



GOVERNMENT OF THE KINGDOM OF ESWATINI, MINISTRY OF
NATURAL RESOURCES AND ENERGY - DEPARTMENT OF WATER
AFFAIRS

ENVIRONMENTAL AND SOCIAL IMPACT ASSESSMENT OF THE PROPOSED MBABANE - MANZINI CORRIDOR DAM PROJECT, ESWATINI ESIA REPORT

23 JUNE 2021

FINAL



VOLUME 3 of 3



APPENDIX

***C-5 HERITAGE
ASSESSMENT***

PROPOSED MBABANE – MANZINI CORRIDOR DAM (NONDVO DAM)

HERITAGE SURVEY REPORT



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MARCH 2021

DECLARATION OF INDEPENDENCE

I, Bob Forrester, declare that I have been appointed as an independent consulting specialist to undertake a Heritage Survey in relation to the proposed Nondvo Dam in Eswatini.

I have no vested interest in the project proponent and no conflicting interests in the proposed project or any other activities related to, or arising from, the proposed project.

Signed:

Bob Forrester

Heritage Specialist



26th March 2021

Name

Designation

Signature

Date

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GLOSSARY OF TERMS

Terminology		Description
Chief	-	a person appointed by the King, in accordance with customary law, in terms of Section 7 of the Swazi Administration Order, 1998 to administer a chiefdom.
Chiefdom	-	a Swazi area under the control of a Chief.
Chieftainship	-	as defined by the Swazi Administration Order, 1998, is the office, i.e. position/ designation/ title of Chief.
Competent Authority	-	in the context of the Swazi Administration Order, 1998 means a person appointed by the <i>Ngwenyama</i> in Council for the purpose of administration of a Swazi area and includes a Chief or any person holding such office.
Inner Council	-	the Chief's advisory council.
<i>Inkhundla</i>	-	Administrative area.
<i>Khonta</i>	-	the process of applying for and being granted permission to settle or establish an enterprise or infrastructure on Swazi Nation Land in accordance with Swazi law and custom.
<i>Ngwenyama</i>	-	title of the male ruler (His Majesty the King) of Eswatini.
Swazi area	-	an area of land as defined in the Definition of Swazi Areas Act, 1916 or any other area of land held by the <i>Ngwenyama</i> in trust for the Swazi Nation. Also referred to as Swazi Nation Land (SNL).
<i>Umphakatsi</i>	-	the Chief's official residence.

ACRONYMS AND ABBREVIATIONS

AfDB	-	African Development Bank
DWA	-	Department of Water Affairs
EEA	-	Eswatini Environment Authority
EEC	-	Eswatini Electricity Company
ENTC	-	Eswatini National Trust Commission
ESA		Environmental and Social Assessment (
ESIA	-	Environmental and Social Impact Assessment
ETA		Eswatini Tourism Authority
ha	-	Hectares
HSR		Heritage Survey Report
IFC	-	International Finance Corporation
ISS		Integrated Safeguards System
km	-	Kilometres
kV	-	Kilovolt
kW	-	Kilowatt
m ²	-	Square metres
m ³	-	Cubic metres
masl	-	Metres above sea level
UNESCO		United Nations Educational, Scientific and Cultural Organisation
UNISA	-	University of South Africa

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EXECUTIVE SUMMARY

The Mantabeni and Siphocosini communities in which the Nondvo Dam is proposed to be situated are host to the Lumphohlo Rock Art site and Masibekela refuge cave. Both sites are outside the proposed inundation area, but there is a possibility of their degradation by project implementation activities such as construction of access roads. During project operation, there is the possibility of their degradation by uncontrolled and unmanaged visitor access. The Lumphohlo Rock Art site was legible in the early 1960s, but by the 1980s it had become almost invisible. This was primarily due to uncontrolled visitor access, which was subsequently reduced by the seclusion of the site caused by the construction of Lumphohlo Dam. To protect these two sites from accidental damage during the project implementation phase, it is recommended that the sites be barricaded to prevent damage by project personnel and vehicles. During project operation, it is recommended that the sites be signposted, access controlled, and interpretive plaques be placed to enable the local community and visitors to appreciate their significance to cultural heritage.

The graves of Chiefs and royalty are situated on mountain sides in the project area. While outside the proposed inundation area, the burial sites are likely to be disturbed by project activities, such as prospecting for suitable quarry as well as increased pedestrian traffic and encroachment by homesteads relocated higher up the mountain slopes. It is recommended that during project implementation the burial sites be protected by being cordoned off. To protect the burial sites in the long term from non-project related activities, it is recommended that they be signposted as a reinforcement of the existing local practice of clearing vegetation around the perimeter. Such clearing alone may not be sufficient to alert unsuspecting persons of the sacredness of the burial sites.

While the graves of those homesteads will be resettled will be relocated for reburial, those that remain in the community, but outside the inundation area will still be at risk of being accidentally disturbed by other projects since in most cases they are concealed under dense vegetation. It is recommended that they be signposted to alert the public of their presence so as to prevent accidental disturbance.

Indigenous grasses, sedges and trees within the project site that are of cultural significance in terms of harvesting for construction and making household items will be lost through inundation. It is recommended that trees be propagated in similar habitats to offset the loss and alien invasive plants be controlled along tributaries at the project site in order to rehabilitate wetland habitats. This will mitigate the loss of flora and fauna as well as enhance the aesthetic appeal of the project site.

Where appropriate, it is recommended that the entity appointed to operate the dam promote and support local community initiatives to improve land use management practices in order to ensure the environmental and social sustainability of the community and the project.

1. INTRODUCTION

A Heritage Survey was undertaken of the proposed Nondvo Dam as part of the Environmental and Social Impact Assessment of the project. The purpose of the survey was to identify the historical background of indigenous peoples of the project site, identify cultural heritage resources and to determine the potential impacts of the project on cultural heritage resources occurring at the project site. The survey focused on the project site since the potential resettlement site/s had not yet been identified at the time of the survey.

The importance of the cultural heritage survey in the context of the project site is that it enables the identification of cultural heritage resources that would otherwise be overlooked due to competing existing land use practices, multiple development projects which individually may not have been classified as requiring a full ESIA, but collectively inadvertently threaten the preservation of cultural heritage resources. This Heritage Survey Report acknowledges the survey's limitation of not being an intensive archaeological search of every square metre of the project site, but rather extensive approach of identifying key sites and providing information on cultural heritage characteristics that are relevant to the proposed project. As such, there is a potential for chance-finds wherein additional archaeological evidence is discovered or unearthed during project implementation and operation. The procedures to be followed in such instances have been included in the proposed mitigation measures in this report.

2. ADMINISTRATIVE ASPECTS OF HERITAGE SURVEY

2.1 DETAILS OF HERITAGE SPECIALIST

Aspect	Detail
Specialist	Forrester Associates
Contact Person	Bob Forrester
Contact Numbers	Cell: (+268) 7604 2060 Phone: (+268) 3402 0194
Email	bobforrester@rocketmail.com
Postal Address	P.O. Box 906 Mbabane H100 Eswatini

2.2 QUALIFICATIONS AND EXPERIENCE

2.2.1 Pen portrait

Bob Forrester is an archaeologist and photographer. His photographs appear in a wide variety of publications, has written two books, co-authored and edited several publications. He surveyed all rock art sites in Eswatini, established the Interpretation Centre at Ngwenya which is the world's oldest mine and, in addition to managing the National Museum, has established museums preserving Eswatini's industrial heritage such as the Havelock Asbestos Mine Museum and Sugar Museum.

2.2.2 Curriculum Vitae

Name:	Bob Forrester
Date of Birth:	22 February 1959
Country of Citizenship/Residence	Citizenship: Swazi Country of Residence: Eswatini
Occupation:	Archaeologist/ Heritage Specialist

Training:

Year	Institution	Training Course
1983	Brooks Institute, Santa Barbara, California, USA	Attended underwater and wildlife photography courses; Winner of Wildlife Photography class medal

Education:

Year	College/ University	Degree
1980	University of Cape Town	BA in Archaeology and Anthropology

Employment record:

Period	Employing organization and contact information for references	Country	Position/ Activity
2013 to present	Forrester Associates	Eswatini	Sole proprietor/ Independent Heritage Specialist
February 2012-2013	Eswatini National Museum under Eswatini National Trust Commission (ENTC) For references: Tel. +268 2416 1489 The Director	Eswatini	Digital Archivist
November 2009 - July 2011	Eswatini National Museum under Eswatini National Trust Commission (ENTC) For references: Tel. +268 2416 1489 The Director	Eswatini	Project Director
Jan 2010 - November 2011	Eswatini Archaeological Research Association under Eswatini National Trust Commission (ENTC) For references: Tel. +268 2416 1489 The Director	Eswatini	Archaeological specialist

January 2009 - November 2010	Waterford Kamhlaba College, United World College of Southern Africa For references: Tel. +268 2422 0866 The Head Teacher	Eswatini	Taught Social and Cultural Anthropology
May - October 2009	Economic and Social Research Council For references: Tel. +44 1793 413000 ESRC Chief Executive	United Kingdom	Anthropology field research and photographic recording
July 2008	Eswatini National Museum under Eswatini National Trust Commission (ENTC) For references: Tel. +268 2416 1489 The Director	Eswatini	Designer and researcher
April - August 2007	European Union Office of the European Commission in the Kingdom of Eswatini For references: Tel. +268 24040 0191 The Development Attaché	Eswatini	Project Director
March - December 2006	Eswatini Tourism Authority For references: Tel. +268 24040 9693 The Director	Eswatini	Photographer
May 2006	Waterford Kamhlaba College, United World College of Southern Africa For references: Tel. +268 2422 0866 The Head Teacher	Eswatini	Publisher
June - September 2005	European Union Office of the European Commission in the Kingdom of Eswatini For references: Tel. +268 24040 0191 The Development Attaché	Eswatini	Project Director

November 2004	American Ambassador's Fund under United States of America Embassy in Eswatini For references: Tel. +268 24040 6441 American Cultural Centre	Eswatini	Produced a detailed management plan
April - November 2003	American Ambassador's Fund under United States of America Embassy in Eswatini For references: Tel. +268 24040 6441 American Cultural Centre	Eswatini	Photographic and archaeological survey
January - November 2002	Waterford Kamhlaba, United World College of Southern Africa For references: Tel. +268 2422 0866 The Head Teacher	Eswatini	Theory of Knowledge teacher
2001 - 2002	Eswatini National Trust Commission (ENTC) For references: Tel. +268 2416 1489 The Director	Eswatini	Conducting countrywide surveying
1999	Eswatini National Trust Commission (ENTC) For references: Tel. +268 2416 1489 The Director	Eswatini	Co-founded Eswatini Digital Archives
1986 - 1996	Independent Heritage Specialist	South and Central America and Europe	Archaeological photographer specializing in ruins and ancient cultures
1984 - 1985	Okavango Research Institute, University of Botswana For references: Tel. +267 681 7224	Botswana	Photographer
January 1981- January 1983	Eswatini National Museum under Eswatini National Trust Commission (ENTC) For references: Tel. +268 2416 1489	Eswatini	Acting Curator

	The Director		
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Membership in Professional Associations and Publications:

Membership: Eswatini Archaeological Research Association

Publications:

Year	Activity
2013	Awarded a Sahee Foundation Fellowship to co-write <i>The Holographic Kingdom</i> , an academic book exploring history, archaeology and ritual in Eswatini. Co-written with Dr Vito Laterza, the book was published by UNISA in 2014.
2010	Wrote latest of four editions of <i>A Traveller's Guide to Eswatini</i> , a tourist oriented publication emphasizing Swazi culture and history. Published by Kamhlaba Publications.
2010	Edited <i>Mandla and the Bird of Heaven</i> by Peter Dunseith. Winner of the MER best youth novel in 2010 sponsored by M Net and Via Afrika. Published by Tafelberg.
2010	Photographed artworks for <i>From Pottery to Poetry, the works of Austin Hleza</i> . Published by Kamhlaba and Alliance Francais.
2010	Edited <i>The Archaeology of Eswatini</i> by J R Masson. Published by Freethinkrs / Kamhlaba Publications.
2007	Edited and wrote the historical introduction to <i>Wild Eswatini</i> , a comprehensive field guide to flora and fauna. Published by M and P Productions.
2007	Edited <i>The Power of the Ancestors</i> by PH Mtshali, a well-known traditional healer. The book explores traditional healing techniques, African causality and Swazi cosmology. Published by Kamhlaba Publications.
2006	Co-founder of Kamhlaba Publications, a small not for profit publisher specialising in Swazi culture hosted by Waterford Kamhlaba College.
1989	Photographed the Okavango for <i>The Swamp Book</i> , published by Southern Books.

Language Skills:

Language	Speaking	Reading	Writing
English	Excellent	Excellent	Excellent
Siswati	Average	Average	Average
Afrikaans	Average	Good	Average
French	Average	Average	Average

2.3 PURPOSE OF REPORT

The Heritage Survey Report (HSR) has been prepared as part of the ESIA of the proposed construction and operation of the Mbabane – Manzini Corridor Dam (Nondvo Dam). Cognizant that the project is likely to cause environmental and social impacts, the purpose of the report is to provide:

- A description of the historical background of indigenous peoples in the surrounding communities of Mantabeni and Siphocosini in which the proposed project will be situated;
- A description and inventory of archaeological sites, heritage sites, artefacts, photographic project site, including the surrounding communities;
- A description of potential threats to archaeological, cultural and heritage sites within the project site and any other sites within a 5km radius of the proposed dam which may be affected by project activities;
- An assessment of the significance of the potential impacts of the project and a recommendation appropriate mitigation measures to either eliminate or limit the negative impacts that have been identified and where possible enhance beneficial impacts, with a view to complementing existing and proposed tourism initiatives.

The report will therefore form part of the overall management of the environmental and social impacts of the project, ensuring that the potential adverse impacts on cultural and heritage aspects are mitigated and potential positive impacts are enhanced.

2.4 METHODOLOGY OF SURVEY

The archaeological aspects of the survey were conducted by investigating exposed ground, forest areas, erosion gullies, stream beds and stream banks for stone tools and/ or pottery. The survey was conducted during the dry season when access to undeveloped areas is optimal due to less visual and physical obstruction by vegetation cover compared to during the rainy season. Cultural and heritage aspects of survey were conducted by interviewing people with local knowledge within the community. Literature was also consulted on archaeological, cultural and heritage aspects.

2.5 LIMITATIONS OF SURVEY

While the survey period (June 2019) was adequate for the archaeological aspects of the survey, natural processes such as weathering, erosion, previous floods, lack of written records by previous inhabitants as well as physical development undertaken by present inhabitants influence the quantity and quality of physical evidence of prehistoric artifacts, relics, monuments and practices. Furthermore, no excavation was undertaken during the survey. The survey therefore does not purport to be the absolute survey of the project-affected area, since additional, previously un-recorded evidence may be discovered during project implementation and/ or other human activity as well as future research.

3. LEGAL AND POLICY FRAMEWORK

This section of the report describes the legal requirements of national legislation, international treaties and guiding principles of international financing organizations such as AfDB with respect to the management of impacts on cultural heritage, arising from project implementation and operation.

3.1 ACTS

3.1.1 Flora Protection Act, 2001

3.1.1.1 Description

This Act protects indigenous flora and special habitats. It provides for the establishment of flora reserves, botanic gardens as well as restricts the plucking, cutting, uprooting or digging up, export and sale of protected indigenous flora. It also provides for bona fide Swazi rural dwellers to use indigenous flora outside flora reserves for their personal and domestic purposes, but not for sale.

3.1.1.2 Applicability

Applicable to this project is:

3.1.1.2.1 Section 16 which requires any person wishing to implement an activity that is likely to impact indigenous flora to conduct an environmental assessment and develop a mitigation plan prior to implementing the activity.

Some indigenous flora at the project site and sites that will be affected by resettlement and relocation is likely to be affected

by the implementation of the project. Furthermore, some flora at the project-affected sites has cultural significance. Therefore the need for a mitigation plan is pertinent.

3.1.2 Game (Amendment) Act, 1991

3.1.2.1 Description

This Act, to be read in conjunction with the Game Act, 1953 provides for the protection of game in Eswatini.

3.1.2.2 Applicability

Applicable to this project are:

3.1.2.2.1 Section 8 which prohibits the hunting and dealing in specially protected game as listed under the First Schedule and Royal Game as listed under the Second Schedule. All birds, except *Numida meleagris* (Imphangele/ Helmeted guineafowl) are designated as Royal Game. Helmeted guineafowl are designated as Common Game under the Third Schedule;

3.1.2.2.2 Section 12 which restricts the hunting of game and prohibits the illegal possession of a trophy of specially protected game and Royal Game.

Cognizant of the importance of wildlife to the national and global heritage, the Act provides for the statutory protection of wildlife. Therefore, during project implementation and operation, this Act will be applicable to unauthorised hunting or

capture of protected game, particularly during disturbance of their habitats.

3.1.3 National Trust Commission Act, 1972

3.1.3.1 Description

This Act provides for the management of cultural institutions, declared national parks, nature reserves, monuments, relics and antiques through the Eswatini National Trust Commission (ENTC) which is a body corporate established under the same Act.

3.1.3.2 Applicability

Applicable to this project are:

3.1.3.2.1 Section 11 which empowers the curator of a declared institution to receive, hold and preserve all specimens, collections or other moveable property of whatever kind placed under the care, loaned to or belonging to the institution. In the event that items such as relics and antiques are discovered prior to or during project implementation, the ENTC will be notified in order to collect such relics and antiques for preservation;

3.1.3.2.2 Section 25 which provides for the ENTC to:

- Make recommendations to the Minister on the proclamation of a national monument, any area of land having a distinctive or beautiful scenery or geological formation, any area of land containing distinctive or beautiful

flora or fauna, any area of land containing objects of archaeological, historical or scientific interest or value, or any waterfall, cave, grotto, avenue of trees, old building, or any other place or object (whether natural or constructed by man) of aesthetic, historical, archaeological, scientific, sacred, or religious value or interest.

- Make recommendations to the Minister on the proclamation as a relic any fossil of any kind, any drawing or painting or stone or petroglyph known or commonly believed to have been executed by aboriginal inhabitants of Southern Africa, or by any people who inhabited or visited Southern Africa in ancient days, and any implement or ornament known or commonly believed to have been used by them and any anthropological or archaeological contents of the graves, caves, rock shelters, shell mounds, or other sites used by them.
- Make recommendations to the Minister on the proclamation as an antique, any movable object (not being a monument or relic) of aesthetic, historical, archaeological or scientific value or interest, the whole or more valuable portion whereof has for more than thirty years been in any part of Southern Africa.

- Assume control over any such object requested by the person having the ownership or control thereof and as trustee for the Government accept any such object which the owner desires to donate or has bequeathed to the Government.
- Preserve, repair, restore or insure any monument, relic or antique under its control.
- Make a register of all monuments, relics and antiques.

3.1.3.2.3 Section 26 which stipulates that no person shall destroy, damage, excavate, alter, remove from its original site or export any monument, relic or antique except under the authority of and in accordance with a permit granted by the ENTC.

Any geological formation, monument, relic or antique discovered during the Heritage Survey and project implementation, including any associated resettlement and relocation, will be communicated to the ENTC, through the ESIA Report, who will make a decision on the method of preservation.

3.1.4 Swazi Administration Order, 1998

3.1.4.1 Description

This Order-in-Council provides for the incorporation of the law governing the appointment, removal and functions of Chiefs and *Tindvuna* into the law relating to the administration of Swazi affairs. It applies to every person, whether Swazi or not,

ordinarily resident on land situated in a Swazi area. Therefore it applies to the project-affected communities of Mantabeni and Siphocosini, as well as any other chiefdoms whose cultural heritage will be affected by project activities such as resettlement and relocation.

3.1.4.2 Applicability

Applicable to this project is:

3.1.4.2.1 Section 11 which stipulates that the functions of a Chief are to, *inter alia*,

- (a) promote the welfare of the community in his chiefdom;
- (b) ensure that the community is informed of issues or developments which affect them as a community or as part of the Swazi Nation;
- (c) convene *Umphakatsi* meetings;
- (d) arrange chiefdom ceremonies;
- (e) arrange and facilitate national functions.

These functions of the Chief are therefore part of the cultural heritage of the people residing within the project-affected communities. Functions (a), (b) and (c) are also applicable to the community meetings through which the project, including impacts on cultural heritage, will be communicated to residents within the project-affected chiefdoms.

3.1.5 Swazi Graves Act, 1909

3.1.5.1 Description

This Act provides for the access of Swazis to the sites of graves of certain Chiefs or the relations of Chiefs.

3.1.5.2 Applicability

Applicable to this project are:

3.1.5.2.1 Section 1 which, for the purposes of the Act, defines “Minister” as the Deputy Prime Minister.

3.1.5.2.2 Section 2 which stipulates that any land in the vicinity of the graves of chiefs or the relations of chiefs enclosed in accordance with the provisions of the Swazi Graves Proclamation with a substantial fence to the satisfaction of the Minister may be declared by the Minister by notice in the Gazette to be a grave site, and such site shall thereafter, as long as such fence is maintained in proper order to the satisfaction of the Minister, be deemed to be land set apart for the sole and exclusive use and occupation of the Swazi nation.

3.1.5.2.3 Section 3 which stipulates that the Swazi nation shall have such right of way over neighbouring land as may reasonably be necessary for the purpose of obtaining access to any grave site as long as their rights in respect of such site continue in force and such right of way shall be defined by the Minister if he considers such definition necessary.

The graves of Chiefs and their next of kin which are situated at various sites along the hills immediately to the east and west of the project site will need to be respected, such that project activities do not cause destruction or hinder access to the grave sites.

3.1.6 Wild Birds Protection Act, 1914

3.1.6.1 Description

This Act restricts the sale and exportation of plumage of wild birds and provides for the protection of wild birds.

3.1.6.2 Applicability

Applicable to this project are:

3.1.6.2.1 Section 3 which makes it an offense to, without authorisation, sell or offer or expose for sale or export or cause to be exported from Eswatini any plumage of a wild bird;

3.1.6.2.2 Section 6 which prohibits the capture and/ or sale of wild birds.

The objective of the Act is to ensure the preservation of national cultural heritage. Therefore, during project implementation any person, including project employees and community members, encountering wild birds will be prohibited from capturing wild birds or collecting their plumage for purposes of sale or bartering.

3.2 REGULATIONS

3.2.1 Environmental Audit, Assessment and Review Regulations, 2000

3.2.1.1 Description

These Regulations control the environmental assessment process and stipulate requirements on the structure of reports and reporting procedures.

3.2.1.2 Applicability

Applicable to this project are:

3.2.1.2.1 Regulation 5 which requires the submission of a Project Brief to the EEA prior to project categorisation. This was undertaken as part of the environmental assessment categorization request.

3.2.1.2.2 Regulation 6 which stipulates the EEA's project categorisation process. The project was categorised by the EEA as a Category 3, requiring a full ESIA.

3.2.1.2.3 Regulation 8 which stipulates the ESIA process for Category 3 projects, including the requirements for consultations with interested and affected parties and the public. While persons with local knowledge within the community were consulted as part of the Heritage Survey, consultations with stakeholders form part of the overall ESIA.

3.3 INTERNATIONAL TREATIES

3.3.1 Convention on the Protection and Promotion of the Diversity of Cultural Expressions, 2005

3.3.1.1 Description

The United Nations Educational, Scientific and Cultural Organisation (UNESCO) Convention on the Protection and Promotion of the Diversity of Cultural Expressions is a legally binding international agreement that ensures artists, cultural professionals, practitioners and citizens worldwide can create, produce, disseminate and enjoy a broad range of cultural goods, services and activities, including their own. Cultural expressions are conveyed by activities, goods and services, which results in an economic and cultural nature. The main objective of the Convention is to strengthen creation, production, distribution/dissemination, access and enjoyment of cultural expressions transmitted by cultural activities, goods and services, with a strong focus on developing countries.

3.3.1.2 Applicability

Eswatini accepted the Convention on 30 October 2012. Applicable to the project during operation will be the need for local communities at the project site to allow persons or groups of persons from within the community, such as cultural professionals and practitioners, to utilise the project site as a venue for purposes of promoting cultural heritage as a tourism attraction.

Applicable during project implementation and operation will be the need to ensure that project activities, such as sedimentation during construction and impounding of water, do not adversely affect Mantenga Nature Reserve in which Mantenga Cultural Village and Mantenga Falls are situated approximately 8km downstream of proposed dam wall, along the Lusushwana River. The prime attraction to the reserve is Mantenga Falls. Mantenga Cultural Village is a replica mid-19th Century Swazi village, constructed using authentic materials and techniques. The site exhibits how traditional huts are constructed, what each hut is used for, the role played by the traditional healer as well as traditional dance routines.

3.3.2 Convention for the Safeguarding of the Intangible Cultural Heritage, 2003

3.3.2.1 Description

The Convention defines “Intangible Cultural Heritage” as the practices, representations, expressions, knowledge, skills, as well as the instruments, objects, artefacts and cultural spaces associated therewith, that communities, groups and, in some cases, individuals recognize as part of their cultural heritage. This intangible cultural heritage, transmitted from generation to generation, is constantly recreated by communities and groups in response to their environment, their interaction with nature and their history, and provides them with a sense of identity and continuity, thus promoting respect for cultural diversity and human creativity. The Convention further states that “intangible cultural heritage”, is manifested through:

- Oral traditions and expressions, including language as a vehicle of the intangible cultural heritage.

- Performing arts.
- Social practices, rituals and festive events.
- Knowledge and practices concerning nature and the universe.
- Traditional craftsmanship.

“Safeguarding” is defined by the Convention as the measures aimed at ensuring the viability of the intangible cultural heritage, including the identification, documentation, research, preservation, protection, promotion, enhancement, transmission, particularly through formal and non-formal education, as well as the revitalization of the various aspects of such heritage. The role of each Party State is therefore to:

- Take the necessary measures to ensure the safeguarding of the intangible cultural heritage present in its territory.
- Identify and define the various elements of the intangible cultural heritage present in its territory, with the participation of communities, groups and relevant non-governmental organizations.

3.3.2.2 Applicability

Eswatini accepted the Convention on 30 October 2012.

Applicable to the project will be the need to prevent the destruction of the Lumphohlo Rock Art site, Masibekela refuge cave, and graves of Chiefs and their next of kin at various sites along the surrounding hills.

3.4 PRINCIPLES OF INTERNATIONAL FINANCIAL INSTITUTIONS

3.4.1 African Development Bank (AfDB)

3.4.1.1 Integrated Safeguards System (ISS), 2013

3.4.1.1.1 *Description*

AfDB is committed to ensuring the social and environmental sustainability of the projects it supports. The ISS is designed to promote the sustainability of project outcomes by protecting the environment and people from potentially adverse impacts of projects. Among the five operational safeguards, **Operational Safeguard 1: Environmental and Social Assessment (ESA)** governs the process of determining a project's environmental and social category and the resulting environmental and social assessment requirements.

3.4.1.1.2 *Applicability*

As part of Operational Safeguard 1: Environmental and Social Assessment, the assessment is required to consider the full range of potential impacts on local affected communities, vulnerable communities and cultural heritage.

On **Cultural Heritage**, the borrower or client is responsible for ensuring that project sites and designs avoid significant damage to cultural heritage, including both tangible and intangible cultural heritage. When the project is likely to have adverse

impacts on cultural heritage, the borrower or client identifies appropriate measures for avoiding and mitigating these impacts. The measures may include avoidance, full site protection and selective mitigation including salvage.

When the proposed location of a project is in an area where tangible cultural heritage is likely to be found, chance-finds procedures shall be included in the mitigation plan. Chance-finds shall not be disturbed until an assessment by a qualified specialist has been undertaken. The Safeguard defines “chance-finds” as the discovery of previously unknown cultural heritage resources, particularly archaeological resources, that are encountered during project construction or operation.

3.4.2 International Finance Corporation (IFC)

3.4.2.1 International Finance Corporation Performance Standards on Environmental and Social Sustainability, 2012

3.4.2.1.1 Description

The IFC Performance Standards on Environmental and Social Sustainability are widely adopted as market standards and incorporated into the operational policies by corporations, investors, financial institutions (such as AfDB), regulators and countries. The IFC requires, as means to mitigating risk and ensuring sustainability, clients to apply the 8 Performance Standards which form part of its policy on environmental and social sustainability.

3.4.2.1.2 Applicability

Performance Standard 7 – Indigenous Peoples:

The party responsible for implementing and operating the project is required to:

- avoid or mitigate adverse impacts on affected communities of indigenous peoples, including direct and indirect economic and social impacts as well as impacts on cultural heritage;
- recognise that affected communities of indigenous peoples may be particularly vulnerable to the loss of, alienation from or exploitation of their land and access to natural and cultural resources;

- ensure fair and equitable sharing of benefits from commercialization of indigenous knowledge, innovation or practice consistent with the customs and traditions of the indigenous peoples.

While there are no known remaining indigenous peoples, such as the San, the principle will apply in the event that the cultural heritage of pre-Emaswati inhabitants is discovered at the project site during project implementation and operation. The principle applies to potential adverse impacts on the socio-economic wellbeing and cultural heritage of present-day indigenous Emaswati residing within the project-affected communities.

Performance Standard 8 – Cultural Heritage:

The party responsible for implementing and operating the project is required to:

- identify and protect cultural heritage;
- avoid disturbing chance-finds until their status has been verified by competent professionals and their protection is supervised by such professionals;
- protect cultural heritage in consultation with affected communities and responsible regulatory authorities;
- allow continued access to cultural sites by affected communities.
- The inclusion of the Heritage Survey in the ESIA is a means of fulfilling the requirements of this principle.

3.4.3 World Bank

3.4.3.1 Environmental and Social Safeguard Policies, 2013

3.4.3.1.1 Description

The Safeguard Policies provide guidelines for addressing environmental and social issues in project design, implementation and operation. They also provide a framework for consultation with communities and for public disclosure. The Safeguard Policies consist of 11 Operational Policies (OPs), one of which applies to Physical Cultural Resources.

3.4.3.1.2 Applicability

OP 4.11 – Physical Cultural Resources:

The objective of this Operational Policy is to preserve Physical Cultural Resources and avoid their destruction or damage. Physical Cultural Resources include resources of archaeological, palaeontological, historical, architectural, religious (including graveyards and burial sites), aesthetic or other cultural significance. The implementing agency of a proposed development project is required to:

- use an environmental assessment or equivalent process to identify Physical Cultural Resources and prevent or minimize or compensate for adverse impacts and

enhance positive impacts such resources through site selection and design;

- conduct field based surveys, as part of the environmental assessment, using qualified specialists;
- consult concerned governmental authorities, relevant non-governmental organizations, relevant experts and local people in documenting the presence and significance of Physical Cultural Resources, assessing the nature and extent of potential impacts, and designing and implementing mitigation plans;
- provide for the use of chance-find procedures for materials that may be discovered during project implementation;
- disclose draft mitigation plans as part of the environmental assessment or equivalent process, in a timely manner, before appraisal formally begins, in an accessible place and in a form and language that are understandable to key stakeholders.

The inclusion of the Heritage Survey in the ESIA is a means of fulfilling the requirements of this principle.

4. DESCRIPTION OF BASELINE ENVIRONMENT

4.1 LOCATION OF PROPOSED DAM

The proposed Nondvo Dam wall is on the Lusushwana River approximately 7km downstream of the Lumphohlo Dam wall. According to the Draft Feasibility Report, dated May 2019, the Full Supply Level (FSL) will be 960.0 metres above sea level and the Flood Level will be 963.4 metres above sea level. The inundation area, at Full Supply Level, will extend from the dam wall upstream to approximately 1km south of the Lumphohlo Dam wall. The surface area at Full Supply Level will cover approximately 2.5km² and hold a volume of approximately 22 million m³. The inundated area will cover the rural communities of Mantabeni and Siphocosini. There is no surveyed boundary delineating the two communities and thus their respective homesteads are interspersed within the project site. Both communities are situated on Farm 1032 which is Swazi Nation Land. The location of the proposed Nondvo Dam in relation to Farm 1032 and surrounding properties is indicated in Figure 1.

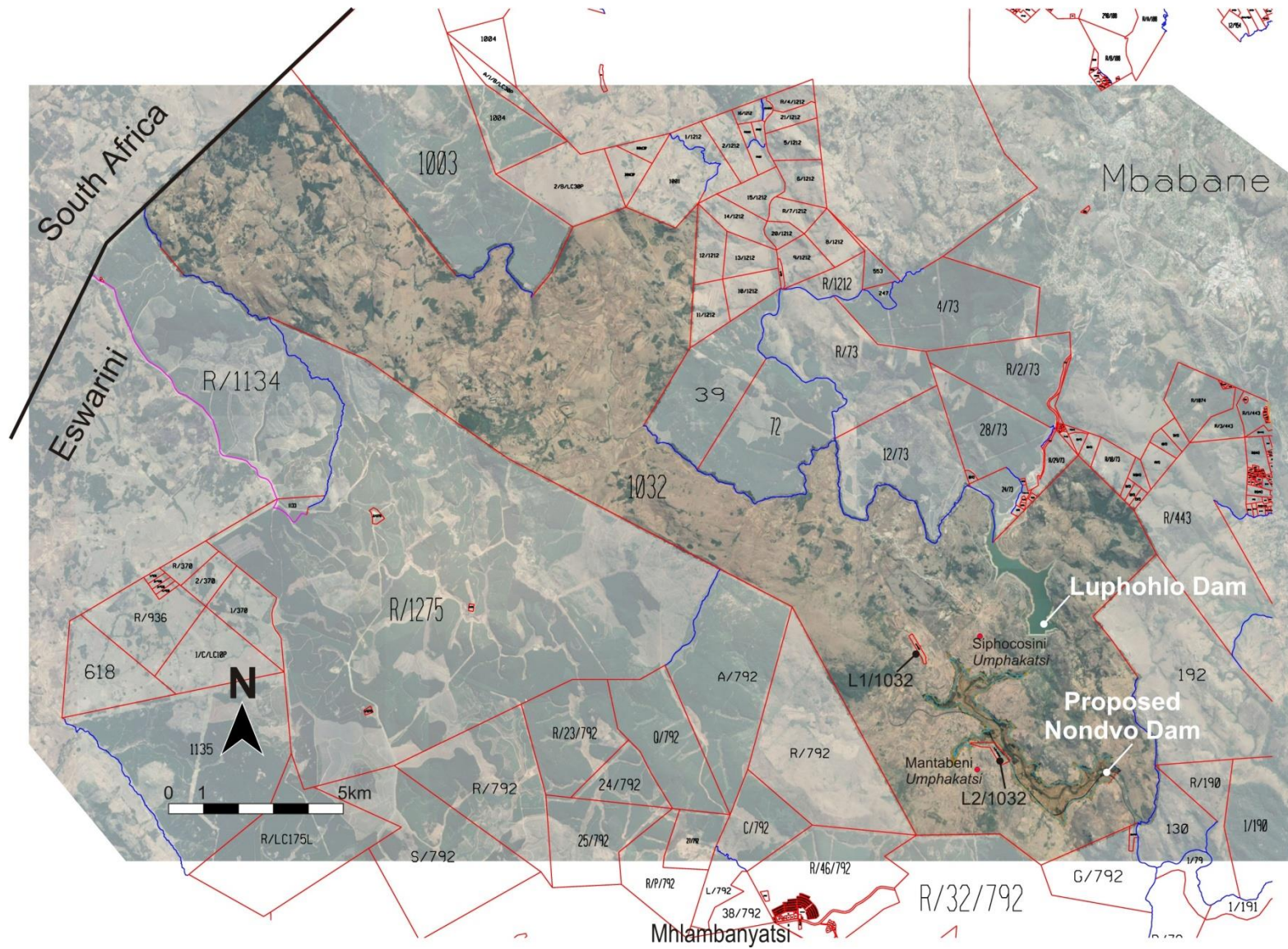


Figure 1. Location of proposed Nondvo Dam

4.2 BASELINE PHYSICAL ENVIRONMENTAL CHARACTERISTICS RELEVANT TO CULTURAL HERITAGE

4.2.1 Topography

The section of the Lusushwana River where the proposed project will be situated is at an altitude ranging from approximately 930 to 965 metres above sea level. The project site is along a narrow valley with moderate gradient bounded by steep mountainous terrain. The Mahothoza mountain range along the east rises to an altitude of 1,090 metres above sea level while the Mhlane mountain range along the west rises to 1,278 metres above sea level. Apart from the river valley and the plateau along the ridge of Mahothoza, the steep mountainous terrain is characterised by granite outcrops, boulder clusters and the distinct Masibekela rock massif which itself is part of the Mahothoza range.

Topography is relevant to cultural heritage in that the rock shelters along the steep mountain slopes present a potential for future chance-finds of pre-historic human habitation, whereas the narrow valley, due to transformation from subsistence cultivation and the rapid rate of homestead development, has a much lower potential for chance-finds. In terms of present-day cultural heritage, the steep mountainous terrain is suitable for burial sites of Chiefs and their relations in accordance with Swazi custom.

4.2.2 Climate

Eswatini has a sub-tropical climate, receiving approximately 75% of its annual rainfall between September and March (Goudie, 1983). Mbabane, the nearest city with formal records of climate data, similar altitude and

climate as the project site, experiences a mean annual temperature of 16°C and mean annual rainfall of 1,500mm.

The relevance of climate to cultural heritage is that it influenced the long absence in human occupation in east and central Eswatini. Part of the evidence of this hiatus, according to Masson (2011), was derived from archaeological excavation of the Nyonyane Rock Shelter in 1982 which is situated at the base of the summit of Nyonyane Mountain in Mlilwane Wildlife Sanctuary, 6km south east of the project site. The archaeological excavation found that there was a hiatus in human occupation of the area from 8080 to 3270 Before Present, an approximately 5,000 year absence due to climatic conditions, whose precise extremes are not clear. In terms of present-day cultural heritage, climate is relevant in that rainfall has attracted some people to settle in the Mantabeni and Siphocosini communities in pursuit of favourable subsistence cultivation. This was cited by, amongst others, Mr Masoso Mavuso, a resident who moved to the area from Ezulwini. In this context, for those to whom it is important, the ability to cultivate the land and rear livestock to provide for oneself and family, in order to supplement a formal income, is a form of cultural heritage as it represents a continuation of cultural practices.

4.2.3 Ecology

The project site has been highly transformed by human settlements and subsistence agriculture, comprising mainly maize and livestock grazing. Mlilwane Wildlife Sanctuary, situated 1km east of the project site and extends 15km south eastwards, is a formally protected area comprising numerous protected indigenous species of flora and fauna. Another formally protected area is Mantenga Nature Reserve 8km downstream of the proposed dam wall and whose prime attraction is Mantenga Falls, but also consists of Mantenga Cultural Village and numerous species of indigenous flora and fauna species. Approximately 3km to the west, but

outside Farm 1032, is the commercial forestry plantation established in 1950 as Usutu Forest, one of the largest contiguous man-made forests in the world and presently comprising pine, eucalyptus and wattle trees. It was originally owned jointly by the Commonwealth Development Corporation and Courtaulds Ltd, with shareholdings by the Government. In the late 1980s, Usutu Forest was acquired by South African Pulp and Paper Industries (SAPPI) Ltd. In 2014, Montigny Investments Ltd, a Swazi owned timber company, purchased Usutu Forest Products Company from SAPPI Ltd.

4.2.3.1 Flora

At the project site, predominant indigenous vegetation comprises *Setaria megaphylla* (Ribbon bristle grass), *Pteridium aquilinum* (luHlindzafuku/ Bracken/ Eagle fern) and *Cyathea dregei* (iNkhomankhoma/ Common tree fern).

Flora of cultural significance are:

- *Phragmites australis* (Umhlanga/ Reed grass) occurring along the section of the Lusushwana River which will be inundated, is used for construction of enclosures, such as wind breaks, garden fencing and animal enclosures within homesteads. Although harvested for *Umhlanga* (Reed Dance ceremony) in other designated parts of the country, it is not harvested for this purpose at this particular site – maidens from the project-affected communities actively participate in the annual *Umhlanga* by travelling to the designated harvesting sites and attending the ceremony at Lobamba;
- *Cyperus dives* (Likhwane/ Giant sedge) and *Cyperus articulatus* (Incoboza/ Jointed flatsedge) occurring along a marsh on the east bank of the river, approximately

700m upstream of the proposed dam wall. These sedges are harvested by the local community, as do other communities in their respective areas elsewhere in the country, for making grass mats and baskets;

- *Breonadia salicina* (Umhlume/ Matumi) occurring along the west bank of the river, immediately downstream of the proposed dam wall as well as at a homestead at the south west tip of the inundation area, 1.4km upstream of the proposed dam wall. Timber from this tree is traditionally used for constructing battle byres;
- *Pterocarpus angolensis* (Umvangati/ Wild teak) occurring along the west bank of the river, 400m upstream of the proposed dam wall. Timber from this tree is traditionally used for house construction, fences, firewood and carvings including utensils, while the roots and bark are used for medicinal purposes.

4.2.3.2 Fauna

Since the project site is highly transformed, natural habitats are restricted to the riverbed and some sections of banks. Outside the inundation area, natural habitats are restricted to the rocky outcrops, steep mountain slopes and watercourses draining into the Lusushwana.

Birds observed in the vicinity of the project site include:

- *Athus cinnamomeus* (African pitpit);
- *Motacilla aguimp* (Umvemve/ African pied wagtail) – designated the protection status of Royal Game under Schedule 2 of the Game Act, 1953;
- *Phalacrocorax africanus* (Reed cormorant);

- *Polyboroides typus* (African harrier hawk) – designated the protection status of Royal Game under Schedule 2 of the Game Act, 1953;
- *Pycnonotus tricolor* (Ligibholo/ Dark-capped bulbul).

Mammals observed in the vicinity of the project site are:

- *Galerella sanguinea* (Imbolwane/ Slender mongoose);
- *Lepus saxatilis* (Logwaja/ Scrub hare) – designated the protection status of Common Game under Schedule 3 of the Game Act, 1953;
- *Procavia capensis* (Imbila/ Rock dassie) – designated the protection status of Common Game under Schedule 3 of the Game Act, 1953.

Freshwater fishes that potentially occur at the project site, along the Lusushwana River, are:

- *Barbus crocodilensis* (Southern rosefin barb);
- *Labeobarbus poolylepis* (Smallscale yellowfish);
- *Oreochromis mossambicus* (Mozambique tilapia);
- *Varicorhinus nelspruitensis* (Incomati chiselmouth).

Flora and fauna are physical cultural resources which are accorded statutory protection by applicable legislation. While the foregoing description of flora and fauna at the project site has highlighted some of the cultural significance of various species, the protection of wildlife is essential to the preservation of not only the cultural heritage of the project-affected communities and Eswatini, but global cultural heritage as well.

4.2.4 Environmental aesthetics

4.2.4.1 Natural environment

Although the valley along the Lusushwana River has been highly transformed by human settlements and cultivation, the surrounding mountains and rock formations remain scenic. The scenery is complemented by the natural vegetation along the watercourses and amongst rocky outcrops, both of which have become a refuge for natural vegetation from the pressures of annual burning of mountain grassland for livestock grazing. The scenery of mountain sides is moderately interrupted by clusters of wattle and eucalyptus trees which are alien invasive plants escaped from commercial forestry plantations. The reduced flow along the Lusushwana River downstream of Lumphohlo Dam has diminished the river to a noticeable trickle compared to what it was prior to the construction of Lumphohlo Dam. The diminished scenery of the river is somewhat mitigated by the remaining pools and rapids along isolated sections.

According to Mr Ndumiso Hlophe, a resident of Siphocosini near the southern end of the project site, there is a section along the riverbed where the dam wall is proposed, which is frequented by community members and visitors from outside the community. The site is used by the locals for relaxing, bathing and laundry while outsiders use it as a picnic spot.

The relevance of the aesthetic of the natural environment at the project site is that, despite not being not within a formally protected area, the scenery and tranquillity of the unbuilt landscape are enjoyed by both locals and outsiders.

4.2.4.2 Built environment

Situated in a rural area, the project site does not have formalised documented controls on physical planning, building designs and architectural styles. Each respective *Umphakatsi*, through its Inner Council, designates general areas for residential, commercial, social facilities (schools, clinics, churches), communal grazing and recreational use. There are no cadastral surveys of the designated areas to produce property and land use boundaries. Persons wishing to settle in the area or establish an enterprise apply for and are granted permission by the Chief, through the Inner Council, permission to do so in accordance with the *Khonta* system (Swazi law and custom). This process applies to governmental, parastatal utility and non-governmental organisations, including churches intending to establish physical infrastructure in the area.

The lack of formalised physical planning and control over building design, as well as the aspiration towards brick and mortar building construction has further produced an array of architectural styles. Closer to the Main Road, houses are similar to those in urban areas and further away from the Main Road towards the south end of the project site, where homesteads are more remote, there is a blend of traditional and western building techniques, resulting in rectangular thatched huts built with stick and mud walls.

There are no homesteads constructed using completely traditional building materials, techniques and layout. However, in some homesteads, the functions of the various structures, such as the matriarchal hut and cattle byre still retain their traditional functions and symbolisms. Generally, the

homesteads at the southern end of the project site are more sparsely distributed compared to those near the Main Road, a characteristic which creates a noticeably more tranquil atmosphere. Despite being less opulent, the homesteads at the southern end are less visually obtrusive than their counterparts closer to the Main Road.

The relevance of the aesthetic of the built environment at the project site is that the tranquillity and visual appeal of the rural landscape is rapidly becoming diminished by the rapid rate of development closer to the Main Road. As land for settlement near the Main Road is becoming scarce, congestion is gradually spreading to the more remote sections of the community.

4.2.5 Graves

4.2.5.1 Graves of Chiefs and their relations

The graves of Chiefs, their spouses, next of kin and members of the Royal Household are situated at the base of the summits of the mountains immediately to the east of the project site. The burial sites extend from approximately 1km south of Lumphohlo Dam wall to 2.5km south of Lumphohlo Dam wall. Although not fenced, the burial sites are demarcated by clearing a narrow strip of vegetation around the perimeter as and when necessary. To the west of the project site, there is only one grave of a member of the Royal Household at the base of a rock formation approximately 400m south of Mantabeni *Umphakatsi*.

4.2.5.2 Graves of Community Members

Graves are situated relatively close to homesteads. In some cases, two or more homesteads, usually of the same family name, share a burial site. In all cases, the deceased are buried individually, i.e. one person per grave. While family graves are generally above 970 metres above sea level, one grave site belonging to the Zwane family at Mhlane at the south end of the project site is at approximately 964 metres above sea level, which is 1m below the Flood Level contour.

Those families which are within the proposed inundation area also have their grave sites above the 970m contour. The reason for grave sites being generally above 970m is that the lower lying areas are used for mainly for cultivation. Most of the homesteads situated below 970m are relatively recent in the history of the communities.

Locations of graves are shown in Figure 2 and photos are shown in Figure 3.

5. INDIGENOUS PEOPLE AND CULTURAL HERITAGE

5.1 INDIGENOUS PEOPLE

5.1.1 San / Bushmen

The first known inhabitants of the survey area were the San, also known as Bushmen. The San have been in Eswatini for the past 20,000 years. Initially they inhabited the middle veld with a combination of good hunting and gathering, large rivers, no Tsetse Fly and a warm climate. However, with the influx of black pastoralists from 450 CE onwards the San were increasingly marginalised. As hunter-gatherers the San had no concept of the permanent ownership of animals. To the San the only way that you could 'own' an animal was by killing it, then it became the property of the hunter, otherwise animals roamed free for the taking.

Pastoralists however had a strong a concept of the private ownership of animals, particularly those that they regarded as 'their' cattle, sheep and goats. The San hunted and killed cattle at will. These conflicting cultural views of animal ownership caused animosity between the San and cattle owners.

The result was that the San were increasingly marginalized by the more powerful black settlers into areas not suitable for cattle grazing or agriculture, like the highveld of Eswatini. When the Dlamini extended hegemony into Eswatini in the 19th century they had a deliberate San eradicating policy. Masson has termed the San highveld occupation sites as 'refugia'.¹ The San sometimes left paintings on granite overhangs and archaeological sites; these are evidence of their occupation. They would have been painted after trance ceremonies to show what had occurred

during trance. The last genetic and cultural San individual died in the middle 1950s in Pigg's Peak, according to two reliable oral sources.

In the Nondvo survey area there would originally have been extensive reed beds on the comparatively flat river flood plains. Vestiges of these reeds remain, however they have been almost entirely destroyed by ploughing. The reed beds would have attracted bands of San, particularly when birds were nesting. Eggs would have been a reliable and easily obtainable protein source.

5.1.2 Black pastoralists

The first black pastoralists entered what is present-day Eswatini in around 450 CE. The language that they spoke, and their tribal identity is not known, archaeologists have termed it the Silverleaves culture. The first known and named black people in Eswatini were Sotho speaking clans which entered from the highveld from the 11th century onwards. There is evidence from sites in Eswatini that there were increasing numbers of Sotho speaking communities from around 1550 onwards. Many of their descendants, such as the Mnisi and Magagula clans, self-identify as Sotho to this day within the wider context of Swazi culture.

5.1.3 Nguni settlers

During the 19th century Nguni speaking people, under Dlamini leadership, settled in central and then northern Eswatini from the 1820s onwards. They were primarily driven northwards by militaristic Zulu expansion from the south. The Dlamini hegemony sought a specific middleveld granite landscape. This had rocky granite outcrops a broad valley and a stream or river in the middle, like Lobamba. The river provided water and the floodplains provided the ideal terrain for agriculture and cattle grazing.

The rocky outcrops could be natural fortresses and boulder chokes could be used as strategic retreats in times of Zulu raids.

5.1.4 Pastoralist settlement patterns

Oral history collected during the heritage survey indicates that the Nondvo river valley was sparsely populated. This is consistent with known pre-historic high-altitude settlement patterns. The rainfall of between 1200 to 1800 mm per annum in the highveld leached nutrients out of the soil, making for poor cattle grazing in winter and marginal agriculture. Both the San and the black pastoralists preferred the middle-veld. The lowveld had rich soils, but was malaria infested and Tsetse Fly ridden. Large rivers crossed the lowveld, but there was no widespread network of streams, making for extremely long distances between water sources.

5.2 COLONIAL ERA

During the colonial era from 1907 to 1968 the survey area was Native Concession number 10,² administered through the system of chiefs. Later it became Swazi Nation Land. At this period total population was low because middle-veld sites were preferred, and land was available there.

5.3 ORAL HISTORY

Mantabeni and Siphocosini were sparsely settled until the road between Mhlambanyatsi and Mbabane was tarred in the 1990s. Mpetse Dlamini, who is over 90 years old and a lifelong Mantabeni resident, says that until the early 1980s there were only two families living there. This is consistent with general population densities in the highveld prior to rapid population growth after independence in 1968. After the road was tarred buses started operating

regularly, and the area became a rural dormitory suburb of the capital. There was an influx of residents and of building construction, a process which continues.

5.4 CHIEFS

The project site lies within two chieftainships: Mantabeni being led by Chief Mafelenkhosini Mashampu Sifiso Khumalo, and Siphocosini by Chief Jabhane Dlamini.

5.5 ARCHAEOLOGICAL AND CULTURAL HERITAGE SITES

5.5.1 Archaeological site

There is one archaeological site from the San / Bushman era. This is immediately below the Lumphohlo dam wall, at 26° 24' 05.94"S and 31° 05' 54.69"E shown in Figure 2.

The site is a rock painting on Lochiel Granite in the cleft of a small granite boulder cluster. The site was first recorded in the 1960s by Masson. At that time it was a clear polychrome painting of an antelope, however over time this has faded to the point of near invisibility. There are several other indistinct markings in ochre. Photos are shown in Figure 3.

There is no known archaeological deposit associated with this site, and the lack of an overhang or cave makes one unlikely. Nor are there any signs of tools below. The site is in the Rock Art Register as Lumphohlo, details are stored in the Rock Art Research Institute at the University of the Witwatersrand.³

5.5.2 Heritage site

There is one heritage site in the survey area, an underground refuge. This is formed by a boulder choke composed of huge granite boulders which have fallen from Masibekela mountain on the north of the Nondvo river. Typically, in these geological formations soil accumulates over the boulders and vegetation grows on top of them, often concealing the extent of the underground passageways. The Masibekela boulder choke is marked B between the track and the rock massif. This was used as a refuge in times of Zulu military incursions, or the perceived threat of them. Several residents repeated this account of usage, the Makhanya homestead, which is close to the site, provided access. The boulder choke has a few remains of refuge pottery within it, evidence of occasional use. It is located directly at the base of Masibekela mountain, at 26° 25' 21.16"S and 31° 05' 50.93"E, shown in Figure 2. Photos are shown in Figure 3.

5.6 INDUSTRIAL ARCHAEOLOGY SITES

5.6.1 Railway line

The KaDake to Maputo railway line bed runs along the proposed southern edge of the dam before entering two long tunnels in Mlilwane Game Reserve. The track has been long removed, however the bed is largely intact. In mountainous terrain as a rule of thumb around three quarters of the cost of a new rail line is invested in the bed, rather than the track and trains. Therefore, the existing disused railway bed was, and is, a significant investment.

During the subsequent years of its disuse, homesteads have been allocated land by the Mantabeni Inner Council through Swazi law and

custom to settle in close proximity to the railway line and have thus encroached into the reserve.

5.6.2 Quarry

There is an old quarry at 26° 25' 29.7"S and 31° 05' 32.9"E with substantial granite reserves. The disused quarry, covering approximately 12,650m², is situated within Land Concession 2 of Farm 1032 (L2/1032) and on the boundary of the Flood Level. L2/1032, itself measuring 13.3641ha (133,641m²), was established in 1966 for purposes of establishing the quarry site which was used for sourcing quarry stone for the railway construction in 1969. The quarry was not formally closed or rehabilitated because the quarry had not been exhausted and it indeed provided a source of material for the upgrading of the Mbabane to Mhlambanyatsi section of the MR19 in 1991.

The homesteads along the gravel road from Bhekephi Primary School to the quarry are within L2/1032 and settled along the gravel road after the establishment of L2/1032.

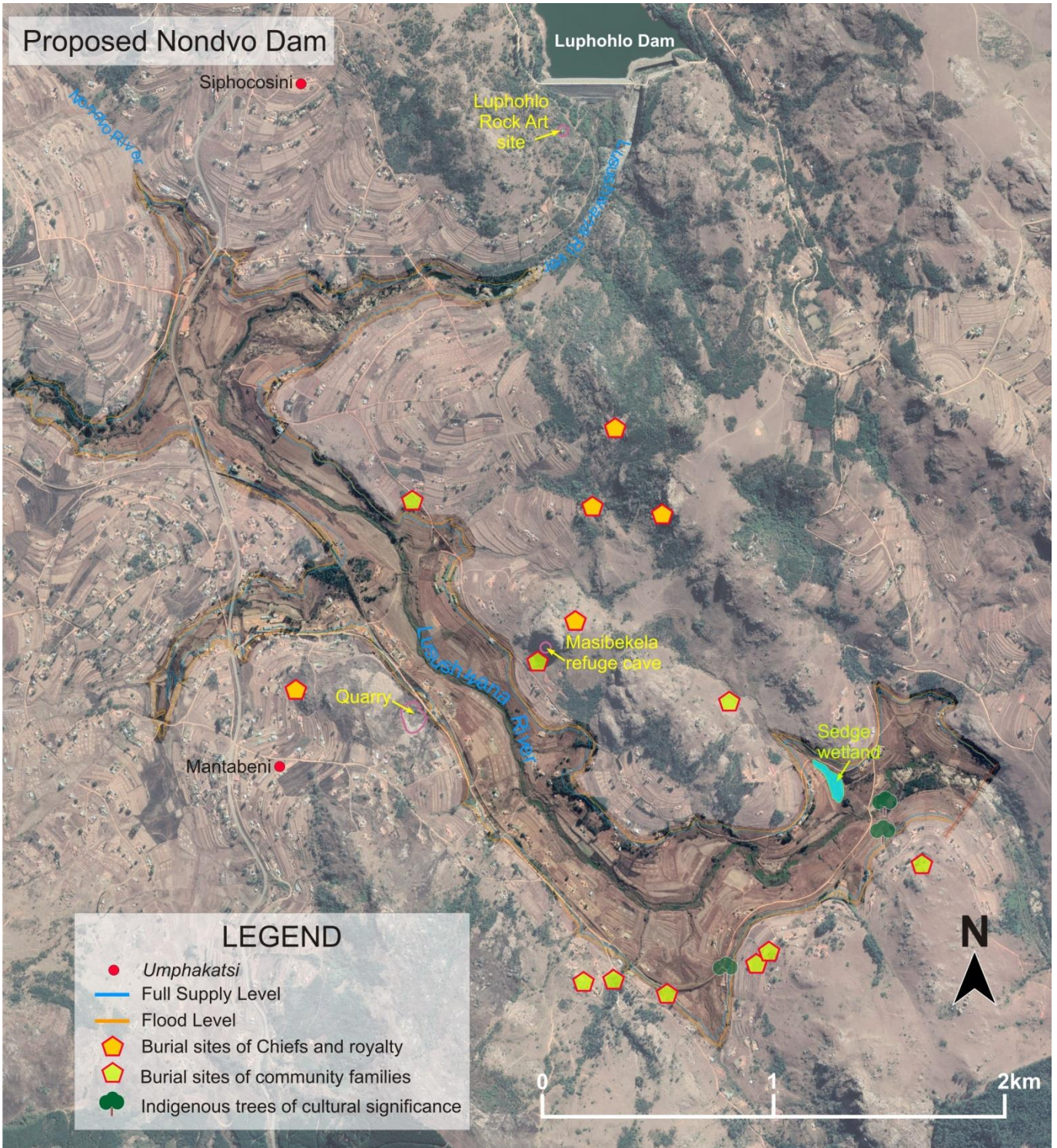
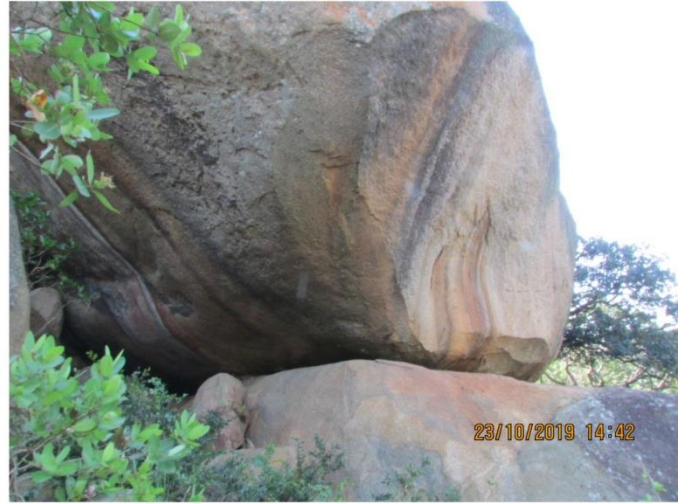


Figure 2. Location of archaeological and cultural heritage sites.



a) Luphohlo Rock Art site.



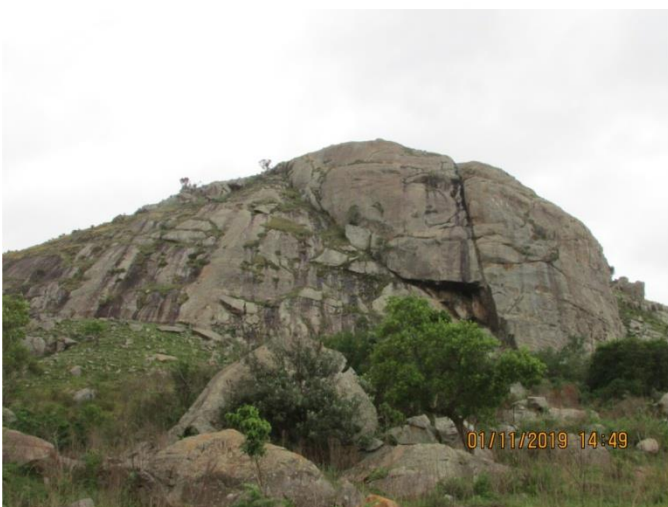
b) Luphohlo Rock Art site.



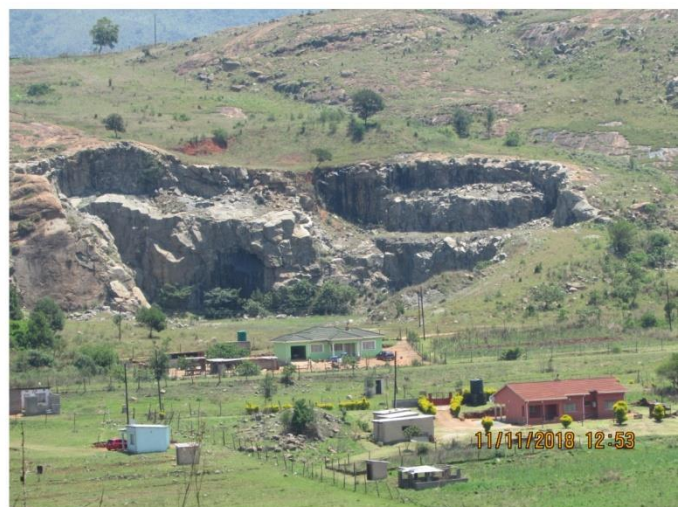
c) Faded rock painting at Luphohlo Rock Art site.



d) Faded animal figures at Luphohlo Rock Art site.



e) Masibekela refuge cave.



f) Disused quarry.



g) Indigenous vegetation immediately upstream of proposed dam wall.



h) Umvangati/ Wild teak trees within inundation area at south end of project site.



i) Harvesting of thatching grass within inundation area at south end of project site.



j) Use of local building materials at homestead within inundation area at south end of project site.



k) Wetland from which sedges are harvested for making baskets and grass mats.



l) Family graves withing within inundation area at south end of project site.

Figure 3. Photos of archaeological and cultural heritage sites.

6. IMPACT ASSESSMENT

6.1 METHODOLOGY

The impact assessment is based on the characteristics of the identified impact:

- Nature of impact;
- Extent;
- Duration;
- Reversibility;
- Magnitude;
- Probability;
- Significance.

For each characteristic other than the significance, the Specialist assigns a score, based on what the specialist predicts to be an appropriate rating. Such prediction is also influenced by observation of impacts of similar activities and projects, viewed in the context of the local circumstances and conditions of the proposed project site. The significance is calculated using a statistical equation described later in this section.

6.1.1 Nature of impact

A prediction of whether the impact is positive or negative:

Nature of impact	Description
Positive/ Beneficial	An impact that is considered to represent an improvement on the baseline or introduces a positive change.
Negative/ Adverse	An impact that is considered to represent an adverse change from the baseline, or introduces a new undesirable factor.

6.1.2 Extent

A prediction of how far the impact will reach from the source of the activity:

Rating of Extent	Description
1	The impact will be limited to the site.
2	The impact will be limited to the local area.
3	The impact will be limited to the region.
4	The impact will be national.
5	The impact will be international.

6.1.3 Duration

A prediction of how long the impact will be experienced from the time that it is triggered:

Rating of Duration	Description
1	Very short duration (0 – 1 year).
2	Short duration (2 – 5 years).
3	Medium term (5 – 15 years).
4	Long term (>15 years, but reversible).
5	Permanent.

6.1.4 Reversibility

A prediction of the degree to which the environmental receptor will be able, or time necessary for the environmental receptor, to rehabilitate or restore itself after the impact is triggered or becomes evident:

Rating of Reversibility	Description
1	The impact is immediately reversible.
2	Rating not used.
3	The impact is reversible within 2 years after the cause or stress is removed.
4	Rating not used.
5	The impact is irreversible.

Note: the rating of 2 and 4 are not used because the rating approximates a “low” (1), “medium”(3) and “high”(5) when rated on a score of 1 – 5.

6.1.5 Magnitude

A prediction of the magnitude of disruption by an impact on ecological and/ or social processes:

Rating of Magnitude	Description
1	No or negligible effect on ecological and/ or social processes.
2	Slight disruption to ecological and/ or social processes.
3	Moderate disruption, but ecological and/ or social processes will continue in a modified manner.
4	High disruption such that ecological and/ or social processes temporarily cease.
5	Complete disruption resulting permanent cessation of ecological and/ or social processes.

6.1.6 Probability

A prediction of the likelihood of the impact actually occurring:

Rating of Probability	Description
1	Very improbable (unlikely to happen).
2	Improbable (some likelihood, but low).
3	Probable (distinct likelihood).
4	Highly probable (high likelihood).
5	Definite (a certainty of occurrence).

6.1.7 Significance

A calculated prediction of the overall importance of an impact or outcome, where:

$$\text{Significance} = (\text{Extent} + \text{Duration} + \text{Reversibility} + \text{Magnitude}) \times \text{Probability}$$

$$S = (E+D+R+M) \times P$$

The minimum score is:

$$\begin{aligned} S &= (1+1+1+1) \times 1 \\ &= 4 \end{aligned}$$

The maximum score is:

$$\begin{aligned} S &= (5+5+5+5) \times 5 \\ &= 100 \end{aligned}$$

The range of 4 to 100 is partitioned into three levels to produce a significance rating of “Low”, “Medium”, “High” as follows:

Significance Rating (S)	Nature of impact		Description
	NEGATIVE (N)	POSITIVE (P)	
4 – 29	Low	Low	Low overall importance of impact does not have a direct influence on the decision to develop in the area.
30 – 60	Medium	Medium	Medium overall importance of impact could influence the decision to develop in the area, unless effective mitigation or enhancement measures are implemented.
61 – 100	High	High	High overall importance of impact influences the decision to develop in the area. Mitigation and enhancement measures are imperative.

Each impact significance is first calculated on the baseline a scenario before mitigation or enhancement measures are taken. The pre-mitigation/ pre-enhancement significance rating provides an indication of the depth of mitigation or enhancement warranted by the impact. For example, a negative impact of high significance may warrant a more elaborate mitigation than an impact of low significance.

Thereafter the impact significance is calculated for a scenario after appropriate mitigation or enhancement measures are taken. This latter rating is the “residual impact significance”. It enables the project’s implementing agency, project team and stakeholders to prioritise effort and resources for achieving optimal effectiveness in managing the impacts.

The identified impacts, mitigations and enhancements are described in the subsequent sections below, while the impact significance calculations are provided in Appendix 1.

7. POTENTIAL IMPACTS AND OPPORTUNITIES

7.1 POTENTIAL IMPACTS

7.1.1 Archaeological site

The San / Bushman painting site is located 610m from the north east inlet of the proposed dam. The Flood Level of the proposed dam is 965 metres above sea level whereas the Rock Art site is 996 metres above sea level. While the Rock Art site is not at risk of being inundated, it is at risk of being disturbed by project activities such as clearing for access roads that will link with the existing D95 gravel road which runs from the MR19 junction to Lumphohlo Dam wall. D95 was proclaimed a public road by the Ministry of Public Works and Transport through General Notice 98 of 1998 under Section 7 of the Roads and Outspans Act, 1931. Additionally, the provision of access roads will expose the site to more visitor traffic, thereby accelerating the deterioration of the site which has thus far been retarded by its seclusion which resulted from the construction of Lumphohlo Dam. Such deterioration will be exacerbated by allowing visitor access to the site to remain uncontrolled or unmanaged.

7.1.2 Heritage site

The Masibekela refuge cave is situated at 1,090 metres above sea level and 110m east of the proposed dam, and therefore is not at risk of inundation. It is however at risk of disturbance from access road construction and relocation of existing homesteads from the inundation area. The risk of disturbance from homesteads is real since new homesteads have recently been allocated land and thus homestead development is rapidly encroaching further up the mountain side, approaching the refuge cave.

7.1.3 Railway line

The railway line servitude will be inundated by the proposed dam. Although the line is disused, the servitude is still operative in that Eswatini Railways continues to pay royalties for the servitude and intends reviving the line for transporting iron ore from Ngwenya. Due to inundation it will not be possible to preserve any section of the servitude at the project site for posterity of industrial heritage. There are no aspects of the railway line bed that demonstrate peculiar technological innovation that would warrant conservation.

7.1.4 Quarry

There are no peculiar aspects about the quarry that render it conservation-worthy, i.e. there are no geomorphological features of special interest exposed by previous workings, it does not have any human-made features demonstrating peculiar industrial or technological innovation and it does not form a peculiar habitat or refuge for flora and fauna. Potential re-use as a source of water is negated by the proposed dam.

In view of the intention to revive the railway line or its possible realignment, the use of the quarry is likely to resume and expand further into the as yet un-mined sections of L2/1032. Since the quarry is on the edge of the Flood Level, the existing access point at the quarry will be obstructed by the dam, necessitating either establishing an alternative access route, or relocating, or expanding the quarry further northwards into L2/1032. The possible resumption and expansion of the quarry will likely displace adjacent homesteads, particularly those outside the Flood Level, but within L2/1032.

7.1.5 Graves

7.1.5.1 Graves of Chiefs and their relations

The graves of Chiefs and their relations are outside the inundation area and thus will not be inundated. Ease of access to the graves by community members living on the west side of the dam will be reduced by the physical barrier caused by the water body. Accessing the graves via the east of the mountain is not feasible as there are no vehicle tracks leading to the graves from the east and there are near-vertical cliffs. Reduced access will therefore cause physical and emotional alienation from the graves and burial sites.

7.1.5.2 Graves of Community Members

The graves of homesteads are mostly outside the inundation area. While they will not be inundated, they are likely to be disturbed during construction of access roads.

The graves of the Zwane families at the south end of the project site are in the inundation area and therefore will need to be relocated.

The graves of families in the vicinity of the proposed project offices will be at risk of being disturbed during site clearing for the offices and vehicle parking.

Homesteads that will be resettled as a result of inundation, construction of access roads, realignment of the railway, the MR19 and the proposed 132kV and 11kV transmission lines, will be alienated from their graves and burial sites. At the time of

the Heritage Survey the realignment routes of the infrastructure were not known therefore it was not possible to determine the homesteads that will be affected.

7.1.6 Ecology

7.1.6.1 Flora

Project implementation will result in loss of indigenous vegetation through site clearing for construction of the dam, establishment of a new quarry site (if the existing quarry is not utilized), access roads, realignment of railway line and power lines, construction of resettled and relocated homesteads and relocation of burial sites of affected homesteads. Inundation will also result in vegetation loss.

From a cultural heritage perspective, the loss of indigenous vegetation will cause a loss of species of cultural significance such as timber and grasses used for construction, as well as plants used for medicinal purposes.

7.1.6.2 Fauna

Project implementation will result in the loss of natural habitats through site clearing for project offices, workers' camp, access roads, realignment of railway, the MR19, powerlines and resettlement of homesteads. The loss of habitats will also cause conflicts between humans and wildlife where some mammals will seek refuge within cultivated fields and consequently be killed by humans.

Inundation and operation of the dam will attract aquatic fauna and birds, but the attraction of large mammals will be limited due to the homesteads and cultivation surrounding the dam. The attraction of birds, although a positive impact, is likely to be limited by the prevalence of alien invasive plants.

Resettlement of homesteads to sites that are in close proximity to formally protected areas, such as Mlilwane, and informally protected areas such as Usutu Forest, will cause conflicts between humans and wildlife. Conflicts will be through increased likelihood, or attempts, or actual incidents of poaching. Another form of conflict will arise from noise pollution which will either cause behavioural changes amongst some species of wildlife or cause them to flee towards the quieter interior of protected areas, thereby reducing their range area.

From a cultural heritage perspective, the potential adverse impacts on wildlife will ultimately result in a reduction of species populations, which will not necessarily be instantaneous, but cumulative over time.

7.1.7 Environmental aesthetics

7.1.7.1 Natural environment

The dam will enhance the aesthetics of the surrounding mountain sides and preserve the tranquillity of the rural landscape.

In view of the scarcity of remaining land for homesteads, resettlement and relocation of homesteads to higher up the mountain sides will diminish the scenery of the mountains.

7.1.7.2 Built environment

The dam wall will face southward where there are no homesteads or access routes, therefore the wall will not be visually obtrusive to both the local community and visitors passing through the area and along the MR19.

Resettlement and relocation of homesteads will increase congestion of built areas, thus diminishing the sense of open space of the rural countryside. This will be accentuated by the need to provide adequate space for continued subsistence agriculture, thus forcing homesteads into more congested areas. Congested spaces will further degrade the rural lifestyle wherein residents presently feel safe to leave their homesteads unattended without having to worry about burglaries. Presently the open space enables neighbours to easily lookout for each other's homesteads thus mitigating crime. Therefore congestion will degrade the sense of community and sense of belonging amongst residents, both characteristics which are part of cultural heritage.

From an aesthetic perspective, a positive impact of constructing resettled homesteads to at least meet minimum building regulation requirements will be the general improvement of the visual attractiveness of the host community. Amongst the residents who will not be resettled, the disparity in building standards between opulent and impoverished homesteads will

persist, thereby diminishing the aesthetic appeal of the community and rural landscape around the dam.

7.1.8 Diverse and Conflicting Values Attached to Heritage Resources

7.1.8.1 Flora and fauna

The various impacts on heritage resources are likely to trigger or expose the diverse and or/ conflicting societal values attached to such resources. Such diversity in the attachment of values is influenced by the differing world views amongst different groups of people. For example, one of the discussions arising during the engagement of Project Affected Persons was the listing of one of the project's justifications for the selected location as being the need to avoid encroachment into Mlilwane Wildlife Sanctuary. Some Project Affected Persons submitted that this demonstrated that plants and animals were accorded by project engineers and proponents a higher value than fellow humans. They proposed that the dam be located further south, along the boundary of Mlilwane or in neighbouring commercial forests so as to further mitigate involuntary displacement (Community meetings of 17th August 2019; 26th September 2020). Meanwhile the technical arguments for the proposed location emphasized the suitability of the geology, the long term financial return on investment as well as the optimal balance of impacts on humans and wildlife of the proposed location.

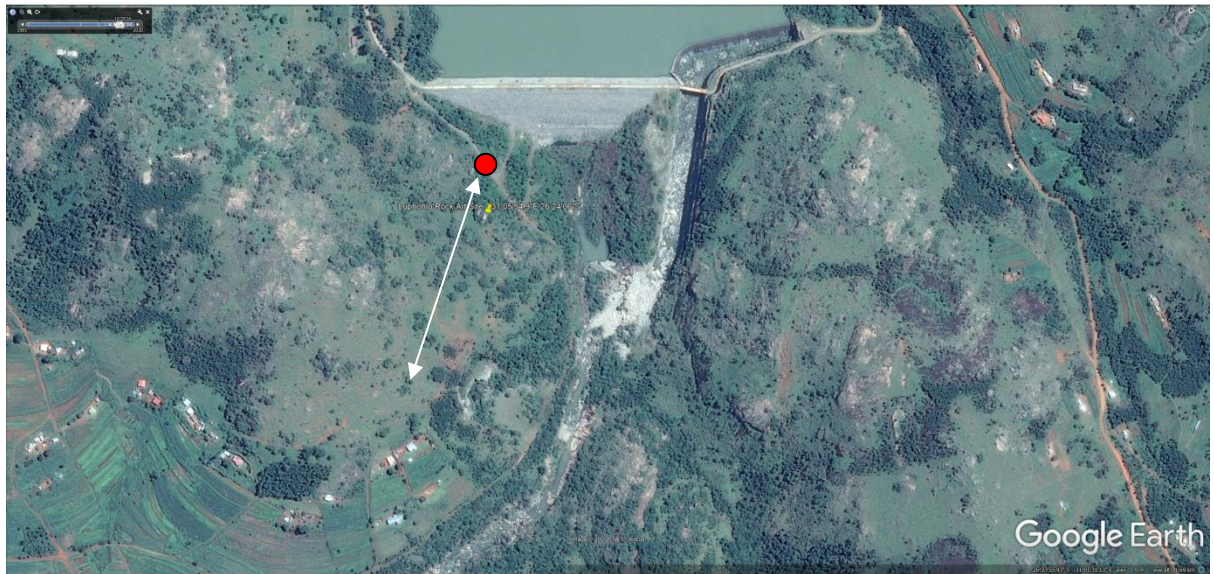
7.1.8.2 Graves

While no objections were raised against the relocation of household graves during the engagement of Project Affected Persons, they submitted that the project will need to ensure

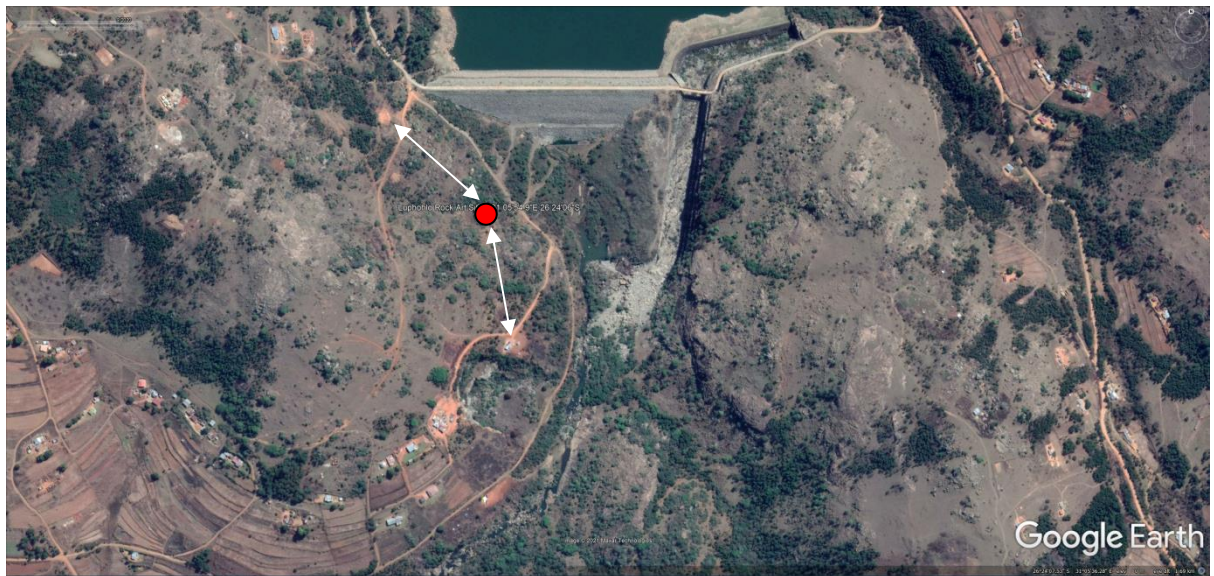
that all burial rituals will need to be respected and financed by the project. It is nevertheless prudent to anticipate incidents where some individuals or households may have extenuating circumstances feeling uncomfortable with relocating their graves when the time arrives. These will include, but not limited to ancestral ties to the land upon which the household and/ or family graves are situated. This is a situation which at times may not be fully appreciated by proponents of development.

7.1.8.3 Rock Art Site

The Rock Art Site is potentially in danger of being inadvertently destroyed by the pressure on land for residential settlements, particularly as it is presently not fenced, nor signposted to warn the public of its presence. The risk is that some Project Affected Persons may choose to resettle on the available land near the Rock Art Site the land is close to where they already live. When advised not to encroach upon the site, they will feel dejected that preference is being given to the protection of a rock upon which the ancient paintings are barely legible. Figure 4 shows the imminent threat of the Rock Art Site from residential development, which will increase during resettlement.



a) Environs of Rock Art Site in October 2016 with nearest households 360m away.



b) Environs at Rock Art Site in September 2020 with nearest households 200m away.

Figure 4. Residential development near Rock Art Site

7.2 OPPORTUNITIES

Before assessing the significance of the impacts, the opportunities relating to cultural heritage will be considered so that they are incorporated into the mitigation and enhancement measures. Opportunities represent measures that are not necessarily within the scope of the project, but that of the community and other institutions which, if adopted, will strengthen the effectiveness, value and sustainability of measures implemented by the project.

7.2.1 Archaeological site

The Rock Art site is not suitable for tourism because the painting is barely accessible in a rocky cleft and is extremely faded. Leaving the site open to uncontrolled or unmanaged visitor access will result in further deterioration. Therefore, rather than leave the site to continue to deteriorate, one option is to professionally restore the paintings and control visitor access thereafter. Where restoration costs and loss of authenticity through restored paintings are inhibitive or outweigh the benefit, then another option is to professionally produce a replica of the paintings, display them on an interpretive plaque a safe distance, e.g. 30m from the site, such that visitors, including the local community, may still be able to see the site from such safe distance. The objective of such preservation options is not so much for tourism, but for the local community to appreciate or recognize the occupation of the area by earlier cultures. Few people within the local community are aware of the site.

In order to determine the possibility of chance-finds, exploratory test pits should be excavated in the immediate area around the boulder cluster. If Late Stone Age quartz is exposed in the test pits, this will signify a high possibility of the presence of archaeological deposits concealed beneath

the ground, in which case the site should be professionally excavated as rescue archaeology. An appropriate fence of 30m radius around the site will provide adequate protection of the site.

7.2.2 Heritage site

The Masibekela site is suited to being one component of a cultural heritage tour, however the site is not sufficiently important to be a primary destination. An option is to include it as part of a broader cultural tourism package. In order to enable appreciation of its cultural heritage significance amongst the local community and visitors, an interpretive plaque placed at a viewpoint along the access road on the west side of the mountain is an option.

7.2.3 Graves

7.2.3.1 Graves of Chiefs and their relations

In order to protect the graves of Chiefs and royalty from accidental disturbance, whether by project activities or other human activities in the community, an option is to erect a suitable fence around the respective burial sites, leaving adequate space for future burials. This would offer improved protection than clearing vegetation as and when necessary. Another option, where fencing is not practical due to rocky terrain, is to erect sign-posts at appropriate intervals around the perimeter signifying that the area is sacred.

7.2.3.2 Graves of Community Members

Graves of homesteads that will be resettled will be addressed through the Resettlement Action Plan. Graves that will not be

relocated will be at risk of being accidentally disturbed by other human activities not related to the project, particularly since in some cases they are concealed under dense vegetation or have become indiscernible. An option is to either erect a fence around the designated burial sites, while leaving space for future burials where space is available, or erect sign-posts alerting the public of the presence of graves in the vicinity. This will also prevent local residents being unintentionally offended or startled when seeing strangers traversing burial sites unknowingly.

7.2.4 Ecology

7.2.4.1 Flora

Where indigenous trees of cultural significance occur outside the inundation area, an option is to place tags on the trees inscribed with the scientific name, siSwati name and common name as well as short description of significance to Swazi cultural heritage. This will promote awareness and appreciation amongst the local community, visitors and contractors on other projects as to the cultural significance of the trees. This need not apply to every individual tree, but to different species within a given locality. An additional option is to apply a similar principle of erecting an interpretive plaque on the edge of a marsh area where there are reeds and sedges of cultural significance.

7.2.4.2 Fauna

An option is to establish community based programmes eradicate or control alien invasive plants along watercourses and mountain sides in order to enhance natural habitats for

terrestrial and aquatic wildlife. An additional option is for the Inner Councils to monitor and enforce rules of development within the community so that development of homesteads does not encroach into wetlands such as marshes. Community based bee-keeping initiatives are a possible option for preventing uncontrolled harvesting of honey from nearby natural and man-made forests which often results in run-away fires that destroy habitats.

7.2.5 Environmental aesthetics

7.2.5.1 Natural environment

An option for the enhancement of the aesthetic appeal and tranquillity of the surrounding mountains and rural landscape in for the *Inkhundla* and Inner Councils to control development such that homesteads do not encroach into areas of natural beauty. The *Inkhundla* together with Inner Councils would have to consult with relevant bodies such as ENTC with regard to establishing criteria and procedures for designating such areas.

7.2.5.2 Built environment

An option for enhancing the aesthetic appeal of the built environment is for the *Inkhundla* and Inner Councils to establish guidelines for new homesteads settling in the community and new enterprises to build their structures such that they blend with the surrounding natural and built environment. Examples include, where appropriate, painting corrugated iron roofs to minimise reflective glare, avoidance of such paint colours on external walls that conflict with those of surrounding buildings or rock formations. Establishing such guidelines will require the

Inkhundla and Inner Councils to consult with the Physical Planning department within the Ministry of Housing and Urban Development.

8. MITIGATION AND ENHANCEMENT MEASURES

8.1 IMPLEMENTATION PHASE

8.1.1 Archaeological site

The Rock Art site must be demarcated with appropriate barrier mesh and signposting prohibiting unauthorized entry to prevent disturbance by construction personnel and vehicles. The demarcation will be a radius of 30m from the centre of the site.

8.1.2 Heritage site

The Masibekela refuge cave must be demarcated with appropriate barrier mesh and signposting prohibiting unauthorised entry to prevent disturbance by construction personnel and vehicles. The demarcation must be 30m from the site. Chance-finds of heritage sites must be demarcated and work in the vicinity suspended until further notice from a qualified and heritage specialist and the ENTC.

8.1.3 Graves

8.1.3.1 Graves of Chiefs and their relations

The graves of Chiefs and royalty must be demarcated with appropriate barrier mesh and signposting prohibiting unauthorised entry to prevent disturbance by construction personnel and vehicles. The demarcation must be 30m from the burial sites. Chance-finds of graves and burial sites of Chiefs and royalty must be demarcated and work in the vicinity must be suspended until further notice from the Inner Council.

8.1.3.2 Graves of Community Members

Community burial sites and graves must be signposted to prevent accidental disturbance by construction personnel and vehicles. Where appropriate, graves and burial sites must be fenced. Graves at risk of being inundated and those belonging to families that will be resettled must be relocated for reburial in accordance with Swazi custom. Graves encountered during any site clearing must be demarcated and the next of kin traced and notified before relocation for reburial.

8.1.4 Chance finds

Chance-finds of archaeological sites or material must be demarcated and work in the vicinity will be suspended. A qualified and experienced heritage specialist and the ENTC must be notified and engaged to make an assessment of the find and a determination of the appropriate action to be taken for the rescue and/ or preservation of the find:

- Movable chance finds must be proclaimed as relics or antiques, whichever the case may be in accordance with Section 25 of the National Trust Commission Act, 1972. Thereafter they must be transported, under supervision of a qualified curator at the ENTC or other person designated by the ENTC, for preservation at the National Museum in accordance with Section 11 of the National Trust Commission Act, 1972. The ENTC will determine whether to proclaim the chance finds before transportation or vice versa, depending on whichever is more practical. For example, in some cases verification may involve analytical processes which may take time, therefore it may be prudent to transport the finds to safety first.

