	(015) 307 8000
Nwamitwa village, Tzaneen	Nwamitwa Traditional office	HOD: Public Participation: Mr Moroka Molale HOD Communication: Mr ZS Mkhatshwa	(015) 307 8000
Nkowankowa, Tzaneen	Nkowankowa Multi Purpose Community Centre, Nkowankowa	HOD: Public Participation: Mr Moroka Molale HOD Communication: Mr ZS Mkhatshwa	(015) 307 8000
Relela village, Tzaneen	Relela Multi Purpose Community Thusong Centre	HOD: Public Participation: Mr Moroka Molale HOD Communication: Mr ZS Mkhatshwa	(015) 307 8000
Dzumeri village, Giyani	Dzumeri Community Centre	Office of the Municipal Manager	(015) 812 5233
Giyani	Greater Giyani Local Municipality	Office of the Municipal Manager	(015) 812 5233

Town/area/district	Locality	Contact person	Telephone
Giyani, Mopani District	Mopani District Municipality	Office of the Municipal Manager	(015) 811 5500
Giyani, Mopani District	Department of Water Affairs and Forestry	Mrs Matsie Molapisane	(015) 812 0090
Phalaborwa	Ba-Phalaborwa Local Municipality	Ms Riana Smit	(015) 780 6302
Namakgale, Phalaborwa	Namakgale Police Station Calvin Ngobeni Street, opposite Sediba Accommodation and next to magistrate offices	Station Commissioner	(015) 769 1530
Polokwane	Department of Water Affairs and Forestry	Ms Sarah Mamabolo/ Mrs Leah Matlala	(015) 290 1444

Appreciation for participation by Interested and Affected Parties (I&APs)

Many I&APs have participated actively during the EIA process by attending meetings, and by taking the time to prepare written submissions. I&APs contributed considerable local knowledge, information on previous studies done in the area. Many also hosted members of the EIA team in their homes or offices, and showed them around the area. The EIA team wishes to express sincere appreciation for these efforts by I&APs.

EXECUTIVE SUMMARY

BACKGROUND

In 1998, the DWAF completed an assessment of various options to improve the management of water available for social and economic development in the Groot Letaba River catchment. Since it was recognised that the water resources of the Groot Letaba River were already heavily committed, a wide range of strategic alternatives were considered to improve the water availability situation in the face of growing needs in the domestic water use sector, deterioration in the conservation status of the river ecology and increasing shortages in the irrigation sector.

The feasibility study indicated that additional storage facilities would provide for a more sustainable solution to the water resource problems. To this end, various alternative storage sites were examined. The outcome of these investigations led to the recommendations that the construction of a new major dam at Nwamitwa be considered together with improved water management interventions. The raising of the Tzaneen Dam, with the objective of minimising the intensity and consequences of shortages in the irrigation sector, was found to deserve sympathetic consideration. The DWAF is currently reviewing and updating information in this regard and conducting post-feasibility bridging studies to determine whether the recommendations made previously are still relevant and how they should be taken forward.

Environmental authorisation process

Environmental authorisation in terms of Section 24 (5) of the NEMA and other legislation is required before the infrastructure components of the project can be implemented. An EIA process commenced in June 2007 and is expected to be completed in the last quarter of 2008.

The DEAT is the lead authority for the EIA, and will make the final decision on whether the proposed project may go ahead or not, and under what conditions. DEAT will collaborate closely with the Limpopo Department of Finance and Economic Development. DEAT will also use the inputs from other relevant government departments and agencies, for example, the Department of Minerals and Energy (DME), the Department of Land Affairs (DLA), Limpopo Department of Agriculture, the Roads Agency Limpopo (RAL), the South African Heritage

Resources Agency (SAHRA), and district and local municipalities before making a final decision.

Environmental authorisation may also be required from DME to use various quarry and borrow areas in terms of the Minerals and Petroleum Resources Development Act (Act 28 of 2002). Thus, I&APs are invited to submit their comments on borrow sites and quarries as part of the EIA.

MOTIVATION FOR THE PROJECT

The Groot Letaba Valley falls within the Luvuvhu-Letaba Water Management Area (WMA), one of the 19 WMAs into which South Africa is divided. Faced with water shortages of increasing severity and frequency, the main consumptive users of water (irrigation, forestry, domestic and industrial) have from time to time had to compete for limited supplies by taking extraordinary measures to survive. This has resulted in serious degradation of the riverine ecosystems. Historically the environment was not considered a water user and was not allocated any water from available resources. However, in the Letaba River catchment 14,8 million m^3/annum was allocated, on an ad hoc basis, for release from Tzaneen Dam to the Kruger National Park but little if any of these releases reached the Park with real beneficial effect.

