1. STUDY INTRODUCTION

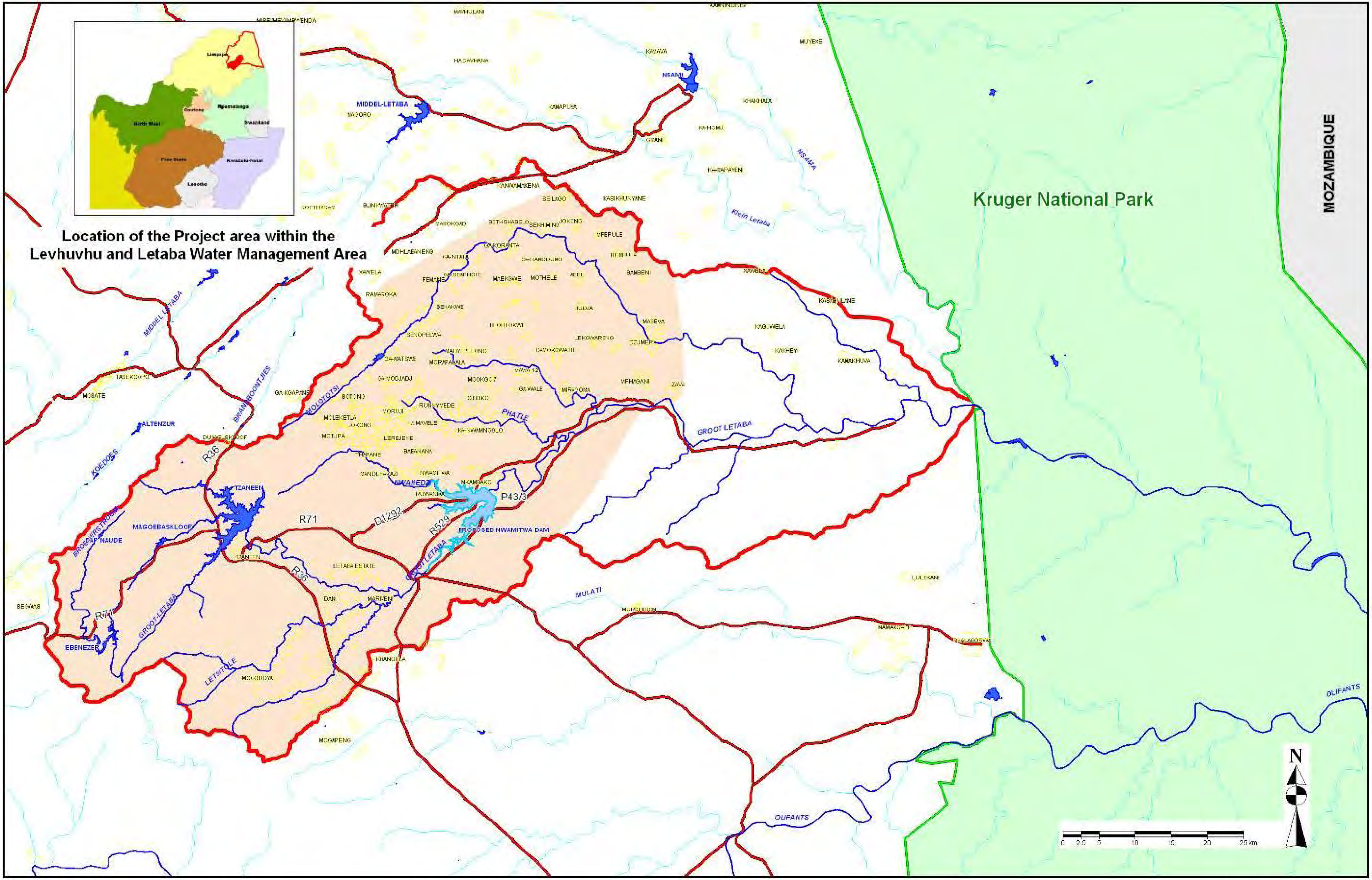
1.1 BACKGROUND TO PROJECT

In 1998, the Department of Water Affairs and Forestry (DWAF) completed an assessment of various options to improve the management of water available for social and economic development in the Groot Letaba catchment (**Figure 1.1**).

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. Some of the alternatives were unusual or controversial but deserved attention. Consideration was given to the following options at a feasibility level of detail and reliability:

- Replacing commercial afforestation with natural vegetation.
- Ceasing the export of water to the Sand River catchment.
- Improving the utilization efficiency of water used for irrigation.
- Decreasing the water allocated for irrigation use.
- Water loss management in the reticulation systems for domestic and industrial water users.
- Creation of additional storage in the river system to further regulate the river flow.
- Improved water management in all user sectors.

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, namely a site at Hobson's Choice, in the Letsitele River, sites in the Groot Letaba River of which only that at Nwamitwa was found to be reasonable (but not good), and the raising of the Tzaneen Dam.



Legend	
Groot Letaba Catchment	Roads
Project Area	Rivers
Kruger National Park	Dams
Towns and Villages	Proposed Nwamitwa Dam

water & forestry
Department: Water Affairs and Forestry
REPUBLIC OF SOUTH AFRICA

ILISO CONSULTING

GROOT LETABA RIVER WATER DEVELOPMENT PROJECT (GLeWaP)

LOCALITY MAP

FIGURE 1.1

Date : September 2007

The outcome of these earlier investigations led to the recommendations that 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. DWAF is now reviewing and updating the needs of this area and post-feasibility bridging studies are being conducted to confirm whether the recommendations made previously are still relevant and how they should be taken forward.