- Immovable chance finds must be proclaimed as national monuments in accordance with Section 25 of the National Trust Commission Act, 1972 and protected by whatever means are practical, such as signposting the site, fencing the site or proclaiming a defined area surrounding the site as a protected area.
- In accordance with Section 26 of the National Trust Commission Act, no person shall be permitted to destroy, damage, excavate, alter, remove from its original site or export any chance find monument, relic or antique except under the authority of and in accordance with a permit granted by the ENTC.

8.1.5 Ecology

8.1.5.1 Flora

Indigenous plants of cultural significance and those protected under the Flora Protection Act, 2001 must be rescued for relocation to similar habitats. Where relocation is not practical, seeds or cuttings must be collected for propagation. Relocation and propagation must be undertaken under supervision of a qualified and experienced botanist.

Access roads must be designed so as to avoid ecologically sensitive areas such as wetlands. Where routing through ecologically sensitive areas cannot be avoided, personnel and vehicles will be restricted to demarcated tracks.

8.1.5.2 Fauna

Awareness must be provided to site personnel and the local community not to harm wild animals. Where wild animals find themselves trapped in fences or confined spaces while attempting to escape construction activities, a qualified specialist must be engaged to supervise the safe rescue and relocation to a similar habitat. Bird nests encountered during any site clearing must be rescued and relocated to a similar habitat by a qualified and experienced specialist.

8.1.6 Environmental aesthetics

8.1.6.1 Natural environment

Resettlement sites for homesteads must be selected such that ecologically sensitive areas such as wetlands and areas of natural beauty such as the bases of mountain summits, upon a rock massif or within 30m thereof.

8.1.6.2 Built environment

Houses of homesteads and any other buildings that will be resettled or relocated must be designed so as to avoid being visually obtrusive against the natural background and the majority of existing buildings in the host community. The layout of resettled homes and other buildings must be designed such that they do not cause congestion in terms of building density.

8.1.7 Diverse and Conflicting Values Attached to Heritage Resources

On-going dialogue between project proponent and Project Affected Parties as well as establishment of Resettlement Task Team will enable amicable resolution of conflicting values attached to heritage resources.

8.2 OPERATION PHASE

8.2.1 Archaeological site

The entity appointed to operate the dam must support initiatives by the local community to maintain and preserve the Rock Art site. This will include sponsoring or part-sponsoring fencing, plaques and access control notices.

8.2.2 Heritage site

The entity appointed to operate the dam must support initiatives by the local community to maintain and preserve the Masibekela refuge cave. This will include sponsoring or part-sponsoring plaques and access control notices.

8.2.3 Graves

8.2.3.1 Graves of Chiefs and their relations

The entity appointed to operate the dam must support initiatives by the local community in maintaining access to the graves of Chiefs and royalty. This will include sponsoring or part-sponsoring maintenance of access roads in the vicinity of the burial sites, fencing and access control notices.

8.2.3.2 Graves of Community Members

The entity appointed to operate the dam must support initiatives by the local community in maintaining community burial sites so as to protect them from disturbance and vandalism by visitors. This will include fencing and access control notices.

8.2.4 Ecology

8.2.4.1 Flora

The entity appointed to operate the dam must support initiatives by the local community in protecting wetlands, controlling alien invasive plants and protecting indigenous trees. Support will include sponsoring or part-sponsoring initiatives for protecting flora and natural habitats.

8.2.4.2 Fauna

The entity appointed to operate the dam must support local community initiatives to enhance natural habitats. This will include sponsoring or part-sponsoring awareness campaigns, control of alien invasive plants to conserve natural habitats for wildlife, community-based enterprises such as beekeeping to mitigate wild fires.

8.2.5 Environmental aesthetics

8.2.5.1 Natural environment

The entity appointed to operate the dam must support local community initiatives in enhancing and maintaining the aesthetic appeal of the area. This will include sponsoring or part-sponsoring initiatives for controlling alien invasive plants, fencing communal grazing areas so as to protect natural habitats, environmentally and socially sustainable community-based tourism so as to ensure participation of the local community in the benefits derived cultural heritage resources.

8.2.5.2 Built environment

The entity appointed to operate the dam must support local community initiatives in enhancing the aesthetic appeal of the built environment. This will include sponsoring and part-sponsoring community-based waste management, providing assistance to vulnerable and destitute groups in terms of repairs to dilapidated housing structures, facilitating engagements between the *Inkhundla* and relevant governmental agencies in promoting awareness in the community on building design and physical planning.

9. MITIGATION PLAN

The mitigation plan, which includes the enhancement measures is provided in Appendix 2.

10. MONITORING PLAN

The monitoring plan is provided in Appendix 3.

11. CONCLUSION

The key physical cultural heritage resources at the project site are the Lumphohlo Rock Art site, Masibekela refuge cave, graves of Chiefs and royalty, graves of community members, indigenous grasses, sedges and trees harvested for construction, furniture, utensils and medicinal purposes. Intangible cultural heritage resources at the project site include the aesthetic appeal and tranquility of the rural landscape.

The site has been, and continues to be, transformed by rapid peri-urban development which places the remaining cultural heritage resources under pressure and risk of further degradation. The proposed dam, if not consciously managed in an environmentally and socially responsible manner will accelerate the degradation of cultural heritage resources, despite its good intentions (and positive impact) of securing water availability.

The mitigation and enhancement measures aimed at preserving the cultural heritage resources during the implementation phase will be clearly the responsibility of the project proponent through delegation of the project managers and contractors. Mitigation and enhancement measures during the operation phase will overlap between the entity appointed to operate the dam and leadership of the local community. This is because most of the threats to the cultural heritage resources are present and in progress before project implementation and are associated with land use management. Therefore, since land use management issues are likely to persist as they will not be under the administrative control of the operator of the dam, the operator will nevertheless have a duty, by virtue of being an integral part of the community, to promote and support local community initiatives that will ensure environmental and social sustainability of land use practices. This will in turn ensure the environmental and social sustainability of the proposed project.

12. REFERENCES AND BIBLIOGRAPHY

12.1 REFERENCES

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APPENDIX 1 – IMPACT ASSESSMENT

Impact Assessment

Impact number	Project Stage	Receptor	Impact Description	Nature of Impact	Pre-Mitigation Extent (E ₁)	Pre-Mitigation Duration (D ₁)	Pre-Mitigation Reversibility (R ₁)	Pre-Mitigation Magnitude (M ₁)	Pre-Mitigation Probability (P ₁)	Pre-Mitigation Significance (S ₁)	Pre-Mitigation Significance Rating (SR ₁)	Nature of Action	Action	Post Mitigation Extent (E ₂)	Post Mitigation Duration (D ₂)	Post Mitigation Reversibility (R ₂)	Post Mitigation Magnitude (M ₂)	Post Mitigation Probability (P ₂)	Post Mitigation Significance (S ₂)	Post Mitigation Significance Rating (SR ₂)
Impact 01	Implementation	Rock Art site	Disturbance by project activities.	Negative	1	5	5	1	2	24	Negative - Low	Mitigation	Demarcate with appropriate barrier mesh and signposting prohibiting unauthorised entry to prevent disturbance by construction personnel and vehicles.	1	1	1	1	1	4	Negative - Low
Impact 02	Implementation	Rock Art site	Chance-find	Positive	1	1	5	1	2	16	Positive - Low	Enhancement	Chance-finds of archaeological sites or material will be demarcated and work in the vicinity will be suspended.	1	5	1	1	3	24	Positive - Low
Impact 03	Implementation	Masibekela refuge cave	Disturbance by project activities.	Negative	1	5	5	1	2	24	Negative - Low	Mitigation	Demarcate with appropriate barrier mesh and signposting prohibiting unauthorised entry to prevent disturbance by construction personnel and vehicles.	1	1	1	1	1	4	Negative - Low
Impact 04	Implementation	Masibekela refuge cave	Chance-find	Positive	1	1	5	1	2	16	Positive - Low	Enhancement	Chance-finds of archaeological sites or material will be demarcated and work in the vicinity will be suspended.	1	5	1	1	3	24	Positive - Low
Impact 05	Implementation	Graves of Chiefs and royalty	Disturbance by project activities.	Negative	1	5	5	1	2	24	Negative - Low	Mitigation	Demarcate with appropriate barrier mesh and signposting prohibiting unauthorised entry to prevent disturbance by construction personnel and vehicles.	1	1	1	1	1	4	Negative - Low
Impact 06	Implementation	Graves of Chiefs and royalty	Chance-find	Negative	1	1	5	1	2	16	Negative - Low	Mitigation	Chance-finds of graves and burial sites of Chiefs and royalty will be demarcated and work in the vicinity will be suspended until further notice from the Inner Council.	1	1	1	1	1	4	Negative - Low
Impact 07	Implementation	Graves of community members	Disturbance by project activities.	Negative	2	2	4	5	5	65	Negative - High	Mitigation	Graves at risk of being inundated and those belonging to families that will be resettled will be relocated for reburial in accordance with Swazi custom. Graves encountered during any site clearing will be demarcated and the next of kin traced and notified before relocation for reburial.	2	2	3	3	3	30	Negative - Medium
Impact 08	Implementation	Graves of community members	Chance-find	Negative	1	1	5	1	2	16	Negative - Low	Mitigation	Graves encountered during any site clearing will be demarcated and the next of kin traced and notified before relocation for reburial.	1	1	1	1	1	4	Negative - Low
Impact 09	Implementation	Flora	Damage and loss of indigenous vegetation.	Negative	2	5	3	4	5	70	Negative - High	Mitigation	Where relocation is not practical, seeds or cuttings will be collected for propagation. Relocation and propagation will be undertaken under supervision of a qualified and experienced botanist.	2	5	1	2	3	30	Negative - Medium
Impact 10	Implementation	Fauna	Loss of wildlife.	Negative	2	5	3	4	5	70	Negative - High	Mitigation	Awareness will be provided to site personnel and the local community not to harm wild animals. Where wild animals find themselves trapped in fences or confined spaces while attempting to escape construction activities, a qualified specialist will be engaged to supervise the safe rescue and relocation to a similar habitat.	2	5	1	2	3	30	Negative - Medium
Impact 11	Implementation	Aesthetic of natural environment	Degradation of scenery by encroachment of houses into near-pristine areas	Negative	2	5	5	2	3	42	Negative - Medium	Mitigation	Resettlement sites for homesteads will be selected such that ecologically sensitive areas such as wetlands and areas of natural beauty such as the bases of mountain summits, upon a rock massif or within 30m thereof.	1	2	1	1	2	10	Negative - Low

Impact Assessment

Impact number	Project Stage	Receptor	Impact Description	Nature of Impact	Pre-Mitigation Extent (E ₁)	Pre-Mitigation Duration (D ₁)	Pre-Mitigation Reversibility (R ₁)	Pre-Mitigation Magnitude (M ₁)	Pre-Mitigation Probability (P ₁)	Pre-Mitigation Significance (S ₁)	Pre-Mitigation Significance Rating (SR ₁)	Nature of Action	Action	Post Mitigation Extent (E ₂)	Post Mitigation Duration (D ₂)	Post Mitigation Reversibility (R ₂)	Post Mitigation Magnitude (M ₂)	Post Mitigation Probability (P ₂)	Post Mitigation Significance (S ₂)	Post Mitigation Significance Rating (SR ₂)
Impact 12	Implementation	Aesthetic of built environment	Degradation of scenery of built environment by increased housing density.	Negative	2	5	5	2	3	42	Negative - Medium	Mitigation	Houses of homesteads and any other buildings that will be resettled or relocated will be designed so as to avoid being visually obtrusive against the natural background and the majority of existing buildings in the host community. The layout of resettled homes and other buildings will be designed such that they do not cause congestion in terms of building density.	1	2	1	1	2	10	Negative - Low
Impact 13	Implementation	Diverse values attached to heritage resources	Conflict in perceptions of value and thus conflict in approaches to handling heritage resources, leading to delays or obstacles to project implementation.	Negative	5	5	5	3	4	72	Negative - High	Mitigation	On-going dialogue between project proponent and Project Affected Parties as well as establishment of Resettlement Task Team will enable amicable resolution of conflicting values attached to heritage resources	1	2	1	1	2	10	Negative - Low
Impact 14	Operation	Rock Art site	Deterioration of Rock Art site by uncontrolled visitor access.	Negative	1	5	5	1	5	60	Negative - Medium	Mitigation	The entity appointed to operate the dam will support initiatives by the local community to maintain and preserve the Rock Art site. This will include sponsoring or part-sponsoring fencing, plaques and access control notices.	1	1	1	1	4	16	Negative - Low
Impact 15	Operation	Masibekela refuge cave	Deterioration by uncontrolled visitor access.	Negative	1	5	5	1	5	60	Negative - Medium	Mitigation	The entity appointed to operate the dam will support initiatives by the local community to maintain and preserve the Masibekela refuge cave. This will include sponsoring or part-sponsoring plaques and access control notices.	1	1	1	1	4	16	Negative - Low
Impact 16	Operation	Graves of Chiefs and royalty	Disturbance by human activity.	Negative	1	5	5	1	2	24	Negative - Low	Mitigation	The entity appointed to operate the dam will support initiatives by the local community in maintaining access to the graves of Chiefs and royalty. This will include sponsoring or part-sponsoring maintenance of access roads in the vicinity of the burial sites, fencing and access control notices.	1	1	1	1	1	4	Negative - Low
Impact 17	Operation	Graves of community members	Disturbance by human activity.	Negative	1	5	5	1	2	24	Negative - Low	Mitigation	The entity appointed to operate the dam will support initiatives by the local community in maintaining community burial sites so as to protect them from disturbance and vandalism by visitors. This will include fencing and access control notices.	1	1	1	1	1	4	Negative - Low
Impact 18	Operation	Flora	Lack of access to indigenous plant resources lost through inundation.	Negative	2	4	3	4	4	52	Negative - Medium	Mitigation	The entity appointed to operate the dam will support initiatives by the local community in protecting wetlands, controlling alien invasive plants and protecting indigenous trees. Support will include sponsoring or part-sponsoring initiatives for protecting flora and natural habitats.	2	2	2	3	2	18	Negative - Low
Impact 19	Operation	Fauna	Attraction of fauna to project site due to availability of water	Positive	1	5	5	1	4	48	Positive - Medium	Enhancement	The entity appointed to operate the dam will support local community initiatives to enhance natural habitats. This will include sponsoring or part-sponsoring awareness campaigns, control of alien invasive plants to conserve natural habitats for wildlife, community-based enterprises such as bee-keeping to mitigate wild fires.	2	5	5	1	5	65	Positive - High
Impact 20	Operation	Aesthetic of natural environment	The dam will enhance the aesthetics of the surrounding mountain sides and preserve the tranquillity of the rural landscape.	Positive	1	5	5	1	5	60	Positive - Medium	Enhancement	The entity appointed to operate the dam will support local community initiatives in enhancing and maintaining the aesthetic appeal of the area.	2	5	5	1	5	65	Positive - High
Impact 21	Operation	Aesthetic of built environment	Improved aesthetic appeal of resettled homesteads.	Positive	1	5	5	1	5	60	Positive - Medium	Enhancement	The entity appointed to operate the dam will support local community initiatives in enhancing the aesthetic appeal of the built environment.	2	5	5	1	5	65	Positive - High

APPENDIX 2 – MITIGATION PLAN

Mitigation Plan

Impact number	Project Stage	Receptor	Impact Description	Nature of Impact	Nature of Action	Action	Responsible Person	Associated Cost (SZL)	Applicable Safeguards
Impact 01	Implementation	Rock Art site	Disturbance by project activities.	Negative	Mitigation	Demarcate with appropriate barrier mesh and signposting prohibiting unauthorised entry to prevent disturbance by construction personnel and vehicles.	Construction Contractor	5,000.00	National Trust Commission Act, 1972; AfDB ISS, 2013 - Cultural Heritage; IFC Performance Standard 8 - Cultural Heritage; World Bank OP4.11 - Physical Cultural Resources
Impact 02	Implementation	Rock Art site	Chance-find	Positive	Enhancement	Chance-finds of archaeological sites or material will be demarcated and work in the vicinity will be suspended.	Environmental Compliance Officer	50,000.00	National Trust Commission Act, 1972; AfDB ISS, 2013 - Cultural Heritage; IFC Performance Standard 8 - Cultural Heritage; World Bank OP4.11 - Physical Cultural Resources
Impact 03	Implementation	Masibekela refuge cave	Disturbance by project activities.	Negative	Mitigation	Demarcate with appropriate barrier mesh and signposting prohibiting unauthorised entry to prevent disturbance by construction personnel and vehicles.	Construction Contractor	5,000.00	National Trust Commission Act, 1972; AfDB ISS, 2013 - Cultural Heritage; IFC Performance Standard 8 - Cultural Heritage; World Bank OP4.11 - Physical Cultural Resources
Impact 04	Implementation	Masibekela refuge cave	Chance-find	Positive	Enhancement	Chance-finds of archaeological sites or material will be demarcated and work in the vicinity will be suspended.	Environmental Compliance Officer	25,000.00	National Trust Commission Act, 1972; AfDB ISS, 2013 - Cultural Heritage; IFC Performance Standard 8 - Cultural Heritage; World Bank OP4.11 - Physical Cultural Resources
Impact 05	Implementation	Graves of Chiefs and royalty	Disturbance by project activities.	Negative	Mitigation	Demarcate with appropriate barrier mesh and signposting prohibiting unauthorised entry to prevent disturbance by construction personnel and vehicles.	Construction Contractor	10,000.00	National Trust Commission Act, 1972; Swazi Graves Act, 1909 AfDB ISS, 2013 - Cultural Heritage; IFC Performance Standard 8 - Cultural Heritage; World Bank OP4.11 - Physical Cultural Resources
Impact 06	Implementation	Graves of Chiefs and royalty	Chance-find	Negative	Mitigation	Chance-finds of graves and burial sites of Chiefs and royalty will be demarcated and work in the vicinity will be suspended until further notice from the Inner Council.	Environmental Compliance Officer	10,000.00	National Trust Commission Act, 1972; Swazi Graves Act, 1909 AfDB ISS, 2013 - Cultural Heritage; IFC Performance Standard 8 - Cultural Heritage; World Bank OP4.11 - Physical Cultural Resources
Impact 07	Implementation	Graves of community members	Disturbance by project activities.	Negative	Mitigation	Graves at risk of being inundated and those belonging to families that will be resettled will be relocated for reburial in accordance with Swazi custom. Graves encountered during any site clearing will be demarcated and the next of kin traced and notified before relocation for reburial.	Project Manager	1,000,000.00	National Trust Commission Act, 1972; AfDB ISS, 2013 - Cultural Heritage; IFC Performance Standard 8 - Cultural Heritage; World Bank OP4.11 - Physical Cultural Resources
Impact 08	Implementation	Graves of community members	Chance-find	Negative	Mitigation	Graves encountered during any site clearing will be demarcated and the next of kin traced and notified before relocation for reburial.	Environmental Compliance Officer	500,000.00	National Trust Commission Act, 1972; AfDB ISS, 2013 - Cultural Heritage; IFC Performance Standard 8 - Cultural Heritage; World Bank OP4.11 - Physical Cultural Resources

Mitigation Plan

Impact number	Project Stage	Receptor	Impact Description	Nature of Impact	Nature of Action	Action	Responsible Person	Associated Cost (SZL)	Applicable Safeguards
Impact 09	Implementation	Flora	Damage and loss of indigenous vegetation.	Negative	Mitigation	Where relocation is not practical, seeds or cuttings will be collected for propagation. Relocation and propagation will be undertaken under supervision of a qualified and experienced botanist.	Environmental Compliance Officer	50,000.00	Flora Protection Act, 2001; National Trust Commission Act, 1972; AfDB ISS, 2013 - Cultural Heritage; IFC Performance Standard 8 - Cultural Heritage; World Bank OP4.11 - Physical Cultural Resources
Impact 10	Implementation	Fauna	Loss of wildlife.	Negative	Mitigation	Awareness will be provided to site personnel and the local community not to harm wild animals. Where wild animals find themselves trapped in fences or confined spaces while attempting to escape construction activities, a qualified specialist will be engaged to supervise the safe rescue and relocation to a similar habitat.	Environmental Compliance Officer	25,000.00	Game Amendment Act, 1991; Wild Birds Protection Act, 1914; National Trust Commission Act, 1972; AfDB ISS, 2013 - Cultural Heritage; IFC Performance Standard 8 - Cultural Heritage; World Bank OP4.11 - Physical Cultural Resources
Impact 11	Implementation	Aesthetic of natural environment	Degradation of scenery by encroachment of houses into near-pristine areas	Negative	Mitigation	Resettlement sites for homesteads will be selected such that ecologically sensitive areas such as wetlands and areas of natural beauty such as the bases of mountain summits, upon a rock massif or within 30m thereof.	Inner Council	10,000.00	National Trust Commission Act, 1972; AfDB ISS, 2013 - Cultural Heritage; IFC Performance Standard 8 - Cultural Heritage; World Bank OP4.11 - Physical Cultural Resources
Impact 12	Implementation	Aesthetic of built environment	Degradation of scenery of built environment by increased housing density.	Negative	Mitigation	Houses of homesteads and any other buildings that will be resettled or relocated will be designed so as to avoid being visually obtrusive against the natural background and the majority of existing buildings in the host community. The layout of resettled homes and other buildings will be designed such that they do not cause congestion in terms of building density.	Project Manager	1,000,000.00	AfDB ISS, 2013 - Cultural Heritage; IFC Performance Standard 8 - Cultural Heritage; World Bank OP4.11 - Physical Cultural Resources
Impact 13	Implementation	Diverse values attached to heritage resources	Conflict in perceptions of value and thus conflict in approaches to handling heritage resources, leading to delays or obstacles to project implementation.	Negative	Mitigation	On-going dialogue between project proponent and Project Affected Parties as well as establishment of Resettlement Task Team will enable amicable resolution of conflicting values attached to heritage resources	Project Manager	100,000.00	AfDB ISS, 2013 - Cultural Heritage; IFC Performance Standard 8 - Cultural Heritage; World Bank OP4.11 - Physical Cultural Resources
Impact 14	Operation	Rock Art site	Deterioration of Rock Art site by uncontrolled visitor access.	Negative	Mitigation	The entity appointed to operate the dam will support initiatives by the local community to maintain and preserve the Rock Art site. This will include sponsoring or part-sponsoring fencing, plaques and access control notices.	Dam Operator	50,000.00	National Trust Commission Act, 1972; AfDB ISS, 2013 - Cultural Heritage; IFC Performance Standard 8 - Cultural Heritage; World Bank OP4.11 - Physical Cultural Resources

Mitigation Plan

Impact number	Project Stage	Receptor	Impact Description	Nature of Impact	Nature of Action	Action	Responsible Person	Associated Cost (SZL)	Applicable Safeguards
Impact 15	Operation	Masibekela refuge cave	Deterioration by uncontrolled visitor access.	Negative	Mitigation	The entity appointed to operate the dam will support initiatives by the local community to maintain and preserve the Masibekela refuge cave. This will include sponsoring or part-sponsoring plaques and access control notices.	Dam Operator	50,000.00	National Trust Commission Act, 1972; AfDB ISS, 2013 - Cultural Heritage; IFC Performance Standard 8 - Cultural Heritage; World Bank OP4.11 - Physical Cultural Resources
Impact 16	Operation	Graves of Chiefs and royalty	Disturbance by human activity.	Negative	Mitigation	The entity appointed to operate the dam will support initiatives by the local community in maintaining access to the graves of Chiefs and royalty. This will include sponsoring or part-sponsoring maintenance of access roads in the vicinity of the burial sites, fencing and access control notices.	Dam Operator	50,000.00	National Trust Commission Act, 1972; Swazi Graves Act, 1909 AfDB ISS, 2013 - Cultural Heritage; IFC Performance Standard 8 - Cultural Heritage; World Bank OP4.11 - Physical Cultural Resources
Impact 17	Operation	Graves of community members	Disturbance by human activity.	Negative	Mitigation	The entity appointed to operate the dam will support initiatives by the local community in maintaining community burial sites so as to protect them from disturbance and vandalism by visitors. This will include fencing and access control notices.	Dam Operator	50,000.00	National Trust Commission Act, 1972; AfDB ISS, 2013 - Cultural Heritage; IFC Performance Standard 8 - Cultural Heritage; World Bank OP4.11 - Physical Cultural Resources
Impact 18	Operation	Flora	Lack of access to indigenous plant resources lost through inundation.	Negative	Mitigation	The entity appointed to operate the dam will support initiatives by the local community in protecting wetlands, controlling alien invasive plants and protecting indigenous trees. Support will include sponsoring or part-sponsoring initiatives for protecting flora and natural habitats.	Dam Operator	50,000.00	Flora Protection Act, 2001; National Trust Commission Act, 1972; AfDB ISS, 2013 - Cultural Heritage; IFC Performance Standard 8 - Cultural Heritage; World Bank OP4.11 - Physical Cultural Resources
Impact 19	Operation	Fauna	Attraction of fauna to project site due to availability of water	Positive	Enhancement	The entity appointed to operate the dam will support local community initiatives to enhance natural habitats. This will include sponsoring or part-sponsoring awareness campaigns, control of alien invasive plants to conserve natural habitats for wildlife, community-based enterprises such as bee-keeping to mitigate wild fires.	Dam Operator	50,000.00	Game Amendment Act, 1991; Wild Birds Protection Act, 1914; National Trust Commission Act, 1972; AfDB ISS, 2013 - Cultural Heritage; IFC Performance Standard 8 - Cultural Heritage; World Bank OP4.11 - Physical Cultural Resources
Impact 20	Operation	Aesthetic of natural environment	The dam will enhance the aesthetics of the surrounding mountain sides and preserve the tranquillity of the rural landscape.	Positive	Enhancement	The entity appointed to operate the dam will support local community initiatives in enhancing and maintaining the aesthetic appeal of the area.	Dam Operator	50,000.00	National Trust Commission Act, 1972; AfDB ISS, 2013 - Cultural Heritage; IFC Performance Standard 8 - Cultural Heritage; World Bank OP4.11 - Physical Cultural Resources

Mitigation Plan

Impact number	Project Stage	Receptor	Impact Description	Nature of Impact	Nature of Action	Action	Responsible Person	Associated Cost (SZL)	Applicable Safeguards
Impact 21	Operation	Aesthetic of built environment	Improved aesthetic appeal of resettled homesteads.	Positive	Enhancement	The entity appointed to operate the dam will support local community initiatives in enhancing the aesthetic appeal of the built environment.	Dam Operator	50,000.00	AfDB ISS, 2013 - Cultural Heritage; IFC Performance Standard 8 - Cultural Heritage; World Bank OP4.11 - Physical Cultural Resources

TOTAL **3,190,000.00**

APPENDIX 3 – MONITORING PLAN

Monitoring Plan

Impact number	Project Stage	Receptor	Impact Description	Nature of Impact	Nature of Action	Action	Parameter Being Monitored	Method	Location	Frequency	Responsible Person	Associated Cost (SZL)	Applicable Safeguards
Impact 01	Implementation	Rock Art site	Disturbance by project activities.	Negative	Mitigation	Demarcate with appropriate barrier mesh and signposting prohibiting unauthorised entry to prevent disturbance by construction personnel and vehicles.	Evidence of site disturbance	Site Inspection	Rock Art site	Monthly	Environmental Compliance Officer	5,000.00	National Trust Commission Act, 1972; AfDB ISS, 2013 - Cultural Heritage; IFC Performance Standard 8 - Cultural Heritage; World Bank OP4.11 - Physical Cultural Resources
Impact 02	Implementation	Rock Art site	Chance-find	Positive	Enhancement	Chance-finds of archaeological sites or material will be demarcated and work in the vicinity will be suspended.	Evidence of chance-finds	Site inspection; Verbal reports from site supervisory personnel	Rock Art site	6-month intervals	Environmental Compliance Officer	5,000.00	National Trust Commission Act, 1972; AfDB ISS, 2013 - Cultural Heritage; IFC Performance Standard 8 - Cultural Heritage; World Bank OP4.11 - Physical Cultural Resources
Impact 03	Implementation	Masibekela refuge cave	Disturbance by project activities.	Negative	Mitigation	Demarcate with appropriate barrier mesh and signposting prohibiting unauthorised entry to prevent disturbance by construction personnel and vehicles.	Evidence of site disturbance	Site Inspection	Masibekela refuge cave	Monthly	Environmental Compliance Officer	5,000.00	National Trust Commission Act, 1972; AfDB ISS, 2013 - Cultural Heritage; IFC Performance Standard 8 - Cultural Heritage; World Bank OP4.11 - Physical Cultural Resources
Impact 04	Implementation	Masibekela refuge cave	Chance-find	Positive	Enhancement	Chance-finds of archaeological sites or material will be demarcated and work in the vicinity will be suspended.	Evidence of chance-finds	Site inspection; Verbal reports from site supervisory personnel	Masibekela refuge cave	6-month intervals	Environmental Compliance Officer	5,000.00	National Trust Commission Act, 1972; AfDB ISS, 2013 - Cultural Heritage; IFC Performance Standard 8 - Cultural Heritage; World Bank OP4.11 - Physical Cultural Resources
Impact 05	Implementation	Graves of Chiefs and royalty	Disturbance by project activities.	Negative	Mitigation	Demarcate with appropriate barrier mesh and signposting prohibiting unauthorised entry to prevent disturbance by construction personnel and vehicles.	Evidence of site disturbance	Site Inspection	Graves of Chiefs and royalty	Monthly	Environmental Compliance Officer	5,000.00	National Trust Commission Act, 1972; Swazi Graves Act, 1909 AfDB ISS, 2013 - Cultural Heritage; IFC Performance Standard 8 - Cultural Heritage; World Bank OP4.11 - Physical Cultural Resources
Impact 06	Implementation	Graves of Chiefs and royalty	Chance-find	Negative	Mitigation	Chance-finds of graves and burial sites of Chiefs and royalty will be demarcated and work in the vicinity will be suspended until further notice from the Inner Council.	Evidence of chance-finds	Site inspection; Verbal reports from site supervisory personnel	Graves of Chiefs and royalty	6-month intervals	Environmental Compliance Officer	5,000.00	National Trust Commission Act, 1972; Swazi Graves Act, 1909 AfDB ISS, 2013 - Cultural Heritage; IFC Performance Standard 8 - Cultural Heritage; World Bank OP4.11 - Physical Cultural Resources
Impact 07	Implementation	Graves of community members	Disturbance by project activities.	Negative	Mitigation	Graves at risk of being inundated and those belonging to families that will be resettled will be relocated for reburial in accordance with Swazi custom. Graves encountered during any site clearing will be demarcated and the next of kin traced and notified before relocation for reburial.	Evidence of site disturbance	Site Inspection	Graves of community members	Monthly	Environmental Compliance Officer	5,000.00	National Trust Commission Act, 1972; AfDB ISS, 2013 - Cultural Heritage; IFC Performance Standard 8 - Cultural Heritage; World Bank OP4.11 - Physical Cultural Resources
Impact 08	Implementation	Graves of community members	Chance-find	Negative	Mitigation	Graves encountered during any site clearing will be demarcated and the next of kin traced and notified before relocation for reburial.	Evidence of chance-finds	Site inspection; Verbal reports from site supervisory personnel	Graves of community members	6-month intervals	Environmental Compliance Officer	5,000.00	National Trust Commission Act, 1972; AfDB ISS, 2013 - Cultural Heritage; IFC Performance Standard 8 - Cultural Heritage; World Bank OP4.11 - Physical Cultural Resources
Impact 09	Implementation	Flora	Damage and loss of indigenous vegetation.	Negative	Mitigation	Where relocation is not practical, seeds or cuttings will be collected for propagation. Relocation and propagation will be undertaken under supervision of a qualified and experienced botanist.	Effective rescue and/ or relocation of indigenous plants	Site inspection; Verbal reports from site supervisory personnel	Project site	Monthly	Environmental Compliance Officer	5,000.00	Flora Protection Act, 2001; National Trust Commission Act, 1972; AfDB ISS, 2013 - Cultural Heritage; IFC Performance Standard 8 - Cultural Heritage; World Bank OP4.11 - Physical Cultural Resources

Monitoring Plan

Impact number	Project Stage	Receptor	Impact Description	Nature of Impact	Nature of Action	Action	Parameter Being Monitored	Method	Location	Frequency	Responsible Person	Associated Cost (SZL)	Applicable Safeguards
Impact 10	Implementation	Fauna	Loss of wildlife.	Negative	Mitigation	Awareness will be provided to site personnel and the local community not to harm wild animals. Where wild animals find themselves trapped in fences or confined spaces while attempting to escape construction activities, a qualified specialist will be engaged to supervise the safe rescue and relocation to a similar habitat.	Evidence of harm to wildlife	Site inspection	Project site	Monthly	Environmental Compliance Officer	5,000.00	Game Amendment Act, 1991; Wild Birds Protection Act, 1914; National Trust Commission Act, 1972; AfDB ISS, 2013 - Cultural Heritage; IFC Performance Standard 8 - Cultural Heritage; World Bank OP4.11 - Physical Cultural Resources
Impact 11	Implementation	Aesthetic of natural environment	Degradation of scenery by encroachment of houses into near-pristine areas	Negative	Mitigation	Resettlement sites for homesteads will be selected such that ecologically sensitive areas such as wetlands and areas of natural beauty such as the bases of mountain summits, upon a rock massif or within 30m thereof.	Evidence of encroachment into scenic and ecologically sensitive areas	Site inspection	Project site	Monthly	Environmental Compliance Officer	5,000.00	National Trust Commission Act, 1972; AfDB ISS, 2013 - Cultural Heritage; IFC Performance Standard 8 - Cultural Heritage; World Bank OP4.11 - Physical Cultural Resources
Impact 12	Implementation	Aesthetic of built environment	Degradation of scenery of built environment by increased housing density.	Negative	Mitigation	Houses of homesteads and any other buildings that will be resettled or relocated will be designed so as to avoid being visually obtrusive against the natural background and the majority of existing buildings in the host community. The layout of resettled homes and other buildings will be designed such that they do not cause congestion in terms of building density.	Evidence of congested housing density	Site inspection	Project site	6-month intervals	Environmental Compliance Officer	5,000.00	AfDB ISS, 2013 - Cultural Heritage; IFC Performance Standard 8 - Cultural Heritage; World Bank OP4.11 - Physical Cultural Resources
Impact 13	Implementation	Diverse values attached to heritage resources	Conflict in perceptions of value and thus conflict in approaches to handling heritage resources, leading to delays or obstacles to project implementation.	Negative	Mitigation	Houses of homesteads and any other buildings that will be resettled or relocated will be designed so as to avoid being visually obtrusive against the natural background and the majority of existing buildings in the host community. The layout of resettled homes and other buildings will be designed such that they do not cause congestion in terms of building density.	Grievances against loss of heritage resources	Review of logged grievances	Project site	Monthly	Resettlement Task Team	5,000.00	AfDB ISS, 2013 - Cultural Heritage; IFC Performance Standard 8 - Cultural Heritage; World Bank OP4.11 - Physical Cultural Resources
Impact 14	Operation	Rock Art site	Deterioration of Rock Art site by uncontrolled visitor access.	Negative	Mitigation	The entity appointed to operate the dam will support initiatives by the local community to maintain and preserve the Rock Art site. This will include sponsoring or part-sponsoring fencing, plaques and access control notices.	Evidence of site disturbance	Site Inspection	Rock Art site	Monthly	Inner Council	5,000.00	National Trust Commission Act, 1972; AfDB ISS, 2013 - Cultural Heritage; IFC Performance Standard 8 - Cultural Heritage; World Bank OP4.11 - Physical Cultural Resources
Impact 15	Operation	Masibekela refuge cave	Deterioration by uncontrolled visitor access.	Negative	Mitigation	The entity appointed to operate the dam will support initiatives by the local community to maintain and preserve the Masibekela refuge cave. This will include sponsoring or part-sponsoring plaques and access control notices.	Evidence of chance-finds	Site inspection	Masibekela refuge cave	6-month intervals	Inner Council	5,000.00	National Trust Commission Act, 1972; AfDB ISS, 2013 - Cultural Heritage; IFC Performance Standard 8 - Cultural Heritage; World Bank OP4.11 - Physical Cultural Resources
Impact 16	Operation	Graves of Chiefs and royalty	Disturbance by human activity.	Negative	Mitigation	The entity appointed to operate the dam will support initiatives by the local community in maintaining access to the graves of Chiefs and royalty. This will include sponsoring or part-sponsoring maintenance of access roads in the vicinity of the burial sites, fencing and access control notices.	Evidence of site disturbance	Site Inspection	Graves of Chiefs and royalty	6-month intervals	Inner Council	500.00	National Trust Commission Act, 1972; Swazi Graves Act, 1909 AfDB ISS, 2013 - Cultural Heritage; IFC Performance Standard 8 - Cultural Heritage; World Bank OP4.11 - Physical Cultural Resources

Monitoring Plan

Impact number	Project Stage	Receptor	Impact Description	Nature of Impact	Nature of Action	Action	Parameter Being Monitored	Method	Location	Frequency	Responsible Person	Associated Cost (SZL)	Applicable Safeguards
Impact 17	Operation	Graves of community members	Disturbance by human activity.	Negative	Mitigation	The entity appointed to operate the dam will support initiatives by the local community in maintaining community burial sites so as to protect them from disturbance and vandalism by visitors. This will include fencing and access control notices.	Evidence of chance-finds	Site inspection	Graves of community members	6-month intervals	Inner Council	500.00	National Trust Commission Act, 1972; AfDB ISS, 2013 - Cultural Heritage; IFC Performance Standard 8 - Cultural Heritage; World Bank OP4.11 - Physical Cultural Resources
Impact 18	Operation	Flora	Lack of access to indigenous plant resources lost through inundation.	Negative	Mitigation	The entity appointed to operate the dam will support initiatives by the local community in protecting wetlands, controlling alien invasive plants and protecting indigenous trees. Support will include sponsoring or part-sponsoring initiatives for protecting flora and natural habitats.	Evidence of effective rehabilitation, restoration and enhancement of natural habitats	Site inspection	Project site	Annual	Dam Operator	5,000.00	Flora Protection Act, 2001; National Trust Commission Act, 1972; AfDB ISS, 2013 - Cultural Heritage; IFC Performance Standard 8 - Cultural Heritage; World Bank OP4.11 - Physical Cultural Resources
Impact 19	Operation	Fauna	Attraction of fauna to project site due to availability of water	Positive	Enhancement	The entity appointed to operate the dam will support local community initiatives to enhance natural habitats. This will include sponsoring or part-sponsoring awareness campaigns, control of alien invasive plants to conserve natural habitats for wildlife, community-based enterprises such as bee-keeping to mitigate wild fires.	Evidence of effective rehabilitation, restoration and enhancement of natural habitats	Site inspection	Project site	Annual	Dam Operator	5,000.00	Game Amendment Act, 1991; Wild Birds Protection Act, 1914; National Trust Commission Act, 1972; AfDB ISS, 2013 - Cultural Heritage; IFC Performance Standard 8 - Cultural Heritage; World Bank OP4.11 - Physical Cultural Resources
Impact 20	Operation	Aesthetic of natural environment	The dam will enhance the aesthetics of the surrounding mountain sides and preserve the tranquillity of the rural landscape.	Positive	Enhancement	The entity appointed to operate the dam will support local community initiatives in enhancing and maintaining the aesthetic appeal of the area.	Evidence of enhanced natural habitats	Site inspection	Project site	Annual	Inner Council	5,000.00	National Trust Commission Act, 1972; AfDB ISS, 2013 - Cultural Heritage; IFC Performance Standard 8 - Cultural Heritage; World Bank OP4.11 - Physical Cultural Resources
Impact 21	Operation	Aesthetic of built environment	Improved aesthetic appeal of resettled homesteads.	Positive	Enhancement	The entity appointed to operate the dam will support local community initiatives in enhancing the aesthetic appeal of the built environment.	Evidence of congested housing density	Site inspection	Project site	Annual	Inner Council	5,000.00	AfDB ISS, 2013 - Cultural Heritage; IFC Performance Standard 8 - Cultural Heritage; World Bank OP4.11 - Physical Cultural Resources

TOTAL 96,000.00

APPENDIX

D PROJECT CATEGORISATION





ESWATINI ENVIRONMENT AUTHORITY

RHUS Office Park
Lot 195, Karl Grant Street
Mbabane

P.O.Box 2602
Mbabane, Kingdom of Eswatini
Tel: 2404 6960/7893 Fax: 2404 1719

21 December 2018

Attn: Mr. Trevor Shongwe
Director- Water Affairs
Ministry of Natural Resources & Energy
P.O. Box 57
Mbabane

Tel: 2404-6244

Dear Sir

RE: REQUEST FOR PROJECT CATEGORISATION FOR THE PROPOSED OF MBABANE –MANZINI CORRIDOR DAM (NONDVO)

We acknowledge receipt of your project brief for The Proposed of Mbabane-Manzini Corridor Dam (Nondvo Dam).

In view of the nature and the size of the proposed project as well as the provision of the Environmental Audit, Assessment and Review Regulation of 2000, we therefore assign the proposed project a **CATEGORY 3**.

You are therefore required to undertake an Environmental Impact Assessment and formulate a Comprehensive Mitigation Plan for this project. The EIA/CMP should be submitted to the Swaziland Environment Authority (SEA) for review and approval prior to the commencement of the project.

We look forward to your cooperation in this regard.

Yours Sincerely,

Isaac G. Dladla
ACTING EXECUTIVE DIRECTOR

APPENDIX

E SCOPING REPORT AND TERMS OF REFERENCE ACCEPTANCE



ESWATINI ENVIRONMENT AUTHORITY

RHUS Office Park
Lot 195, Karl Grant Street
Mbabane

P.O.Box 2602
Mbabane, Kingdom of Eswatini
Tel: 2404 6960/7893 Fax: 2404 1719
Email: reception@sea.org.sz or ceosec@sea.org.sz
www.sea.org.sz

29th July 2019

Our Ref: SEA/PRJ/5.03

Director-Department of Water Affairs
Ministry of Natural Resources and Energy
P. O. Box 6201
Mbabane
Tel.: 2404 2061
Fax: 2404 4708

Dear Sir/Madam,

**RE: SUBMISSION OF SCOPING REPORT FOR THE PROPOSED CONSTRUCTION OF MBABANE
– MANZINI CORRIDOR DAM (NONDVO DAM)**

We acknowledge receipt of your Scoping Report and terms of reference (TOR) for the above cited proposed development. We have reviewed the report and find it acceptable for the Environmental Impact Study.

We look forward to receiving the EIA/CMP document.

Yours Faithfully

A handwritten signature in black ink, appearing to read 'ISAAC G. DLADLA', is written over a circular stamp or seal.

ISAAC G. DLADLA
ACTING EXECUTIVE DIRECTOR

APPENDIX

F STAKEHOLDER ENGAGEMENT PLAN





GOVERNMENT OF THE KINGDOM OF ESWATINI, MINISTRY OF
NATURAL RESOURCES AND ENERGY - DEPARTMENT OF WATER
AFFAIRS

ENVIRONMENTAL AND SOCIAL IMPACT ASSESSMENT OF THE PROPOSED MBABANE - MANZINI CORRIDOR DAM PROJECT, ESWATINI

STAKEHOLDER ENGAGEMENT PLAN

01 MARCH 2021

FINAL





ENVIRONMENTAL AND SOCIAL IMPACT ASSESSMENT OF THE PROPOSED MBABANE - MANZINI CORRIDOR DAM PROJECT, ESWATINI

STAKEHOLDER ENGAGEMENT PLAN

GOVERNMENT OF THE KINGDOM OF
ESWATINI, MINISTRY OF NATURAL
RESOURCES AND ENERGY -
DEPARTMENT OF WATER AFFAIRS

TYPE OF DOCUMENT (VERSION)
FINAL

PROJECT NO.: 41101262
DATE: MARCH 2021

WSP
BUILDING C
KNIGHTSBRIDGE, 33 SLOANE STREET
BRYANSTON, 2191
SOUTH AFRICA

T: +27 11 300 6089
F: +27 11 361 1381
WSP.COM

QUALITY MANAGEMENT

ISSUE/REVISION	FIRST ISSUE	REVISION 1	REVISION 2	REVISION 3
Remarks	Stakeholder Engagement Plan	Stakeholder Engagement Plan	Stakeholder Engagement Plan	Stakeholder Engagement Plan
Date	January 2020	August 2020	October 2020	March 2021
Prepared by	Mbuso Kingsley / Anri Scheepers	Mbuso Kingsley / Anri Scheepers	Mbuso Kingsley / Anri Scheepers	Mbuso Kingsley / Anri Scheepers
Checked by	Ashlea Strong	Ashlea Strong	Ashlea Strong	Ashlea Strong
Project number	41101262	41101262	41101262	41101262
File Reference	W:\000 NEW Projects\41101262 - Nondvo Dam ESIA Eswatini\			

PRODUCTION TEAM

CLIENT

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ACRONYMS

ACRONYM	DESCRIPTION
AfDB	African Development Bank
CMP	Comprehensive Mitigation Plan (used interchangeably with ESMP)
CRDIF	Climate Resilient Infrastructure Development Facility
CRR	Comment and Response Register
DWA	Department of Water Affairs
EAARR	Environmental Audit, Assessment and Review Regulations (2000)
ECB	Eswatini Cotton Board
ECC	Environmental Compliance Certificate
EDB	Eswatini Dairy Board
EEA	Eswatini Environment Authority
EIA	Environmental Impact Assessment
ESIA	Environmental and Social Impact Assessment
ESMP	Environmental and Social Impact Assessment (used interchangeably with CMP)
FHH	Female Headed Households
FSR	Final Scoping Report
IESIA	Integrated Environmental and Social Assessment
IFC	International Finance Corporation
JMRBWRWS	Joint Maputo River Basin Water Resources Study
MEPD	Ministry of Economic Planning and Development
MMA	Maphanga Mitchell Associates
MNRE	Ministry of Natural Resources and Energy
MoA	Ministry of Agriculture
MoH	Ministry of Health
MTAD	Ministry of Tinkhundla Administration and Development
NAMB	National Agricultural Marketing Board
NGOs	Non-Governmental Organizations
NMC	National Maize Corporation
NWA	National Water Act
PSs	Performance Standards
PSP	Private Service Providers
RAP	Resettlement Action Plan
SEP	Stakeholder Engagement Plan
SWADE	Eswatini Water and Agricultural Development Enterprise
TFS	Technical Feasibility Study
ToR	Terms of Reference

ACRONYM	DESCRIPTION
WSP	WSP Environmental (Pty) Ltd
EEC	Eswatini Electricity Company

GLOSSARY

TERM	DESCRIPTION
Communication	A dialogue between the ESIA team and affected or interested parties. Communication is exchanging (giving and receiving) information. Communication enables the ESIA team to convey the aspects, risks and opportunities of the proposed project, and to receive information including stakeholder's concerns, questions and suggestions shared in response.
Consultation	Consultation is not the same as communication although both are two-way processes. Consultation deliberately seeks input from stakeholders in order to shape relations and the development of programmes. It involves the business, key individuals, organisations and groups affected by or interested in the development and outcomes of the issue/process being discussed. The aim is to ensure mutual understanding and for all parties to be able to be involved in making decisions that have the potential to affect all concerned. A good consultation process needs to be supported by a strong communication programme.
Records of Communication / Consultation	Records of communication / consultation may include key e-mails, letters, newsletters, memorandums, complaints, opportunities for improvement, records of distribution/attendance, records of formal and informal meetings and records of commitments.
Stakeholders	Stakeholders are people/communities who may - directly or indirectly, positively or negatively - affect or be affected by the outcomes of projects. Primary stakeholders are the beneficiaries of a development intervention or those directly affected (positively or negatively) by it. They include local populations (individuals and community-based organizations) in the project area, in particular, poor and marginalized groups who have traditionally been excluded from participating in development efforts. Secondary stakeholders are those who influence a development intervention or are indirectly affected by it. They include the borrowing government, line ministry and project staff, implementing agencies, local governments, civil society organizations, private sector firms, the bank and its shareholders and other development agencies.
Affected Party	Stakeholders who are affected by the company or operation, both positively and negatively. This includes those that are directly affected and indirectly affected by the project
Interested Party	Persons or groups who, although not affected by the project or operations, have an interest in or influence over the proposed project. This might include welfare organisations, non-government organisations, local businesses and political groups.
Participation	The process through which people with an interest (stakeholders) influence and share control over development initiatives and the decisions and resources that affect them.
Vulnerable or disadvantaged group	Individuals or groups within the project area of influence who could experience adverse impacts from the proposed project more severely than others based on their vulnerable or disadvantaged status. This status may stem from an individual's or group's race, colour, sex, language, religion, political or another opinion, national or social origin, property, birth or another status. In addition, other factors should be considered such as gender, ethnicity, culture, sickness, physical or mental disability, poverty or economic disadvantage and dependence on unique natural resources.

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1 INTRODUCTION

This document, the Stakeholder Engagement Plan (SEP), has been prepared by WSP Environmental (Pty) Ltd (WSP) together with Maphanga Mitchell Associates (MMA) for the proposed Nondvo Dam Project. The SEP has been prepared as part of the Environmental and Social Impact Assessment (ESIA) for the proposed project.

The SEP outlines the engagement process that has been undertaken as part of the ESIA. This SEP is a ‘live document’ that will be updated and refined throughout the ESIA.

1.1 PROJECT BACKGROUND

The Kingdom of Eswatini (abbreviated in this document as Eswatini, and also known as Swaziland) is a small landlocked country in Southern Africa, bordering Mozambique and South Africa. It covers an area of 17,360 km² and has a population of 1.39 million (mid-2012). The country is largely mountainous with 75.8% of the population living in rural areas with livelihoods predominantly dependent on subsistence agriculture. Eswatini has a relatively well-developed infrastructure in comparison to other Sub-Saharan African countries, but there are a number of critical areas that require further improvement.

The nature of the hydrological network of Eswatini, comprising rivers shared between several states upstream and downstream, coupled with highly seasonal patterns with relatively long periods of drought makes the management of the country’s surface water resources very difficult and vulnerable to climatic change. Economic and demographic growth of the country as well as changes in the water usage patterns have resulted in a significant increase in the demand for water resources. It has been identified that the size of the existing infrastructure and the capacity of equipment will soon be inadequate to satisfy the water demand. Furthermore, in Eswatini, all ‘normal flow’ in the rivers, most of them being of transboundary type, has been allocated under the arrangements of the international treaties. ‘Normal flow’ is water that has been calculated as being available 80% of the time during the driest month of the year. Therefore, the only water that can be made available for allocation is surplus flow (during floods and rainy season) through harnessing this flow in large storage reservoirs. This means that currently no water allocation can be made to any new developments as the water demand far exceeds the ‘normal flow’. This is a major challenge limiting further social and economic development in the country.

As a response to these constraints the Government of the Kingdom of Eswatini, Ministry of Natural Resources and Energy, Department of Water Affairs (DWA) intends to better exploit surface water resources by storing surplus water, made available during flooding periods, above the allocated abstraction limits established by the Tripartite Agreement signed with South Africa and Mozambique. The stored water is then intended to be released as required for the various downstream usages. The main purpose of the proposed Nondvo Dam project is for the storage of water for the supply of potable water to Mbabane and Manzini. A Joint Maputo River Basin Water Resources Study (JMRBWRs) was jointly undertaken by the Kingdom of Eswatini, the Republic of South Africa and the Republic of Mozambique (Skoy Plancenter Ltd, 2008) During this study a multi-criteria selection process was developed and the Mbabane – Manzini Corridor, specifically the Nondvo Dam project was identified due to its proximity to the cities of Mbabane and Manzini where the future water demand is the identified to be highest.

A possible secondary benefit of the proposed dam is the potential for utilising the Nondvo Dam head for small scale hydropower generation. Additionally, the stored water could also be used for irrigation and for improving the output of run-of-river hydropower plants further downstream.

The Proposed Mbabane – Manzini Corridor Dam in reference to the geographical area that will be served by the dam, whilst the term “Nondvo Dam” is the official shortened version of the project title in reference to the dam’s location whereupon it will harvest surface flows along the Lusushwana River and its tributary, the Nondvo River. The terms “Mbabane – Manzini Corridor Dam” and “Nondvo Dam” are therefore used interchangeably throughout the project’s study documentation.

The proposed project site is situated approximately 12 km south of Mbabane and 26 km north-west of Manzini, along the south-eastern boundary of the Hhohho Region, Eswatini (**Figure 1-1**), approximately 7 km downriver of the Lumphohlo Dam wall, on the Lusushwana River, at the following coordinates 26°25'39.04"S and 31°7'0.98"E.

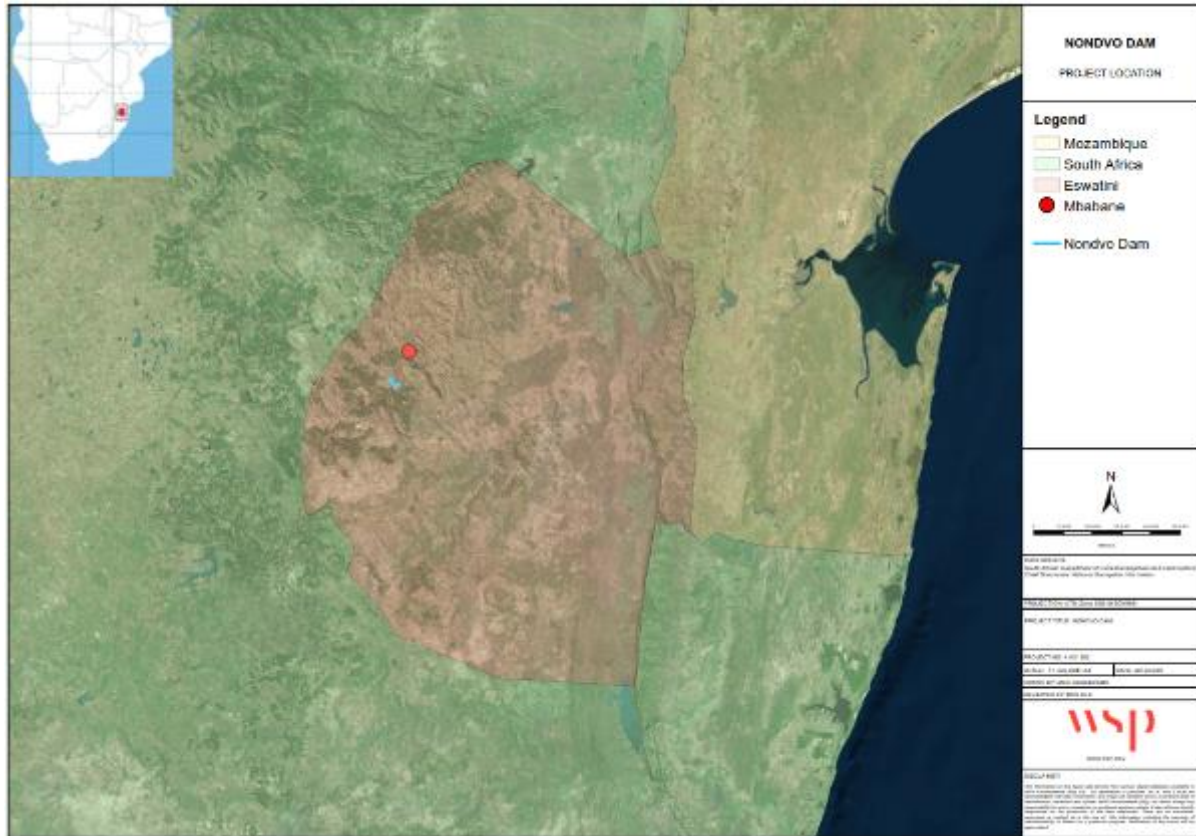


Figure 1-1: Map Indicating the Project Location

In terms of the Environmental Management Act, 2002 (Act No. 5 of 2002), the proposed Project is categorised as a Category 3 project, requiring a full Environmental Impact Assessment (EIA) study to be undertaken and submitted to the Eswatini Environmental Authority (EEA) for consideration prior to project implementation. The categorisation was confirmed in correspondence received from the EEA, dated 21 December 2018.

1.2 PROJECT COMPONENTS

The Nondvo Dam ESIA include and assessed the components listed below:

- River diversion works;
- Nondvo Dam and auxiliary works;
 - Dam wall;
 - Spillway;
 - Intake;
 - Powerhouse (i.e. hydropower plant); and
 - Bottom outlet.
- Quarry;
- Site camps and offices;
- Electrical distribution system, connection to the existing low voltage electricity distribution scheme;
- Realignment of MR19;
- Temporary access roads; and
- Railway line realignment.

The following components are excluded from the ESIA:

- Water distribution infrastructure (i.e. pipeline network connecting dam to end users):
Excluded due to not being included in the Technical Feasibility Study (TFS) (Studio Pietrangeli, 2019).
- Realignment of the inundated internal access roads:
Excluded due to not being included in the Technical Feasibility Study (Studio Pietrangeli, 2019).
- Host community impacts:
Four potential host sites were identified, however impacts at the host communities were only assessed at a high-level and selection of the preferred site was not part of the ESIA.

At the time of writing the ESIA report, the details for the excluded components had not been identified or assessed within the feasibility studies (Studio Pietrangeli, 2019).

1.3 PURPOSE OF THE STAKEHOLDER ENGAGEMENT PLAN

The overall aim of this SEP is to ensure that a consistent, comprehensive, coordinated and culturally appropriate approach is taken to stakeholder engagement and project disclosure throughout the ESIA. It is further intended to demonstrate the commitment of the DWA to an ‘international best practice’ approach to engagement. The DWA is committed to full compliance with the Environmental Management Act 2002 (Act No. 5 of 2002) and the Environmental Audit, Assessment and Review Regulations, 2000 (EAARR).

Project funding is to be provided by the AfDB, therefore in addition to the national environmental and social standards and regulations the reference framework for the ESIA includes the AfDB Integrated Environmental and Social Assessment (IESIA) Guidelines (AfDB 2009; 2015).

In line with current international best practice, this SEP aims to ensure engagement that is free of manipulation, interference, coercion and intimidation. It also aims to ensure that stakeholder engagement is conducted on the basis of timely, relevant, understandable and accessible information, in a culturally appropriate format. In this way, the SEP seeks to ensure that stakeholder groups are given sufficient opportunity to voice their opinions and concerns, and that these concerns influence project decisions.

The SEP:

- Provide an overview of the engagement process;
- Provide details of engagement activities;
- Document issues and opportunities raised by stakeholders; and
- Provide records of stakeholder engagement communications.

1.4 PRINCIPLES AND OBJECTIVES OF THE STAKEHOLDER ENGAGEMENT PROCESS

Stakeholder engagement is an inclusive process conducted throughout the project life cycle. Where properly designed and implemented, it supports the development of strong, constructive and responsive relationships that are important for the successful management of a project’s environmental and social risks.

Stakeholder engagement is most effective when initiated at an early stage of the project development process, and is an integral part of early project decisions and the assessment, management and monitoring of the project’s environmental and social risks and impacts.

Stakeholder engagement must be free of manipulation, interference and intimidation. It must be conducted based on timely, relevant, understandable and accessible information in a culturally appropriate format. It involves

interactions between identified groups of people and provides stakeholders with an opportunity to raise their concerns and opinions, and ensure that this information is taken into consideration when making project decisions.

The stakeholder engagement process is guided by the following key principles of stakeholder engagement and will adhere to these principles throughout the life of the project:

- Inclusiveness in the representation of views, including women, vulnerable and/or minority groups;
- Two-way dialogues that give both the company and stakeholders the opportunity to exchange views and information, to listen, and to have their issues heard and addressed;
- Respect for local traditions, languages, timeframes, and decision-making processes;
- Provide meaningful information in a format and language that is tailored to the needs of the local communities and other affected stakeholders; and
- Provide consultation and decision-making information as early as possible.

The public is an important source of local information and traditional knowledge about the project's likely environmental and social impacts. Stakeholder engagement provides an opportunity to work with the public and addressing any concerns raised. This process goes well beyond the ESIA process, as it will continue throughout the life of the project. The objectives of the stakeholder engagement for this ESIA are to:

- Identify relevant individuals, organisations and communities who may be interested in or affected by the proposed project;
- Clearly outline the scope of the proposed project, including the scale and nature of the existing and proposed activities;
- Identify viable project alternatives that will assist the relevant authorities in making an informed decision;
- Identify shortcomings and gaps in existing information;
- Identify key concerns raised by stakeholders that should be addressed in the ESIA and specialist studies;
- Present the results of the ESIA, the potential environmental impacts assessed, whether positive or negative, and mitigation measures defined; and
- To inform and provide the public with information and an understanding of the proposed project, issues and solutions.

1.5 KEY STANDARDS AND LEGISLATION

The stakeholder engagement process has been designed to ensure compliance with national standards and regulations and in line with international best practice, notably the following:

- Eswatini Legislation:
 - EEAR
- International Guidelines and Standards:
 - AfDB Guidelines:
 - Integrated Environmental and Social Impact Assessment Guidelines; and
 - Stakeholder Consultation and Participation Guidelines.
 - IFC Performance Standards; and
 - Equator Principles.

2 PROJECT STAKEHOLDERS

2.1 STAKEHOLDER IDENTIFICATION

In order to develop an effective SEP, it is necessary to determine exactly who the stakeholders are and understand their priorities and objectives in relation to the proposed project. By classifying and analysing the stance, influence, capacity and interests of stakeholders it will be possible to develop a SEP that is tailored to the needs of different stakeholder groups.

For the proposed project stakeholders have been identified by:

- Identifying the different categories of stakeholders who may be affected by or interested in the proposed project; and
- Identifying specific individuals or organisations within each of these categories taking into account the geographic area where impacts may be experienced and the nature of potential impacts and potentially interested groups.

The stakeholder groups that have been identified for engagement to date are outlined in **Table 2-1**. A stakeholder database has been compiled based on identified stakeholders as well as those who requested to be registered as stakeholders. The database is a ‘living document’ which will be updated periodically throughout the ESIA process and whenever a new stakeholder has been identified and / or stakeholder engagements are undertaken.

Table 2-1: Identification of Stakeholders

STAKEHOLDER CATEGORY	STAKEHOLDER
Governmental agencies	Relevant governmental agencies.
Public transport associations	Public transport operators’ associations whose members are likely to be affected by realignment of public roads.
Nature conservation areas	Nature conservation areas that are likely to be affected by the project and/or may have suitable habitats for relocated flora and fauna species.
Landowners	Landowners, such as neighbouring small-scale and large-scale farms.
Affected communities	Communities (villages) affected by the proposed project.
Displaced households	The potentially affected persons that are likely to be either physically or economically displaced by the proposed project. These are households that are located or that possess crops or any other asset within the Project affected area.
Industrial and commercial stakeholders	Industrial or commercial organizations potentially affected by the proposed project.
NGOs	Relevant NGOs at national and local levels in the fields of conservation, environment, social development and Human Rights.

Various institutions support the agriculture and water sectors in Eswatini, these are identified as follows:

2.1.1 AGRICULTURE

NO.	INSTITUTION	RESPONSIBILITIES
1	Ministry of Agriculture (MoA)	Governance, policy and legislation in the sector and ensuring national food security.
2	National Agricultural Marketing Board (NAMBoard)	Marketing agricultural products, processing, storage, transportation, distribution and sale of vegetables. Issuing import/export permits of scheduled products.
3	National Maize Corporation (NMC)	Marketing and storage of white maize and guarantees a market to local maize farmers, and provide good quality maize meal at reasonable prices to consumers.
4	Eswatini Water and Agricultural Development Enterprise (SWADE)	To empower smallholder farmers on SNL through water and agricultural development projects.
5	Eswatini Dairy Board (EDB)	To develop and regulate the dairy industry, food security, poverty reduction, investment promotion, job creation and export promotion.
6	Eswatini Cotton Board (ECB)	Promote production, processing and sale of cotton lint and seed. Control seed access; facilitate research and extension.
7	University of Eswatini– Faculty of Agric.	Training, research and advisory services.
8	Non-governmental Organizations (NGOs)	Drought relief and humanitarian assistance, input supply, marketing and advisory services.
9	Private Service Providers (PSP)	Input supply, marketing and advisory services.
10	Farmer Organizations	Input supply, marketing, and advisory services.

2.1.2 WATER

The National Water Authority (NWA) is responsible to advise the Minister on policy directions relating to water affairs at national level.

The DWA within the Ministry of Natural Resources and Energy (MNRE) is the secretariat for the NWA, and it provides technical support and advice to the authority. It is composed of the Water Resources Branch, the Rural Water Supply Branch and the Geological Surveys Unit.

The other ministries that are recognised as key to water resources development are:

NO.	INSTITUTION	RESPONSIBILITIES
1	Ministry of Agriculture	Design and construction of small irrigation dams.
2	Ministry of Economic Planning and Development (MEPD)	Allocate resources to national policy objectives and priority development initiatives.
3	Ministry of Health (MoH)	Construction of pit latrines and providing hygiene education on the proper use of drinking water and sanitation facilities.

2.2 STAKEHOLDER ANALYSIS

Once stakeholders were identified a basic analysis was applied to determine the level of engagement necessary to appropriately include them. The stakeholder analysis tool in **Figure 2-1** was used to group stakeholders according to their influence and support in relation to the project. This analysis allows for the informed planning of how to focus engagement efforts and helps identify the key objectives of engagement with different parties.

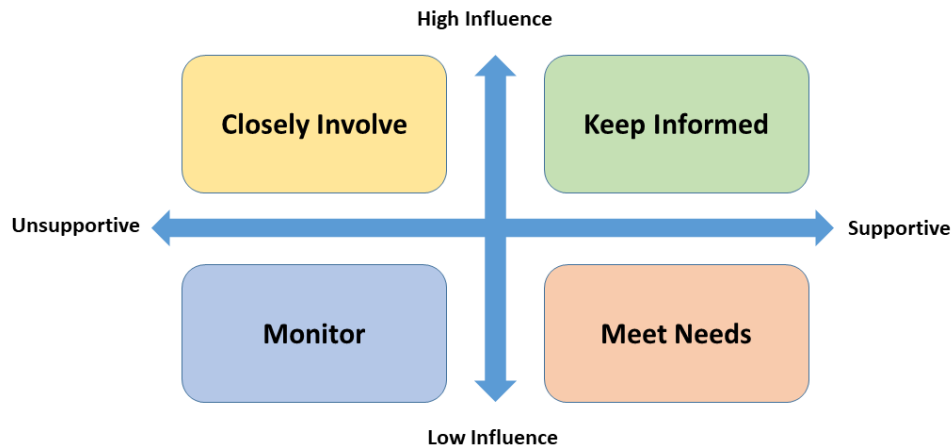


Figure 2-1: Stakeholder Mapping Tool

Stakeholder groups that were engaged with through the development of the ESIA are described in **Table 2-2**.

Table 2-2: Preliminary Stakeholder Mapping

STAKEHOLDER CATEGORY	CONNECTIONS TO THE PROJECT	MAPPING RESULT
Concerned Ministries and National Agencies	Government individuals are of high importance to the proposed project as well as managing permitting requirements	Keep Informed
Government technical services at provincial / regional and levels	Government individuals are of high importance to the proposed project.	Keep Informed
Local administrative authorities	District and Local government individuals are of high importance to the proposed project.	Closely Involve
Customary authorities	Local community leaders and religious or educational leaders act as representatives of their local community.	Closely Involve
Project-affected communities and households	Households and communities that will experience impacts (positive or negative) as a result of the proposed project. Vulnerable groups may be affected by the proposed project. They may also have difficulty in engaging with the stakeholder consultation process and thus may not be able to fully express their concerns regarding the proposed project.	Closely Involve

STAKEHOLDER CATEGORY	CONNECTIONS TO THE PROJECT	MAPPING RESULT
Industrial and commercial stakeholders	Individuals or organisations with a potential economic interest in the proposed project. This may be through gaining contracts with the proposed project or due to economic impacts caused by the project.	Meet Needs
Non-Governmental Organisations (NGOs) at national and regional levels	Organisations with a direct interest in the proposed project and that are able to influence the project directly or through public opinion. Such organisations may also have useful data and insight and may be able to become partners to the project in areas of common interest. It is anticipated that some international NGOs will have an interest in the proposed project.	Meet Needs
Public Institutions		Meet Needs
Others	Other international, regional and local groups with a direct interest in the proposed project.	Meet Needs

3 APPROACH TO STAKEHOLDER ENGAGEMENT

3.1 ENGAGEMENT PHASE

A staged approach has been used to undertake stakeholder engagement for the ESIA process and in line with the various phases of the ESIA. All engagement activities have been designed to comply with the Eswatini legislative requirements and in consideration of international standards.

According to international best practices and relevant legislation in Eswatini, all stakeholders must be properly informed and participate during all phases of the resettlement process.

The objectives and outputs of each engagement phase, for both the ESIA and Resettlement Action Plan (RAP), are presented below in **Table 3-1**; while the detailed engagement activities planned for each phase are described in **Section 4** of this document.

Table 3-1: Stakeholder Engagement Objectives and Outputs

PHASE	OBJECTIVES	KEY OUTPUTS
ESIA		
Scoping Engagement	<ul style="list-style-type: none"> — Inform regulatory and administrative authorities of the project and undergoing ESIA process — Identify elements of the project area that could influence the determination of alternatives — Identify key concerns and expectations associated with the project and the ESIA / RAP process — To meet key stakeholders and introduce them to the proposed project and ESIA — To generate feedback on the Draft Scoping Report, including the scope, approach and key issues to be investigated further for the ESIA — To consult key stakeholders on the next steps in the ESIA process — Present corridor options understudy and identify potentially associated environmental and social issues — Involve concerned authorities, technical services and other key stakeholders in the best corridor selection process — Consult relevant authorities on key elements of the ESIA and RAP frameworks — Discuss the best community engagement approach in view of the upcoming ESIA activities and community surveys 	<ul style="list-style-type: none"> — Updated SEP — Stakeholder database — Engagement tools and proof of their dissemination — Final Scoping Report (FSR) with record of stakeholder issues — Non-technical presentation and posters summarising the Draft Scoping Report including a list of preliminarily identified impacts — Meeting minutes

PHASE	OBJECTIVES	KEY OUTPUTS
Draft Impact Assessment Disclosure	<ul style="list-style-type: none"> — Involve affected communities in the identification of environmental / social sensitive elements so as to optimize the power line’s final route — Document affected communities, women and potentially displaced households’ concerns and expectations — As required, conduct <i>ad-hoc</i> consultative meetings with key stakeholders at national / provincial levels on specific issues — To discuss the identified impacts and proposed mitigation measures with stakeholders allowing for their input — To provide stakeholders with the opportunity to comment on the Draft ESIA report — Disclose and validate with stakeholders critical elements of the Draft ESIA and RPF reports — Assess local government capacity to participate in the implementation / monitoring of management plans 	<ul style="list-style-type: none"> — Updated ESIA Report with record of stakeholder issues — Engagement tools and proof of their dissemination — Meeting minutes — Updated SEP
Formal Submission of Final ESIA	<ul style="list-style-type: none"> — To formally submit the final ESIA to the authorities and key stakeholders with comments incorporated from the Scoping and Draft ESIA engagement and disclosure stages 	<ul style="list-style-type: none"> — Final ESIA Report — Final SEP

3.2 VULNERABLE STAKEHOLDERS

In order for stakeholders to gain a high level of understanding of the issues involved in the ESIA, a good level of literacy is required. These issues can be explained to the illiterate members of the community; however, this requires more than mere linguistic translation. An interpreter needs to undertake an exercise of cultural translation, converting complex concepts, alien to the local culture in understandable terms. For this reason, disclosure of project information and the ESIA process will require assistants that have a deep understanding of two domains, the bureaucratic and the customary; the first dominated by written communication and the second by oral culture.

The ESIA team includes a cultural translator as facilitator during the stakeholder engagement process. The translator has worked on similar stakeholder engagement programmes and is accustomed to converting alien or abstract concepts in terms understandable to local community audiences, and to assist them in engaging with the proposed project’s feedback mechanism.

Vulnerable stakeholders require special attention according to the IFC PSs. Vulnerable people include those who, by virtue of their gender, ethnicity, age, physical or mental disability, economic disadvantage or social status may be more adversely affected by a project than others, and who may be limited in their ability to take advantage of a project’s development benefits.

The following groups can be seen as potentially vulnerable in Eswatini:

- Women: a woman’s access to resources (physical and financial) are restricted due to traditional and cultural practices. Women were identified to have low representation in village level decision making.
- Female Headed Households (FHH): FHH are identified as particularly vulnerable due to reduced access to income generating opportunities and higher levels of food insecurity.

- Elderly: The elderly within the villages are less likely to receive an income and are reliant upon other members of a household. It should be noted that elder men have an elevated status and play a prominent role in traditional institutions and village level decision making.
- Children: Children are mainly reliant upon older members of the household to access resources and for the maintenance of their general wellbeing.
- People with Physical / Mental Health Illnesses and Disabilities: The project area has limited institutional systems or services to encourage the economic and social participation of disabled stakeholders in the community.

3.3 TOOLS AND MATERIALS

Project stakeholders differ in terms of levels of literacy and education and in light of this engagement materials and tools used have been tailored towards the target audience; for instance, different materials have been used to engage local communities and Government officials.

For local communities in the project area high instances of illiteracy have required the use of a series of alternative techniques for the dissemination of proposed project information. This includes a series of Focus Group Meetings, Community Meetings and one-to-one meetings that rely on verbal discussion with the involvement of cultural translators. In addition, presentations are simplified and written in non-technical/accessible language. During engagement events Siswati will be used to communicate.

Figure 3-1 outlines the stakeholder engagement tools that will be used throughout the ESIA process.

Consultation material such as presentations will provide information on the following:

- The background and description of the proposed project;
- The environment in which the proposed project will be developed;
- Information on the client;
- Information on the ESIA process and timelines; and
- Information on ESIA consultants and their independence.

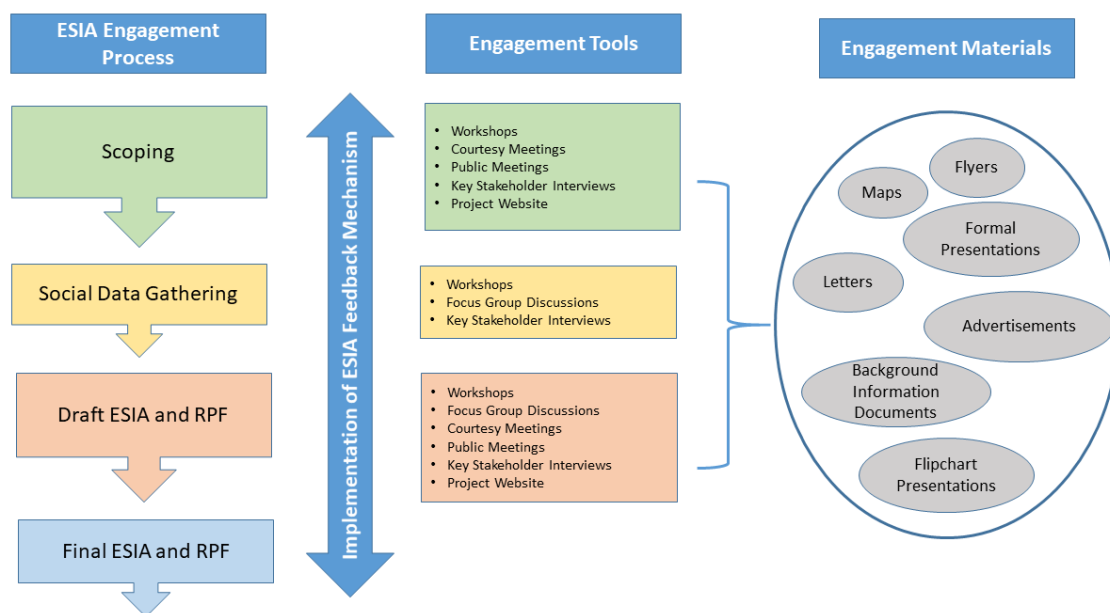


Figure 3-1: ESIA Stakeholder Engagement Tools

4 ENGAGEMENT ACTIVITIES

Engagement activities are planned according to key stages, or decision moments, throughout the ESIA studies where the informed participation of stakeholders is likely to make the most significant contribution to the on-going analysis. **Table 4-1** identifies these stages, or “consultation rounds”, and presents specific engagement objectives, target groups, consultation format and implementation periods for each of them.

Table 4-1: Stakeholder Engagement Activities

PHASES	ENGAGEMENT ACTIVITIES	TARGET GROUPS	FORMAT
<p>Scoping (ESIA Consultations Round 1)</p>	<ul style="list-style-type: none"> – Consultation on the proposed project and associated ESIA through meetings and workshops with identified stakeholders. Details may include: <ul style="list-style-type: none"> – Contextualisation of the proposed project with respect to other neighbouring projects and any previous consultation undertaken – Nature, purpose and scale of the proposed project – ESIA & stakeholder engagement process – Disclosure of scoping findings, including identification of preliminary impacts – Feedback regarding findings – Dissemination of engagement materials (presentations etc.) – Formal submission of Draft Scoping Report to Authorities – Distribution of Draft Scoping Report to other key stakeholders – Present the proposed ESIA process and the project to the public – Receive and record issues of concern from the public 	<ul style="list-style-type: none"> – Affected people (people living along the corridors) – Ministries and agencies at national level – Local administrative authorities and technical services – Traditional leaders 	<ul style="list-style-type: none"> – Community Meetings Siphocosini and Mantabeni – Draft Scoping Report
<p>RAP Meetings (RAP Consultations Round 1)</p>	<ul style="list-style-type: none"> – Present corridor options understudy and identify potentially associated environmental and social issues. – Engagement for the purposes of additional baseline data gathering through: <ul style="list-style-type: none"> – Focus Group Discussions – Key Informant Interviews – Consult relevant authorities on key elements of the RAP framework. – Present the proposed project and potential resettlement impacts. Receive and record issues of concern 	<ul style="list-style-type: none"> – Affected people (people living along the corridors) – Traditional leaders 	<ul style="list-style-type: none"> – Focus Group Discussions in Siphocosini and Mantabeni – Interviews and field walks with community leaders – Individual meetings (semi-structured interviews)

PHASES	ENGAGEMENT ACTIVITIES	TARGET GROUPS	FORMAT
Detailed ESIA / RAP (ESIA Consultations Round 2)	<ul style="list-style-type: none"> — Consultation on the Draft Impact Assessment Report. This will include: <ul style="list-style-type: none"> — Identification of impacts in the Draft ESIA and proposed mitigation — Identification of stakeholder concerns and opinions on the impacts identified — Involvement of stakeholders in assessing the efficacy and suitability of the proposed mitigation measures — Identification of revisions or additions to the Draft ESIA and RPF report where necessary — Dissemination of the Draft ESIA and RPF to Authorities and key stakeholders — Disclosing findings of the Draft ESIA and RPF — Present the results of the ESIA — Receive and record issues of concern from the public. 	<ul style="list-style-type: none"> — Affected Communities — Local administrative authorities and technical services — Authorities, NGOs and other stakeholders at district, regional and national levels — Traditional leaders — Industrial / commercial stakeholders affected by the proposed project 	<ul style="list-style-type: none"> — Community Meetings Siphocosini and Mantabeni — Community Meeting Mbabane — Draft Impact Assessment Report
Project Update Meetings (RAP Consultations Round 2)	<ul style="list-style-type: none"> — Present the results of the RAP and ToR for the Resettlement Action Plan. — Consult the communities to collect information regarding possible resettlement host areas in each community — Receive and record issues of concern 	<ul style="list-style-type: none"> — Affected people (people living along the preferred option) Traditional leaders 	<ul style="list-style-type: none"> — Focus Group Discussions in Affected Villages.

5 FEEDBACK MECHANISM

Each round of engagement undertaken provided stakeholders with an opportunity to provide input and feedback on the proposed project. A feedback mechanism has therefore been put in place for use during the ESIA process to ensure that potential concerns raised by stakeholders during engagement are acknowledged and addressed in a timely, structured and culturally appropriate manner.

The feedback mechanism seeks to:

- Provide Opportunities to Provide Feedback
- Record Feedback – all input received through the engagement process and other communication channels are recorded via meeting minutes and the Comment and Response Report (CRR).
- Generate Responses – the ESIA team together with DWA review comments received and generate responses after each phase of engagement.
- Communicate Responses to Stakeholders who have Raised Comments – all opinions and concerns noted during stakeholder engagements will be recorded and a summary of the feedback and comments will be maintained.

The feedback channels available to stakeholders through the course of the ESIA process include:

- Electronic and telephone feedback, email and telephone contact details have been made available to stakeholders for the ESIA team; and
- Engagement activities undertaken directly with stakeholders during the various disclosure phases.

6 PUBLIC CONSULTATION

6.1 INITIAL CONSULTATION

The DWA had already consulted widely with the stakeholder groups related to the Nondvo Dam, including transboundary stakeholders, national stakeholders and traditional authorities.

6.2 INCEPTION WORKSHOP

DWA organised a stakeholder inception workshop which included the DWA, Eswatini Meteorological Service, Ministry of Agriculture-Land Use Section, Climate Resilient Infrastructure Development Facility (CRDIF), Ministry of Natural Resources & Energy (MNRE), Ministry of Tinkhundla Administration and Development (MTAD), Eswatini Railways and Eswatini Electricity Company. The workshop took place on 11 September 2018 at the Sibane Hotel, Ezulwini. The workshop provided information on the Nondvo Dam project, its components and the objectives of the project.

The workshop introduced the WSP and Maphanga Mitchell Associates (MMA) who shared information on the scope of work, the development of the inception report and planned activities for the ESIA - including public participation. The attendance register and minutes from the workshop are included in **Appendix A**.

6.3 SCOPING PHASE STAKEHOLDER ENGAGEMENT

The Scoping Phase stakeholder engagement commenced with four scoping meetings for respective target groups were held:

- Meeting at Mantabeni chiefdom (Inner Council) for the rural community nearest to the proposed Nondvo Dam on 13 February 2019 (**Appendix B**);
- Meeting at Mantabeni chiefdom (Community) for the rural community nearest to the proposed Nondvo Dam on 23 February 2019 (**Appendix C**);
- Meeting at Siphocosini chiefdom (Community) for the rural community nearest to the existing Luphohlo Dam on 9 February 2019 (**Appendix D**); and
- Meeting at Siphocosini chiefdom (Inner Council) for the rural community nearest to the existing Luphohlo Dam on 13 February 2019 (**Appendix E**).

In addition to the Scoping meetings, additional meetings were held with the Hhohho and Manzini Regional Administrators (attendance registers provided in **Appendix F**), and associated chiefs, in order to disseminate project information to all the potentially affected communities.

The main objectives of the scoping phase stakeholder engagement were to:

- help identify any fatal flaws or critical issues of the project, which would undermine its environmental sustainability;
- to disclose info in a transparent way, i.e. to provide info regarding the proposed project; and
- enable timely identification and registration of the expectations and concerns of stakeholders in the ESIA.

6.4 ESIA PHASE STAKEHOLDER ENGAGEMENT

The ESIA Phase stakeholder engagement included five ESIA meetings for respective target groups were held:

- Meeting at Mantabeni chiefdom (Inner Council) for the rural community nearest to the proposed Nondvo Dam on 31 July 2019 (**Appendix G**);
- Meeting at Mantabeni chiefdom (Community) for the rural community nearest to the proposed Nondvo Dam on 17 August 2019 (**Appendix H**);
- Meeting at Siphocosini chiefdom (Inner Council) for the rural community nearest to the existing Luphohlo Dam on 31 July 2019 (**Appendix I**);
- Meeting at Siphocosini chiefdom (Community) for the rural community nearest to the existing Luphohlo Dam on 3 August 2019 (**Appendix J**);
- Meeting at Siphocosini chiefdom (Inkundla) for the rural community nearest to the existing Luphohlo Dam on 22 October 2019 (**Appendix K**);
- Public Meeting at the Eswatini National Library, Mbabane on 28 November 2019 (**Appendix L**);
- Stakeholder Review Meeting at Hilton Garden Inn, Mbabane on 18 March 2020 (**Appendix M**);
- Stakeholder Review Meeting at Emafini Country Lodge, on 10 September 2020 (**Appendix N**); and
- Mantabeni Inner Council Site Visit, on 26 September 2020 (**Appendix O**).

Public consultation continues throughout the ESIA process and additional public meetings will be held.

The main objectives of the ESIA phase stakeholder engagement were to:

- Ensure that legislative requirements and international performance standards and operational policy requirements are met.
- Inform local communities about key findings and potential impacts.
- Confirm that stakeholder concerns are addressed in the assessment.
- Receive verification from communities and shared suggest mitigation measures.

6.5 ADVERTISEMENTS

The project was advertised via radio and in the Times of Eswatini and Eswatini Observer (**Appendix Q**).

6.6 COMMENTS AND RESPONSES

A Comment and Response Report is included in **Appendix P**. The key issues and concerns raised in most of the consultations include:

- Why the ESIA focuses on Nondvo Dam only and does not include the raising of Luphohlo Dam and Hawane Dam.
- It was requested that directly affected communities be prioritised in the stakeholder engagement process.
- The development of additional houses in the impacted area will result in additional compensation claims.
- The local communities are unsure how they will benefit from the project.
- The Siphocosini *Indvuna* requested that a community representative needs to be involved in the specialist studies.
- The Siphocosini Inner Council requested local labourers to be hired where appropriate.
- The Eswatini Railway mentioned that the re-established of the old railway line is being investigated.

- Eswatini Electricity Company advised that they have a 132kV Transmission Line planned for installation at the Nondvo Dam project site.
- Whether PAPs must continue with improvements to their homesteads and cultivation plans.
- Whether proposed community development programmes should continue.
- Concerned about where the PAPs will be relocated to.
- Resettlement by the railway line and main road realignment.
- Accessibility between the community and across the dam.
- Relocation of community services, such as schools.
- Potential impacts on cultivated lands.
- Potential risk with living in close proximity to two dams.
- Not sufficient information on supporting infrastructure.
- Estimated commencement date of implementation.
- Climate Change Adaptation.
- Tourism potential and local community benefits.
- Request to investigate dam wall locations further downstream.