With the advent of the National Water Act (Act 36 of 1998 NWA), a water allocation or Reserve for basic human needs and for sustaining ecological functioning, has placed a new perspective on water resource management in the Groot Letaba River. It now has to be complemented by a strategy for managing the water resources in a sustainable manner. Proposals for augmenting reliable water supplies from the Groot Letaba River include the construction of a dam on the Groot Letaba River at Nwamitwa just downstream of the Nwanedzi River confluence as well as the possibility of raising Tzaneen Dam. Bulk infrastructure for the treatment, conveyance and storage of potable water for primary use forms an integral part of the development proposals. Attention is focused on water needs for the increasing human population, for downstream riverine ecosystems (including those in the Kruger National Park) as well as for stabilising commercial irrigation, including the settlement of resource-poor farmers.

The Groot Letaba River Water Development Project (GLeWaP) is a major initiative by DWAF in support of the Limpopo Provincial Government's economic development strategy for the

province. The project will have a positive impact on the regional economics and on alleviating poverty. This will mainly be achieved through:

- *Increasing the safe, reliable water supplies for domestic and industrial use;*
- *Minimizing the frequency, intensity and duration of restrictions on the use of water allocated for irrigation of high value crops;*
- *An increase in total household income through stabilising the job market; and*
- *Providing leverage for the equitable distribution of resources.*

DESCRIPTION OF THE PROJECT

The Groot Letaba River Water Development Project is aimed at improving the management of the water resources in the catchment and consists of non-infrastructure options to manage the available water as well as the construction of infrastructure components. Although only the construction of the infrastructure components require authorisation from the DEAT and are subject to this EIA, they must be seen as being complemented by the non-infrastructure components.

Non-infrastructure options

Non-infrastructure options to make more water available, which do not form part of the project for environmental authorisation, include:

Water conservation and demand management, as well as water recycling and re-use: The aim is to ensure that increased efficiency and effectiveness of water use will decrease the growth in the need for new water supply augmentation

Local groundwater resources: The conjunctive use of ground and surface water is promoted. Groundwater resources should be developed incrementally to supply growing needs, supported by ongoing monitoring to ensure sustainable yields and good water quality. The Department will make recommendations to local authorities in this regard.

Removal of invasive alien vegetation: DWAF's Working for Water Programme is actively removing invasive alien vegetation in the Groot Letaba Valley as a means of improving runoff in the river system.

Infrastructure components of the project

The infrastructure components of the project that are subject to this EIA include (Figure 3.1):

- *Construction of Nwamitwa Dam on the Groot Letaba River, downstream of the confluence of the Nwanedzi River. The dam wall could be 36m high and would then have a gross storage capacity of 144 million m^3. The optimum size is yet to be determined. The catchment area of the proposed Nwamitwa Dam is 1 400 km^2 and the Mean Annual Runoff (MAR) is approximately 122,6 million m^3 under natural undeveloped conditions. With a storage capacity of 144 million m^3 the estimated increase in system yield is 47million m^3/a after providing for the Reserve*

- *Parts of the R529, D1292 and P43/3 roads will have to be re-aligned to accommodate the dam.*

- *Raising of the Tzaneen Dam could result in increasing the storage from 157,5 million m^3 to approximately 203 million m^3.*

- *Construction of water treatment works, bulk water pipelines and pump stations from the dam for water supply for domestic to communities in the area. Pump stations and reservoirs could each occupy an area of about half a football field.*

- *Borrow areas from which materials required will be sourced.*

- *Construction activities will take approximately 5 years with several construction teams working concurrently in different areas at the proposed dam site and along the pipeline routes.*

- *Residential accommodation for construction staff will be established in the vicinity of the proposed dam or in established towns. Housing, internal roads, water and electricity supply, water treatment, solid waste disposal, emergency facilities and recreational amenities will be provided.*

- *The construction cost of the infrastructure components of the project is estimated in excess of R1 100 million at 2007 prices.*

- *Construction sites will include offices, internal roads, water and electricity supply, waste water treatment, solid waste disposal, emergency facilities, areas for the handling of*

hazardous substances, workshops, wash bays, areas for the safe storage of fuel and explosives and communication infrastructure.

Supply of water from proposed Nwamitwa Dam is targeted by 2012 with full yield around 2013. Proposed construction will start in 2009.