The post-feasibility bridging studies options to be investigated include the construction of a large dam on the Groot Letaba River at the Nwamitwa site, downstream of the confluence of the Nwanedzi River, realignment of the roads to accommodate the dam, construction of water treatment works, bulk water pipelines and pump stations from the dam site to communities in the area and the raising of the Tzaneen Dam wall.

Environmental authorisation in terms of Section 24 (5) of the National Environmental Management Act (NEMA), Act No 107 of 1998 and other legislation is required before the infrastructure components of the project can be implemented. An Environmental Impact Assessment (EIA) process commenced in June 2007 and is expected to be completed in the last quarter of 2008. This document is forms part of the EIA series and is the Draft Scoping Report.

1.2 OBJECTIVE OF THE STUDY

An EIA is a planning and decision making tool. It identifies potential negative and positive impacts of a proposed project and recommends ways to enhance the positive impacts and minimise the negative ones. The EIA will address the impacts associated with the project, and provide an assessment of the project in terms of the biophysical, social and economic environments to assist both the environmental authorities (in this case the national Department of Environmental Affairs and Tourism (DEAT)) and the proponent (i.e. the DWAF) in making decisions regarding implementation of the proposed project. The work will be undertaken in compliance with the National Environmental Management Act (No 107 of 1998) (NEMA), specifically Regulations in GN No 385, 386 and 387 of 21 April 2006.

The EIA process will consist of three phases:

- The Scoping Phase;
- The Impact Assessment Phase; and
- The Decision-Making Phase.

1.3 PURPOSE OF THIS REPORT

The main purpose of the Scoping Phase of the project is to identify and define the issues that need to be addressed in the Impact Assessment Phase. Input from the technical team, the authorities, specialists and Interested and Affected Parties (I&APs) is considered and integrated.

The purpose of the Scoping Report is to document the outcome of the Scoping Phase of the project. This draft report will be made available to I&APs for comment, prior to finalisation and submission to the authorities, to afford them the opportunity to ensure that their comments and input has been captured accurately and correctly understood.

1.4 ENVIRONMENTAL IMPACT ASSESSMENT TEAM

ILISO Consulting has been appointed as Independent Environmental Assessment Practitioner (EAP) to undertake the EIA. Dr Martin van Veelen is the Project Leader. This Draft Scoping Report was compiled by Terry Baker with input from a team of specialists. (**Table** 1.1)

Dr Martin van Veelen is a professional engineer with a PhD in aquatic health. He is the Managing Director of the ILISO Environmental Management Division and a certified Environmental Assessment Practitioner with 28 years experience. He specialises in project management, environmental impact assessments and water resource planning. He specifically has extensive experience in water quality, especially water quality management, water quality monitoring and water quality assessment. Martin has experience in managing projects that involve multi-disciplinary teams, and projects that involve public consultation and participation.

Terry Baker is a certified Environmental Assessment Practitioner (EAP), has a MA in Environmental Management and specialises in Environmental Impact Assessments and Project Management. She has been involved in a variety EIAs including for transmission lines, water supply projects, dams, roads and airports, in South Africa, Uganda, Lesotho, and Mozambique. She has been involved in public participation programmes, water quality assessments, socio-economic and institutional development projects and the use of Geographic Information Systems on a number of projects. Terry is actively involved in the International Association for Impact Assessment, and serves on the National Executive Committee of the South African Affiliate.

Table 1.1: EIA Project Team

Person	Company	Role on the team
Martin Van Veelen	ILISO Consulting	Project Leader
Terry Baker	ILISO Consulting	Environmental Assessment Practitioner
Deon Esterhuizen	ILISO Consulting	Environmental Management Plans
Karen Jodas	Savannah Environmental	Borrow Area
Sean O Beirne	SES	Peer Review
Bert De Vries	Iliso Consulting	Traffic
Anita Bron	MasterQ Research	Social
Dr Peet Rautenbach	Private	Health
Nanja Churr	Kayamandi	Regional Economics And Landuse
Veronica Rall	Golder Africa	Aquatic Ecology
Johnny Van Schalkwyk	National Cultural History Museum	Heritage Resources
Derek Cosijn	Jongens Keet Associates	Noise
Rene Thomas	Airshed	Air Quality
Karen James	Insite	Visual Impacts

1.5 THE STRUCTURE OF THIS REPORT

The following information, in accordance with Regulation 29 of Government Notice 385, is included in this report:

- background information, scope of the study and details and expertise of the EAP who compiled the scoping report (**Chapter 1**);
- the motivation for the proposed project (**Chapter 2**);
- a description of the proposed project **(Chapter 3**)
- an investigation of alternatives (**Chapter 4**);
- a description of the receiving environment (**Chapter 5**);
- legislation and guidelines that have been considered in the preparation of the scoping report (**Chapter 6**);
- public participation in the scoping phase.; (**Chapter 7**);
- key issues identified (**Chapter 8**);
- a plan of study for the Environmental Impact Assessment (**Chapter 9**);
- conclusions (**Chapter 10**); and
- references used in the study (**Chapter 11**).