7 ESIA PHASE PUBLIC DISCLOSURE

Upon completion, the ESIA Report will be submitted to the EEA (i.e. the regulatory authority) for review. Upon completion of the initial review by the EEA, the EEA will issue the Proponent with the comments to be addressed. The Consultant will address comments received from the EEA by amending the ESIA Report and CMP accordingly, in consultation with the Proponent. The amended ESIA Report will be resubmitted to the EEA for approval prior to issuing for Public Review. The EEA will then issue its final decision on whether or not the proposed project is authorised to proceed (i.e. issue an Environmental Compliance Certificate). Where the proposed project is authorised by the EEA to proceed, the EEA will specify the conditions of authorisation as well as any additional requirements for compliance monitoring (i.e. the frequency at which Project Compliance Reports shall be submitted to the EEA).

8 MONITORING AND REPORTING

In both personal and business relationships, follow-through is important. The same principle applies to stakeholder engagement. Once consultations have taken place, stakeholders will want to know which of their suggestions will be used, what risk or impact mitigation measures will be put in place to address their concerns, and how, for example, project impacts are being monitored. Thus the environmental and social performance of the Nondvo Dam project should be monitored and reported by DWA throughout the entire life cycle of the project (i.e. construction and operation phases). Often, the same methods used in information disclosure are applied to reporting back project environmental and social performance monitoring to the stakeholders.

Stakeholder engagement must be monitored and reported by DWA throughout the life of the project, which will involve:

- Updates of the stakeholder list;
- Records of all consultations held; and
- Records of all grievances received and dealt with (entered into a grievance log on the system or a computer).

Information Management

DWA must record every meeting and interaction related to the project engagement through the following:

- Stakeholder list;
- Grievance Mechanism Log;
- Minutes of all meetings; and
- Meeting attendance registers.







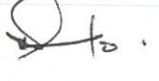

APPENDIX

A INCEPTION MEETING



ATTENDANCE RECORD - INCEPTION MEETING

Project Number: 41101262
Grant Number: P-SZ-EAZ-001/002 and P-SZ-EAO-002
Contract Number: MNRE/DWA/002/2017-18
Meeting Title: Mbabane-Manzini Dam Feasibility Study - Environment and Social Impact Assessment
Client: Government of the Kingdom of Swaziland, Ministry of Natural resources and Energy - Department of Water Affairs
Venue: Department of Water Affairs
Date: 11 September 2018

Name	Company Name	Telephone No.	Email	Signature
Amelia Briel	Knight Piesold	+27 84 701 3946	abriel@knightpiesold.com	
EDWARD MSWANE	MNRE - DWA	+26876082142	edwardmswane1@gmail.com	
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Mwelase Mswantshos	MNRE - DWA	+26876052666	wenswos796@gmail.com	
Titus Dlamini	MNRE - DWA	+26876357933	dlamini tombitus@gmail.com	
Sifiso Ntsho	MNRE - MET	+26876687960	sifisontsho@gmail.com	
Patrick Zondo	DWA	+268 7611 9910	patrickzondo@gmail.com	
Meshack Dlamini	DWA	+268 76088257	meshackdlamini@gmail.com	



Name	Company Name	Telephone No.	Email	Signature
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Patrick Dlamini	MoA Land Use	(+268) 76051965	patrickbdlamini@gmail.com	
Kenneth Msibi	CRADF	+268-7605-1714	kenneth.msibi@gmail.com	
Siphesihle Dlamini	MNRE (Planning)	76307926	Siphesihledlamini@gmail.com	
Anri Scheepers	WSP	+2782 701 7690	Anri.Scheepers@wsp.com	

ATTENDANCE RECORD - INCEPTION MEETING

Project Number: 41101262
Grant Number: P-SZ-EAZ-001/002 and P-SZ-EAO-002
Contract Number: MNRE/DWA/002/2017-18
Meeting Title: Mbabane-Manzini Dam Feasibility Study - Environment and Social Impact Assessment
Client: Government of the Kingdom of Swaziland, Ministry of Natural resources and Energy - Department of Water Affairs
Venue: Department of Water Affairs
Date: 11 September 2018

Name	Company Name	Telephone No.	Email	Signature
MBUSO KINGSLEY	MAPHANGA MITCHELL ASSOCIATES (LOCAL SUPPORT)	+268 76530306 / 2404 3044	info@mapmitch.org mbuso@mapmitch.org	
TEMUSA ZWANE	MAPHANGA MITCHELL ASSOCIATES	+268 79632087 / 24043044	info@mapmitch.org temusa@mapmitch.org	
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Mduduzi Mdululi	DWA/MNRE	+268 76361650	mdmdluli@yahoo.co.uk	
Doctor Alongwane	REC	+268 76028488	doctor.hlongwane@sec.co.sz	

APPENDIX

B MANTABENI MEETING 13 FEBRUARY 2019

MBABANE – MANZINI CORRIDOR (NONDVO) DAM ENVIRONMENTAL & SOCIAL IMPACT ASSESSMENT (ESIA)

RECORD OF MEETING WITH MANTABENI INNER COUNCIL

Project Number:	41101262		
Grant Number:	P-SZ-EAZ-001 /002 and P-SZ-EAO-002		
Contract Number:	MNRE/ DWA/ 002/ 2017-18		
Client:	Government of the Kingdom of Eswatini Ministry of Natural Resources & Energy Department of Water Affairs (DWA)		
Project Title:	Mbabane-Manzini Corridor (Nondvo) Dam Feasibility Study Environmental & Social Impact Assessment		
Consultant:	WSP Environmental (Pty) Ltd		
Meeting organized by:	WSP Environmental (Pty) Ltd		
Date:	13 th February 2019		
Time:	Start :	14:00hrs	End: 14:30hrs
Venue:	Mantabeni <i>Umphakatsi</i> (Royal Kraal)		
Objectives:	<ul style="list-style-type: none"> • Introducing the WSP Project Management Team to Mantabeni <i>Bandlancane</i> (Inner Council); • Notifying Manabeni Inner Council of commencement of ESIA specialist studies; • Request a community representative appointed by the Inner Council to accompany the specialist teams; • Request a suitable date for WSP to sensitise the Mantabeni community residents on the project. 		

ATTENDANCE:

	NAME	ORGANIZATION
1.	Mavimbela	Indvuna (Headman) of Mantabeni
2.	Khestemabala	Ezulwini Cheifdom Inner Council – <i>Umsumpe</i> / Land Allocation and Boundary Committee
3.	Sifiso Mdlovu	Ezulwini Cheifdom Inner Council – Chairperson
4.	Edgar Dube	Ezulwini Cheifdom Inner Council – <i>Umsumpe</i> / Land Allocation and Boundary Committee
5.	Mduduzi Manline Dlamini	Ezulwini Cheifdom Inner Council – Chairperson
6.	Martha Dlamini	Mantabeni Inner Council – Community Police
7.	Themba Dlamini	Mantabeni Inner Council – Community Police

8.	Benjamin Dlamini	Mantabeni Inner Council – Community Police
9.	Celani Hlophe	Mantabeni Inner Council
10.	Vusi Mahlambi	Mantabeni Inner Council – Community Police
11.	Funekile Lapidos	Mantabeni Inner Council – Secretary
12.	Moses Maseko	Mantabeni Inner Council – <i>Bucopho/</i> Development Committee
13.	Sam Ncongwane	Mantabeni Inner Council
14.	Bheki Mnisi	Mantabeni Inner Council – Community Police
15.	Mathew Dlamini	Mantabeni Inner Council
16.	Andreas Tsabedze	Mantabeni Inner Council – Community Police
17.	Bheki Hlatjwako	Mantabeni Inner Council
18.	Freda Nkumane	Mntabeni Inner Council – <i>Umsumpe/</i> Land Allocation and Boundary Committee
19.	Martha Dlamini	Mantabeni Inner Council
20.	Sonnyboy Mdluli	Mntabeni Inner Council
21.	Muzi Khumalo	Mantabeni Inner Council
22.	Malanga Mbeste	Mantabeni Inner Council – <i>Bucopho/</i> Development Committee
23.	Mandla Cindzi	Mantabeni Inner Council
24.	Themba Dlamini	Mntabeni Inner Council – <i>Umsumpe/</i> Land Allocation and Boundary Committee
25.	Anri Scheepers	WSP – Environmentalist
26.	Robert Els	WSP – Environmentalist
27.	Zakariya Nakhoda	WSP – Environmentalist
28.	Mbuso Kingsley	WSP – Local Environmental Support
29.	Louis Maziya	WSP – Stakeholder Engagement Liaison

AGENDA

AGENDA ITEM	RESPONSIBILITY
1. Welcome and Introductions	Inner Council/ WSP
2. ESIA Process 2.1 WSP Reconnaissance visit 2.2 Schedule of Specialist Studies 2.3 Suitable date for sensitising the community residents on the project	WSP WSP Inner Council/ WSP
3. Closing 3.1 Words of appreciation to Inner Council 3.2 Inner Council’s closing remarks	WSP Inner Council

1. Welcome and introductions

WSP Environmental (Pty) Ltd (WSP) had requested a meeting for introducing the Project Management Team to Mantabeni *Bandlancane* (Inner Council). The Inner Council welcomed WSP to Mantabeni. WSP introduced themselves and each team member briefly described their respective roles.

The Inner Council asked what the initials WSP stand for and it was explained that the founding company name was Williams Sale Partnership.

2. ESIA Process

2.1 WSP Reconnaissance visit

The Inner Council was informed that the purpose of the reconnaissance visit was to enable the project management team to familiarise themselves with the project site over the next two days as well as to collect water samples along the Lusushwana River. The specialist surveys will commence during the week of 18th February 2019, therefore familiarisation with the site will enable the project management team to coordinate the activities of the specialist teams.

2.2 Schedule of Specialist Studies

The specialist teams will comprise water quality, flora, fauna and a socio-economic study team. The first water quality samples will be collected along the Lusushwana River during the reconnaissance visit and subsequent samples will be collected during the winter months. The fauna study team will commence during the week of 18th February 2019, followed by the flora team the week of 25th February 2019. The flora and fauna team are collectively referred to as the biodiversity team. The socio-economic study team will follow in due course, after the biodiversity team. In general the various teams will visit the project site at different times and in order to mitigate overwhelming the community, not all teams will be at the site simultaneously. The Inner Council will be notified when each team is on site and each team will make return visits during the winter months in order to collect baseline data under the conditions representative of each particular season.

2.3 Community representative for accompanying specialist teams

WSP kindly requested the Inner Council to identify and appoint a community representative to accompany the teams of specialists as and when they proceed

with the specialist studies in order or assist with local knowledge of the community. The Inner Council concurred that this is an important aspect of outsiders working within the community and that it will further provide assurance to residents that the specialist are *bona fide* members of the project team. The Inner Council undertook to revert back to WSP with the name and contact details of the appointed community representative. The Inner Council emphasized the requirement for WSP to compensate the community representative for accompanying the specialists.

2.4 Suitable date for community meeting

WSP kindly requested the Inner Council to propose a suitable date during which the proposed project will be presented to the community and to respond to queries that the community may have on the project. The Inner Council proposed that WSP present the project during the next regular community meeting scheduled for Saturday, 23rd February 2019. The Inner Council however stressed that the presentation should be kept brief and that a separate meeting will be held for receiving and responding to queries.

3. Closing

3.1 Words of appreciation to the Inner Council

WSP expressed appreciation to the Inner Council for the opportunity of introducing the project management team and granting permission to proceed with the specialist studies at the project site.

3.2 Inner Council's closing remarks

The *Indvuna* expressed appreciation for the introductory meeting with the project management team and the Inner Council granted permission for WSP to proceed with the reconnaissance visit of the project site.

Record of meeting proceedings prepared by:



Mbuso Kingsley



Mbabane - Manzini Corridor Dam (Nondvo Dam)
Environmental & Social Impact Assessment (ESIA)
Public Participation Meeting Attendance Register

Venue/ Indzawo: MANTABENIDate/ Lusuku: 13 FEB 2019

Luhla lwalabo lebebakhona emhlanganweni welucwaningo lwemvelo nenhlalakahle

NAME/ LIBITO	ORGANIZATION/ COMMUNITY INHLANGANO/ SIFUNDZA/ SIGODZI	DESIGNATION/ SIKHUNDLA/ SIGABA EMMANGWENI	CONTACT NUMBER/ INOMBOLO YELUCINGO	EMAIL/ LIKHELI LEKUCHUMANA NGA NGCONDVOMSHINI	SIGNATURE/ SAYINA LAPHA
MBUSO KINGSLEY	WSP/MMA	LOCAL ENVIRONMENTAL SUPPORT	7653 0306	mbuso@mapmitch.org	
Nolwela Mawumbela	Inobhuna Mantabeni	Inobhuna	7645 3017		
Khetsemabata	Umsumpe Zul.	Umsumpe	766 85457		
Gise Mkhonzi	Zul	Chairperson	7603 6869		
Kelger Dupo	Zul.	Umsumpe	76118485		
Mousuzi MANLINE DAMINI	Ezulwini	CHAIRPERSON	76020858		
Daniel Saulus	Ezulwini	Secretary	76211371		
MARTHA Namini	MANTABENI	Community Polie			
THEMBA Namini	MANTABENI	Community Polie	7655856	mgogolathon@gra	
Beyyama Sabinu	Mantabeni	Community Polie	78233563		
Celani Hlyhe	Mantabeni		76785189		

Luhla lwalabo lebebakhona emhlanganweni welucwaningo lwemvelo nenhlalakahle

NAME/ LIBITO	ORGANIZATION/ COMMUNITY INHLANGANO/ SIFUNDZA/ SIGODZI	DESIGNATION/ SIKHUNDLA/ SIGABA EMMANGWENI	CONTACT NUMBER/ INOMBOLO YELUCINGO	EMAIL/ LIKHELI LEKUCHUMANA NGA NGCONDVOMSHINI	SIGNATURE/ SAYINA LAPHA
Vuse Mahlamzi	Bandla Ncane	Comm. Pol	76301127		
Fundel hapiolos	Bandla Ncane	Secretary	76267266		
MOSES maseko	Bandla Ncane MAZIS MAZIKU	Dev. Comm.	76087508		
Sami	Ncangane	Pol	76171047		
Rheki Misi	Alom Police	Community Police	76496185		
Mathew Daini	Bandla Ncane		78467142		
Andreas Tshelenge	Bandla Ncane	Community Police	76378439		
Rheki Hlatjwako	Bandla Ncane		76056356		
FREDA Nkumane	Bandlancane	Umsungu	76540615		
Martha Alamini	Bandlancane	community	76510583		
Sonnyboy Mdluli	Bandlancane	community	76040089		

Venue/ Indzawo: MANTABENIDate/ Lusuku: 13/2/19

Luhla lwalabo lebebakhona emhlanganweni welucwaningo lwemvelo nenhlalakahle

NAME/ LIBITO	ORGANIZATION/ COMMUNITY INHLANGANO/ SIFUNDZA/ SIGODZI	DESIGNATION/ SIKHUNDLA/ SIGABA EMMANGWENI	CONTACT NUMBER/ INOMBOLO YELUCINGO	EMAIL/ LIKHELI LEKUCHUMANA NGA NGCONDVOMSHINI	SIGNATURE/ SAYINA LAPHA
Muzi Ichumalo	Bandlancane	Community	76048565		
MALANGA MBESSE	BUCOPHO	A C	70276835		
Mandla Cindzi	BANDLANCANE	Community	76176784		
Themba Damini	Bandlancane	Unsumpho	76084264		
Anri Scheepers	WSP	Environmentalist	+2782707690	Anri.Scheepers @wsp.com	
ZALALIYA NAKHOODA	WSP	Environmentalist	+27836008989	Zalaliya.Nakhooda @wsp.com	
ROBERT ELI	WSP	ENVIRONMENTALIST	+27745091000	ROBERT.ELI @wsp.com	

APPENDIX

C

MANTABENI

MEETING 23

FEBRUARY 2019

MBABANE – MANZINI CORRIDOR (NONDVO) DAM ENVIRONMENTAL & SOCIAL IMPACT ASSESSMENT (ESIA)

RECORD OF MEETING WITH MANTABENI COMMUNITY

Project Number:	41101262		
Grant Number:	P-SZ-EAZ-001 /002 and P-SZ-EAO-002		
Contract Number:	MNRE/ DWA/ 002/ 2017-18		
Client:	Government of the Kingdom of Eswatini Ministry of Natural Resources & Energy Department of Water Affairs (DWA)		
Project Title:	Mbabane-Manzini Corridor (Nondvo) Dam Feasibility Study Environmental & Social Impact Assessment		
Consultant:	WSP Environmental (Pty) Ltd		
Meeting organized by:	Mantabeni Umphakatsi (Royal Kraal)		
Date:	23 rd February 2019		
Time:	Start :	11:00hrs	End: 11:15hrs
Venue:	Mantabeni Umphakatsi (Royal Kraal)		
Objectives:	<ul style="list-style-type: none"> Sensitisation of Mantabeni Community on Project Objectives and Environmental & Social Impact Assessment (ESIA) process. 		

ATTENDANCE:

	NAME	ORGANIZATION
1.	Mduduzi Matsebula	Member of Parliament – Siphocosini Inkhundla
2.	Gcinumuzi Mavimbela	Indvuna Yenkundla – Chairperson of Siphocosini Inkhundla
3.	Thami Shongwe	Bucopho of Sigangeni Umphakatsi
4.	Enoch Malaza	Bucopho of Luhlendlweni Umphakatsi
5.	Malanga Mbetse	Bucopho of Mantabeni Umphakatsi
6.	Mandla Cindzi	Mantabeni Inner Council
7.	David Vilakati	Mantabeni Inner Council
8.	Mathew Dlamini	Mantabeni Inner Council
9.	Vusi Nkambule	Mantabeni Pastor
10.	Mjuluko Kunene	Mantabeni Inner Council
11.	Bhekie Hlatshwayo	Mantabeni Inner Council
12.	Antony Mlotsa	Mantabeni Community Police
13.	Samuel Ncongwane	Mantabeni Inner Council
14.	BG Nhlabatsi	Mantabeni Inner Council
15.	NB Zwane	Mantabeni Inner Council
16.	Michael Mbetse	Mantabeni Community Member
17.	Ntombifuthi Masilela	Mantabeni Inner Council

18.	Mhlatase Nhlabatsi	Mantabeni Inner Council
19.	Thabitha Maziya - Mndzebele	Mantabeni Inner Council
20.	Freda Nkumane	Mantabeni Inner Council – <i>Umsumpe/</i> Land Allocation and Boundary Committee
21.	Finchie Lapidos	Mantabeni Inner Council
22.	Celani Hlophe	Mantabeni Inner Council
23.	Mduduzi Dlamini	Manatbeni Community Chairperson
24.	Samkeliso Cindzi	Mantabeni Community Member
25.	Lucky Cindzi	Mantabeni Community Member
26.	Absalom Mahlambi	Mantabeni Community Member
27.	Mthini Mlotsa	Mantabeni Community Member
28.	Jesta Mbetse	Mantabeni Community Member
29.	Rose Dlamini	Mantabeni Community Member
30.	Sibongile Vilakati	Mantabeni Community Member
31.	Busisiwe Mofokeng	Mantabeni Community Member
31.	Fortunate Mkhwanazi	Mantabeni Community Member
32.	Sihlelile	Mantabeni Community Member
33.	Cebsile Dlodlu	Mantabeni Community Member
34.	Happy Dlamini	Mantabeni Community Member
35.	Sibongile Lukhele	Mantabeni Community Member
36.	Sibusiso Dlamini	Mantabeni Community Member
37.	Mbuso Kingsley	WSP/ MMA
38.	Louis Maziya	WSP/ MMA

Note: the above is a sample of the audience that was present.

AGENDA

AGENDA ITEM	RESPONSIBILITY
1. Welcome and Introductions	Inner Council
2. Project Overview 2.1 Description of Project Objectives	WSP
3. ESIA Process 3.1 Purpose of ESIA process 3.2 Methodology of Biophysical Impact Assessment 3.3 Methodology of Social Impact Assessment	WSP WSP WSP
4. Closing 4.1 Inner Council's closing remarks	Inner Council

1. Welcome and introductions

The Mantabeni community meeting, chaired by the Inner Council, was an extraordinary meeting whose main objective for the Member of Parliament (MP) of the newly established Siphocosini Inkhundla, Mr Mduduzi Matsebula and Mantabeni *Bucopho* (Development Chairperson), Mr Malanga Mbetse to formerly express gratitude to the community members for having elected them into office, leading to

their appointment in October 2018. Prior to the 2018 elections, the Motshane Inkhundla comprised the *Imiphakatsi* (Royal Kraals) of:

- Mantabeni;
- Siphocconsini;
- Sigangeni;
- Luhlendlweni;
- Mpolonjeni;
- Kupheleni;
- Nduma.

During the 2018 electoral process, the Motshane Inkhundla was divided into two separate Tinkhundla of Motshane and Siphocosini. These Tinkhundla now comprise the following *Imiphakatsi*:

Motshane Inkhundla	Siphocosini Inkhundla
<ul style="list-style-type: none"> • Mpolonjeni; • Kupheleni; • Nduma. 	<ul style="list-style-type: none"> • Mantabeni; • Siphocconsini; • Sigangeni; • Luhlendlweni;

WSP Environmental (Pty) Ltd (WSP) had been invited by the Mantabeni Inner Council to present a brief description of the proposed Nondvo Dam to the community. WSP was one of numerous guest speakers invited to speak during the extra-ordinary community meeting.

WSP introduced themselves as the Environmental Consultant and also stated that the project proponent is the Government of the Kingdom of Eswatini. The implementing agency of the project is the Ministry of Natural Resource & Energy and the project is coordinated by the Department of Water Affairs (DWA), whose responsibility is the development and management of water resources infrastructure.

2. Project Overview

2.1 Project site

The objective of the project is to improve water security along the Mbabane – Manzini corridor through the proposed construction of a new dam approximately 7km south of the existing Lumphohlo Dam. The proposed dam will harvest surface flows along the Lusushwana River and its tributary, the Nondvo River. The proposed site was identified by the intergovernmental study amongst Eswatini, South Africa and Mozambique. A map was presented, illustrating the proposed location of Nondvo Dam.

3. ESIA Process

3.1 Purpose of the ESIA process

The purpose of the ESIA Process is to ensure that the potential positive and adverse environmental and social impacts of the project are identified and evaluated prior to finalising designs. The identified impacts will also be used in developing measures for mitigating potential adverse impacts and enhancing positive impacts.

3.2 Method of Biophysical Impact Assessment

WSP will:

- deploy various teams of specialists to undertake baseline biophysical studies comprising water quality, flora and fauna;
- undertake the baseline biophysical studies primarily along the two watercourses (Lusushwana River and Nondvo River) immediately downstream of Lumphohlo dam;
- undertake the biophysical studies by observing the current state of the biophysical elements and predict the potential impacts of the project on

those elements. Water quality will be determined by collecting samples for laboratory analysis.

3.3 Method of Social Impact Assessment

WSP will:

- identify those homesteads and social amenities, such as schools, which are likely to be affected in terms of relocation. Other aspects include identifying the existing social amenities in the community, their condition as well as accessibility to those amenities in terms of distance;
- collect socio-economic data of homesteads by visiting each of the identified homesteads likely to be affected by the project to conduct interviews with residents.

4. Closing

4.1 Inner Council's closing remarks

The Inner Council expressed support for the project and explained to the community that all speeches and presentations during this extra-ordinary community meeting were limited to 10 minutes therefore queries and shall be reserved for the regular community meetings.

Note: while the duration of the presentation of the project was 10-15 minutes, the overall community meeting commenced at 10:30hrs and ended at 15:00hrs due to the numerous presentations and speeches which covered a wide range of community development topics, such as community-based enterprises, the proposed Nondvo Dam, crime prevention awareness and community administration.

Record of meeting proceedings prepared by:


Mbuso Kingsley



Venue/ Indzawo: MANTABENI
Date/ Lusuku: 23/02/2019

Luhla lwalabo lebebakhona emhlanganweni welucwaningo lwemvelo nenhlalakahle

NAME/ LIBITO	ORGANIZATION/ COMMUNITY INHLANGANO/ SIFUNDZA/ SIGODZI	DESIGNATION/ SIKHUNDLA/ SIGABA EMMANGWENI	CONTACT NUMBER/ INOMBOLO YELUCINGO	EMAIL/ LIKHELI LEKUCHUMANA NGA NGCONDVOMSHINI	SIGNATURE/ SAYINA LAPHA
LOUIS MAZIYA	WSP/ MMA	LOCAL ENVIRONMENTAL SUPPORT (STAKE HOLDER)	7623186	louismazy@gmail.com	
Embsi MANKHA	MANTABENI UMPHAKATSI	BANDLANCANE	76176784		
ULAKATI BAUID	MANTABENI UMPHAKATSI	BANDLANCANE	78059371		
Dlamini MATHEWU	UMPHAKATSI	BANDLANCANE	78467143		
Vusienkambili	UMPHAKATSI	PASTAR	78528101		
Kurere MR MJULUKO	MANTABENI UMPHAKATSI	BANDLANCANE	76318049		
Bhekie HATSHWAYO	MANTABENI UMPHAKATSI	BANDLANCANE	76056356		
ANTONY MLOTSHA	COMMUNITY POLICE	COMMUNITY POLICE	76897095		
Samuel Nangwa	MANTABENI UMPHAKATSI	BANDLANCANE	76171042		
BG Nhlalatsi	MANTABENI UMPHAKATSI	BANDLANCANE	76264419		
MB ZWANA	MANTABENI	BANDLANCANE	7607402		

Venue/ Indzawo: MANTABENI
Date/ Lusuku: 23/02/19

Luhla lwalabo lebebakhona emhlanganweni welucwaningo lwemvelo nenhlalakahle

NAME/ LIBITO	ORGANIZATION/ COMMUNITY INHLANGANO/ SIFUNDZA/ SIGODZI	DESIGNATION/ SIKHUNDLA/ SIGABA EMMANGWENI	CONTACT NUMBER/ INOMBOLO YELUCINGO	EMAIL/ LIKHELI LEKUCHUMANA NGA NGCONDVOMSHINI	SIGNATURE/ SAYINA LAPHA
Michael Mabe	Mantabeni Community	Community Member	7604-1609	mbatemmegined	
Mtombifuthi Masilek	Mantabeni Umphakatsi	Bandlancane	76088289		
Mwatase Mwabatsi	Mantabeni Umphakatsi	Bandlancane	76796162		
Thalitha	MaBuzamndzibela	Bandlancane	76399807		
Mkumane	Mantabeni	Umsungphe	76540615		
Luchie Japulos	Mantabeni	Bandlancane	76267266		
Celani Hophe	Mantabeni	Bandlancane	76785189		
Gcinqwazi Mawabatsi	SIPHOCOSINI INKHUNDLA	INDJUMA YINKHUNDLA	76119525		
Mansuzi Dumi	MANTABENI	COMMUNITY CHAIR	76020858		
Makanga Mbeze	MANTABENI	PUCOPHO	76276835		



Venue/ Indzawo: MANTABENI
Date/ Lusuku: 23/02/2019

Luhla lwalabo lebebakhona emhlanganweni welucwaningo lwemvelo nenhlalakahle

NAME/ LIBITO	ORGANIZATION/ COMMUNITY INHLANGANO/ SIFUNDZA/ SIGODZI	DESIGNATION/ SIKHUNDLA/ SIGABA EMMANGWENI	CONTACT NUMBER/ INOMBOLO YELUCINGO	EMAIL/ LIKHELI LEKUCHUMANA NGA NGCONDVOMSHINI	SIGNATURE/ SAYINA LAPHA
MBUSO KINGSLEY	WSP / MMA	LOCAL ENVIRONMENTAL SUPPORT	7653 0306	Mbuso@mapitch.org	
Cindzi Samkelwa	Mantabeni resident	COMMUNITY MEMBER			
CINDZI LUCKY	Mantabeni Resident	COMMUNITY MEMBER	7636 0310	Cindzi@gmail.com	
MATKAMBI ALBACAM	MANTABENI Resident	Community Member	76192350		
Mthini Motsa	Mantabeni Resident	Community Member	76752907		
JESTA MBETSE	MANTABENI	COMMUNITY MEMBER			
ROSE DLAMINI	MANTABENI	COMMUNITY MEMBER			
Sibongile Ulokoti	Mantabeni	Community Member	76030318		
BUSISWE MOFOKA	Mantabeni	Community Member	766 55138		B Mefoka
Fortune Mkhwanji	Mantabeni	Community member	76857529		
Shelie	Mantabeni	Community member	7846247		



Venue/ Indzawo: MANTABENI
 Date/ Lusuku: 23/02/2019.

Luhla lwalabo lebebakhona emhlanganweni welucwaningo lwemvelo nenhlalakahle

NAME/ LIBITO	ORGANIZATION/ COMMUNITY INHLANGANO/ SIFUNDZA/ SIGODZI	DESIGNATION/ SIKHUNDLA/ SIGABA EMMANGWENI	CONTACT NUMBER/ INOMBOLO YELUCINGO	EMAIL/ LIKHELI LEKUCHUMANA NGA NGCONDVOMSHINI	SIGNATURE/ SAYINA LAPHA
Cebisile Nudlu	Mantabeni	Community			C. Nudlu
Happy Naminu	Mantabeni	Community member			Naminu
Sbongile Lubhele	Mantabeni	community member			S. Lubhele
SIBUSISO D -	Mantabeni	COMMUNITY MEMBER			S. D.

APPENDIX

D SIPHOCOSINI MEETING 9 FEBRUARY 2019

MBABANE – MANZINI CORRIDOR (NONDVO) DAM ENVIRONMENTAL & SOCIAL IMPACT ASSESSMENT (ESIA)

RECORD OF MEETING WITH SIPHOCOSINI COMMUNITY

Project Number:	41101262		
Grant Number:	P-SZ-EAZ-001 /002 and P-SZ-EAO-002		
Contract Number:	MNRE/ DWA/ 002/ 2017-18		
Client:	Government of the Kingdom of Eswatini Ministry of Natural Resources & Energy Department of Water Affairs (DWA)		
Project Title:	Mbabane-Manzini Corridor (Nondvo) Dam Feasibility Study Environmental & Social Impact Assessment		
Consultant:	WSP Environmental (Pty) Ltd		
Meeting organized by:	WSP Environmental (Pty) Ltd		
Date:	09 th February 2019		
Time:	Start :	10:30hrs	End: 10:45hrs
Venue:	Siphocosini Umphakatsi Lomdzala (Old Royal Kraal)		
Objectives:	<ul style="list-style-type: none"> Sensitisation of Siphocosini Community on Project Objectives and Environmental & Social Impact Assessment (ESIA) process 		

ATTENDANCE:

	NAME	ORGANIZATION
1.	Mbuso Kingsley	WSP
2.	Louis Maziya	WSP
3.	Chief Jabhane Dlamini	Chief of Siphocosini
4.	Sikakadza Nicholas Matsebula	Indvuna (Headman) of Siphocosini
5.	William Masuku	Siphocosini Resident
6.	Mfanasibili Mchobokazi	Siphocosini Resident
7.	Mbongeni	Siphocosini Resident
8.	Maphindela Hlophe	Siphocosini Resident
9.	David Nyoni	Siphocosini Resident
10.	Leonard Langwenya	Siphocosini Resident
11.	Siboniso Nkambule	Siphocosini Resident
12.	Sibusiso Kunene	Siphocosini Resident
13.	Patrick M. Dlamini	Siphocosini Resident
14.	Mandla Lushaba	Siphocosini Resident
15.	Mandla Mdluli	Siphocosini Resident
16.	Aaron Dlamini	Siphocosini Resident
17.	Sibusiso Ngwenya	Siphocosini Resident

18.	Sabelo Ndwandwe	Siphocosini Resident
19.	Mpendulo Gwebu	Siphocosini Resident
20.	Christopher Nkosi	Siphocosini Resident
21.	Lucky M. Dube	Siphocosini Resident
22.	Patrick Mavimbela	Siphocosini Resident
23.	Themba Vilakati	Siphocosini Resident
24.	Robert Msibi	Siphocosini Resident
25.	Bongi Nkambule	Siphocosini Resident
26.	Bongani Dube	Siphocosini Resident
27.	Jeffrey Dlamini	Siphocosini Resident
28.	Fana Sihlongonyane	Siphocosini Resident
29.	Petros Mamba	Siphocosini Resident
30.	Mandlenkosi	Siphocosini Resident
31.	Sam D. Khumalo	Siphocosini Resident
31.	Colane	Siphocosini Resident
32.	Rejoyce	Siphocosini Resident
33.	Lindiwe Zikalala	Siphocosini Resident
34.	Ntombi Khumalo	Siphocosini Resident
35.	Ntombi Ginindza	Siphocosini Resident
36.	Anna Mbuyisa	Siphocosini Resident
37.	Xolile Dlamini	Siphocosini Resident
38.	Lovey Shongwe	Siphocosini Resident
39.	Xolile Shongwe	Siphocosini Resident
40.	Pearl Dlamini	Siphocosini Resident
41.	Zodwa Tfwala	Siphocosini Resident
42.	Khanyi Tfwala	Siphocosini Resident
43.	Make Gule	Siphocosini Resident
44.	Baganile Dlamini	Siphocosini Resident
45.	Make Mango-Mabuza	Siphocosini Resident
46.	Bongekile Nhlabatsi	Siphocosini Resident
47.	Make Maseko-Sipete	Siphocosini Resident
48.	Esabel Maseko	Siphocosini Resident
49.	Dudu Sibandze	Siphocosini Resident
50.	Prisca Dlamini	Siphocosini Resident
51.	Nokuthula Mahlalela	Siphocosini Resident
52.	Mduduzi Simelane	Siphocosini Resident
53.	Maphupho Mhlanga	Siphocosini Resident
54.	Reuben Dladla	Siphocosini Resident
55.	Sikelela Tsabedze	Siphocosini Resident
56.	Phinda Ndzinisa	Siphocosini Resident
57.	Robert S. Dlamini	Siphocosini Resident
58.	Boy Mabuza	Siphocosini Resident
59.	Banele Simelane	Siphocosini Resident
60.	Musa Mbuyisa	Siphocosini Resident
61.	Walter Dlamini	Siphocosini Resident
62.	Mbongwa Seyama	Siphocosini Resident

AGENDA

AGENDA ITEM	RESPONSIBILITY
1. Welcome and Introductions	Inner Council
2. Project Overview 2.1 Description of Project Objectives	WSP
3. ESIA Process 3.1 Purpose of ESIA process 3.2 Methodology of Biophysical Impact Assessment 3.3 Methodology of Social Impact Assessment	WSP WSP WSP
4. Closing 4.1 Words of appreciation to Community 4.2 Inner Council's closing remarks	WSP Inner Council

1. Welcome and introductions

The Siphocosini community meeting was a regular scheduled meeting which is held on Saturdays. The meetings are convened and chaired by the Inner Council, upon authorisation and instruction from the Chief. The programme director is the *Indvuna* (Headman).

WSP Environmental (Pty) Ltd (WSP) had been invited by the *Indvuna* to make a brief presentation to the community on the proposed project which the community had previously been made aware of by the Inner Council at a previous meeting.

WSP introduced themselves as the Environmental Consultant and also stated that the project proponent is the Government of the Kingdom of Eswatini. The implementing agency of the project is the Ministry of Natural Resource & Energy and the project is coordinated by the Department of Water Affairs (DWA), whose responsibility is the development and management of water resources infrastructure.

2. Project Overview

2.1 Project site

The objective of the project is to improve water security along the Mbabane – Manzini corridor through the proposed construction of a new dam approximately 7km south of the existing Lumphohlo Dam. The proposed dam will harvest surface flows along the Lusushwana River and its tributary, the Nondvo River. The proposed site was identified by the intergovernmental study amongst Eswatini, South Africa and Mozambique. A map was presented, illustrating the proposed location of Nondvo Dam.

3. ESIA Process

3.1 Purpose of the ESIA process

The purpose of the ESIA Process is to ensure that the potential positive and adverse environmental and social impacts of the project are identified and evaluated prior to finalising designs. The identified impacts will also be used in developing measures for mitigating potential adverse impacts and enhancing positive impacts.

3.2 Method of Biophysical Impact Assessment

WSP will:

- deploy various teams of specialists commencing in the week of 11th February 2019 to undertake baseline biophysical studies comprising water quality, flora and fauna;
- undertake the baseline biophysical studies primarily along the two watercourses (Lusushwana River and Nondvo River) immediately downstream of Lumphohlo dam;

- undertake the biophysical studies by observing the current state of the biophysical elements and predict the potential impacts of the project on those elements. Water quality will be determined by collecting samples for laboratory analysis.

3.3 Method of Social Impact Assessment

WSP will:

- identify those homesteads and social amenities, such as schools, which are likely to be affected in terms of relocation. Other aspects include identifying the existing social amenities in the community, their condition as well as accessibility to those amenities in terms of distance;
- collect socio-economic data of homesteads by visiting each of the identified homesteads likely to be affected by the project to conduct interviews with residents.

4. Closing

4.1 Words of appreciation to Community

On behalf of the project proponent and the project team, WSP expressed appreciation to the Inner Council and community for the opportunity of briefly presenting the project.

4.2 Inner Council's closing remarks

The *Indvuna* expressed appreciation for the presentation and explained to the community that the opportunity for questions and answers will be provided in subsequent community meetings. The *Indvuna* notified the community that the Inner Council will identify and appoint community representatives to accompany the specialists throughout the biophysical and socio-economic studies.

Following the *Indvuna's* concluding remarks on the topic of the project, the community meeting proceeded with the regular agenda items.

Record of meeting proceedings prepared by:



Mbuso Kingsley

Venue/ Indzawo: SIPHOCOSINIDate/ Lusuku: 09 FEB 2019

Luhla lwalabo lebebakhona emhlanganweni welucwaningo lwemvelo nenhlalakahle

NAME/ LIBITO	ORGANIZATION/ COMMUNITY INHLANGANO/ SIFUNDZA/ SIGODZI	DESIGNATION/ SIKHUNDLA/ SIGABA EMMANGWENI	CONTACT NUMBER/ INOMBOLO YELUCINGO	EMAIL/ LIKHELI LEKUCHUMANA NGA NGCONDVOMSHINI	SIGNATURE/ SAYINA LAPHA
MBUSO KINGSLEY	WSP	LOCAL ENVIRONMENTAL SUPPORT	7653 03 06	mbuso@wsp.co.za	
William Masuku	SIPHOCOSINI	RESIDENT	76546055		
MFANASIBILI MCHOBDKAZI	SIPHOCOSINI	RESIDENT	76454517		
MR Bongweni	SIPHOCOSINI	RESIDENT	76273451		
Maphindela Hlophe	SIPHOCOSINI	RESIDENT			
David Nyoni Laywenya	SIPHOCOSINI	RESIDENT			
Leonard	SIPHOCOSINI	RESIDENT			
Sibusiso NKhambule	SIPHOCOSINI	RESIDENT			
Sibusiso Kunene	SIPHOCOSINI	RESIDENT	76259368		
Patrick M. Dlamini	SIPHOCOSINI	RESIDENT	76278942		
Mandla Lushaba	SIPHOCOSINI	RESIDENT	76329815		



Mbabane - Manzini Corridor Dam (Nondvo Dam)
Environmental & Social Impact Assessment (ESIA)
Public Participation Meeting Attendance Register



Venue/ Indzawo: Siphocosini
Date/ Lusuku: 9 Feb

Luhla lwalabo lebebakhona emhlanganweni welucwaningo lwemvelo nenhlalakahle

NAME/ LIBITO	ORGANIZATION/ COMMUNITY INHLANGANO/ SIFUNDZA/ SIGODZI	DESIGNATION/ SIKHUNDLA/ SIGABA EMMANGWENI	CONTACT NUMBER/ INOMBOLO YELUCINGO	EMAIL/ LIKHELI LEKUCHUMANA NGA NGCONDVOMSHINI	SIGNATURE/ SAYINA LAPHA
Mandlankhe	SIPHOCOSINI	RESIDENT	76972194		
Arca Dlamini	SIPHOCOSINI	RESIDENT	76916945		
Sibusiso ngwenya	SIPHOCOSINI	RESIDENT	76134566		
Sabelo Mdwaandwe	SIPHOCOSINI	RESIDENT	78050417		
Mpendulo Gwebu	SIPHOCOSINI	RESIDENT	76228630		
CHRISTOPHER NKOSI	SIPHOCOSINI	RESIDENT	76072641		



Mbabane - Manzini Corridor Dam (Nondvo Dam)
Environmental & Social Impact Assessment (ESIA)
Public Participation Meeting Attendance Register

MMA
si phulojin

Venue/ Indzawo:

Date/ Lusuku:

Luhla lwalabo lebebakhona emhlanganweni welucwaningo lwemvelo nenhlahakahle

9 Feb

NAME/ LIBITO	ORGANIZATION/ COMMUNITY INHLANGANO/ SIFUNDZA/ SIGODZI	DESIGNATION/ SIKHUNDLA/ SIGABA EMMANGWENI	CONTACT NUMBER/ INOMBOLO YELUCINGO	EMAIL/ LIKHELI LEKUCHUMANA NGA NGCONDVOMSHINI	SIGNATURE/ SAYINA LAPHA
Lucky M Dube	SIPHOCOSINI	RESIDENT	76327966		
PATRICK MAVIMBELA	SIPHOCOSINI	RESIDENT	76280834		
Themba Vilakali	SIPHOCOSINI	RESIDENT	76907554		
ROBERT MSIRI	SIPHOCOSINI	RESIDENT	76645917		
Rengi Nkumbi BONGANI DUBE	SIPHOCOSINI	RESIDENT	76325595		
JEFFREY DLAMINI	SIPHOCOSINI	RESIDENT	76375818		
FANA	SIPHOCOSINI	RESIDENT	76487560		
Siphongyan PETROS MAMBA	SIPHOCOSINI	RESIDENT	76459156		
	SIPHOCOSINI SIPHOSINI	RESIDENT	76244403		
Mandlenkosi	SIPHOCOSINI	RESIDENT	76245259		
Saw D. Fhambale	SIPHOCOSINI	RESIDENT	76117455		



Mbabane - Manzini Corridor Dam (Nondvo Dam)
Environmental & Social Impact Assessment (ESIA)
Public Participation Meeting Attendance Register



Venue/ Indzawo: Siphosini
Date/ Lusuku: 9 Feb 2019

Luhla lwalabo lebebakhona emhlanganweni welucwaningo lwemvelo nenhlalakahle

NAME/ LIBITO	ORGANIZATION/ COMMUNITY INHLANGANO/ SIFUNDZA/ SIGODZI	DESIGNATION/ SIKHUNDLA/ SIGABA EMMANGWENI	CONTACT NUMBER/ INOMBOLO YELUCINGO	EMAIL/ LIKHELI LEKUCHUMANA NGA NGCONDVOMSHINI	SIGNATURE/ SAYINA LAPHA
Colane		- Khanyi Tfwala			
Rejace		- Maki Gube			
Lindiwe	Zikalala	- Bagwile Blami			
NTombi	khumalo	- Maki Mingo - Mabaza			
NTombi	Gimindza	- Bongekile Nwabafsi			
Anna	mbuyisi	- Maki Masiko - Siphe			
Xolile	Dlamini	- Esabel Masoko			
LOVEY	Shongwe	- Gudo Sibandze			
Xolile	Shongwe	- Precia Blami			
Pearl Hamini		- Nokuthola Mahlabela			
Zodwa Tfwala					

SIPHOSINI RESIDENTS

SIPHOSINI RESIDENTS

Venue/ Indzawo: Siphocosi
Date/ Lusuku: 9 Feb 2019

Luhla lwalabo lebebhakona emhlanganweni welucwaningo lwemvelo nenhlalakahle

NAME/ LIBITO	ORGANIZATION/ COMMUNITY INHLANGANO/ SIFUNDZA/ SIGODZI	DESIGNATION/ SIKHUNDLA/ SIGABA EMMANGWENI	CONTACT NUMBER/ INOMBOLO YELUCINGO	EMAIL/ LIKHELI LEKUCHUMANA NGA NGCONDVOMSHINI	SIGNATURE/ SAYINA LAPHA
Mludizi Simelane	SIPHOCOSINI	RESIDENT	769393 18		
Mhlanga Maphapha	SIPHOCOSINI	RESIDENT	76517748		
Dlaolla Rueben	SIPHOCOSINI	RESIDENT	76579583		
Sikelela Tsabedzo	SIPHOCOSINI	RESIDENT	70342307	ptahryunou90@gmail.com	
Pwinda Ndzimisa	SIPHOCOSINI	RESIDENT	78414746		
Rusere .s Dlamini	SIPHOCOSINI	RESIDENT	76295959		
Boy Masuza	SIPHOCOSINI	RESIDENT	76768065		
Dand e Simelane	SIPHOCOSINI	RESIDENT	76787320		
Musa Mbuyisa	SIPHOCOSINI	RESIDENT	76733051		
Walter Mairi	SIPHOCOSINI	RESIDENT	76040037		
Mbonanga Seyama	SIPHOCOSINI	RESIDENT	76471577		

APPENDIX

E SIPHOCOSINI
MEETING 13
FEBRUARY 2019

MBABANE – MANZINI CORRIDOR (NONDVO) DAM ENVIRONMENTAL & SOCIAL IMPACT ASSESSMENT (ESIA)

RECORD OF MEETING WITH SIPHOCOSINI INNER COUNCIL

Project Number:	41101262		
Grant Number:	P-SZ-EAZ-001 /002 and P-SZ-EAO-002		
Contract Number:	MNRE/ DWA/ 002/ 2017-18		
Client:	Government of the Kingdom of Eswatini Ministry of Natural Resources & Energy Department of Water Affairs (DWA)		
Project Title:	Mbabane-Manzini Corridor (Nondvo) Dam Feasibility Study Environmental & Social Impact Assessment		
Consultant:	WSP Environmental (Pty) Ltd		
Meeting organized by:	WSP Environmental (Pty) Ltd		
Date:	13 th February 2019		
Time:	Start :	13:30hrs	End: 13:45hrs
Venue:	Siphocosini		
Objectives:	<ul style="list-style-type: none"> • Introducing the WSP Project Management Team to Siphocosini <i>Bandlancane</i> (Inner Council); • Notifying Siphocisini Inner Council of commencement of ESIA specialist studies. 		

ATTENDANCE:

	NAME	ORGANIZATION
1.	Sikakadza Nicholas Matsebula	Indvuna (Headman) of Siphocosini
2.	Sipho Mavimbela	Siphocosini Inner Council – Secretary
3.	Simon Msibi	Siphocosini Inner Council – Member
4.	Paul Kunene	Siphocosini Inner Council – Member (<i>Umsumphe/</i> Land Allocation and Boundary Committee)
5.	Nelson Dlamini	Siphocosini Inner Council – Member (Royal Household Representative)
6.	Alfred Nhlabatsi	Siphocosini Inner Council – Member
7.	Anri Scheepers	WSP – Environmentalist
8.	Robert Els	WSP – Environmentalist
9.	Zakariya Nakhlooda	WSP – Environmentalist
10.	Mbuso Kingsley	WSP – Local Environmental Support
11.	Louis Maziya	WSP – Stakeholder Engagement Liaison

AGENDA

AGENDA ITEM	RESPONSIBILITY
1. Welcome and Introductions	Inner Council/ WSP
2. ESIA Process 2.1 WSP Reconnaissance visit 2.2 Schedule of Specialist Studies	WSP WSP
3. Closing 3.1 Words of appreciation to Inner Council 3.2 Inner Council's closing remarks	WSP Inner Council

1. Welcome and introductions

WSP Environmental (Pty) Ltd (WSP) had requested a meeting for introducing the Project Management Team to Siphocosini *Bandlancane* (Inner Council). The Inner Council welcomed WSP to Siphocosini. WSP introduced themselves and each team member briefly described their role.

2. ESIA Process

2.1 WSP Reconnaissance visit

The Inner Council was informed that the purpose of the reconnaissance visit was to enable the project management team to familiarise themselves with the project site over the next two days as well as to collect water samples along the Lusushwana River. The specialist surveys will commence during the week of 18th February 2019, therefore familiarisation with the site will enable the project management team to coordinate the activities of the specialist teams.

2.2 Schedule of Specialist Studies

The specialist teams will comprise water quality, flora, fauna and a socio-economic study team. The first water quality samples will be collected along the

Lusushwana River during the reconnaissance visit and subsequent samples will be collected during the winter months. The fauna study team will commence during the week of 18th February 2019, followed by the flora team the week of 25th February 2019. The flora and fauna team are collectively referred to as the biodiversity team. The socio-economic study team will follow in due course, after the biodiversity team. In general the various teams will visit the project site at different times and in order to mitigate overwhelming the community, not all teams will be at the site simultaneously. The Inner Council will be notified when each team is on site and each team will make return visits during the winter months in order to collect baseline data under the conditions representative of each particular season.

3. Closing

3.1 Words of appreciation to the Inner Council

WSP expressed appreciation to the Inner Council for the opportunity of introducing the project management team and granting permission to proceed with the specialist studies at the project site.

3.2 Inner Council's closing remarks

The *Indvuna* expressed appreciation for the introductory meeting with the project management team and the Inner Council undertook to identify and assign a community representative to accompany the specialists while working within the community. The Inner Council further requested WSP to consider hiring labourers from within the community where appropriate, for example where the specialist teams require assistance in terms of manual labour in the course of conducting their studies. The project management team was granted permission to proceed with the reconnaissance visit of the project site.

Record of meeting proceedings prepared by:



Mbuso Kingsley

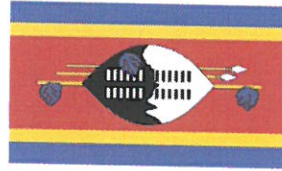


Luhla lwalabo lebebakhona emhlanganweni welucwaningo lwemvelo nenhlalakahle

NAME/ LIBITO	ORGANIZATION/ COMMUNITY INHLANGANO/ SIFUNDZA/ SIGODZI	DESIGNATION/ SIKHUNDLA/ SIGABA EMMANGWENI	CONTACT NUMBER/ INOMBOLO YELUCINGO	EMAIL/ LIKHELI LEKUCHUMANA NGA NGCONDVOMSHINI	SIGNATURE/ SAYINA LAPHA
Indvungu Skakadze Mafeni	Indvungu, Indvungu Self-governing council	Indvungu	76182950		
Sipho Mavimbela	Inner council	secretary	76218852		
Samison Mwenzi	Inner council	Member	76088726		
Paul Kuzeni	Ungumphel	secretary	76047447		
Nelson Dlamini	Umntshwanenkosi	Member			
Alfred Nhlalathi	Inner Council	member			
MBUSO KINGSLEY	WSP / MMA	LOCAL ENVIRONMENTAL SUPPORT	7653 0306	mbuso@mapitch.org	
Anri Scheepers	WSP	Environmentalist	+27827017690	Anri.Scheepers @wsp.com	
Robert Els	WSP	ENVIRONMENTALIST	+27725091000	robert.els@wsp.com	
ZAKARIYA NAKHODDA	WSP	Environmentalist	+27 83 6006489	ZAKARIYA.NAKHODDA @wsp.com	

APPENDIX

F REGIONAL ADMINISTRATOR ATTENDANCE REGISTERS



RECORD

QUALITY MANAGEMENT SYSTEM

REF NO. QMS-REC-ENV VI.0

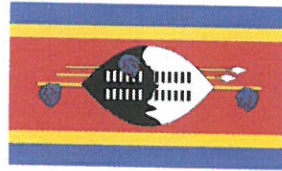
ATTENDANCE RECORD - MANZINI REGIONAL ADMINISTRATOR MEETING

Project Number: 41101262
Grant Number: P-SZ-EAZ-001/002 and P-SZ-EAO-002
Contract Number: MNRE/DWA/002/2017-18
Meeting Title: Mbabane-Manzini Dam Feasibility Study - Environment and Social Impact Assessment
Client: Government of the Kingdom of Swaziland, Ministry of Natural resources and Energy - Department of Water Affairs
Venue: Manzini Regional Administrator Offices
Date: 22 October 2018

Name	Company Name	Telephone No.	Email	Signature
Anri Scheepers	WSP	+27 11 3006081	Anri.Scheepers@wsp.com	
MBUSO KINGSLEY	WSP	+268 2404 3044	mbuso@mapmitch.org	
JOHN RAMEDEZ	R.A. OFFICE	+268 7604 4549	John.Ramedez@Gmail.com	
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Princece Masebula	R.A.	7606 4200		
Bongekile Masebula	DWA	76757024	bongekile.masebula@yahoo.com	



WSP



MMA

RECORD

QUALITY MANAGEMENT SYSTEM

REF NO. QMS-REC-ENW VI.0

ATTENDANCE RECORD - MANZINI REGIONAL ADMINISTRATOR MEETING

Project Number: 41101262
Grant Number: P-SZ-EAZ-001/002 and P-SZ-EAO-002
Contract Number: MNRE/DWA/002/2017-18
Meeting Title: Mbabane-Manzini Dam Feasibility Study - Environment and Social Impact Assessment
Client: Government of the Kingdom of Swaziland, Ministry of Natural resources and Energy - Department of Water Affairs
Venue: Manzini Regional Administrator Offices
Date: 22 October 2018

Name	Company Name	Telephone No.	Email	Signature
Sipito TALA	DWA	+ 268-24048032 + 268-76147260	Siphotoala@gmail.com	
Emelda Magagula	DWA	+ 268 24042929	emmapoledlamini@yahoo.com	

APPENDIX

G MANTABENI INNER COUNCIL MEETING 31 JULY 2019

MBABANE – MANZINI CORRIDOR (NONDVO) DAM ENVIRONMENTAL & SOCIAL IMPACT ASSESSMENT (ESIA)

RECORD OF MEETING WITH MANTABENI INNER COUNCIL

Project Number:	41101262		
Grant Number:	P-SZ-EAZ-001 /002 and P-SZ-EAO-002		
Contract Number:	MNRE/ DWA/ 002/ 2017-18		
Client:	Government of the Kingdom of Eswatini Ministry of Natural Resources & Energy Department of Water Affairs (DWA)		
Project Title:	Mbabane-Manzini Corridor (Nondvo) Dam Feasibility Study Environmental & Social Impact Assessment		
Consultant:	WSP Environmental (Pty) Ltd		
Meeting organized by:	WSP Environmental (Pty) Ltd		
Date:	31 st July 2019		
Time:	Start :	12:00hrs	End: 13:17hrs
Venue:	Mantabeni Royal Kraal (<i>Umphakatsi</i>)		
Objectives:	<ul style="list-style-type: none"> • Introducing the Socio-economic and Resettlement Action Plan Survey Team to Mantabeni <i>Bandlancane</i> (Inner Council). • Presenting the Socio-economic and Resettlement Action Plan Survey process to Mantabeni Inner Council. 		

ATTENDANCE:

	NAME	ORGANIZATION
1.	Ndlavela Mavimbela	Indvuna (Headman) of Mantabeni
2.	Sifiso Mdlovu	Chairperson
3.	Mandla Cindzi	Vice Chairperson
4.	Malanga Mbetse	<i>Bucpho</i> / Development Committee Chairperson
5.	Khetsemabala Nsingwane	<i>Umsumphe</i> / Land Allocation and Boundary Committee
6.	Freda Nkumane	<i>Umsumphe</i> / Land Allocation and Boundary Committee
7.	Finchie Lapidos	Inner Council Member
8.	Enock Shiba	Inner Council Member
9.	Muzi Khumalo	Inner Council Member
10.	Nelisiwe Motsa	Inner Council Member
11.	Thabitha Mndzebele-Maziya	Inner Council Member
12.	Celani Hlophe	Inner Council Member
13.	Mathew Dlamini	Inner Council Member
14.	Martha Dlamini	Inner Council Member
15.	Tengetile Mlangeni	Inner Council Member
16.	Thembisile Nhlabatsi	Inner Council Member

17.	Edgar Du Pont	Inner Council Member
18.	Vusi Mahlambi	Inner Council Member
19.	Daniel Saulus	Inner Council Member
20.	Samuel Ncongwane	Inner Council Member/ Project Community Representative
21.	Richard Ramoetsi	Si Futures – Resettlement Action Plan Specialist
22.	Phakisa Mokhesi	Si Futures – Data Specialist
23.	Dr Zodwa Dlamini	Si Futures – Environmental & Social Impact Assessment Specialist
24.	Hlasoa Matsoso	Si Futures – Surveyor
25.	Mamahlolonolo Mokhobo	Si Futures – Surveyor
26.	Keketso Mosebi	Si Futures – Surveyor
27.	Zaba Mdlovu	Si Futures – Enumerator
28.	Nokwanda Shongwe	Si Futures – Enumerator
29.	Blessing Masuku	Si Futures – Enumerator
30.	Siphesihle Tsabedze	Si Futures – Enumerator
31.	Babili Magagula	Si Futures – Enumerator
32.	Mcebo Mabaso	Si Futures – Enumerator
33.	Tebenguni Simelane	Si Futures – Enumerator
34.	Welile Maphalala	Si Futures – Enumerator
35.	Charity Lapidos	Si Futures – Enumerator
36.	Sandziso Mthupha	Si Futures – Enumerator
37.	Sambulo Zwane	Si Futures – Enumerator
38.	Mbuso Kingsley	WSP – Local Environmental Support
39.	Temusa Zwane	WSP – Local Environmental Support

AGENDA

AGENDA ITEM	RESPONSIBILITY
1. Welcome and Introductions	Inner Council/ WSP
2. Socio-economic and RAP Survey Process 2.1 Description of RAP Survey 2.2 Description of Socio-economic Survey	Si Futures
3. Closing 3.1 Words of appreciation to Inner Council 3.2 Inner Council’s closing remarks	Si Futures Inner Council

1. Welcome and introductions

WSP Environmental (Pty) Ltd (WSP) had requested a meeting for introducing the Socio-economic and Resettlement Action Plan (RAP) Survey Team to Mantabeni *Bandlancane* (Inner Council). The Inner Council welcomed the Survey Team to Mantabeni.

Mr Samuel Ncongwane, a member of the community and Inner Council, was presented as having been appointed by the Inner Council to be the Community Representative who will accompany and assist the Survey Team with local knowledge pertaining to the community.

Mbuso Kingsley introduced the Survey Team and described their respective roles:

- Mr Richard Ramoeletsi, Resettlement Action Plan Specialist and Team Leader;
- Dr Zodwa Dlamini, Environmental & Social Impact Assessment Specialist, Socio-economic Survey Team Leader;
- Mr Phakisa Mokhesi, Data Specialist, Fixed Assets Data Collection and Land Survey Team Leader
- Fixed Assets Data Collection and Land Survey Team comprising:
 - a) Hlasoa Matsoso;
 - b) Mamahlolonolo Mokhobo;
 - c) Keketso Mosebi.
- A total of 11 enumerators, identifiable by high visibility yellow vests with name tags, who will be divided into two groups:
 - i) Socio-economic Survey Team;
 - ii) Resettlement Action Plan (RAP) Team.

The Inner Council requested the Enumerators to introduce themselves individually.

2. Socio-economic and RAP Survey Process

2.1 Description of RAP Survey

Mr Ramoeletsi explained that the purpose of the survey is to work with the community in identifying the properties that will be affected by the proposed dam. The properties are those that are along and below the buffer contour line. This therefore includes those properties within the buffer zone and the inundation area.

2.1.1 Identification of fixed assets

The Survey Team will work with respective property owners in identifying and recording:

- a) Houses;
- b) Structures;
- c) Fields;
- d) Trees;
- e) Kraals;
- f) Chicken coops;
- g) Any and all other fixed assets belonging to each respective homestead.

It is anticipated that in some cases certain fixed assets within the homestead will be above the buffer contour and other fixed assets will be below the buffer contour. For example, the houses may be above the buffer while the fields are below the buffer contour. In such cases only the affected fields and other affected non residential fixed assets will be identified, measured and recorded. Such identification, measurement and recording will be undertaken in the presence of the homestead head or authorised representative/s.

Similarly, the fixed assets of community facilities and amenities, such as schools, churches, clinics, shops, recreational areas, communal fields, are likely to be affected, therefore the representatives of such facilities will need to be present during identification, measuring and recording of their respective affected fixed assets.

2.1.2 Identification of cemeteries and graves

Where there are cemeteries, those homesteads which will be affected, i.e. those below the buffer contour, will be required to identify each respective grave which belongs to the homestead and is located within the cemetery, even if the cemetery is above the buffer contour. This will enable each respective grave to be exhumed, relocated and re-buried in accordance with cultural practices, thereby ensuring that the homestead's graves are not left behind during the resettlement process.

Where graves are not in a cemetery, but are in isolated locations below the buffer contour, it will be necessary for family members to point out or, if uncertain, consult with family elders to assist the family members in pointing out the locations of such graves so that they are not inadvertently inundated. It will otherwise be impractical to exhume graves which are remembered after they have been inundated.

The identification of graves includes stillborns, who due to particular cultural burial practices, may not have marked graves and are not buried at the cemetery, but at a designated location within the homestead. Family members will be required to point out or, if uncertain, consult with family elders to assist the family members in pointing out the locations of the graves of stillborns. This is to enable the graves of stillborns to also be relocated.

2.1.3 Identification of communal grazing areas

It will be necessary to identify, measure and record communal grazing areas.

2.1.4 Request for support from traditional authorities

Mr Ramoeletsi kindly requested the support of the Chief, *Indvuna* and Inner Council in being sensitive towards the affected homesteads since they will be affected not only materially by having to resettle, but also emotionally and psychologically by the anxiety of knowing that resettlement is imminent. The traditional authorities are therefore kindly requested to assist the Project Team by pleading for the cooperation of the affected homesteads throughout the data collection of the Socio-economic and RAP Survey.

The Inner Council was further requested to refrain from using the survey as an opportunity to victimise affected homesteads who may have committed transgressions against the traditional authorities in the past. An example of victimisation was cited as deliberately and/ or maliciously causing an affected homestead to be excluded from the survey such that the homestead is denied compensation that is rightfully deserved.

2.1.5 Data collection process

The Surveyors together with a team of Enumerators will visit each affected homestead. The homestead representative will identify each fixed asset. The Surveyors and Enumerators will measure and record each fixed asset. Recording will include taking a photograph of the fixed asset with the homestead head or authorised representative standing beside the asset. For each homestead, the photographs of the fixed

assets and a map of the measured assets will be printed onto a form containing the details of the homestead head and spouse. For each community facility, the photographs of the fixed assets and a map of the measured assets will be printed onto a form containing the details of the authorised custodian.

Each homestead will be required to produce the Identity (I.D.) card of the homestead head when data of the homestead is collected. Where either spouse at the homestead is deceased, then a death certificate will be required. Where a homestead has been allocated land to settle in the community, but no construction has commenced, then *Umphakatsi* through the Project Community Representative will be required to bring such a homestead to the attention of the Survey Team.

2.1.6 Data verification

The printed form will be presented to the homestead head for verification of the captured assets. The homestead head may designate the spouse, or other representative authorised by the homestead head to verify the contents of the printed form. Where the homestead head or authorised representative is satisfied that the data on the form has been captured correctly, then the homestead head or authorised representative will sign acknowledgement that the data was captured correctly as at the date of the survey. The form will then be signed by the Royal Kraal (*Umphakatsi*) witnessing that the homestead head or authorised representative is satisfied with the correctness of the data. On behalf of the Consultant, the RAP Specialist will then sign as witness that the affected homestead head and *Umphakatsi* have acknowledged the correctness of the data. Finally, the Department of Water Affairs (DWA) will sign on behalf of the Ministry of Natural Resources & Energy, acknowledging that all the aforementioned persons are satisfied with the correctness of the data. The signature of DWA will also serve as

acknowledgement on behalf of the Government that the affected homestead qualifies for compensation and inclusion in the Resettlement process.

Where the homestead head identifies discrepancies or incorrectly captured data, the homestead head will instruct the Survey Team to correct such data prior to signing acceptance of the data captured on the form. Thereafter the amended form, signed by the homestead head, will proceed up the levels of authority for counter signature.

2.2 Description of Socio-economic Survey

The Socio-economic Survey will identify the baseline social and economic characteristics of the affected homesteads and community. The overall objective is to determine the existing social and economic condition of the affected homesteads and community in order to ensure that changes arising from project activities, including resettlement and relocation, do not leave the affected homesteads and community worse off.

2.2.1 Community facilities and amenities

The availability and accessibility of community facilities such as schools, health care centres, water sources, public roads, will be recorded through interviewing affected homesteads and any other relevant stakeholders within the community.

The availability and accessibility of community facilities in the receiving community, to which affected homesteads will be resettled, will also be taken into consideration to ensure that the demand placed upon such resources is not exceeded to the detriment of the wellbeing of the both the receiving community and the resettled families.

2.2.2 Identification of employment opportunities likely to arise during project implementation

Data will be collected through interviews to determine existing skills that are available within the affected community in order to determine the prioritisation of appropriate employment opportunities for members of the community. For example, some members of the community may have qualifications and training in certain vocations, such as construction, catering, driving and many others which are likely to be required during project implementation.

2.2.3 Natural resources of cultural and economic value

Natural resources of cultural and economic value such as various species of grasses which grow on communal land and are harvested for making mats, hats, constructing structures within homesteads etc, will be identified measured and recorded. This will support the description and determination of existing sources of cultural and economic livelihood within the affected community.

3. Discussion

The members of the Inner Council were provided the platform to submit comments, suggestions and queries to the Socio-economic and RAP Survey Team.

3.1 Extended families

3.1.1 Absent and deceased homestead heads

A query was raised on how homesteads with absent or deceased homestead heads as well as child headed homesteads will be surveyed, i.e. who will be recognised as the homestead head in such cases?

Response: the designated living homestead head, whether designated by extended family elders or other form of documented proof, will be recorded as the homestead head. Additional written confirmation by Umphakatsi will be required certifying the designated person, who is the next of kin to the deceased, as the homestead head.

3.1.2 Multiple homesteads per individual

A query was raised as to how multiple homesteads headed by an individual will be dealt with. For example, where a homestead head has one homestead which is affected and another homestead within the same community which is not affected, will the homestead head be compensated for the affected homestead or required to move to the unaffected homestead, and thereby be deemed as not qualifying for compensation?

Response: the specific affected fixed asset, whether it be on or more fields or a homestead, will be compensated, irrespective of how many

other homesteads in the community headed by an individual are not affected.

3.2 Annual cultivation programmes

3.2.1 Annual cultivation programmes of affected homesteads

A query was raised as to whether or not affected homesteads should continue with their annual cultivation programmes at the being of the rainy season, since they will be resettled.

Response: annual cultivation programmes shall proceed as normal until such time that the Government issues an instruction to affected homesteads to stop cultivation beyond a date to be appointed. The same shall apply to establishment of new homesteads and construction of structures within existing homesteads.

3.3 Benefit of project to the affected community

3.3.1 Socio-economic benefits of proposed dam to affected community

A query was raised as to whether or not the affected community, i.e. the host community of the dam will benefit from the project during the operation phase. The query was raised in light of the adjacent existing Lumphohlo Dam not having directly benefitted the host community, yet homesteads were relocated to provide space for the dam.

Response: while the purpose of the proposed dam is to meet the future water needs along the Mbabane-Manzini corridor, the water needs of the host community will also be taken into consideration, therefore the directly affected community will benefit.

3.4 Proposed dam site

3.4.1 Detailed map of proposed dam

A detailed map of the final proposed dam site was requested in order to provide clarity to the community on the respective locations of the directly affected homesteads.

Response: a map will be issued to the Inner Council by the Survey Team, indicating the buffer contour and the inundation area. During the meeting, several map slides were presented.

3.5 Impacts of sourcing of construction material on agriculture

3.5.1 Impacts of construction activities on subsistence agriculture

A concern was raised that while it is acknowledged that community residents are permitted to continue with their respective annual cultivation programmes until a cut-off date is announced, the real impacts on agriculture emerge during construction. This is when construction material such as gravel and sand are sourced from nearby sites which at times may require borrowing material from arable land, resulting in food insecurity amongst the remaining homesteads. Therefore, even if borrow sites are identified in advance, the actual yields are sometimes lower than initially estimated, resulting in resorting to borrowing material from arable land.

Response: the social impact assessment report will include recommendations for mitigating potential adverse impacts on subsistence agriculture. This will include recommendations on timely compensation to those who will be affected by loss of arable land.

4. Closing

4.1 Words of appreciation to the Inner Council

The Socio-economic and RAP Survey Team expressed gratitude to the Inner Council for the opportunity of presenting the survey process and granting permission to proceed with the survey.

4.2 Inner Council's closing remarks

The *Indvuna* expressed appreciation for the introductory meeting with the Socio-economic and RAP Survey Team. The *Indvuna* emphasized that through the survey the Environmental and Social Impact Assessment commenced in earnest since the social impacts are the most sensitive aspect of the project. He further highlighted that some aspects of resettlement and compensation may present challenges to the Government, however that is beyond the scope of the consultants whose role is to present facts and recommendations upon which the Government will need to make decisions.

The Survey Team was invited to present the survey process to the Community Meeting which is scheduled for 17th August 2019. In the meantime the survey is permitted to proceed amongst the affected homesteads and the Inner Council will support the Survey Team through promoting the community's cooperation with the survey.

Record of meeting proceedings prepared by:


Mbuso Kingsley

APPENDIX

H MANTABENI COMMUNITY MEETING 17 AUGUST 2019

MBABANE – MANZINI CORRIDOR (NONDVO) DAM ENVIRONMENTAL & SOCIAL IMPACT ASSESSMENT (ESIA)

RECORD OF MEETING WITH MANTABENI COMMUNITY

Project Number:	41101262		
Grant Number:	P-SZ-EAZ-001 /002 and P-SZ-EAO-002		
Contract Number:	MNRE/ DWA/ 002/ 2017-18		
Client:	Government of the Kingdom of Eswatini Ministry of Natural Resources & Energy Department of Water Affairs (DWA)		
Project Title:	Mbabane-Manzini Corridor (Nondvo) Dam Feasibility Study Environmental & Social Impact Assessment		
Consultant:	WSP Environmental (Pty) Ltd		
Meeting organized by:	WSP Environmental (Pty) Ltd		
Date:	17 th August 2019		
Time:	Start :	10:50hrs	End: 13:50hrs
Venue:	Mantabeni		
Objectives:	<ul style="list-style-type: none"> • Introducing the Socio-economic and Resettlement Action Plan Survey Team to Mantabeni Community. • Presenting the Socio-economic and Resettlement Action Plan Survey process to Mantabeni Community. 		

ATTENDANCE:

	NAME	ORGANIZATION/ DESIGNATION
1.	Ndlavela Mavimbela	Indvuna (Headman) of Mantabeni
2.	Sifiso Mdllovu	Chairperson
3.	Mandla Cindzi	Vice Chairperson
4.	Malanga Mbetse	<i>Bucpho</i> / Development Committee Chairperson
5.	Freda Nkumane	<i>Umsumphe</i> / Land Allocation and Boundary Committee
6.	Finchie Lapidos	Inner Council Member
7.	Thabitha Mndzebele-Maziya	Inner Council Member
8.	Celani Hlophe	Inner Council Member
9.	Martha Dlamini	Inner Council Member
10.	Tengetile Mlangeni	Inner Council Member
11.	Thembisile Nhlabatsi	Inner Council Member
12.	Edgar Du Pont	Inner Council Member
13.	Vusi Mahlambi	Inner Council Member
14.	Daniel Saulus	Inner Council Member
15.	Eric Nxumalo	Inner Council Member
16.	Mboneleli Xaba	Inner Council Member

17.	Ciniso Mlangeni	Inner Council Member
18.	Monica Nhlabatsi	Inner Council Member
19.	Vusi Mahlambi	Inner Council Member
20.	Johannes Hlophe	Inner Council Member
21.	Tebesutfu Nkambule	Community Member
22.	Thubelihle Mabaso	Community Member
23.	Lihle Sibandze	Community Member
24.	Sikhulile Motsa	Community Member
25.	Mbali Lokotfwako	Community Member
26.	Senamile Mamba	Community Member
27.	Yolanda Lokotfwako	Community Member
28.	Phephile Sihlongonyane	Community Member
29.	N. Sibiya	Community Member
30.	Nkosing'phile Tfwala	Community Member
31.	Silindile Shongwe	Community Member
32.	Beketele Simelane	Community Member
33.	Siyabonga Motsa	Community Member
34.	Sibonelo Khumalo	Community Member
35.	Sakhile Maseko	Community Member
36.	Nonsikelelo Maziya	Community Member
37.	Rebecca Kubheka	Community Member
38.	Precious Mngometulu	Community Member
39.	Nkosing'phile Sibandze	Community Member
40.	Nkosinathi Mbetse	Community Member
41.	Gcebile Dlamini	Community Member
42.	Richard Mnisi	Community Member
43.	Millicent Ndzimandze	Community Member
44.	Graham Ngwenya	Community Member
45.	Xolile Cindzi	Community Member
46.	Zanele Zikalala	Community Member
47.	Nosipho Mbhamali	Community Member
48.	Nontobeko Mthethwa	Community Member
49.	Nokuthula Zwane	Community Member
50.	Lindiwe Mabuza	Community Member
51.	Phumzile Mavimbela	Community Member
52.	Lomthandzo Mazibuko	Community Member
53.	Lettah Mnisi	Community Member
54.	Bongi Moyane	Community Member
55.	Rose Simelane	Community Member
56.	Dumisani Simelane	Community Member
57.	Alfred Cindzi	Community Member
58.	Clement Motsa	Community Member
59.	Ephraim Motsa	Community Member
60.	Mfanufikile Shabangu	Community Member
61.	Luke Dlamini	Community Member
62.	Albert Dlamini	Community Member
63.	Dumisani Khoza	Community Member
64.	Johannes Mbetse	Community Member
65.	Nhlanhla Mamba	Community Member
66.	Mncedisi Dlamini	Community Member
67.	Mgaco Dlamini	Community Member
68.	Mandla Mdluli	Community Member
69.	Isaac Zambane	Community Member
70.	David Vilakati	Community Member
71.	Simon Mbetse	Community Member
72.	Joseph Hlophe	Community Member
73.	Mdwidwi Mbetse	Community Member
74.	Samuel Mbetse	Community Member
75.	Prince Sicelo	Community Member
76.	Sabelo Motsa	Community Member
77.	Jahasibili Ndzingane	Community Member
78.	Isaiah Nkambule	Community Member
79.	Nkosinathi Simelane	Community Member
80.	Mavisha Shongwe	Community Member
81.	Nkosinathi Shongwe	Community Member
82.	Sifiso Sibandze	Community Member
83.	Mvikeli Nhlabatsi	Community Member
84.	Isaac Dlamini	Community Member
85.	Duma Mamba	Community Member

86.	Nkosingiphile Lokotfwako	Community Member
87.	Maswazi Lokotfwako	Community Member
88.	Mbhekeni Mahlambi	Community Member
89.	Daniel Mamba	Community Member
90.	Vusi Motsa	Community Member
91.	Lungelwa Khumalo	Community Member
92.	Bonginkhosi Ngwenya	Community Member
93.	Themba Mabuza	Community Member
94.	Ndumiso Mkhonta	Community Member
95.	Vusi Sangweni	Community Member
96.	Phinda Mndvoti	Community Member
97.	Philemon Moyane	Community Member
98.	Dumisani Shongwe	Community Member
99.	Peter Simelane	Community Member
100.	Dumisani Khumalo	Community Member
101.	Manyovu Mnisi	Community Member
102.	Mathew Dlamini	Community Member
103.	Douglas Mamba	Community Member
104.	Petros Gama	Community Member
105.	Mzwandile Dlamini	Community Member
106.	Anthony Mlotsa	Community Member
107.	Vusi Nkambule	Community Member
108.	Daniel Cindzi	Community Member
109.	Sipho Manana	Community Member
110.	Moses Dlamini	Community Member
111.	Flora Cindzi	Community Member
112.	Dumisani Gama	Community Member
113.	Phumzile Vilakati	Community Member
114.	Jabu Kunene	Community Member
115.	Typhina Mndzebele	Community Member
116.	Khombisile Motsa	Community Member
117.	Lindiwe Bhembe	Community Member
118.	Gemma Zwane	Community Member
119.	Fikelephi Mahlambi	Community Member
120.	Neli Dlamini	Community Member
121.	Themba Nhlabatsi	Community Member
122.	Ntombikayise Dlamini	Community Member
123.	Grace Maseko	Community Member
124.	Jeremiah Simelane	Community Member
125.	Cecilia Dlamini	Community Member
126.	Sikelela Vilakati	Community Member
127.	Vusi Nhleko	Community Member
128.	Sibongile Msibi	Community Member
129.	Fikile Dlamini	Community Member
130.	Sibusiso Mbetse	Community Member
131.	Sibongile Mahlambi	Community Member
132.	Jabulile Malaza	Community Member
133.	Nhlanhla Masuku	Community Member
134.	Mandla Mvubu	Community Member
135.	Mduduzi Dlamini	Community Member
136.	Lucky Shongwe	Community Member
137.	Mahlubi Dlamini	Community Member
138.	Walter Nkambule	Community Member
139.	Thulani Baartjies	Community Member
140.	Makhosazana Mvubu	Community Member
141.	Nonhlanhla Mbetse	Community Member
142.	Doris Gama	Community Member
143.	Wandile Dlamini	Community Member
144.	Selby Nkambule	Community Member
145.	Wilson Kunene	Community Member
146.	Jacob Mathabela	Community Member
147.	Bheki Matsenjwa	Community Member
148.	Veli Sifundza	Community Member
149.	Jabulani Khoza	Community Member
150.	Vusi Shongwe	Community Member
151.	Fana Magagula	Community Member
152.	Qiniso Maseko	Community Member
153.	Bafana Mkhonta	Community Member
154.	Nelisiwe Mavimbela	Community Member

155.	Koloni Mamba	Community Member
156.	Joyce Bhembe	Community Member
157.	Khumbuzile Tfwala	Community Member
158.	Lungile Mkhatshwa	Community Member
159.	Sandile Magagula	Community Member
160.	Sithembile Hlatjwayo	Community Member
161.	Joanah Mbetse	Community Member
162.	Gugu Manana	Community Member
163.	Rose Dlamini	Community Member
164.	Nozizwe Dlamini	Community Member
165.	Ndzelaphi Mbetse	Community Member
166.	Jabu Zwane	Community Member
167.	Ncamsile Dluclu	Community Member
168.	Ndambayi Shiba	Community Member
169.	Siphiwe Cindzi	Community Member
170.	Busi Mndzebele	Community Member
171.	Harriet N.	Community Member
172.	Philile Mthembu	Community Member
173.	Sibongile Nkambule	Community Member
174.	Sibusisiwe Mbetse	Community Member
175.	Makhosi Dlamini	Community Member
176.	Sonto Dlamini	Community Member
177.	Roydon Stanford	Community Member
178.	Thabitha Mamba	Community Member
179.	Florence Magagula	Community Member
180.	Busisiwe Gadlela	Community Member
181.	Eldah Dlamini	Community Member
182.	Fikelephi Dlamini	Community Member
183.	Phumzile Dlamini	Community Member
184.	Sibongile Zwane	Community Member
185.	Sibongile Simelane	Community Member
186.	Lydia Mbetse	Community Member
187.	Ntombifuthi Bhembe	Community Member
188.	Ntokozo Bhembe	Community Member
189.	Mary Ndzimandze	Community Member
190.	Busisiwe Mofokeng	Community Member
191.	Sibongile Vilakati	Community Member
192.	Ntombikayise Siyaya	Community Member
193.	Siphiwe Maseko	Community Member
194.	Makhosazana Shongwe	Community Member
195.	Thulisile Ginindza	Community Member
196.	Nonduduzo Nhlabatsi	Community Member
197.	Nokwanda Mabaso	Community Member
198.	Samuel Ncongwane	Inner Council/ Project Community Representative
199.	Nicholas Zwane	Inner Council/ Project Community Representative
200.	Richard Ramoetsi	Si Futures – Resettlement Action Plan Specialist
201.	Dr Zodwa Dlamini	Si Futures – Environmental & Social Impact Assessment Specialist
202.	Mcebo Mabaso	Si Futures – Enumerator
203.	Charity Lapidos	Si Futures – Enumerator
204.	Sandziso Mthupha	Si Futures – Enumerator
205.	Sambulo Zwane	Si Futures – Enumerator
206.	Mbuso Kingsley	WSP – Local Environmental Support
207.	Temusa Zwane	WSP – Local Environmental Support

AGENDA

AGENDA ITEM	RESPONSIBILITY
1. Welcome and Introductions	Inner Council/ WSP
2. Socio-economic and RAP Survey Process 2.1 Description of RAP Survey 2.2 Description of Socio-economic Survey	Si Futures
3. Discussion 3.1 Queries, comments, suggestions, concerns	Community Members
4. Closing 4.1 Words of appreciation to Community 4.2 Royal Kraal's closing remarks	Si Futures Royal Kraal

1. Welcome and introductions

The Vice Chairperson of the Inner Council, on behalf of the Indvuna, announced that the Socio-economic and Resettlement Action Plan (RAP) Survey Team had been invited to present the survey process to the community of Mantabeni. As this was a regular community meeting, community agenda items were first addressed prior to the special presentation on Nondvo Dam, which commenced 1hr 40mins after the meeting had commenced. The *Indvuna* joined the meeting during as the Nondvo Dam agenda item commenced.

Mbuso Kingsley introduced the Survey Team and described the respective roles of the Survey Team members:

- Mr Richard Ramoeletsi, Resettlement Action Plan Specialist and Team Leader;
- Dr Zodwa Dlamini, Environmental & Social Impact Assessment Specialist, Scio-economic Survey Team Leader;
- Mr Phakisa Mokhesi, Data Specialist, Fixed Assets Data Collection and Land Survey Team Leader
- Fixed Assets Data Collection and Land Survey Team comprising:
 - a) Hlasoa Matsoso;
 - b) Mamahlolonolo Mokhobo;
 - c) Keketso Mosebi.
- A total of 11 enumerators, identifiable by high visibility yellow vests with name tags, who will be divided into two groups:
 - i) Socio-economic Survey Team;
 - ii) Resettlement Action Plan (RAP) Team.

2. Socio-economic and RAP Survey Process

2.1 Description of RAP Survey

It was explained to the meeting participants that the purpose of the survey is to work with the community in identifying the properties that will be affected by the proposed dam. The properties are those that are along and below the buffer contour line. This therefore includes those properties within the buffer zone and the inundation area.

2.1.1 Identification of fixed assets

The Survey Team will work with respective property owners in identifying and recording:

- a) Houses;
- b) Structures;
- c) Fields;
- d) Trees;
- e) Kraals;
- f) Chicken coops;
- g) Any and all other fixed assets belonging to each respective homestead.

It is anticipated that in some cases certain fixed assets within the homestead will be above the buffer contour and other fixed assets will be below the buffer contour. For example, the houses may be above the buffer while the fields are below the buffer contour. In such cases only the affected fields and other affected non residential fixed assets will be identified, measured and recorded. Such identification, measurement and recording will be undertaken in the presence of the homestead head or authorised representative/s.

Similarly, the fixed assets of community facilities and amenities, such as schools, churches, clinics, shops, recreational areas, communal fields, are likely to be affected, therefore the representatives of such facilities will need to be present during identification, measuring and recording of their respective affected fixed assets.

2.1.2 Identification of cemeteries and graves

Where there are cemeteries, those homesteads which will be affected, i.e. those below the buffer contour, will be required to identify each respective grave which belongs to the homestead and is located within the cemetery, even if the cemetery is above the buffer contour. This will enable each respective grave to be exhumed, relocated and re-buried in accordance with cultural practices, thereby ensuring that the homestead's graves are not left behind during the resettlement process.

Where graves are not in a cemetery, but are in isolated locations below the buffer contour, it will be necessary for family members to point out or, if uncertain, consult with family elders to assist the family members in pointing out the locations of such graves so that they are not inadvertently inundated. It will otherwise be impractical to exhume graves which are remembered after they have been inundated.

The identification of graves includes stillborns, who due to particular cultural burial practices, may not have marked graves and are not buried at the cemetery, but at a designated location within the homestead. Family members will be required to point out or, if uncertain, consult with family elders to assist the family members in pointing out the locations of the graves of stillborns. This is to enable the graves of stillborns to also be relocated.

2.1.3 Identification of communal grazing areas

It will be necessary to identify, measure and record communal grazing areas.

2.1.4 Potential resettlement site/s

It was emphasized that while no potential resettlement sites/s had yet been identified, it would be ideal to identify sites within the community. Based on previous experience with similar projects elsewhere in Southern Africa, the RAP Specialist cautioned heads of affected homesteads not to be too eager to seize the opportunity to move to urban areas as the cost of living may exceed their financial resources in the long term.

2.1.5 Data collection process

The Surveyors together with a team of Enumerators will visit each affected homestead. The homestead representative will identify each fixed asset. The Surveyors and Enumerators will measure and record each fixed asset. Recording will include taking a photograph of the fixed asset with the homestead head or authorised representative standing beside the asset. For each homestead, the photographs of the fixed assets and a map of the measured assets will be printed onto a form containing the details of the homestead head and spouse.

For each community facility, the photographs of the fixed assets and a map of the measured assets will be printed onto a form containing the details of the authorised custodian.

2.1.6 Data verification

The printed form will be presented to the homestead head for verification of the captured assets. The homestead head may designate the spouse, or other representative authorised by the homestead head to verify the contents of the printed form. Where the homestead head or authorised representative is satisfied that the data on the form has been captured correctly, then the homestead head or authorised representative will sign acknowledgement that the data was captured correctly as at the date of the survey. The form will then be signed by the Royal Kraal (*Umphakatsi*) witnessing that the homestead head or authorised representative is satisfied with the correctness of the data. On behalf of the Consultant, the RAP Specialist will then sign as witness that the affected homestead head and *Umphakatsi* have acknowledged the correctness of the data. Finally, the Department of Water Affairs (DWA) will sign on behalf of the Ministry of Natural Resources & Energy, acknowledging that all the aforementioned persons are satisfied with the correctness of the data. The signature of DWA will also serve as acknowledgement on behalf of the Government that the affected homestead qualifies for compensation and inclusion in the Resettlement process.

Where the homestead head identifies discrepancies or incorrectly captured data, the homestead head will instruct the Survey Team to correct such data prior to signing acceptance of the data captured on the form. Thereafter the amended form, signed by the homestead head, will proceed up the levels of authority for counter signature.