ALTERNATIVES

Several alternatives to the non-infrastructure and infrastructural components of the project were fully investigated and it was confirmed that the proposed project is the preferred option. The specialist studies will therefore only focus on the proposed project and not on the alternatives. The alternatives investigated included, the following:

Do Nothing option

If no measures are taken to improve management of the water resources in the catchment, there will be shortages for irrigation, other developments and the socio-economic development in the region will be negatively affected and the availability of water to maintain the ecosystems will reduce. People in some villages in the study area are dissatisfied with the quality of the groundwater that is available and are resorting to collecting water from local rivers. Water collected is not treated introducing potential health risks, social impacts and also impacts on the natural environment. The "no project" option is therefore not considered the best alternative as it does not allow for the desired ability to manage and operate the water resource system, and is likely to result in increased negative social, economic and ecological impacts.

Replacing Commercial Afforestation with Natural Vegetation

The positive impact on flows in the river as a result of the replacement of commercial afforestation would be limited since natural vegetation in the areas is also a significant water user. The undesirable impact on the regional economy and on the local employment that would result from deforestation also negates this option.

Ceasing Export of Water to the Sand River Catchment

An annual allocation of 18,5 million m^3/annum is exported to Polokwane from the Dap Naude Dam and Ebenezer Dam. Polokwane does not have reasonable alternatives for replacing the

import of this water and therefore this option would impact significantly on water supply to the Polokwane area.

Improve Utilization Efficiency of Irrigation Water

Allocations are currently set at 50% of the annual quota as a result of the current drought conditions and low levels of water in storage. The irrigation sector already relies on modern technology and has invested heavily in management and sophisticated equipment to improve water use efficiency. Inefficient flood irrigation methods are rarely encountered in the study area. There is therefore little scope for improvement in this sector.

Decrease Irrigation Allocations

The agricultural sector (fruit orchards dependant on irrigation) and the associated agro-industries provide the majority of employment opportunities in the area. Competition for the limited jobs is fierce and unemployment in the area is high and many people rely on income from family members working in the cities. Decreasing allocations to the irrigation sector will negatively affect employment rates and is therefore not recommended.

Water Loss Management: Domestic and Industrial

Effective management systems to counter water loss can most certainly contribute to the increased availability of water. Maintenance tasks such as repairs of pipelines can be carried out as part of a comprehensive management system. Estimates, however, indicate that even with optimistic projections, these actions alone will fall far short of providing sufficient water to meet the increasing requirements.

Create additional storage

The objective of creating additional storage (in the form of a dam) is to improve effective water management in the catchment. The following alternative sites for additional storage were investigated:

- *The raising of the Tzaneen Dam (now under further investigation);*
- *Constructing a dam at other sites including at Hobson's Choice in the Letsitele River (not economically viable); and*
- *The Nwamitwa Dam (now under further investigation)*

DESCRIPTION OF THE RECEIVING ENVIRONMENT

Location

The proposed project mainly falls within the Greater Letaba Local Municipality (LIM332), Greater Tzaneen Local Municipality (LIM333), and the Mopani District Municipality (DC33) in the Limpopo Province. Small portions of the study area are in the Greater Giyani (NP331) and the Ba-Phalaborwa (N334) municipalities.

Geology, Soils and Topography

The geology at the proposed Nwamitwa dam site consists of Goudplaats Gneiss from the Swazian age. Underlying this is granite gneiss and diabase dykes. The rest of the Groot Letaba catchment is made up of granites that result in shallow weathering (less than 10 m) and the soils formed are sandy.

Surface Water and Quality

The Groot Letaba River rises in the western part of the catchment and flows in an easterly direction and has a catchment area of approximately 13 500km2. The most important tributaries of the Groot Letaba River in the study area are the Letsitele River and the Nwanedzi River. The water quality in the Groot Letaba River is of a good quality with some deterioration in the lower reaches due to salination from natural sources and nutrient enrichment.

Ecology

The project area covers ten different vegetation types. It is estimated that a total of 256 species of Red Data flora and fauna species could potentially occur. Moreover, at least 107 species could be endemic.

Demographic Processes

Settlement patterns in the study area are dominated by small rural villages, where the poorest people live. Communities in the study area live in relatively densely populated areas with Black Africans being the dominant population group. Education levels are generally low. Very few households have direct access to water within either their dwelling or yard. The provision of bulk water supplies to villages is therefore a priority to the affected communities.

Economic Context

The Greater Tzaneen Municipality contributed most of the GDP to the Mopani District in 2006. Agriculture and the irrigation sector in particular is the main base of the economy of the region and provides the major portion of local employment opportunities. The town of Tzaneen is the only provincial growth point in the study area. In the Greater Tzaneen Municipality, nearly 30% of the population are unemployed with unemployment increasing annually. Employment is mostly generated in the agriculture sector, followed by community, personal and social services sector and the wholesale, retail and trade sectors.