2.1.7 Map of project site

A map will be issued to the Inner Council by the Survey Team, indicating the buffer contour and the inundation area. The map will be made

available to the community to identify which of their fixed assets will be affected.

2.2 Description of Socio-economic Survey

The Socio-economic Survey will identify the baseline social and economic characteristics of the affected homesteads and community. The overall objective is to determine the existing social and economic condition of the affected homesteads and community in order to ensure that changes arising from project activities, including resettlement and relocation, do not leave the affected homesteads and community worse off.

2.2.1 Community facilities and amenities

The availability and accessibility of community facilities such as schools, health care centres, water sources, public roads, will be recorded through interviewing affected homesteads and any other relevant stakeholders within the community.

The availability and accessibility of community facilities in the receiving community, to which affected homesteads will be resettled, will also be taken into consideration to ensure that the demand placed upon such resources is not exceeded to the detriment of the wellbeing of the both the receiving community and the resettled families.

2.2.2 Identification of employment opportunities likely to arise during project implementation

Data will be collected through interviews to determine existing skills that are available within the affected community in order to determine the prioritisation of appropriate employment opportunities for members of the community. For example, some members of the

community may have qualifications and training in certain vocations, such as construction, catering, driving and many others which are likely to be required during project implementation.

The role of the Social Impact Assessment report is to present facts and recommendations upon which the Government will need to make decisions. The Government will implement the compensation and resettlement process in accordance with international best practice guidelines and principles of the African Development Bank as well as national laws and regulations.

3. Discussion

The community members were provided the platform to submit queries, comments, suggestions and concerns to the Socio-economic and RAP Survey Team.

3.1 Data verification

3.1.1 Presentation of completed forms to homesteads

A concern was raised that when the Community Representatives visit the homesteads to present the completed forms for verification and signing by the homestead heads, they tend to rush through the forms and request the homestead heads to sign the forms. This presents the risk of pressurising the homestead head, who will thus be unable to fully satisfy himself or herself that all the captured data is indeed correct.

Response: the concern was noted and Community Representatives were instructed, after the initial homesteads during the verification visits in days preceding the community meeting, to leave forms with affected homestead heads at least overnight to fully satisfy themselves of the accuracy of the data captured.

3.2 Invitation of Member of Parliament

3.2.1 Invitation of Member of Parliament to Community Meetings

A suggestion was submitted that the Member of Parliament (MP) be invited to community meetings when discussing development projects of this size and nature. The reason is that the community members may wish to ask the MP how the decision to propose the construction of

Nonvdo Dam, or any other infrastructure project of similar size, was arrived at by the Government and/ or Parliament.

Response: the Indvuna clarified that the project was first introduced during the term of the former and late Prime Minister and previous Parliament, therefore the identification of the proposed site was arrived at through extensive consultations between the Government of the Kingdom of Eswatini and neighbouring states of South Africa and Mozambique.

3.3 Planned cultivation, home improvements and community development programmes

3.3.1 Status of current plans for cultivation and home improvements

A query was raised as to whether or not affected homesteads should continue with their cultivation plans and home improvements, since they will be resettled. Furthermore, how will homesteads be compensated for crops and home improvements that are established after the survey?

Response: cultivation plans and home improvements shall proceed as normal until such time that the Government issues an instruction to affected homesteads to stop cultivation or home improvement beyond a date to be appointed. When the appointed cut-off date has been announced by the Government, the affected homesteads will be surveyed again to update the data for each homestead.

3.3.2 Status of existing and planned development programmes

A query was raised as to whether or not some community development programmes, such as rural water supply and rural electrification

programmes (electricity schemes) should continue since they will be affected by the dam.

Response: as with cultivation plans and home improvements, the community development programmes shall proceed as normal until such time that the Government proclaims the cut-off date. The reason is that in the event that the current designs of the dam are altered or if the decision is reached that the dam is environmentally and socially not feasible, existing community development programmes will have been unnecessarily interrupted.

3.3.3 Control of opportunistic development

A query was raised as to how opportunistic development, through the establishment of new homesteads and/ or implementation of home improvements, will be controlled. Failure to control such development, without defining a cut-off date urgently, will escalate any initial budget for resettlement and relocation particularly due to people being tempted to take advantage of the time lapse between the sensitization of the community and the announcement of the cut-off date.

Response: it is acknowledged that opportunistic developments are highly likely, therefore it is necessary to proceed with studies in as timely a manner as is reasonable, while being cognizant of the sensitivities of the subject of resettlement and relocation. An effective method of controlling opportunistic development will be the Government's proclamation of the cut-off date after all studies have been concluded.

3.4 Potential resettlement and alternative project sites

3.4.1 Potential resettlement site/s

A query was raised on whether or not potential resettlement sites have been identified.

Response: it was reiterated that while no potential resettlement sites/s had yet been identified, it would be ideal to indentify sites within the community or sites of similar characteristics as the present location since various homesteads will have been attracted to the area by particular characteristics, such as availability of rainfall, relative proximity to urban area, proximity to next of kin, etc. Therefore resettlement to a site of similar characteristics will mitigate various forms of anxiety, which no amount of compensation will be able to replace.

3.4.2 Alternative project sites

A suggestion was submitted that alternative project sites be explored as a means of mitigating the distress and cost of resettling the densely distributed homesteads from the proposed project site. It was suggested that a site such as the nearby commercial forestry plantation to the south west of Mantabeni be considered for the dam since there are no homesteads there.

Response: it was clarified that the project in its entirety comprises other options of raising Lumphohlo Dam and Hawane Dam respectively. Therefore Nondvo Dam is one of three options, all of which may be feasible, or only two of which may be feasible, or only one of which may be feasible. When all options have been evaluated, a decision will be made on the best option or combination of options.

A member of the audience further supported the response by enlightening meeting participants that it is necessary for them as a community to take into consideration the fact that the present scarcity of water may be exacerbated in the distant future due to climate change. Therefore, he urged fellow participants to appreciate the need for taking interventions to ensure water security for the future, even if it means having to make the sacrifice of resettling some homesteads for the greater good of all.

3.5 Realignment of railway line and main road

3.5.1 Potential resettlements arising from realignment of railway line and main road

A request for clarification was raised on what will happen those homesteads which have encroached into the railway line since Eswatini Railway recently informed the community that they will have to relocate since they should not have been allocated land within an existing railway reserve. Therefore with the possibility of the dam being implemented, will those homesteads now be safe to remain within the railway reserve? A further query was raised on whether or not the main road will cause additional resettlement of homesteads.

Response: a separate technical consultant will determine suitable realignment routes for the railways line and main road, respectively. When those feasibility study reports of each realignment have been made available to the Government, the associated resettlement surveys of such realignments will be undertaken. The dam will indeed trigger realignments of the railway line and main road and this will in turn necessitate the realignment of access roads within the community. Therefore the resettlement and relocation of homesteads will affect

more than just those within the dam's inundation area. Presently the Survey Team is focusing on the dam.

3.5.2 Accessibility within affected community

A query was raised on whether or not the project will provide access routes across the dam, since presently there are low level crossings for vehicles and footbridges for pedestrians.

Response: impacts on vehicular and pedestrian access will be taken into consideration and appropriate mitigations and enhancements will be developed. In line with the principle of ensuring that the affected community is not left worse off as a result of a development project, some of the feeder roads within the community will need to be upgraded to prevent sections of the community being isolated by the dam.

3.6 Relocation of schools

3.6.1 Relocation of affected schools

A query was raised as to what will happen to the schools, Masibekela High School and Bhekephi Primary School if they are affected by the dam, particularly since they serve the community as a whole and not just the affected homesteads.

Response: schools will need to be relocated, i.e. shifted such that they remain within the community since they serve the whole community rather than just the affected homesteads. It was clarified that relocation means shifting the position of a homestead or facility, whereas resettlement means moving to a new location. The community in

conjunction with the Government will need to identify suitable relocation sites. The same applies to clinics.

3.7 Proximity of Luphohlo Dam and Nondvo Dam

3.7.1 Living in close proximity to two dams

A concern was raised that the proximity of two dams to each other will increase the intensity of localised weather conditions such as strong winds and rainfall intensity during thunderstorms. This will therefore exacerbate storm damage to homesteads and other property as well as increase anxiety amongst community members.

Response: both direct and indirect impacts and mitigations will be taken into consideration. The ESIA will take impacts on climate change into consideration.

4. Closing

4.1 Words of appreciation to Community

The Socio-economic and RAP Survey Team expressed gratitude to the community for the opportunity of presenting the survey process and looked forward to working in close cooperation with the community during the survey.

4.2 Royal Kraal's closing remarks

The *Indvuna* expressed appreciation to the community for attending the meeting. He emphasised that it is acknowledged that resettlement and relocation will cause much anxiety both those who are directly affected and those who are indirectly affected. He however pleaded with the community to understand that the proposed dam seeks to improve water security and one of the objectives is to ensure that affected parties are not left worse off. Therefore the community is urged to cooperate throughout the survey in ensuring that the proposed project is a success.

Record of meeting proceedings prepared by:


Mbuso Kingsley

APPENDIX



SIPHOCISINI
INNER COUNCIL
MEETING 31
JULY 2019

MBABANE – MANZINI CORRIDOR (NONDVO) DAM ENVIRONMENTAL & SOCIAL IMPACT ASSESSMENT (ESIA)

RECORD OF MEETING WITH SIPHOCOSINI INNER COUNCIL

Project Number:	41101262		
Grant Number:	P-SZ-EAZ-001 /002 and P-SZ-EAO-002		
Contract Number:	MNRE/ DWA/ 002/ 2017-18		
Client:	Government of the Kingdom of Eswatini Ministry of Natural Resources & Energy Department of Water Affairs (DWA)		
Project Title:	Mbabane-Manzini Corridor (Nondvo) Dam Feasibility Study Environmental & Social Impact Assessment		
Consultant:	WSP Environmental (Pty) Ltd		
Meeting organized by:	WSP Environmental (Pty) Ltd		
Date:	31 st July 2019		
Time:	Start :	10:25hrs	End: 11:25hrs
Venue:	Siphocosini		
Objectives:	<ul style="list-style-type: none"> • Introducing the Socio-economic and Resettlement Action Plan Survey Team to Siphocosini <i>Bandlancane</i> (Inner Council). • Presenting the Socio-economic and Resettlement Action Plan Survey process to Siphocosini Inner Council. 		

ATTENDANCE:

	NAME	ORGANIZATION
1.	Sikakadza Nicholas Matsebula	Indvuna (Headman) of Siphocosini
2.	Nelson Dlamini	Inner Council Member (Royal Household Representative)
3.	Lot Dlamini	Inner Council Member (Royal Household Representative)
4.	Sipho Mavimbela	Inner Council Member (Secretary)
5.	Paul Kunene	Inner Council Member (<i>Umsumphe</i> / Land Allocation and Boundary Committee)
6.	Samson Msibi	Inner Council Member
7.	Alfred Nhlabatsi	Inner Council Member
8.	Kenneth Dlamini	Inner Council Member
9.	Moses Nhlabatsi	Inner Council Member
10.	Mchele Gule	Inner Council Member
11.	Isaya Tfwala	Inner Council Member
12.	Jabulani Lukhele	Inner Council Member
13.	Jeremiah Nhlabatsi	Inner Council Member
14.	Jabulani Makhanya	Inner Council Member
15.	Mathokoza Malinga	Inner Council Member

16.	Simson Dlamini	Inner Council Member
17.	Andreas Mamba	Inner Council Member
18.	Enock Ngwenya	Inner Council Member
19.	Dudu Mamba	Inner Council Member
20.	Sebezile Maseko	Inner Council Member
21.	Ellen Manyatsi	Inner Council Member
22.	F. Nhlabatsi	Inner Council Member
23.	Abednigo Mbuyisa	Inner Council Member
24.	Obed Langwenya	Inner Council Member
25.	Sikelela Mavimbela	Inner Council Member
26.	Ndumiso Dlamini	Inner Council Member
27.	Jeffery Dlamini	Inner Council Member
28.	Mduduzi Dlamini	Inner Council Member
29.	Gcina Mdluli	Inner Council Member
30.	Mancoba Mhlanga	Inner Council Member
31.	Micah Mkhonta	Inner Council Member
32.	Obed Masuku	Inner Council Member
33.	Lindiwe Zikalala	Inner Council Member
34.	Dudu Dlamini	Inner Council Member
35.	Eunice Mkhonta	Inner Council Member
36.	Gcebile Shiba	Inner Council Member
37.	Thandi Mkhwanazi	Inner Council Member
38.	Sanele Shongwe	Inner Council Member
39.	Ndumiso Hlophe	Resident/ Community Representative
40.	Richard Ramoetsi	Si Futures – Resettlement Action Plan Specialist
41.	Phakisa Mokhesi	Si Futures – Data Specialist
42.	Dr Zodwa Dlamini	Si Futures – Environmental & Social Impact Assessment Specialist
43.	Hlasoa Matsoso	Si Futures – Surveyor
44.	Mamahlolonolo Mokhobo	Si Futures – Surveyor
45.	Keketso Mosebi	Si Futures – Surveyor
46.	Zaba Mdlovu	Si Futures – Enumerator
47.	Nokwanda Shongwe	Si Futures – Enumerator
48.	Blessing Masuku	Si Futures – Enumerator
49.	Siphesihle Tsabedze	Si Futures – Enumerator
50.	Babili Magagula	Si Futures – Enumerator
51.	Mcebo Mabaso	Si Futures – Enumerator
52.	Tebenguni Simelane	Si Futures – Enumerator
53.	Welile Maphalala	Si Futures – Enumerator
54.	Charity Lapidos	Si Futures – Enumerator
55.	Sandziso Mthupha	Si Futures – Enumerator
56.	Sambulo Zwane	Si Futures – Enumerator
57.	Mbuso Kingsley	WSP – Local Environmental Support
58.	Temusa Zwane	WSP – Local Environmental Support

AGENDA

AGENDA ITEM	RESPONSIBILITY
1. Welcome and Introductions	Inner Council/ WSP
2. Socio-economic and RAP Survey Process 2.1 Description of RAP Survey 2.2 Description of Socio-economic Survey	Si Futures
3. Closing 3.1 Words of appreciation to Inner Council 3.2 Inner Council’s closing remarks	Si Futures Inner Council

1. Welcome and introductions

WSP Environmental (Pty) Ltd (WSP) had requested a meeting for introducing the Socio-economic and Resettlement Action Plan (RAP) Survey Team to Siphocosini *Bandlancane* (Inner Council). The Inner Council welcomed the Survey Team to Siphocosini.

The *Indvuna* introduced Mr Ndumiso Hlophe, a community member, appointed by the Inner Council to be the Community Representative who will accompany and assist the Survey Team with local knowledge pertaining to the community.

Mr Hlophe introduced the Survey Team and thereafter Mbuso Kingsley described the respective roles of the Survey Team members:

- Mr Richard Ramoetsi, Resettlement Action Plan Specialist and Team Leader;
- Dr Zodwa Dlamini, Environmental & Social Impact Assessment Specialist, Socio-economic Survey Team Leader;
- Mr Phakisa Mokhesi, Data Specialist, Fixed Assets Data Collection and Land Survey Team Leader
- Fixed Assets Data Collection and Land Survey Team comprising:
 - a) Hlasoa Matsoso;
 - b) Mamahlolonolo Mokhobo;
 - c) Keketso Mosebi.
- A total of 11 enumerators, identifiable by high visibility yellow vests with name tags, who will be divided into two groups:
 - i) Socio-economic Survey Team;
 - ii) Resettlement Action Plan (RAP) Team.

2. Socio-economic and RAP Survey Process

2.1 Description of RAP Survey

Mr Ramoeletsi explained that the purpose of the survey is to work with the community in identifying the properties that will be affected by the proposed dam. The properties are those that are along and below the buffer contour line. This therefore includes those properties within the buffer zone and the inundation area.

2.1.1 Identification of fixed assets

The Survey Team will work with respective property owners in identifying and recording:

- a) Houses;
- b) Structures;
- c) Fields;
- d) Trees;
- e) Kraals;
- f) Chicken coops;
- g) Any and all other fixed assets belonging to each respective homestead.

It is anticipated that in some cases certain fixed assets within the homestead will be above the buffer contour and other fixed assets will be below the buffer contour. For example, the houses may be above the buffer while the fields are below the buffer contour. In such cases only the affected fields and other affected non residential fixed assets will be identified, measured and recorded. Such identification, measurement and recording will be undertaken in the presence of the homestead head or authorised representative/s.

Similarly, the fixed assets of community facilities and amenities, such as schools, churches, clinics, shops, recreational areas, communal fields, are likely to be affected, therefore the representatives of such facilities will need to be present during identification, measuring and recording of their respective affected fixed assets.

2.1.2 Identification of cemeteries and graves

Where there are cemeteries, those homesteads which will be affected, i.e. those below the buffer contour, will be required to identify each respective grave which belongs to the homestead and is located within the cemetery, even if the cemetery is above the buffer contour. This will enable each respective grave to be exhumed, relocated and re-buried in accordance with cultural practices, thereby ensuring that the homestead's graves are not left behind during the resettlement process.

Where graves are not in a cemetery, but are in isolated locations below the buffer contour, it will be necessary for family members to point out or, if uncertain, consult with family elders to assist the family members in pointing out the locations of such graves so that they are not inadvertently inundated. It will otherwise be impractical to exhume graves which are remembered after they have been inundated.

The identification of graves includes stillborns, who due to particular cultural burial practices, may not have marked graves and are not buried at the cemetery, but at a designated location within the homestead. Family members will be required to point out or, if uncertain, consult with family elders to assist the family members in pointing out the locations of the graves of stillborns. This is to enable the graves of stillborns to also be relocated.

2.1.3 Identification of communal grazing areas

It will be necessary to identify, measure and record communal grazing areas.

2.1.4 Request for support from traditional authorities

Mr Ramoeletsi kindly requested the support of the Chief, *Indvuna* and Inner Council in being sensitive towards the affected homesteads since they will be affected not only materially by having to resettle, but also emotionally and psychologically by the anxiety of knowing that resettlement is imminent. The traditional authorities are therefore kindly requested to assist the Project Team by pleading for the cooperation of the affected homesteads throughout the data collection of the Socio-economic and RAP Survey.

2.1.5 Data collection process

The Surveyors together with a team of Enumerators will visit each affected homestead. The homestead representative will identify each fixed asset. The Surveyors and Enumerators will measure and record each fixed asset. Recording will include taking a photograph of the fixed asset with the homestead head or authorised representative standing beside the asset. For each homestead, the photographs of the fixed assets and a map of the measured assets will be printed onto a form containing the details of the homestead head and spouse.

For each community facility, the photographs of the fixed assets and a map of the measured assets will be printed onto a form containing the details of the authorised custodian.

2.1.6 Data verification

The printed form will be presented to the homestead head for verification of the captured assets. The homestead head may designate the spouse, or other representative authorised by the homestead head to verify the contents of the printed form. Where the homestead head or authorised representative is satisfied that the data on the form has been captured correctly, then the homestead head or authorised representative will sign acknowledgement that the data was captured correctly as at the date of the survey. The form will then be signed by the Royal Kraal (*Umphakatsi*) witnessing that the homestead head or authorised representative is satisfied with the correctness of the data. On behalf of the Consultant, the RAP Specialist will then sign as witness that the affected homestead head and *Umphakatsi* have acknowledged the correctness of the data. Finally, the Department of Water Affairs (DWA) will sign on behalf of the Ministry of Natural Resources & Energy, acknowledging that all the aforementioned persons are satisfied with the correctness of the data. The signature of DWA will also serve as acknowledgement on behalf of the Government that the affected homestead qualifies for compensation and inclusion in the Resettlement process.

Where the homestead head identifies discrepancies or incorrectly captured data, the homestead head will instruct the Survey Team to correct such data prior to signing acceptance of the data captured on the form. Thereafter the amended form, signed by the homestead head, will proceed up the levels of authority for counter signature.

2.2 Description of Socio-economic Survey

The Socio-economic Survey will identify the baseline social and economic characteristics of the affected homesteads and community. The overall objective is to determine the existing social and economic condition of the affected homesteads and community in order to ensure that changes arising from project activities, including resettlement and relocation, do not leave the affected homesteads and community worse off.

2.2.1 Community facilities and amenities

The availability and accessibility of community facilities such as schools, health care centres, water sources, public roads, will be recorded through interviewing affected homesteads and any other relevant stakeholders within the community.

The availability and accessibility of community facilities in the receiving community, to which affected homesteads will be resettled, will also be taken into consideration to ensure that the demand placed upon such resources is not exceeded to the detriment of the wellbeing of the both the receiving community and the resettled families.

2.2.2 Identification of employment opportunities likely to arise during project implementation

Data will be collected through interviews to determine existing skills that are available within the affected community in order to determine the prioritisation of appropriate employment opportunities for members of the community. For example, some members of the community may have qualifications and training in certain vocations, such as construction, catering, driving and many others which are likely to be required during project implementation.

3. Discussion

The members of the Inner Council were provided the platform to submit comments, suggestions and queries to the Socio-economic and RAP Survey Team.

3.1 Project Corporate Social Investment

3.1.1 Community facilities

The *Indvuna* submitted a suggestion that, where possible, the project provide technical and/ or financial assistance to the affected community through the construction of facilities to meet the social amenity needs of the community. An example of construction of a community hall for community meetings was cited. He further pointed out that one of the recommendations which arose from the Feasibility Study Report was that the structures that will be built for the project site office and workers' camp may be repurposed for community facilities upon completion of the construction of the dam.

3.2 Accessibility to social amenities

3.2.1 Accessibility at receiving communities

A query was raised as to whether or not a homestead's access to social amenities at the place of resettlement will be taken into consideration. For example, some amenities such as communal grazing are presently a short walk from an affected homestead, however at the place of resettlement, the resettled family members may have to walk longer distances than they presently do to access those amenities.

Response: accessibility to social facilities and amenities by resettled homesteads will be taken into consideration in the planning of the resettlement of homesteads.

3.2.2 Accessibility within affected community

A query was raised on whether or not the project will provide access routes across the dam, since presently there are low level crossings for vehicles and footbridges for pedestrians.

Response: impacts on vehicular and pedestrian access will be taken into consideration and appropriate mitigations and enhancements will be developed.

3.2.3 Replacement of affected schools

A query was raised as to whether or not Masibekela High School, which is a relatively new school will be replaced.

Response: schools will need to be relocated, i.e. shifted such that they remain within the community since they serve the whole community rather than just the affected homesteads. It was clarified that relocation means shifting the position of a homestead or facility, whereas resettlement means moving to a new location.

3.3 Availability of land for resettlement and relocation

3.3.1 Scarcity of land

The *Indvuna* pointed out that land for resettlement and relocation is scarce, citing the example of the difficulty that was experienced when identifying suitable land for constructing Masibekela High School. One

of the contributing factors to scarcity of land is the rapid rate of development within the community.

Response: it was reiterated that schools will need to be relocated, preferably close to their existing sites.

The *Indvuna* then pointed out that the Consultant's response implies, therefore that where facilities, such as schools are relocated, it means that homesteads will have to be resettled or relocated to provide land for the relocated facilities. Therefore, in addition to those homesteads directly affected by the dam, there will be additional homesteads whose resettlement or relocation is incidental to the dam.

3.4 Homesteads where construction has not yet commenced

3.4.1 Homesteads which have been allocated land, but have not yet been developed

The *Indvuna* highlighted that some community members, including those wishing to settle in the community, have been allocated land through Swazi law and custom (*kukhonta*) by *Umphakatsi* to construct their homesteads, but they have not yet commenced construction. In all cases those allocated land have paid the application fee and all costs associated with the application process. Therefore it is imperative for the Zone Leaders to bring to the Survey Team's attention the locations of all designated homesteads allocated land, but have not yet commenced construction so that those homesteads are included in the resettlement and/ or compensation process. The *Indvuna* cautioned Zone Leaders to be vigilant of potential false claims that may arise where people claim they were allocated land when in actual fact they were not allocated land by *Umphakatsi*.

4. Closing

4.1 Words of appreciation to the Inner Council

The Socio-economic and RAP Survey Team expressed gratitude to the Inner Council for the opportunity of presenting the survey process and granting permission to proceed with the survey.

4.2 Inner Council's closing remarks

The *Indvuna* expressed appreciation for the introductory meeting with the Socio-economic and RAP Survey Team. The *Indvuna* reiterated that several meetings had already been held with the Inner Council and the community where the project was introduced. He reiterated that the Environmental and Social Impact Assessment had now reached the critical stage of interacting with the directly affected homesteads. He therefore proposed that the question and answer session be deferred to the Community Meeting scheduled for 03rd August 2019. That is where the interested and affected parties will be provided the platform to submit further comments, suggestions, queries and concerns. The *Indvuna* pledged that the role of the Inner Council will be to continue promoting awareness of the project to the community members and to promote the community's cooperation with the Survey Team during the course of the survey. In the meantime the Survey Team is granted permission to commence surveying the affected homesteads prior to the Community Meeting.

Record of meeting proceedings prepared by:

Mbuso Kingsley

APPENDIX

J SIPHOCISINI COMMUNITY MEETING 3 AUGUST 2019

MBABANE – MANZINI CORRIDOR (NONDVO) DAM ENVIRONMENTAL & SOCIAL IMPACT ASSESSMENT (ESIA)

RECORD OF MEETING WITH SIPHOCOSINI COMMUNITY

Project Number:	41101262		
Grant Number:	P-SZ-EAZ-001 /002 and P-SZ-EAO-002		
Contract Number:	MNRE/ DWA/ 002/ 2017-18		
Client:	Government of the Kingdom of Eswatini Ministry of Natural Resources & Energy Department of Water Affairs (DWA)		
Project Title:	Mbabane-Manzini Corridor (Nondvo) Dam Feasibility Study Environmental & Social Impact Assessment		
Consultant:	WSP Environmental (Pty) Ltd		
Meeting organized by:	WSP Environmental (Pty) Ltd		
Date:	03 rd August 2019		
Time:	Start :	11:00hrs	End: 13:30hrs
Venue:	Siphocosini		
Objectives:	<ul style="list-style-type: none"> • Introducing the Socio-economic and Resettlement Action Plan Survey Team to Siphocosini Community. • Presenting the Socio-economic and Resettlement Action Plan Survey process to Siphocosini Community. 		

ATTENDANCE:

	NAME	ORGANIZATION
1.	Chief Jabhane Dlamini	Chief
2.	Mduduzi Matsebula	Right Honourable Member of Parliament
3.	Sikakadza Nicholas Matsebula	Indvuna (Headman) of Siphocosini
4.	Nelson Dlamini	Inner Council Member (Royal Household Representative)
5.	Lot Dlamini	Inner Council Member (Royal Household Representative)
6.	Mathendele Dlamini	Inner Council Member (Royal Household Representative)
7.	Sibusiso Dlamini	Inner Council Member (Royal Household Representative)
8.	Senzo Dlamini	Inner Council Member (Royal Household Representative)
9.	Sonnyboy Dlamini	Inner Council Member (Royal Household Representative)
10.	Sipho Mavimbela	Inner Council Member (Secretary)
11.	Paul Kunene	Inner Council Member (Umsumphe/ Land Allocation and Boundary Committee)
12.	Samson Msibi	Inner Council Member
13.	Alfred Nhlabatsi	Inner Council Member
14.	Kenneth Dlamini	Inner Council Member
15.	Moses Nhlabatsi	Inner Council Member
16.	Mchele Gule	Inner Council Member

17.	Isaya Tfwala	Inner Council Member
18.	Jabulani Lukhele	Inner Council Member
19.	Jeremiah Nhlabatsi	Inner Council Member
20.	Jabulani Makhanya	Inner Council Member
21.	Mathokoza Malinga	Inner Council Member
22.	Simson Dlamini	Inner Council Member
23.	Andreas Mamba	Inner Council Member
24.	Enock Ngwenya	Inner Council Member
25.	Dudu Mamba	Inner Council Member
26.	Sebezile Maseko	Inner Council Member
27.	Ellen Manyatsi	Inner Council Member
28.	F. Nhlabatsi	Inner Council Member
29.	Abednigo Mbuyisa	Inner Council Member
30.	Obed Langwenya	Inner Council Member
31.	Sikelela Mavimbela	Inner Council Member
32.	Ndumiso Dlamini	Inner Council Member
33.	Jeffery Dlamini	Inner Council Member
34.	Mduduzi Dlamini	Inner Council Member
35.	Gcina Mdluli	Inner Council Member
36.	Mancoba Mhlanga	Inner Council Member
37.	Micah Mkhonta	Inner Council Member
38.	Obed Masuku	Inner Council Member
39.	Lindiwe Zikalala	Inner Council Member
40.	Dudu Dlamini	Inner Council Member
41.	Eunice Mkhonta	Inner Council Member
42.	Gcebile Shiba	Inner Council Member
43.	Thandi Mkhwanazi	Inner Council Member
44.	Sanele Shongwe	Inner Council Member
45.	Daniel Mamba	Community Member
46.	TM Simelane	Community Member
47.	Sabelo Motaung	Community Member
48.	Mark Payne	Community Member
49.	Leonard Camp	Community Member
50.	Jameson Matsebula	Community Member
51.	Enos Nkambule	Community Member
52.	David Ndwandwe	Community Member
53.	Patrick Maziya	Community Member
54.	Sipho Langwenya	Community Member
55.	Ishmael Dlamini	Community Member
56.	Maurice Littler	Community Member
57.	Mduduzi Dlamini	Community Member
58.	Robert Simelane	Community Member
59.	Fine Dlamini	Community Member
60.	Vivian Sihlongonyane	Community Member
61.	Andrew Vilakati	Community Member
62.	Austin Dlamini	Community Member
63.	Moses Msibi	Community Member
64.	Sibusiso Simelane	Community Member
65.	Vusi Sibisi	Community Member
66.	M. Vilakati	Community Member
67.	Bongani Dube	Community Member
68.	Abel Motsa	Community Member
69.	Vincent Sangweni	Community Member
70.	K. Mkhabela	Community Member
71.	Solomon Vilakati	Community Member
72.	Orela Maziya	Community Member
73.	David Dlamini	Community Member
74.	Hudu Dlamini	Community Member
75.	Dumisani Dlamini	Community Member
76.	Ngabi Dlamini	Community Member
77.	Shedrack Maphosa	Community Member
78.	Mfanalomuhle Dlamini	Community Member
79.	Fungisisa Vilakati-Dladla	Community Member
80.	Thulasizwe Mdluli	Community Member
81.	Lucky M. Dube	Community Member
82.	Sifiso Motsa	Community Member
83.	Mduduzi Ngwenya	Community Member
84.	Sipho Dlamini	Community Member
85.	Mxolisi Dlamini	Community Member

86.	Ndumiso Nkambule	Community Member
87.	Sibusiso Mnisi	Community Member
88.	Mxolisi Mnisi	Community Member
89.	Timothy Kunene	Community Member
90.	Armstrong Dlamini	Community Member
91.	Oscar Khaba	Community Member
92.	Sandile Ngozo	Community Member
93.	Happyguy Matsebula	Community Member
94.	Luke Mkhwanazi	Community Member
95.	Mfanzile Dlamini	Community Member
96.	Comfort Sibiya	Community Member
97.	Christopher Dlamini	Community Member
98.	Michael Mavimbela	Community Member
99.	Sifiso Mamba	Community Member
100.	Dumisani Dlamini	Community Member
101.	Mxolisi Simelane	Community Member
102.	Alfred Sihlongonyane	Community Member
103.	Sicelo Dlamini	Community Member
104.	Phumlani Hlophe	Community Member
105.	Bongani Hlophe	Community Member
106.	Philani Tfwala	Community Member
107.	George Simelane	Community Member
108.	Mxolisi Matsebula	Community Member
109.	Majaha Hlophe	Community Member
110.	Sibusiso Ngwenya	Community Member
111.	Lomasontfo Ngwenya	Community Member
112.	Bongani Dube	Community Member
113.	Milton Ngwenya	Community Member
114.	Shedrack Nhlabatsi	Community Member
115.	Mzwandile Mthethwa	Community Member
116.	Gudeni Simelane	Community Member
117.	Elson Maseko	Community Member
118.	Musa Dlamini	Community Member
119.	David Nyoni	Community Member
120.	Samuel Msweli	Community Member
121.	Philani Dlamini	Community Member
122.	May Thwala	Community Member
123.	Saneliso Kunene	Community Member
124.	Daniel Nhlabatsi	Community Member
125.	Mbuso Dlamini	Community Member
126.	Grace Hlophe	Community Member
127.	Jema Dlamini	Community Member
128.	Eldah Dlamini	Community Member
129.	Mavis Hlophe	Community Member
130.	Nompumelelo Nxumalo	Community Member
131.	Agnes Silindza	Community Member
132.	Babili Mabuza	Community Member
133.	Thulani Manyatsi	Community Member
134.	Wandile Guliwe	Community Member
135.	Mhlophe Nkambule	Community Member
136.	Ndumiso Dlamini	Community Member
137.	Buyile Dlamini	Community Member
138.	Futhi Zwane	Community Member
139.	Louisa Dlamini	Community Member
140.	Lindiwe Mnisi	Community Member
141.	Elise Zwane	Community Member
142.	Lillian Dlamini	Community Member
143.	Nomsa Dlamini	Community Member
144.	Rejoyce Mabuza	Community Member
145.	Lindiwe Zikalala	Community Member
146.	Philile Sikhondze	Community Member
147.	T.K. Shongwe-Khumalo	Community Member
148.	Zandile Kunene	Community Member
149.	Agnes Magagula	Community Member
150.	Norah Shabangu	Community Member
151.	Sholiphi Dlamini	Community Member
152.	Sarafina Dlamini	Community Member
153.	Sunny simelane	Community Member
154.	Lungile Manana	Community Member

155.	Sipholesihle Sacolo	Community Member
156.	Thokoza Dlamini	Community Member
157.	Faye Miller	Community Member
158.	Monisa Gule	Community Member
159.	Sibongile Mhlanga	Community Member
160.	Mary Simelane	Community Member
161.	Zanele Dlamini	Community Member
162.	Sebenzile Zubuko	Community Member
163.	Bhelina Dlamini	Community Member
164.	Isabel Maseko	Community Member
165.	Martha Mkhathshwa	Community Member
166.	Sonto Simelane	Community Member
167.	Gladys Manana	Community Member
168.	Maria Matsebula	Community Member
169.	Nompumelelo Giyane	Community Member
170.	Gabsile Gule	Community Member
171.	Tholakele Khumalo	Community Member
172.	Gugu Matsebula	Community Member
173.	Thoko Gule	Community Member
174.	Ncobile Dlamini	Community Member
175.	Jabulile Simelane	Community Member
176.	Welile Kunene	Community Member
177.	Tfombile Simelane	Community Member
178.	Gcina Mavimbela	Community Member
179.	A. Simelane	Community Member
180.	Nokuthula Mahlalela	Community Member
181.	Thulani Msibi	Community Member
182.	Lindiwe Dlamini	Community Member
183.	Ntombi Mavuso	Community Member
184.	Elizabeth Sihlongonyane	Community Member
185.	Maggi Mamba	Community Member
186.	Khanyisile Dlamini	Community Member
187.	Xolile Shongwe	Community Member
188.	Zodwa Matse	Community Member
189.	Zanele Msimango	Community Member
190.	Virginia Ndzinisa	Community Member
191.	Sebenele Simelane	Community Member
192.	Dumsile Mavuso	Community Member
193.	Ellene Manyatsi	Community Member
194.	Leta Mnisi	Community Member
195.	Sitfoliwe Gwebu	Community Member
196.	Alice Dlamini	Community Member
197.	Anna Tfwala	Community Member
198.	Miriathe Malaza	Community Member
199.	Thandi Maseko	Community Member
200.	Phumzile Tfwala	Community Member
201.	Thembi Sukati	Community Member
202.	Zanele Nzima	Community Member
203.	Selinah Sikhondze	Community Member
204.	Catherine Dlamini	Community Member
205.	Afra Mabuza	Community Member
206.	Thulisile Mabuza	Community Member
207.	Sizakele Mamba	Community Member
208.	Dumsile Ngubeni	Community Member
209.	Xolile Magagula	Community Member
210.	Beauty Lukhele	Community Member
211.	Dudu Du Pont	Community Member
212.	Cebile Dlamini	Community Member
213.	Khangezile Dube	Community Member
214.	Zodwa Dlamini	Community Member
215.	Busile Msibi	Community Member
216.	Thobile Thwala	Community Member
217.	Simangele Mlangeni	Community Member
218.	Nonhlanhla Ngcamphalala	Community Member
219.	Susan Dlamini	Community Member
220.	Zandile Dlamini	Community Member
221.	Nomsa Tfwala	Community Member
222.	Sibongile Dlamini	Community Member
223.	Nonhlanhla Mchobokazi	Community Member

224.	Hildah Simelane	Community Member
225.	Josephina Hlophe	Community Member
226.	Nothando Dlamini	Community Member
227.	Nontsikelelo Simelane	Community Member
228.	Lombuso Nkambule	Community Member
229.	Queen Mabuza	Community Member
230.	Elizabeth Sithole	Community Member
231.	Tryphina Simelane	Community Member
232.	Gcebile Mthethwa	Community Member
233.	Nomsa Mchobokazi	Community Member
234.	Xolile Motsa	Community Member
235.	Justice Mamba	Community Member
236.	Mpendulo Dlamini	Community Member
237.	Thulani Vilakati	Community Member
238.	Sibusiso Malaza	Community Member
239.	Themba Dlamini	Community Member
240.	Hezekiah Hlophe	Community Member
241.	Boy Thwala	Community Member
242.	Jabulani Dlamini	Community Member
243.	Walter Dlamini	Community Member
244.	Moses Seyama	Community Member
245.	Mbongwa Seyama	Community Member
246.	Hambaphi Simelane	Community Member
247.	Thembela Simelane	Community Member
248.	Mthunzi Mkhonta	Community Member
249.	Ndumiso Hlophe	Resident/ Community Representative
250.	Richard Ramoetsi	Si Futures – Resettlement Action Plan Specialist
251.	Phakisa Mokhesi	Si Futures – Data Specialist
252.	Dr Zodwa Dlamini	Si Futures – Environmental & Social Impact Assessment Specialist
253.	Hlasoa Matsoso	Si Futures – Surveyor
254.	Mamahlolonolo Mokhobo	Si Futures – Surveyor
255.	Keketso Mosebi	Si Futures – Surveyor
256.	Zaba Mdlovu	Si Futures – Enumerator
257.	Blessing Masuku	Si Futures – Enumerator
258.	Siphehile Tsabedze	Si Futures – Enumerator
259.	Babili Magagula	Si Futures – Enumerator
260.	Mcebo Mabaso	Si Futures – Enumerator
261.	Tebenguni Simelane	Si Futures – Enumerator
262.	Welile Maphalala	Si Futures – Enumerator
263.	Charity Lapidos	Si Futures – Enumerator
264.	Sandziso Mthupha	Si Futures – Enumerator
265.	Sambulo Zwane	Si Futures – Enumerator
266.	Mbuso Kingsley	WSP – Local Environmental Support
267.	Temusa Zwane	WSP – Local Environmental Support

AGENDA

AGENDA ITEM	RESPONSIBILITY
1. Welcome and Introductions	Inner Council/ WSP
2. Socio-economic and RAP Survey Process 2.1 Description of RAP Survey 2.2 Description of Socio-economic Survey	Si Futures
3. Discussion 3.1 Queries, comments, suggestions, concerns	Community Members
4. Closing 4.1 Words of appreciation to Community 4.2 Royal Kraal's closing remarks	Si Futures Royal Kraal

1. Welcome and introductions

The *Indvuna* announced that the Socio-economic and Resettlement Action Plan (RAP) Survey Team had been invited to present the survey process to the community of Siphocosini. He introduced Mr Ndumiso Hlophe, a community member, appointed by the Inner Council to be the Community Representative who will accompany and assist the Survey Team with local knowledge pertaining to the community.

Mbuso Kingsley introduced the Survey Team and described the respective roles of the Survey Team members:

- Mr Richard Ramoetsi, Resettlement Action Plan Specialist and Team Leader;
- Dr Zodwa Dlamini, Environmental & Social Impact Assessment Specialist, Socio-economic Survey Team Leader;
- Mr Phakisa Mokhesi, Data Specialist, Fixed Assets Data Collection and Land Survey Team Leader
- Fixed Assets Data Collection and Land Survey Team comprising:
 - a) Hlasoa Matsoso;
 - b) Mamahlolonolo Mokhobo;
 - c) Keketso Mosebi.
- A total of 11 enumerators, identifiable by high visibility yellow vests with name tags, who will be divided into two groups:
 - i) Socio-economic Survey Team;
 - ii) Resettlement Action Plan (RAP) Team.

2. Socio-economic and RAP Survey Process

2.1 Description of RAP Survey

Mr Ramoeletsi explained that the purpose of the survey is to work with the community in identifying the properties that will be affected by the proposed dam. The properties are those that are along and below the buffer contour line. This therefore includes those properties within the buffer zone and the inundation area.

2.1.1 Identification of fixed assets

The Survey Team will work with respective property owners in identifying and recording:

- a) Houses;
- b) Structures;
- c) Fields;
- d) Trees;
- e) Kraals;
- f) Chicken coops;
- g) Any and all other fixed assets belonging to each respective homestead.

It is anticipated that in some cases certain fixed assets within the homestead will be above the buffer contour and other fixed assets will be below the buffer contour. For example, the houses may be above the buffer while the fields are below the buffer contour. In such cases only the affected fields and other affected non residential fixed assets will be identified, measured and recorded. Such identification, measurement and recording will be undertaken in the presence of the homestead head or authorised representative/s.

Similarly, the fixed assets of community facilities and amenities, such as schools, churches, clinics, shops, recreational areas, communal fields, are likely to be affected, therefore the representatives of such facilities will need to be present during identification, measuring and recording of their respective affected fixed assets.

2.1.2 Identification of cemeteries and graves

Where there are cemeteries, those homesteads which will be affected, i.e. those below the buffer contour, will be required to identify each respective grave which belongs to the homestead and is located within the cemetery, even if the cemetery is above the buffer contour. This will enable each respective grave to be exhumed, relocated and re-buried in accordance with cultural practices, thereby ensuring that the homestead's graves are not left behind during the resettlement process.

Where graves are not in a cemetery, but are in isolated locations below the buffer contour, it will be necessary for family members to point out or, if uncertain, consult with family elders to assist the family members in pointing out the locations of such graves so that they are not inadvertently inundated. It will otherwise be impractical to exhume graves which are remembered after they have been inundated.

The identification of graves includes stillborns, who due to particular cultural burial practices, may not have marked graves and are not buried at the cemetery, but at a designated location within the homestead. Family members will be required to point out or, if uncertain, consult with family elders to assist the family members in pointing out the locations of the graves of stillborns. This is to enable the graves of stillborns to also be relocated.

2.1.3 Identification of communal grazing areas

It will be necessary to identify, measure and record communal grazing areas.

2.1.4 Request for support from traditional authorities

Mr Ramoeletsi kindly requested the support of the Chief, *Indvuna* and Inner Council in being sensitive towards the affected homesteads since they will be affected not only materially by having to resettle, but also emotionally and psychologically by the anxiety of knowing that resettlement is imminent. The traditional authorities are therefore kindly requested to assist the Project Team by pleading for the cooperation of the affected homesteads throughout the data collection of the Socio-economic and RAP Survey.

2.1.5 Data collection process

The Surveyors together with a team of Enumerators will visit each affected homestead. The homestead representative will identify each fixed asset. The Surveyors and Enumerators will measure and record each fixed asset. Recording will include taking a photograph of the fixed asset with the homestead head or authorised representative standing beside the asset. For each homestead, the photographs of the fixed assets and a map of the measured assets will be printed onto a form containing the details of the homestead head and spouse.

For each community facility, the photographs of the fixed assets and a map of the measured assets will be printed onto a form containing the details of the authorised custodian.

2.1.6 Data verification

The printed form will be presented to the homestead head for verification of the captured assets. The homestead head may designate the spouse, or other representative authorised by the homestead head to verify the contents of the printed form. Where the homestead head or authorised representative is satisfied that the data on the form has been captured correctly, then the homestead head or authorised representative will sign acknowledgement that the data was captured correctly as at the date of the survey. The form will then be signed by the Royal Kraal (*Umphakatsi*) witnessing that the homestead head or authorised representative is satisfied with the correctness of the data. On behalf of the Consultant, the RAP Specialist will then sign as witness that the affected homestead head and *Umphakatsi* have acknowledged the correctness of the data. Finally, the Department of Water Affairs (DWA) will sign on behalf of the Ministry of Natural Resources & Energy, acknowledging that all the aforementioned persons are satisfied with the correctness of the data. The signature of DWA will also serve as acknowledgement on behalf of the Government that the affected homestead qualifies for compensation and inclusion in the Resettlement process.

Where the homestead head identifies discrepancies or incorrectly captured data, the homestead head will instruct the Survey Team to correct such data prior to signing acceptance of the data captured on the form. Thereafter the amended form, signed by the homestead head, will proceed up the levels of authority for counter signature.

2.1.7 Map of project site

A map will be issued to the Inner Council by the Survey Team, indicating the buffer contour and the inundation area. The map will be made

available to the community to identify which of their fixed assets will be affected.

2.2 Description of Socio-economic Survey

The Socio-economic Survey will identify the baseline social and economic characteristics of the affected homesteads and community. The overall objective is to determine the existing social and economic condition of the affected homesteads and community in order to ensure that changes arising from project activities, including resettlement and relocation, do not leave the affected homesteads and community worse off.

2.2.1 Community facilities and amenities

The availability and accessibility of community facilities such as schools, health care centres, water sources, public roads, will be recorded through interviewing affected homesteads and any other relevant stakeholders within the community.

The availability and accessibility of community facilities in the receiving community, to which affected homesteads will be resettled, will also be taken into consideration to ensure that the demand placed upon such resources is not exceeded to the detriment of the wellbeing of the both the receiving community and the resettled families.

2.2.2 Identification of employment opportunities likely to arise during project implementation

Data will be collected through interviews to determine existing skills that are available within the affected community in order to determine the prioritisation of appropriate employment opportunities for members of the community. For example, some members of the

community may have qualifications and training in certain vocations, such as construction, catering, driving and many others which are likely to be required during project implementation.

The role of the Social Impact Assessment report is to present facts and recommendations upon which the Government will need to make decisions. The Government will implement the compensation and resettlement process in accordance with international best practice guidelines and principles of the African Development Bank as well as national laws and regulations.

3. Discussion

The community members were provided the platform to submit queries, comments, suggestions and concerns to the Socio-economic and RAP Survey Team.

3.1 Affected zones

3.1.1 Extent of affected zones

The *Indvuna* explained that the three zones that will be affected are:

- a) Spete;
- b) Ncabaneni;
- c) Sithobela.

Of note is that Masibekela High School and Bhekephi Primary School will be affected.

3.2 Flora and fauna

3.2.1 Natural resources of cultural and economic value

A query was raised as to how natural resources, particularly those of cultural and economic value will be compensated, especially since they do not belong to individuals, but the community as a whole. An example of plants of medicinal value was cited.

Response: natural resources of cultural and economic value such as various species of grasses which grow on communal land and are harvested for making mats, hats, constructing structures within homesteads etc, will be identified measured and recorded. This will support the description and determination of existing sources of cultural and economic livelihood within the affected community.

Communal fixed assets such as communal grazing areas, and grasses of cultural and economic value will be measured and compensation will be based on the affected area measurement. Compensation will be made to the designated custodian, such as the Chief or the Royal Kraal, whichever the case may be.

3.3 Realignment of railway line and main road

3.3.1 Potential resettlements arising from realignment of railway line and main road

A suggestion was proposed that the survey should include resettlements that will be caused by the realignment of the railway line and main road. This will avoid having to survey the community several times, prolonging the anxiety amongst community members.

Response: a separate technical consultant will determine suitable realignment routes for the railways line and main road, respectively. When those feasibility study reports of each realignment have been made available to the Government, the associated resettlement surveys of such realignments will be undertaken. Presently the Survey Team is focusing on the dam.

3.3.2 Accessibility within affected community

A query was raised on whether or not the project will provide access routes across the dam, since presently there are low level crossings for vehicles and footbridges for pedestrians.

Response: impacts on vehicular and pedestrian access will be taken into consideration and appropriate mitigations and enhancements will be developed. In line with the principle of ensuring that the affected

community is not left worse off as a result of a development project, some of the feeder roads within the community will need to be upgraded to prevent sections of the community being isolated by the dam.

3.4 Identification of graves of stillborns

3.4.1 Identification of graves of stillborns

A query was raised on how to deal with cases where the locally resident family members do not know of any stillborns within the homestead whereas the only person who knows may be the mother who has long since left the homestead to settle elsewhere. One day she may return only to find the homestead inundated.

Response: prior to allowing the RAP Specialist to respond, the Indvuna asserted that if there is no way of any locally resident family member or any other person reasonably knowing that there is a grave of a stillborn, then unfortunately no claim can be initiated since it was not reasonably practical to expect such locally resident persons to have known. Mr Ramoeletsi responded that where remaining family members are uncertain of specific locations of graves of stillborns, then depending on the specific local customs, a portion of the soil from the homestead will be taken in lieu of the grave of the stillborn for reburial.

3.5 Source of funds

3.5.1 Source of funds for resettlement and compensation

A query was raised that in view of current reports in the media that the Government has limited financial resources for various activities, where

will the funds come from for resettling and compensating all the affected homesteads?

Response: the project will be funded by the African Development Bank (AfDB), subject to terms and conditions of funding agreement with the Government of the Kingdom of Eswatini.

3.6 Relocation of schools

3.6.1 Relocation of affected schools

A query was raised as to whether or not relocation sites have been identified for Masibekela High School and Bhekephi Primary School.

Response: schools will need to be relocated, i.e. shifted such that they remain within the community since they serve the whole community rather than just the affected homesteads. It was clarified that relocation means shifting the position of a homestead or facility, whereas resettlement means moving to a new location. The community in conjunction with the Government will need to identify suitable relocation sites. The same applies to clinics.

3.7 Planned cultivation and home improvements

3.7.1 Status of current plans for cultivation and home improvements

A query was raised as to whether or not affected homesteads should continue with their cultivation plans and home improvements, since they will be resettled. Furthermore, how will homesteads be compensated for crops and home improvements that are established after the survey?

Response: cultivation plans and home improvements shall proceed as normal until such time that the Government issues an instruction to affected homesteads to stop cultivation or home improvement beyond a date to be appointed. When the appointed cut-off date has been announced by the Government, the affected homesteads will be surveyed again to update the data for each homestead.

3.8 Proximity of Lumphohlo Dam and Nondvo Dam

3.8.1 Living in close proximity to two dams

A concern was raised that for those homesteads that will not be resettled, living in close proximity to two dams will affect the local climate such that winters will be colder, resulting in an increase in respiratory illnesses. There will also be the psychological stress of proximity to two large water bodies. Therefore it is suggested that indirect social impacts be taken into consideration so that indirectly affected homesteads are also accommodated by the survey.

Response: both direct and indirect impacts and mitigations will be taken into consideration.

3.9 Project Corporate Social Investment

3.9.1 Community facilities

A suggestion was submitted that the project provide tangible technical and/ or financial assistance to the affected community through the construction of facilities to meet the social amenity needs of the community. Examples of community water supply infrastructure and construction of a community hall were cited.

Response: suggestion was noted and will be included in recommendations of Social Impact Assessment report.

4. Closing

4.1 Words of appreciation to Community

The Socio-economic and RAP Survey Team expressed gratitude to the community for the opportunity of presenting the survey process and looked forward to working in close cooperation with the community during the survey.

4.2 Royal Kraal's closing remarks

The *Indvuna* expressed appreciation to the community for attending the meeting and acknowledged that due to time constraints of the meeting it may not have been possible for all queries and concerns to have been exhausted, therefore community members are requested to feel free to bring forward additional queries and concerns to their respective Zone Leaders who in turn will channel them through to the Inner Council, who will forward them to the Consultant. The *Indvuna* requested that the issues of the railway line and main road be addressed urgently by the Government since additional homesteads will be relocated by the possible realignment of the railway line and main road, which will have been triggered by the dam.

The Honourable Member of Parliament urged the community to welcome the proposed dam as part of the overall development of the community and urged all parties to treat each other respect and dignity throughout the various stages of the project. He also urged the community and the consultants to involve the Inkhundla throughout the consultation process.

The Chief expressed appreciation for the presentation from the Socio-economic and RAP Survey Team and urged the community to cooperate throughout the survey since it is being undertaken on behalf of His Majesty King Mswati III, the Government of the Kingdom of Eswatini and the Swazi Nation.

Record of meeting proceedings prepared by:


Mbuso Kingsley

APPENDIX

K SIPHOCISINI
INKUNDLA
MEETING 22
OCTOBER 2019

MBABANE – MANZINI CORRIDOR DAM (NONDVO DAM) ENVIRONMENTAL & SOCIAL IMPACT ASSESSMENT (ESIA)

RECORD OF MEETING WITH SIPHOCOSINI INKHUNDLA COUNCIL

Project Number:	41101262		
Grant Number:	P-SZ-EAZ-001 /002 and P-SZ-EAO-002		
Contract Number:	MNRE/ DWA/ 002/ 2017-18		
Client:	Government of the Kingdom of Eswatini Ministry of Natural Resources & Energy Department of Water Affairs (DWA)		
Project Title:	Mbabane-Manzini Corridor Dam (Nondvo Dam) Feasibility Study Environmental & Social Impact Assessment		
Consultant:	WSP Environmental (Pty) Ltd		
Meeting organized by:	WSP Environmental (Pty) Ltd		
Date:	22 nd October 2019		
Time:	Start :	10:40hrs	End: 12:15hrs
Venue:	Siphocosini Inkhundla Centre at Sigangeni		
Objectives:	<ul style="list-style-type: none"> • Formerly introducing the Nondvo Dam project to Siphocosini Inkhundla Council. • Address queries and receive comments, concerns and suggestions from Siphocosini Inkhundla Council on the proposed project. 		

ATTENDANCE:

	NAME	ORGANIZATION	DESIGNATION
1.	Mduduzi Matsebula	Siphocosini Inkhundla	Member of Parliament
2.	Gcinumuzi Mavimbela	Siphocosini Inkhundla	Indvuna Yenkhundla (Chairperson)
3.	Malanga Mbetse	Siphocosini Inkhundla	Bucophu (representing Mantabeni <i>Umphakatsi</i>)
4.	Sipho Mavimbela	Siphocosini Inkhundla	Bucophu (representing Siphocosini <i>Umphakatsi</i>)
5.	Thamie Shongwe	Siphocosini Inkhundla	Bucophu (representing Sigangeni <i>Umphakatsi</i>)
6.	Enock Malaza	Siphocosini Inkhundla	Bucophu (representing Luhendlweni <i>Umphakatsi</i>)
7.	Nomcebo Kunene	Siphocosini Inkundla	Secretary
8.	Mbuso Kingsley	Maphanga Mitchell Associates (MMA)	Local Environmental Support (representing WSP Environmental [Pty] Ltd)

AGENDA

AGENDA ITEM	RESPONSIBILITY
1. Welcome and Introductions	Inkhundla Council
2. Overview of Proposed Nondvo Dam 2.1 Background 2.2 Environmental & Social Impact Assessment Process	WSP WSP
3. Discussion	All
4. Closing 4.1 Words of appreciation to Inkhundla Council 4.2 Inkhundla Council's closing remarks	WSP Inkhundla Council

FOREWORD

Tinkhundla are local government institutions comprising local councils, but excluding urban government councils such as City Councils, Town Councils and Town Boards. The primary purpose of each Inkhundla is to bring services closer to the people and let them take charge of their own development. The Bucopho (Chiefdom Councillors) together with their communities initiate, compile and co ordinate development projects and programmes within chiefdoms. Each Inkhundla Council comprises:

- Member of Parliament;
- Indvuna Yenkhundla (Chairperson);
- Bucopho (Chiefdom Councillor), representing a Chiefdom within the Inkhundla;
- Inkhundla Executive Secretary.

Prior to the 2018 elections, the Mothsane Inkhundla comprised the communities of:

- Mantabeni;
- Siphocinsini;
- Sigangeni;
- Luhlendlweni;
- Mpolonjeni;
- Kupheleni;
- Nduma.

During the 2018 electoral process, the Motshane Inkhundla was divided into two separate Tinkhundla of Motshane and Siphocosini in order to further improve the ease of administration since the previous structure covered a large geographical area. These Tinkhundla now comprise the following communities:

Siphocosini Inkhundla	Motshane Inkhundla
Mantabeni Siphocinsini Sigangeni Luhlendlweni	Mpolonjeni Kupheleni Nduma

Following the 2018 elections, the current Siphocosini Inkhundla Council was appointed into office in October 2018. The proposed Nondvo Dam is located within the Siphocosini Inkhundla and will inundate areas within the communities of Mantabeni and Siphocosini.

1. Welcome and introductions

The Indvuna Yenkundla welcomed the representative of WSP Environmental (Pty) Ltd (WSP) to the Inkhundla Council's weekly meeting and introduced the Inkhundla Council members. Mbuso Kingsley from Maphanga Mitchell Associates introduced himself as the representative of WSP, who are the environmental consultants on the proposed Nondvo Dam project. WSP have appointed Maphanga Mitchell Associates (MMA), who are based in Eswatini, to act as the Local Environmental Support on behalf of WSP.

The WSP representative acknowledged the open invitation by the Honourable Member of Parliament on two previous occasions during community meetings held on 03rd August 2019 and 12th October 2019, respectively, where the project representatives were kindly requested to introduce the proposed project to the Inkhundla Council. The reason for the request was that the current Inkhundla Council was appointed in October 2018 and therefore had not been formerly inducted on the proposed project.

2. Overview of proposed Nondvo Dam

2.1 Background

The Government of the Kingdom of Eswatini identified an increasing gap between water supply and demand, which in turn will lead to a potential critical constraint to socio-economic sustainability and development. The gap in water supply and demand was subsequently confirmed by two joint intergovernmental studies, the first undertaken by Eswatini and Mozambique in 2006 and the second by Eswatini, South Africa and Mozambique in 2009. The outcome of the study was that each country establish appropriate interventions to the potential water shortage facing each country and for Eswatini the appropriate intervention was identified as being dams, of which Nondvo Dam is a part.

The main objective of Nondvo Dam is to secure potable water availability along the Mbabane – Manzini corridor. Additional possible uses of the water include

hydropower generation and irrigation, depending on the suitability of soils along the Mbabane – Manzini corridor. The Mbabane – Manzini corridor includes Mbabane, Ezulwini, Lobamba, Matsapha, Manzini. The proposed location of the dam is along the Lusushwana River, immediately downstream of Luphohlo Dam and the source of water will primarily be from the Nondvo River, from which the project derives its common name. Other sources will be the tributaries upstream of the dam wall which will be approximately 7km downstream of Luphohlo Dam. An A3 colour map of the proposed site was issued to the Council.

One of the prime considerations for the site selection was that a site of suitable elevation from sea level is necessary to enable the stored water to flow to the points of use by gravity in order to avoid pumping which would otherwise cause high electricity consumption, whose associated costs would cause the project to be unsustainable. An additional consideration was the topography which would allow water to be impounded using surrounding mountains, thereby enabling an optimal depth of the dam, as opposed to a shallow dam which would rapidly be silted.

It is estimated that the proposed design of the dam will meet the water requirements of the Mbabane – Manzini corridor up to approximately 2050, at which point additional interventions will need to be considered, such as increasing the capacity of dams that will be existing at that time or developing new infrastructure and/or strategies.

2.2 Environmental and Social Impact Assessment process

The Environmental and Social Impact Assessment (ESIA) process entails identifying the potential impacts on flora, fauna and the livelihoods of the people who will be directly and indirectly affected by the project. Appropriate mitigations of adverse impacts and enhancement of positive impacts will be developed as part of the ESIA process. A major component of the ESIA process is

identifying the homesteads that will be affected by impounding the water wherein if those homesteads are not resettled, then they will be inundated.

Other infrastructure that will need to be realigned in order to avoid inundation are the railway line, main road MR19 and feeder roads. The realignment of this infrastructure will in turn cause additional homesteads to be resettled. Thus far, only those homesteads that will be affected by inundation have been identified, visited and their assets measured and recorded. Those that will be affected by realignment of infrastructure have not yet been measured since the proposed realignment designs have to be first approved by the relevant entities, i.e. Eswatini Railways in the case of the railway line. No realignment routes have yet been proposed for the MR19, which will need to be approved by the Ministry of Public Works and Transport. To avoid confusion and exacerbating the anxiety within the community, the homesteads affected by infrastructure realignment will be visited only when realignment routes have been approved by the respective entities. Therefore, possible resettlement sites have not yet been identified since the total population and total area required to accommodate resettled homesteads first needs to be determined. The leadership within the affected communities will be consulted throughout the process of identifying suitable resettlement sites.

3. Discussion

The members of the Inkhundla Council were provided the platform to submit comments, suggestions and queries and concerns.

3.1 Additional infrastructure to be affected

The Inkhundla Council pointed out that the presentation omitted the proposed 132kV transmission line and the two schools which will also be affected by the dam.

3.1.1 Proposed 132kV transmission line

Response: It is correct that the proposed 132kV transmission line which will be installed by the Eswatini Electricity Company (EEC) is currently proposed directly on the same site as the dam. The transmission line will need to be realigned and such realignment will affect additional homesteads which will also need to be resettled. Similar to the railway line and MR19, the project will need to propose a realignment route for the 132kV transmission line. When the transmission line realignment route is approved by EEC, the homesteads along the proposed route will be measured and recorded for inclusion in the resettlement process. Thus far, DWA has been made aware of the proposed transmission line and a formal decision is yet to be reached as to whether or not Eswatini Government, through the Ministry of Natural Resources and Energy, will bear the costs that will be incurred by EEC in redesigning the realignment route of the proposed 132kV transmission line.

On the existing distribution network, EEC have advised that the 11kV distribution network layout will be dependent upon the final layout of the homesteads to be resettled and the remaining homesteads. This is

because the distribution lines have to be routed to the homesteads, as opposed to designing the homesteads according to the network layout.

3.1.2 Schools

Response: It is correct that Bhekephi Primary School and Masibekela High School will be inundated. Since they serve the community, they will need to be relocated within the community, as opposed to resettled. Due to unavailability of land, such relocation will invariably mean that some homesteads will need to be moved, i.e. either relocated or resettled, in order to provide space for the schools. Suitable relocation sites will be identified through consultations with the community members, community leaders and Ministry of Education.

3.2 Intergovernmental studies

3.2.1 Availability of intergovernmental studies

The Inkhundla Council kindly requested a copy of the intergovernmental study that contains the recommendation of the identification on the proposed site for the dam. The purpose for the request is to enable the council to respond to queries from the community on how the proposed site was identified, i.e. the criteria which led to the identification of the proposed site. This will also enable the Council to respond to community members who may suggest other sites or who may query why not other sites.

Response: the Local Environmental Support undertook to request a copy of the intergovernmental report from the Department of Water Affairs and forward it to the Inkhundla Council.

3.3 Purpose of proposed dam

3.3.1 Project beneficiaries

A query was raised as to whom the project beneficiaries will be. This is in view of the fact that the communities affected by the construction of Lumphohlo Dam did not benefit directly from that project, particularly since expectations were raised that they would benefit from water and other spin-offs, besides electricity which is Lumphohlo Dam's core purpose. Therefore the communities have a bitter experience of hosting infrastructure projects that benefit other communities more than the hosts. Furthermore, the delivery of services and infrastructure at the places to which homesteads were resettled has been incomplete, such that the general quality of life amongst resettled homesteads is currently worse off than what it was prior to the construction of Lumphohlo Dam. With regard to the proposed Nondvo Dam, it is apparent that downstream communities will benefit from potable water, but it is not clear how the host communities will benefit.

Response: It is part of the project objectives that potable water will be available to the project's host communities. Secondly, when the place that will host the resettled homesteads has been identified, the availability, accessibility and condition of infrastructure and facilities such as public roads, schools, health care centres, etc, will need to be evaluated to determine the capacity to absorb the resettled homesteads. Where appropriate, upgrades or provision of new infrastructure and facilities will be necessary so as to avoid placing a strain on the existing infrastructure and facilities which would otherwise leave the resettled homesteads and their host community worse off. It was emphasized that the response does not purport to make promises on behalf of Government, but rather provide an indication of the

considerations that will form part of the proposed mitigations in the ESIA Report by the ESIA Consultant.

Another perspective from which to view the project is to consider the social cost of not taking intervention measures against water scarcity. By 2050 the water requirements and water shortage may be such that it will be too late or far costlier than at present to consider building a dam: too late in the sense that the level of development of the human settlements at the currently proposed site may be so dense that it may be impractical to even contemplate a dam.

3.4 Impact on community development capital projects

3.4.1 Capital projects

A query was raised as to whether or not planned community development projects should be halted or suspended. Examples include rural electrification schemes and rural water supply projects. The basis of the query is that some projects entail monetary contributions from homesteads participating in the schemes, therefore some are now reluctant to make contributions, citing the fact that the proposed dam will disrupt the development programmes altogether, therefore their money will have been wasted.

Response: All planned community development programmes, including home improvements and annual cultivation of arable land, shall continue as normal until such time that Government proclaims a decision on whether or not the dam is proceeding. Halting the planned community development programmes will cause a greater inconvenience if eventually the dam does not proceed. In the event that the dam proceeds, then the community development infrastructure network will need to be re-routed or realigned at the cost of the project.

The Local Environmental Support kindly requested the Inkhundla Council for a list of current community development capital projects as presented during the Siphocosini Community Meeting on 12th October 2019. This will enable WSP to take into consideration potential impacts on such community development projects during the preparation of the ESIA Report. The Inkhundla Council undertook to make the annual report on community development projects available to the Local Environmental Support.

3.5 Technical feasibility of proposed dam

3.5.1 Technical feasibility

A query was raised as to the level of confidence of the technical feasibility of the dam, i.e. the level of certainty amongst the technical feasibility study consultants that the dam is indeed feasible. The query is raised on the basis that Lumphohlo Dam is itself currently visibly very low, therefore the proposed Nondvo Dam may take a long time to reach full supply level, if at all.

Response: The consultants undertaking the technical feasibility study have thus far indicated that the dam is technically feasible, based on the results of the hydrological studies and geotechnical surveys. What remains to be determined is whether the dam is feasible from a socio-economic perspective when the environmental and resettlement costs have been incorporated into the decision making process. Resettlement costs are not limited to homesteads, but also include practicalities and costs of realignment of the railway and MR19.

3.6 Estimated commencement of project implementation

3.6.1 Estimated commencement date of project implementation

A query was raised as to when project implementation is expected to commence.

Response: First, the technical and environmental and social feasibility studies have to be concluded. The Ministry of Natural Resources and Energy expects these processes to be concluded early in 2020. If the studies find that the dam is feasible from all perspectives, i.e. technical, environmental and social, then Government will proceed with sourcing funding. Therefore a definitive project commencement date cannot be intimated at this stage.

3.7 Project alternatives

3.7.1 Alternative project sites

A suggestion was submitted that alternative project sites be explored as a means of mitigating the distress and cost of resettling the densely distributed homesteads from the proposed project site.

Response: it was clarified that the project in its entirety comprises other options of raising Luphohlo Dam and Hawane Dam respectively. Therefore Nondvo Dam is one of three options, all of which may be feasible, or only two of which may be feasible, or only one of which may be feasible. When all options have been evaluated, a decision will be made on the best option or combination of options.

As a follow-up, the Inkhundla Council suggested the possibility of reducing the size of the proposed dam so that the inundated area

covers only the existing arable fields along the banks of the proposed site. It was suggested that a scaled down version of the proposed dam be balanced with the other options of raising Lumphohlo and Hawane. This will mitigate the need for resettlement of homesteads, relocation of schools and realignment of transport infrastructure.

3.8 Conduct of socio-economic survey

3.8.1 Inclusion of HIV status in socio-economic survey questionnaire

The Inkhundla Council requested verification and relevance of asking respondents about their HIV status during the socio-economic survey. The query was raised on the basis that respondents assumed that HIV status will influence whether or not they qualify for compensation.

Response: It was clarified that the objective of the question posed to respondents was to ascertain whether or not they are aware of their HIV status, not to disclose such status. The relevance is that obtaining an indication of the level of self-awareness guides the nature of mitigation measures that will be recommended. For example, where the level of self-awareness in a community is low, then the recommended mitigation measures will be more intensive than in a community where self-awareness is high.

The Inkhundla Council acknowledged the perspective of the response, but kindly requested to express reservations in view of how easily the line of questioning will be misinterpreted in the community as well as the legality of asking a person about their HIV status, whether explicitly or implicitly.

3.8.2 Signing of asset forms

A clause was contained in the asset forms issued to respective affected homesteads to sign that they agree not to add any further structures after the asset recording exercise. A query was raised as to how such a clause will be reconciled with the instruction to continue with capital projects and homestead improvements until such time that Government issues a directive for all development within the project site to cease on account of the dam proceeding.

Response: Fortunately the clause was identified when the first few homesteads were requested to verify the assets recorded on the form. Subsequently the forms were withdrawn and the clause has since been amended to read that the homestead head acknowledges the accuracy of the data collected. The commitment to not add further structures has been removed.

3.9 Map of proposed dam

3.9.1 Map of proposed dam

The A3 map was acknowledged and a larger map was requested for pinning on the wall of the Inkhundla Centre.

Response: The Local Environmental Support undertook to issue a larger map on A0 sheet.

3.10 Where to direct correspondences

3.10.1 Correspondence between Inkhundla and the project

A query was raised as to where Inkhundla shall direct queries and correspondence on the dam.

Response: queries shall be directed to the Local Environmental Support who shall in turn forward queries to the Lead Consultant (WSP) and DWA. The Honourable Member of Parliament further suggested directing correspondence to the Ministry of Natural Resources and Energy who will then delegate the implementing agency DWA to address the queries accordingly through the appointed service providers. The meeting participants resolved to adopt the latter approach.

4. Closing

4.1 Words of appreciation to the Inner Council

The Local Environmental Support expressed gratitude to the Inkhundla Council for the opportunity of formerly presenting the project and addressing queries.

4.2 Inkhundla Council's closing remarks

The Honourable Member of Parliament expressed appreciation for presentation which will now enable the Inkhundla Council to address queries from the constituency with more confidence as well as enable the Council to submit queries, suggestions and concerns to Government from an informed position in order to ensure the success and sustainability of the project.

Record of meeting proceedings prepared by:


Mbuse Kingsley

APPENDIX

L GENERAL
PUBLIC
MEETING 28
NOVEMBER
2019

MBABANE – MANZINI CORRIDOR DAM (NONDVO DAM) ENVIRONMENTAL & SOCIAL IMPACT ASSESSMENT (ESIA)

RECORD OF PUBLIC CONSULTATION MEETING

Project Number:	41101262		
Grant Number:	P-SZ-EAZ-001 /002 and P-SZ-EAO-002		
Contract Number:	MNRE/ DWA/ 002/ 2017-18		
Client:	Government of the Kingdom of Eswatini Ministry of Natural Resources & Energy Department of Water Affairs (DWA)		
Project Title:	Mbabane-Manzini Corridor Dam (Nondvo Dam) Feasibility Study Environmental & Social Impact Assessment		
Consultant:	WSP Environmental (Pty) Ltd		
Meeting organized by:	WSP Environmental (Pty) Ltd		
Date:	28 th November 2019		
Time:	Start :	10:20hrs	End: 12:30hrs
Venue:	Exhibition Hall, Eswatini National Library, Mbabane		
Objectives:	<ul style="list-style-type: none"> • Present proposed project to the public. • Receive comments, queries, suggestions, concerns from the public for input into the ESIA process. 		

ATTENDANCE:

	NAME	ORGANIZATION	DESIGNATION
1.	Mordecai Dlamini	Sizabantu Piping Systems	Managing Director
2.	Khulani Mamba	Royal Eswatini Police Service	Superintendent
3.	Priscilla Mkhathshwa	Surveyor General's Department	Cartographer
4.	Jabulani Tibane	TP&I Managers	Consultant
5.	Nelsiwe Dlamini	Siphocosini Community	Community Member
6.	Thabsile Shongwe	Mantabeni Community	Community Member
7.	Themba Khumalo	Mantabeni Community	Community Member
8.	Jabulile Mnisi	Public	Interested Party
9.	Darron Raw	Ezulwini Town Council	Councillor, Ward 6
10.	Anthony Borrel	Mlilwane Wildlife Sanctuary	Technical Services Manager
11.	Bhekie Jackson	Mantabeni Community	Community Member
12.	Zandile Jackson	Mantabeni Community	Community Member
13.	Samuel Ncongwane	Mantabeni Community	Community Member
14.	William Masuku	Siphocosini Community	Community Member
15.	Phumzile Mkhathshwa	Public	Interested Party
16.	Amos Msibi	Ministry of Tinkhundla Administration & Development	Interested Party
17.	Temusa Zwane	Maphanga Mitchell Associates (MMA)	Environmentalist
18.	Angelina Edje	Maphanga Mitchell Associates (MMA)	Quantity Surveyor
19.	Mbuso Kingsley	Maphanga Mitchell Associates (MMA)	Local Environmental Support (representing WSP Environmental [Pty] Ltd)

AGENDA

AGENDA ITEM	RESPONSIBILITY
1. Opening and Welcome	MMA
2. Overview of ESIA Process	MMA
3. Project Description	MMA
4. Discussion	All
5. Closing	MMA

1. Opening and Welcome

M. Kingsley of MMA, Local Environmental Support on behalf of WSP and DWA, welcomed the participants to the Nondvo Dam Public Consultation Meeting.

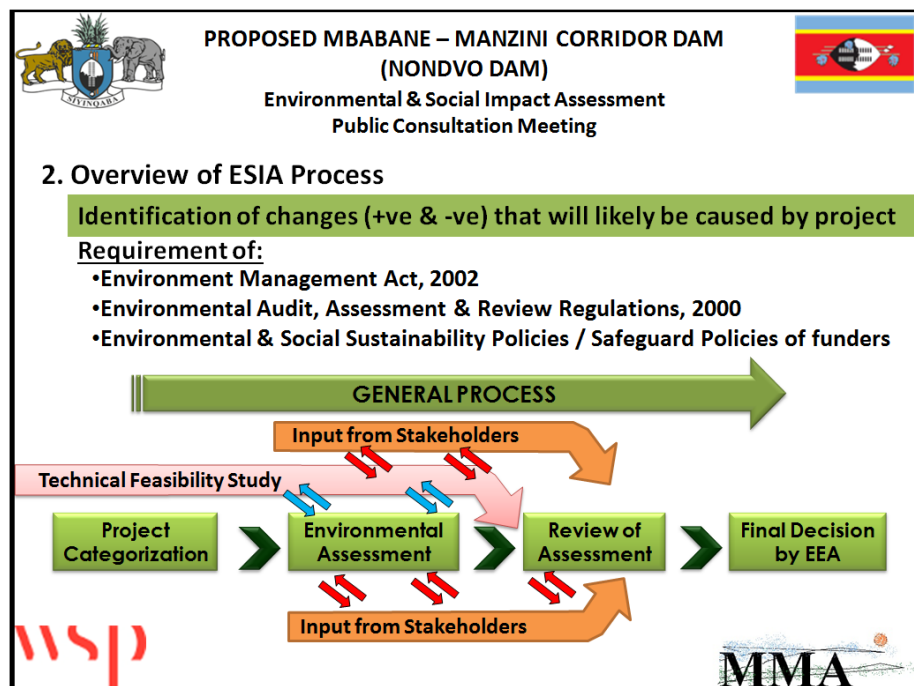
The relationship amongst the Client and project consultants was described:



It was explained that the Feasibility Study comprises two elements, i.e. the Technical Feasibility Study which is being undertaken by Studio Pietrangeli Consulting Engineers (SP) and the ESIA Study which is being undertaken by WSP Environmental (Pty) Ltd (WSP). MMA are subcontracted to WSP to provide Local Environmental Support.

2. Overview of ESIA Process

It was explained that the ESIA Process essentially entails identification of negative and positive changes that are likely arise from project activities, evaluating the significance of the changes and developing measures to mitigate negative impacts and enhance positive impacts. Application of the process is mandated by legislation and documented policies of international funding institutions, such as the World Bank and African Development Bank, among others.



While the Technical Feasibility Study commenced earlier than the ESIA Study, both processes are being undertaken simultaneously. In so-doing the respective consultants share information with each other thereby complementing each other's studies. Additionally, both processes interact with stakeholders in order to inform the issues to be addressed by each study. It was highlighted that while the Technical Feasibility Study is likely to conclude that the proposed dam is technically feasible, the final outcome will depend on the findings of the ESIA process whereby the environmental and social impacts, including costs of resettlement, may find that the social cost influences whether or not the project is feasible.

With respect to stakeholder engagement, it was highlighted that the Technical Feasibility Study has been interacting with stakeholders comprising governmental

agencies, parastatals and traditional leaders from the project-affected communities. An interim report was presented to stakeholders in November 2019 and the final report is expected by May 2020. Stakeholder engagement in the ESIA process has thus far been intensive within the project-affected communities, specialist studies have been undertaken on flora and fauna as well as cultural heritage. A socio-economic study and resettlement survey entailing indentifying and measuring fixed assets that will be affected by the inundation area have been undertaken and are still on-going. An interim report will be presented to stakeholders in December 2019. When the work of consultants has been concluded the ESIA Report will be issued for public review prior to a final decision by Eswatini Environment Authority (EEA) as to whether or not the project is granted environmental authorisation.

The rules of the Public Consultation Meeting were then described:



**PROPOSED MBABANE – MANZINI CORRIDOR DAM
(NONDVO DAM)**
Environmental & Social Impact Assessment
Public Consultation Meeting

PUBLIC CONSULTATION MEETING RULES

- **One Moderator**
- **One speaker at a time (*as directed by Moderator*)**
- **Respect each other's views/ opinions**
- **Clear submissions to enable capturing**
- **Submissions after Project Description**

WSP MMA

3. Project Description

3.1 Background

The Government of the Kingdom of Eswatini identified an increasing gap between water supply and demand, which in turn will lead to a potential critical constraint to socio-economic sustainability and development. The gap in water supply and demand was subsequently confirmed by two joint intergovernmental studies, the first undertaken by Eswatini and Mozambique in 2006 and the second by Eswatini, South Africa and Mozambique in 2009. The outcome of the study was a recommendation that each country respectively establish appropriate interventions to mitigate the potential water shortage facing each country.



**PROPOSED MBABANE – MANZINI CORRIDOR DAM
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3. Project Description

3.1 Background

- Gap in water demand and supply along Mbabane – Manzini Corridor
- Need for interventions to mitigate water shortage
- Interventions comprise:
 - Development of new water resources infrastructure and/ or
 - Enhancement of existing infrastructure

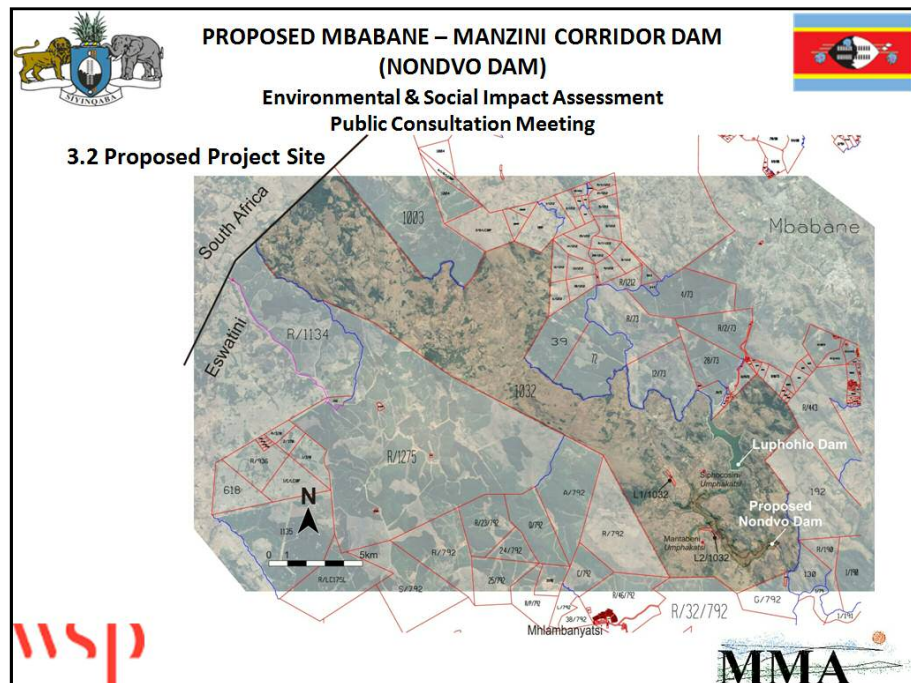
WSP **MMA**

For Eswatini the appropriate interventions were identified as construction of new dams and increasing the capacity of existing dams. The proposed Nondvo Dam therefore falls under the category of new water resources infrastructure. An example of another dam for which a technical feasibility study and ESIA were undertaken is Ethemba Dam on the Mkhondvo River in the Shiselweni Region.

The main objective of Nondvo Dam is to enhance the availability of potable water along the Mbabane – Manzini corridor. Additional possible uses of the water include hydropower generation and irrigation, depending on the suitability of soils along the Mbabane – Manzini corridor. The Mbabane – Manzini corridor includes Mbabane, Ezulwini, Lobamba, Matsapha, Manzini.

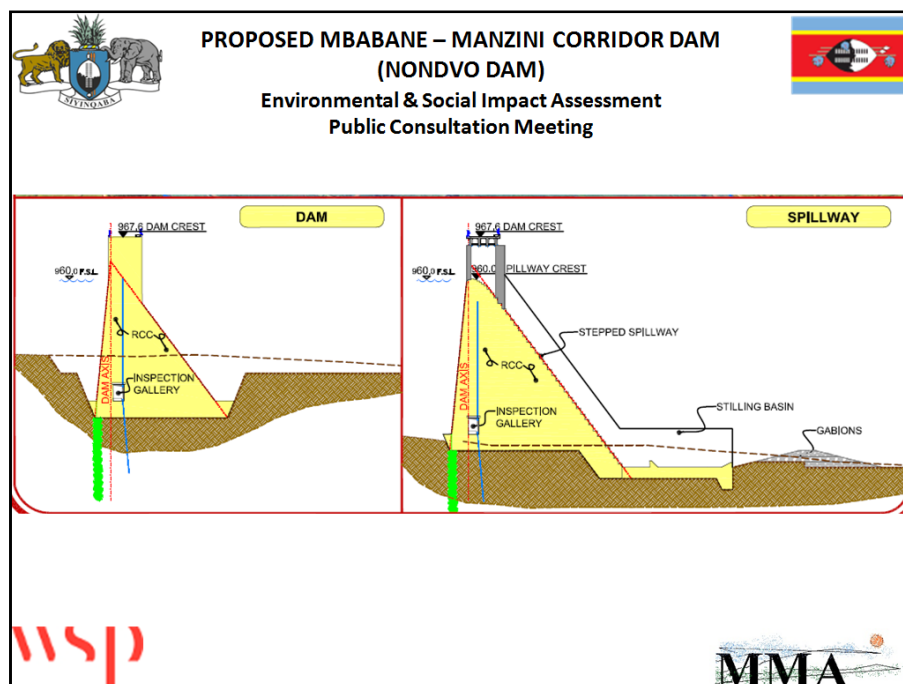
3.2 Proposed Project Site

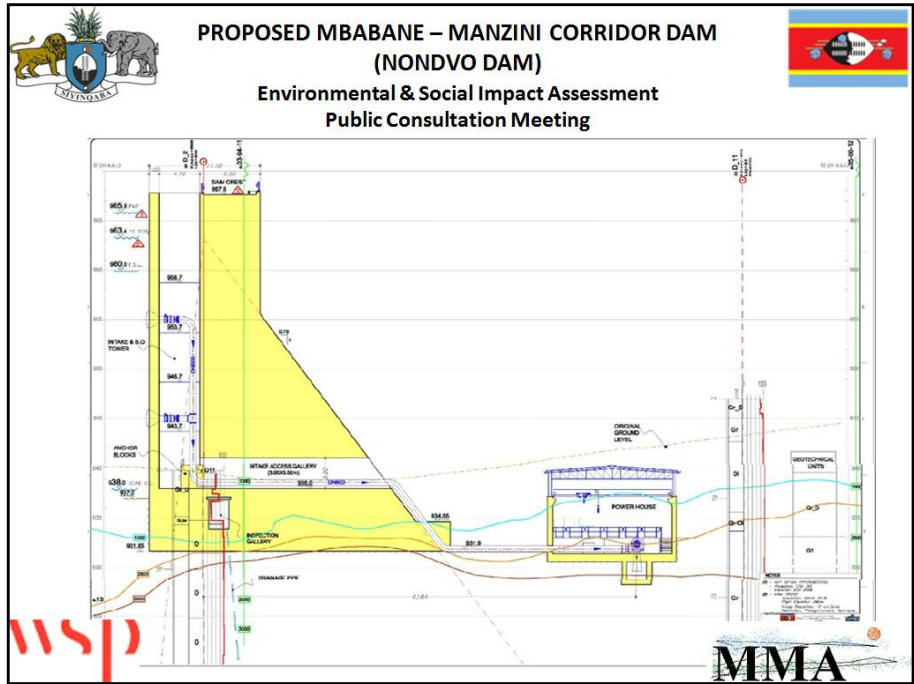
The proposed location of the dam is along the Lusushwana River, immediately downstream of Luphohlo Dam and the source of water will primarily be from the Nondvo River, from which the project derives its common name.



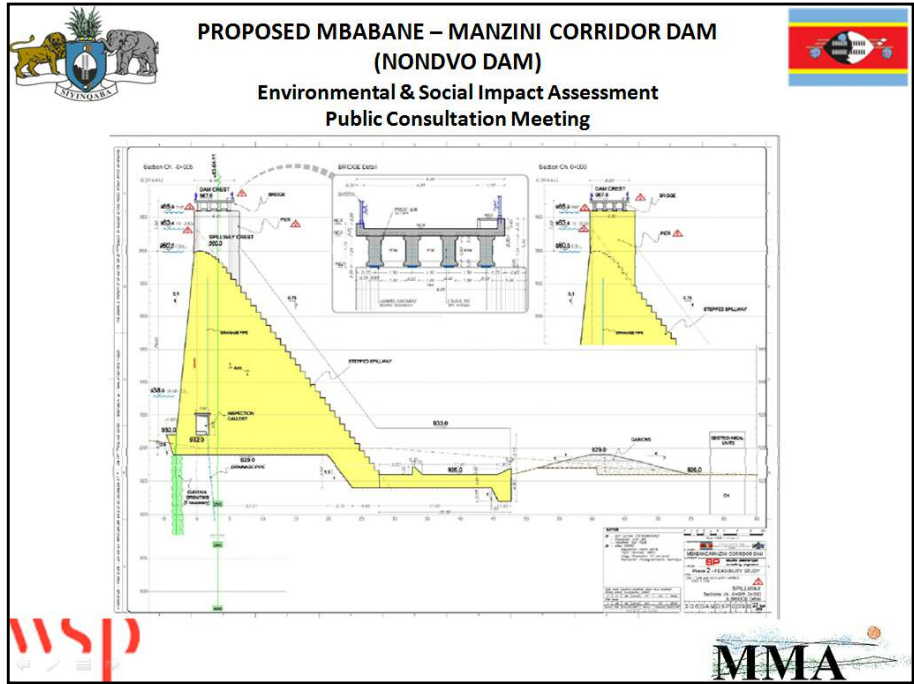


The dam wall will be situated approximately 7km downstream of Luphohlo Dam. The proposed dam will impound water from the Nondvo River and tributaries of the Lusushwana River in the Mantabeni and Siphocosini communities. One of the prime considerations for the site selection was that a site of suitable elevation from sea level is necessary to enable the stored water to flow to the points of use by gravity in order to avoid pumping which would otherwise cause high electricity consumption. A cross-section of the proposed dam wall was shown:







A 0.13MW hydropower plant generating 1.02GWh/y and situated at the outlet of the dam is included in the proposed project. An access road for vehicular traffic is proposed along the dam wall to enable continued access between both sides of the dam. The road will be constructed on pillars. Initially, the road had not been included, however subsequent to input from stakeholders it was included by the Technical Feasibility Study Consultant.





The key characteristics relating to the capacity of the dam were presented:




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Description	Metres Above Sea Level	Reservoir Volume (Mm ³)	Reservoir Area (km ²)
Minimum Operating Level	939	0.17	0.05
Maximum Operating Level	960	21.6	2.4
Flood Level @ 10,000years	963.4	29.6	2.9
Extreme Flood Level	965.9	38.6	3.3

The estimated timeframe for construction was presented:





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Activity	Estimated Duration
Mobilization and Demobilization	6 months
Roads and Camps	3 months
Diversion Works	4 months
Dam and Auxiliary Works	24 months
Powerhouse	10 months
Commissioning	4 months
TOTAL	36 to 51 months

Construction only.
Does not include resettlement and any other environmental and social processes.





It was emphasized that the estimated timeframe applies to construction only and does not include resettlement processes as these will be contained in the ESIA Report.

The estimated construction cost was presented:





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ACTIVITY	ESIMATED COST (M\$)
CONSTRUCTION	33.1
CONTINGENCIES (10% of construction)	3.31
ENGINEERING (5% of construction)	1.66
TOTAL	38.01

Does not include resettlement and any other environmental and social processes.



It was emphasized that the estimated construction cost applies to construction of the dam only and does not include resettlement and any other environmental and social processes, such as compensation. These will be included in subsequent stages of the ESIA process.

4. Discussion

The meeting participants were provided the platform to submit comments, suggestions and queries and concerns.

4.1 Water sources

4.1.1 Confidence level of availability of water for proposed dam

A query was raised as to the confidence level of the data used by the Technical Feasibility Study Consultant in determining that adequate water will be available for the proposed dam. It is acknowledged that the query may be addressed in the Technical Feasibility Study Report, but it would be helpful to provide such information in such a format that non-technical stakeholders can easily understand. The query is raised on the basis that to the lay person, physically there appears to be inadequate flows along the proposed water sources and it is known that the Government's measuring devices upstream of the proposed site are not adequately maintained or data recording is inconsistent. Furthermore, there are no measuring devices along the proposed tributaries, therefore there is no long term historical data for the sub-catchment. It is likely that in the absence of actual historical records, the Technical Feasibility Consultant has had to rely on computer modelling to determine adequacy of water in the sub-catchment, which may not necessary translate to reality during project implementation.

Response:

The query was noted for forwarding to the Technical Feasibility Study Consultant, through the Department of Water Affairs.

4.2 Project costs

4.2.1 Exclusion of environmental and social costs from presentation

A query and concern was raised as to why the costs of environmental mitigations as well as resettlement and compensation of affected parties was not presented. Presentation of the construction cost alone appears to misrepresent the true total cost of the project and may be misconstrued as an attempt to enable or justify the escalation of costs during implementation.

Response:

The ESIA process has not yet finalised the costs of environmental mitigations, resettlement and compensation. These costs will be available in due course and will be included in the project's total estimated implementation and operation costs.

4.2.2 Environmental and social cost as a percentage of construction cost

A query was raised as to the approximate percentage of construction cost that the environmental and social costs are likely to be, i.e. in a similar method that contingencies and engineering costs are estimated as a percentage of the construction cost.

Response:

It is as yet not possible to estimate the environmental and social costs as a percentage since they may not necessarily be linearly or exponentially proportional to the construction cost. There are several dynamics to take into consideration, such as the added resettlement and compensation costs arising from other activities and projects that will be triggered by the dam. These include the realignment of the railway line, the Main Road (MR19), feeder roads within the community and

realignment of Eswatini Electricity Company's (EEC's) proposed 132kV transmission line. Additionally, there are two schools (Bhekephi Primary School and Masibekela High School) which will have to be relocated to alternative sites within the community – this will also necessitate resettlement of homesteads since there is presently no land to relocate the school-affected homesteads within the community. Therefore, in view of such variables and dynamics, it is not possible to estimate a cost of environmental and social mitigations as a percentage of the dam construction cost. In fact it may well be the environmental and social costs that influence the overall feasibility of the project.

4.2.3 Threshold of bankability of project

A query was raised as to the threshold of bankability of the project, i.e. the minimum and maximum cost of both Technical Feasibility and Environmental and Social Feasibility that will qualify the project as being worth funding by potential funders.

Response:

The query was noted for onward submission to the Client.

4.2.4 Project funding

A query was raised as to how and by whom the project will be funded.

Response:

It was clarified that the Feasibility Study, which comprises both the Technical Feasibility Study and ESIA Study, is being funded by the African Development Bank (AfDB). When the Feasibility Study is complete, Government will then be in a position to use the Final Feasibility Study Report to seek funding from development funding institutions which will scrutinize the Feasibility Study Report to determine whether or not it

qualifies for funding. Therefore, a funder for the project implementation and operation stages has not yet been identified.

4.2.5 Justification of project cost

A recommendation was made that the project costs be justified strongly by the project proponent so that a lot of money is not spent, and possibly recovered from tax payers, only to find that the benefit is too low relative to the cost. An example was cited of Lubovane Dam which was constructed as part of the Lower Usuthu Smallholder Irrigation Project (LUSIP) where the lives of community members have visibly been positively transformed. Therefore, the proposed Nondvo Dam should also provide assurance of tangible benefits as means of strengthening the justification of the project costs, i.e. positive impacts should be practical, realistic and attainable rather than simply hypothesised in order to market the project. As a follow-up to the recommendation, a comment was submitted that without strong justification for the expenditure, the project will be at risk of inciting animosity of the populace against the Government.

Response:

The recommendation and additional comment were noted. A member of the audience highlighted, for the benefit of other participants, that the example of LUSIP as cited by the previous speaker, is not without sections of the affected community feeling excluded from the benefits, such as the Mphaphathi community which cannot easily access water from the LUSIP project. Various community development initiatives have therefore had to be implemented to off-set the lack of direct access to LUSIP water. That being said, in respect to the exploration of interventions to mitigate the severity of water scarcity, it is necessary to recognise the Eswatini Government's timely response to the threat, which is proactive compared to the recent situation in neighbouring

South Africa where the water crisis in Cape Town may have been exacerbated by delayed action by the government. In relation to this specific project, it may therefore be prudent to consider the aspect of securing water for a larger population over a wider geographical area than only the project site. Therefore there is a predicament of balancing the needs of the many against the impacts on a few.

4.2.6 Forecasting environmental and social costs

A recommendation was submitted that when environmental mitigation costs and resettlement and compensation costs are calculated, they should factor in the time lapse between the time the survey is undertaken and the time when the project will be implemented. This forecasting or projection will mitigate situations where, due to inflation and exchange rates, the budget allocation at implementation is found to be inadequate to cover the environmental and social costs since excessive time will have elapsed between the date of calculation and the date of project implementation.

Response:

Recommendation was noted.

4.2.7 Variation in value of fixed assets between date of ESIA and date of implementation of resettlement process

A concern was raised that the value of fixed assets of affected homesteads will likely be higher at the date of implementation of the resettlement and compensation process. This will cause discrepancies in the value of compensation due, resulting in grievances.

Response:

It was clarified that the affected homesteads will be revisited prior to project implementation in order to update and verify the asset inventories and value of the fixed assets. For example, some structures such as houses are likely to be extended after the asset survey since no directive has been issued by the Government to stop house construction or home improvement. Therefore, when the cut-off date for house construction and home improvement within the project site is issued, the recorded homesteads will be revisited to update the fixed asset inventories.

4.3 Community development initiatives

4.3.1 Project benefits to host communities

A recommendation was submitted that the project consider community development initiatives to benefit the wider host community since the likely reality is that it may not be practical to supply water to the entire host community, particularly if water will be conveyed by gravity. Therefore, rather than raising false expectations, it may be prudent to consider community development initiatives such as roads and other facilities that will off-set or compensate for the lack of access to water from the project. It is recommended that such initiatives be included in the ESIA. The ESIA needs to further take into consideration the trend that the host community is rapidly developing as a peri-urban area, therefore any potential community development initiatives need to be relevant to the unique circumstances of the host community in that agriculture may not be viable. Initiatives that will bring infrastructure and services may alleviate increasing population density and any adverse impacts associated with such increase in population density.

Response:

The recommendation was noted.

4.4 Impact on existing and planned capital projects within community

4.4.1 Disruption of home improvement plans and projects

Clarification and confirmation was requested as to whether or not on-going and planned home improvement projects should cease.

Response:

All planned and on-going home improvements and annual cultivation of arable land, shall continue as normal until such time that Government proclaims a cut-off date for such activities. Verbally instructing homesteads to cease their respective projects and cultivation will cause a greater inconvenience if eventually the dam does not proceed. This has been emphasized at the community meetings.

4.4.2 Uncertainty amongst affected homesteads

The uncertainty amongst directly affected homesteads is causing anxiety within the project-affected communities. A concern was therefore raised on psychological stress caused by the state of uncertainty.

Response:

The anxiety caused by the prospect of being resettled by large-scale infrastructure projects is acknowledged. This is currently being mitigated by including progress updates on the ESIA process during community meetings. Furthermore, anxiety from the cumulative impacts of multiple simultaneous projects such as realignment of the railway line, MR19 and 132kV Transmission line, which themselves will

be triggered by the Nondvo Dam, are being mitigated by first ensuring that realignment routes are finalised before surveying affected homesteads. This approach has been taken to avoid surveying homesteads based on draft realignment routes, only to return at a later stage to inform them that they are in fact not affected, and that other homesteads which will have initially been told are unaffected are now affected. This would result in confusion and exacerbate psychological stress.

4.5 Resettlement process

4.5.1 Assurance of commitment to implement recommendations

A query was raised as to what documentation will be issued to directly affected parties, including homesteads, as a commitment that their rights in terms of equitable compensation will be honoured during the implementation of the resettlement process. Such documentation would be used by affected homesteads when lodging a grievance or seeking recourse in the event that the implementing agency fails to honour its obligations.

Response:

A Resettlement Policy Framework which comprises the Resettlement Action Plan will be developed as part of the ESIA. This will contain the overarching principles, terms and conditions of how resettlement and compensation will be applied.

4.5.2 Resettlement sites

A query was raised as to where the affected homesteads will be resettled. The basis of the query is that it is not desirable to resettle affected homesteads far from their present communities, particularly to

areas intimated in rumours where the climate is hot compared to what they are accustomed and where there is no water.

Response:

It was clarified that as yet, no sites have been identified for resettlement. Any rumours of potential sites are unfounded and such rumours have been mitigated by emphasizing during the community meetings that identification of potential resettlement sites will be undertaken in consultation with traditional leadership and governmental stakeholders. The identification of potential resettlement sites will need to be undertaken and communicated to affected communities as timely as is practicable in order to further mitigate rumours and psychological stress.

4.6 Carbon footprint

4.6.1 Carbon footprint of project

A query was raised as to whether or not the carbon dioxide (CO₂) emissions of the project life-cycle have been calculated or estimated and if so, what the CO₂ breakdown is for the various project activities.

Response:

The query was noted. So far a high level climate change risk assessment which is a climate resilience study has been undertaken on behalf of the Client by a consultancy firm called Climate Resilient Infrastructure Development Facility (CRIDF). Although not a direct response to the query, this is relevant to the query in that CO₂ is amongst other greenhouse gases that contribute to climate change.

4.7 Impacts on immediate downstream water users

4.7.1 Impacts on nature conservation and ecotourism

A recommendation was submitted that the ESIA take into consideration potential adverse impacts, during implementation and operation, on water availability and quality at Mantenga Nature Reserve and Mlilwane Wildlife Sanctuary, both of which are immediately downstream of the proposed project. Adverse impacts include reduction of ecological flows, which will adversely affect wildlife and will also reduce attraction of tourists to the aforementioned sites. For example, Mantenga Falls which is the primary tourist attraction to Mantenga Nature Reserve.

Response:

Recommendation was noted.

4.7.2 Impacts on cultural heritage sites

A recommendation was submitted that the ESIA take into consideration potential adverse impacts, during implementation and operation, on water availability and quality at Lobamba in the vicinity of the hot springs where regiments bathe during Incwala and maidens bathe during Umhlanga.

Response:

Recommendation was noted.

4.7.3 Disaster modelling and management

A recommendation was submitted that disaster modelling and management need to take into consideration potential adverse impacts

on river crossings and utilities in the event of dam failure. River crossings include the road bridges at various points along the Lusushwana River as it flows through Ezulwini and Lobamba. Utilities include the Eswatini Water Services (EWSC) water purification plants at Ezulwini and Matsapha respectively, both of which are within the flood plain, as well as EWSC sewer pipelines which cross the river at various points between Lobamba and Matspha.

An additional aspect of disaster management is the suggestion for the establishment of an operational procedure is to release water at periodic intervals to flush any debris, such as tree trunks, that accumulates along the watercourse. Leaving such debris to accumulate over a long period along the Lusushwana River will exacerbate major flood events whereby bridges will be destroyed mainly by the excessive debris, as was observed during Cyclone Domoina in 1984.

A final aspect of disaster modelling and management is that operational procedures need to consider how Nondvo Dam would be operated to absorb the impact of Lumpholo Dam's failure. Disaster management also needs to take into consideration the impact of failure of both Lumphohlo Dam and Nondvo Dam concurrently.

Response:

While dam safety has been included in the ESIA, the pertinent recommendations and suggestions were noted.

4.8 Project alternatives

4.8.1 Upgrading existing infrastructure

A recommendation was submitted that alternatives to Nondvo Dam be considered in order to avoid disruption of lives due to resettlement.

Specifically, the de-silting and raising of Luphohlo Dam was submitted as a possible alternative.

Response:

It was clarified that the project in its entirety comprises other options of raising Luphohlo Dam and Hawane Dam respectively and separate studies will be undertaken for those options.

4.8.2 Excavation versus inundation

A suggestion was submitted that rather than inundating the proposed area, deep excavation in the vicinity of the proposed dam wall in a manner similar to that of an open cast mine may possibly yield the same volume of water storage, but without the impact of resettling as many homesteads.

Response:

The suggestion was noted for onward submission to the design engineers to clarify the basic technical principles, requirements and practicalities of dam engineering.

4.9 Public consultation process

4.9.1 Disparity between submissions from stakeholders during consultation process and actual implementation of recommendations

A concern was raised that the sentiments, suggestions and recommendations of stakeholders submitted during the consultation process are often not implemented during project implementation and operation. Furthermore, the needs of directly affected homesteads are seldom met, particularly in reference to the standard of replaced building structures during resettlement. An example was cited where

the standard and quality of replaced building structures is often not to the standard and quality recommended by consultants' reports. Such experience with previous infrastructure projects makes directly affected parties sceptical of the commitment and capacity of implementing agencies in executing resettlement plans in accordance with engineering designs and input from stakeholders and consultants. The submission further illustrated and emphasized with the example that the schools in the community were funded with financial aid from Japan, therefore the Government may not have the funds to replace the schools to the original building standard and quality.

Response:

The concern was noted.

4.9.2 Validity of public consultation meeting

A query was raised as to the validity of this public consultation meeting in view of the low attendance. A suggestion was made that perhaps the meeting should have been held at the affected community.

Response:

Several consultation meetings have been held within the communities of Mantabeni and Siphocosini, respectively and these commenced in February 2019. This particular meeting is being held outside the community to provide an opportunity to stakeholders outside the communities to attend. The consultation process is not a single event, but a process comprising several meetings, therefore attendance may not be the same at each meeting. Stakeholders are welcome to attend whichever meeting is convenient to them and some stakeholders have been and will be approached directly and thus may decide not to attend the meetings as their submissions will have been captured.

4.9.3 Feedback to stakeholders

A recommendation was submitted that a redacted version of the ESIA Report be made available to stakeholders since the main report will be bulky or voluminous, as well as highly technical. This characteristic of such reports discourages stakeholders from reading the reports and participating in the decision-making process. Minimal participation will in turn be misinterpreted by the project proponent and consultants to imply that the stakeholders are not opposed to the project, therefore the project will be imposed upon stakeholders on the basis that they did not contest it. A redacted version will enable the majority of stakeholders to easily understand the report's contents. If possible, a Siswati translation of the redacted version may further assist members of the directly affected communities to understand the report.

Response:

The recommendation and suggestion were noted. A member of the audience urged community members attending the meeting to encourage fellow community members to actively participate in the decision-making process through the relevant structures within the community. It is important for the community to make the needs of the community known to the project design and development process. This will ensure the development of appropriate mitigations and any other development initiatives relevant to the needs of the community.

4.9.4 Submission of queries

A query was raised as to where to direct further queries, including those which may not necessarily relate to environmental and social aspects.

Response:

Queries shall be directed to the Environmental Consultant. Stakeholders are welcome to direct queries to the Ministry of Natural Resources and Energy, but when doing so they are urged to copy to the Environmental Consultant to ensure that such queries are captured as part of the consultation process.

5. Closing

On behalf the project proponent, participants were thanked for attending the meeting, making valuable submissions and engaging in a productive discussion.

Scribes:

Temusa Zwane

Angelina Edje

Record of meeting proceedings edited by:


Mbuso Kingsley



Venue/ Indzawo: Mbabane Library Exhibition Hall
Date/ Lusuku: 28 November 2011

Luhla lwalabo lebebakhona emhlanganweni welucwaningo lwemvelo nenhlalakahle

NAME/ LIBITO	ORGANIZATION/ COMMUNITY INHLANGANO/ SIFUNDZA/ SIGODZI	DESIGNATION/ SIKHUNDLA/ SIGABA EMMANGWENI	CONTACT NUMBER/ INOMBOLO YELUCINGO	EMAIL/ LIKHELI LEKUCHUMANA NGA NGCONDVOMSHINI	SIGNATURE/ SAYINA LAPHA
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Luhla lwalabo lebebakhona emhlanganweni welucwaningo lwemvelo nenhlalakahle

NAME/ LIBITO	ORGANIZATION/ COMMUNITY INHLANGANO/ SIFUNDZA/ SIGODZI	DESIGNATION/ SIKHUNDLA/ SIGABA EMMANGWENI	CONTACT NUMBER/ INOMBOLO YELUCINGO	EMAIL/ LIKHELI LEKUCHUMANA NGA NGCONDVOMSHINI	SIGNATURE/ SAYINA LAPHA
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Amos Msihi	Minister of Inkhundla	N/A	76059782	amos.msihi@gmail.com	

APPENDIX

M STAKEHOLDER MEETING 18 MARCH 2020



African Water Facility
Facilité africaine de l'eau
Mobilising Resources for Water in Africa
Mobiliser des ressources pour l'eau en Afrique



**COMMENTS ON THE DRAFT DETAILED DAM DESIGNS AND THE INTERIM
ESIA REPORT ON THE NONDVO FEASIBILITY STUDY
FROM THE STAKEHOLDER MEETING HELD ON THE 18TH MARCH, 2020
AT THE HILTON GARDEN INN, MBABANE.**

INTRODUCTION

The Director of the Department of Water Affairs welcomed all present in the workshop including the Consultants who were available via SKYPE to make their presentations in order to facilitate progress in the Nondvo Dam project.

COMMENTS RAISED IN THE MEETING.

1. The meeting appreciated the effort by the Consultant for the relocation of MR19 but was still concerned that there is no specific plan or design on the relocation of feeder and community roads within the project site. It was noted that from the technical presentation that a cost of US\$ 3.5Million has been set aside for the access roads and community roads.

The meeting requested that more information be made available regarding the access roads. This information is important for the local communities to address issues of connectivity even after the construction of the Nondvo dam. Also, there are many factors to be considered when relocating the community roads e.g. the steep landscape in some parts of the project area, proximity to existing roads and service Centres and community populations. The stakeholders therefore requested that the relocation sites be identified and the information be presented in a map to show the existing roads that will be affected and then identify other possible routes that will be established by the Contractor. It is not sufficient to say that it's the Contractor's responsibility to make connecting community routes as well as access routes.

The Consultant is requested to have a re look on this matter as it is important for the project. A suggestion was made that the Consultant should consider the area where there is a foot bridge and a path to determine the possibility of having an access road close by.

2. The stakeholders wanted to find out about power generation from the project. First it was about the amount of energy produced at the Nondvo dam. Also, why is the power production approach that of continuous generation instead of peak hour generation as the latter approach is more favourable for our country. The request from the meeting was that if the proposed power plant and its system of power production is not changed to favour our local preference, then the Consultant must justify comprehensively the reasons for not constructing a peak power plant. The Consultant is hereby requested to address this concern and to give reasons for their selected approach.
3. The Issue of MR19 was raised again in the stakeholder meeting. The request was to cost each of the listed activities that must be undertaken in order to relocate the road. The costing of US\$3 Million for the relocation was seen as insufficient.
 - a. Cost of feasibility study for relocation of MR19
 - b. Resettlement costs
 - c. Construction costs.

The stakeholders felt that the relocation of the road may have been under costed because the information that was used for making the estimates was not comprehensive.
4. The meeting advised the Ministry of Natural Resources and Energy to determine if the proposed relocation of the railway and the road are agreeable with the Eswatini Railways and the Ministry Of Public Works and Transport.
5. Regarding the ESIA report, the stakeholders wanted to know the meaning of assets in the report. For the sake of clarity in both the report and in presentations, the Consultant is requested to make attempts to better clarify this term and further illustrate with pictures the variety of assets available in the project area.
6. Questions were raised regarding the size of area to be inundated by the dam as well as the size of total arable and grazing land.

7. The meeting wanted to know if there was any species that can be highlighted of flora and fauna to be affected. Are there any endangered species. The Client requests that for the sake of ease of presentation and reading, pictures of some interesting species captured during the investigations can be put in the report and presentations. It would be important to state interesting findings from these investigations noting that the project site is just above a game reserve.
8. The stakeholders wanted more information on how the spoils and rubble from the project will be managed.
9. The communities in the project area requested for the project to supply them with potable water. The ESIA Consultant was requested to put this request in the study and also cost it in its environmental costs so that the Government may be in a position to carry out this request during project implementation. This request is in line with Government policies of empowering project communities and making sure that they are also beneficiaries of the project.
10. Noting that the country has no specific project resettlement policy and compensation policy, how will resettlement be implemented in the project area. The International Community especially the World Bank has resettlement and compensation frameworks that the country adopts from time to time to address such needs when implementation projects. The ESIA Consultant must give guidance on steps to be undertaken in this project to handle resettlement issues. Local and regional experience can be used to give guidance and recommendations to this project.
11. There were also comments raised regarding the relocation of schools. Down listed are some points for consideration by the ESIA Consultant:
 - a. Relocation of schools should consider the access roads issue.
 - b. Number of population to use the services.
 - c. A suggestion was to have a primary and High School and one site and then have a primary school and High school at another site.

12. A request was made that the compensation framework be aligned with AfDB and World Bank standards so that the project becomes bankable and made according to International best practice.
13. The Ministry was advised to get in contact with the Ministry of Education regarding the Masibekela High School since that school was funded by the Japanese Government thus its relocation is not as simple as Government funded projects.

GENERAL COMMENTS

The reviewed institutional structure of the Nondvo dam project was not presented in the workshops neither was this information included in the draft detailed design report. The Client requests that this information is submitted for comments even before the submission of the final detailed design report by the Consultant.

APPENDIX

N STAKEHOLDER MEETING 10 SEPTEMBER 2020

MBABANE – MANZINI CORRIDOR DAM (NONDVO DAM) TECHNICAL FEASIBILITY STUDY

MINUTES OF STAKEHOLDER MEETING 10 SEPTEMBER 2020

Project Number:	41101262		
Grant Number:	P-SZ-EAZ-001 /002 and P-SZ-EAO-002		
Contract Number:	MNRE/ DWA/ 002/ 2017-18		
Client:	Government of the Kingdom of Eswatini Ministry of Natural Resources & Energy Department of Water Affairs (DWA)		
Project Title:	Mbabane-Manzini Corridor Dam (Nondvo Dam) Feasibility Study Environmental & Social Impact Assessment		
Consultants:	Studio Pietrangeli – Technical Feasibility Study WSP Environmental – Environmental & Social Impact Assessment		
Meeting organized by:	Department of Water Affairs (DWA)		
Date:	10 th September 2020		
Time:	Start :	09:30hrs	End: 13:30hrs
Venue:	Emafini Country Lodge		
Objectives:	<ul style="list-style-type: none"> • Presentation of Draft Final Technical Feasibility Report; • Presentation of Draft Final ESIA Report. 		

ATTENDANCE:

1	Mduduzi Matsebula	Member of Parliament Siphocosini Inkhundla	16	Ray Gama	ESWADE
2	Dumisani Mngomezulu	MNRE	17	Patrick Dlamini	MOA- Land Use
3	Trevor Shongwe	DWA	18	Lindiwe Magagula	MOPWT
4	Emelda Magagula	DWA	19	John M.Mlangeni	MOPWT – Roads Dept.
5	Bongekile Matsebula	DWA	20	Mncedisi Masondo	MOPWT – Roads Dept.
6	Sibusiso Dlamini	DWA	21	Bhekitemba Dlamini	Eswatini Railways
7	Sindy Mthimkhulu	DWA	22	Sandile Dlamini	Eswatini Railways
8	Gcinumuzi Mavimbela	Siphocosini Inkhundla	23	Nondvo Team	Studio Pietrangeli
9	Johannes Hlophe	Mantabeni Umphakatsi	24	Anri Scheepers	WSP Environmental
10	Mandla Mdluli	Mantabeni Umphakatsi	25	Temusa Zwane	MMA/ WSP (Local Env. Support)
11	Wilson Kunene	Mantabeni Umphakatsi	26	Mbuso Kingsley	MMA/ WSP (Local Env. Support)
12	Maswazi Lokotfwako	Mantabeni Umphakatsi			
13	Skakadza Matsebula	Siphocosini Umphakatsi			
14	Obed Langwenya	Siphocosini Umphakatsi			
15	Siphiwe Sibandze	MEPD			



African Water Facility
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DRAFT AGENDA

NONDVO DAM WORKSHOP ON THE DETAILED DESIGNS REPORTS AND THE DRAFT FINAL ESIA ASSESSMENT REPORT

DATE: 10th SEPTEMBER, 2020. VENUE: MAFINI COUNTRY LODGE,
MBABANE.

	Agenda Item	Responsibility
1	Opening and Welcome	MNRE/DWA
2	Introductions	ALL
3	Presentation on Dam Designs	Studio Pietrangeli
4	Discussions	All
	HEALTH BREAK	
5	ESIA Presentation	WSP Environmental
6	Discussions	ALL
7	Way Forward	ALL
8	Closure	MNRE/DWA



1. Opening and Welcome

DWA welcomed meeting participants and highlighted that the objectives of the meeting were to present and discuss the Draft Final Reports of the Technical Feasibility Study and Environmental & Social Impact Assessment, respectively. This meeting follows previous Stakeholder Meeting held on 18th March 2020 at Hilton Garden Inn, Mbabane.

2. Introductions

In variation to regular “roll call”, self introductions by meeting participants were expedited (due to time constraints) by requesting each participant to introduce themselves and their organisation/ community when making submissions.

3. Technical Feasibility

3.1 Progress update

Studio Pietrangeli presented status update:

- Final dam designs have been developed;
- Dam Operating Procedures have been developed;
- Operating Procedures include Emergency Preparedness Plan, i.e. what will be done when emergency release is anticipated, e.g. during flood events;
- Road (MR19) and Railway have been relocated: approx. 23 households to be affected by Road, 39 households by Railway. Re-alignment of Road will increase travel distance from 4km (existing road) to 6km (proposed new section);
- Technical specifications for construction of dam and hydropower plant, respectively, have been developed;
- Recommended institutional arrangement for management of dam has been included.

3.2 Institutional Management of Dam

Having conducted interviews with prospective agencies potentially suitable to manage implementation and operation phases of dam, Studio Pietrangeli arrived at the following recommendations:

3.2.1 Implementation phase

- Eswatini Water and Agricultural Development Enterprise (ESWADE) is most suitable entity for managing implementation due to capacity and experience with large water infrastructure projects.
- Komati Basin Water Authority (KOBWA) while having capacity and experience, is limited in scope and mandate, i.e. mandate applies to development and utilization of water resources of Komati River Basin, whereas proposed project is within Lusutfu River Basin.

- Eswatini Water Services Corporation (EWSC) – core functions are purified water supply and wastewater conveyance and treatment. No readily available resources for managing construction of large dams.
- Project Steering Committee (PSC) recommended to be established to guide and oversee all aspects of implementation, including Resettlement Action Plan. Representation on PSC to comprise all key stakeholders, including project affected communities. PSC to dissolve upon sign-off and handover of project to operating agency.

3.2.2 Operation phase

- EWSC is suitable entity on basis of one of core functions being water supply, however EWSC nominates ESWADE for operation and maintenance since dam maintenance is not amongst EWSC's core functions.

3.2.3 Project funding

- Appropriate agency to source funds for project is Ministry of Finance.

4. Discussion on Technical Feasibility

Question and Answer session:

4.1 Project Design and Approval Stage

4.1.1 Stage in project lifecycle

Query as to precisely what stage of its lifecycle the project is currently, i.e. whether it is still a study or at preparations for implementation. Stakeholders feel they have an opportunity to influence designs, yet presentation is already reporting on final designs.

Response: project is still at feasibility study stage. DWA added that when final reports have been submitted to Government, a decision will be made on whether or not funds are available or can be sourced. Government will then notify stakeholders of outcome of decision.

4.1.2 Location of dam wall

Query on prospects of reconsidering a review of dam location. Affected communities feel that Feasibility Study does not adequately explain why options to locate dam wall a few kilometres further south of present proposed site were eliminated.

Response: present proposed location and height of dam wall was selected due to:

- *Suitability of underlying geology at specific site;*
- *Being most optimal for achieving desired water harvesting with least environmental and social impact.*

4.1.3 Associated water security interventions

Query on outcome of options of raising Luphohlo Dam and Hawane Dam: affected communities concerned that report focuses only on Nondvo Dam, giving impression that other options have either been eliminated without clear explanation and hence project is perceived as being intent on victimising affected communities.

Response: Raising existing two dams alone will supply water demand up to 2025. A combination of all three options is being pursued to meet water demand up to 2050. Investigations and designs on raising of the two existing dams is still in progress and output will be a separate report.

4.1.4 Design approval process

Query on whether or not final designs have been approved and if so, what approval process is followed.

Response: detailed details are what is to be included in the tender documents so as to enable bidders to price on design specifications with respect to dam and hydropower plant. The designs with respect to Road and Railway are preliminary designs, not detailed designs.

4.1.5 Endorsement of designs

Query as to whether or not designs of re-alignment of Road and Railway have been endorsed by relevant agencies and their parent ministries.

Response: preliminary designs not yet endorsed by Eswatini Railways and Ministry of Public Works & Transport. Explanatory note on design criteria: maximum slope for road is 10% while railway is 2%. Minimum allowable radius for curves in railways is greater than that for roads.

These factors influenced the proposed re-alignment routes. Proposed re-alignment of MR19 mainly influenced by design engineers' quest to avoid need for bridges which would increase re-alignment cost.

Studio Pietrangeli's scope of work did not include preparation of detailed designs for Road and Railway, only preliminary designs which will enable project budgeting. Subsequent consultant will need to be procured by Government to prepare detailed designs in consultation with Eswatini Railways and Ministry of Public Works & Transport.

4.1.6 Railway

Eswatini Railways request designs of proposed railway re-alignment in order to:

- a) Verify that adequate allowance has been provided for servitude;
- b) Verify that adequate provision has been made for replacement of Nondvo Railway Station at S26° 26' 36.1" E31° 07' 14.8".

Studio Pietrangeli to avail preliminary designs.

4.1.7 Road

Ministry of Public Works & Transport requests designs and cost estimate for proposed re-alignment of MR19.

Studio Pietrangeli to avail preliminary designs and cost estimate.

4.1.8 Road and railway intersection

Eswatini Railways request assurance that adequate provision has been allowed for ensuring that the crossing at road and rail intersection will be of similar nature and standard to (or better than) the existing.

Response: Studio Pietrangeli to avail preliminary design of Road and Railway crossing.

4.1.9 Road and railway impacts

Honourable Member of Parliament recommends that Road and Railway not be treated separately or as incidental to project. They should be fully integrated into dam designs and impact mitigations so as to avoid neglecting design standards of, and impacts upon Eswatini Railways and Ministry of Public Works & Transport. Ultimately, all impacts of and upon Road and Railway will in turn impact upon the communities and public at large.

Response: Studio Pietrangeli refers queries/ comments on social impacts of Road and Railway to ESIA Report.

4.2 Institutional Framework

Observation that Ministry of Agriculture appears to have been omitted from recommended institutional management of dam, yet they will be key in development of potential irrigation projects.

Response: Ministry of Agriculture features amongst stakeholders in recommended PSC.

5. Environmental & Social Impact Assessment

5.1 Progress update

WSP presented status update since March 2020:

- Terms and Definitions now included;
- Impacts of re-alignment of Road and Railway have been included. As with dam, key impacts are displacement of households – 23 for Road, 39 for Railway. Reference to Road and Railway also included in Project Description to signify that their implementation and associated impacts are integral to the dam;
- Resettlement cost estimate included in Resettlement Action Plan (RAP);
- Breakdown of affected assets now included to clarify definitions of asset types;
- Measurement of affected arable land now included – 85ha;
- Implementation Plan now included in RAP;
- Relocation sites for schools identified on basis of need to retain proximity to existing sites and main road, thereby mitigating travel distance for community members;
- Additional possible resettlement Site D has been identified and investigation of acquiring sites is in progress;
- Method of valuation of affected fixed assets included in RAP;
- Measurement of fixed assets undertaken and verification of asset inventories per household currently on-going;
- Fauna and Flora now clearly listed;
- Some impacts now re-rated, e.g. climate change. Also new impact included, i.e. loss of wetlands will affect climate change;
- New mitigation for generation of spoil and rubble included, i.e. spoil and rubble to be demarcated;
- Aspects excluded from ESIA Report are:
 - Downstream distribution of potable water;

- Re-alignment of existing and construction of new feeder roads within community;
- Footbridges across dam deemed not to be feasible.

6. Discussion on ESIA Report

Question and Answer session:

6.1 Resettlement process

6.1.1 Identification of resettlement sites

Query on criteria used for identifying resettlement sites.

Response: primary objective was to avoid resettling affected households far from existing community. Secondly, due to inadequate space within existing community, available land presently not used for residential settlements was sought amongst surrounding farms under Title Deed Land. Property owners to be engaged formally and where owners indicate willingness to sell, community will be involved in vetting of suitability of resettlement sites. Thereafter, further negotiations will be undertaken to acquire the properties.

Clarification that Site C, despite being within protected area, is not withdrawn from options. Rather, its location within a protected area makes it less preferred than other sites. Suggestion submitted by meeting participants that consultants should nevertheless continue to actively pursue Site C.

6.1.2 Possible avoidance of resettlement

Suggestion raised that resettlement could be avoided altogether or mitigated by considering alternative sites for the dam wall a few

kilometres further south of current proposed site. Government is strongly urged not to forcefully implement project without exhausting all possible alternatives. Community extended invitation DWA to visit community-proposed sites for dam wall which in community's opinion will eliminate need for resettlement.

Response: DWA accepted invitation to visit community-proposed sites for dam wall.

6.1.3 Relocation of graves and cattle dip tanks

Comment submitted that relocation of graves and cattle dip tanks not clearly described in terms of whether or not provision has been made to accommodate them at possible host sites.

Response: graves and cattle dip tanks have been identified. Their accommodation was taken into consideration during identification of possible resettlement sites.

6.1.4 Benefits to host communities

Request for clarity on the tangible benefits to both affected and host communities, besides access to potable water.

Response: Mitigation measures and benefits included in Environmental & Social Mitigation Plan (ESMP). Example: where impact is physical displacement of households, mitigations include:

- *Resettlement Action Plan (RAP) and Livelihood Restoration Programme (LRP);*
- *Compensation packages to serve as supplementary assistance so that households can meet their basic needs until they recover from their losses and restore their livelihoods to pre-Project levels.*

- *Ensure host site negotiations include the office of Regional Administrator and the Ministry of Tinkhundla;*
- *Engagement with Chiefs, affected households and host communities to manage host site selection and preparation;*
- *Continual Project-Affected-Party (PAP) assessment to determine effectiveness of RAP and LRP measures.*

6.1.5 National Resettlement Policy

Comment submitted that no formal National Resettlement Policy is in place and each large scale infrastructure development project tends to synthesize its own policy based on international guidelines and best practice. Directing comment to Honourable MP, commenter called for development of national policy which includes compensation framework.

Response: Under Secretary – Technical (Ministry of Natural Resources & Energy) clarified that a National Rural Resettlement Policy, 2003 (NRRP) is in place, although it does not contain a compensation framework. In the meantime this policy together with international best practice will be used. WSP added that NRRP has been referenced in RAP and African Development Bank (AfBD) guidelines have been used.

6.1.6 Quality assurance of replacement buildings

Concern raised by community that anecdotal observation of previous infrastructure development projects shows that the standard and quality of replaced buildings tends to be below requirement and expectation of PAPs, i.e. projects appear to build small “matchbox” houses for resettled people. Query also raised as to whether or not buildings will be replaced like for like.

Response: Under Secretary – Technical acknowledged that grievances have been raised by PAPs on previous projects. Lessons have thus been learned by Government hence this forum is a platform for stakeholders to formally register their views and concerns which will enable Government to develop appropriate mitigation measures. Overseeing the implementation of the RAP to ensure that affected households are not left worse off will be one of the functions of the PSC. With respect to replacing buildings like for like, Under Secretary – Technical clarified that stick and mud houses will not be replaced like for like, but with improved structures. Replacement guidelines included in RAP.

6.1.7 Existing community infrastructure

Comment raised that ESIA Report does not clearly describe how infrastructure developed through community projects/ initiatives will be compensated, e.g. water supply schemes, electricity distribution schemes, etc.

Response: RAP recommends that loss of community assets be replaced through Livelihood Restoration Programme (LRP). Original comment is sustained.

6.1.8 Institutional arrangements

Comment submitted that Land Management Board is not represented in this meeting.

Response: Land Management Board will be part of Project Steering Committee and will also work with Inner Councils and their sub-committees at community level to address issues of resettlement and land use change authorization.

6.2 Other socio-economic impacts

6.2.1 Travel costs

Concern submitted that re-alignment of MR19 will cause an additional travel distance (approx. 2km) to commuters. In the long term this will cause community members to be financially worse off, further leading to emotional distress of having to sacrifice and suffer perpetually.

Response: under heading “Increased Cost of Living and Debt Generation”, ESIA Report identifies increased cost of living arising from various changes within community, including introduction of new formal public transport services. Impact rated as “Negative, Low” warranting no inclusion in ESMP. Mitigation nevertheless achievable through wider LRP.

6.2.2 Cultural beliefs

Concern raised about mythological serpents, mermaids and water creatures which are believed by some people to reside in water bodies and migrate along Lusushwana and other water courses. Constructing a dam in close proximity to community, compounded by proximity to Lumphohlo Dam, will attract additional creatures and/ or increase incidents of mysterious drowning whereby victims are presently always all males. Further concern raised that this submission was previously interpreted as large water bodies causing microclimate such as intense storms and cold weather compared to surrounding areas, yet commenter passionately feels this is a distinctly different issue. Concern seconded to be included under cultural beliefs.

Response: concern noted for inclusion in Heritage Survey.

6.3 Biophysical impacts

6.3.1 Loss of wetlands

Comment submitted that downstream wetlands will be adversely affected by dam operation.

Response: Mitigation to downstream wetlands is Ecological Flow Requirement release of 4 million m³/ year as recommended by Joint Maputo River Basin Water Resources Study (2008). Wetlands within footprint of dam will be lost with no practical mitigation measures.

7. Way Forward

Subsequent milestones are:

- Submission of ESIA Report to Eswatini Environment Authority (EEA);
- Public Review;
- Final decision of EEA on whether or not to grant environmental authorization to project.

Further comments to be submitted in writing to DWA by 25th September 2020.

8. Closing

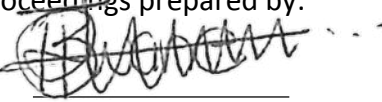
8.1 Closing remarks

Under Secretary – Technical emphasized stark reality that water is scarce and proposed project is one of several interventions being pro-actively pursued by Government to mitigate water shortage which will otherwise be exacerbated by drought conditions. Severity of the situation is heightened by future projections that incidents of drought will increase in frequency and intensity. The project is thus of national strategic importance. Other options have been explored, such as harvesting surface flow along watercourses flowing through Mbabane, however these proved ineffective in meeting potable water requirements alone.

As with other infrastructure development projects, it is unfortunately inevitable that a section of the population will be adversely affected and hence the ESIA process aims to develop appropriate mitigation and enhancements measures to ensure the environmental and social sustainability of the project, whose overall objective is to uplift the livelihoods of all sections of the population.

Minutes of meeting proceedings prepared by:


Mbuso Kingsley


Temusa Zwane

APPENDIX

O MANTABENI
INNER COUNCIL
SITE VISIT 26
SEPTEMBER
2020

MBABANE – MANZINI CORRIDOR (NONDVO) DAM ENVIRONMENTAL & SOCIAL IMPACT ASSESSMENT (ESIA)

RECORD OF SITE VISIT WITH MANTABENI INNER COUNCIL

Project Number:	41101262		
Grant Number:	P-SZ-EAZ-001 /002 and P-SZ-EAO-002		
Contract Number:	MNRE/ DWA/ 002/ 2017-18		
Client:	Government of the Kingdom of Eswatini Ministry of Natural Resources & Energy Department of Water Affairs (DWA)		
Project Title:	Mbabane-Manzini Corridor (Nondvo) Dam Feasibility Study Environmental & Social Impact Assessment		
Consultant:	WSP Environmental (Pty) Ltd		
Meeting organized by:	Department of Water Affairs		
Date:	26 th September 2019		
Time:	Start :	09:00hrs	End: 12:00hrs
Venue:	Mantabeni Royal Kraal (<i>Umphakatsi</i>)		
Objectives:	<ul style="list-style-type: none"> • Mantabeni Inner Council had invited DWA to view possible locations of the dam wall in order to mitigate need for involuntary resettlements that will arise from the inundation area currently proposed in the Feasibility and ESIA reports. • Visit the proposed resettlement sites in order to appraise the Inner Council of their respective locations and suitability. 		

ATTENDANCE:

	NAME	ORGANIZATION
1.	Johannes Hlophe	Inner Council Chairperson
2.	Sonnyboy Mdluli	Inner Council Member
3.	Dan Mamba	Inner Council Member
4.	Wilson Kunene	Inner Council Member
5.	Nicholas Zwane	Inner Council Member
6.	Samuel Ncongwane	Inner Council Member
7.	Trevor Shongwe	Director – DWA
8.	Emelda Magagula	Senior Water Resources Engineer – DWA
9.	Mbuso Kingsley	Local Environmental Support – WSP

AGENDA

AGENDA ITEM	RESPONSIBILITY
1. Welcome and Introductions	Inner Council
2. Site Visit 2.1 Possible dam wall sites downstream of current proposed dam wall 2.2 Proposed resettlement sites	All
3. Closing 3.1 Inner Council's remarks 3.2 Words of appreciation to Inner Council	Inner Council DWA

1. Welcome and introductions

All participants of the site visit introduced themselves. First objective of site visit was for the Inner Council of Mantabeni Royal Kraal (*Umphakatsi*) to show Department of Water Affairs the locations which Mantabeni Royal Kraal and community members feel are more suitable for constructing the dam wall in order to mitigate and possibly avoid the involuntary resettlements that will arise from the present location of the dam wall as proposed by the Technical Feasibility Study Report and supported by the Environmental & Social Impact Assessment (ESIA) Report. The Royal Kraal had been submitting suggestions of the need for alternative locations of the dam wall at all Stakeholder Meetings since 15th November 2019 (Sibane Hotel). At the latest Stakeholder Meeting on 10th September 2020, the Royal Kraal invited DWA to visit the community's suggested sites for the dam wall. A site visit was subsequently agreed upon by both parties and scheduled for 26th September 2020.

Second objective of site visit was to show the Mantabeni Royal Kraal the four proposed resettlement sites (A,B,C and D) alluded to in the latest draft final ESIA Report of August 2020. While a full colour map of three of the proposed sites had been issued to the Mantabeni and Siphocisini Royal Kraals respectively in July 2020, the intent of the site visit was to afford Mantabeni an appraisal of the sites in person. A similar visit of the proposed resettlement sites will be scheduled for Siphocosini.

2. Site Visit

2.1 Possible dam wall sites downstream of current proposed dam wall

Mantabeni Royal Kraal submitted that in their opinion the most suitable site is at S26° 26' 42.3" E31° 07' 43.4" which is 2.9km downstream of the current proposed dam wall. Favourable aspects of this site submitted by Mantabeni Royal Kraal are:

- Underlying geology is similar to that of current proposed dam wall;
- Depth and narrowness of river valley lend themselves to achieving the volume of desired impounded water and enabling a dam wall that is not excessively long from one river bank to the opposite bank. This, the community feels, would be more cost effective since the construction and resettlement costs would be less than the current proposal;
- Fewer households, if any, will need to be resettled. It is the Royal Kraal and community's opinion that all possible means of avoiding resettlement need to be explored and exhausted.

The Royal Kraal found no unfavourable aspects of the site, from a social perspective.

The second possible site is at S26° 26' 34.6" E31° 08' 06.9" which is 3.6km from the current proposed dam wall. Favourable aspects were submitted as:

- Suitable underlying geology;
- Little or no adverse impacts of resettlement;

The unfavourable aspect was submitted as:

- Possibly higher construction costs compared to the site at 2.9km, particularly in view of the wider valley section and depth of valley.

2.2 Proposed resettlement sites

Possible resettlement sites were visited and viewed from vantage points. The following data was communicated to Site Visit Party:

Site Name in ESIA Report	Farm Name	Title Holder (as obtained from Deeds Registry – 04 Dec 2019)	Area measurement of site
Site A	R/792	Ingwenyama In Trust for the Swazi Nation	11km ² 1,100ha
Site B	1032	Ingwenyama In Trust for the Swazi Nation	0.18km ² 18ha
Site C	192	Trustees of the Mlilwane Game Sanctuary	4km ² 400ha
Site D	12/73 and R/73	Public Service Pension Fund	15km ² 1,500ha
Total			30km² 3,000ha

The locations of the community-proposed sites for the dam wall and the project-proposed resettlement sites are indicated in Figure 1.

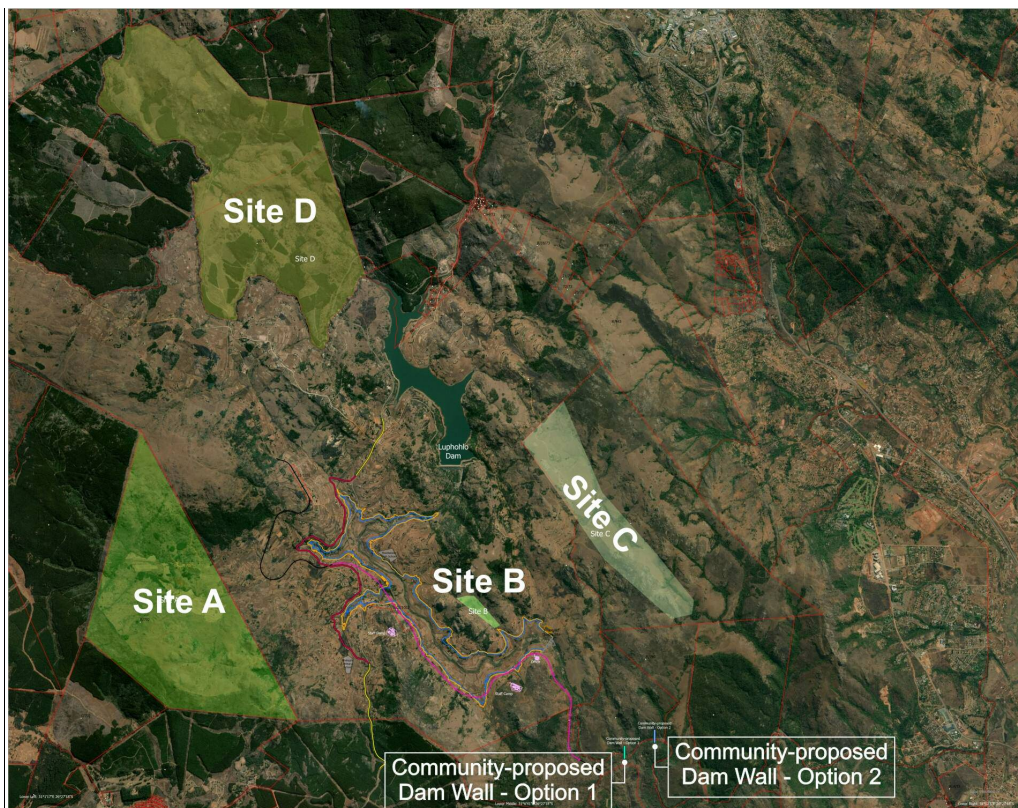


Figure 1. Community-proposed dam wall options and Project-proposed resettlement sites

3. Closing

3.1 Inner Council's remarks

The Inner Council expressed appreciation to DWA, and by extension to Government, for having accepted the invitation to view the sites which the community feels are better suited for constructing the dam wall in order to mitigate, and possibly avoid involuntary resettlement. The Inner Council further expressed gratitude for having been shown the proposed resettlement sites thus enabling a physical appraisal of the maps previously presented.


The two gestures have made a positive impression upon the Inner Council that Government is willing to listen to the concerns of project affected parties. The Inner Council acknowledged the expense in time and resources spent thus far on the Feasibility Study and ESIA, but on behalf of the community, reiterated their plea to Government to take the submissions on the dam wall into consideration.

3.2 Words of appreciation to the Inner Council

DWA, on behalf of the Ministry of Natural Resources & Energy, expressed appreciation to the Inner Council for the invitation to view the community-proposed sites for the dam wall. Appreciation expressed also for the Inner Council's acceptance of invitation to view the proposed resettlement sites.

On the community-proposed dam wall sites, DWA highlighted that while the Feasibility and ESIA studies were at advanced stages, DWA undertakes to ensure that the respective consultants adequately address the community's concern in the Feasibility and ESIA Reports, respectively. This commitment by DWA is made on the basis of now having physically appraised the community's point of view.

Record of meeting proceedings prepared by:


Mibuse Kingsley

Nondvo Dam
Environmental & Social Impact Assessment (ESIA)
Meeting Attendance Register



Meeting: SITE VISIT TO PROPOSED RESETTLEMENT SITES & COMMUNITY-PROPOSED DAM WALL LOCATIONS

Venue: MANTABENI
Date: 26 SEP 2020

NAME	ORGANIZATION	DESIGNATION	CONTACT NUMBER	EMAIL	SIGNATURE
MBUSO KINGSLLEY	MMA / WSP	LOCAL ENVIRONMENTAL SUPPORT	7658 0806	mbuso@mpmilkh...	
DANIEL MAMBA	MANTABENI UMPHAKATSI	INNER COUNCIL	7804 3284	-	
Bongani Zube	MANTABENI UMPHAKATSI	INNER COUNCIL	7607 5402	-	
Sonnyboy Mdluli	MANTABENI UMPHAKATSI	INNER COUNCIL	7604 0089	-	
Samuel Nongwana	MANTABENI UMPHAKATSI	INNER COUNCIL	7617 1042	-	
Wilson M. Kurere	MANTABENI UMPHAKATSI	INNER COUNCIL	7631 8049	-	

APPENDIX

P COMMENT AND RESPONSE REPORT





COMMENTS AND RESPONSE REPORT

Date	22 nd October 2018			
Time	11:00 hrs to 11:15 hrs			
Venue	Manzini Regional Administrator's Office			
Objectives	<ul style="list-style-type: none">— Sensitisation of Manzini Regional Administrator on Project Objectives;— Introduction of Environmental Consultant and Client to Manzini Regional Administrator;— Identification of communities within Manzini Region to be sensitised about project.			
No.	Issue	Raised By	Response	ESIA Reference
1	The Regional Administrator welcomed the initiative to sensitise the communities that are likely to be affected by the project and stressed that some impacts may not be apparent during the early stages of a project's development, but subsequent changes to a project may result in communities being affected to a greater degree than initially anticipated. Therefore early sensitisation alleviates potential obstacles to project implementation, such as aggravation of affected communities and excessive escalation of resettlement costs.	Regional Administrator	Noted	Refer to the SEP attached in Appendix F.

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2	<p>The Regional Administrator observed that generally, delays on project implementation result in lost opportunities in the realisation of project objectives. For example, while it is acknowledged that studies are an important part of the planning process, if the studies find that the proposed project is viable, it should be implemented immediately thereafter in order to mitigate influences of circumstances which may arise several years after inaction, i.e. superseded by events, thereby rendering the project no longer viable.</p>	Regional Administrator	Noted	Refer to the ESMP attached in Appendix B .
3	<p>The Regional Administrator urged the project team (Environmental Consultant during the study and Department of Water Affairs during implementation) to keep the RA's Office updated on the progress of the project</p>	Regional Administrator	It was agreed that the RA will be kept informed of progress of the project.	Refer to the SEP attached in Appendix F .

Date	21 st November 2018			
Time	10:00 hrs to 10:50 hrs			
Venue	Hhohho Regional Secretary's Office			
Objectives	<ul style="list-style-type: none"> — Sensitisation of Hhohho Regional Secretary on Project Objectives — Introduction of Environmental Consultant and Client to Hhohho Regional Secretary — Identification of communities within Project area to be sensitised about project 			
No.	Issue	Raised By	Response	ESIA Reference
1	<p>The Regional Secretary highlighted that there are pre-existing discrepancies in the jurisdictions of the chiefdoms and allegiances of residents within the Project Area. The two communities are Mantabeni, which falls under the Ezulwini Chiefdom and the second is Siphocosini which falls under the Siphocosini Chiefdom. Some residents pay allegiance to the Ezulwini Chiefdom while others pay allegiance to Siphocosini, thereby creating a situation where next door neighbours within the Project Area pay allegiance to their respective chiefdoms. Therefore there is no clear-cut geographical boundary separating the two communities.</p> <p>The discrepancies in the geographical jurisdictions has been submitted for resolution by the Royal Household and the timelines for such resolution are not known. The RS however acknowledged that irrespective of the discrepancies, the feasibility and ESIA studies will be expected to proceed. To that effect the RS recommended that DWA and WSP proceed with engaging the respective Chiefs with respect to obtaining their consent to conduct specialist studies and Public Meetings.</p>	Regional Secretary	<p>Noted.</p> <p>It was agreed that WSP and the DWA will engage with the respective Chiefs in order to obtain their consent to conduct specialist studies and Public Meetings</p>	<p>Refer to the SEP attached in Appendix F.</p> <p>Refer to the Socio-Economic Impact Attachment in Appendix C3.</p>

2	<p>The RS further highlighted that such Public Meetings will however not be possible between the remaining month of November and the New Year, since all communities will be participating in preparations for the annual Incwala Ceremony. The Public Meetings will therefore need to be arranged with the Chiefs to take place after the Incwala Ceremony.</p>	Regional Secretary	<p>Noted.</p> <p>It was agreed that the engagements with the Chiefs will only commence in 2019.</p>	Refer to the SEP attached in Appendix F .
3	<p>The RS suggested that the Regional Administrator's Office summon all Chiefs of communities within the Project Area and those downstream, but within the Hhohho Region, for a collective meeting where DWA and WSP will present an overview of the project and the ESIA process. This is to ensure that all Chiefs are treated with equal respect in terms of being formally briefed about the project, although those directly affected (within the Project Area) will have already been engaged by WSP and DWA for consent to undertake specialist studies and Public Meetings. The RS undertook to arrange a collective meeting of the Chiefs after the Incwala Ceremony.</p>	Regional Secretary	Noted.	Refer to the SEP attached in Appendix F .
4	<p>The RS emphasized the need for DWA and WSP to proceed with utmost caution and respect when engaging the authorities within the Project Area due to the pre-existing sensitivities of the discrepancies in the jurisdictions of the respective chiefdoms. The RS further requested DWA and WSP to keep the Regional Administrator's Office informed of progress so that potential constraints can be addressed strategically, timely and sensitively in consultation with the Regional Administrator's office.</p>	Regional Secretary	It was agreed that the RS will be kept informed of progress of the project.	<p>Refer to the SEP attached in Appendix F.</p> <p>Refer to the Socio-Economic Impact Attachment in Appendix C3.</p>

Date	13 th February 2019			
Time	14:00 hrs to 14:30 hrs			
Venue	Mantabeni <i>Umphakatsi</i> (Royal Kraal)			
Objectives	<ul style="list-style-type: none"> — Introducing the WSP Project Management Team to Mantabeni Bandlancane (Inner Council); — Notifying Mantabeni Inner Council of commencement of ESIA specialist studies; — Request a community representative appointed by the Inner Council to accompany the specialist teams; — Request a suitable date for WSP to sensitise the Mantabeni community residents on the project. 			
No.	Issue	Raised By	Response	ESIA Reference
1	Enquired what the initials WSP stand for.	Inner Council	The founding company name was Williams Sale Partnership.	N/A
2	It was requested that the Inner Council be notified when each team is on site.	Inner Council	<p>The fauna study team will commence during the week of 18th February 2019, followed by the flora team the week of 25th February 2019. The flora and fauna team are collectively referred to as the biodiversity team. The socio-economic study team will follow in due course, after the biodiversity team. In general, the various teams will visit the project site at different times and in order to mitigate overwhelming the community, not all teams will be at the site simultaneously.</p> <p>It was agreed that the Inner Council will be notified when the specialists will be onsite.</p>	Refer to the SEP attached in Appendix F .

3	<p>The Inner Council concurred that this is an important aspect of outsiders working within the community and that it will further provide assurance to residents that the specialist are bona fide members of the project team. The Inner Council undertook to revert back to WSP with the name and contact details of the appointed community representative.</p>	Inner Council	<p>Subsequent to the meeting the Inner Council provided WSP with the contact details of the community representative.</p>	<p>Refer to the SEP attached in Appendix F. Refer to the Socio-Economic Impact Attachment in Appendix C3.</p>
4	<p>The Inner Council emphasised the requirement for WSP to compensate the community representative for accompanying the specialists.</p>	<i>Indvuna</i>	<p>Community members were utilised as part of the social surveys and these members were compensated.</p>	<p>Refer to the Socio-Economic Impact Attachment in Appendix C3. Refer to the RAP in Appendix I.</p>
5	<p>Requested the Inner Council to provide a suitable date for a community meeting</p>	Mbuso Kingsley	<p>The Inner Council proposed that WSP present the project during the next regular community meeting scheduled for Saturday, 23rd February 2019.</p>	<p>Refer to the SEP attached in Appendix F.</p>
6	<p>The Inner Council expressed appreciation for the introductory meeting with the project management team and the Inner Council granted permission for WSP to proceed with the reconnaissance visit of the project site.</p>	Inner Council	Noted.	N/A

Date	23 rd February 2019			
Time	11:00 hrs to 11:15 hrs			
Venue	Mantabeni <i>Umphakatsi</i> (Royal Kraal)			
Objectives	— Sensitisation of Mantabeni Community on Project Objectives and Environmental & Social Impact Assessment (ESIA) process.			
No.	Issue	Raised By	Response	ESIA Reference
1	The Inner Council expressed support for the project and explained to the community that all speeches and presentations during this extra-ordinary community meeting were limited to 10 minutes therefore queries and shall be reserved for the regular community meetings.	Inner Council	Noted.	Refer to the SEP attached in Appendix F .

Date	9 th February 2019			
Time	10:30 hrs to 10:45 hrs			
Venue	Siphocosini <i>Umphakatsi</i> Lomdzala (Old Royal Kraal)			
Objectives	— Sensitisation of Siphocosini Community on Project Objectives and Environmental & Social Impact Assessment (ESIA) process			
No.	Issue	Raised By	Response	ESIA Reference
1	The <i>Indvuna</i> expressed appreciation for the presentation and explained to the community that the opportunity for questions and answers will be provided in subsequent community meetings.	<i>Indvuna</i>	Noted	Refer to the SEP attached in Appendix F .
2	The <i>Indvuna</i> notified the community that the Inner Council will identify and appoint community representatives to accompany the specialists throughout the biophysical and socio-economic studies.	<i>Indvuna</i>	WSP thanked the <i>Indvuna</i> for making a representative available.	Refer to the SEP attached in Appendix F . Refer to the Socio-Economic Impact Attachment in Appendix C3 .

Date	13 th February 2019			
Time	13:30 hrs to 13:45 hrs			
Venue	Siphocosini			
Objectives	<ul style="list-style-type: none"> — Introducing the WSP Project Management Team to Siphocosini Bandlancane (Inner Council); — Notifying Siphocosini Inner Council of commencement of ESIA specialist studies. 			
No.	Issue	Raised By	Response	ESIA Reference
1	The <i>Indvuna</i> expressed appreciation for the introductory meeting with the project management team and the Inner Council undertook to identify and assign a community representative to accompany the specialists while working within the community.	<i>Indvuna</i>	Noted.	Refer to the SEP attached in Appendix F . Refer to the Socio-Economic Impact Attachment in Appendix C3 .
2	The Inner Council further requested WSP to consider hiring labourers from within the community where appropriate, for example where the specialist teams require assistance in terms of manual labour in the course of conducting their studies.	Inner Council	Community members were utilised as part of the social surveys and these members were compensated.	Refer to the Socio-Economic Impact Attachment in Appendix C3 . Refer to the RAP in Appendix I .
3	The project management team was granted permission to proceed with the reconnaissance visit of the project site.	Inner Council	Noted.	N/A

Date	31 st July 2019			
Time	10:25 hrs to 11:25 hrs			
Venue	Siphocosini			
Objectives	<ul style="list-style-type: none"> — Introducing the Socio-economic and Resettlement Action Plan Survey Team to Siphocosini Bandlancane (Inner Council). — Presenting the Socio-economic and Resettlement Action Plan Survey process to Siphocosini Inner Council. 			
No.	Issue	Raised By	Response	ESIA Reference
1	The <i>Indvuna</i> submitted a suggestion that, where possible, the project provide technical and/ or financial assistance to the affected community through the construction of facilities to meet the social amenity needs of the community. An example of construction of a community hall for community meetings was cited. He further pointed out that one of the recommendations which arose from the Feasibility Study Report was that the structures that will be built for the project site office and workers' camp may be repurposed for community facilities upon completion of the construction of the dam.	<i>Indvuna</i>	A recommendation has been included in the ESMP that the Contractor must design the management camp, contractors camp and offices to ensure future beneficial use by the local community, such as a community hall or resort.	Refer to the RAP in Appendix B .
2	A query was raised as to whether or not a homestead's access to social amenities at the place of resettlement will be taken into consideration. For example, some amenities such as communal grazing are presently a short walk from an affected homestead, however at the place of resettlement, the resettled family members may have to walk longer distances than they presently do to access those amenities.	Inner Council	Accessibility to social facilities and amenities by resettled homesteads were taken into consideration in the planning of the resettlement of homesteads.	Refer to the Socio-Economic Impact Attachment in Appendix C3 . Refer to the RAP in Appendix I .

3	<p>A query was raised on whether or not the project will provide access routes across the dam, since presently there are low level crossings for vehicles and footbridges for pedestrians.</p>	Inner Council	<p>Studio Pietrangeli proposed a realignment route for the MR in the Draft Design Report, 2020. In addition, a desktop based investigation was undertaken to identify PAPs.</p> <p>Access roads to be realised/rehabilitated will cover a 9 km total length. The dam wall will also provide a crossing for community members.</p> <p>Land replacement options have been identified and all proposed sites are in close proximity to existing roads. A map has also been included in the RAP</p> <p>However, internal access roads to the north of the site has not been confirmed and it is recommended that a detailed assessment of the internal access roads needs to be undertaken prior to the Project being implemented.</p>	<p>Refer to Chapter 5 of the ESIA.</p> <p>Refer to the RAP in Appendix I.</p> <p>Refer to Chapter 11 of the RAP in Appendix I.</p> <p>Refer to Chapter 12.2 of the ESIA.</p>
4	<p>A query was raised as to whether or not Masibekela High School, which is a relatively new school will be replaced.</p>	Inner Council	<p>Masibekela High School will need to be relocated and a proposed relocation site has been identified in the RAP.</p>	<p>Refer to the RAP in Appendix I.</p>

5	<p>The <i>Indvuna</i> pointed out that land for resettlement and relocation is scarce, citing the example of the difficulty that was experienced when identifying suitable land for constructing Masibekela High School. One of the contributing factors to scarcity of land is the rapid rate of development within the community.</p> <p>The <i>Indvuna</i> then pointed out that the Consultant’s response implies, therefore that where facilities, such as schools are relocated, it means that homesteads will have to be resettled or relocated to provide land for the relocated facilities. Therefore, in addition to those homesteads directly affected by the dam, there will be additional homesteads whose resettlement or relocation is incidental to the dam.</p>	<i>Indvuna</i>	Land replacement options have been identified and all proposed sites are in close proximity to the existing communities. A map has also been included in the RAP	Refer to Chapter 11 of the RAP in Appendix I .
6	<p>The <i>Indvuna</i> highlighted that some community members, including those wishing to settle in the community, have been allocated land through Swazi law and custom (<i>kukhonta</i>) by Umphakatsi to construct their homesteads, but they have not yet commenced construction. In all cases those allocated land have paid the application fee and all costs associated with the application process. Therefore it is imperative for the Zone Leaders to bring to the Survey Team’s attention the locations of all designated homesteads allocated land, but have not yet commenced construction so that those homesteads are included in the resettlement and/ or compensation process. The <i>Indvuna</i> cautioned Zone Leaders to be vigilant of potential false claims that may arise where people claim they were allocated land when in actual fact they were not allocated land by <i>Umphakatsi</i>.</p>	<i>Indvuna</i>	Community members were utilised as part of the social surveys and the methodology employed for the surveys are detailed in the RAP.	Refer to Chapter 7 of the RAP in Appendix I .

7	<p>The <i>Indvuna</i> expressed appreciation for the introductory meeting with the Socio-economic and RAP Survey Team. The <i>Indvuna</i> reiterated that several meetings had already been held with the Inner Council and the community where the project was introduced. He reiterated that the Environmental and Social Impact Assessment had now reached the critical stage of interacting with the directly affected homesteads. He therefore proposed that the question and answer session be deferred to the Community Meeting scheduled for 03rd August 2019. That is where the interested and affected parties will be provided the platform to submit further comments, suggestions, queries and concerns.</p> <p>The <i>Indvuna</i> pledged that the role of the Inner Council will be to continue promoting awareness of the project to the community members and to promote the community's cooperation with the Survey Team during the course of the survey. In the meantime the Survey Team is granted permission to commence surveying the affected homesteads prior to the Community Meeting.</p>	<i>Indvuna</i>	Noted	<p>Refer to the SEP attached in Appendix F</p> <p>Refer to the Socio-Economic Impact Attachment in Appendix C3.</p>
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Date	17 th August 2019			
Time	10:50 hrs to 13:50 hrs			
Venue	Mantabeni			
Objectives	<ul style="list-style-type: none"> — Introducing the Socio-economic and Resettlement Action Plan Survey Team to Mantabeni Community. — Presenting the Socio-economic and Resettlement Action Plan Survey process to Mantabeni Community. 			
No.	Issue	Raised By	Response	ESIA Reference
1	A concern was raised that when the Community Representatives visit the homesteads to present the completed forms for verification and signing by the homestead heads, they tend to rush through the forms and request the homestead heads to sign the forms. This presents the risk of pressurising the homestead head, who will thus be unable to fully satisfy himself or herself that all the captured data is indeed correct.	Mantabeni Community	The concern was noted and Community Representatives were instructed, after the initial homesteads during the verification visits in days preceding the community meeting, to leave forms with affected homestead heads at least overnight to fully satisfy themselves of the accuracy of the data captured.	Refer to the Socio-Economic Impact Attachment in Appendix C3 .
2	A suggestion was submitted that the Member of Parliament (MP) be invited to community meetings when discussing development projects of this size and nature. The reason is that the community members may wish to ask the MP how the decision to propose the construction of Nondvo Dam, or any other infrastructure project of similar size, was arrived at by the Government and/ or Parliament.	Mantabeni Community	The <i>Indvuna</i> clarified that the project was first introduced during the term of the former and late Prime Minister and previous Parliament, therefore the identification of the proposed site was arrived at through extensive consultations between the Government of the Kingdom of Eswatini and neighbouring states of South Africa and Mozambique.	Refer to Chapter 1 of the ESIA.

3	<p>A query was raised as to whether or not affected homesteads should continue with their cultivation plans and home improvements, since they will be resettled. Furthermore, how will homesteads be compensated for crops and home improvements that are established after the survey?</p>	Mantabeni Community	<p>Cultivation plans and home improvements shall proceed as normal until such time that the Government issues an instruction to affected homesteads to stop cultivation or home improvement beyond a date to be appointed. When the appointed cut-off date has been announced by the Government, the affected homesteads will be surveyed again to update the data for each homestead.</p>	<p>Refer to the Socio-Economic Impact Attachment in Appendix C3.</p> <p>Refer to the RAP in Appendix I.</p>
4	<p>A query was raised as to whether or not some community development programmes, such as rural water supply and rural electrification programmes (electricity schemes) should continue since they will be affected by the dam.</p>	Mantabeni Community	<p>As with cultivation plans and home improvements, the community development programmes shall proceed as normal until such time that the Government proclaims the cut-off date. The reason is that in the event that the current designs of the dam are altered or if the decision is reached that the dam is environmentally and socially not feasible, existing community development programmes will have been unnecessarily interrupted.</p>	<p>Refer to the Socio-Economic Impact Attachment in Appendix C3.</p> <p>Refer to the RAP in Appendix I.</p>

5	<p>A query was raised as to how opportunistic development, through the establishment of new homesteads and/ or implementation of home improvements, will be controlled. Failure to control such development, without defining a cut-off date urgently, will escalate any initial budget for resettlement and relocation particularly due to people being tempted to take advantage of the time lapse between the sensitization of the community and the announcement of the cut-off date.</p>	Mantabeni Community	<p>It is acknowledged that opportunistic developments are highly likely, therefore it is necessary to proceed with studies in as timely a manner as is reasonable, while being cognizant of the sensitivities of the subject of resettlement and relocation. An effective method of controlling opportunistic development will be the Government's proclamation of the cut-off date after all studies have been concluded.</p>	Refer to the RAP in Appendix I .
6	<p>A query was raised on whether or not potential resettlement sites have been identified.</p>	Mantabeni Community	<p>Land replacement options have been identified and all proposed sites are in close proximity to existing community. A map has also been included in the RAP</p>	Refer to Chapter 11 of the RAP in Appendix I .

<p>7</p>	<p>A suggestion was submitted that alternative project sites be explored as a means of mitigating the distress and cost of resettling the densely distributed homesteads from the proposed project site. It was suggested that a site such as the nearby commercial forestry plantation to the south west of Mantabeni be considered for the dam since there are no homesteads there.</p>	<p>Mantabeni Community</p>	<p>The Department of Water Affairs had established and maintained a Project Steering Committee and Stakeholder Committee. The former comprised representatives from the various relevant Government ministries and parastatals, while the latter comprised Government ministries, parastatals as well as community representatives including the office of the Member of Parliament.</p> <p>Aspects relating to the dam, including its proposed location were discussed during the regular meetings held by both committees. On the matter of alternative sites, a query was raised by stakeholders as to how the Nondvo site was identified. The query emanated from the concern that the Project Affected Persons appeared to be sacrificed in favour of a wildlife protected area immediately south of the proposed site. DWA clarified that it was based on the optimal yield of the watercourses in the area and the need to have a site that is at sufficiently high altitude to enable conveyance of water by gravity so as to avoid unsustainable pumping costs [Reference Minute 3.2.2, Stakeholder Committee Meeting of 15th November 2019].</p>	<p>Refer to Chapter 6 of the ESIA.</p>
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		<p>The Technical Feasibility Consultant noted that the preferred proposed location and height of dam wall were selected due to:</p> <ul style="list-style-type: none"> — The suitability of the underlying geology at the preferred site. The alternative site immediately south of the preferred site did not present the optimal geological consistency and integrity as the preferred site, which had rocks on both abutments as well as the river bed, thereby providing optimal conditions for a solid foundation. — The preferred site presenting the most optimal geological conditions and topography for achieving optimal water harvesting volume (to meet water present and projected water demand up to at least 2050) with the most balanced environmental and social impact in terms of advantages and disadvantages. For example, placing the dam wall further south would require a higher dam wall due to the depth of the valley, thus requiring a higher complexity of engineering and thus cost, resulting in a reduced return on investment. <p>[Reference Minute 4.1.2, Stakeholder Committee Meeting of 10th September, 2020].</p>	
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		<p>Stakeholder engagement on the selection of the best available option was undertaken and was inherently constrained by the geotechnical requirements of dam construction wherein the geology and topography are amongst the key determinants on dam location. Therefore, selection of alternative sites further downstream presents diminishing returns and thus presenting less cost-effective solutions.</p> <p>During the Technical Scoping Study several downstream dam locations were investigated. The preferred location was selected based on an evaluation of the scenarios through a sensitivity analysis aimed at understanding the effects of the dam type selection and reservoir elevation on water supply volume, on the energy production, on the costs of construction and subsequently on the profitability of the plant in its entirety.</p> <p>Unfortunately, in large infrastructure projects, especially in populated areas, resettlement is often unavoidable. The proposed dam, as described within the ESIA, was identified as the preferred alternative taking into consideration all</p>	
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			environmental, social and economic costs.	
8	A member of the audience further supported the response by enlightening meeting participants that it is necessary for them as a community to take into consideration the fact that the present scarcity of water may be exacerbated in the distant future due to climate change. Therefore, he urged fellow participants to appreciate the need for taking interventions to ensure water security for the future, even if it means having to make the sacrifice of resettling some homesteads for the greater good of all.	Mantabeni Community	Noted.	Refer to Chapter 9 of the ESIA.
9	A request for clarification was raised on what will happen those homesteads which have encroached into the railway line since Eswatini Railway recently informed the community that they will have to relocate since they should not have been allocated land within an existing railway reserve. Therefore with the possibility of the dam being implemented, will those homesteads now be safe to remain within the railway reserve? A further query was raised on whether or not the main road will cause additional resettlement of homesteads.	Mantabeni Community	Re-alignment routes for the railway line and MR 19 has been proposed in the Draft Technical Designs and a desktop analysis were undertaken of the potential PAP's.	Refer to Chapter 5 of the ESIA. Refer to the RAP in Appendix I .

10	A query was raised on whether or not the project will provide access routes across the dam, since presently there are low level crossings for vehicles and footbridges for pedestrians.	Mantabeni Community	<p>Studio Pietrangeli proposed a realignment route for the MR in the Draft Design Report, 2020. In addition, a desktop based investigation was undertaken to identify PAPs.</p> <p>Access roads to be realised/rehabilitated will cover a 9 km total length. The dam wall will also provide a crossing to community members.</p> <p>However, internal access roads to the north of the site has not been confirmed and it is recommended that a detailed assessment of the internal access roads needs to be undertaken prior to the Project being implemented.</p>	<p>Refer to Chapter 5 of the ESIA.</p> <p>Refer to the RAP in Appendix I.</p> <p>Refer to Chapter 12.2 of the ESIA.</p>
11	A query was raised as to what will happen to the schools, Masibekela High School and Bhekephi Primary School if they are affected by the dam, particularly since they serve the community as a whole and not just the affected homesteads.	Mantabeni Community	Masibekela High School and Bhekephi Primary School will need to be relocated and proposed relocation sites have been identified in the RAP.	Refer to the RAP in Appendix I .
12	A concern was raised that the proximity of two dams to each other will increase the intensity of localised weather conditions such as strong winds and rainfall intensity during thunderstorms. This will therefore exacerbate storm damage to homesteads and other property as well as increase anxiety amongst community members.	Mantabeni Community	The Technical Design has taken climate change into consideration and the dam has been developed accordingly.	Refer to Chapter 5 of the ESIA.

Date	31 st July 2019			
Time	12:00 hrs to 13:17 hrs			
Venue	Mantabeni Royal Kraal (<i>Umphakatsi</i>)			
Objectives	<ul style="list-style-type: none"> — Introducing the Socio-economic and Resettlement Action Plan Survey Team to Mantabeni Bandlancane (Inner Council). — Presenting the Socio-economic and Resettlement Action Plan Survey process to Mantabeni Inner Council. 			
No.	Issue	Raised By	Response	ESIA Reference
1	A query was raised on how homesteads with absent or deceased homestead heads as well as child headed homesteads will be surveyed, i.e. who will be recognised as the homestead head in such cases?	Mantabeni Inner Council	The designated living homestead head, whether designated by extended family elders or other form of documented proof, has been recorded as the homestead head.	Refer to the RAP in Appendix I .
2	A query was raised as to how multiple homesteads headed by an individual will be dealt with. For example, where a homestead head has one homestead which is affected and another homestead within the same community which is not affected, will the homestead head be compensated for the affected homestead or required to move to the unaffected homestead, and thereby be deemed as not qualifying for compensation?	Mantabeni Inner Council	The specific affected fixed asset, whether it be on or more fields or a homestead, will be compensated, irrespective of how many other homesteads in the community headed by an individual are not affected.	Refer to the RAP in Appendix I .

3	<p>A query was raised as to whether or not affected homesteads should continue with their annual cultivation programmes at the being of the rainy season, since they will be resettled.</p>	<p>Mantabeni Inner Council</p>	<p>Annual cultivation programmes shall proceed as normal until such time that the Government issues an instruction to affected homesteads to stop cultivation beyond a date to be appointed. The same shall apply to establishment of new homesteads and construction of structures within existing homesteads.</p>	<p>Refer to the RAP in Appendix I.</p>
4	<p>A query was raised as to whether or not the affected community, i.e. the host community of the dam will benefit from the project during the operation phase. The query was raised in light of the adjacent existing Lumphohlo Dam not having directly benefitted the host community, yet homesteads were relocated to provide space for the dam.</p>	<p>Mantabeni Inner Council</p>	<p>The ESMP requires that PAPs are provided with access to potable water.</p> <p>In the RAP it has been assumed that 10% of the compensation rate of the replacement of structures is to account for installation of bulk services including potable water.</p> <p>A recommendation has been included in the ESMP that the Contractor must design the management camp, contractors camp and offices to ensure future beneficial use by the local community, such as a community hall or resort.</p> <p>The ESMP also details various measures to uplift and empower the local community.</p>	<p>Refer to the ESMP in Appendix B.</p> <p>Refer to the RAP in Appendix I.</p>

5	A detailed map of the final proposed dam site was requested in order to provide clarity to the community on the respective locations of the directly affected homesteads.	Mantabeni Inner Council	A map will be issued to the Inner Council by the Survey Team, indicating the buffer contour and the inundation area. During the meeting, several map slides were presented.	Refer to Chapter 5 of the ESIA.
6	A concern was raised that while it is acknowledged that community residents are permitted to continue with their respective annual cultivation programmes until a cut-off date is announced, the real impacts on agriculture emerge during construction. This is when construction material such as gravel and sand are sourced from nearby sites which at times may require borrowing material from arable land, resulting in food insecurity amongst the remaining homesteads. Therefore, even if borrow sites are identified in advance, the actual yields are sometimes lower than initially estimated, resulting in resorting to borrowing material from arable land.	Mantabeni Inner Council	The RAP includes recommendations on timely compensation to those who will be affected by loss of arable land.	Refer to the RAP in Appendix I .

Date	3 rd August 2019			
Time	11:00 hrs to 13:30 hrs			
Venue	Siphocosini			
Objectives	<ul style="list-style-type: none"> — Introducing the Socio-economic and Resettlement Action Plan Survey Team to Siphocosini Community. — Presenting the Socio-economic and Resettlement Action Plan Survey process to Siphocosini Community. 			
No.	Issue	Raised By	Response	ESIA Reference
1	A query was raised as to how natural resources, particularly those of cultural and economic value will be compensated, especially since they do not belong to individuals, but the community as a whole. An example of plants of medicinal value was cited.	Siphocosini Community	<p>Natural resources of cultural and economic value such as various species of grasses which grow on communal land and are harvested for making mats, hats, constructing structures within homesteads etc, were identified, measured and recorded.</p> <p>Communal fixed assets such as communal grazing areas, and grasses of cultural and economic value were measured and compensation is based on the affected area measurement. Compensation will be made to the designated custodian, such as the Chief or the Royal Kraal, whichever the case may be.</p>	Refer to the RAP in Appendix I .

2	<p>A suggestion was proposed that the survey should include resettlements that will be caused by the realignment of the railway line and main road. This will avoid having to survey the community several times, prolonging the anxiety amongst community members.</p>	Siphocosini Community	<p>Re-alignment routes for the railway line and MR 19 has been proposed in the Draft Technical Designs and a desktop analysis were undertaken of the potential PAP's.</p>	<p>Refer to Chapter 5 of the ESIA.</p> <p>Refer to the RAP in Appendix I.</p>
3	<p>A query was raised on whether or not the project will provide access routes across the dam, since presently there are low level crossings for vehicles and footbridges for pedestrians.</p>	Siphocosini Community	<p>Studio Pietrangeli proposed a realignment route for the MR in the Draft Design Report, 2020. In addition, a desktop based investigation was undertaken to identify PAPs.</p> <p>Access roads to be realised/rehabilitated will cover a 9 km total length. The dam wall will also provide a crossing to community members.</p> <p>However, internal access roads to the north of the site has not been confirmed and it is recommended that a detailed assessment of the internal access roads needs to be undertaken prior to the Project being implemented.</p>	<p>Refer to Chapter 5 of the ESIA.</p> <p>Refer to the RAP in Appendix I.</p> <p>Refer to Chapter 12.2 of the ESIA.</p>

4	A query was raised on how to deal with cases where the locally resident family members do not know of any stillborns within the homestead whereas the only person who knows may be the mother who has long since left the homestead to settle elsewhere. One day she may return only to find the homestead inundated.	Siphocosini Community	Prior to allowing the RAP Specialist to respond, the <i>Indvuna</i> asserted that if there is no way of any locally resident family member or any other person reasonably knowing that there is a grave of a stillborn, then unfortunately no claim can be initiated since it was not reasonably practical to expect such locally resident persons to have known.	Refer to the RAP in Appendix I .
5	A query was raised that in view of current reports in the media that the Government has limited financial resources for various activities, where will the funds come from for resettling and compensating all the affected homesteads?	Siphocosini Community	The project will be funded by the African Development Bank (AfDB), subject to terms and conditions of funding agreement with the Government of the Kingdom of Eswatini.	Refer to Chapter 1 and 4 of the ESIA.
6	A query was raised as to whether or not relocation sites have been identified for Masibekela High School and Bhekephi Primary School.	Siphocosini Community	Masibekela High School and Bhekephi Primary School will need to be relocated and proposed relocation sites have been identified in the RAP.	Refer to the RAP in Appendix I .