LAND USE ACTIVITIES

The Groot Letaba River catchment is a highly productive mixed farming agricultural area with high value fruit production dominating, complemented by cattle ranching, game farming, dryland crop production and a variety of crops produced under irrigation. Most of the roads in the area are poorly maintained. Apart from internal gravel roads, a fair tarred road network links most of the areas within the district. Although an increase is evident, the tourism demand is well below that which could be expected from an area with such outstanding natural potential.

ENVIRONMENTAL SCOPING

Technical process

The EIA is currently in the Scoping Phase i.e. the first step in the EIA process, designed to inform the public, interest groups, affected communities and government agencies of the EIA (including opportunities for public involvement) and to present the proposed actions, alternatives and impacts for public and agency review.. The purpose of scoping is to determine the range of alternatives and identify the potentially significant issues to be analysed in the Impact Assessment Phase. The scoping process is also intended to

eliminate detailed study of those issues that are not significant and those issues that have been addressed by prior studies. The scoping process includes the following:

- *Developing alternatives for evaluation, identifying environmental issues to be addressed and defining the project needs and desirability;*
- *Releasing this Draft Scoping Report to the public;*
- *A 30-day public scoping comment period and scoping meetings to present information and receive comments;*
- *Meeting, corresponding, and/or consulting with affected local, regional, and provincial government agencies, affected communities and other organizations regarding issues within their jurisdiction or concern;*
- *Carefully considering written or oral comments made at the scoping meetings or received during the scoping period, and as appropriate, refining the proposed alternatives, issues and impact assessment plan. Preparing a Final Scoping Report that summarizes the results of the scoping process, including comments received, and making the report available to the public.*

After completion of the 30-day scoping comment period, DEAT will consider all comments received during the Scoping Phase and, in consultation with other agencies, will formulate its comments on the Scoping Report and the next phase of the project.

Public participation process

Public participation forms an important component of the EIA. The key objective of public participation during Scoping is to help define the scope of the technical studies to be undertaken during the Impact Assessment Phase of the EIA. The EIA for the proposed project was widely advertised and special efforts are being made to obtain contributions of people who may be directly affected. A Background Information Document (BID) in English, Sepedi, XiTsonga and Afrikaans was widely distributed, advertisements announcing the EIA were placed in the media and project notice boards were placed at prominent localities in the study area.

Several meetings were held with landowners, communities, authorities, residents and others during July and August 2007. More meetings are envisaged, including two public

meetings/open houses indicated on page iii of this report. In addition to the public participation process for the EIA, the Department of Water Affairs and Forestry has initiated several parallel stakeholder liaison initiatives for the project as a whole.

All issues raised by stakeholders are presented in an Issues and Response Report, available from the Public Participation Office. After the end of the period for public comment on the Draft Scoping Report, any new issues will be captured in a Final Scoping Report. Once the lead authority for the EIA has approved the Final Scoping Report, the Impact Assessment Phase of the EIA will commence with several specialist studies.

As stakeholders raised issues, they were passed on to the environmental technical team to identify significant issues that need to be addressed by Specialist Studies during the Impact Assessment. The significance of an impact was determined by various criteria (nature of impact, extent, duration, intensity and probability of occurrence). Environmental issues and their potential impacts are described in the next section.

ISSUES AND POTENTIAL IMPACTS

The EIA study team has identified the following key issues that will require further in-depth investigation by specialists in various disciplines. These in-depth investigations will take place in the Impact Assessment Phase of the EIA.

The proposed infrastructure components of the GLeWaP project are likely to impact on:

River flow (water quantity and quality)

A change in the flow and mean annual run-off (MAR) in a river as a result of building a new dam could result in the degradation of aquatic and riparian habitats. One of the objectives of this project proposal is to better manage the flow regime to meet riverine ecological requirements.

Water quality could be affected due to possible eutrophic conditions, increased salinity, and changes in temperature and quantity of water released from the dam. Potential impacts on downstream users (including Kruger National Park and Mozambique) must also be considered.

Terrestrial ecology

The proposed project may lead to localised impacts on the ecology resulting from construction activities. Specialist studies should focus on site-specific ecological field surveys and impact assessments in the areas that will be directly affected by construction activities.

Social processes

The proposed project may impact on the size, composition and character of communities and the provision of services in the study area. The demographic profile may be impacted in a positive and negative way.

Economy

Direct and in-direct job opportunities will be created as a result of the construction and maintenance of the proposed dam. The project will mainly have a positive impact on the economy of the area, although a loss of agricultural land in the dam basin will be experienced.

Physical infrastructure

Some existing infrastructure could be impacted on by the proposed project. Any temporary or permanent disruptions in these services must be mitigated.