7	<p>A query was raised as to whether or not affected homesteads should continue with their cultivation plans and home improvements, since they will be resettled. Furthermore, how will homesteads be compensated for crops and home improvements that are established after the survey?</p>	Siphocosini Community	<p>Cultivation plans and home improvements shall proceed as normal until such time that the Government issues an instruction to affected homesteads to stop cultivation or home improvement beyond a date to be appointed. When the appointed cut-off date has been announced by the Government, the affected homesteads will be surveyed again to update the data for each homestead.</p>	Refer to the RAP in Appendix I .
8	<p>A concern was raised that for those homesteads that will not be resettled, living in close proximity to two dams will affect the local climate such that winters will be colder, resulting in an increase in respiratory illnesses. There will also be the psychological stress of proximity to two large water bodies. Therefore it is suggested that indirect social impacts be taken into consideration so that indirectly affected homesteads are also accommodated by the survey.</p>	Siphocosini Community	<p>Both direct and indirect impacts and mitigations were taken into consideration.</p>	<p>Refer to Chapter 9 of the ESIA. Refer to the Socio-Economic Impact Attachment in Appendix C3. Refer to the ESMP in Appendix B.</p>

9	<p>A suggestion was submitted that the project provide tangible technical and/ or financial assistance to the affected community through the construction of facilities to meet the social amenity needs of the community. Examples of community water supply infrastructure and construction of a community hall were cited.</p>	Siphocosini Community	<p>The ESMP requires that PAPs are provided with access to potable water.</p> <p>In the RAP it has been assumed that 10% of the compensation rate of the replacement of structures is to account for installation of bulk services including potable water.</p> <p>A recommendation has been included in the ESMP that the Contractor must design the management camp, contractors camp and offices to ensure future beneficial use by the local community, such as a community hall or resort.</p> <p>The ESMP also details various measures to uplift and empower the local community.</p>	<p>Refer to the ESMP in Appendix B.</p> <p>Refer to the RAP in Appendix I.</p>
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Date	22 nd October 2019			
Time	10:50 hrs to 12:15 hrs			
Venue	Siphocosini Inkhundla Centre at Sigangeni			
Objectives	<ul style="list-style-type: none"> — Formerly introducing the Nondvo Dam project to Siphocosini Inkhundla Council. — Address queries and receive comments, concerns and suggestions from Siphocosini Inkhundla Council on the proposed project. 			
No.	Issue	Raised By	Response	ESIA Reference
1	The Inkhundla Council pointed out that the presentation omitted the proposed 132kV transmission line and the two schools which will also be affected by the dam.	Siphocosini Inkhundla Council	It is correct that the proposed 132kV transmission line which will be installed by the Eswatini Electricity Company (EEC) is currently proposed directly on the same site as the dam. The transmission line will need to be realigned and such realignment will affect additional homesteads which will also need to be resettled. Similar to the railway line and MR19, the project will need to propose a realignment route for the 132kv transmission line. When the transmission line realignment route is approved by EEC, the homesteads along the proposed route will be measured and recorded for inclusion in the resettlement process. Thus far, DWA has been made aware of the proposed transmission line and a formal decision is yet to be reached as to whether or not Eswatini	Refer to Chapter 5 of the ESIA.

			<p>Government, through the Ministry of Natural Resources and Energy, will bear the costs that will be incurred by EEC in redesigning the realignment route of the proposed 132kV transmission line.</p> <p>On the existing distribution network, EEC have advised that the 11kV distribution network layout will be dependent upon the final layout of the homesteads to be resettled and the remaining homesteads. This is because the distribution lines have to be routed to the homesteads, as opposed to designing the homesteads according to the network layout.</p>	
2	Relocation of schools	Siphocosini Inkhundla Council	Masibekela High School and Bhekephi Primary School will need to be relocated and proposed relocation sites have been identified in the RAP.	Refer to the RAP in Appendix I .
3	The Inkhundla Council kindly requested a copy of the intergovernmental study that contains the recommendation of the identification on the proposed site for the dam. The purpose for the request is to enable the council to respond to queries from the community on how the proposed site was identified, i.e. the criteria which led to the identification of the proposed site. This will also enable the Council to respond to community members who may suggest other sites or who may query why not other sites.	Siphocosini Inkhundla Council	The Local Environmental Support undertook to request a copy of the intergovernmental report from the Department of Water Affairs and forward it to the Inkhundla Council.	Refer to Chapter 6 of the ESIA.

4	<p>A query was raised as to whom the project beneficiaries will be. This is in view of the fact that the communities affected by the construction of Lumphohlo Dam did not benefit directly from that project, particularly since expectations were raised that they would benefit from water and other spin-offs, besides electricity which is Lumphohlo Dam's core purpose. Therefore the communities have a bitter experience of hosting infrastructure projects that benefit other communities more than the hosts. Furthermore, the delivery of services and infrastructure at the places to which homesteads were resettled has been incomplete, such that the general quality of life amongst resettled homesteads is currently worse off than what it was prior to the construction of Lumphohlo Dam. With regard to the proposed Nondvo Dam, it is apparent that downstream communities will benefit from potable water, but it is not clear how the host communities will benefit.</p>	<p>Siphocosini Inkhundla Council</p>	<p>The ESMP requires that PAPs are provided with access to potable water.</p> <p>In the RAP it has been assumed that 10% of the compensation rate of the replacement of structures is to account for installation of bulk services including potable water.</p> <p>A recommendation has been included in the ESMP that the Contractor must design the management camp, contractors camp and offices to ensure future beneficial use by the local community, such as a community hall or resort.</p> <p>The ESMP also details various measures to uplift and empower the local community.</p>	<p>Refer to the ESMP in Appendix B.</p> <p>Refer to the RAP in Appendix I.</p>
5	<p>A query was raised as to whether or not planned community development projects should be halted or suspended. Examples include rural electrification schemes and rural water supply projects. The basis of the query is that some projects entail monetary contributions from homesteads participating in the schemes, therefore some are now reluctant to make contributions, citing the fact that the proposed dam will disrupt the development programmes altogether, therefore their money will have been wasted.</p>	<p>Siphocosini Inkhundla Council</p>	<p>All planned community development programmes, including home improvements and annual cultivation of arable land, shall continue as normal until such time that Government proclaims a decision on whether or not the dam is proceeding. Halting the planned community development programmes will cause a greater inconvenience if eventually the dam does not proceed. In the event that the dam proceeds, then the community development</p>	<p>Refer to the RAP in Appendix I.</p>

			<p>infrastructure network will need to be re-routed or realigned at the cost of the project.</p> <p>The Local Environmental Support kindly requested the Inkhundla Council for a list of current community development capital projects as presented during the Siphocosini Community Meeting on 12th October 2019. This will enable WSP to take into consideration potential impacts on such community development projects during the preparation of the ESIA Report. The Inkhundla Council undertook to make the annual report on community development projects available to the Local Environmental Support.</p>	
6	<p>A query was raised as to the level of confidence of the technical feasibility of the dam, i.e. the level of certainty amongst the technical feasibility study consultants that the dam is indeed feasible. The query is raised on the basis that Luphohlo Dam is itself currently visibly very low, therefore the proposed Nondvo Dam may take a long time to reach full supply level, if at all.</p>	<p>Siphocosini Inkhundla Council</p>	<p>The consultants undertaking the technical feasibility study have indicated that the dam is technically feasible.</p>	<p>Refer to Chapter 5 of the ESIA.</p>

7	<p>A query was raised as to when project implementation is expected to commence.</p>	<p>Siphocosini Inkhundla Council</p>	<p>First, the technical and environmental and social feasibility studies have to be concluded. The Ministry of Natural Resources and Energy expects these processes to be concluded early in 2021. If the studies find that the dam is feasible from all perspectives, i.e. technical, environmental and social, then Government will proceed with sourcing funding. Therefore a definitive project commencement date cannot be intimated at this stage.</p>	<p>Refer to the ESMP attached in Appendix B.</p>
8	<p>A suggestion was submitted that alternative project sites be explored as a means of mitigating the distress and cost of resettling the densely distributed homesteads from the proposed project site.</p>	<p>Siphocosini Inkhundla Council</p>	<p>The project in its entirety comprises other options of raising Lumphohlo Dam and Hawane Dam respectively. Therefore Nondvo Dam is one of three options, all of which may be feasible, or only two of which may be feasible, or only one of which may be feasible. When all options have been evaluated, a decision will be made on the best option or combination of options.</p> <p>The Department of Water Affairs had established and maintained a Project Steering Committee and Stakeholder Committee. The former comprised representatives from the various relevant Government ministries and parastatals, while the latter comprised Government ministries, parastatals as</p>	<p>Refer to Chapter 6 of the ESIA.</p>

		<p>well as community representatives including the office of the Member of Parliament.</p> <p>Aspects relating to the dam, including its proposed location were discussed during the regular meetings held by both committees. On the matter of alternative sites, a query was raised by stakeholders as to how the Nondvo site was identified. The query emanated from the concern that the Project Affected Persons appeared to be sacrificed in favour of a wildlife protected area immediately south of the proposed site. DWA clarified that it was based on the optimal yield of the watercourses in the area and the need to have a site that is at sufficiently high altitude to enable conveyance of water by gravity so as to avoid unsustainable pumping costs [Reference Minute 3.2.2, Stakeholder Committee Meeting of 15th November 2019].</p> <p>The Technical Feasibility Consultant noted that the preferred proposed location and height of dam wall were selected due to:</p> <ul style="list-style-type: none"> — The suitability of the underlying geology at the preferred site. The alternative site immediately south of the preferred site did not present the optimal geological 	
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			<p>consistency and integrity as the preferred site, which had rocks on both abutments as well as the river bed, thereby providing optimal conditions for a solid foundation.</p> <ul style="list-style-type: none"> — The preferred site presenting the most optimal geological conditions and topography for achieving optimal water harvesting volume (to meet water present and projected water demand up to at least 2050) with the most balanced environmental and social impact in terms of advantages and disadvantages. For example, placing the dam wall further south would require a higher dam wall due to the depth of the valley, thus requiring a higher complexity of engineering and thus cost, resulting in a reduced return on investment. <p>[Reference Minute 4.1.2, Stakeholder Committee Meeting of 10th September, 2020].</p> <p>Stakeholder engagement on the selection of the best available option was undertaken and was inherently constrained by the geotechnical requirements of dam construction wherein the geology and topography are amongst the key determinants on dam location. Therefore, selection of alternative sites further downstream</p>	
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			presents diminishing returns and thus presenting less cost-effective solutions.	
9	The Inkhundla Council requested verification and relevance of asking respondents about their HIV status during the socio-economic survey. The query was raised on the basis that respondents assumed that HIV status will influence whether or not they qualify for compensation.	Siphocosini Inkhundla Council	It was clarified that the objective of the question posed to respondents was to ascertain whether or not they are aware of their HIV status, not to disclose such status. The relevance is that obtaining an indication of the level of self-awareness guides the nature of mitigation measures that will be recommended. For example, where the level of self-awareness in a community is low, then the recommended mitigation measures will be more intensive than in a community where self-awareness is high.	Refer to the Socio-Economic Impact Attachment in Appendix C3 .
10	The Inkhundla Council acknowledged the perspective of the response, but kindly requested to express reservations in view of how easily the line of questioning will be misinterpreted in the community as well as the legality of asking a person about their HIV status, whether explicitly or implicitly.	Siphocosini Inkhundla Council	Noted.	Refer to the Socio-Economic Impact Attachment in Appendix C3 .

11	<p>A clause was contained in the asset forms issued to respective affected homesteads to sign that they agree not to add any further structures after the asset recording exercise. A query was raised as to how such a clause will be reconciled with the instruction to continue with capital projects and homestead improvements until such time that Government issues a directive for all development within the project site to cease on account of the dam proceeding.</p>	<p>Siphocosini Inkhundla Council</p>	<p>Fortunately the clause was identified when the first few homesteads were requested to verify the assets recorded on the form. Subsequently the forms were withdrawn and the clause has since been amended to read that the homestead head acknowledges the accuracy of the data collected. The commitment to not add further structures has been removed.</p>	<p>Refer to the Socio-Economic Impact Attachment in Appendix C3.</p>
12	<p>The A3 map was acknowledged and a larger map was requested for pinning on the wall of the Inkhundla Centre.</p>	<p>Siphocosini Inkhundla Council</p>	<p>The Local Environmental Support undertook to issue a larger map on A0 sheet.</p>	<p>N/A</p>
13	<p>A query was raised as to where Inkhundla shall direct queries and correspondence on the dam.</p>	<p>Siphocosini Inkhundla Council</p>	<p>Queries shall be directed to the Local Environmental Support who shall in turn forward queries to the Lead Consultant (WSP) and DWA. The Honourable Member of Parliament further suggested directing correspondence to the Ministry of Natural Resources and Energy who will then delegate the implementing agency DWA to address the queries accordingly through the appointed service providers. The meeting participants resolved to adopt the latter approach.</p>	<p>Refer to the SEP attached in Appendix F.</p>

Date	28 th November 2019		
Time	10:20 hrs to 12:30 hrs		
Venue	Exhibition Hall, Eswatini National Library, Mbabane		
Objectives	<ul style="list-style-type: none"> — Present proposed project to the public. — Receive comments, queries, suggestions, concerns from the public for input into the ESIA process. 		
No.	Issue	Response	ESIA Reference
1	<p>Confidence level of availability of water for proposed dam.</p> <p>A query was raised as to the confidence level of the data used by the Technical Feasibility Study Consultant in determining that adequate water will be available for the proposed dam. It is acknowledged that the query may be addressed in the Technical Feasibility Study Report, but it would be helpful to provide such information in such a format that non-technical stakeholders can easily understand. The query is raised on the basis that to the lay person, physically there appears to be inadequate flows along the proposed water sources and it is known that the Government’s measuring devices upstream of the proposed site are not adequately maintained or data recording is inconsistent. Furthermore, there are no measuring devices along the proposed tributaries, therefore there is no long term historical data for the sub-catchment. It is likely that in the absence of actual historical records, the Technical Feasibility Consultant has had to rely on computer modelling to determine adequacy of water in the sub-catchment, which may not</p>	<p>The consultants undertaking the technical feasibility study have indicated that the dam is technically feasible.</p>	<p>Refer to Chapter 5 of the ESIA.</p>

	necessary translate to reality during project implementation.		
2	<p>Exclusion of environmental and social costs from presentation</p> <p>A query and concern was raised as to why the costs of environmental mitigations as well as resettlement and compensation of affected parties was not presented. Presentation of the construction cost alone appears to misrepresent the true total cost of the project and may be misconstrued as an attempt to enable or justify the escalation of costs during implementation.</p>	At the time of the meeting the ESIA process had not yet finalised the costs of environmental mitigations, resettlement and compensation. The costs for environmental mitigation have been included in the ESMP and the resettlement cost has been included in the RAP.	<p>Refer to the ESMP attached in Appendix B.</p> <p>Refer to the RAP in Appendix I.</p>
3	<p>Environmental and social cost as a percentage of construction cost</p> <p>A query was raised as to the approximate percentage of construction cost that the environmental and social costs are likely to be, i.e. in a similar method that contingencies and engineering costs are estimated as a percentage of the construction cost.</p>	The costs for environmental mitigation have been included in the ESMP and the resettlement cost has been included in the RAP. This percentage has not yet been determined as the Technical Designs and associated costs have not been finalised.	<p>Refer to the ESMP attached in Appendix B.</p> <p>Refer to the RAP in Appendix I.</p>
4	<p>Threshold of bankability of project</p> <p>A query was raised as to the threshold of bankability of the project, i.e. the minimum and maximum cost of both Technical Feasibility and Environmental and Social Feasibility that will qualify the project as being worth funding by potential funders.</p>	This needs to be agreed to by the lenders and is outside of the scope of the ESIA.	N/A
5	<p>Project funding</p> <p>A query was raised as to how and by whom the project will be funded.</p>	It was clarified that the Feasibility Study, which comprises both the Technical Feasibility Study and ESIA Study, is being funded by the African Development Bank (AfDB). When the Feasibility Study is complete, Government will	Refer to Chapter 4 of the ESIA.

		<p>then be in a position to use the Final Feasibility Study Report to seek funding from development funding institutions which will scrutinize the Feasibility Study Report to determine whether or not it qualifies for funding. Therefore, a funder for the project implementation and operation stages has not yet been identified.</p>	
<p>6</p>	<p>Justification of project cost</p> <p>A recommendation was made that the project costs be justified strongly by the project proponent so that a lot of money is not spent, and possibly recovered from tax payers, only to find that the benefit is too low relative to the cost. An example was cited of Lubovane Dam which was constructed as part of the Lower Usuthu Smallholder Irrigation Project (LUSIP) where the lives of community members have visibly been positively transformed. Therefore, the proposed Nondvo Dam should also provide assurance of tangible benefits as means of strengthening the justification of the project costs, i.e. positive impacts should be practical, realistic and attainable rather than simply hypothesised in order to market the project. As a follow-up to the recommendation, a comment was submitted that without strong justification for the expenditure, the project will be at risk of inciting animosity of the populace against the Government.</p>	<p>The recommendation and additional comment were noted. A member of the audience highlighted, for the benefit of other participants, that the example of LUSIP as cited by the previous speaker, is not without sections of the affected community feeling excluded from the benefits, such as the Mphaphathi community which cannot easily access water from the LUSIP project. Various community development initiatives have therefore had to be implemented to off-set the lack of direct access to LUSIP water. That being said, in respect to the exploration of interventions to mitigate the severity of water scarcity, it is necessary to recognise the Eswatini Government's timely response to the threat, which is proactive compared to the recent situation in neighbouring South Africa where the water crisis in Cape Town may have been exacerbated by delayed action by the government. In relation to this specific project, it may therefore be prudent to consider the aspect of securing water for a larger population over a wider geographical area than only the project site. Therefore there is a predicament of balancing the needs of the many against the impacts on a few.</p>	<p>Refer to the ESMP attached in Appendix B.</p>
<p>7</p>	<p>Forecasting environmental and social costs</p> <p>A recommendation was submitted that when environmental mitigation costs and resettlement and compensation costs are calculated, they should factor in the time lapse between the time the survey is undertaken</p>	<p>The environmental mitigation costs and resettlement and compensation costs were calculated based on 2019/2020 rates and a contingency budget has been included.</p>	<p>Refer to the ESMP attached in Appendix B. Refer to the RAP in Appendix I.</p>

	<p>and the time when the project will be implemented. This forecasting or projection will mitigate situations where, due to inflation and exchange rates, the budget allocation at implementation is found to be inadequate to cover the environmental and social costs since excessive time will have elapsed between the date of calculation and the date of project implementation.</p>		
8	<p>Variation in value of fixed assets between date of ESIA and date of implementation of resettlement process</p> <p>A concern was raised that the value of fixed assets of affected homesteads will likely be higher at the date of implementation of the resettlement and compensation process. This will cause discrepancies in the value of compensation due, resulting in grievances.</p>	<p>It was clarified that the affected homesteads will be revisited prior to project implementation in order to update and verify the asset inventories and value of the fixed assets. For example, some structures such as houses are likely to be extended after the asset survey since no directive has been issued by the Government to stop house construction or home improvement. Therefore, when the cut-off date for house construction and home improvement within the project site is issued, the recorded homesteads will be revisited to update the fixed asset inventories.</p>	<p>Refer to the RAP in Appendix I.</p>
9	<p>Project benefits to host communities</p> <p>A recommendation was submitted that the project consider community development initiatives to benefit the wider host community since the likely reality is that it may not be practical to supply water to the entire host community, particularly if water will be conveyed by gravity. Therefore, rather than raising false expectations, it may be prudent to consider community development initiatives such as roads and other facilities that will offset or compensate for the lack of access to water from the project. It is recommended that such initiatives be included in the ESIA. The ESIA needs to further take into consideration the trend that the host community is rapidly developing as a peri-urban area, therefore any</p>	<p>The ESMP requires that PAPs are provided with access to potable water.</p> <p>In the RAP it has been assumed that 10% of the compensation rate of the replacement of structures is to account for installation of bulk services including potable water.</p> <p>A recommendation has been included in the ESMP that the Contractor must design the management camp, contractors camp and offices to ensure future beneficial use by the local community, such as a community hall or resort.</p> <p>The ESMP also details various measures to uplift and empower the local community.</p>	<p>Refer to the ESMP in Appendix B.</p> <p>Refer to the RAP in Appendix I.</p>

	<p>potential community development initiatives need to be relevant to the unique circumstances of the host community in that agriculture may not be viable. Initiatives that will bring infrastructure and services may alleviate increasing population density and any adverse impacts associated with such increase in population density.</p>		
10	<p>Disruption of home improvement plans and projects Clarification and confirmation was requested as to whether or not on-going and planned home improvement projects should cease.</p>	<p>All planned and on-going home improvements and annual cultivation of arable land, shall continue as normal until such time that Government proclaims a cut-off date for such activities. Verbally instructing homesteads to cease their respective projects and cultivation will cause a greater inconvenience if eventually the dam does not proceed. This has been emphasized at the community meetings.</p>	Noted.
11	<p>Uncertainty amongst affected homesteads The uncertainty amongst directly affected homesteads is causing anxiety within the project-affected communities. A concern was therefore raised on psychological stress caused by the state of uncertainty.</p>	<p>The anxiety caused by the prospect of being resettled by large-scale infrastructure projects is acknowledged. This is currently being mitigated by including progress updates on the ESIA process during community meetings. Furthermore, anxiety from the cumulative impacts of multiple simultaneous projects such as realignment of the railway line, MR19 and 132kV Transmission line, which themselves will be triggered by the Nondvo Dam, are being mitigated by first ensuring that realignment routes are finalised before surveying affected homesteads. This approach has been taken to avoid surveying homesteads based on draft realignment routes, only to return at a later stage to inform them that they are in fact not affected, and that other homesteads which will have initially been told are unaffected are now affected. This would result in confusion and exacerbate psychological stress.</p>	Noted.

<p>12</p>	<p>Assurance of commitment to implement recommendations</p> <p>A query was raised as to what documentation will be issued to directly affected parties, including homesteads, as a commitment that their rights in terms of equitable compensation will be honoured during the implementation of the resettlement process. Such documentation would be used by affected homesteads when lodging a grievance or seeking recourse in the event that the implementing agency fails to honour its obligations.</p>	<p>The costs for resettlement has been included in the RAP.</p>	<p>Refer to the RAP in Appendix I.</p>
<p>13</p>	<p>Resettlement sites</p> <p>A query was raised as to where the affected homesteads will be resettled. The basis of the query is that it is not desirable to resettle affected homesteads far from their present communities, particularly to areas intimated in rumours where the climate is hot compared to what they are accustomed and where there is no water.</p>	<p>Accessibility to social facilities and amenities by resettled homesteads were taken into consideration in the planning of the resettlement of homesteads.</p>	<p>Refer to the Socio-Economic Impact Attachment in Appendix C3.</p> <p>Refer to the RAP in Appendix I.</p>
<p>14</p>	<p>Carbon footprint of project</p> <p>A query was raised as to whether or not the carbon dioxide (CO₂) emissions of the project life-cycle have been calculated or estimated and if so, what the CO₂ breakdown is for the various project activities.</p>	<p>The query was noted. So far a high level climate change risk assessment which is a climate resilience study has been undertaken on behalf of the Client by a consultancy firm called Climate Resilient Infrastructure Development Facility (CRIDF). Although not a direct response to the query, this is relevant to the query in that CO₂ is amongst other greenhouse gases that contribute to climate change.</p> <p>A carbon footprint assessment has not been undertaken, however potential climate change impacts as a result of Nondvo Dam has been identified.</p>	<p>Refer to Chapter9.3.9 of the ESIA.</p>

15	<p>Impacts on nature conservation and ecotourism</p> <p>A recommendation was submitted that the ESIA take into consideration potential adverse impacts, during implementation and operation, on water availability and quality at Mantenga Nature Reserve and Mlilwane Wildlife Sanctuary, both of which are immediately downstream of the proposed project. Adverse impacts include reduction of ecological flows, which will adversely affect wildlife and will also reduce attraction of tourists to the aforementioned sites. For example, Mantenga Falls which is the primary tourist attraction to Mantenga Nature Reserve.</p>	Recommendation was noted.	<p>Refer to Chapter 9.3 of the ESIA.</p> <p>Refer to the ESMP attached in Appendix B.</p>
16	<p>Impacts on cultural heritage sites</p> <p>A recommendation was submitted that the ESIA take into consideration potential adverse impacts, during implementation and operation, on water availability and quality at Lobamba in the vicinity of the hot springs where regiments bathe during Incwala and maidens bathe during Umhlanga.</p>	Recommendation was noted.	<p>Refer to Chapter 9.4 of the ESIA.</p> <p>Refer to the ESMP attached in Appendix B.</p>
17	<p>Disaster modelling and management</p> <p>A recommendation was submitted that disaster modelling and management need to take into consideration potential adverse impacts on river crossings and utilities in the event of dam failure. River crossings include the road bridges at various points along the Lusushwana River as it flows through Ezulwini and Lobamba. Utilities include the Eswatini Water Services (EWSC) water purification plants at Ezulwini and Matsapha respectively, both of which are within the flood plain, as well as EWSC sewer pipelines which</p>	While dam safety has been included in the ESIA, the pertinent recommendations and suggestions were noted.	Refer to the ESMP attached in Appendix B.

	<p>cross the river at various points between Lobamba and Matspha.</p> <p>An additional aspect of disaster management is the suggestion for the establishment of an operational procedure is to release water at periodic intervals to flush any debris, such as tree trunks, that accumulates along the watercourse. Leaving such debris to accumulate over a long period along the Lusushwana River will exacerbate major flood events whereby bridges will be destroyed mainly by the excessive debris, as was observed during Cyclone Domoina in 1984.</p> <p>A final aspect of disaster modelling and management is that operational procedures need to consider how Nondvo Dam would be operated to absorb the impact of Lumpholo Dam's failure. Disaster management also needs to take into consideration the impact of failure of both Lumphohlo Dam and Nondvo Dam concurrently.</p>		
18	<p>Upgrading existing infrastructure</p> <p>A recommendation was submitted that alternatives to Nondvo Dam be considered in order to avoid disruption of lives due to resettlement. Specifically, the de-silting and raising of Lumphohlo Dam was submitted as a possible alternative.</p>	<p>It was clarified that the project in its entirety comprises other options of raising Lumphohlo Dam and Hawane Dam respectively and separate studies will be undertaken for those options.</p>	<p>Refer to Chapter 6 of the ESIA.</p>
19	<p>Excavation versus inundation</p> <p>A suggestion was submitted that rather than inundating the proposed area, deep excavation in the vicinity of the proposed dam wall in a manner similar to that of an open cast mine may possibly yield the same volume of water</p>	<p>It was clarified that the project in its entirety comprises other options of raising Lumphohlo Dam and Hawane Dam respectively and separate studies will be undertaken for those options.</p>	<p>Refer to Chapter 6 of the ESIA.</p>

	<p>storage, but without the impact of resettling as many homesteads.</p>		
20	<p>Disparity between submissions from stakeholders during consultation process and actual implementation of recommendations</p> <p>A concern was raised that the sentiments, suggestions and recommendations of stakeholders submitted during the consultation process are often not implemented during project implementation and operation. Furthermore, the needs of directly affected homesteads are seldom met, particularly in reference to the standard of replaced building structures during resettlement. An example was cited where the standard and quality of replaced building structures is often not to the standard and quality recommended by consultants' reports. Such experience with previous infrastructure projects makes directly affected parties sceptical of the commitment and capacity of implementing agencies in executing resettlement plans in accordance with engineering designs and input from stakeholders and consultants. The submission further illustrated and emphasized with the example that the schools in the community were funded with financial aid from Japan, therefore the Government may not have the funds to replace the schools to the original building standard and quality.</p>	<p>The concern was noted and an Implementation Plan has been provided in the ESMP and RAP.</p>	<p>Refer to the ESMP attached in Appendix B. Refer to the RAP in Appendix I.</p>
21	<p>Validity of public consultation meeting</p> <p>A query was raised as to the validity of this public consultation meeting in view of the low attendance. A suggestion was made that perhaps the meeting should have been held at the affected community.</p>	<p>Several consultation meetings have been held within the communities of Mantabeni and Siphocosini, respectively and these commenced in February 2019. This particular meeting is being held outside the community to provide an opportunity to stakeholders outside the communities to attend. The consultation process is not a single event, but a</p>	<p>Refer to the SEP attached in Appendix F.</p>

		<p>process comprising several meetings, therefore attendance may not be the same at each meeting. Stakeholders are welcome to attend whichever meeting is convenient to them and some stakeholders have been and will be approached directly and thus may decide not to attend the meetings as their submissions will have been captured.</p>	
<p>22</p>	<p>Feedback to stakeholders</p> <p>A recommendation was submitted that a redacted version of the ESIA Report be made available to stakeholders since the main report will be bulky or voluminous, as well as highly technical. This characteristic of such reports discourages stakeholders from reading the reports and participating in the decision-making process. Minimal participation will in turn be misinterpreted by the project proponent and consultants to imply that the stakeholders are not opposed to the project, therefore the project will be imposed upon stakeholders on the basis that they did not contest it. A redacted version will enable the majority of stakeholders to easily understand the report's contents. If possible, a Siswati translation of the redacted version may further assist members of the directly affected communities to understand the report.</p>	<p>The recommendation and suggestion were noted. A member of the audience urged community members attending the meeting to encourage fellow community members to actively participate in the decision-making process through the relevant structures within the community. It is important for the community to make the needs of the community known to the project design and development process. This will ensure the development of appropriate mitigations and any other development initiatives relevant to the needs of the community.</p>	<p>Refer to the SEP attached in Appendix F.</p>
<p>23</p>	<p>Submission of queries</p> <p>A query was raised as to where to direct further queries, including those which may not necessarily relate to environmental and social aspects.</p>	<p>Queries shall be directed to the Environmental Consultant. Stakeholders are welcome to direct queries to the Ministry of Natural Resources and Energy, but when doing so they are urged to copy to the Environmental Consultant to ensure that such queries are captured as part of the consultation process.</p>	<p>Refer to the SEP attached in Appendix F.</p>

Date	18 th March 2020		
Time	09:00 hrs to 14:00 hrs		
Venue	Hilton Garden Inn, Mbabane		
Objectives	<ul style="list-style-type: none"> — Stakeholder Engagement. — Review of Draft Detailed Dam Designs and the Interim ESIA Report. 		
No.	Issue	Response	ESIA Reference
1	<p>The meeting appreciated the effort by the Consultant for the relocation of MR19 but was still concerned that there is no specific plan or design on the relocation of feeder and community roads within the project site. It was noted that from the technical presentation that a cost of US\$ 3.5Million has been set aside for the access roads and community roads.</p> <p>The meeting requested that more information be made available regarding the access roads. This information is important for the local communities to address issues of connectivity even after the construction of the Nondvo dam. Also, there are many factors to be considered when relocating the community roads e.g the steep landscape in some parts of the project area, proximity to existing roads and service Centre's and community populations. The stakeholders therefore requested that the relocation sites be identified and the information be presented in a map to show the existing roads that will be affected and then identify other possible routes that will be established by the Contractor. It is not sufficient to say that it's the Contractor's responsibility to make connecting community routes as well as access routes.</p> <p>The Consultant is requested to have a re look on this matter as it is important for the project. A suggestion</p>	<p>Studio Pietrangeli proposed a realignment route for the MR in the Draft Design Report, 2020. In addition, a desktop based investigation was undertaken to identify PAPs.</p> <p>Access roads to be realised/rehabilitated will cover a 9 km total length. The dam wall will also provide a crossing community members.</p> <p>Land replacement options have been identified and all proposed sites are in close proximity to existing roads. A map has also been included in the RAP</p> <p>However, internal access roads to the north of the site has not been confirmed and it is recommended that a detailed assessment of the internal access roads needs to be undertaken prior to the Project being implemented.</p>	<p>Refer to Chapter 5 of the ESIA.</p> <p>Refer to the RAP in Appendix I.</p> <p>Refer to Chapter 11 of the RAP in Appendix I.</p> <p>Refer to Chapter 12.2 of the ESIA.</p>

	<p>was made that the Consultant should consider the area where there is a foot bridge and a path to determine the possibility of having an access road close by.</p>		
2	<p>The Issue of MR19 was raised again in the stakeholder meeting. The request was to cost each of the listed activities that must be under taken in order to relocate the road. The costing of US\$3 Million for the relocation was seen as insufficient.</p> <ol style="list-style-type: none"> a. Cost of feasibility study for relocation of MR19 b. Resettlement costs c. Construction costs. <p>The stakeholders felt that the relocation of the road may have been under costed because the information that was used for making the estimates was not comprehensive.</p>	<p>Currently portions of the MR 19 road between Kilometer 15 and Milometer 17 (the Bhekephi Primary School) will fall under the water level, this proposed road realignment by the Government of Eswatini will certainly impact a number of household and assets along the realignment route. Since the proposed realignment is still under conceptual design stage the consultant is yet to identify the affected households conclusively. It is expected that the engineering design for M19 road realignment to Mhlambanyatsi shall be conducted in a way that will minimise disruption and relocation of the population in the project area especially if it complies with the Roads and Outspans Act-1931 Width of roads, Section 4. The width of public roads as prescribed by the aforementioned Act indicates the following including unmade portions thereof, shall have the following widths — (a) main roads and trunk roads, thirty-eight metres; (b) branch roads, sixteen metres; (c) bridle paths, not exceeding five metres:</p> <p>The following principles have been followed to provisionally identify the affected households’ assets based on desktop study;</p> <ol style="list-style-type: none"> 1 The properties that will fall within the 38 meter width, will be counted and measured for relocation, 2 Similarly, fields that will be affected by the construction of the MR 19 road will be measured for compensation while the remaining part will still be available for use by the owner. 3 Trees and outbuildings will be counted and measured. 	<p>Refer to the RAP in Appendix I.</p>

		<p>There are 163 Assets that have been identified to be falling within the road realignment where the structures will either be destroyed, or are dangerously located close to or within the 38 meters width of the road reserve. These properties will require compensation or relocation.</p> <p>Based on the principle set out above, there are about 39 households with 163 assets that are affected by the realignment of MR 19 road. This number should be considered as provisional because the realignment of the road is still provisional and may be altered to minimise the resettlement where feasible.</p>	
3	<p>Regarding the ESIA report, the stakeholders wanted to know the meaning of assets in the report. For the sake of clarity in both the report and in presentations, the Consultant is requested to make attempts to better clarify this term and further illustrate with pictures the variety of assets available in the project area.</p>	<ul style="list-style-type: none"> — Assets: all properties (household structures, gardens, fields, trees, fruit, graves, stores, etc), including resources, income earning opportunities or livelihood means - for which compensation is due. — Assets inventory: assembly of specified individual, communal, institutional and public assets (fixed properties) as determined or collected at a certain point in time using specific aerial photos, mapping, field survey, land survey, etc., for which assets register will be developed and compensation payments processed. — Assets register: a compiled record of affected assets and ownership as adjudicated and valued, and ready to be used for compensation discharge processing. The information may also be stored in the computerized database for easy manipulation, long term tracking of compensation liability discharge, and for settlement of disputes. — Business or commercial property: licensed permanent buildings or structure, premises, facility or asset used primarily for the purposes of business activity. 	<p>Refer to the RAP in Appendix I.</p>
4	<p>Questions were raised regarding the size of area to be inundated by the dam as well as the size of total arable and grazing land.</p>	<p>The Nondvo Dam will inundate approximately 3.3 km² at Extreme Flood Level. In the RAP it was identified that</p>	<p>Refer to Chapter 5 of the ESIA. Refer to the RAP in Appendix I.</p>

		approximately 85 ha of arable land and 41 ha of residential land will be affected.	
5	The meeting wanted to know if there was any species that can be highlighted of flora and fauna to be affected. Are there any endangered species. The Client requests that for the sake of ease of presentation and reading, pictures of some interesting species captured during the investigations can be put in the report and presentations. It would be important to state interesting findings from these investigations noting that the project site is just above a game reserve.	<p>A Biodiversity Assessment was undertaken and all fauna and flora that may be impacted on by the Nondvo Dam was assessed. All endangered species potentially found in the area has been documented.</p> <p>All findings have been documented and pictures included in the Baseline Assessment.</p>	<p>Refer to the Biodiversity Assessment in Appendix C-4.</p> <p>Refer to Chapter 7.2 of the ESIA.</p>
6	The stakeholders wanted more information on how the spoils and rubble from the project will be managed.	<p>The management of spoils has been included in the ESMP and the following is required:</p> <ul style="list-style-type: none"> — Spoil sites to be demarcated and access controlled. — Development and implementation of a Spoil Disposal Management Plan (SDMP) – to be kept on site within Environmental File. — Use of material for levelling and filling of erosion gullies at identified sites within the project area, in consultation with Environmental Manager, District Environmental Officers, and Community Councils. Requires strict monitoring in order to ensure that natural water courses are not blocked in the process. 	Refer to the ESMP in Appendix B .
7	The communities in the project area requested for the project to supply them with potable water. The ESIA Consultant was requested to put this request in the study and also cost it in its environmental costs so that the Government may be in a position to carry out this request during project implementation. This request is in line with Government policies of empowering project communities and making sure that they are also beneficiaries of the project.	<p>The ESMP requires that PAPs are provided with access to potable water.</p> <p>In the RAP it has been assumed that 10% of the compensation rate of the replacement of structures is to account for installation of bulk services including potable water.</p>	<p>Refer to the ESMP in Appendix B.</p> <p>Refer to the RAP in Appendix I.</p>
8	Noting that the country has no specific project resettlement policy and compensation policy, how will resettlement be implemented in the project area. The	The RAP includes guidance on the Implementation Plan and has been aligned to International Standards.	Refer to the RAP in Appendix I .

	<p>International Community especially the World Bank has resettlement and compensation frameworks that the country adopts from time to time to address such needs when implementation projects. The ESIA Consultant must give guidance on steps to be undertaken in this project to handle resettlement issues. Local and regional experience can be used to give guidance and recommendations to this project.</p>		
9	<p>There were also comments raised regarding the relocation of schools. Down listed are some points for consideration by the ESIA Consultant:</p> <ol style="list-style-type: none"> a. Relocation of schools should consider the access roads issue. b. Number of population to use the services. c. A suggestion was to have a primary and High School and one site and then have a primary school and High school at another site. 	<p>The location of schools was to ensure that the remaining community in all the affected areas are not adversely affected especially taking into consideration the percentages of both the community that will be relocating and that will remain behind.</p> <p>To have the two schools (High School and Primary school) on one site was considered during the identification of the sites for relocation, however, two issues were identified, (1) unavailability of free land within the walking distance; (2) absence of available land to accommodate both schools on one site further cemented the current proposal.</p> <p>The final objective of school building activities is to provide adequate spaces for “good” schools, which are child-friendly and inclusive, and have the additional objectives of: Attracting students (increase access); improve attendance rates; improve retention and completion rates; improve learning achievement; Provide safe, inclusive, welcoming environments for all children; Provide enabling learning environments, including accommodating children with physical and mental/learning disabilities ; Cultivate harmony between the school and its community.</p> <p>Both Schools are situated near the communities they have been serving, including the resettlement sites so that pupils have the shortest possible way to the school. The maximum</p>	<p>Refer to the RAP in Appendix I.</p>

		distance between children's homes and school should be equivalent to a 45-minute walk according to the international standards.	
10	A request was made that the compensation framework be aligned with AfDB and World Bank standards so that the project becomes bankable and made according to International best practice.	The Entitlement and Compensation Framework has been aligned to the requirements of the AfDB.	Refer to the RAP in Appendix I .

Date	10 th September 2020
Time	09:30 hrs to 13:30 hrs
Venue	Emafini Country Lodge, Mbabane
Objectives	<ul style="list-style-type: none"> — Stakeholder Engagement. — Review of Draft Final Technical Feasibility Report and the Draft Final ESIA Report.

No.	Issue	Response	ESIA Reference
1	Query on criteria used for identifying the proposed resettlement sites.	<p>The primary objective was to avoid resettling affected households far from existing community. Secondly, due to inadequate space within existing community, available land presently not used for residential settlements was sought amongst surrounding farms under Title Deed Land.</p> <p>Property owners to be engaged formally and where owners indicate willingness to sell, community will be involved in vetting of suitability of resettlement sites. Thereafter, further negotiations will be undertaken to acquire the properties.</p>	Refer to Chapter 11 of the RAP in Appendix I .

2	<p>Area C on the report has been removed as one of the proposed relocation sites, Why? Stakeholders wanted the project to consider also downstream relocation of affected households in order to enable them to benefit from the project.</p>	<p>Clarification that Site C, despite being within protected area, is not withdrawn from options. Rather, its location within a protected area makes it less preferred than other sites.</p>	<p>Refer to Chapter 11 of the RAP in Appendix I.</p>
3	<p>Suggestion raised that resettlement could be avoided altogether or mitigated by considering alternative sites for the dam wall a few kilometres further south of current proposed site. Government is strongly urged not to forcefully implement project without exhausting all possible alternatives. Community extended invitation DWA to visit community-proposed sites for dam wall which in community's opinion will eliminate need for resettlement.</p>	<p>The Department of Water Affairs had established and maintained a Project Steering Committee and Stakeholder Committee. The former comprised representatives from the various relevant Government ministries and parastatals, while the latter comprised Government ministries, parastatals as well as community representatives including the office of the Member of Parliament.</p> <p>Aspects relating to the dam, including its proposed location were discussed during the regular meetings held by both committees. On the matter of alternative sites, a query was raised by stakeholders as to how the Nondvo site was identified. The query emanated from the concern that the Project Affected Persons appeared to be sacrificed in favour of a wildlife protected area immediately south of the proposed site. DWA clarified that it was based on the optimal yield of the watercourses in the area and the need to have a site that is at sufficiently high altitude to enable conveyance of water by gravity so as to avoid unsustainable pumping costs [Reference Minute 3.2.2, Stakeholder Committee Meeting of 15th November 2019].</p> <p>The Technical Feasibility Consultant noted that the preferred proposed location and height of dam wall were selected due to:</p> <ul style="list-style-type: none"> — The suitability of the underlying geology at the preferred site. The alternative site immediately south of the preferred site did not present the optimal geological consistency and integrity as the preferred site, which had rocks on both abutments as well as the river bed, 	<p>Refer to Chapter 6 of the ESIA.</p>

thereby providing optimal conditions for a solid foundation.

- The preferred site presenting the most optimal geological conditions and topography for achieving optimal water harvesting volume (to meet water present and projected water demand up to at least 2050) with the most balanced environmental and social impact in terms of advantages and disadvantages. For example, placing the dam wall further south would require a higher dam wall due to the depth of the valley, thus requiring a higher complexity of engineering and thus cost, resulting in a reduced return on investment.

[Reference Minute 4.1.2, Stakeholder Committee Meeting of 10th September, 2020].

Stakeholder engagement on the selection of the best available option was undertaken and was inherently constrained by the geotechnical requirements of dam construction wherein the geology and topography are amongst the key determinants on dam location. Therefore, selection of alternative sites further downstream presents diminishing returns and thus presenting less cost-effective solutions.

During the Technical Scoping Study several downstream dam locations were investigated. The preferred location was selected based on an evaluation of the scenarios through a sensitivity analysis aimed at understanding the effects of the dam type selection and reservoir elevation on water supply volume, on the energy production, on the costs of construction and subsequently on the profitability of the plant in its entirety.

Unfortunately, in large infrastructure projects, especially in populated areas, resettlement is often unavoidable. The proposed dam, as described within the ESIA, was identified

		<p>as the preferred alternative taking into consideration all environmental, social and economic costs.</p>	
4	<p>Comment submitted that relocation of graves and cattle dip tanks not clearly described in terms of whether or not provision has been made to accommodate them at possible host sites.</p>	<p>The RAP has included a compensation value for HHs to cover the exhumation and reburial costs of graves (including ceremonies). It is noted that during the HH surveys only one HH indicated that graves were present of the property, which would require relocation. The Heritage Impact Assessment did not identify any clearly marked graves below the FSL, all identified graves above the FSL are to be demarcated and not disturbed during construction activities.</p> <p>In addition, all community assets that will be impacted have been included in the compensation value.</p>	<p>Refer to the RAP in Appendix I.</p>
5	<p>Request for clarity on the tangible benefits to both affected and host communities, besides access to potable water.</p>	<p>The ESMP requires that PAPs are provided with access to potable water.</p> <p>In the RAP it has been assumed that 10% of the compensation rate of the replacement of structures is to account for installation of bulk services including potable water.</p> <p>A recommendation has been included in the ESMP that the Contractor must design the management camp, contractors camp and offices to ensure future beneficial use by the local community, such as a community hall or resort.</p> <p>The ESMP also details various measures to uplift and empower the local community.</p> <p>The RAP specifically talks to PAPs that are directly impacted by either physical or economic (or a combination of both) displacement. The RAP therefore includes relevant compensation as well as the requirement for a detailed LRP to be developed. The LRP defines measures to restore</p>	<p>Refer to the ESMP in Appendix B.</p> <p>Refer to the RAP in Appendix I.</p>

		<p>livelihoods to the same or better than status as pre-project conditions. Measures defined within the ESMP as well as LRP are identified to benefit the PAPs, remaining community members as well as host communities in terms of financial management training, as well as land-based and non-land based livelihood support.</p>	
6	<p>A question was raised on the Resettlement Policy that the country does not have one. The document needs to indicate the reality that a Resettlement Policy is available. It is a national compensation policy that is not available but several compensation mechanisms have been developed and used in the country for various projects.</p>	<p>The RAP has been prepared according to existing Eswatini legislation and policy on resettlement and compensation as well as the AfDB involuntary resettlement policy and Operational Safeguard 2 - Involuntary resettlement: land acquisition, population displacement and compensation.</p> <p>The RAP includes the National Rural Resettlement Policy (Government of the Kingdom of Swaziland, 2003) as well as the Ministry of Housing and Urban Development (MHUD) resettlement policy. As per the comment, neither of these documents include compensation rates, nor has a national compensation policy been developed. Although several compensation mechanisms have been developed and used in the country for various projects, each are project specific – as is the case with the current RAP. It is noted that as the project is still in the feasibility assessment phase, the compensation rates applied have been utilised for budgeting purposes only. Should the Project be approved for implementation it is recommended that a professional valuation process be undertaken to determine effective rates to be applied for the proposed Project to enable the making of ‘entitlement offers’ to affected asset owners for implementation purposes.</p>	<p>Refer to the RAP in Appendix I.</p>
7	<p>Concern raised by community that anecdotal observation of previous infrastructure development projects shows that the standard and quality of replaced buildings tends</p>	<p>During the meeting it was acknowledged that grievances have been raised by PAPs on previous projects. Lessons have thus been learned by Government hence this forum is a</p>	<p>Refer to the RAP in Appendix I.</p>

	<p>be below requirement and expectation of PAPs, i.e. projects appear to build small “matchbox” houses for resettled people. Query also raised as to whether or not buildings will be replaced like for like.</p>	<p>platform for stakeholders to formally register their views and concerns which will enable Government to develop appropriate mitigation measures. Overseeing the implementation of the RAP to ensure that affected households are not left worse off will be one of the functions of the PSC. With respect to replacing buildings like for like, it was clarified that stick and mud houses will not be replaced like for like, but with improved structures. Replacement guidelines included in RAP.</p>	
8	<p>Comment raised that ESIA Report does not clearly describe how infrastructure developed through community projects/ initiatives will be compensated, e.g. water supply schemes, electricity distribution schemes, etc.</p>	<p>The RAP process includes the identification of all affected HHs and assets that will be affected by the project as per the project description contained within the ESIA and RAP reports. Surveys have been undertaken with PAPs and asset registers compiled. All PAPs are required to sign off the asset verification forms to confirm the details captured. The asset verification forms will form the baseline from which RAP implementation will be undertaken.</p>	<p>Refer to the RAP in Appendix I.</p>
9	<p>Comment submitted that Land Management Board is not represented in this meeting.</p>	<p>The Land Management Board will be part of Project Steering Committee and will also work with Inner Councils and their sub-committees at community level to address issues of resettlement and land use change authorization.</p>	<p>Refer to the RAP in Appendix I.</p>
10	<p>Concern submitted that re-alignment of MR19 will cause an additional travel distance (approx. 2km) to commuters. In the long term this will cause community members to be financially worse off, further leading to emotional distress of having to sacrifice and suffer perpetually.</p>	<p>Indirect impacts are addressed within the ESIA and mitigation measures identified within the ESMP. In relation to impacts resulting from the road realignment, it is noted that both negative and positive impacts will result from this process. Some community members who resided close to the existing road may have to travel further (negative) however, others that were situated away from the original road will be located closer to the relocated road (positive). In terms of general road users, outside of the community, which will be</p>	<p>Refer to Chapter 9.4 of the ESIA. Refer to the ESMP attached in Appendix B.</p>

		<p>required to travel the additional 2km of road resulting from the realignment little can be done in terms of mitigating this impact.</p> <p>The ESIA identifies an impact of increased cost of living arising from various changes within community, including introduction of new formal public transport services. The residual impact rated as Negative, Low.</p> <p>In terms of mitigation measures relating to indirect impacts on the community, these aspects are to be dealt with in line with the Livelihood Restoration Plan (LRP). These measures are aimed at improving the lives of the community and livelihood restoration inputs will be developed with appropriate technical support, and with inputs from government and community stakeholders. The fully developed LRP must be in place prior to RAP implementation, allowing the informed selection of options by beneficiaries.</p> <p>These aspects include:</p> <ul style="list-style-type: none"> — Financial management training, land-based and non-land based livelihood support should be extended to the remaining community members not directly affected by the construction and operation of the dam (i.e. direct physical or economic displacement), as well as host communities. — Additional support mechanisms, such as provision of a school bus pick-up / drop-off service, should be investigated in consultation with the schools, governing bodies, education department and NGO's to assist families with learners who may have to travel further due to the relocation of the schools. 	
11	Concern raised about mythological serpents, mermaids and water creatures which are believed by some people to reside in water bodies and migrate along Lusushwana	The ESIA identifies an impact of increased safety risks to people and animals. Included therein is the large exposed	Refer to Chapter 9.4 of the ESIA.

	and other water courses. Constructing a dam in close proximity to community, compounded by proximity to Luphohlo Dam, will attract additional creatures and/ or increase incidents of mysterious drowning whereby victims are presently always all males. Further concern raised that this submission was previously interpreted as large water bodies causing microclimate such as intense storms and cold weather compared to surrounding areas, yet commenter passionately feels this is a distinctly different issue.	water body during inundation phase. The residual impact rated as Negative, Low.	
12	Downstream wetlands will be adversely affected by dam operation.	Mitigation to downstream wetlands is Ecological Flow Requirement release of 4 million m ³ / year as recommended by Joint Maputo River Basin Water Resources Study (2008). Wetlands within footprint of dam will be lost with no practical mitigation measures.	Refer to Chapter 5 of the ESIA. Refer to Chapter 9.3 of the ESIA. Refer to the ESMP attached in Appendix B .

Date	26 th September 2020		
Time	09:00 hrs to 12:00 hrs		
Venue	Mantabeni Royal Kraal (Umphakatsi)		
Objectives	<ul style="list-style-type: none"> — Mantabeni Inner Council had invited DWA to view possible locations of the dam wall in order to mitigate need for involuntary resettlements that will arise from the inundation area currently proposed in the Feasibility and ESIA reports. — Visit the proposed resettlement sites in order to appraise the Inner Council of their respective locations and suitability. 		
No.	Issue	Response	ESIA Reference
1	Mantabeni Royal Kraal submitted that in their opinion the most suitable site is at S26° 26' 42.3" E31° 07' 43.4" which is 2.9km downstream of the current proposed dam	The Department of Water Affairs had established and maintained a Project Steering Committee and Stakeholder	Refer to Chapter 6 of the ESIA.

	<p>wall. Favourable aspects of this site submitted by Mantabeni Royal Kraal are:</p> <ul style="list-style-type: none"> — Underlying geology is similar to that of current proposed dam wall; — Depth and narrowness of river valley lend themselves to achieving the volume of desired impounded water and enabling a dam wall that is not excessively long from one river bank to the opposite bank. This, the community feels, would be more cost effective since the construction and resettlement costs would be less than the current proposal; — Fewer households, if any, will need to be resettled. It is the Royal Kraal and community's opinion that all possible means of avoiding resettlement need to be explored and exhausted. <p>The Royal Kraal found no unfavourable aspects of the site, from a social perspective.</p>	<p>Committee. The former comprised representatives from the various relevant Government ministries and parastatals, while the latter comprised Government ministries, parastatals as well as community representatives including the office of the Member of Parliament.</p> <p>Aspects relating to the dam, including its proposed location were discussed during the regular meetings held by both committees. On the matter of alternative sites, a query was raised by stakeholders as to how the Nondvo site was identified. The query emanated from the concern that the Project Affected Persons appeared to be sacrificed in favour of a wildlife protected area immediately south of the proposed site. DWA clarified that it was based on the optimal yield of the watercourses in the area and the need to have a site that is at sufficiently high altitude to enable conveyance of water by gravity so as to avoid unsustainable pumping costs [Reference Minute 3.2.2, Stakeholder Committee Meeting of 15th November 2019].</p>	
2	<p>The second possible site is at S26° 26' 34.6" E31° 08' 06.9" which is 3.6km from the current proposed dam wall. Favourable aspects were submitted as:</p> <ul style="list-style-type: none"> — Suitable underlying geology; — Little or no adverse impacts of resettlement; <p>The unfavourable aspect was submitted as:</p> <ul style="list-style-type: none"> — Possibly higher construction costs compared to the site at 2.9km, particularly in view of the wider valley section and depth of valley. 	<p>The Technical Feasibility Consultant noted that the preferred proposed location and height of dam wall were selected due to:</p> <ul style="list-style-type: none"> — The suitability of the underlying geology at the preferred site. The alternative site immediately south of the preferred site did not present the optimal geological consistency and integrity as the preferred site, which had rocks on both abutments as well as the river bed, thereby providing optimal conditions for a solid foundation. 	
3	<p>The Inner Council expressed appreciation to DWA, and by extension to Government, for having accepted the invitation to view the sites which the community feels are better suited for constructing the dam wall in order to mitigate, and possibly avoid involuntary resettlement. The Inner Council further expressed gratitude for having been shown the proposed resettlement sites thus enabling a physical appraisal of the maps previously presented.</p>	<ul style="list-style-type: none"> — The preferred site presenting the most optimal geological conditions and topography for achieving optimal water harvesting volume (to meet water present and projected water demand up to at least 2050) with the most balanced environmental and social impact in terms of advantages and disadvantages. For example, placing the dam wall further south would require a 	
4	<p>The two gestures have made a positive impression upon the Inner Council that Government is willing to listen to the concerns of project affected parties. The Inner</p>		

<p>Council acknowledged the expense in time and resources spent thus far on the Feasibility Study and ESIA, but on behalf of the community, reiterated their plea to Government to take the submissions on the dam wall into consideration.</p>	<p>higher dam wall due to the depth of the valley, thus requiring a higher complexity of engineering and thus cost, resulting in a reduced return on investment.</p> <p>[Reference Minute 4.1.2, Stakeholder Committee Meeting of 10th September, 2020].</p> <p>Stakeholder engagement on the selection of the best available option was undertaken and was inherently constrained by the geotechnical requirements of dam construction wherein the geology and topography are amongst the key determinants on dam location. Therefore, selection of alternative sites further downstream presents diminishing returns and thus presenting less cost-effective solutions.</p> <p>During the Technical Scoping Study several downstream dam locations were investigated. The preferred location was selected based on an evaluation of the scenarios through a sensitivity analysis aimed at understanding the effects of the dam type selection and reservoir elevation on water supply volume, on the energy production, on the costs of construction and subsequently on the profitability of the plant in its entirety.</p> <p>Unfortunately, in large infrastructure projects, especially in populated areas, resettlement is often unavoidable. The proposed dam, as described within the ESIA, was identified as the preferred alternative taking into consideration all environmental, social and economic costs.</p>	
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ISSUE NO.	ISSUE RAISED BY	DATE ISSUE RAISED	ISSUE	RESPONSE	ESIA REFERENCE
RB1	Mr Rex Brown	2 January 2020	<p>Framing the Rationale</p> <p>Although the dam is purported to be for the supply of water to the Ezulwini – Matsapha – Manzini corridor, the ESIA is very weak on presenting and framing the problem being addressed.</p> <p>We all know the Ezulwini – Matsapha – Manzini corridor is a growth area and water demand will increase but the ESIA fails to justify it clearly.</p> <p>Population growth projections should inform the resulting volume of storage with various assumptions.</p>	<p>The Motivation has been updated to reflect the growth of the area and future water demand.</p>	<p>Refer to Chapter 1.4 of the ESIA.</p> <p>Refer to Chapter 5 of the ESIA.</p>
RB2	Mr Rex Brown	2 January 2020	<p>Climate Change</p> <p>The greatest risk to this project remains climate change consequences in the form of the expected (and designed for) annual inflow into the dam from seasonal rainfalls. Don't underestimate the impact of climate change.</p> <p>All our national models forecast declining rainfall with the resulting effect being less water flowing into the dam catchment. The attached V&A report should help frame the issue I am referring to ... a new one is currently being developed under the 4th National Communication Project.</p> <p>A search through the ESIA for the phrase "climate change" does not show up one instance which given the timing and the significant risks I find as a major weakness.</p> <p>As I mentioned at the workshop ... this project should be viewed as a climate adaptation project securing potable water</p>	<p>Climate Change was considered in the Technical Design of the Nondvo Dam. A summary of the considerations are outlined in the ESIA.</p> <p>The Technical Design also considered safety aspects associated with the dam, specifically in terms of potential extreme flood events. The Technical Design Report is a standalone report and due to length has not been included in the ESIA. Should a copy be required a request can be made to the consultant to obtain consent to provide such.</p>	<p>Refer to Chapter 5 of the ESIA.</p>



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			<p>for an increasing urban population and not just as an engineering based water supply project.</p> <p>A climate risk assessment should really be carried out for this project as it may influence the design and yield of this dam.</p> <p>As an example of the ESIA study missing out from an analysis of climate change, one really can't expect the anticipated flows and rainfall presented in Figure 7 16: Mean Monthly Runoff Trend to really be reflective of the situation 10 years from now. You certainly can't expect these types of flows to be normal in the lifetime of this dam.</p> <p>I don't see any language around this dam (the wall and spillway) being climate proofed. As thinking and informed engineers will know these days, there is a need to climate proof water infrastructure due to the expected changes in weather and heavy rain events. Spillways need to accommodate these future (well not that far into the future) extremes and ensure that the dam and spillway can safely hold and pass devastating climate induced storm events.</p> <p>In terms of securing this investment into the future, the two dams should be considered to be of national strategic value as they supply the most urbanised and economically vibrant sectors of the country (Mbabane – Ezulwini – Matsapha – Manzini) and securing the water should be a major priority.</p> <p>In terms of the Water Act and the realities of climate change, for these dams to function into the decades ahead, the whole catchment system needs to be assessed, evaluated and managed and a basin management plan prepared with all relevant stakeholders. Saving the catchment will strengthen</p>		



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			the catchments ability to continue to provide flow into the dams as our climate begins to fall apart.		
RB3	Mr Rex Brown	2 January 2020	<p>Recreational dam use</p> <p>Assuming my comments above are addressed and the dam is given the go ahead , the next critical item is trying to ensure that the communities directly affected by the project are supported with innovative economic opportunities.</p> <p>I believe for this dam to truly be successful there is a need to recognise and provide for the economic potential of the recreational dam user (individuals with families or friends using the banks for the reservoir for braais, boating, canoeing, sailing, swimming, social gatherings, weddings, functions etc) and recreational fishermen (sport fishing for bass and other species etc) let alone the potential for some forms of aquaculture and also the economic potential of structured themed land development around the banks of the reservoir for residential, tourism and business opportunities. I also raised the impact of climate change and how the inevitable impacts that will arise can be integrated into the project.</p> <p>In minutes of scoping meetings carried out in the community its stated somewhere “numerous presentations and speeches which covered a wide range of community development topics, such as community-based enterprises, the proposed Nondvo Dam, crime prevention awareness and community administration..”</p> <p>In another meeting it was stated “A query was raised as to whether or not the affected community, i.e. the host</p>	<p>The ESMP has been updated to reflect additional measures for tourism and the empowerment and beneficiation of the local community.</p>	<p>Refer to the ESMP in Appendix B.</p>



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			<p>community of the dam will benefit from the project during the operation phase. The query was raised in light of the adjacent existing Lumphohlo Dam not having directly benefitted the host community, yet homesteads were relocated to provide space for the dam. Response: while the purpose of the proposed dam is to meet the future water needs along the Mbabane-Manzini corridor, the water needs of the host community will also be taken into consideration, therefore the directly affected community will benefit.” The same question was asked – yet the response seems out of touch with what was being asked.</p> <p>It’s unclear where in the mitigation plan it addresses “community development topics” or how “the host community of the dam will benefit from the project during the operation phase”.. so by making my following comments it’s these questions asked that I am seeking to mitigate in a practical functional sensitive rational and logical way as it is missing from the EIA.</p> <p>As you can imagine, any open body of water offers quite a range of potential benefits – socially, environmentally and economically. Recognising these benefits should help guide strategies (mitigation in EIA parlance) to capitalise on these benefits with designed-in significant community benefit.</p> <p>Two strategies I believe to be relevant and certainly doable are:</p> <ul style="list-style-type: none"> — Exploiting the recreational and fishing utilisation of the reservoir — Exploiting the sense of place of the dam reservoir by offering a range of diverse planned development opportunities unique to this reservoir and landscape 		

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			<p>Sport fishing is a recognised national sport and several water bodies in Swaziland (Maguga, Sand River, Lumphoholo, van Eck, Lebovane and other smaller dams) all support a very active sport fishing community with fishing equipment and in many cases boats. The income generation potential from a regulated fishing permission on this reservoir could be extremely useful for a community that would have had their lives turned upside down by the construction etc of this dam.</p> <p>Fishing fees could be set for daily use of the dam like SWADE do on Lebovane (E30 / boat/day and E70/person/day) and Maguga is similar (E40 / boat/day and E60/person/day) and collected money (cash, momo money, eft) could/should be held in a trust and used for community based projects and reservoir facilities management). In addition, making Nondvo a sport fishing destination, could create entrepreneurial opportunities for gilly's (local guys who help a fisherman with his boat and tackle – like a golf caddie), fee collectors, security, food and drinks, guides etc. Scenic boat trips run by community based businesses could expand the tourism potential.</p> <p>Whether this fishing community is included or not they will use this dam to fish on, it just seems a waste of an opportunity to not use it to create wealth and benefit at community level.</p> <p>My second point was to explore a communal income generation project along the lines of certain types of housing along the banks of the reservoir being allowed by the community and leaders whereon individuals could “lease” plots from a community trust, build certain permissible</p>		

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			<p>structures on such plots and have all these plots connected by a perimeter road.</p> <p>Lessons can be learned from SWADE and Lubovane where dozens if not a 100 people have “khontad” and now have plots on the banks of the reservoir and most have built some truly impressive house and lodges. The sad thing is, the local community benefit very little from this development (the chief of course gets his cows and cash but others ?? nothing). There is no income generation from the millions of emalangenzi that has been privately invested. The land is free. The water is free. Because its unplanned with no development plan, the affected communities are slowly being excluded from land that should rightly belong to them and even though excluded, they get little or no benefit from these developments – no land fees, no rents, no leases, no social development.</p> <p>In addition because there has been no planning, the area is certain to have land related conflicts in years to come, is unlikely to be efficiently served by EEC or ESWC and environmental degradation is everywhere. A land use plan should have formed part of that project and for Nondvo such a plan is needed to.</p> <p>By recognising what will inevitably happen on Nondvo and integrating it into an overall sustainability plan, will offset some socio-economic hardships the communities will face.</p> <p>The opportunities of a well-planned lakeside living concept on the banks of the reservoir (so close to Mbabane and Manzini) are huge for the communities. Plot leases could be almost any annual amount ... and if a legitimate, transparent,</p>		

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			<p>accountable, registered community trust was established, such monies would go to that and be used for community based projects, reservoir management, tourism development, and capitalise a revolving development fund that community members could apply for though business plans etc.</p> <p>All properties would need a range of people to build, clean, secure and maintain them – possible 3 to 5 employed per plot.</p> <p>I've no idea how many people Lubovane now support, but take Wendys Lodge, that must have employed over 20 people from the local area. Wendys is only one of maybe 4 lodges around the reservoir.</p> <p>You have 2 or 3 such lodges on Nondvo (the first one being the reuse of the proposed project camp and offices) and you start to recognise the scale of employment and offsite benefits that could arise.</p> <p>In addition, dozens of new houses built and owned by individuals not living in the area (but within commutable distance perhaps) are appearing all the time around the banks of the Lubovane reservoir. Again these developments are unplanned and getting legally messy. It is after all SNL which can be reallocated to others at the whim of the chief</p>		
RB4	Mr Rex Brown	2 January 2020	<p>Catchment Management</p> <p>To ensure the long-term critical security of the water in this dam for use in the Mbabane Manzini corridor, the catchment that supplies the said water has to be better managed. I don't see anything really in the mitigation on how this is being</p>	<p>The recommendation for the catchment to be declared as a strategic water source area with a climate proof management plan developed under the Water Act (basin management plan) has been</p>	<p>Refer to the ESMP in Appendix B.</p>



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			<p>dealt with. A degrading catchment will decrease inflows and increase sediment loads. Add climate impacts and you can expect a drying out of catchment vegetation and soils further decreasing flows in some years. The catchment should be declared a / considered as a strategic water source area with a climate proof management plan developed under the Water Act (basin management plan).</p> <p>Nature-based solutions (also called ecosystem-based adaptation) can deliver multiple resilience, economic, and ecological co-benefits and are often more flexible and cost-effective than traditional “hard” engineering options.</p> <p>All in all as I said, this study that has been carried out is of good quality though I could pick the mitigation plan apart in some areas but given how lax the EEA are on monitoring I will let them pass .. there are more important strategic issues to deal with in the storage of precious water.</p>	<p>submitted to the DWA for investigation.</p> <p>The ESMP has provided for water quality and quantity monitoring upstream and downstream of the proposed inundation area.</p>	
AB1	Mr Anthony Borrel	March 2019	<p>In a November 2018 Project Brief the Government of the Kingdom of Eswatini is proposing to build a 15Mm³ reservoir with a surface area of 210Ha on the Lusushwana River. The wall will be 44m high, 500m long, and is downstream of the Luphohlo Dam. It will flood right back to the Luphohlo Dam wall.</p> <p>A project of this size will have seriously negative impacts on the functioning of ecosystems, and will definitely aggravate the climate change challenges we already face. Some of the well-known potential impacts of dams have been mentioned in the Project Brief, but there are many more concerns. The term ‘potential impacts’ used in the document is actually</p>	<p>Comment noted.</p> <p>The Project Brief online identified high level impacts and a detailed impact assessment is provided in the ESIA,</p>	Refer to Chapter 9 of the ESIA.



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			incorrect – the impacts will be real, and worse than described.		
AB2	Mr Anthony Borrel	March 2019	<p>It would be useful to see a summary of the feasibility reports of this project and the other two alternatives mentioned on page 10 of the Project Brief for comparative purposes.</p> <p>The reports should be made easily available, participatory, transparent, thorough, and accountable.</p>	A copy of the feasibility reports can be obtained from the local consultant.	N/A
AB3	Mr Anthony Borrel	March 2019	<p>It would be better for the health of our ecosystems and their water supply potential if the Usutu River catchment was managed properly: Stop the steady degradation of wetlands that is happening all the time; remove alien invasive plants; implement sound veld management throughout the catchment; stop soil erosion; properly regulate water use and waste by industries; stop unregulated urban sprawl; stop the exponential human population growth (the internationally accepted replacement-level fertility rate of 2.1 children/woman should not be difficult to achieve). If all these and other measures are implemented it will not be necessary to build this dam or any others in the future.</p> <p>Through education, awareness, planning and innovation people learn to live within the limits set by nature. A dedicated Nature Conservation college could be built and operationalized for a fraction of the cost of building this dam and its related infrastructure.</p> <p>Currently in the USA the government has stopped building large dams. That nation has learnt its lessons, and is trying to fix the problems created by existing dams. The tearing down</p>	<p>Noted.</p> <p>The ESIA has detailed the potential impacts associated with Nondvo Dam. It should be noted that the purpose of the dam is to provide potable water.</p>	<p>Refer to Chapter 9 of the ESIA.</p> <p>Refer to Chapter 1.4 of the ESIA.</p>

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			of these monstrosities is very expensive and puts further pressures on the environment.		
AB4	Mr Anthony Borrel	March 2019	<p>I suspect it is politicians trying to appease the electorate and/or their paymasters. It is the financial institutions providing the loans (and big projects always run over the initial budgeted costs and timeframes), consultants, engineers and construction companies.</p> <p>It will definitely not benefit the long-term health of the climate and ecosystems, or the long-term future of the people downstream. Dams provide a brief water supply relief, and then have to be enlarged, multiplied, or torn down. This does not make sense. In the meantime, nature is destroyed.</p>	<p>Noted.</p> <p>The ESIA has detailed the potential impacts associated with Nondvo Dam. It should be noted that the purpose of the dam is to provide potable water.</p>	<p>Refer to Chapter 9 of the ESIA.</p> <p>Refer to Chapter 1.4 of the ESIA.</p>
AB5	Mr Anthony Borrel	March 2019	<p>The Lumphohlo dam immediately upstream of this proposed dam provides an example of how tourism is wrongly used as a positive in the project proposal. Recreational users of the dam area have been subjected to increasing crime levels over the years. Now there is only a small ugly razor-wire fenced off area erected by the ETA (Tourism Authority).</p> <p>Recreational fisherman are the most frequent users of dams in Eswatini. As in the case of all impoundments in Eswatini they quickly introduce alien invasive predatory fish such as the American Largemouth Bass (<i>Micropterus salmoides</i>). This spells ecological disaster for all indigenous aquatic lifeforms – including endangered insect life above the water surface and in amongst the aquatic vegetation.</p>	<p>The ESMP contains measures for tourism and the empowerment and beneficiation of the local community.</p>	<p>Refer to the ESMP in Appendix B.</p>

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AB6	Mr Anthony Borrel	March 2019	How is the water to be delivered to the Mbabane/Ezulwini/Matsapha/Manzini areas? Pipelines and/or canal systems, with attendant pumping stations, filtration plants, power lines and service roads cutting across Protected Nature Reserves and sensitive water catchment areas? More detail needs to be thought out, explained and exposed.	Water distribution infrastructure (i.e. pipeline network connecting dam to end users) is excluded from this ESIA and a separate study needs to be undertaken.	Refer to Chapter 5 of the ESIA.
AB7	Mr Anthony Borrel	March 2019	<p>Some of the well-known environmental impacts of dams are listed on page 16 of the Project Brief. I would like to add a few:</p> <ul style="list-style-type: none"> — Most impoundments in Eswatini are now subject to the effects of increasingly unpredictable climate patterns and the whims of man-made water demands. As a result, their levels rise and fall regularly and unseasonably. Indigenous plant and animal life have not adapted to the unnaturally dried out and then flooded shorelines. These areas become monomorphic ‘deserts’ – only attractive to pioneer alien invasive species in the long-run. — Newly flooded areas decompose all the vegetation in the flood plain, thus depleting oxygen levels, and then releasing the potent climate changing gas methane. Further, the plant matter decomposition in stagnant water reservoirs results in inorganic mercury being transformed into methylmercury. This toxin is bio-accumulative through all the trophic levels. 	<p>Noted.</p> <p>The ESIA has detailed the potential impacts associated with Nondvo Dam.</p>	Refer to Chapter 9 of the ESIA.

APPENDIX

Q NEWSPAPER AND RADIO ADVERTS

SIMEMETELO SESIVE

DATE: Thu 21 Nov 2019, 8.00pm; Mon 25 Nov 2019, 8.00pm (x2 days)

Sive siyatiswa kutsi kutoba nemhlangango welucwaningo lwekutsinteka kwemvelo nenhlalakahle lokuphatselana nemsebenti welidamu lase Nondvo lelihlungutwa kwakhiwa nguHulumende waseSwatini ngentansi kwelidamu laseLuphohlo.

Injongo yalomhlangano kuniketa sive litfuba lekubuta imibuto nekubeka imibono leyitawutselela lucwaningo lwelentiwa nguHulumende waseSwatini kubuka tindlela tekutfufukisa emanti.

Umhlangano utocala nga 10:00 ekuseni, ngalesine mhlaka 28 November 2019. Utobanjelwa ehholeni letembukiso (Exhibition Hall) eLibrary eMbabane.

SIMEMETELO SIKHISHWA lihhovisi letemanti (Department of Water Affairs) egameni lelitiko Lemcebo wemvelo nemandla (Ministry of Natural Resources and Energy)

P.O. Box

ID Number: 7203296100053

Cell Number: 7653 0306

ESWATINI

GR 0851282



GOVERNMENT

TR 166

Rev 4/75

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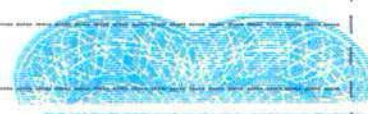
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TWENTY EMALANGENI



Handwritten signature

Eswatini taking shape



Minister of Labour and Social Security Makhosi Vilakati, Finance Minister Neal Rijkenberg with Minister of Commerce, Industry and Trade Manqoba Khumalo at the Editors Forum meeting with the PM.

getting electricity – from 163 in 2019 to 132 in 2020. It should be mentioned that the World Bank reported is regarded as the best measurement by most investors.

INVESTMENTS UPDATE IN A NUTSHELL:

Kellogg's – Progress on the Kellogg's site in terms of construction is ongoing as earthworks have begun on their 15 000 square metre factory in Matsapha Industrial site. The company's project team is in the country working with government institutions and contractors to do the foundational earthworks. An estimated E250 million has been invested and about 270 jobs will be created in their noodles factory. A further investment into a conflakes factory is on the pipeline.

Jonsson Workwear – They have already registered their company, and Government is currently considering viable options for their factory construction. About 2 000 direct jobs will be created at full scale with the value of the investment being an estimated

E100million.

TRIOMF Fertiliser – This is a new investment. TRIOMF is a South African company that deals with inorganic fertiliser. They have already finalised the installation of their machinery on site and are now finalising logistics for the launch of their project. About 65 Emaswati will be employed and a sizeable number of indirect jobs will be created particularly in the area of Agriculture. Government is currently working on linking TRIOMF with Taiwan Fertiliser Company with the view of producing organic fertiliser.

Kingsgate Clothing – The textile company was launched earlier in the year and is already operational at Buhleni where they

currently employ over 200 emaswati. The number will rise to over 1 000 at full scale. Government, through the Eswatini Investment Promotion Authority (EIPA), has also allocated another factory to Kingsgate at Siphofaneni; which will create about 300 direct jobs.

Artemis Pharmaceuticals – This is another new investment. The company will be producing pharmaceutical nutritional supplements using Moringa. They have already cultivated about 50 hectares of Moringa in Siphofaneni and have completed construction of their factory.

Air Liquide – This was an expansion project which was launched in Matsapha in August 2019.

QUOTE

"Rule #1: Don't lose money. Rule #2: Don't forget Rule #1." – Warren Buffett

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NOTICE

SWAZILAND COMPANIES ACT NO.8 OF 2009 SECTION 62 (2)

Notice is hereby given that I have reasonable cause to believe that the undermentioned company,

LARINIX (PROPRIETARY) LIMITED

Incorporated under the laws of Eswatini, is not carrying on business. The name of the aforesaid company, will unless cause is shown to the contrary at the end of the two months from the date hereof be deregistered and struck-off the register of companies in the Kingdom of Eswatini, and the company be dissolved.

BARNABAS MATSEBULA FOR: REGISTRAR OF COMPANIES

ESTATE NOTICE

ESTATE LATE: TSANDZILE BONGEKILE DLAMINI
FILE NUMBER: EP57/2019

Notice is hereby given in terms of Section 51 (2) of the Administration of Estates Act No. 28 /1902 that the First and Final Liquidation and Distribution Account will lie open for inspection at the offices of the Master of the High Court of Swaziland, for a period of Twenty one (21) days from the date of publication of this notice.

Any person objecting to the Account may lodge his or her objection in writing with the Executor and with the Master of the High Court at any time before the expiry of the said period.

MRS THABSILE SIPHIWE DLAMINI
P.O. BOX A14
MAYIWANE

IN THE HIGH COURT OF ESWATINI HELD AT MBABANE

CASE NO: 1527/2019

HELD AT MBABANE ON FRIDAY THE 8TH DAY OF NOVEMBER 2019 BEFORE HIS LORDSHIP THE HONOURABLE JUSTICE MAMBA.

In the matter between:
AFRICAN ALLIANCE SWAZILAND UMNOTFO FUND
Represented by **NEDBANK (SWAZILAND) LIMITED** Applicant

And
MATATA GROUP (PTY) LIMITED Respondent

COURT ORDER

Having heard Counsel for the Plaintiff and the Defendant it is ordered;

1. Provisionally winding up the Respondent under the supervision of the Master of the High Court.
2. That the costs at the application for winding up be costs in the liquidation.
3. That a rule nisi do hereby issue calling upon any interested person to show cause on 29 November 2019 why an Order in terms of prayers 1, 2 and 3 above should not be made final.

BY ORDER OF THE HIGH COURT
GIVEN UNDER MY HAND AT MBABANE DAY OF NOVEMBER 2019

REGISTRAR OF THE HIGH COURT
MBABANE
EJH/cm/A.204

MINISTRY OF ECONOMIC PLANNING AND DEVELOPMENT

EUROPEAN UNION

SUPPLY, DELIVERY AND INSTALLATION OF COLD ROOMS FOR THE HIGH VALUE CROP AND HORTICULTURE PROJECT (HVCHP)

EuropeAid/140-573/ID/SUP/SZ

The Ministry of Economic Planning and Development, Aid Coordination and Management Section, intends to award a contract for the supply, delivery and installation of Cold Rooms to the High Value Crop and Horticulture Project with financial assistance from the 11th European Development Fund. The Contract Notice is available on the EuropeAid website at: <https://webgate.ec.europa.eu/europeaid/online-services/index.cfm?do=publi.welcome>. The CD containing the Tender Dossier is also available from;

The National Authorizing Office
Ministry of Economic Planning and Development
Aid Coordination and Management Section (ACMS)
Annex Building, Hospital Hill
P.O. Box 602,
Mbabane H100
Eswatini.
Tel: +268 2404 6512 / 6154 / 9551
Fax: +268 2404 9816

Email: lwazi.mkhabela@mepd-acms.org
Copy: mawenzi@swade.co.sz and mduduzi@mepd-acms.org

The deadline for submission of applications is **20th December 2019** at **1200hrs**, Swazi local time.

INCOME TAX BUILDING, 4th FLOOR
MHLAMBANYATSI ROAD
TEL: (+268) 404 6244 8
FAX: (+268) 404 4708
TELEX: 2301 WD

ESWATINI GOVERNMENT

MINISTRY OF NATURAL RESOURCES AND ENERGY
P. O. BOX 57
MBABANE H100,
ESWATINI

MBABANE - MANZINI CORRIDOR DAM

ENVIRONMENTAL AND SOCIAL IMPACT ASSESSMENT
Notification and Public Consultation Meeting

The Government of Eswatini, Ministry of Natural Resources and Energy through the Department of Water Affairs (DWA) is in the process of assessing the feasibility of the construction of a multipurpose dam, the Mbabane-Manzini Corridor Dam (Nondvo Dam), which will have the main objective as being able to store water in order to provide potable water to the Mbabane and Manzini Corridor. The stored water could also be used for irrigation and for improving the output of runoff to the river hydropower plants further downstream.

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Time: **10:00 hours**

For further information, please contact the following:
Mbuso Kingsley
Maphanga Mitchell Associates
Office Tel: (+268) 2404 3044/ 2404 6139, email: info@mapmitch.org

SIPHO SHONGWE TRIAL:

'Electronic Evidence Act forced us to recall witness'

STORIES BY SANDILE NKAMBULE
High Court

THE office of the Director of Public Prosecutions (DPP) has alleged that the provisions of the Electronic Records (evidence) Act of 2009 has forced them to recall one of its witnesses who has already given evidence in court in Siphon Shongwe's trial.

The state has submitted that during the period of 19, 20 and 21 August, the Eswatini police consulted with the Crown's prosecuting team in Johannesburg, South Africa in relation to the murder case.

It was there that it was pointed out that the provisions of the Act may have application and in particular the provisions of Section 5 and 5 (4) of the Act.

This is contained in the fresh interlocutory application filed by the state in the murder trial for businessman Siphon Shongwe who stands accused of the murder of businessman and football administrator Victor Gamedze, at the High Court.

The application was yesterday filed before Judge Nkosinathi Maseko and

...State says consultations with SA based prosecuting team pointed out that such evidence may apply in Shongwe's case



YOU CAN'T: Businessman Siphon Shongwe.

deposing to an affidavit is detective Bhekisisa Simelane who is part of the investigating team in the matter. He submitted that whilst it was not certain that such sections applied to the CCTV footages retrieved by CCTV expert Ricardo Mordaunt, the prosecuting team agreed that it should investigate as to who was responsible for maintenance of the CCTV systems.

Mordaunt is the witness the state has applied to recall in the matter to give

further evidence in as far as the CCTV systems are concerned.

Simelane submitted that this witness would state that during the months of January 2018 and on the days covered by his previous evidence, those CCTV systems from the Galp Filling Station at Ezulwini, near Corner Plaza, The Spar at Ezulwini and that of Eswatini Revenue Authority (ERA), were in good working condition, as a person who maintained them and would have been called if they were not properly functioning.

"The reason therefore that Ricardo has to be recalled is that at the time he was engaged by the REPS to upload the footage, it was not realised firstly that the Crown would want to prove that the systems were in good working condition, and it was not realised that it was Mordaunt himself who maintained the systems," detective Simelane submitted.

The Crown submitted further that it was important that the court exercise its powers and discretion under Section 199 of the Criminal Procedure and Evidence Act (CPE) to allow the recalling of this witness, solely for the question arising above.

WITNESS CAN'T BE RECALLED - SHONGWE

IN his opposing papers filed before court, Shongwe has submitted that this witness (Mordaunt) cannot be recalled to give further evidence as he had already given evidence on all he knew and did as regards the matter before court.

Shongwe who is represented by senior attorney Ben J Simelane in the interlocutory application filed by the Crown, submitted that the recalling of this witness was an attempt by the crown to cover its tracks in order to comply with the provisions of section 5 of the electronic records (evidence) Act of 2009.

"As submitted by the applicant (crown) the role of this witness was to download the footage at the said venues and nothing more, the prosecution is trying to cover its tracks to comply with the provisions of the Electronic Evidence Act, in law, a party cannot have a second bite of the cherry wherein his evidence was led," he submitted.

He stated that it was part of

the elements of the trial to challenge and test the evidence the prosecution could not, where it forgot deliberately to lead evidence to attempt to recall a witness such as Mordaunt.

Shongwe through his defence counsel further informed the court that such a recall of the witness was prejudicial to the case of the defence and as such it should not be permitted as there were no exceptional circumstances that have been placed before court to amount to the recall of the witness.

They argued that the prosecution should not be allowed to prosecute in piece meal as they were still investigating the matter while prosecuting Shongwe which was extremely prejudicial and unconstitutional.

He submitted that after giving evidence this witness remained in court and went to the extent of assisting in playing the footages and further listening to what other witnesses had to say as he was done with his evidence.

Matter postponed to Monday for arguments

WITH both parties having filed their papers before it, the court was yesterday supposed to hear arguments by both counsel, however the matter was postponed to Monday.

Although the reason for the postponement was stated in open court, members of the prosecuting team and the defence counsel comprising principal Crown counsels Absalom Makhanya and Macebo Nxumalo together with defence counsel Ben J Simelane went to see presiding Judge Justice Maseko in his chambers.

Both counsel spent about 20 minutes inside the Judge's chamber before proceeding to court where Judge Maseko informed Shongwe that the matter was postponed to Monday.

"Mr Shongwe, I think counsel has explained to you, the matter is postponed to Monday, we cannot proceed today for the reasons explained to you, thank you Mr Shongwe see you on Monday, the court adjourns," Judge Maseko said before retiring back to his chamber.

The trial has been stalled by the present interlocutory application filed by the Crown as more witnesses were to be paraded when the fresh application to recall the witness was filed.

Judge Maseko is expected to make a ruling on an application to have two of the Crown's witnesses Ncaza Nkosi and Sipiwo Ngubane give their evidence through a Video Audio Link (AVL) as they are incarcerated in the Republic of South Africa.

Toddler to be finally laid to rest

BY DELISA THWALA
Mbabane

THE family of Gelekeceni in Ezulwini which lost their two-year-old baby due to drowning in a bathtub has received donations to bury their daughter.

Speaking to this publication, the toddler's mother said they were glad to have finally put together money to give their daughter a befitting send-off.

Sihle Lukhele said she was grateful that the community had helped them.

"We are thankful for the donations we have received; they will go a long way in helping us and making sure that we give our daughter a befitting burial," said Lukhele.

The family which lives at Gelekeceni also


revealed that they would be able to cover all costs for the funeral.

Echoing Lukhele was the toddler's father, Ncamiso Ndlangamandla who said words could explain how thankful they were for the help they have received.

"Nothing can ever amount to how grateful we are, to the people who have come out to help us we really are thankful," said Ndlangamandla.

Narrating the ordeal, the mother said she was running a bathtub and getting ready for work and thought her daughter was asleep. The visibly-shaken mother said she could not believe it when she found her only daughter floating in the bathtub.

In an effort to try and save her baby, she administered first aid, but her efforts were in vain as the young one did not respond.



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DOC.20862

BUSINESS & FARMING

Keeping The Business Sector Up To Date

'Consider interest on arrears'

BY BUSINESS REPORTER

MBABANE – Government should consider paying interest on the amount owed to suppliers.

This is the view of Business Eswatini, in reaction to a call by the Ministry of Finance to all suppliers owed by government to submit claims by December 20, 2019.

The reason for this, according to Chief Executive Officer Nathi Dlamini, is that some of these companies are, and have been, holding government IOU's, and others verbal promissory notes, which are essentially useless to their suppliers.

He said these companies borrow money from banks in order to meet their supply contracts or tender obligations to government and these loans accrue interest charges against the borrower, which interest charges can wipe out any small profit margin a company could have made from the deals.

Dlamini said while they received the call as good news, the



Chief Executive Officer Nathi Dlamini.

organisation noted with great concern that the late payment did not include interest charges to the supplier.

Advocate

"I believe, and hereby advocate, that government be persuaded to begin paying suppliers interest charges, much like the banks do for outstanding loans. That would be fair," he said.

Dlamini said if this does not change, it means that the private sector will continue, as has been the case all along, to bankroll government against its will, much to the detriment of the economy which is struggling.

The CEO said the announcement was good news to the business community and he congratulated government for finally coming to the party, despite that others are saying government is too late.

Regrettably

"It is true that some businesses have already shut down, thanks to government, and regrettably there were job losses in the wake of these company shut-downs.

"The record of casualties as a result of government defaulting on payment of its obligations to the business community, is too long to enumerate," Dlamini said yesterday.

With government encouraging the private sector in particular to grow the economy, Business

Eswatini has never doubted its sincerity.

"However, it should be said that the private sector cannot grow the economy, even in the best of times, when most of the companies that matter are swimming in red ink due to unpaid debts by government.

Business Eswatini recognised the efforts being made by government and assured it of its continued support as long as it (government) is honestly pursuing the Turnaround Strategy.

"Anything less is bound to attract public rebuke. If they (government) want to get to the other side quicker, as they should, they must begin by ruthlessly cutting spending.

"So far, I don't feel the sense of urgency.

"It would appear the spending spree has not subsided and it is such things that tend to cause hopelessness to many.

"More so because everyone wants this government to succeed," he said.

Verification process begins

BY BUSINESS REPORTER

MBABANE – Government owed suppliers and service providers will have to resubmit their documents and undergo a verification process before they get paid.

The Ministry of Finance has issued a notice stating that it will only pay suppliers who can provide documentary proof of services rendered.

This, Finance Minister Neal Rijkenberg said, this was aimed at processing outstanding claims in a transparent, orderly and fair manner.

He said this method required proper scheduling and comprehensive stock taking.

In a statement calling on suppliers owed by government to submit proof of service to government, the Finance minister stated that all claims would be subjected to verification by the relevant line ministries and the internal Audit department before being passed on to treasury.

The claim, he said must be accompanied by a purchase order, tax invoice, delivery note, contract documents and the tender award.

Confirmation

"The arrears settlement schedule cannot be complete without confirmation of the outstanding payments by the affected suppliers through the submission of claims," he emphasised.

The announcement comes shortly after the prime Minister Ambrose Dlamini last week promised that all service providers and suppliers would have been paid in full by April next year.

Initially suppliers had been promised settlement by September but government could not meet this deadline. The PM said government was now on the verge of obtaining a E2 billion loan which would serve to honour its debt obligations to the local businesses.

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LIFAD Investing in rural people

gef GLOBAL ENVIRONMENT FACILITY INVESTING IN OUR PLANET

MINISTRY OF AGRICULTURE

ESWADE Making A Difference

SWAZILAND WATER AND AGRICULTURAL DEVELOPMENT ENTERPRISE
SMALLHOLDER MARKET-LED PROJECT/CLIMATE SMART AGRICULTURE FOR RESILIENT LIVELIHOODS (SMLP/CSARL)

SUPPLY AND DELIVERY OF BUILDING MATERIAL FOR FERRO-CEMENT TANKS

TENDER NO. ESWADE/0438

The Eswatini Water and Agricultural Development Enterprise (ESWADE) is a government company established by the Government of Eswatini in 1999 to empower communities to improve their quality of life through projects in commercial agriculture and other enterprises; providing innovative services in infrastructure development and management as well as expertise to public and private entities. ESWADE has been mandated by the Government of Eswatini to implement the Smallholder Market-Led Project/Climate Smart Agriculture for Resilient Livelihoods (SMLP/CSARL).

Tenders are invited for the **Supply and Delivery of Building Material for Ferro-Cement Tanks** for the SMLP/CSARL supported communities. A complete set of Tender document in English may be purchased by interested Tenderers at the address below and upon the payment of a non-refundable fee of **Three Hundred and Fifty Emalangeni (E350.00)** at **ESWADE Head Office, 3rd Floor, MVA Building**. The document can also be downloaded from ESWADE website, www.eswade.co.sz or the ESPPRA's website at www.sppra.co.sz.

The tender document should be hand delivered and deposited in the Tender Box at the ESWADE Head Office, 3rd Floor, Sincephetelo MVA Building, Mbhilibhi Street, Mbabane, no later than Monday, 2nd December 2019 at 10:00a.m. Tender documents should be signed and completed, and accompanied by the following documents:

1. Original and Valid Tax Compliance Certificate
2. A copy of Valid Trading License
3. A copy of Form J endorsed by Register of Companies
4. A copy of Form C endorsed by Register of Companies
5. A copy of Valid Labour Compliance Certificate
6. Police Clearance Certificates for Director's Listed in Form J
7. Certified Copies of National IDs of Company's Directors
8. Tender Bond of E20,000
9. Original/Copy of ESWADE Receipt of Tender Purchase
10. A fully signed document providing Power of Attorney
11. A fully signed Declaration of Eligibility

A tender must remain open for a period of 120 days from the closing date of the tender submission, during which period the tender may not be amended or withdrawn.

Tenders must be in a sealed envelope and clearly marked TENDER No. ESWADE/0438 and addressed to:

THE CHAIRMAN OF THE TENDER BOARD
Eswatini Water & Agricultural Development Enterprise
Tender No.: ESWADE/0438
Supply and Delivery of Building Material for Ferro-Cement Tanks

Telegraphic, telephonic, telex, facsimile, e-mail and late tenders will not be accepted. ESWADE will accept no responsibility for the late delivery of tenders by courier services or any other means. ESWADE does not bind itself to accept the lowest or any tender.

Ngwane principal's contract renewed

BY MBONO MDLULI
Mbabane

NGWANE Teacher Training College Principal Dr Amos Mahlalela has had his contract renewed for another three years.

Principal Secretary in the Ministry of Education and Training Bertram Stewart confirmed this.

His initial contract had lapsed in September. The contract of the principal is said to run until 2022. The principal is said to have been given the mandate to continue leading the institution, as it works towards being transformed into a university.

However, efforts to get comments from Dr Mahlalela proved futile, as he elected not to comment on the matter. He referred this reporter to the ministry of education and training.

Dr Mahlalela reached his retirement age in 2016 and has been working on contract ever since. He has been a principal at Ngwane Teacher Training College for around 14 years, having assumed the role in 2005. He obtained his Doctor of Education in Educational Management and Leadership from the University of South Africa

(UNISA) in 2017. At that time, he had been at the helm of the institution for 12 years. Other qualifications in his possession include a Primary Teacher's Diploma, Diploma in Education in Secondary Teaching, Bachelor of Education, Bachelor of Biblical Studies and Master of Education. He has two masters' degrees.

Dr Mahlalela is one of the four lecturers that have a PhD at the college. Six other lecturers have also enrolled to do their PhD studies. The lecturers are said to have improved their grades in preparation for the college to become a university.

About 50 of the college's lecturers now possess a Master's Degree. According to the ministry of education and training 2019/20 second quarter performance report, the college is still preparing to be a university. The matter of transformation was discussed at length with the ministry of education and training.

Thereafter, the institution was advised to conduct needs analysis with the view of making the proposed programmes relevant and further prioritise based on the economic situation of the country.

Plea for help for shot SANU student

BY SIFISO NHLABATSI
Manzini

STUDENTS of the Southern Africa Nazarene University (SANU) have engaged in a fundraising drive to assist a student who was injured allegedly during a protest action.

Phephile Sifundza a second year student at the Faculty of Health Sciences doing Medical Laboratory Sciences was injured when she was allegedly shot at by police during a protest action at SANU on November 4.

The student has been in hospital after she sustained serious injuries following the shooting incident.

SANU Chief Electoral Officer Phumlani Mabuza said the student sustained a fractured leg during the incident.

Announcing the fundraising initiative, Mabuza said Sifundza should be transferred to a private hospital and be given the best medical attention she deserves.

He urged students to come together and show government and the administration that they were united in pain and in love. Mabuza said students must support one of their own.

He explained that Sifundza, who was shot by the police on November 4 in the leg is currently waiting for

THE SUSPENDED SRC MEMBERS INCLUDE:

- Gubevu Tholumuzi Simelane - President
- Felix Vilakati - Vice President
- Colani Khulekani Maseko - Secretary General
- Mfundo Gamedze - Vice Secretary General
- Holinhlanhla Masebula - Minister of Sports
- Samkelo Mamba - Treasurer General
- Siphesihle Magagula - Minister of Academics
- Nothando Mkhabela - Minister of Social Welfare
- Malcomax Simelane - Minister of IT

an operation to fix her fractured leg. He said students could help with any amount they can afford.

Mabuza said the money would cater for medical bills and also help the SANU Student Representative Council to take the legal route to bring the police officer, who is alleged to have shot at Sifundza to justice.

Urged

Mabuza added that as students they also want to see to it that the injured student gets compensation for the incident. Students were urged to drop their contributions with their class representatives.

Students are also calling for the dropping of charges against their leaders, who were suspended following the chaotic strike action by students at SANU.

When Sifundza was shot at, it is alleged that three other students were

assaulted and arrested by the police. They are currently out on bail. The three included Sibusiso Nkwanyane, Nkhosingiphile Zitha and Menzi Gamedze.

After the incident on November 11, 2019, the administration suspended the entire Student Representative Council (SRC) for leading in the demonstrations. The students have since pointed out that the charges faced by their leaders are just trumped up charges.

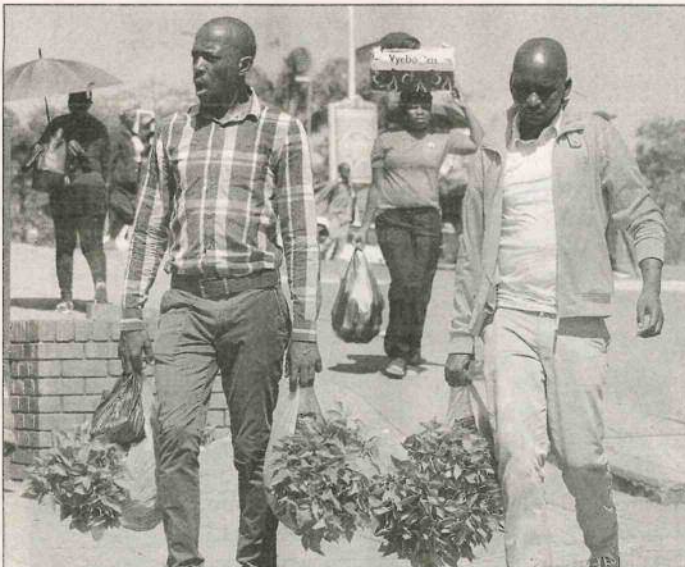
Intimidate

The university administration has since called the suspended students for internal disciplinary processes which might lead to their expulsion from the university. Students are now complaining that since the suspensions, the administration and the police have continued to intimidate the SRC members.

It is alleged that some members have been coerced into admitting the charges and unconditionally apologising to the administration for the demonstrations. It has been gathered that another student, who is not a member of the SRC, Nkwanyane was also served with a suspension letter due to his partaking in the strike action.

The disciplinary hearing for the suspended students is expected to take place tomorrow (Wednesday). The concern among students is that their leadership may miss exams, which begin on December 2.

The suspended members, it is said have already missed many continuous assessment tests due to the suspension.



FARMERS: Serious farmers carry some seedlings on their way to the Mbabane Bus Rank after buying them from the marketplace yesterday. (Pic: Mduduzi Mngomezulu)

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ESTATE LATE: SAMSON BANATSHI MASEKO ESTATE NO. EH 168/2019

Notice is hereby given in terms of Section 51 (2) of the Administration of Estates Act No. 28/1902 that the First and Final Liquidation and Distribution Account will lie open for inspection at the office of the Master of the High Court of Swaziland, Mbabane branch first floor Miller's Mansion for a period of **Twenty One (21) days** from the date of publication of this notice.

Any person objecting to the account may lodge his or her objection in writing with the executor and with the Master of the High Court at any time before expiry of the said period.

**MRS ZODWA GLORIA MASEKO
P. O. BOX 43
MOTSHANE**

RN/173180 Ds 25 NOV 2019

LIQUOR NOTICE

It is hereby notified for general information that the Liquor Licensing Board will hold its sitting to hear the following applications at the Ministry of Commerce, Industry and Trade Conference Room on the **16 December 2019** starting at **10.00am**.

REGION LUBOMBO
1. **VICTOR DOS SANTOS**, P. O. Box 533 SITEKI RENEWAL of a RESTAURANT Liquor Licence situated at **MATSETSA** known as **MAFALALA RESTAURANT**.

Any person who wishes to lodge an objection to the above-mentioned application may do so with the Secretary of the Liquor Licensing Board in writing, sending a copy to the applicant by registered mail to reach him/her at least ten days before the sitting of the Board.

**SECRETARY LIQUOR LICENSING BOARD
P.O. BOX 451
MBABANE**

RN/173188

APPENDIX

G APPLICABLE LEGISLATION AND POLICIES

NATIONAL LEGISLATION

1.1.1 +ENVIRONMENTAL SECTOR

TITLE	DESCRIPTION OF LEGISLATION AND PROJECT APPLICABILITY
Environment Management Act, 2002	<p>Description: This Act provides for environmental management principles and the establishment of regulations with regard to the conduct of environmental assessments.</p> <p>Applicability: Sections of the Act relevant to this project are:</p> <ul style="list-style-type: none"> — Section 5 which outlines the Environmental Principles of preventing and minimizing adverse environmental effects, the polluter pays principle, the prudent use of non-renewable resources, the sustainable use of renewable resources; — Sections 34-36 on Pollution Control which prohibit the discharge of contaminants into the environment; — Section 41 on Waste Management which prohibits the collection, transport, sorting, recovery, treatment, storage and disposal of waste in such a manner that causes adverse environmental impacts.
Environmental Audit, Assessment and Review Regulations, 2000	<p>Description: These Regulations control the environmental assessment process and stipulate requirements on the structure of reports and reporting procedures.</p> <p>Applicability: The Regulations are applicable to the environmental assessment of the proposed project.</p>

1.1.2 CONSERVATION AND RESOURCE MANAGEMENT SECTOR

TITLE	DESCRIPTION OF LEGISLATION AND PROJECT APPLICABILITY
Water Act, 2003	<p>Description: This Act provides for the management of water resources in Eswatini. It provides for water management structures such as a National Water Authority, Water Apportionment Board, River Basin Authorities, and Irrigation Districts. It establishes a permit system for the abstraction and use of water resources. It also provides for the issuance of effluent control permits. The Water Apportionment Board formed under this Act controls and registers the use of water and the use and safety of water retaining structures such as dams.</p> <p>Applicability: Applicable to this project are:</p> <ul style="list-style-type: none"> — Section 34 and 35 which require a permit for the abstraction and use of water from a natural water course. This is applicable to the project as water will be abstracted from surface water

TITLE	DESCRIPTION OF LEGISLATION AND PROJECT APPLICABILITY
	<p>sources to supply the construction-related activities as well as the various projects such as hydro-power generation and agriculture throughout the life of the project;</p> <ul style="list-style-type: none"> — Section 62 and 63 which require a user of water for industrial purposes, .e.g. agricultural use, to apply for an effluent control permit; — Section 81 which stipulates that a person shall not alter or divert a water course without permission from the Water Apportionment Board (or River Basin Authority where one is in place in the river basin concerned). This will be applicable to this project in the event of any temporary diversion of water along nearby watercourses in pursuit of constructing the dam, realigned roads and railway line.
<p>National Trust Commission Act, 1972</p>	<p>Description:</p> <p>This Act provides for the management of cultural institutions, declared national parks, nature reserves, monuments, relics and antiques through the Eswatini National Trust Commission (ENTC) which is a body corporate established under the same Act.</p> <p>Applicability:</p> <p>Applicable to this project are:</p> <ul style="list-style-type: none"> — Section 11 which empowers the curator of a declared institution to receive, hold and preserve all specimens, collections or other moveable property of whatever kind placed under the care, loaned to or belonging to the institution. In the event that items such as relics and antiques are discovered during the Heritage Study and project implementation, the SNTC will be notified in order to collect such relics and antiques for preservation; — Section 25 which provides for the Commission to:- <ul style="list-style-type: none"> — Make recommendations to the Minister on the proclamation of a national monument, any area of land having a distinctive or beautiful scenery or geological formation, any area of land containing distinctive or beautiful flora or fauna, any area of land containing objects of archaeological, historical or scientific interest or value, or any waterfall, cave, grotto, avenue of trees, old building, or any other place or object (whether natural or constructed by man) of aesthetic, historical, archaeological, scientific, sacred, or religious value or interest. — Make recommendations to the Minister on the proclamation as a relic any fossil of any kind, any drawing or painting or stone or petroglyph known or commonly believed to have been executed by aboriginal inhabitants of Southern Africa, or by any people who inhabited or visited Southern Africa in ancient days, and any implement or ornament known or commonly believed to have been used by them and any anthropological or archaeological contents of the graves, caves, rock shelters, shell mounts, or other sites used by them. — Make recommendations to the Minister on the proclamation as an antique, any movable object (not being a monument or relic) of aesthetic, historical, archaeological or scientific value or interest, the whole or more valuable portion whereof has for more than thirty years been in any part of Southern Africa. — Assume control over any such object requested by the person having the ownership or control thereof and as trustee for the Government accept any such object which the owner desires to donate or has bequeathed to the Government. — Preserve, repair, restore or insure any monument, relic or antique under its control. — Make a register of all monuments, relics and antiques. — Section 26 which stipulates that no person shall destroy, damage, excavate, alter, remove from its original site or export any monument, relic or antique except under the authority of and in accordance with a permit granted by the Commission. <p>Any geological formation, monument, relic or antique discovered during the Heritage Study and project implementation will be communicated to the Commission who will make a decision on the method of preservation.</p>

TITLE	DESCRIPTION OF LEGISLATION AND PROJECT APPLICABILITY
Game (Amendment) Act, 1991	<p>Description: This Act, to be read in conjunction with the Game Act, 1953 provides for the protection of game in Eswatini.</p> <p>Applicability: Applicable sections to this project in particular are:</p> <ul style="list-style-type: none"> — Section 8 which prohibits the hunting and dealing in Royal game as listed under the Second Schedule; — Section 12 which restricts the hunting of game. <p>These Sections are applicable as some of the protected species listed in the Act potentially occur in the vicinity of the project site, particularly in nearby protected areas.</p>
Flora Protection Act, 2001	<p>Description: This Act restricts the plucking, cutting, uprooting or digging up of protected flora. For any activity likely to impact upon indigenous flora, the proponent is required to carry out an impact assessment and develop a mitigation plan.</p> <p>Applicability: The key activities which form part of this project, such as site clearing for the realignment of access roads, the railway line and relocated buildings, as well as inundation during the filling of the dam are likely to affect indigenous flora, therefore an environmental assessment and mitigation plan are required.</p>
Wild Birds Protection Act, 1914	<p>Description: The Act provides for the compensation and medical treatment of workmen who suffer injury or contract work-related diseases in the course of their employment.</p> <p>Applicability: This Act will apply in the event that employees of the project proponent or those of its contractors are injured or suffer work-related diseases in the course of their employment.</p>
The Protection of Fresh Water Fish Act, 1937	<p>Description: The Act protects fresh water fish against unauthorised capturing, removal, destruction and stocking of fish in water bodies. The Act further establishes the Protection of Freshwater Fish Regulations.</p> <p>Applicability: Applicable to the project is Section 2 which defines “waters” as:</p> <ul style="list-style-type: none"> — “any river, stream, or creek, and any fresh water, lake, dam, reservoir, pond, pool or other collection of water in which fresh water fish may be found.” — All project activities will be carried out in such a manner that does not adversely affect fish populations occurring within the existing water course.
Natural Resources Act, 1951	<p>Description: An Act to provide for the conservation and improvement of natural resources.</p> <p>Applicability:</p> <ul style="list-style-type: none"> — Section 21(1) stipulates that “if the owners of land in any area wish on their own initiative to undertake the construction of works and other measures for the conservation or improvement of natural resources in such area, they may petition the Minister in writing to declare such area to be an intensive conservation area.” This clause refers to Title Deed Land and will be applicable to non-communal land surrounding the project site which itself is on communal

TITLE	DESCRIPTION OF LEGISLATION AND PROJECT APPLICABILITY
	<p>land. The clause presents a constraint to securing land that is suitable, adequate and in close proximity to the Project Affected Persons who will be involuntarily displaced.</p> <ul style="list-style-type: none"> — Section 31 stipulates that “any person who, by any act or by neglect causes damage to another whether by diverting storm water from its natural course, or by any other act or omission or who injures any soil or water conservation work, shall be guilty of an offence.” This clause refers to impacts on communal land wherein it applies to any project works that cause stormwater discharge resulting in erosion and damage to communal land and or property of persons.
<p>Natural Resources (Public Stream Banks) Regulations, 1951</p>	<p>Description: These Regulations restrict the cultivation or planting of crops or the destruction of natural vegetation within 100 feet (30m) of the banks of any bank or verge of a public stream.</p> <p>Applicability: Section 2 stipulates that these Regulations apply to all areas other than Swati areas (communal land). This means that the project site and any other communal areas will be exempted in situations where land is required for agriculture for Project Affected Persons, meaning that availability of arable land will not be constrained as would the case on Title Deed Land.</p> <p>The Regulations will apply with regard to the destruction of vegetation in pursuit of constructing the dam, relocating homesteads, schools and clinics as well as realigning roads and the railway line whereby such destruction of vegetation will need to be mitigated.</p>
<p>Mines and Minerals Act, 2011</p>	<p>Description: The Act consolidates the law on mining and provides for the management and administration of minerals and mineral oils.</p> <p>Applicability: Applicable to extraction of gravel and sand for construction of the dam, buildings, access roads and realignment of the railway line are:</p> <ul style="list-style-type: none"> — Section 126 which requires a mining operator to have a site rehabilitation and closure plan in place; — Section 127 which requires the holder of a mining license to provide the Commissioner of Mines with a bond or some other form of financial security that is satisfactory to the Commissioner, that shall be sufficient to cover the costs associated with the implementation of the environmental and rehabilitation obligations set out in the site rehabilitation and mine-closure plans of the holder of the licence.
<p>Integrated Water Resources Master Plan, 2011</p>	<p>Description: A requirement of Section 10 of the Water Act, 2003, the overall goal of the Integrated Water Resources Master Plan (IWRMP) is to develop and manage water resources in a planned and co-ordinated manner taking into account the projected requirements of the various social and economic sectors including the environment.</p> <p>Applicability: Applicable to this project are the requirements stipulated under Section 10 of the Water Act, 2003 that the Water Resources Master Plan shall:</p> <ul style="list-style-type: none"> — 10(4)(a) - be based on all relevant data including but not limited to data of surface water flows, ground water flows, biological state, climatic conditions, agricultural land suitability, forestry and industrial potential; — 10(4)(b) - identify, at a prefeasibility level, opportunities for water resources development including both storage reservoirs and runoff, the river developments for irrigated agriculture, hydroelectric generation and industrial use; — 10(4)(c) - consider potential requirements for domestic consumption, schools clinics and similar institutions.

TITLE	DESCRIPTION OF LEGISLATION AND PROJECT APPLICABILITY
	<p>The proposed construction of a multi-purpose dam is therefore an integrated approach to realising the objectives of the Integrated Water Resources Master Plan as stipulated in the Water Act, 2003.</p>
<p>Water Pollution Control Regulations, 2010</p>	<p>Description:</p> <p>The Regulations provide for the control and reporting of the discharge of effluent. The intentional or negligent discharge of polluting substances above the stipulated limits is prohibited.</p> <p>Applicability:</p> <p>The monitoring and reporting of the quality of any releases to the environment from any project activities as well as the quality of nearby surface and groundwater sources will be subject to these Regulations.</p>
<p>National Water Policy, 2009</p>	<p>Description:</p> <p>The National Water Policy (NWP) is a political statement of the intentions of Eswatini with respect to water resources development and management. It seeks to provide guidance to water managers, legislators and supporting partners.</p> <p>Applicability:</p> <p>The Nondvo Dam will have to be developed in accordance with the National Water Policy. In addition, Nondvo Dam, is an implementation of the policy with respect to improving water security and socio-economic development</p>
<p>Waste Regulations, 2000</p>	<p>Description:</p> <p>The Regulations control the collection, transport and disposal of solid and liquid waste.</p> <p>Applicability:</p> <p>Waste generated, including demolition of existing structures and household waste generated by site employees, will be subject to the requirements of these Regulations.</p>
<p>Litter Regulations, 2011</p>	<p>Description:</p> <p>These Regulations prohibit littering and define litter as discarded, used or consumed substance or waste.</p> <p>Applicability:</p> <p>The Regulations will be applicable throughout the implementation and operation of the project in relation to activities where waste is generated, collected and disposed. Applicable clauses are:</p> <ul style="list-style-type: none"> — Regulation 4 which prohibits the dumping, depositing, dropping, throwing, discarding or leaving of litter upon any public place, private property, river, stream, or any body of water as well as from any vehicle upon a public road; — Regulation 7(2) which stipulates that every owner of premises shall place at the entrance or anywhere within the premises receptacles for use by occupants and visitors; — Schedule 2 which prescribes the fines for littering.
<p>Air Pollution Control Regulations, 2010</p>	<p>Description:</p> <p>These Regulations provide for air quality objectives, air quality monitoring, reporting of air pollution incidents and the obligation to take corrective and preventive measures against harm to air quality.</p> <p>Applicability:</p> <p>During implementation and operation any activities that may cause air quality impacts will be subject to these regulations. Pertinent to the project will be the need to control dust and particulate matter which may adversely affect site employees, residents of surrounding communities as well as visitors.</p>

TITLE	DESCRIPTION OF LEGISLATION AND PROJECT APPLICABILITY
Ozone Depleting Substances Regulations, 2003	<p>Description: These Regulations control the use of controlled substances and promote the use of ozone friendly substances, products, equipment and technology.</p> <p>Applicability: Air conditioning will be used in some project buildings, therefore it will be pertinent that ozone friendly substances are used, maintained and disposed safely.</p>
Plant Control Act, 1981	<p>Description: This Act provides for the prevention of plant disease. It controls the import and export of plants. It also controls the registration of nurseries and regulates the sale of plants through the control of nurseries.</p> <p>Applicability: During rehabilitation of disturbed areas, such as quarry sites, the potential introduction of plants which are not indigenous to Eswatini will be subject to this Act. This will apply to the introduction of non-indigenous grass species to stabilise slopes and which provided a platform for subsequent indigenous plant species to establish themselves.</p> <p>Additionally, Section 22 requires owners and occupiers of land, such as the operator of the dam, to keep the land clear of noxious weeds as specified in the First Schedule of the Act.</p>
Stock Diseases Regulations, 1962	<p>Description: These Regulations control all aspects of disease control amongst livestock such as importation, exportation, movement within the country, quarantine, notification of diseases, disease prevention and control methods including fencing of properties.</p> <p>Applicability: Since livestock will be relocated from the project site the Regulations, with over 70 clauses, are applicable to the project in terms of ensuring the effective prevention and control of diseases which would otherwise arise from the relocation of homesteads.</p>
National Food Security Policy, 2005	<p>Description: The National Food Security Policy aims to ensure:</p> <ul style="list-style-type: none"> — Food availability, such that a sufficient quantity of food of appropriate quality is available to all people in Eswatini through domestic production and imports; — Food access, such that all individuals in Eswatini have access to adequate resources to acquire appropriate foods for a nutritious diet; — Food utilization and nutritional requirements, such that all individuals in Eswatini attain nutritional well-being for which all physiological needs are met; — Stability of food supply, such that all individuals in Eswatini have access to food at all times. <p>Applicability: The potential uses of water for agriculture will contribute towards improving food security within the project area.</p>

1.1.3 HUMAN RESETTLEMENT, COMPENSATION AND REHABILITATION SECTOR

TITLE	DESCRIPTION OF LEGISLATION AND PROJECT APPLICABILITY
Draft Land Policy, 1999	<ul style="list-style-type: none"> — Land tenure issues and policies

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	<ul style="list-style-type: none"> — Land use and land management issues and policies — Land market issues and policies — Land administration issues and policies
Building Act, 1968	<p>Description:</p> <p>This Act provides for the control of the design of buildings and the safety of such buildings. All building design and construction will be in conformity with this Act.</p> <p>Applicability:</p> <p>This Act will apply to permanent buildings, such as temporary shelters and builders’ sheds for any contractors as well as hydro-power station/s, residential houses for relocated homesteads, new buildings for relocated schools, clinics, shops, etc.</p>
Children’s Protection and Welfare Act, 2012	<p>Description:</p> <p>The Act extends the provisions of Section 29 of the Constitution and other international instruments, protocols, standards and rules on the protection and welfare of children, the care and maintenance of children.</p> <p>Applicability:</p> <p>The provisions of this Act will apply to the project in that the process of relocating homesteads and schools needs to ensure that the welfare of the children in affected and host communities is protected and that children are also protected from any harm that may arise from the project.</p> <p>Applicable to the protection, welfare, care and maintenance of children during the relocation process is:</p> <ul style="list-style-type: none"> — Part III – Rights of the Child and Responsibilities of Parents and the Sate. This part of the act addresses, inter alia, <ul style="list-style-type: none"> — Section 9 – the Right to Education and Welfare. This will be pertinent in terms of mitigating disruption to education during the relocation process as well as ensuring that adequate shelter, diet, clothing, medical attention are provided at the destination of relocation. — Section 10 – the Right to Social Activity. This will be pertinent in terms of ensuring that recreational facilities and cultural activities provided at the destination of relocation are available and are to a standard that is at least similar to that which is has been provided thus far in the affected communities. — Section 22 – General Functions of the Department of Social Welfare. This will be pertinent in that the relocation process will need to ensure that Department of Social Welfare is consulted with and involved during all aspects of relocation of the homesteads, schools and clinics in order for the Department of Social Welfare to carry out its functions of providing information about the development of children. <p>Applicable to the protection, welfare, care and maintenance of children in the community during project implementation and operation is:</p> <ul style="list-style-type: none"> — Part III – Rights of the Child and Responsibilities of Parents and the Sate. This part of the act addresses, inter alia, <ul style="list-style-type: none"> — Section 16 – the Right to be Protected from Harmful Substances. This clause stipulates that a child has the right to be protected from the use of hallucinogens, narcotics, alcohol, tobacco products or psycho-tropic drugs and any other substances declared harmful and from being involved in their production, trafficking or distribution. This will be pertinent through the need for the proponent to cooperate with the community in controlling activities, such as the sale of liquor and the influx of job-seekers, both of which are aspects likely to cause conditions that will ultimately expose children to harmful substances. — Section 22 – General Functions of the Department of Social Welfare. This will be pertinent in that the project proponent will need to ensure that Department of Social Welfare is consulted with during the implementation and operation of the project in order

TITLE	DESCRIPTION OF LEGISLATION AND PROJECT APPLICABILITY
	<p>for the Department of Social Welfare to carry out its functions of providing support services to strengthen and support families in the community and to reduce the incidence of harm to children.</p> <p>Section 23 – Child in Need of Care and Protection. This clause will be pertinent in mitigating the conditions which are likely to cause children to be exposed to neglect, physical and emotional harm, including sexual abuse. For example, in cases where both parents are employed by the project measures will need to be developed to mitigate children’s exposure to the aforementioned hazards while the parents are at work.</p>
<p>Resettlement Policy Framework, 2007</p>	<p>Description:</p> <p>The objective is to assist the Government of Eswatini to develop institutionally strengthened rural local governments (<i>Tinkhundla</i>) and urban local governments.</p> <p>It is generally understood that the involuntary displacement of people may give rise to severe economic, social, and emotional distress on the part of those who are relocated. The Ministry of Housing and Urban Development’s Resettlement Policy outlines the practices that must be followed to limit these adverse effects where resettlement is necessary. These implementation guidelines should be utilized in conjunction with this Policy.</p> <p>The purpose of these guidelines is to lay the foundation by which resettlement can be carried out. Any involuntary resettlement – including any land acquisition – needs to be identified and considered at the earliest stages of sub-project identification and design, and should be addressed from the earliest stages of project preparation.</p> <p>Applicability:</p> <p>The Resettlement Policy Framework will be applicable to the development and implementation of the Resettlement Action Plan.</p>
<p>Human Settlements Authority Act, 1988</p>	<p>Description:</p> <p>An Act to establish the Human Settlements Authority.</p> <p>Applicability:</p> <p>Section 3 stipulates that “this Act shall apply to such human settlements, housing schemes and private housing schemes in such areas as the Minister may, by notice in the Gazette, declare to be subject to the provisions of this Act but shall not, without the written approval of the King, either generally or in any particular case, apply to any land vested in the Ngwenyama in trust for the Swati Nation or to a Swati area as defined in the Safeguarding of Swati Areas Act, 1910 and the Definition of Swati Areas Act, 1917.</p> <p>Therefore, the Act will only apply in such areas where Project Affected Persons are resettled on Title Deed Land, provided that such land is not converted to communal land during the procurement process for purposes of such resettlement. Retaining the Title Deed status is unlikely since the procurement will have been for purposes of settling Emaswati. The applicability would only be valid with written approval of the Ingwenyama, as stipulated in the clause.</p>
<p>Swati Graves Act, 1990</p>	<p>Description:</p> <p>An Act to grant to Swazis access to the sites of graves of certain Chiefs or the relations of Chiefs.</p> <p>Applicability:</p> <p>Section 3 stipulates that, “the Swati nation shall have such right of way over neighbouring land as may reasonably be necessary for the purpose of obtaining access to any grave site as long as their rights in respect of such site continue in force and such right of way shall be defined by the Minister if he considers such definition necessary.”</p> <p>This clause will be applicable where the project causes loss of access to grave sites of chiefs and members of the Royal Household in the north east section of the project site, i.e. to the north east</p>

TITLE	DESCRIPTION OF LEGISLATION AND PROJECT APPLICABILITY
	of Masibekela. Therefore alternate means of access will be required, e.g footbridges and access roads.
Land Survey Act, 1961	<p>Description: An Act to provide for the survey of land.</p> <p>Applicability: The Act applies to the conduct and administration of land surveys. It will be applicable in the event that Title Deed Land is acquired for the purposes of resettling Project Affected Parties wherein survey diagrams will be verified to avoid impacts of encroachment on neighbouring land.</p>
Sub-division of Land Act, 1957	<p>Description: An Act to consolidate and amend the law relating to the sub-division of land in Eswatini.</p> <p>Applicability: Section 3 stipulates that, “Except as hereinafter provided no person shall sub-divide any land without the consent of the (Natural Resources) board. This clause will be applicable in the event that a willing seller offers to sell or agrees to an offer of purchase of his/ her land for purposes of resettling Project Affected Persons. Such will seller will not be authorised to sub-divide a portion of such land without authorisation from the Ministry of Natural Resources and Energy.</p>
Vesting of Land King Order, 1973	<p>Description: A King’s Order-in-Council to provide for the vesting of land and real rights to land in the King.</p> <p>Applicability:</p> <ul style="list-style-type: none"> – Section 3 stipulates that “Notwithstanding any other law, all land and real rights to land presently registered in the name of the Crown or the Government or vested in the Crown or the Government shall with effect as from the 12th day of April, 1973 be deemed to vest in the King but shall be described in the Deeds Registry Office and in the title deeds relating to such land or rights and in any documents dealing with such land or rights as vesting in the “Crown”. – Section 4 stipulates that “Any land or real rights acquired by the Government after the 12th day of April, 1973 in any manner whatsoever shall be deemed to vest in the King and shall be registered in the Deeds Registry Office in the title deeds to the land and in any other documents appertaining thereto as vesting in the “Crown”. – Section 5 stipulates that “(1) The Government acting through the Minister is hereby authorised and empowered to enter into any agreement relating to the letting, sub-letting or the granting of any servitude or other real right in any land or real right in land vesting in the King in terms of this Order, and is further authorised and empowered to acquire any land or real right or any lease to any land on behalf of the King. (2) The Minister is hereby further authorised and empowered to sign and execute on behalf of the King any documents of any kind whatsoever to give effect to any transaction of the kind mentioned in subsection (1) and, if necessary, to appear before a notary public to execute any such documents.” <p>The above clauses will be applicable in acquisition of land for resettlement wherein Government will be empowered to acquire any land on behalf of the King for purposes of settling Project Affected Parties.</p>
Immovable Property (Race Discrimination) Act, 1963	<p>Description: An Act to prohibit restrictions on the ownership or tenure of immovable property based solely on the grounds of race.</p> <p>Applicability:</p>

TITLE	DESCRIPTION OF LEGISLATION AND PROJECT APPLICABILITY
	<p>Section 3 stipulates that, “A condition —</p> <ul style="list-style-type: none"> — (a) in a deed of grant, transfer, lease or other notarial deed conveying rights to immovable property which, on the grounds of race alone, restricts or purports to restrict a person from owning or occupying that property or from exercising any servitude or other real right in respect thereof; or — (b) in a mortgage bond prohibiting or purporting to prohibit the sale of the mortgaged property to any person on those grounds; shall be of no effect. <p>The Act will be applicable to protecting the rights of Project Affected Persons wishing to acquire title to land of their own accord, without fear of racial discrimination, in lieu of moving to identified resettlement sites in communal areas.</p>
<p>Persons with Disabilities Act, 2018</p>	<p>Description:</p> <p>The Act provide for the rights and welfare of persons with disabilities. The Act provides for, <i>inter alia</i>, the promotion and development of the quality of life and wellbeing of persons with disabilities through access to:</p> <ul style="list-style-type: none"> — Assistance. — Public facilities, amenities and services and buildings. — Health — Education. — Employment. — Information, communication and Technology. — Cultural life. — Recreation, leisure and sport. <p>Applicability:</p> <p>Applicable to the project will be the Resettlement Action Plan which will take into consideration the needs of persons with disabilities within the project-affected communities.</p>
<p>Sexual Offences and Domestic Violence Act, 2018</p>	<p>Description:</p> <p>An Act to make provision concerning sexual offences and domestic violence, prevention and the protection of all persons from harm from other sexual acts and acts of domestic violence. The Act provides for, <i>inter alia</i>, the criminalisation of:</p> <ul style="list-style-type: none"> — Rape. — Incest. — Sexual assault. — Causing a potential victim to believe that the potential victim will be sexually assaulted. — Compelled sexual assault, wherein a person compels a third person, without the consent of that third person, to commit an act of sexual violation with another person without the consent of that other person. — Compelled self-sexual assault, wherein a person compels another, without the consent of that person, to engage in self-sexual activities. — Unlawfully administering of a substance, wherein a person intentionally administers or causes a substance to be taken by another person without consent of that person, with the intention of stupefying or overpowering that other person, so as to enable the administering person or any other person to engage in sexual activity with the person to whom the substance is administered. — Unlawful stalking. — Commercial sexual exploitation and promotion of commercial sexual exploitation. — Procuring prostitution, wherein a person (e.g. a pimp or a madam) facilitates another to engage in prostitution.

TITLE	DESCRIPTION OF LEGISLATION AND PROJECT APPLICABILITY
	<ul style="list-style-type: none"> — Benefiting from prostitution. — Living from the earnings of prostitution. — Keeping a brothel. <p>Applicability:</p> <p>Applicable to the project will be the risk of sexual offences arising from the influx of project workers during implementation which will increase the vulnerability of persons, particularly women and children, to sexual offences.</p> <p>Another avenue increased vulnerability will arise from parents and/or heads of households leaving their dependants at home unattended while at work, i.e. the dependants will be vulnerable to sexual offences committed by strangers from within the community or by other family members.</p>

1.1.4 CONSTRUCTION SECTOR

TITLE	DESCRIPTION OF LEGISLATION AND PROJECT APPLICABILITY
<p>Construction Industry Council Act, 2013</p>	<p>Description:</p> <p>The Act provides for the establishment of the Construction Industry Council and the promotion and development of the construction industry in Eswatini, the registration of contractors, the affiliation to the Council of professional bodies and organisations whose members are engaged in activities related to the construction industry, the regulation of the construction industry and the training of persons engaged in construction or in activities related to construction.</p> <p>Applicability:</p> <ul style="list-style-type: none"> — Section 27(1) which stipulates that “a contractor shall not carry on business in the construction industry in Eswatini unless the contractor is registered under this Act,” i.e. registered with the Construction Industry Council; — Section 28 which stipulates that “contractor registered under this Act shall not undertake construction work in a category in respect of which that person is not registered.” — Section 39(1) which stipulates that “a person shall not award a contract for any construction works of such value as the Minister, upon the recommendation of the Council, may determine, to another person unless that other person is registered under this Act.” — Section 40(1) which stipulates that “a person shall not award a contract for construction works to a foreign company or foreign firm without approval of the Council.” — Section 41(1) which stipulates that “a person shall not award a contract for any construction works to a foreign company or foreign firm unless the foreign company or foreign firm undertakes the construction works in partnership or jointly with a Swazi company or Swazi firm.” — Section 42 which prohibits the use of substandard construction materials.
<p>Water Services Corporation Act, 1992</p>	<p>Description:</p> <p>This Act provides for the establishment of Eswatini Water Services Corporation (EWSC) as a fully autonomous body corporate and empower EWSC as the sole custodian of water and sewerage services in Eswatini, wherein the objects of EWSC are to ‘abstract, store, transport, purify, and supply water and collect, treat and dispose sewage’ in the areas specified in the Schedule of the Act.</p> <p>Applicability:</p> <p>This project will be a multipurpose dam, therefore the activities of EWSC in supplying water along the Mbabane – Manzini corridor will be directly and indirectly applicable to the project. Sections of the Act applicable to this project are:</p>

TITLE	DESCRIPTION OF LEGISLATION AND PROJECT APPLICABILITY
	<ul style="list-style-type: none"> — Section 16(1) which empowers EWSC, unless prevented by drought, to supply water to the public for domestic purposes; — Section 19(1) which provides for the interruption of water inspections, repairs maintenance and modifications; — Section 24(1) which empowers EWSC to install a pipeline below the ground across any land on which no buildings have been constructed as well as use any land, wall building or bridge for supporting any pipeline; — Section 24(2) which requires EWSC to first serve notice in writing to the owner or occupier of land of its intention to install a pipeline across the land; — Section 24(7) which requires the installation of any pipeline or plant not to obstruct or hinder passage across any road, railway, watercourse; — Section 25(1) which empowers EWSC to enter any land or premises and survey it, including digging in carrying out such survey; — Section 25(2) which empowers EWSC to cut down, burn or clear any trees, shrubs or grass likely to interfere with the construction, maintenance, alteration or removal of any existing or proposed works.
Employment Act, 1980	<p>Description: The Act provides for the improvement of the status of employees in Eswatini.</p> <p>Applicability: The Parts of the Act applicable to the economic well-being of employees are:</p> <ul style="list-style-type: none"> — Part IV which addresses issues pertaining to the establishment of contracts between employers and employees; — Part V which addresses issues pertaining to the termination of contracts of employment; — Part VI which addresses issues pertaining to remuneration and conditions of employment; — Part X which addresses issues pertaining to the employment of women and children. <p>Sections of the Act applicable to gender issues are:</p> <ul style="list-style-type: none"> — Section 29, under Part IV, which prohibits the discrimination against employees on the grounds of sex (and other personal attributes such as marital status, race, colour, religion, etc.); — Section 96, under Part X, which provides for equal pay for equal work between male and female employees; — Sections 102 and 103, under Part X, which provide for entitlement to maternity leave by female employees; — Section 105, under Part X, which prohibits termination of employment of female employees arising from or relating to the granting of maternity leave; — Section 106, under Part X, which protects the seniority and/ or remuneration and any other conditions of employment of female employees subsequent to returning from maternity leave.
Workmen’s Compensation Act, 1983	<p>Description: The Act provides for the compensation and medical treatment of workmen who suffer injury or contract work-related diseases in the course of their employment.</p> <p>Applicability: This Act will apply in the event that employees of the project proponent or those of its contractors are injured or suffer work-related diseases in the course of their employment.</p>
Workmen’s Compensation Regulations, 1983	<p>Description: The Regulations control the reporting of workplace accidents and work-related diseases, the provision and payment of medical treatment of injured employees and the compensation of such employees.</p>

TITLE	DESCRIPTION OF LEGISLATION AND PROJECT APPLICABILITY
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	<p>Applicability:</p> <p>Any workplace accidents and dangerous occurrences during implementation and operation will be reported, and any payment of medical treatment and compensation of injured employees will be conducted in accordance with these Regulations.</p>
<p>Building Operations Regulations, 1969</p>	<p>Description:</p> <p>These Regulations provide for the control of building activities and the safety of buildings.</p> <p>Applicability:</p> <ul style="list-style-type: none"> — Regulation 5 which stipulates that no rubbish, materials or other matter from building construction, repair, maintenance and demolition shall be deposited in a street or public place. For this project, public places this will be along public roads, neighbouring properties and communities; — Regulation 12 which stipulates that building work shall be carried out such that surface and stormwater drains are kept clear at all times; — Regulation 46 which stipulates that temporary sheds are to be kept in a safe and sanitary condition; — Regulation 47 which stipulates that adequate and suitable latrines are to be provided for construction workers before construction work begins; — Regulation 53 which stipulates that no roof, floor or any part of a building shall be overloaded with debris or materials as to render it unsafe; — Regulation 54 which stipulates that a builder carrying out building work shall abate any public nuisance such as noise, dust, unsightliness caused by the work.

1.1.5 HEALTH AND SAFETY SECTOR

TITLE	DESCRIPTION OF LEGISLATION AND PROJECT APPLICABILITY
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<p>Occupational Safety and Health Act, 2001</p>	<p>Description:</p> <p>The Act provides for the safety and health of persons in the workplace and for the protection of persons other than those in the workplace against hazards to safety and health arising from work activities.</p> <p>Applicability:</p> <ul style="list-style-type: none"> — Section 9 which stipulates the duties of the employer to ensure safe and healthy working conditions, make employees aware of the hazards of the workplace, provide personal protective equipment, provide training and supervision of employees, prevent exposure of non-employees to hazards arising from the works; — Section 11 which stipulates the duties of the employee to cooperate and follow the instructions of the employer, use equipment and safety devices provided by the employer, report accidents and unsafe conditions to the employer; <p>Section 28 which requires the employer to record and report minor and major accidents and dangerous occurrences to the Labour Inspector.</p>
<p>Explosives Act, 1961</p>	<p>Description:</p> <p>This act provides for the establishment of the Explosives Regulations and empowers the Minister of Natural Resources and Energy to appoint one or more persons as an Inspector of Explosives for the purpose of issuing or granting licenses, certificates and permits in pursuance of any Regulations established under the Act.</p>

TITLE	DESCRIPTION OF LEGISLATION AND PROJECT APPLICABILITY
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	<p>Applicability:</p> <p>This Act is applicable to this project in the event that any explosives, as defined by the Act, are imported, transported, stored, used and disposed in the course of carrying out any activity of the project. Applicable sections of the Act are:</p> <ul style="list-style-type: none"> — Section 2 which defines “explosives as: <ul style="list-style-type: none"> — gunpowder, nitroglycerine, dynamite, guncotton, blasting powders, fulminate of mercury or of other metals, coloured fires, and every other substance which is used or manufactured with a view to producing a practical effect by explosion or a pyrotechnic effect; — any fuse, rocket, detonator, cartridge and every adaptation or preparation of any explosive; — any other substance which the Minister of Natural Resources and Energy may declare to be an explosive. — Section 5 which stipulates that any person who is convicted of an offense against the Regulations who holds a license or permit issued under the Regulations shall be liable, in addition to any other punishment, to the cancellation of his license or permit, or suspension of his licence or permit for a period as the court thinks fit. <p>In the interest of public safety and the environment, it is therefore pertinent, in the event that explosives are imported, transported, stored, used and disposed with respect to construction activities that contractors and sub-contractors comply with the requirements of the Explosives Regulations.</p>
<p>Explosives Regulations, 1961</p>	<p>Description:</p> <p>The Regulations provide for the control of purchasing, importation, transportation, storage, use, possession and disposal of explosives.</p> <p>Applicability:</p> <p>While the Regulations focus on safety aspects, they are applicable to social and environmental aspects of the project in that failure to comply will cause the potential unintentional release or distribution of explosives to unauthorised persons who in turn may use such explosives for criminal activities, including acts of terrorism thereby endangering the public. The unsafe transportation, storage, use and disposal of explosives will potentially cause injuries to persons, damage to property as well as environmental hazards such as landslides, damage to natural habitats and obstruction of natural watercourses.</p> <p>Parts of the Regulations applicable to the workplace safety as well as public safety and environmental aspects of the project are:</p> <ul style="list-style-type: none"> — Part II – GENERAL, which requires a person to apply for a permit to import explosives, a permit holder to exercise duty of care when transporting, storing and using explosives; — Part IV – CONVEYANCE OVERLAND, which stipulates the requirements for safe transportation of explosives; — Part V – STORAGE, which stipulates the requirements for the safe storage of explosives; — Part VI – SALE, PURCHASE OR ACQUISITION, which requires a person to obtain a permit to purchase, acquire and possess explosives and prohibits the sale of explosives to unauthorised persons; — Part VII – UNLAWFUL POSSESSION, HIDING, AND ABANDONING OF EXPLOSIVES, which prohibits theft, unauthorised possession, unauthorised entry into storage areas, hiding or abandoning explosives and leaving explosives unattended; — Part VIII – USE OF EXPLOSIVES, which stipulates the requirements for the safe use of explosives, including providing notices to the relevant authorities and public prior to blasting; — Part IX – DUTIES OF BLASTING LICENSE HOLDERS, which stipulates the safe conduct of blasting operations;

TITLE	DESCRIPTION OF LEGISLATION AND PROJECT APPLICABILITY
	<ul style="list-style-type: none"> — Part X – DUTIES OF GANGER OR MINER IN CHARGE WHO IS A BLASTING LICENSE OR PERMIT HOLDER, which stipulates the requirements for the employer in ensuring the safe condition of the workplace and workers involved in blasting operations.
Factories, Machinery and Construction Works Act, 1972	<p>Description: This Act provides for safe working conditions and the safe use of machinery at factories and construction sites.</p> <p>Applicability: This Act is applicable in terms of ensuring that the workplace and machinery are safe and used safely during implementation and operation of the project.</p>
Factories, Machinery and Construction Works Regulations, 1974	<p>Description: These Regulations provide for safe working conditions and the safe use of machinery in the workplace.</p> <p>Applicability: These Regulations are applicable in terms of ensuring that the workplace and machinery are safe and used safely during implementation and operation.</p>
Public Health Act, 1969	<p>Description: The Act requires prevention of nuisances and public health hazards such as standing water, pollution of potable water and the disposal of waste water. It also provides for the control of unsanitary and unsafe buildings.</p> <p>Applicability: Any nuisance or condition that is likely to be offensive, dangerous or injurious to health will be removed in accordance with this Act.</p>
Road Traffic Act, 2007	<p>Description: This Act provides for the regulation and control of traffic and transport on public roads.</p> <p>Applicability: Applicable sections of the Act are:</p> <ul style="list-style-type: none"> — Section 73(1) which prohibits the operation on a public road of a vehicle which causes excessive noise. Environmentally this requirement will be applicable to the use of vehicles transporting material to and from the project site which are likely to generate noise that will be transmitted to neighbouring properties as well as those along the transport routes; — Section 73(2) which prohibits the operation on a public road of a vehicle which emits excessive smoke or fumes. Environmentally this requirement will be applicable to the use of vehicles which will cause air pollution if not adequately maintained.

1.1.6 ENERGY SECTOR

TITLE	DESCRIPTION OF LEGISLATION AND PROJECT APPLICABILITY
Electricity Act, 2007	<p>Description: This Act provides for the regulation of the generation, distribution and supply of electricity, the promotion of access to electricity.</p> <p>Applicability:</p>

TITLE	DESCRIPTION OF LEGISLATION AND PROJECT APPLICABILITY
	<ul style="list-style-type: none"> — Section 55(1) which empowers a licensee (which is the holder of a licence granted or deemed to be granted by the Authority under the Energy Regulatory Authority Act, 2007 for the generation, transmission, distribution and supply of electricity) to: <ul style="list-style-type: none"> — place an electric line below ground across any land, and above ground across any land not covered by any buildings; — utilise any land, building, wall or bridge for the support of an electric line; — place any electrical plant on any land not covered by any buildings. — Section 56(1) which empowers a licensee, in carrying out its mandate of supplying electricity, maintaining and protecting infrastructure, to enter upon any land and as far as is reasonably necessary, cut down, burn or clear away from the vicinity thereof, to such extent as may be necessary, any trees, shrubs, hedges, brushwood or grass and any other kind of vegetation. — Section 56(6) which stipulates that in exercise of powers under sections 55, 56, 57, 58 and 59, the licensee shall do as little damage as may be practicable and make reasonable compensation to any interested person for all damage sustained by that person by reason or in consequence of the exercise of those powers. — Section 56(7)(a) which stipulates that compensation shall not be payable in respect of a tree, shrub, hedge, brushwood or grass or any other kind of vegetation cut down, burnt or cleared away by the licensee under this Act, where that tree, shrub, hedge, brushwood, grass or other kind of vegetation was not in existence at the time of the placing of the electric line on account of which the cutting, burning or clearing away was carried out; — Section 56(7)(b) which stipulates that compensation shall not be payable in respect of the removal, demolition or cutting down as the case may be of any building, structure or tree or the taking of any of the other steps where the works are deemed as emergency works; — Section 57 which stipulates that the Energy Regulatory Authority may make an order requiring a licensee to alter the position of any of its electric lines or any pole, strut or other support for an electric line, which has been placed on or in or affixed to any land, building, wall or bridge; — Section 58 which empowers a licensee, for the purpose of constructing, erecting, placing, maintaining, repairing, altering or removing electric lines or apparatus to: <ul style="list-style-type: none"> — open and break up the soil and pavement of any road or bridge; or, — open or break up any sewer, drain or tunnel under any road or bridge. — Section 59(1) which stipulates that a licensee may by notice in writing call upon any authorised person permanently or temporarily to alter at the expense of the licensee the position of any pipe, wire, or drain (except a main drain) controlled by the authorised person which is likely to interfere with the exercise of the powers of the licensee under this Act; — Section 59(2) which stipulates that the authorised person may in like manner call upon the licensee permanently or temporarily to alter at the expense of the authorised person the position of any electric line or apparatus of the licensee which may interfere with the exercise of the lawful powers of that authorised person. <p>These sections of the Act will be applicable to construction of the hydro-power station.</p>
Energy Regulatory Authority Act, 2007	<p>Description: This Act establishes the Energy Regulatory Authority</p> <p>Applicability: Applicable to this project are the Energy Regulatory Authority’s mandates stipulated under Section 5(2) of:</p> <ul style="list-style-type: none"> — promoting the interests of consumers of goods and services provided by regulated entities with respect to prices and charges and the continuity and quality of supply; — promoting and maintain the integrity and sustainability of regulated undertakings and seek to ensure that regulated undertakings, whilst providing efficient service, are able to finance the carrying on of the activities which they are licensed or authorised to carry on;

TITLE	DESCRIPTION OF LEGISLATION AND PROJECT APPLICABILITY
	<ul style="list-style-type: none"> — Promoting economic efficiency in the supply of regulated services. <p>These mandates will be applicable to the supply of electricity generated by the hydro-power station to consumers.</p>
<p>National Energy Policy, 2018</p>	<p>Description:</p> <p>The National Energy Policy is to meet the energy needs of the country in a sustainable manner that contributes to economic growth and well-being of the population. The five principles for guiding and achieving this vision are:</p> <ul style="list-style-type: none"> — Ensuring access to available and affordable energy for all; — Enhancing employment creation; — Ensuring security of energy supply; — Stimulating economic growth and development; — Ensuring environmental and health sustainability. <p>The National Energy Policy comprises policy positions which are grouped into three main categories:</p> <ul style="list-style-type: none"> — Electricity Policy Positions <ul style="list-style-type: none"> — To ensure adequate security of electricity supply; — To ensure efficient and cost effective electricity supply integrating pricing for economic efficiency and financial sector viability; — To support the development of renewable energy resources for a target of 50% of the energy mix in electricity generation; — To plan and support and a comprehensive development of national capacities in renewable energy projects; — To strive to provide all households with access to modern energy by 2022; — To strive to ensure eradication of energy poverty at all levels by 2030; — To ascertain options and ensure establishment of a National Electricity Fund in support of renewable energy and accelerating access to modern energy throughout the country; — To ensure the launch and implementation of a National Energy Efficiency Policy and associates implementation strategy covering all relevant sectors of the economy; — To facilitate the further liberalisation of the electricity market; — To facilitate the access of Independent Power Producers in the electricity market through an effective regulatory framework; — To ensure that appropriate local standards are established for relevant renewable energy and energy efficiency technologies to enhance ease of trade and ensure safe and relevant quality to consumers. — Petroleum Policy Positions <ul style="list-style-type: none"> — To ensure security of petroleum supply through establishment of national strategic petroleum stock storage and enforcement of commercial storage; — To introduce mandatory fuel blending with up to 10% by 2030; — To ensure transparent governance of the petroleum market through an effective regulatory framework; — The Ministry of Natural Resources & Energy will initiate increased coordination, clarify and safe operation in the petroleum sector between Ministries and between the wholesale and retail industry partners; — To ensure continued transparent governance of the Strategic Oil Reserve Fund to finance any increases in the cost of purchasing fuel and promote the use of clean fuels; — To ensure petroleum pricing and taxation in line with cross-cutting policies including environmental obligations and access to energy for all;

TITLE	DESCRIPTION OF LEGISLATION AND PROJECT APPLICABILITY
	<ul style="list-style-type: none"> — To ensure increased availability of Liquefied Petroleum Gas as an alternative modern source of energy for households and industries; — To explore options to include natural gas in Eswatini’s energy mix. <p>— Overall and Cross-cutting Matters</p> <ul style="list-style-type: none"> — To ensure Eswatini adopts and oversees enforcement of clean fuel targets and such as reducing sulphur levels in both petrol and diesel in line with regional and targets and standards; — To promote alleviation of poverty through means of energy provision; — To improve gender equality throughout the energy sector; — To ensure appropriate institutional capacity is in place to manage and develop Eswatini’s energy sector to the benefit for all; — To establish and ensure systematic monitoring of the National Energy Policy, 2018. <p>Applicability: The potential construction and operation of a hydro-power station will contribute towards the achievement of the Electricity Policy Positions as well as the Overall and cross-cutting Matters.</p>

INTERNATIONAL STANDARDS AND GUIDELINES

Project funding is to be provided by the African Development Bank (AfDB), therefore the reference framework for the ESIA principally comprises the national environmental and social standards and regulations and the AfDB Integrated Environmental and Social Assessment (IESIA) Guidelines (AfDB 2009; 2015).

The ESIA will also broadly consider and cross-reference against additional international standards and good practice guidelines as identified in **Table 0-1**. In the case of requirements that conflict with the AfDB IESIA Guidelines, the latter will take precedence.

Table 0-1: International Standards and Good Practice Guidelines

INTERNATIONAL STANDARD / GUIDELINE	DESCRIPTION
PROJECT CATEGORISATION	
AfDB Integrated Environmental and Social Assessment (IESIA) Guidelines (AfDB 2009; 2015)	<p>The AfDB guidelines require Project screening. Projects that are directly funded by AfDB are classified into three categories, depending on the expected severity of the project’s potential beneficial and adverse impacts:</p> <ul style="list-style-type: none"> — Category 1 projects require a full ESIA, including the preparation of an ESMP. These projects are likely to induce important adverse environmental and/or social impacts that are irreversible, or to significantly affect environmental or social components considered sensitive by the Bank or the borrowing country; — Category 2 projects require the development of an ESMP. These projects are likely to have detrimental and site specific environmental and/or social impacts that are less adverse than those of Category 1 projects and that can be minimised by the application of mitigation measures or the incorporation of internationally recognised design criteria and standards — Category 3 projects require no impact assessment. These projects shall involve no adverse physical intervention in the environment and induce no adverse environmental or social impact.

INTERNATIONAL STANDARD / GUIDELINE	DESCRIPTION
World Bank’s Environmental and Social Safeguard Policies - OP/BP 4.01 Environmental Assessment	<p>The purpose of OP 4.01 is to ensure that projects funded by the WB are environmentally feasible and viable and that the decision making is improved through appropriate analysis of actions and their probable environmental impacts (OP 4.01, par. 1). This policy is triggered if a project is likely to have potential (negative) environmental risks and impacts in its zone of influence.</p> <p>The WB undertakes environmental screening to determine the appropriate extent and type of environmental assessment to be conducted. It classifies the proposed projects into categories, depending on the type, location, sensitivity, scale of the projects and the nature and magnitude of their potential environmental impacts.</p> <p>This project is considered to be classified as a category A project. When considered as category A, projects have potential adverse environmental impacts that could be significant on human populations or on environmentally important areas. These impacts may affect an area broader than the sites or facilities subject to physical works. The environmental assessment will examine the project's potential negative and positive environmental impacts and recommend any measures needed to prevent, minimise, mitigate, or compensate any adverse impacts and improve its environmental performance.</p>
Equator Principles - Principle 1: Review and Categorisation	<p>When a project is proposed for financing, the Equator Principles Financial Institution (EPFI) will, as part of its internal social and environmental review and due diligence, categorise such project based on the magnitude of its potential impacts and risks in accordance with the environmental and social screening criteria of the IFC. Using categorisation, the EPFI’s environmental and social due diligence is commensurate with the nature, scale and stage of the Project, and with the level of environmental and social risks and impacts. The categories are:</p> <ul style="list-style-type: none"> — Category A – Projects with potential significant adverse environmental and social risks and/or impacts that are diverse, irreversible or unprecedented; — Category B – Projects with potential limited adverse environmental and social risks and/or impacts that are few in number, generally site-specific, largely reversible and readily addressed through mitigation measures; and — Category C – Projects with minimal or no adverse environmental and social risks and/or impacts.
ENVIRONMENTAL AND SOCIAL ASSESSMENT AND MANAGEMENT	
IFC Performance Standards (PS) (IFC, 2012) - PS1 - Assessment and Management of Environmental and Social Risks and Impacts	<p>PS1 underscores the importance of managing environmental and social performance throughout the life of a project. PS1 requires the client to conduct a process of environmental and social assessment, including stakeholder consultation, and to establish and maintain an Environmental and Social Management System (ESMS), appropriate to the nature and scale of the project and commensurate with the level of its environmental and social risks and impacts.</p>
World Bank’s Environmental and Social Safeguard Policies - OP/BP 4.02 Environmental Action Plans	<p>This OP aims at encouraging and supporting the efforts of borrowing governments to prepare and implement an appropriate Environmental Action Plan (EAP) and to revise it periodically as necessary. Although the Bank may provide advice, responsibility for preparing and implementing the EAPs rests with the government</p>

INTERNATIONAL STANDARD / GUIDELINE	DESCRIPTION
Equator Principles - Principle 2: Environmental and Social Assessment	<p>For all Category A and Category B Projects, the EPFI will require the client to conduct an Assessment process to address, to the EPFI’s satisfaction, the relevant environmental and social risks and impacts of the proposed project (which may include the illustrative list of issues found in Exhibit II). The Assessment Documentation should propose measures to minimise, mitigate, and offset adverse impacts in a manner relevant and appropriate to the nature and scale of the proposed project.</p> <p>The Assessment Documentation will be an adequate, accurate and objective evaluation and presentation of the environmental and social risks and impacts, whether prepared by the client, consultants or external experts. For Category A, and as appropriate, Category B Projects, the Assessment Documentation includes an ESIA. One or more specialised studies may also need to be undertaken.</p> <p>The ESIA must include a comprehensive assessment of the key environmental and social impacts and must comply with national requirements. In addition an EMP will be compiled to outline relevant mitigation and management measures required to minimise the impacts identified.</p>
Equator Principles - Principle 3: Applicable Environmental and Social Standards	<p>The Assessment process should, in the first instance, address compliance with relevant host country laws, regulations and permits that pertain to environmental and social issues. For Projects located in Non-Designated Countries, the Assessment process evaluates compliance with the then applicable IFC PS and WBG EHS Guidelines. As Eswatini is designated as a non-designated country the reference framework for environmental and social assessment is based on the IFC PS.</p>
Equator Principles - Principle 4: Environmental and Social Management System and Equator Principles Action Plan	<p>For all Category A and Category B Projects, the EPFI will require the client to develop or maintain an ESMS. Further, an ESMP will be prepared by the client to address issues raised in the Assessment process and incorporate actions required to comply with the applicable standards. Where the applicable standards are not met to the EPFI’s satisfaction, the client and the EPFI will agree an Equator Principles Action Plan (EPAP). The Equator Principles AP is intended to outline gaps and commitments to meet EPFI requirements in line with the applicable standards. The development of the ESMS is not included in the scope of the ESIA. A formal ESMS will need to be implemented by the DWA.</p>
PUBLIC PARTICIPATION	
AfDB - Stakeholder Consultation and Participation Guidelines	<p>For Category 1 projects, the AfDB guidelines require meaningful consultations during the ESIA. Consultations are required with relevant stakeholders, including potential beneficiaries, affected groups, civil society organisations and local authorities, with the objective of discussing the project’s environmental and social aspects as well as taking public views into account. The guidelines indicate that these consultations should be done in compliance with national legal requirements, as long as they meet AfDB minimum requirements for public consultation, which are summarised below:</p> <ul style="list-style-type: none"> — Consultation should be done as early as possible; — Project and ESIA information should be disclosed in a timely manner and in a form and language accessible to the groups being consulted; — Relevant stakeholders should be consulted during both the scoping phase and the EIS phase;

INTERNATIONAL STANDARD / GUIDELINE	DESCRIPTION
	<ul style="list-style-type: none"> — Contributions from stakeholders should be integrated into the ESIA report and reflected in the proposed mitigation, if applicable; — Stakeholder consultation should be extended from the ESIA into the construction and operational phases.
World Bank’s Environmental and Social Safeguard Policies - BP 17.50 Disclosure Policy	<p>This best practice (BP) supports the decision-making of the WB by allowing the public access to information on the environmental and social aspects of projects. It is a mandatory safeguard policy that has specific requirements for disclosure. It requires that during the project’s design phase, the Project Affected People (PAPs), affected groups and local Non-Government Organisations (NGOs) will be consulted and that the environment and social aspects of the project will be presented. Also, consultations must be undertaken throughout the approval process of the project. The policy also requires that relevant documents be disclosed to PAPs, such as the EIS and Resettlement Action Plan (RAP) and kept in places where individuals can gain access easily</p>
Equator Principles - Principle 5: Stakeholder Engagement	<p>The EPFI will require the client to demonstrate effective Stakeholder Engagement as an ongoing process in a structured and culturally appropriate manner with Affected Communities and, where relevant, Other Stakeholders. For Projects with potentially significant adverse impacts on Affected Communities, the client will conduct an Informed Consultation and Participation process.</p> <p>In order to accomplish this, the appropriate assessment documentation, or non-technical summaries thereof, will be made available to the public by the borrower for a reasonable minimum period in the relevant local language and in a culturally appropriate manner. The borrower will take account of and document the process and results of the consultation, including any actions agreed resulting from the consultation.</p> <p>For projects with adverse social or environmental impacts, disclosure should occur early in the Assessment process and in any event before the project construction commences, and on an ongoing basis</p>
RESETTLEMENT	
AfDB’s Involuntary Resettlement Policy	<p>The AfDB’s Involuntary Resettlement Policy has been developed to cover involuntary displacement and resettlement of people caused by an AfDB financed project and it applies when a project results in relocation or loss of shelter by the persons residing in the project area, assets being lost or livelihoods being affected.</p> <p>The overall goal of the policy is to ensure that when people must be displaced they are treated equitably, and that they share in the benefits of the project that involves their resettlement.</p>

INTERNATIONAL STANDARD / GUIDELINE	DESCRIPTION
	<p>The policy has the following key objectives:</p> <ul style="list-style-type: none"> — To avoid involuntary resettlement where feasible, or minimize resettlement impacts where population displacement is unavoidable, exploring all viable project designs. Particular attention must be given to socio-cultural considerations, such as cultural or religious significance of land, the vulnerability of the affected population, or the availability of in-kind replacement for assets, especially when they have important intangible implications. When a large number of people or a significant portion of the affected population would be subject to relocation or would suffer from impacts that are difficult to quantify and to compensate, the alternative of not going ahead with the project should be given a serious consideration; — To ensure that displaced people receive resettlement assistance, preferably under the project, so that their standards of living, income earning capacity, and production levels are improved; — To provide explicit guidance to AfDB staff and to the borrowers on the conditions that need to be met regarding involuntary resettlement issues in AfDB operations in order to mitigate the negative impacts of displacement and resettlement and establish sustainable economy and society; and — To set up a mechanism for monitoring the performance of involuntary resettlement programs in AfDB operations and remedying problems as they arise so as to safeguard against ill-prepared and poorly implemented resettlement plans.
IFC Performance Standards (IFC, 2012) - PS5 – Land Acquisition and Involuntary Resettlement	<p>PS5 recognises that project-related land acquisition and restrictions on land use can have adverse impacts on communities and persons who use this land. PS5 aims to: avoid or at least minimise involuntary resettlement wherever feasible by exploring alternative project designs; mitigate adverse social and economic impacts from land acquisition by (i) providing compensation for loss of assets and (ii) ensuring that resettlement activities are implemented with appropriate consultation and disclosure; and improve or at least restore the livelihoods, standards of living and living conditions of displaced persons.</p>
World Bank’s Environmental and Social Safeguard Policies - OP/BP 4.12 Involuntary Resettlement	<p>The main objectives of the WB Resettlement Policy (OP 4.12) are to:</p> <ul style="list-style-type: none"> — Avoid or minimise involuntary resettlement, whenever feasible; — Develop resettlement activities as sustainable development programs, providing sufficient investment resources to enable the displaced persons’ share in project benefits; — Meaningfully consult displaced persons and give them opportunities to participate in the planning and implementation of the resettlement programs; and — Assist displaced persons in their efforts to improve their livelihoods and standards of living or at least to restore them, in real terms, to pre-displacement levels or to levels prevailing prior to the beginning of the project’s implementation, whichever is higher <p>This policy is usually applied for projects that require international financing. Annex A (Paragraphs 17-31), describes the scope (level of detail) and the elements that a resettlement plan should include. These include objectives, potential impacts, socioeconomic studies, legal and institutional framework, eligibility, valuation and compensation of losses, resettlement measures, relocation planning, community participation, grievance management procedures, implementation schedule, costs and budgets, and monitoring and evaluation.</p>

INTERNATIONAL STANDARD / GUIDELINE	DESCRIPTION
	<p>WB OP 4.12.(6a) requires that the resettlement plan include measures to ensure that displaced persons are (i) informed about their options and rights, (ii) consulted and offered choices among technically and economically feasible resettlement alternatives, and (iii) provided prompt and effective compensation of full resettlement costs.</p>
	<p>WB OP 4.12 (8) requires that particular attention should be placed to the needs of vulnerable groups among those displaced such as: those below the poverty line, landless, elderly, women and children, indigenous populations and ethnic minorities.</p>
	<p>WB.OP 4.12 (13a) stipulates that any displaced persons and their communities and any host communities receiving them should be provided with timely and relevant information. They also should be consulted on resettlement options and offered opportunities to participate in planning, implementing and monitoring of the resettlement.</p>
	<p>WB OP 4.12 (12a) states that payment of cash compensation for lost assets may be appropriate where livelihoods are land-based but only when the land taken for the project is a small fraction (less than 20%) of the affected asset and the residual is economically viable.</p>
	<p>WB OP 4.12 (6b&c) state that in case of physical relocation, displaced persons should be (i) provided assistance (such as moving allowances) during relocation; and (ii) provided with residential housing, or housing sites, and, if required, agricultural sites for which a combination of productive potential, locational advantages, and other factors is at least equivalent to the advantages of the old site.</p>
	<p>In addition, displaced persons should be offered support after displacement, for a transition period, based on a reasonable estimate of the time likely to be needed to restore their livelihood and standards of living. This development assistance comes in addition to compensation measures such as land preparation, credit facilities, training, or job opportunities.</p>
	<p>WB OP 4.12 (13a) requires that appropriate and accessible grievance mechanisms be established to sort out any issues arising.</p>
POLLUTION PREVENTION	
<p>IFC Performance Standards (IFC, 2012) - PS3 – Resource Efficiency and Pollution Prevention</p>	<p>PS3 recognises that economic activity and urbanisation often generate increased levels of pollution to air, water, and land, and consume finite resources in a manner that may threaten people and the environment at the local, regional, and global levels. PS3 aims to: avoid or minimise adverse impacts on human health and the environment by avoiding or minimising pollution from project activities; promote more sustainable use of resources including energy and water; and reduce project-related emissions that contribute to climate change.</p>
BIODIVERSITY	
<p>IFC Performance Standards (IFC, 2012) - PS6 – Biodiversity Conservation and Sustainable Management of Living Natural Resources</p>	<p>PS6 encourages sustainable development while recognising that the protection and conservation of biodiversity and sustainably managing living natural resources are fundamental to sustainable development. PS6 aims to: protect and conserve biodiversity; maintain the benefits from ecosystem services; and promote the sustainable management and use of natural resources through practices that integrate conservation and development.</p>

INTERNATIONAL STANDARD / GUIDELINE	DESCRIPTION
World Bank’s Environmental and Social Safeguard Policies - OP/BP 4.04 Natural Habitats	<p>OP 4.04 is a conservation policy designed to protect natural habitats and their biodiversity and to ensure the sustainability of services and products that natural habitats supply to human societies. In principle, the WB will refuse to finance project’s that may be perceived as causing significant damages in Critical Natural Habitats (CNHs). Its objective is to circumvent the conversion or degradation of non-critical natural habitats, as much as possible. These impacts should be avoided by reconfiguring the project, even in its size or its extension, and/or by implementing acceptable mitigation measures, such as the establishment of protected areas or the strengthening of effective protection of CNHs. Should the project involve the significant conversion or degradation of natural habitats that are not considered as critical, and if there are no alternative solutions for the project and its location, and if the complete analysis clearly shows that the project’s overall benefits are significantly higher than the environmental costs, then the WB can finance the project if the project includes appropriate mitigation measures.</p> <p>The WB defines natural habitats as land or water zones where biological communities sheltered by ecosystems are in majority made of indigenous plant and animal species, and where human activity has not fundamentally modified its zone’s main ecological functions.</p> <p>CNHs are defined as:</p> <ul style="list-style-type: none"> — existing protected areas and areas officially proposed by governments to be classified amongst ”protected areas“ e.g. reserves that meet the criteria of the International Union for Conservation of Nature (IUCN) classifications; — areas recognised as protected by traditional local communities — sites maintaining vital conditions for the viability of such protected areas
World Bank’s Environmental and Social Safeguard Policies - OP/BP 4.36 Forests	<p>OP 4.36 is about forest protection. The major objectives of the policy are:</p> <ul style="list-style-type: none"> — sustainable management of forests — conservation of wet forest zones — communities’ rights respected in their traditional use of forest zones in a sustainable manner <p>The WB does not finance projects that would involve significant conversion or degradation of critical sections of forests or essential (critical) natural habitats attached to them. Should the project involve the significant conversion or degradation of natural forests or associated natural habitats that are not considered as critical, and if there are no alternative solutions for the project and its location, and if the complete analysis clearly shows that the project’s overall benefits are significantly higher than the environmental costs, then the WB can finance the project on condition that it includes appropriate mitigation measures. OP 4.36 is triggered by the project as some forest habitats are located along the projected transmission line route</p>
SOCIO-ECONOMIC	

INTERNATIONAL STANDARD / GUIDELINE	DESCRIPTION
IFC Performance Standards (IFC, 2012) - PS2 - Labour and Working Conditions	PS2 recognises that the pursuit of economic growth through employment creation and income generation should be accompanied by protection of the fundamental rights of workers. PS2 aims to: establish, maintain and improve the worker-management relationship; promote the equal opportunity of workers, and compliance with national labour and employment laws; protect the workforce by addressing child labour and forced labour; protect vulnerable workers; and, promote safe and healthy working conditions and the health of workers.
IFC Performance Standards (IFC, 2012) - PS4 – Community Health, Safety and Security	PS4 recognises that project activities, equipment, and infrastructure can increase community exposure to risks and impacts. PS4 aims to: anticipate and avoid adverse impacts on the health and safety of the affected community during the project life cycle; and ensure that the safeguarding of personnel and property avoids or minimises risks to the community’s safety and security.
IFC Performance Standards (IFC, 2012) - PS7 - Indigenous Peoples	PS7 aims to: ensure that the development process fosters full respect for Indigenous Peoples; anticipate and avoid, minimise or compensate adverse impacts of projects on Indigenous Peoples and provide opportunities for development benefits; establish and maintain an ongoing relationship with affected Indigenous Peoples throughout the life of the project; ensure free, prior and informed consent of Indigenous Peoples; and respect and preserve their culture, knowledge and practices.
IFC Performance Standards (IFC, 2012) - PS8 - Cultural Heritage	PS8 recognises the importance of cultural heritage for current and future generations. PS8 aims to: protect cultural heritage from the adverse impacts of project activities; support its preservation; and promote equitable sharing of benefits from cultural heritage.
World Bank’s Environmental and Social Safeguard Policies - OP/BP 4.11 Physical Cultural Resources	This policy assists in preserving physical cultural resources (PCRs) and helps reduce chances of their destruction and/or damage. The policy considers PCRs to be resources of archaeological, paleontological, historical, architectural, religious (including graveyards and burial sites), aesthetic or other cultural significance.
	According to this policy, an investigation and inventory of PCRs likely to be affected by the project have to be conducted. The investigation should document the significance of such PCRs, and assess the nature and extent of potential impacts on them. Since many cultural resources are generally not well documented or protected by law, public consultations are an important mean of identifying PCRs. Such consultations include meetings with project-affected groups, relevant government and non-governmental organizations.
	If PCRs are found during an inventory, a management plan must be prepared. This management plan must include measures to avoid or mitigate any adverse impacts on PCRs, provisions for managing chance findings, any necessary measures for strengthening institutional capacity for the management of PCRs and monitoring systems to track the progress of these activities.
	Finally, whether or not a PCR is found at the inventory phase, provisions for managing chance finds must be implemented to ensure that PCRs that may be discovered be properly handled
World Bank’s Environmental and Social Safeguard Policies - OP/BP 4.20 Gender and Development	The objective of the WB's gender and development policy is to reduce poverty and enhance economic growth, human well-being, and development effectiveness by addressing the gender disparities and inequalities that are barriers to development, and by formulating and implementing gender and development goals

INTERNATIONAL STANDARD / GUIDELINE	DESCRIPTION
Equator Principles - Principle 6: Grievance Mechanism	The borrower will inform the Affected Communities about the mechanism in the course of its community engagement process and ensure that the mechanism addresses concerns promptly and transparently, in a culturally appropriate manner, and is readily accessible to all segments of the affected communities

INTERNATIONAL CONVENTIONS, PROTOCOLS AND AGREEMENTS

In addition to national policies and laws, there are also statutory provisions with broad requirements for conservation and protection of certain species and habitats and prevention of pollution emanating from international conventions and agreements. Eswatini is a signatory to a number of international conventions on environmental protection and conservation as shown in **Table 0-1**, and those relevant to this project described in the subsequent sections.