Public health

The decreased river flow may increase the risk of diseases in the adjacent and downstream communities. The potential benefits of potable water, with improvements in sanitation and hygiene, will increase the overall standard of living.

Heritage resources

Heritage resources may be impacted upon. A heritage assessment is necessary to reduce risks of the loss of these resources.

Relocation of main roads

Main roads in the project area will have to be relocated in the vicinity of the dam basin. This will have significant impacts on traffic flow routes, particularly between residential areas and

places of work in the agricultural sector but also for the transportation of agricultural products to markets.

Water rights

Land required for the project includes irrigated orchards and other crops. The future of the water allocations to this land is a major issue and requires a policy directive, bearing in mind compensation costs as well as the impact on the economy in future.

Land acquisition

Land in the basin is under productive permanent orchard crops that require a number of years to be replaced elsewhere to maintain throughput for packhouses and other fruit industries. Land purchase arrangements should be scheduled as early as possible to ensure production continuity.

International Considerations

The EIA takes note of the associated responsibilities linked to the Revised SADC Protocol on Shared Watercourse Systems and the new SADC Water Policy that will shortly be signed and ratified by SADC countries.

PLAN OF STUDY FOR IMPACT ASSESSMENT

To evaluate the issues and recommended mitigation measures (measures to avoid or reduce negative impacts, and to enhance positive ones), the Specialist Studies listed below will be done during the next phase of the EIA, the Impact Assessment Phase:

- *Aquatic Ecology;*
- *Water Quality;*
- *Terrestrial Ecology;*
- *Heritage Resources;*
- *Social and Landuse Processes;*
- *Health Impacts;*

- *Economic Processes;*
- *Traffic Impacts;*
- *Visual Impacts;*
- *Noise Impacts; and*
- *Air quality.*

All specialist studies will be undertaken in compliance with regulation 33(2) of GN 385 and will directly address the impacts identified during the Scoping process.

Once the specialist investigations have been completed and the findings and recommendations are integrated, an Environmental Impact Report will be prepared and be made available for public review.

A draft pre-construction Environmental Management Plan (EMP) and a generic construction EMP will be compiled and included in the Environmental Impact Assessment Report. The overall objective of these EMPs will be to present a workable document that explains how to operate and implement environmental protection requirements for construction. An EMP for the operational phase will be compiled during the design phase of the project when the necessary detail is available.

PROGRAMME AND NEXT STEPS

Following the comment period on the Draft Scoping Report, the issues raised by stakeholders, together with those of technical specialists and regulatory authorities, will be captured in a Final Scoping Report. The Final Scoping Report will be issued by November 2007 to those stakeholders that request a copy.

The Final Scoping Report will be used to define the scope of work for the second phase of the EIA, when the potential impacts of the proposed development on the environment and socio-economic status of the area will be examined in detail. In this way, the issues identified by stakeholders will inform the EIA process.

The Specialist Studies will be conducted from January to April 2008. The draft Environmental Impact Assessment Report is scheduled for public review over a period of 30 days in about April 2008 and, thereafter, it will be finalised for submission to the Authorities.

Environmental Authorisation is anticipated by October 2008, which, would enable the Department of Water Affairs and Forestry to commence construction during the second half of 2009.

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ABBREVIATIONS

CAAP	Compensation Assessment and Action Plan
CBO	Community Based Organisation
DM	District Municipality
DEAT	Department of Environmental Affairs and Tourism
DME	Department of Minerals and Energy
DSR	Draft Scoping Report
DWAF	Department of Water Affairs and Forestry
EIA	Environmental Impact Assessment
EIAR	Environmental Impact Assessment Report
EMP	Environmental Management Plan
EMPR	Environmental Management Programme Report
FSR	Final Scoping Report
GDP	Gross Domestic Product
GLeWaP	Groot Letaba River Water Development Project
GLLM	Greater Letaba Local Municipality
GTLM	Greater Tzaneen Local Municipality
I&AP	Interested and Affected Party
IDP	Integrated Development Plan

LP	Limpopo Province
MMSDsa	Mining Minerals and Sustainable Development (Southern Africa)
MDM	Mopani District Municipality
NEMA	National Environmental Management Act (Act 107 of 1998)
NGO	Non Governmental Organisation
NWRS	National Water Resource Strategy
OA	Options Analysis
PCMT	Project Co-ordination and Management Team
PSP	Professional Service Provider
RDP	Reconstruction and Development Programme
SIA	Social Impact Assessment
VIP	Ventilation Improved Pit Latrine
WCD	World Commission on Dams
WMA	Water Management Area