Table 0-1: International Agreements

INTERNATIONAL AGREEMENTS

Tripartite Interim Agreement between the Republic of Mozambique and the Republic of South Africa and the Kingdom of Swaziland for Co-operation on the protection and sustainable utilisation of the water resources of the Incomati and Maputo Watercourses	<p>Description: The purpose of the agreement is the:</p> <ul style="list-style-type: none"> a) sustainable utilisation principle; b) equitable and reasonable utilisation and participation principle; c) prevention principle; and d) co-operation principle. <p>Applicability: The Lusutfu River flows into the Maputo River and the Tripartite Interim Agreement is applicable.</p>
Protocol on Shared Watercourses in the Southern Africa Development Community (SADC)	<p>Description: The overall objective of this Protocol is to foster closer cooperation for judicious, sustainable and co-ordinated management, protection and utilisation of shared watercourses and advance the SADC agenda of regional integration and poverty alleviation. In order to achieve this objective, this Protocol seeks to:</p> <ul style="list-style-type: none"> a) promote and facilitate the establishment of shared watercourse agreements and Shared Watercourse Institutions for the management of shared watercourses b) advance the sustainable, equitable and reasonable utilisation of the shared watercourses c) promote a co-ordinated and integrated environmentally sound development and management of shared watercourses d) promote the harmonisation and monitoring of legislation and policies for planning, development, conservation, protection of shared watercourses, and allocation of the resources thereof <p>Applicability: Eswatini, South Africa and Mozambique share the Maputo River and this Protocol is applicable.</p>

APPENDIX

H IMPACT ASSESSMENT





CONSTRUCTION PHASE

BIOPHYSICAL

Aspect (Pre-defined) <i>Defn: The result of an activity, which causes the impact</i>	Impact Summary	Stage	Character	Pre-Mitigation							Post-Mitigation						
				(M+)	E+	R+	D)x	P=	S	Rating	(M+)	E+	R+	D)x	P=	S	Rating
Construction and foundations of dam wall and quarry	Blasting and large foundations constructed into the underlying geology and establishment of a quarry to extract material will remove soil cover and expose underlying rock.	Construction	Negative	2	2	5	5	5	70	N3	2	1	5	5	5	65	N3
				N3 - High							N3 - High						
Construction and foundations of dam wall and quarry	Soils in the project area (dam wall site, diversion channel, quarry, access roads and railway line) could be exposed to increased soil erosion due to excavation and destabilisation resulting in potential loss of topsoil; and increased sedimentation. Secondary impacts to downstream ecosystems may occur.	Construction	Negative	3	2	3	4	4	48	N2	2	2	3	2	3	27	N1
				N2 - Medium							N1 - Low						
Construction and foundations of dam wall and quarry	Trapping of sediment will prevent the normal sediment load distribution downstream potentially resulting in a deeper and narrower channel and other related morphological impacts. Clear water has the capacity to carry more sediment than turbid water. The release of clear water is therefore likely to increase erosion and collapse of river banks downstream of the dam.	Construction	Negative	3	3	3	4	4	52	N2	2	2	3	3	4	40	N2
				N2 - Medium							N2 - Medium						
Construction and foundations of dam wall and quarry	Water abstraction for construction could temporarily decrease the natural volume of water within the River.	Construction	Negative	3	3	3	2	3	33	N2	2	3	3	2	3	30	N1
				N2 - Medium							N1 - Low						
Construction and foundations of dam wall and quarry	Change in flow (reduced quantity) downstream of a dam affecting downstream ecological functioning and disruption of supply to users.	Construction	Negative	5	3	5	5	5	90	N3	5	3	5	5	3	54	N2
				N3 - High							N2 - Medium						
Construction and foundations of dam wall and quarry	Rainfall on eroded / unconsolidated sediment has the potential to result in an indirect impact as runoff with higher sediment load enters surrounding drainage lines and streams leading to sedimentation of watercourses and reduced water quality. Secondary impacts to downstream ecosystems functioning may occur.	Construction	Negative	3	3	3	2	5	55	N2	2	2	3	2	5	45	N2
				N2 - Medium							N2 - Medium						
Accidental Release / spills of small quantities of potential contaminants into soils, water bodies, and groundwater	Runoff creates a preferential pathway and exposure of contaminants into the subsurface (groundwater) and downstream watercourses leading to a deterioration in water quality and secondary health impacts on aquatic ecosystems and water users (community).	Construction	Negative	2	1	1	2	3	18	N1	2	1	1	2	2	12	N1
				N1 - Low							N1 - Low						
Inundation of the reservoir area	The incorrect siting of chemical toilets and loss of containment could lead to pollution of the receiving environment (soil, groundwater and surface water), leading to secondary health impacts on downstream aquatic ecosystems and water users (surface and ground), and maintenance of livelihoods.	Construction	Negative	3	3	3	2	5	55	N2	1	1	3	2	4	28	N1
				N2 - Medium							N1 - Low						

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Aspect (Pre-defined) <i>Defn: The result of an activity, which causes the impact</i>	Impact Summary	Stage	Character	Pre-Mitigation							Post-Mitigation						
				(M+)	E+	R+	D)x	P=	S	Rating	(M+)	E+	R+	D)x	P=	S	Rating
Construction and foundations of dam wall and quarry	Direct alteration of the instream and riparian habitats resulting in the permanent modification of the habitats at a local scale.	Construction	Negative	3	2	1	5	3	33	N2	3	2	1	5	2	22	N1
				N2 - Medium							N1 - Low						
Construction and foundations of dam wall and quarry	Temporary loss of riverine habitat and affecting <i>Chiloglanis emarginatus</i> (IUCN, 2019) – a Vulnerable species.	Construction	Negative	3	1	1	3	3	24	N1	3	1	1	3	2	16	N1
				N1 - Low							N1 - Low						
Construction and foundations of dam wall and quarry	Construction activities instream will present an immediate migration barrier with potential to fragment the populations of biota in the watercourse.	Construction	Negative	5	3	5	5	4	72	N3	5	3	5	5	3	54	N2
				N3 - High							N2 - Medium						
Inundation of the reservoir area	Inundation of approximately 19.7 ha of instream and 55.9 ha of riparian habitat will result in disruption to river continuum through the obstruction of the longitudinal exchanges between the regions up and downstream of the dam wall leading to alteration of the ecological structure and function of riverine ecosystems (reproductive and vegetative functions).	Operational	Negative	5	2	3	5	5	75	N3	5	2	3	5	5	75	N3
				N3 - High							N3 - High						
Aspect (Pre-defined) <i>Defn: The result of an activity, which causes the impact</i>	Impact Summary	Stage	Character	Pre-Mitigation							Post-Mitigation						
				(M+)	E+	R+	D)x	P=	S	Rating	(M+)	E+	R+	D)x	P=	S	Rating
Construction and foundations of dam wall and quarry	Spread and/or establishment of alien and/or invasive species, especially in areas that are cleared.	Construction	Negative	4	3	3	4	4	56	N2	2	1	3	2	2	16	N1
				N2 - Medium							N1 - Low						
Construction of the linear infrastructure	Destruction, further loss and fragmentation of the vegetation community.	Construction	Negative	4	3	5	5	4	68	N3	4	2	3	5	4	56	N2
				N3 - High							N2 - Medium						
Increased vehicular activities along roadways and in public areas	Displacement, direct mortalities and disturbance of faunal community (including threatened species) due to habitat loss and disturbances (such as site clearance, dust, light, vibrations, poaching and noise)	Construction	Negative	4	3	3	3	4	52	N2	3	2	3	2	2	20	N1
				N2 - Medium							N1 - Low						
Infringement by humans into natural areas	Infringement by humans into the remaining natural areas, with associated impacts such as poaching, litter and introduction of diseases and feral species such as cats and dogs.	Construction	Negative	4	3	3	4	4	56	N2	3	2	3	2	2	20	N1
				N2 - Medium							N1 - Low						

Aspect (Pre-defined) Defn: The result of an activity, which causes the impact	Impact Summary	Stage	Character	Pre-Mitigation							Post-Mitigation						
				(M+)	E+	R+	D)x	P=	S	Rating	(M+)	E+	R+	D)x	P=	S	Rating
Inundation of the reservoir area	The inundation of the reservoir area will result in an alteration of ecosystem services	Operation	Negative	3	2	3	5	3	39	N2	3	2	3	5	3	39	N2
				N2 - Medium							N2 - Medium						
Inundation of the reservoir area	The inundation of the Nondvo Dam basin will result in the loss of the channelled valley bottom wetlands, unchannelled valley bottom wetlands and hillslope seeps. The loss of the wetland areas will result in the removal of the wetland sink	Construction	Negative	3	5	3	5	4	64	N3	3	5	3	5	4	64	N3
				N3 - High							N3 - High						
Aspect (Pre-defined) Defn: The result of an activity, which causes the impact	Impact Summary	Stage	Character	Pre-Mitigation							Post-Mitigation						
				(M+)	E+	R+	D)x	P=	S	Rating	(M+)	E+	R+	D)x	P=	S	Rating
Generation of general waste	Presence of workforce and absence of adequate waste receptacles results in increased litter potentially leading to secondary impacts on terrestrial and aquatic ecology.	Construction	Negative	3	3	3	3	4	48	N2	2	1	3	2	3	24	N1
				N2 - Medium							N1 - Low						
Generation of general waste	Spoil material unsuitable for reuse as bedding and backfill material has the potential to disrupt land use and habitats if not managed appropriately.	Construction	Negative	3	2	3	3	4	44	N2	2	2	3	2	3	27	N1
				N2 - Medium							N1 - Low						
Generation of general waste	The lack of inappropriate waste separation has the potential to result in unnecessary waste to landfill.	Construction	Negative	2	2	3	3	4	40	N2	2	1	1	1	3	15	N1
				N2 - Medium							N1 - Low						
Generation of hazardous waste (oil, greases, and other chemicals and associated contaminated materials)	The inappropriate management and disposal of hazardous waste could lead to contamination of soil, groundwater and surface water; and poisoning of fauna.	Construction	Negative	3	2	3	3	3	33	N2	2	1	1	2	2	12	N1
				N2 - Medium							N1 - Low						
Generation of hazardous waste (oil, greases, and other chemicals and associated contaminated materials)	Lack of waste minimisation measures will lead to regional impacts and increased project construction costs as registered hazardous waste collectors are located outside the project area.	Construction	Negative	2	2	3	3	4	40	N2	2	1	1	1	3	15	N1
				N2 - Medium							N1 - Low						
Aspect (Pre-defined) Defn: The result of an activity, which causes the impact	Impact Summary	Stage	Character	Pre-Mitigation							Post-Mitigation						
				(M+)	E+	R+	D)x	P=	S	Rating	(M+)	E+	R+	D)x	P=	S	Rating
Release of airborne pollutants emissions to atmosphere (vehicular emissions and dust)	Increased dust emissions will result in reduced ambient air quality resulting primarily in a nuisance factor to nearby receptors (e.g. onsite workers and residents)	Construction	Negative	2	2	3	2	3	27	N1	2	2	3	2	3	27	N1
				N1 - Low							N1 - Low						
Release of airborne pollutants emissions to atmosphere (vehicular emissions and dust)	Increased concentration of pollutants (gaseous emissions) will result in reduced ambient air quality	Construction	Negative	1	2	3	2	3	24	N1	1	2	3	2	3	24	N1
				N1 - Low							N1 - Low						

Aspect (Pre-defined) Defn: The result of an activity, which causes the impact	Impact Summary	Stage	Character	Pre-Mitigation							Post-Mitigation						
				(M)	E+	R+	D)x	P=	S	Rating	(M)	E+	R+	D)x	P=	S	Rating
Construction and foundations of dam wall and quarry	The construction of dam infrastructure is noted to emit greenhouse gases, including emissions associated with project construction, reservoir emissions as well as spillway emissions, amongst others	Construction	Negative	2	2	3	3	4	40	N2	2	2	3	3	4	40	N2
				N2 - Medium							N2 - Medium						
Inundation of the reservoir area	The inundation of the Nondvo Dam basin will result in the loss of the channelled valley bottom wetlands, unchannelled valley bottom wetlands and hillslope seeps. The loss of the wetland areas will result in the removal of the wetland sink	Construction	Negative	3	5	3	5	4	64	N3	3	5	3	5	4	64	N3
				N3 - High							N3 - High						

SOCIO ECONOMIC

Aspect	Impact Summary	Stage	Character	Pre-Mitigation							Post-Mitigation						
				(M)	E+	R+	D)x	P=	S	Rating	(M)	E+	R+	D)x	P=	S	Rating
Physical Displacement and Resettlement of Affected Households	The Project will result in physical displacement and relocation of approximately 210 households in Mantabeni and Siphocosini below the reservoir Max. DL.	Construction	Negative	5	4	5	5	5	95	N3	3	4	3	5	4	60	N2
				N3 - High							N2 - Medium						
Economic Displacement of Affected Households	Loss of access to agricultural land for crop cultivation and livestock grazing, as well as natural resources will affect PAPs ability to produce food and cash crops/ produce.	Construction	Negative	4	3	3	4	5	70	N3	3	2	3	4	4	48	N2
				N3 - High							N2 - Medium						
Loss of plant resources used by the community	Loss of vegetation will result from site clearance in the infrastructure footprint during construction as well as due to flooding during inundation of reservoir area.	Construction	Negative	3	3	5	5	4	64	N3	2	2	3	3	2	20	N1
				N3 - High							N1 - Low						
Host Community Impacts	Introduction of the relocated PAPs into the host community will result in increased pressure on land, infrastructure, goods, and services. In severe cases these may result in conflict.	Construction	Negative	3	2	3	4	4	48	N2	3	2	1	2	2	16	N1
				N2 - Medium							N1 - Low						

Aspect	Impact Summary	Pre-Mitigation							Post-Mitigation						
		(M+)	E+	R+	D)x	P=	S	Rating	(M+)	E+	R+	D)x	P=	S	Rating
Increased Cost of Living and Debt Generation	Increased demand for goods and services is likely to result in increased prices. Simultaneously, however, local people will be able to sell their goods / services at higher prices, thus potentially generating more income. Increased travelling distance around the reservoir will increase the cost of travel around the dam to reach important public services such as clinics, trading posts, schools and places of worship.	4	3	5	3	4	60	N2	2	2	1	2	3	21	N1
		N2 - Medium							N1 - Low						
Exacerbation of Anti-Social Behaviour due to in migration (Influx of job seekers)	Expectations regarding possible employment opportunities may result in the area surrounding the site experiencing an influx of job seekers. Migrants will bring with them differing cultures, religious beliefs, norms and values; they influence young people to change in a manner that may not be accepted by the more conservative/ traditional sector of the population. Resulting increased prevalence of Sexually Transmitted Infections (STIs) and HIV/AIDS as well as crime.	4	3	5	5	4	68	N3	3	3	3	4	3	39	N2
		N3 - High							N2 - Medium						
Disruption to Family and Community Structures	Employment opportunities may inadvertently cause a shortage of available farming skills and family support networks during the construction phase. Additionally people employed in the construction work may aim to secure further work in the construction sector elsewhere, with their newly acquired skills and experience may be required, leading to a long term absence from family and disruption to family setting and social structures and improved economic networks.	3	3	5	4	4	60	N2	3	3	3	3	4	48	N2
		N2 - Medium							N2 - Medium						
Increased pressure on social infrastructure and services	The Project area has one clinic, primary school and high school and is regarded as semi-rural. The possible influx of job seekers and additional contractor's workforce may add more stress on the existing resources.	3	3	5	4	4	60	N2	3	3	3	3	4	48	N2
		N2 - Medium							N2 - Medium						

Aspect	Impact Summary	Stage	Character	Pre-Mitigation							Post-Mitigation						
				(M+)	E+	R+	D)x	P=	S	Rating	(M+)	E+	R+	D)x	P=	S	Rating
Demand on local utilities - Energy	Additional power requirements for construction purposes and services or facilities in the various housing, camp and work areas is likely to place additional pressure on existing electricity supply.	Construction	Negative	4	2	1	2	3	27	N1	3	2	1	2	2	16	N1
		N1 - Low							N1 - Low								
Demand on local utilities - Water	Additional water requirements for construction purposes and services or facilities in the various housing, camps and work areas is likely to place additional pressure on existing water supply.	Construction	Negative	4	2	1	2	3	27	N1	3	2	1	2	2	16	N1
		N1 - Low							N1 - Low								

Aspect	Impact Summary	Pre-Mitigation							Post-Mitigation						
		(M+)	E+	R+	D)x	P=	S	Rating	(M+)	E+	R+	D)x	P=	S	Rating
Disturbance from increased nuisance factors (Noise, Dust, Vibrations)	Construction activities will generate uncharacteristic disturbances resulting in a range of nuisance factors (notably increased levels of noise, decreased air quality and vibrations). Damage to households structures from heavy traffic and rock fall from the blasting operations.	4	2	1	2	5	45	N2	3	2	1	2	2	16	N1
		N2 - Medium							N1 - Low						

Aspect	Impact Summary	Pre-Mitigation							Post-Mitigation						
		(M+)	E+	R+	D)x	P=	S	Rating	(M+)	E+	R+	D)x	P=	S	Rating
Increased safety risks to people and animals	A number of hazards threaten the public safety and security during the construction phase, including increased traffic movement, handling of hazardous chemicals, rock blasting during quarry mining.	5	2	5	5	3	51	N2	3	2	3	2	3	30	N1
		N2 - Medium							N1 - Low						

Aspect	Impact Summary	Stage	Character	Pre-Mitigation							Post-Mitigation						
				(M)	E+	R+	D x	P=	S	Rating	(M)	E+	R+	D x	P=	S	Rating
Increased safety risks to people and animals	The operation of earthmoving equipment and construction vehicles will cause hazards which will result in accidents leading to injuries and fatalities in the workplace.	Construction	Negative	5	1	5	5	4	64	N3	2	1	1	3	2	14	N1
				N3 - High							N1 - Low						
Increased safety risks to people and animals	Working in close proximity will expose employees to drowning hazards, such as when walking or driving on unstable surfaces along the water's edge, sudden flooding of the worksite due to heavy downpour, employees bathing in nearby pools during lunch break or after work. This risk of drowning is identified based on recorded incidents in the community.	Construction	Negative	4	1	5	5	3	45	N2	1	1	1	1	2	8	N1
				N2 - Medium							N1 - Low						
Increased safety risks to people and animals	Skin contact with wet concrete and other chemicals such as chemical stabilizers and waterproofing agents, petrol and diesel will cause irritation and long term exposure will cause dermatitis.	Construction	Negative	3	1	1	4	4	36	N2	1	1	1	1	2	8	N1
				N2 - Medium							N1 - Low						
Increased safety risks to people and animals	Workplace noise will cause noise-induced hearing loss (a recognized illness) while long term exposure to dust will cause or exacerbate pre-existing respiratory conditions.	Construction	Negative	5	1	5	5	5	80	N3	2	1	5	5	2	26	N1
				N3 - High							N1 - Low						
Increased safety risks to people and animals	Inclement weather such as persistent rain, extreme cold, extreme heat will cause shock to the body, triggering conditions such as pneumonia in the case of wet and cold, and heat stroke in the case of heat.	Construction	Negative	3	1	1	3	4	32	N2	1	1	1	1	2	8	N1
				N2 - Medium							N1 - Low						
Increased safety risks to people and animals	Large numbers of employees working in close proximity to each other and sharing hand tools will increase the likelihood of the spread of COVID-19, exacerbated by the likelihood of multiple employees living in shared accommodation both at the workers' camp and in the community. This will be further exacerbated by promiscuity amongst employees who will thus spread both COVID-19 and HIV amongst the workforce and throughout the community.	Construction	Negative	5	5	3	4	4	68	N3	2	2	3	4	3	33	N2
				N3 - High							N2 - Medium						

Aspect	Impact Summary	Stage	Character	Pre-Mitigation							Post-Mitigation						
				(M+)	E+	R+	D x	P=	S	Rating	(M+)	E+	R+	D x	P=	S	Rating
Degradation of scenery of near-pristine areas / built environment	Unplanned construction of resettlement housing in host community may lead to degradation of scenery into near-pristine areas and of the built environment by increased housing density.	Construction	Negative	3	2	5	5	3	45	N2	1	2	1	5	2	18	N1
				N2 - Medium							N1 - Low						
Change in sense of place and landscape characteristics	Construction activities will introduce new machinery and structures into the landscape. Construction vehicles, dust and equipment will have a visual impact on viewers and general visibility (dirtiness of the air) within close proximity to the site.	Construction	Negative	2	2	1	2	5	35	N2	2	2	1	2	3	21	N1
				N2 - Medium							N1 - Low						

Aspect	Impact Summary	Stage	Character	Pre-Mitigation						Post-Mitigation							
				(M+	E+	R+	D)x	P=	S	Rating	(M+	E+	R+	D)x	P=	S	Rating
Disturbance of archaeological/ heritage sites by project activities	Rock Artsite Masibekela refuge cave	Construction	Negative	1	1	5	5	2	24	N1	1	1	1	1	1	5	N1
				N1 - Low						N1 - Low							
Disturbance of archaeological/ heritage sites by project activities	Graves of Chiefs and their relations	Construction	Negative	1	1	5	5	2	24	N1	1	1	1	1	5	N1	
				N1 - Low						N1 - Low							
Loss of archaeological/ heritage sites by inundation	Graves of community members	Construction	Negative	5	2	4	2	5	65	N3	3	2	3	2	3	30	N1
				N3 - High						N1 - Low							
Potential unearthing / discovery (i.e. chance find) of archaeological/ heritage sites	Graves of Chiefs and their relations. Graves of community members	Construction	Positive	1	1	5	1	2	16	P1	1	5	1	1	3	24	P1
				P1 - Low						P1 - Low							
Potential unearthing / discovery (i.e. chance find) of archaeological/ heritage sites	Rock Artsite Masibekela refuge cave	Construction	Positive	1	1	5	1	2	16	P1	1	1	1	1	4	P1	
				P1 - Low						P1 - Low							
Damage and loss of indigenous vegetation / wildlife.	Damage and loss of indigenous vegetation. Loss of wildlife	Construction	Negative	4	2	3	5	5	70	N3	2	2	1	5	3	30	N1
				N3 - High						N1 - Low							
Disturbance by human activity.	Degradation of scenery by encroachment of houses into near-pristine areas and housing density	Construction	Negative	2	5	5	2	3	42	N2	1	2	1	1	2	10	N1
				N2 - Medium						N1 - Low							
Conflict	Conflict in perceptions of value and thus conflict in approaches to handling heritage resources, leading to delays or obstacles to project implementation.	Construction	Negative	5	5	5	3	4	72	N3	1	2	1	1	2	10	N1
				N3 - High						N1 - Low							

OPERATIONAL

BIOPHYSICAL

Aspect (Pre-defined) <i>Defn: The result of an activity, which causes the impact.</i>	Impact Summary	Stage	Character	Pre-Mitigation						Post-Mitigation							
				(M+	E+	R+	D)x	P=	S	Rating	(M+	E+	R+	D)x	P=	S	Rating
Inundation of the reservoir area	Areas of sparse land cover will leave the soil vulnerable to the erosive influences of wind and water resulting in possible erosion and sedimentation.	Operational	Negative	3	2	3	4	4	48	N2	2	1	3	3	3	27	N1
				N2 - Medium						N1 - Low							
Water Irrigation	During the operational phase water for irrigation of 800 ha of agricultural land will be made available.	Operational	Positive	3	2	3	4	3	36	P2	4	3	3	4	4	56	P2
				P2 - Medium						P2 - Medium							
Inundation of the reservoir area	Sediment trapping will prevent normal sediment load distribution downstream of the dam site. A major impact on the downstream river channel could be to make it deeper and narrower.	Operational	Negative	3	3	3	4	4	52	N2	2	2	3	3	4	40	N2
				N2 - Medium						N2 - Medium							

Aspect (Pre-defined) <i>Defn: The result of an activity, which causes the impact</i>	Impact Summary	Stage	Character	Pre-Mitigation							Post-Mitigation							
				(M+)	E+	R+	D)x	P=	S	Rating	(M+)	E+	R+	D)x	P=	S	Rating	
Inundation of the reservoir area	Operation of the Nondvo Dam will result in changes to the river flow regime and ecosystems: — Seasonal variation impacting aquatic and riparian systems downstream. — Loss of turbulent flow reducing dissolved oxygen concentrations; — Increase of turbulent flow resulting in oxygen super-saturation; — Increased water loss rate due to increased evaporation; — Increased recharge of the underlying aquifer through infiltration; and — Changes in velocity and volumes of flow resulting in changes to natural shape of the streams.	Operational	Negative	3	3	3	4	4	4	52	N2	2	2	3	3	4	40	N2
				N2 - Medium							N2 - Medium							
Inundation of the reservoir area	Initial inundation of the reservoir will increase in concentrations of nutrients and organic matter due to decomposition of inundated vegetation and possible mobilisation of nutrients from previous agricultural activities. This is likely to alter trophic conditions and biodiversity in the river downstream during the first few years (i.e. the period of maturation).	Operational	Negative	4	3	3	4	4	4	56	N2	2	2	3	3	4	40	N2
				N2 - Medium							N2 - Medium							
Inundation of the reservoir area	Dam inundation alters the amount of sediment production, retention and transportation in the system.	Operational	Negative	3	3	3	4	5	5	65	N3	2	2	3	2	5	45	N2
				N3 - High							N2 - Medium							
Dam wall failure	Flow and velocity of water during dam failure and flooding has potential to result in loss of households and social assets downstream.	Operational	Negative	4	3	3	3	3	3	39	N2	4	3	3	3	1	13	N1
				N2 - Medium							N1 - Low							
Flooding	Major effects of flooding include the creation of bars, pools and rapids which then influence the morphology of the river.	Operational	Negative	3	3	3	4	4	4	52	N2	2	2	3	3	3	30	N1
				N2 - Medium							N1 - Low							
Reduced water flow in the Lushushwana River downstream of the dam	Change in flow (reduced quantity) downstream of a dam affecting downstream ecological functioning and disruption of supply to users.	Operational	Negative	3	3	3	4	5	5	65	N3	2	2	3	2	5	45	N2
				N3 - High							N2 - Medium							

Aspect (Pre-defined) <i>Defn: The result of an activity, which causes the impact</i>	Impact Summary	Stage	Character	Pre-Mitigation							Post-Mitigation						
				(M+)	E+	R+	D)x	P=	S	Rating	(M+)	E+	R+	D)x	P=	S	Rating
Inundation of the reservoir area	Inundation of approximately 19.7 ha of instream and 55.9 ha of riparian habitat will result in disruption to river continuum through the obstruction of the longitudinal exchanges between the regions up and downstream of the dam wall leading to alteration of the ecological structure and function of riverine ecosystems (reproductive and vegetative functions).	Operational	Negative	5	2	3	5	5	75	N3	5	2	3	5	5	75	N3
				N3 - High							N3 - High						
Inundation of the reservoir area	Habitat modifications will potentially have an immediate impact on biota with preferences to lotic habitats such as <i>Chiloglanis</i> , <i>Labeobarbus</i> and <i>Platycephalus caligata</i> (i.e. loss) and proliferation of taxa adapted to lentic conditions including alien invasive species <i>Micropterus salmoides</i> .	Operational	Negative	2	2	1	5	4	40	N2	2	1	1	5	2	18	N1
				N2 - Medium							N1 - Low						
Inundation of the reservoir area	Alteration of downstream flow regime can impact on the relative volume of water discharge, permanence of low flows as well as the frequency and magnitude of flood peaks leading to reduced frequency of overbank flooding and negative impacts on the breeding cues of local fish communities.	Operational	Negative	4	2	3	4	5	65	N3	3	2	3	4	5	60	N2
				N3 - High							N2 - Medium						
Inundation of the reservoir area	Dissolved nutrients such as phosphorous increase in the reservoir as a result of the decaying submerged vegetation and soil. This increases the chemical and biological oxygen demand and can decrease the concentration of biologically available oxygen. Releases from the reservoir surface contains low concentrations of nutrients and is typically well oxygenated, whilst releases from the bottom are typically cold, rich in nutrients and low in oxygen.	Operational	Negative	3	2	3	5	3	39	N2	3	2	3	5	1	13	N1
				N2 - Medium							N1 - Low						
Additional instream barrier	Easily removable material downstream of the dam wall will be removed and become armoured with rocks resulting in reduced habitat and aquatic species diversity.	Operational	Negative	2	2	1	5	4	40	N2	3	2	3	5	1	13	N1
				N2 - Medium							N1 - Low						
Additional instream barrier	Alteration of migratory patterns for the observed Eel species (<i>Anguilla mossambica</i>) due to migratory habitats upstream of the dam being inaccessible.	Operational	Negative	4	3	3	5	4	60	N2	4	3	3	5	4	60	N2
				N2 - Medium							N2 - Medium						
Additional instream barrier	Large fluctuations in the water levels of reservoirs can result in the erosion of the reservoir shoreline; erosion of the instream channel and riverbanks downstream of impoundments adding to existing sediment loads. This is compounded by the reduced sediment loads of the downstream river system which inherently increases the erosional capacity of the watercourse.	Operational	Negative	2	2	1	5	4	40	N2	3	2	3	5	1	13	N1
				N2 - Medium							N1 - Low						

Aspect (Pre-defined) <i>Defn: The result of an activity, which causes the impact</i>	Impact Summary	Stage	Character	Pre-Mitigation							Post-Mitigation						
				(M+)	E+	R+	D)x	P=	S	Rating	(M+)	E+	R+	D)x	P=	S	Rating
Inundation of the reservoir area	Destruction, further loss and fragmentation of the vegetation community and displacement, direct mortalities and disturbance of faunal community due to habitat loss and disturbances.	Operational	Negative	4	3	5	4	5	80	N3	4	2	5	5	4	64	N3
				N3 - High							N3 - High						
Inundation of the reservoir area	Continued habitat degradation (litter, fire and alien vegetation encroachment)	Operational	Negative	4	3	5	4	4	64	N3	3	3	5	4	3	45	N2
				N3 - High							N2 - Medium						
Inundation of the reservoir area	Loss in genetic diversity, habitat fragmentation and disruption of habitat corridors	Operational	Negative	5	4	5	4	5	90	N3	4	4	3	4	4	60	N2
				N3 - High							N2 - Medium						
Inundation of the reservoir area	Introduction of new waterborne diseases	Operational	Negative	4	3	5	4	4	64	N3	4	3	3	4	3	42	N2
				N3 - High							N2 - Medium						
Infringement by humans into natural areas	Increased infringement by humans into the remaining natural areas, with associated impacts such as habitat destruction, poaching, litter and feral species such as cats and dogs	Operational	Negative	4	3	5	5	4	68	N3	3	3	5	5	3	48	N2
				N3 - High							N2 - Medium						
Aspect (Pre-defined) <i>Defn: The result of an activity, which causes the impact</i>				Pre-Mitigation							Post-Mitigation						
Impact Summary				Character							Rating						
				(M+)	E+	R+	D)x	P=	S	Rating	(M+)	E+	R+	D)x	P=	S	Rating
Inundation of the reservoir area	The inundation of the reservoir area will result in an alteration of ecosystem services	Operation	Negative	3	2	3	5	3	39	N2	3	2	3	5	3	39	N2
				N2 - Medium							N2 - Medium						
Inundation of the reservoir area	The inundation of the Nondvo Dam basin will result in the loss of the channelled valley bottom wetlands, unchannelled valley bottom wetlands and hillslope seeps. The loss of the wetland areas will result in the removal of the wetland sink	Operation	Negative	3	5	3	5	4	64	N3	3	5	3	5	4	64	N3
				N3 - High							N3 - High						
Inundation of the reservoir area	The inundation of the Nondvo Dam will result in altered water quality and flow downstream	Operation	Negative	3	2	3	5	3	39	N2	3	2	3	5	2	26	N1
				N2 - Medium							N1 - Low						
Inundation of the reservoir area	Altered water quality and flow could modify downstream ecosystem services.	Operation	Negative	3	2	3	5	3	39	N2	3	2	3	5	2	26	N1
				N2 - Medium							N1 - Low						
Aspect (Pre-defined) <i>Defn: The result of an activity, which causes the impact</i>				Pre-Mitigation							Post-Mitigation						
Impact Summary				Character							Rating						
				(M+)	E+	R+	D)x	P=	S	Rating	(M+)	E+	R+	D)x	P=	S	Rating
Generation of hazardous waste (oil, greases, and other chemicals and associated contaminated materials)	The inappropriate management and disposal of hazardous waste generated during maintenance activities at the hydro power station and railway line could lead to contamination of soil, groundwater, surface water and poisoning of fauna.	Operational	Negative	3	2	3	3	3	33	N2	2	1	1	2	2	12	N1
				N2 - Medium							N1 - Low						

Aspect (Pre-defined) Defn: The result of an activity, which causes the impact	Impact Summary	Stage	Character	Pre-Mitigation							Post-Mitigation						
				(M+)	E+	R+	D)x	P=	S	Rating	(M+)	E+	R+	D)x	P=	S	Rating
Release of airborne pollutants emissions to atmosphere (vehicular emissions and dust)	Increase in agricultural land (800ha) due to the availability of irrigation may result in additional methane emissions being released to the atmosphere.	Operational	Negative	1	2	3	2	4	32	N2	3	3	1	3	3	30	N1
				N2 - Medium							N1 - Low						
Release of airborne pollutants emissions to atmosphere (vehicular emissions and dust)	The operation of the dam will result in the dam basin area filling to capacity which will result in the inundation of vegetation. There are potential carbon emissions that will be released by the decomposing of woody vegetation	Operational	Negative	3	2	3	3	4	44	N2	3	2	3	3	4	44	N2
				N2 - Medium							N2 - Medium						
Hydropower generation	The generation of hydropower can be considered a positive impact as energy is generated from a renewable resource, thus resulting in lesser use of fossil fuel derived power	Operational	Positive	1	1	1	4	4	28	P1	1	1	1	4	4	28	P1
				P1 - Low							P1 - Low						

SOCIO-ECONOMIC

Aspect	Impact Summary	Pre-Mitigation							Post-Mitigation								
		(M+)	E+	R+	D)x	P=	S	Rating	(M+)	E+	R+	D)x	P=	S	Rating		
Creation of Employment, Procurement and Local Business Opportunities	Generation of employment (formal and informal) and other income generation opportunities in the Nondvo Dam Project area and the surrounding area.	3	3	3	2	3	33	P2	4	3	3	2	4	48	P2		
				P2 - Medium							P2 - Medium						
Economic Opportunities and Diversification	The number of direct Project employment and procurement requirements will be dramatically reduced during operation (no accurate figures are currently available); however, as a result of the Project, the area will be more accessible and the reservoir will potentially be seen as an attraction resulting in increased number of tourists visiting the area. Additionally some of the workers and migrant work-seekers will remain following construction; thus the population is likely to increase as compared to the current baseline. The economy, which is almost exclusively focused on agriculture, is likely to become more diversified through an influx of people with a greater variety of skills and offerings.	Operation	Positive	3	3	3	4	4	52	P2	3	3	3	5	4	56	P2
				P2 - Medium							P2 - Medium						
Downstream Economic Activities	Disruption of downstream economic activities as a result of reduced flow	Operation	Negative	4	2	3	5	4	56	N2	3	3	3	5	4	56	N2
				N2 - Medium							N2 - Medium						
Growth in the local tourism sector	It would be recommended that the Nondvo Dam serve multi purposes. This strategy would increase the footprint of tourist and contribute to the income generation of the local area. Aggressive marketing well ahead of construction, including promotion of the nearby nature reserve, would likely attract visitors who would value the aesthetic presence of the reservoir and who enjoy water-based recreational activities that may be developed at the site. Growth of the tourism sector will also facilitate creation of induced employment for local people, especially the youth.	Operation	Positive	3	2	3	5	2	26	P1	3	3	3	5	3	42	P2
				P1 - Low							P2 - Medium						

Aspect	Impact Summary	Pre-Mitigation							Post-Mitigation								
		(M+)	E+	R+	D)x	P=	S	Rating	(M+)	E+	R+	D)x	P=	S	Rating		
Increased cost of living	The cost of goods and services is likely to increase gradually throughout the construction phase and remain elevated throughout the operational phase. In addition to the increased costs of items, goods and services that were previously not offered for purchase may become available.	4	2	3	5	4	56	N2	3	3	3	5	4	56	N2		
		N2 - Medium							N2 - Medium								
Continuation of Anti-Social Behaviour and Spread of STIs and HIV/AIDS	As a result of increased accessibility and an inevitable flow of 'outsiders' through the area, norms, values and customs will continue to change; people will continue to be exposed to different views and new ways of life. Migration in and out of the area will likely be driven more by economic / market reasons, as well as travel to schools and other social facilities that may be of a higher standard than those present in the Nondvo Project Area.	3	4	5	4	4	64	N3	3	4	3	5	4	60	N2		
		N3 - High							N2 - Medium								
Aspect	Impact Summary	Pre-Mitigation							Post-Mitigation								
		(M+)	E+	R+	D)x	P=	S	Rating	(M+)	E+	R+	D)x	P=	S	Rating		
Demand on local utilities - Energy	The energy generated by the project is to be utilised for operational purposes of the dam as well as distribution of electricity to the local population near the reservoir and thus thereby increasing their quality of life.	3	2	5	5	4	60	P2	3	2	5	5	4	60	P2		
		P2 - Medium							P2 - Medium								
Aspect	Impact Summary	Stage	Character	Pre-Mitigation							Post-Mitigation						
				(M+)	E+	R+	D)x	P=	S	Rating	(M+)	E+	R+	D)x	P=	S	Rating
Increased safety risks to people and animals	The excavation at the end of the life of the quarry will pose a safety hazard to people, livestock and pets due to the near-vertical cliffs which will result in fatal incidents of falling from height, being struck by heavy rocks dislodged from the cliff face and being crushed by large discarded rocks tipping over.	Operation	Negative	4	1	5	5	4	60	N2	1	1	1	2	2	10	N1
		N2 - Medium							N1 - Low								
Increased safety risks to people and animals	Water accumulating at the base of the abandoned quarry may cause drowning amongst people and domesticated animals wandering into the site.	Operation	Negative	5	1	5	5	4	64	N3	1	1	1	1	2	8	N1
		N3 - High							N1 - Low								
Increased safety risks to people and animals	The safety of downstream communities could be influenced by seasonal flooding.	Operation	Negative	4	1	5	5	4	60	N2	1	1	1	1	2	8	N1
		N2 - Medium							N1 - Low								
Aspect	Impact Summary	Stage	Character	Pre-Mitigation							Post-Mitigation						
				(M+)	E+	R+	D)x	P=	S	Rating	(M+)	E+	R+	D)x	P=	S	Rating
Increased safety risks to people and animals	Employees of the dam operator and hydropower plant will be exposed to wet conditions by virtue of working with water. Continual exposure to wet conditions will cause health hazards such as pneumonia.	Operation	Negative	4	1	5	5	3	45	N2	2	1	1	2	2	12	N1
		N2 - Medium							N1 - Low								
Increased safety risks to people and animals	Working with high voltage and high current at the hydropower plant will cause electric shock hazards.	Operation	Negative	5	1	5	5	4	64	N3	2	1	1	2	2	12	N1
		N3 - High							N1 - Low								
Aspect	Impact Summary	Pre-Mitigation							Post-Mitigation								
		(M+)	E+	R+	D)x	P=	S	Rating	(M+)	E+	R+	D)x	P=	S	Rating		
Ease of Shortage of Water in Manzini and Mbabane, Irrigation of agricultural land and Promotion of Social and Economic Growth	The completion of the Nondvo Dam Project water infrastructure will ensure reliable water supply in Manzini, Mbabane and surrounding areas as well as water supply for irrigation of 800 ha of agricultural land in the project area. The availability of reliable infrastructure assets can increase returns and levels of investment and therefore accelerate economic growth.	4	4	5	5	5	90	P3	0	0	0	0	0	0	#N/A		
		P3 - High							#N/A								

Aspect	Impact Summary	Stage	Character	Pre-Mitigation							Post-Mitigation						
				(M+	E+	R+	D)x	P=	S	Rating	(M+	E+	R+	D)x	P=	S	Rating
Change in sense of place and landscape characteristics	The rural character of the area is typical of the region. The Project area is situated within a valley on hilly terrain characterised by a mix of natural areas and disturbed areas that have been transformed by human settlements and cultivation. The reservoir will enhance the aesthetics of the surrounding mountain sides and preserve the tranquillity of the rural landscape. The impact is considered positive as the reservoir will dominate the immediate visual landscape and become a visual attractor for the area.	Operation	Positive	3	2	5	5	4	60	P2	3	2	5	5	4	60	P2
				P2 - Medium							P2 - Medium						
Deterioration of archaeological / heritage resources by uncontrolled visitor access.	Rock Art site Masibekela refuge cave	Operation	Negative	1	1	5	5	5	60	N2	1	1	1	1	4	16	N1
				N2 - Medium							N1 - Low						
Disturbance and lack of access to grave of Chiefs and their relations / community members	Reduced access will cause physical and emotional alienation from the graves and burial sites.	Operation	Negative	1	1	5	5	2	24	N1	1	1	1	1	1	5	N1
				N1 - Low							N1 - Low						
Lack of access to indigenous plant resources lost through inundation.	Loss of species of cultural significance such as timber and grasses used for construction, as well as plants used for medicinal purposes	Operation	Negative	4	2	3	4	4	52	N2	3	2	2	2	2	18	N1
				N2 - Medium							N1 - Low						
Attraction of fauna to project site due to availability of water	Attraction of fauna to project site due to availability of water	Operation	Positive	1	1	5	5	4	48	P2	2	5	5	1	5	65	P3
				P2 - Medium							P3 - High						
Enhancement of aesthetics of the surrounding mountain sides and preserve the tranquillity of the rural landscape.	The dam will enhance the aesthetics of the surrounding mountain sides and preserve the tranquillity of the rural landscape.	Operation	Positive	1	5	5	1	5	60	P2	2	5	5	1	5	65	P3
				P2 - Medium							P3 - High						
Enhancement of aesthetics of the surrounding mountain sides and preserve the tranquillity of the rural landscape.	Improved aesthetic appeal of resettled homesteads.	Operation	Positive	1	5	5	1	5	60	P2	2	5	5	1	5	65	P3
				P2 - Medium							P3 - High						
Downstream Economic Activities	The reduced flow may result in a reduction of downstream tourism potential.	Operation	Negative	3	3	3	4	4	52	N2	2	2	3	3	4	40	N2
				N2 - Medium							N2 - Medium						

APPENDIX



RESETTLEMENT ACTION PLAN





GOVERNMENT OF THE KINGDOM OF ESWATINI MINISTRY OF NATURAL RESOURCES & ENERGY, DEPARTMENT OF WATER AFFAIRS (DWA)

MBABANE - MANZINI CORRIDOR DAM FEASIBILITY STUDY RESETTLEMENT ACTION PLAN

31 MAY 2021

FINAL





MBABANE - MANZINI CORRIDOR DAM FEASIBILITY STUDY RESETTLEMENT ACTION PLAN

GOVERNMENT OF THE KINGDOM OF
ESWATINI MINISTRY OF NATURAL
RESOURCES & ENERGY, DEPARTMENT
OF WATER AFFAIRS (DWA)

TYPE OF DOCUMENT (VERSION)
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PROJECT NO.: 41101262
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QUALITY MANAGEMENT

ISSUE/REVISION	FIRST ISSUE	REVISION 1	REVISION 2	FINAL REVISION	FINAL REVISION (1)
Remarks	Draft for Client Review	Draft Final	Draft Final	FINAL	FINAL
Date	January 2020	August 2020	October 2020	March 2021	May 2021
Prepared by	Zodwa Dlamini	Zodwa Dlamini	Zodwa Dlamini	Zodwa Dlamini	Zodwa Dlamini
Prepared by	Richard Ramoeletsi	Richard Ramoeletsi	Richard Ramoeletsi	Richard Ramoeletsi	Richard Ramoeletsi
Checked by	Eric Deneut				
Peer Review	Tim Hart				
Project number	41101262				

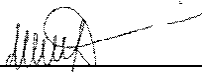
SIGNATURES

PREPARED BY



Richard Ramoeletsi

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This Resettlement Action Plan (Report) has been prepared by WSP Environmental Proprietary Limited (WSP) and SI Futures and on behalf and at the request of the Government of the Kingdom of Eswatini, Ministry of Natural Resources and Energy - Department of Water Affairs (Client), to provide the Client with an understanding of the environmental impacts associated with the proposed Mbabane – Manzini Dam Project.

Unless otherwise agreed by us in writing, we do not accept responsibility or legal liability to any person other than the Client for the contents of, or any omissions from, this Report.

To prepare this Report, we have reviewed only the documents and information provided to us by the Client or any third parties directed to provide information and documents to us by the Client. We have not reviewed any other documents in relation to this Report, except where otherwise indicated in the Report.

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EXECUTIVE SUMMARY

1. INTRODUCTION AND PROJECT BACKGROUND

The Government of Eswatini, Ministry of Natural Resources and Energy, Department of Water Affairs (DWA) intends to better exploit surface water resources within the Mbabane – Manzini Corridor, by storing surplus water made available during flooding periods. A Joint Maputo River Basin Water Resources Study was jointly undertaken by the Kingdom of Eswatini, the Republic of South Africa and the Republic of Mozambique. During this study, a multi-criteria selection process was developed and applied to a number of proposed water supply projects in order to identify the most promising options for further investigation.

The DWA appointed Studio Pietrangeli Consulting Engineers (Studio Pietrangeli) to undertake the relevant scoping and feasibility studies for the multipurpose project to “*identify and design a project that meets competing water demands up to the Horizon 2050 through optimizing its dimensions and costs and minimizing socio-environmental impacts*”. Several project options were studied during the feasibility-scoping phase to meet the short- and long-term demands. Based on the results of the feasibility-scoping study the DWA selected the following options, as identified in **Table 1**, to be subjected to a detailed feasibility assessment (Studio Pietrangeli, 2019).

Table 1: Project Subjected to detailed Feasibility Assessment

SOLUTION PERIOD	PROJECT
Short Term Solutions (up to 2025)	– Hawane Dam (Raising of the by 3.5m) – Lumphohlo Dam (Raising of the by 5m)
Long Term Solutions (up to 2050)	– Nondvo Dam (construction of new dam)

The DWA appointed WSP Environmental (Pty) Ltd. (WSP) in association with Maphanga Mitchell Associates (MMA) and Knight Piésold, collectively referred to as “the Consultant”, to carry out the Environmental and Social Impact Assessment (ESIA) and Resettlement Action Plan (RAP) for the Nondvo Dam Project.

As per the specified Terms of Reference (ToR), the ESIA and RAP only deals with the Nondvo Dam project. Although the Lumphohlo Dam raising is not being assessed as part of the ESIA and RAP the dimensioning of Nondvo Dam, as defined within the final feasibility study undertaken by Studio Pietrangeli, takes into account the benefit of the presence of the raised Lumphohlo Dam.

2. PROJECT DESCRIPTION AND LOCATION

The main purpose of Nondvo Dam is the storage of water for the supply of potable water to Mbabane and Manzini, which are currently suffering from intermittent water shortages, and where the anticipated future water demand is deemed to be highest. The additional water supply is also anticipated to facilitate the growth of the population alongside the “Corridor” area connecting these two cities. Possible secondary benefits of the proposed dam are the potential for utilising the Nondvo Dam head for small-scale hydropower generation, as well as using the stored water for irrigation of approximately 800 Hectares (ha) of agricultural land in the surrounding region.

Following the completion of the technical feasibility study, undertaken by Studio Pietrangeli (Studio Pietrangeli, 2019) it was determined that the Project would comprise 38.6 m high gravity Roller Compacted Concrete (RCC) Dam and small hydropower plant (HPP) of less than 1 MW. The dam will harvest flows along the Lusushwana River, regulated by the upstream Lumphohlo Dam, and associated tributary, the Nondvo River; resulting in a storage reservoir with a total capacity of approximately 22 Mm³, delivering an assured yield of 9.8 Mm³ per year, and cover a surface area of approximately 2.4 km² (240 ha).

The project site is situated approximately 12 km south of Mbabane and 26 km north-west of Manzini, along the south-eastern boundary of the Hhohho Region, Eswatini. The proposed Nondvo Dam is to be situated on the Lusushwana River, at the following coordinates 26°25'39.04"S and 31°7'0.98"E (UTM, WGS84: 312220E; 7075564S), approximately 7 km downriver of the existing Lumphohlo Dam. The project area spreads across two Royal Kraals (known as Umphakatsi in Siswati), namely Mantabeni and Siphocosini, situated under the Motjane

(Tikundla) constituency in Eswatini. The two Royal Kraals occupy what is called ‘Swazi Nation Land’, which is land held by the King in trust for the nation and is allocated by chiefs to household heads.

In order to ensure effective construction and operation of the dam, relevant temporary and permanent associated infrastructure is required, including river diversion works, access roads, site establishment (i.e. site camps and offices), quarry and more. Furthermore, certain existing infrastructure will be affected by the dam reservoir that will require realignment/ relocation. These include the main road (MR19) and smaller informal roads, railway line, electricity / communications lines, as well as private structures (i.e. dwellings, small businesses and religious and education facilities).

It is noted that at the time of undertaking these studies certain aspects associated with the proposed dam were not identified or assessed within the technical feasibility study (Studio Pietrangeli, 2019). The final technical feasibility study report (Studio Pietrangeli, 2020) was updated to include details of the proposed realignment routes of the inundated portions of the MR19 road and railway line. The RAP and ESIA were therefore updated to include a high-level assessment of these proposed routes. However, the final technical feasibility report excluded the following aspects, as such, these aspects were excluded from the terms of reference for assessment within the ESIA and RAP:

- Water distribution infrastructure (i.e. pipeline network connecting dam to end users); and
- Realignment of the inundated internal access roads.

Whereas, due to the high potential for variability based on PAPs selection of compensation package, host community impacts have been identified and assessed at a high-level only.

3. LEGAL AND POLICY FRAMEWORK

The RAP process has been undertaken in line with national legislation and policies, including the National Rural Resettlement Policy, 2003, and the Ministry of Housing and Urban Development Resettlement Policy and Guidelines, 1994.

In addition to national policies and legislation, the RAP process was undertaken in line with the African Development Bank (AfDB) Integrated Safeguard System Guidelines on Involuntary Resettlement. Furthermore, the International Finance Corporation (IFC) standards, World Bank safeguards and Good International Industry Practice (GIIP) were considered during the development of the RAP. Ensuring that adequate mitigation measures are put in place by the project proponent to deal with any negative impacts on the project affected persons (PAPs).

4. POTENTIAL RESETTLEMENT IMPACTS

OVERVIEW

The Project will require permanent acquisition of land for the purpose of construction of the Nondvo Dam, associated infrastructure and to accommodate the reservoir, which will cover a surface area of approximately 2.4 km² (240 ha) of land in the valleys and tributary catchments of the Lusushwana and the Nondvo rivers. Temporary occupation of land will also occur during the construction period for construction of the management offices, management camps, labour camps and works areas.

One of the essential components of a RAP is to identify and record all affected assets. **Table 2** summarises the land-take impacts of the Project as caused by its major components as well as associated aspects (i.e. realignment of the railway line and MR19 road).

Table 2: Project components affecting PAP land and assets

PROJECT COMPONENT	NATURE OF IMPACT
Nondvo Dam, including: <ul style="list-style-type: none"> – Dam and reservoir; – Work camps and offices; – Quarry and access roads. 	Establishment of the dam will result in the displacement of: <ul style="list-style-type: none"> – 175 HHs - of these 102 HHs will experience physical and economic displacement, while 73 HHs will experience economic displacement only. Included in the affected assets are approximately 94.2 ha of arable land and 28.8 ha of residential land. The above includes:

PROJECT COMPONENT	NATURE OF IMPACT
	<ul style="list-style-type: none"> – Two schools, namely the Bhekephi Primary School and Masibekela High School, which require relocation; and – One church, namely the Devine Healing Church, which requires relocation.
Railway line realignment	Rerouting the railway line will affect approximately 39 HHs ¹ .
MR19 road realignment	Rerouting the MR19 road will affect approximately 21 HHs. ²

Table 3 details the above impact by summarising the identity of the affected asset type and the magnitude of losses, as measured, resulting from the Nondvo Dam and reservoir. Whereas **Table 4** and **Table 5** detail the above impact by summarising the potential affected asset type and the magnitude of losses as estimated for the Railway line realignment and MR 19 road realignment, respectively.

Table 3: Asset Type and Magnitude of Losses resulting from the Nondvo Dam

#	ASSET TYPE	QUANTITY	TOTAL SIZES	UNIT OF MEASURE
1	Arable Land ³	191	942 105	sqm
2	Borehole	1	1	Point
3	Building/ Secondary Structures	10	290	sqm
4	Business Plot	2	3 459	sqm
5	Chicken Coup	54	1 038	sqm
6	Church	1	226	sqm
7	Church Plot	1	2 584	sqm
8	Commercial Orchard	1	70	sqm
9	Dwellings/ Primary Structures Brick and Mortar	150	13 684	Point
10	Dwellings/ Primary Structures Corrugated iron	1	10	sqm
11	Dwellings/ Primary Structures Mud	34	840	Point
12	Dwellings/ Primary Structures Wood	14	412	sqm
13	Forest	11	26 587	sqm
14	Formal business Structure	2	322	sqm
15	Fruit Tree	12	991	Point
16	Fuel Tree	21	425	sqm
17	Garden land	3	343	sqm
18	Grave	2	4	Point

¹ & ² Estimated affected HHs are based on desktop review as details of the proposed realignment were not available at the time of undertaking the infield investigations.

³ Due to the extended timeline of the proposed implementation schedule (i.e. from Project commencement to inundation), compensation for standing crops has been excluded from the RAP as sufficient notice is to be provided for the PAPs to harvest final crops before relocating. This is also based on the requirement that prior to relocation PAPs will have access to his/her replacement land (where required), which has been adequately prepared, to plant the following seasonal crop.

#	ASSET TYPE	QUANTITY	TOTAL SIZES	UNIT OF MEASURE
19	Guard House	2	2	point
20	Incomplete Structure	5	273	sqm
21	Informal Business Structure	5	67	sqm
22	Kraal	17	915	sqm
23	Medicinal Plant	2	4	sqm
24	Outbuilding/ Secondary Structures Grain storage	101	1 379	sqm
25	Pigsty	3	18	sqm
26	Pump House	1	2	Point
27	Residential Plot	100	287 820	sqm
28	School building	18	4 626	sqm
29	School Plot	2	113 979	sqm
30	Septic Tank	2	2	Point
31	Sports Field	2	11 454	sqm
32	Sports Ground	1	10 225	sqm
33	Stable	4	91	sqm
34	Standpipe	33	37	Point
35	Toilet	71	148	Point
36	Useful Grasses	1	10	sqm
37	Water Tank	28	44	point
38	Wild Vegetables	1	40	sqm

Table 4: Asset Type and Magnitude of Losses resulting from the Railway realignment

#	ASSET TYPE	QUANTITY	TOTAL SIZES	UNIT OF MEASURE
1	Dwellings	23	2 637.40	sqm
2	Outbuildings	56	2 043.12	sqm
3	Residential plots	21	55 160.66	sqm
4	Arable land	25	166 499.73	sqm

Table 5: Asset Type and Magnitude of Losses resulting from the MR 19 Road realignment

#	ASSET TYPE	QUANTITY	TOTAL SIZES	UNIT OF MEASURE
1	Dwellings	39	5 132.70	sqm
2	Outbuildings	56	1 851.20	sqm
3	Residential plots	39	1 934.06	sqm
4	Arable land	29	86.79	sqm

POTENTIAL NEGATIVE IMPACTS

As indicated above and identified within the ESIA (Nondvo Dam ESIA (2021), implementation of the Nondvo Dam project will result various environmental and social impacts, including physical and economic displacement of project affected households within the Project area. The potential Project related impacts are identified and assessed in detail in the ESIA report, however; some of the potential negative impacts that may arise within the Project area of influence as a result of the Project include:

- Inundation of Nondvo Dam. Land loss associated with inundation will lead to the loss of arable land, the physical / economic displacement of 175 households (with associated host community impacts), as well as displacements of businesses, schools and a church;
- Loss of land and other assets due to the realignment of existing roads and the railway line;
- Associated host community impacts;
- Influx of job seekers;
- Possible social pathologies arising from influx (such as criminal and anti-social behaviours e.g. drug dealing, prostitution etc.);
- Increase in crime levels;
- Impacts related to construction and other traffic and roads;
- Impacts related to physical intrusion on the sense of place;
- Displacement of graves and loss of heritage sites;
- Loss of natural resources;
- Disruption to education of youth; and
- Impeded access due to loss of low level crossings and footbridges.

POTENTIAL POSITIVE IMPACTS

As identified within the ESIA implementation of the Nondvo Dam project will also lead to potential positive impacts. These include:

- Water security for the towns of Mbabane and Manzini and in the development corridor;
- Economic revival for the country with possible attraction for investment;
- The creation of temporary employment opportunities and social benefits;
- Irrigation of arable land for improved productivity; and
- Improvement of local infrastructure – such as roads and water supply.

5. APPROACH AND METHODOLOGY IN THE PREPARATION OF THE RAP

The RAP was undertaken using several instruments, including desktop review, site visits, community and PAP consultations, and physical identification, enumeration, and measurement of affected properties.

During the desktop review process relevant secondary data was collected and reviewed, including an assessment of studies undertaken for the Project to date. These included:

- Technical Feasibility Study undertaken by Studio Pietrangeli 2019/2020 (Scoping & Final);
- AfDB guidelines (applicable to the project); and
- Relevant Eswatini Legislation.

Project maps and engineering drawings were also studied prior to undertaking fieldwork. In addition to this, more information was sourced from printed and electronic reports and documents, including relevant websites. Demographic Surveys and Census reports were also reviewed, and the Nondvo Dam ESIA report was used as a key reference.

Nondvo Dam and Reservoir

A key element of the process was the identification and determination of the number of PAPs (physically and economically affected by the Nondvo Dam), as well as their affected assets. A desktop study of the affected area was undertaken as well as field visits to confirm the properties and to work with community structures. Asset

registration and verification targeting homestead/household heads was undertaken over a period of two weeks. Identification and registration of assets occurred in the presence of household heads, or their representatives, and Community Area Leaders to check for the correctness of surveyed / measured assets and ownership details.

As the project is still at the feasibility stage and the final design yet to be approved, the reservoir inundation area has not been accurately surveyed. As such, google earth imagery and GPS devices were utilised to identify affected sites as accurately as possible, however without a detailed survey there will be some variances. A final verification assessment and valuation, including cut-off date, is to be undertaken to capture any changes in people's individual circumstances and define individual compensation packages for negotiations and acceptance by PAPs during the consolidation stage of the RAP implementation process.

Railway Line Realignment

The existing railway line, now out of service, runs alongside the Lusushwana River in the Nondvo project area. As a section of the railway line will be flooded by the Nondvo reservoir at the Full Supply Level (FSL), the Government of Eswatini has decided that the railway line should be relocated so that it can one-day be reinstated.

The proposed realignment route, as defined within the final feasibility study report (Studio Pietrangeli, 2020), has not yet been approved by the Eswatini Railways. The current route design is therefore conceptual. As such, it was not possible for the consultant to identify the affected households conclusively. For planning purposes, a high-level assessment, based on satellite imagery, has been undertaken to ascertain the potential resettlement activities associated with the proposed realignment. The final design of the railway line realignment is still to be undertaken. The impact on properties may therefore differ between conceptual and final realignment designs. A final verification assessment and valuation, including cut-off date, is to be undertaken to capture any changes in people's individual circumstances and define individual compensation packages for negotiations and acceptance by PAPs during the consolidation stage of the RAP implementation process.

MR19 Road Realignment

The M19 road is an asphalted road that connects the city of Mbabane to the town of Sandlane located close to the border with South Africa. As two sections of the road will be flooded by the Nondvo reservoir at the FSL, a section of the road needs to be realigned to facilitate continued traffic along this route.

The proposed realignment route, as defined within the final feasibility study report (Studio Pietrangeli, 2020), has not yet been approved by the Eswatini Roads Department. The current route design is therefore conceptual. Additionally, the proposed realignment detail was not available at the time of undertaking the RAP. As such, it was not possible for the consultant to identify the affected households conclusively. For planning purposes, a high-level assessment, based on satellite imagery, has been undertaken to ascertain the potential resettlement activities associated with the proposed realignment. The final design of the road realignment is still to be undertaken. The impact on properties may therefore differ between conceptual and final realignment designs. A final verification assessment and valuation, including cut-off date, is to be undertaken to capture any changes in people's individual circumstances and define individual compensation packages for negotiations and acceptance by PAPs during the consolidation stage of the RAP implementation process.

6. CENSUS AND SOCIO-ECONOMIC SURVEY

The Project area is situated within the Royal Kraals of Mantabeni and Siphocosini, which have an estimated 7482 residents residing in approximately 1320 households, combined. The two Royal Kraals are informally subdivided into 12 smaller 'communities. These communities were identified by the Royal Kraals and allocation to each community was assigned according to each households' response, as to which community they considered themselves to fall within, rather than assignment by geographic location.

The census surveys, consultations and asset registration exercise took place in the field from 29 July to 7 August 2019. It became necessary to repeat the exercise during the week of 12 to 17 August 2019 to complete the remaining assets. A third week was necessitated by the absence of owners and to sense check identified data anomalies. Following presentation of asset registers to HHs, additional clarification surveys were required to update the asset registers where discrepancies were identified by individual HHs. The information presented within the RAP is accurate as of 31 March 2021, following confirmation of 80% of all identified assets.

From the census, it was identified that the Nondvo Dam and reservoir will affect approximately 175 households, comprising an estimated 1240 residents, and 991 identified assets, including two schools and one church. **Table 6**

provides a breakdown of the affected households and assets associated with the dam and railway realignment, per Royal Kraals and community.

Table 6: Number of affected Households per Royal Kraal and community.

ROYAL KRAAL	COMMUNITY	NUMBER OF HH	NUMBER OF ASSETS
Mantabeni	Mahlatsini	6	49
	Mahothoza	1	19
	Majadvule	27	144
	Masibekela	3	4
	Mhlane	83	562
	Nkhube	1	17
	Spete	1	13
	Subtotal	122	808
Siphocosini	Mhlane	4	18
	Ncabaneni	18	33
	Sithobela	4	13
	Spete	25	74
	Subtotal	51	138
Schools	All	2	45
Total		175	991

Furthermore, based on desktop survey⁴, the provisional railway realignment will affect approximately 21 HHs with 125 assets; and the provisional MR19 road realignment is anticipated, to affect approximately 39 households and 163 identified assets.

As the project is still at the feasibility stage and the final design yet to be approved, the reservoir inundation area has not been accurately surveyed. As such google earth imagery and GPS devices were utilised to identify affected sites as accurately as possible, however without a detailed survey there will be some variances. A final verification assessment and valuation, including cut-off date, is to be undertaken during the Consolidation Stage of the RAP implementation process, which is to be based on final detailed designs. The verification assessment is to capture any changes in people's individual circumstances and define individual compensation packages for negotiations and acceptance by PAPs.

7. ELIGIBILITY TO ENTITLEMENTS

As noted in the introduction to this RAP, a Resettlement Policy Framework (RPF) for the Nondvo Dam project was not developed by the Government of Eswatini. A RPF typically guides the valuation of assets and definition of entitlements and compensation within the RAP. In the absence of a suitable RPF, and national valuation rates, direction was drawn from resettlement processes and frameworks undertaken for similar large-scale dam infrastructure projects in Lesotho, specifically the Lesotho Highlands Water Project (LHWP), which were financed by the AfDB.

Eligibility is defined as those who will be affected directly by resettlement and are eligible for compensation and other assistance. The eligible PAPs would be those who sustain losses due to program-related causes, whether individual, institutional, or communal, and whether physically displaced or otherwise. These PAPs will be eligible

⁴ Realignment of the MR19 road was not included in the Feasibility Study report (Studio Pietrangeli, 2019). The RAP has been updated based on the proposed realignment route provided in the Detailed Design Report (Studio Pietrangeli, 2020). As this information was not available at the time of undertaking the census surveys, this information is based on desktop assessment of available satellite imagery.

for compensation. Such PAPs will include the following categories of people in relation to the Siphocosini and Mantabeni Project areas:

- The population resident in areas affected by construction and operational works including the feeder roads, dam wall construction, quarry site and work camps and offices;
- Landholders and/or users of land in areas affected by construction and operational works of the Project, including the inundation zone, and associated infrastructure;
- Those who will be economically displaced losing income through loss of employment, such as employees of households and business enterprises, and agricultural labourers; and
- The host populations of resettlement areas where applicable.

The PAPs were considered irrespective of their tenure status, with respect to land that they own, occupy or use. Confirmation of PAPs is to be undertaken following approval of the final designs, based on their ownership, occupation or use of the affected land / asset prior to a prescribed cut-off-date. **Table 7** details the categories of affected/impacted individuals/groups that are potentially eligible for entitlements, as well as types of entitlement available.

Table 7: Categories of Affected Individuals / Groups and Types of Entitlements

AFFECTED CATEGORIES		POTENTIAL LOSSES	TYPE OF ENTITLEMENT
The Government, as legal owner of affected land tracts		Loss of land	Rates / Valuation based replacement or cash compensation
		Loss of fixed assets, including government structures	Rates / Valuation-based replacement or cash compensation
		Loss of production, productive capability (income, service to the community)	Evaluation-based cash compensation
		Loss of rental income from buildings, land	Evaluation-based cash compensation
Landholders with registered rights to land		Loss of land	Rates / Valuation based replacement or cash compensation
		Loss of fixed assets, including homestead /business structures	Rates / Valuation-based replacement or cash compensation
		Loss of production, productive capability (subsistence, income)	Evaluation-based cash compensation
		Loss of rental income from buildings, land	Evaluation-based cash compensation
		Loss of usufruct arrangements on land	Evaluation-based cash compensation
Unregistered landholders with socially recognised traditional/ customary rights to land		Loss of land	Rates / Valuation based replacement or cash compensation
		Loss of fixed assets, including homestead/ business structures	Rates / Valuation-based replacement or cash compensation
		Loss of production, productive capability (subsistence, income)	Evaluation-based cash compensation
		Loss of rental income from buildings, land	Evaluation-based cash compensation
		Loss of usufruct arrangements on land	Evaluation-based cash compensation
Unregistered landholders with no recognisable legal right/ claim	People with usufruct rights to land (e.g. renters,	Loss of usufruct arrangements on, and thus access to land	Evaluation-based cash compensation
		Loss of production, productive capability (subsistence, income)	Evaluation-based cash compensation

AFFECTED CATEGORIES		POTENTIAL LOSSES	TYPE OF ENTITLEMENT
to land they are occupying	leaseholders, share-croppers)	Loss of fixed assets on the land	Replacement or Valuation- based cash compensation
	People who have encroached on land without legal rights or claims to land	Loss of land	Evaluation-based cash compensation
		Loss of production, productive capability (subsistence, income)	Evaluation-based cash compensation
		Loss of usufruct arrangements on land	Evaluation-based cash compensation
	Building tenants/ renters	Loss of fixed assets, including homestead and/or business	Valuation-based replacement or cash compensation
		Loss of rented accommodation.	Evaluation-based cash compensation
		Loss of rented space for business enterprise (income, business networks/clientele).	Evaluation-based cash compensation
	Loss of production, productive capability (subsistence, income).	Evaluation-based cash compensation	
Agricultural labourers	Loss of income.	Evaluation-based cash compensation	
Employees of households and business enterprises	Loss of income	Evaluation-based cash compensation	
	Loss of accommodation	Evaluation-based cash compensation	
Communities	Loss of communal assets	Rates-based or Evaluation-based replacement or cash compensation	
	Impeded/constrained access to facilities, services, social networks	Replacement compensation	
Households/families	Loss of grave sites	Relocation/ Reburial	
Neighbouring and host communities	Loss of land (communal and private)	Rates / Valuation based replacement or cash compensation	
	Loss of fixed assets on the land	Rates / Valuation-based replacement or cash compensation	
	Loss of production, productive capability (subsistence, income)	Evaluation-based cash compensation	
	Loss of usufruct arrangements on land	Evaluation-based cash compensation	
	Impacts on services, facilities, and utilities	Replacement compensation	

A 'cut-off-date' to entitlements and a moratorium on further developments in the Project-affected area is essential to cement agreed arrangements and to avoid opportunistic asset claims. It signals the point at which the Project is ready to offer the PAPs their compensation entitlement packages for acceptance, followed by disbursements and/or relocation processes. It further means that compensation cannot be claimed for structures constructed and land obtained after the declaration date. With cut-off there is a potential for disputes between the Project Authorities and wilful speculators who would opportunistically violate the moratorium.

A final verification assessment and valuation, including formal declaration of cut-off date, will be undertaken in the initial stage of the RAP implementation process to capture any changes in people's individual circumstances and define individual compensation packages for negotiations and acceptance by PAPs. With the registration and signing of all affected property, the cut-off date is to be officially announced by the Eswatini Government. The process of asset verification post inventory taking will still have to be undertaken, and the verification will continue until all forms have been completed and signed by the PAPs.

Declaring and enforcing the moratorium on further developments in the Project-affected area is an administrative challenge for the Client and Local Government authorities, who must assist in carrying out the required enforcement. This is more so in the event that a significant time gap develops between formal declaration of the cut-off-date, and the start of site hand-over to the construction contractor.

8. COMPENSATION MODEL

The proposed compensation model includes cash compensation as well as in-kind compensation, and/or a combination of both. The proposed compensation packages, as identified in **Table 8**, are to be presented and discussed with the PAPs. The aim is to provide compensation that is both beneficial and sustainable to the affected PAPs. As such, PAPs households will have the choice to opt for once off lump sum payments (not recommended), annual cash compensation or in-kind compensation.

Table 8: Compensation model packages

COMPENSATION PACKAGES		DESCRIPTION	
1	Cash Compensation		
	A	Once-off compensation	Short to medium term dedicated compensation administration structure. <ul style="list-style-type: none"> – The livelihood restoration projects, and their training is only in place for 5 years. – Rationale for the livelihood restoration is to ensure that lump sum payment is used for sustainable projects. – DWA to ensure that all PAPs are in a position to take up development projects, income generation projects that are sustainable. – Collaboration between the different Government departments is encouraged to promote success.
	B	Annual cash compensation	A long-term obligation that would require a dedicated management structure to administer compensation: <ul style="list-style-type: none"> – Periodic compensation payments. – Compensation queries. – Audit and update compensation register annually. – Resolve family disputes related to compensation.
2	In-Kind Compensation		
	A	Land for land / Replacement structures	Where the Nondvo Project can replace arable / garden land with land of similar size and quality, the project would provide readily prepared land to households at similar cost (where land is available). <p>Where replacement housing is required, concept designs for different housing prototypes will be presented to individual affected households for selection and approval. Completed dwellings will be handed over to HH once construction is complete.</p>
	B	Annual in-kind compensation (maize & pulses)	Dedicated long term management compensation structure that will administer the following: <ul style="list-style-type: none"> – Periodic compensation payments. – Compensation Queries. – Audit and update compensation register annually. – Resolve family disputes related to compensation.

9. ASSET VALUATION

In the absence of a Resettlement Policy Framework and a Compensation Policy and procedures in Eswatini it was agreed that for expediency, as the Project is still at the feasibility stage, the consultant will use rates from resettlement processes and frameworks undertaken for similar large-scale dam infrastructure projects in Lesotho, specifically the Lesotho Highlands Water Project (LHWP), which were financed by the AfDB. The rationale for the use of resettlement and compensation frameworks from projects undertaken in Lesotho as a reference point is based on several factors. These include similarities in terms of Geography, Governance, and Demographics. Furthermore, the compensation policy rates used from Lesotho have been used over a period of years and have been based on the IFC PS5 and AfDB OS2 requirements; where compensation rates are to be applied equitably,

in a transparent and consistent manner. The rates were developed, and approved, under the guidance of the AfDB and World Bank. With this in mind, the rates below (**Table 9**) are only used as a guide for the Nondvo Dam Project in order to derive proposed compensation values and indicative budgets for the RAP (this report). Asset verification and valuation is to be undertaken in the initial stage of the RAP implementation process, based on approved designs, and following gazetting of the Nondvo Dam Special Development Area (SDA).

Table 9: Asset Types and Suggested Valuation Rates

ASSET TYPE	ASSET MEASUREMENT UNIT	ONCE OFF COMPENSATION (EMALANGENI)	ANNUAL COMPENSATION (EMALANGENI)	RATE SOURCING
Arable Land	sqm	16.11	0.78	LHWP phase 2
Building/ Secondary Structures	Sqm	934.00		LHWP phase 2
Business Plot	sqm	59.00		Roads Directorate
Chicken Coupe	sqm	100.00		LHWP Phase 2
Church Building	sqm	7,805.84		LHWP Phase 2
Church Plot	Sqm	59.00		LHWP Phase 2
Commercial Orchard	sqm	588.00		MDWSP
Dwellings/ Primary Structures Brick and Mortar / Mud	sqm	7,805.84		LHWP Phase 2
Dwellings/ Primary Structures Corrugated iron / Wood	sqm	934.40		LHWP Phase 2
Forest	sqm	980.00		MDWSP
Formal Business Structure	sqm	7,805.84		LHWP Phase 2
Fruit trees	Point	2,480.31	299.96	MDWSP
Fuel trees	Point	885.57	107.11	MDWSP
Garden land	sqm	281.39	14.02	MDWSP
Grave	H/Hold	10,869.00		LHWP Phase 2
Guard House	sqm	13,381.00		Construction/ valuation
Incomplete Structure	sqm	857.00		Construction / Valuation
Informal Business Structure	sqm	857.00		LHWP Phase 2
Kraal (enclosure for farm animals such as cattle, sheep etc.)	sqm	140.16		LHWP Phase 2
Medicinal Plants	Point	9,648.33	467.20	MDWSP
Outbuilding/ Secondary Structures Grain storage	sqm	1,264.00		Construction / valuation
Pigsty	sqm	100.00		LHWP Phase 2
Residential Plot	sqm	19.71		MDWSP
School building	sqm	7,805.84		LHWP Phase 2
School plot	sqm	59.00		LHWP Phase 2

ASSET TYPE	ASSET MEASUREMENT UNIT	ONCE OFF COMPENSATION (EMALANGENI)	ANNUAL COMPENSATION (EMALANGENI)	RATE SOURCING
Sports Field	sqm	19.71		RD BASED
Stable	sqm	136.26		LHWP Phase 2
Standpipe	Point	3,725.00		LHWP Phase 2
Toilet	Point	5,356.24		LHWP Phase 2
Useful Grasses	sqm	10,613.16	513.92	MDWSP
Water Tank	Point	2,500.00		Construction / valuation
Wild Vegetables	sqm	19,296.66	934.40	MDWSP
Inconvenience Allowance (for economically displaced)	H/hold	1,052.10		LHWP Phase 2
Disturbance Allow - Full Resettlement	H/hold	51,419.86		LHWP Phase 2

The rates provided for land, structures and trees are average compensation rates for budget purposes only. Assets are to be assessed and valued by registered/ licensed valuers in terms of the Eswatini National Rural Resettlement Policy, 2003 to account for variances in standards / quality of structures, prior to presentation of compensation value to PAPs.

10. PROPOSED RESETTLEMENT SITES

Residential and Agricultural Resettlement Sites

Four potential resettlement sites were identified, these are indicated as A, B, C and D⁵ in **Figure 1** below. To minimise resettlement and host community impacts the consultant sought to identify possible relocation sites within the Royal Kraals. However, due to the lack of available / open land within the Royal Kraals, land outside of the Royal Kraals had to be considered. The suitability of the proposed sites was assessed based on a several criteria.

Based on evaluations, Site C is considered the least preferred relocation site as it is situated within the Mlilwane Game Sanctuary reserve. It is advised that this site be avoided if possible. Site B if feasible however is considered too small to accommodate all PAPs. Sites A and D are considered the most favourable, albeit some economic compensation would be required due to farming activities currently taking place in portions of the identified area.

Community members from both the Siphocosini and Mantabeni Royal Kraal will require relocation, and their requirements in terms of the area to which they will be relocated will differ. As such more than one resettlement area may be required in order to maintain social cohesion.

Whilst still requiring engagement and input by the Royal Kraals and the PAPs, the relocation sites identified minimize the displacement of communities. DWA and the Chiefs / Inner Councils will have to consider these options; however, due to the sites being in close proximity to the affected area the communities will be able to retain their social and cultural networks and kinship links.

⁵ Three potential resettlement sites (namely sites A, B and C in Figure 2) were initially identified and evaluated. Based on community consultation a request was made for the inclusion of an additional relocation site to provide for individual sites for the community members from the Siphocosini and Mantabeni Royal Kraal. As such, an additional site (namely Site D) was identified and assessed

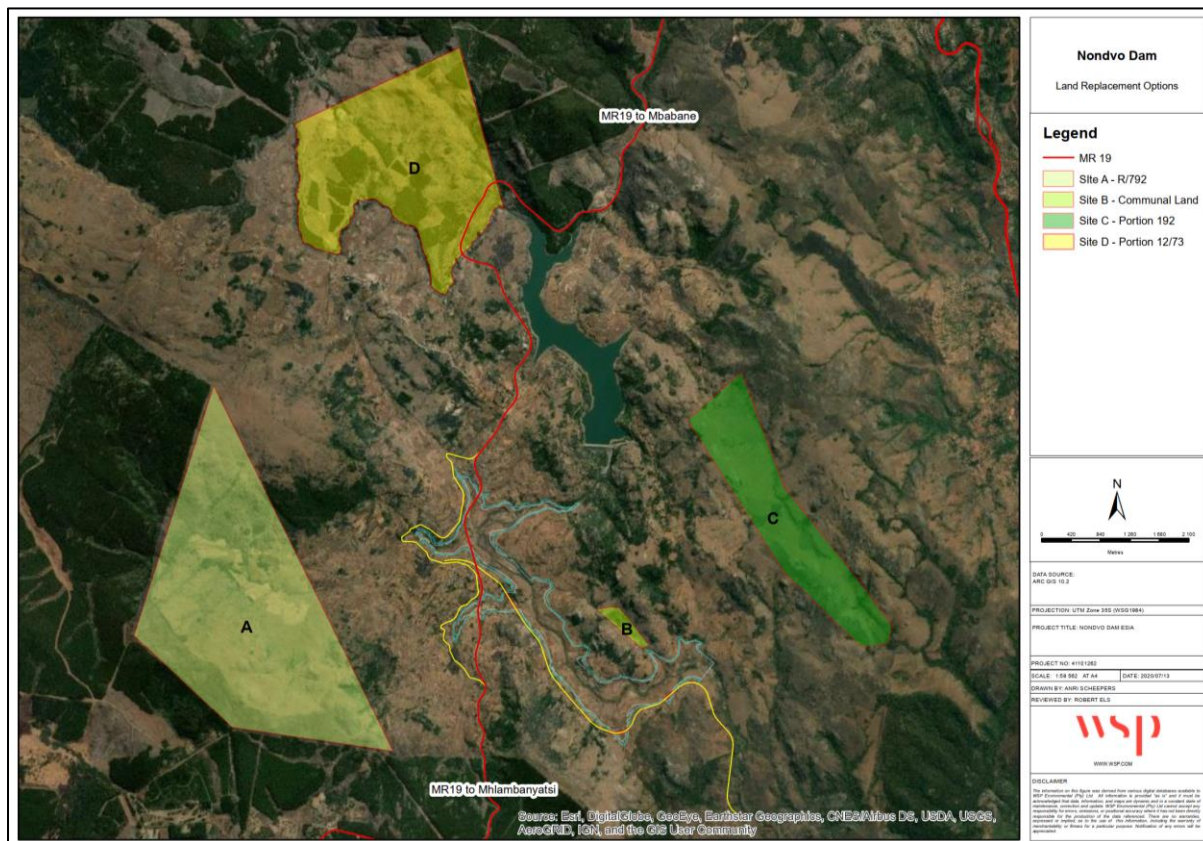


Figure 1: Proposed residential and agricultural resettlement sites

School Relocation Sites

In terms of GIIP, any impact to the social infrastructure of local communities is to be rehabilitated or restored as of pre-project condition and mitigated to ensure minimum impacts. A high-level screening assessment was undertaken to identify potential sites for the relocation and re-establishment of the two schools. **Figure 2** shows the identified potential replacement land for both schools within the surrounding area, with the intention of keeping the schools as close as possible to their original location.

As evident from the layout, the proposed site for the Masibekela High school has been maintained on the eastern side of the proposed reservoir, within its original setting to reduce the negative impact by relocating it further. Access to the proposed Masibekela High school relocation site would still be on the same existing primary road. This road provides access to the current population on the eastern side of the Nondvo Dam and the condition of which may be improved during the upgrade of the feeder roads.

Bhekhephi Primary school too, has been relocated further from its original location in order to continue serving the existing communities and the relocated communities on the western side of the dam. There are more households on this side of the dam, subsequently the availability of large enough open space/ land for relocation is quite limited. Access to the relocation site is reasonably good but would need to be improved. With the relocation of the MR19 road, this would provide access closer to the school.

During the process of identifying potential sites for relocation, consideration was provided to placing the two schools (i.e. High School and Primary school) on one site. However, a large enough piece of available land, to accommodate both schools within walking distance⁶, could not be identified. Should this consideration be taken further, during detailed planning, additional resettlement would be required to retain a large enough portion of land. This additional resettlement would have to be accounted for within the RAP and/or LRP.

⁶ GIIP indicates that the maximum distance between children’s homes and school should be equivalent to a 45-minute walk.

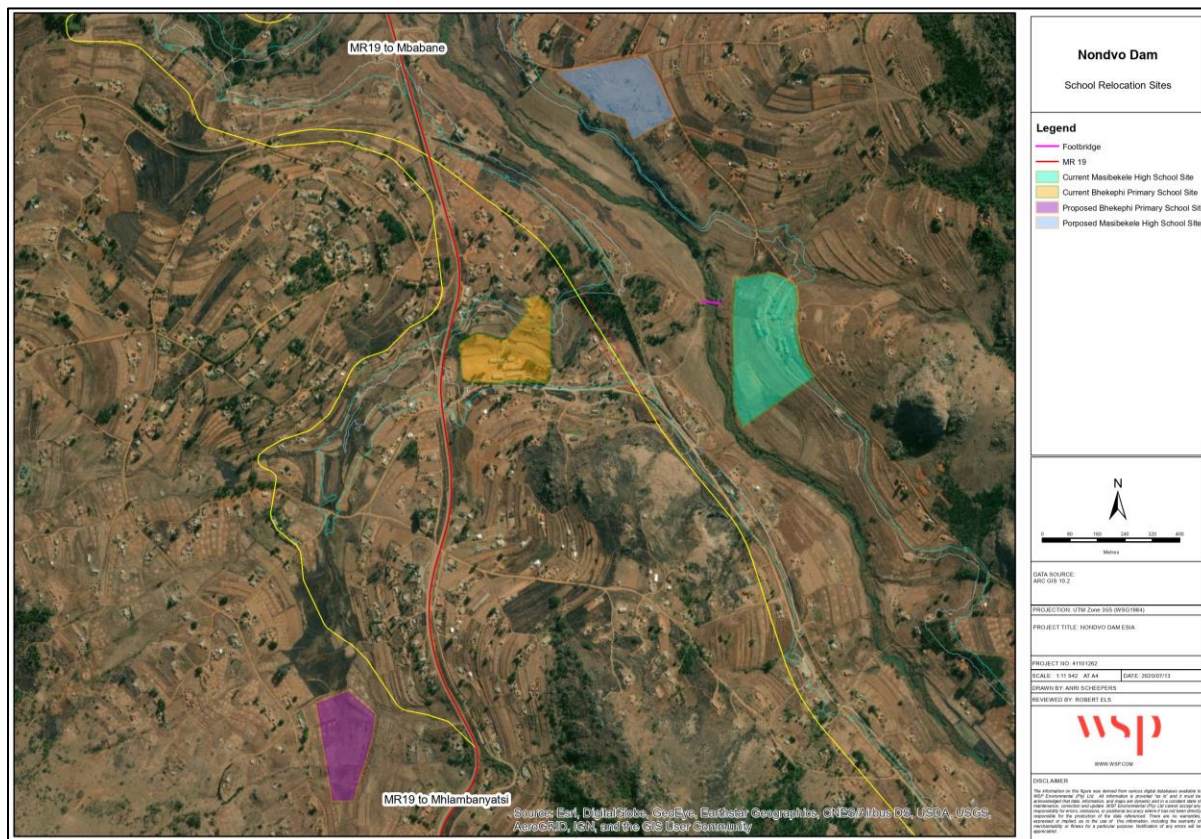


Figure 2: Proposed School Relocation Options

An aspect that must be taken into consideration during final placement of the schools is the level of interconnectedness between the schools. Both in terms of transfer of resources as well as demographics of the pupils (i.e. younger siblings accompanied by older siblings to and from school). Currently the schools are situated near the other. Albeit on opposite sides of the river footbridges provide access easy to each. The loss of the current footbridges, and greater distance between the schools, may result in additional issues for the community. These aspects, as well as others such as the potential for relocating the two schools to a single site, and political aspects such as the source of funding provided for the establishment of the schools, will have to be addressed by the DWA in detailed planning prior to relocation. The Eswatini Ministry of Education and Training will play a key role in the detailed planning process for the relocation of the two schools.

11. LIVELIHOOD RESTORATION PROGRAMME

One of the major challenges associated with resettlement, particularly in rural contexts where people are reliant on land and the use of natural resources, is the restoration of existing livelihood strategies. Livelihood restoration focuses on the restoration, and potential enhancement, of livelihoods of the PAHs, as well as the existing inhabitants of the host communities, whose livelihoods will also potentially be disrupted.

In cases where compensation alone, whether in cash or in-kind, will not guarantee the restoration or improvement of displaced families' existing livelihoods, a Livelihood Restoration Plan (LRP) must be introduced to those HHs who are eligible for such support. Generally, this is when physical resettlement or economic displacement significantly affects the income-earning or production capacity of the affected families.

The main objective of the LRP is to restore or improve the livelihoods of PAPs. The project aims at providing training and start-up inputs to PAPs in content areas as outlined below. The livelihood restoration programme will be aligned with existing resources, knowledge, skills, and household experiences. The proposed LRP is built around four major initiatives, each with sub-initiatives:

- Compensation for losses, including transitional support pending the mobilisation of livelihood restoration initiatives;
- Financial management training, including household level budgeting and money management training;

- Land-based livelihood support, including inputs addressing land preparation, crop improvement and crop diversification, and improved livestock keeping and management (including poultry) bee keeping; and
- Non land-based livelihood support, including the promotion of enterprise development.

Details of the livelihood restoration inputs will be developed with appropriate technical support, and with inputs from government and community stakeholders. The fully developed LRP must be in place prior to RAP implementation, allowing the informed selection of options by beneficiaries.

12. MONITORING AND EVALUATION

Monitoring and Evaluation (M&E) is required to ensure that in planning and implementing the Nondvo Dam resettlement, the DWA is meeting relevant national and international requirements, standards, and guidelines. M&E will also track progress against schedule and budget.

The overall objective of the M&E program is to monitor, assess and report on the effectiveness of the implementation of resettlement, and particularly the application of mitigation measures. This includes asset acquisition, disbursement of compensation, physical progress with land resettlement and rehabilitation activities, effectiveness of consultation and participation, and the sustainability of livelihood restoration efforts. M&E will thus form an integral part of project implementation, providing the necessary information about the involuntary resettlement aspects of the project, measuring the extent to which the goals of the RAP have been achieved, and the effectiveness of mitigation measures.

The basic components of an M&E framework are:

- Internal M&E;
- External M&E; and
- Completion audit.

It is essential that an M&E Specialist coordinates and manages M&E functions, with assistance from a Safeguards Officer within the DWA. Internal M&E is an ongoing management function of the ESSU, and is a required management process. Information may be obtained through:

- Review of available project documentation, including internal reports, minutes of meetings, computer databases and analyses, and GIS mapping;
- On-the-ground observation, through site visits and attendance at community-based meetings;
- Personalised interviews with selected stakeholders; and
- Focus group discussions with PAP, particularly those with specialised interests, such as chiefs and elders, farmers, women, and vulnerable groups.

It will be the Client's responsibility to facilitate the carrying out of external reviews. These must be conducted out by a qualified independent Environmental/Social Consultant or a Monitoring and Evaluation Consultant not directly associated with DWA or its implementing bodies. External reviews are meant to advise independently on all aspects of the Project, including evaluation of the resettlement component of the Nondvo Dam construction.

At the end of the Project's resettlement program, a completion audit must be prepared by an independent agency drawing on the information collected through the M&E program.

13. GRIEVANCE MECHANISM

An appropriate grievance and dispute resolution mechanism is required to enable all stakeholders affected by the Nondvo Dam project to raise grievances and concerns, and to secure structured and effective responses. Grievances may occur at different stages of the project and are useful indicators of Project performance. A high volume of grievances may show the need to adjust work practices or procedures to mitigate adverse impacts and conflicts.

In general, grievances should be addressed through a stepwise and transparent process aimed at reaching consensus between the Project and the affected parties. If the aggrieved person is not satisfied with the decision taken by the Resettlement Implementation Team (RIT) or Grievance Committee, s/he will be able to resort to the judiciary system.

14. RAP IMPLEMENTATION PHASE AND SCHEDULE

At the time of RAP preparation an overall implementation schedule had not been issued. Once issued a detailed programme covering all resettlement activities should be linked to the overall schedule and project plan. RAPs are dynamic documents that need to be updated throughout RAP process. The RAP implementation phase is to be undertaken in two stages, firstly a consolidation stage followed by an implementation stage.

It especially important that the RAP implementation schedule is linked to the implementation of civil works delineated in a Construction Program. As such, the implementation schedule shown below (**Table 10**) may be subject to change, based on overall project schedule changes, and the roll out of the consolidation and implementation phases. The schedule reflects engineering and design, construction, land acquisition, resettlement and livelihood restoration.

Table 10: RAP Implementation Schedule

RAP IMPLEMENTATION SCHEDULE	YEAR 1	YEAR 2	YEAR 3	YEAR 4	YEAR 5
1.0 Engineering Program					
Engineering Procurement Phase	■				
Engineering Planning and Design Phase		■			
Construction Tendering Phase		■			
Construction Supervision			■	■	■
2.0 Construction Program					
Mobilisation Phase			■		
Construction Phase			■	■	■
3.0 Resettlement Program / Land Acquisition					
Institutional arrangements and formation	■				
Livelihood consultant procurement ToRs	■				
Data management system updating	■				
Updating of RAP asset information	■				
PAPs Compensation offers and acceptance		■			
Compensation distribution related training		■			
Compensation distribution phase		■			
Project Management	■	■	■	■	■
4.0 Livelihood Restoration Program					
Livelihood consultant procurement phase	■				
Livelihood consultant study phase	■	■			
Livelihood Programmes development	■	■			
Livelihood programs approval and resourcing	■	■			
Implement approved LRP programs		■	■	■	■
LRP Program phase-out					■

15. ORGANISATIONAL FRAMEWORK AND RESPONSIBILITIES

The Department of Water Affairs (DWA) under the Ministry of Natural Recourse, as the Project Proponent, has the responsibility to undertake all technical, administrative, and financial responsibilities related to the Project. For the Project to succeed a strong Social and Environment institutional base and capacity is required within the DWA, including the establishment of Project-related structures and relevant stakeholders' engagement groupings. Currently all Water-related projects within the DWA are managed by the Senior Water Engineer (SWE), overseen by the Chief Engineer Services under the leadership of DWA Director of the Ministry of Natural Resources and

Energy. This institutional arrangement will not be adequate for the management of the complex Nondvo Dam Project, and the associated resettlement.

In the absence of the environmental and social and economic unit in DWA it is recommended that the DWA establish an Environmental and Social Services Unit (ESSU) to undertake all project related technical, administrative, and financial responsibilities related to implementation of safeguard requirements and RAP matters.

With the ESSU in place, all socio-economic and resettlement issues, including implementation of safeguard requirements and RAP matters would be managed by the Chief Executive Officer (CEO), overseen by the DWA Director, with input from the Chief Water Engineer (planning), Chief Water Engineer (Services) and the Technical Assistant to the Project. Upon completion the Nondvo Dam Project will be handed over to the relevant entity for operation and maintenance.

The ESSU will be supported by Consultants to provide additional expertise as and when required, as per Terms of Reference to be prepared by the DWA. Recognizing that the resettlement process is consultative and representative, the DWA will work in co-operation with Project structures set up specifically for components of the resettlement program.

16. IMPLEMENTATION BUDGET

As the Project is still at the feasibility stage, the budget has been prepared to cover compensation and related measures as at the time of the assessment based on the feasibility designs, as detailed in the following sections. These include permanent acquisitions, as well as costs for Livelihoods Restoration Programmes and operations of the participatory and operational committees.

The budget is based on the land and assets recorded within the inundation zone of the Nondvo Dam reservoir and provisional MR19 road and railway line realignment. As the Project is still at the feasibility stage the final design/alignments have not been approved, as such these may be adjusted prior to implementation.

Costs for the following construction works related items have been excluded in the budget:

- Assets to be affected by feeder roads as the routes are not yet known (replacement/reinstatement of such losses);
- Replacement / reinstatement of feeder roads, railway line realignment and associated structures (i.e. bridges etc. required to facilitate realignment) as well as realignment of the MR19;
- Destruction of standing crops, as the project implementation schedule has not been confirmed and seasonality of crops varies (furthermore, due to the extended timeline of the proposed activities sufficient notice should be provided for the PAPs to harvest final crops before relocating); and
- Reinstatement/replacement of any structures, including vending stalls damaged by, or removed for, actual construction activities.

This approach represents a conservative baseline scenario, as it covers current enumerated assets before the assignment of a cut-off-date. Should the design / alignments be altered prior to implementation there is the potential for the number of affected assets to increase or decrease, the extent of which is also dependent on the period between the current asset enumeration and effective cut-off date to be assigned for implementation purposes. A contingency amount, calculated as 10% of the RAP costs, has been included in the budget to allow for the potential variation.

The indicative budget presented below has been prepared for planning purposes only, as it is based on conceptual planning in some cases due to the Project still being in the feasibility stage. Official compensation rates, for implementation purposes, have not been adopted by the Government of Eswatini.

As identified above the rates applied are based on figures developed for similar water infrastructure projects in Lesotho. These are considered to be the most relevant currently available valuations; however, these are to be updated in line with professional valuations, during the initial stage of the RAP implementation process and adopted by the Government of Eswatini.

Based on the identified assets and proposed implementation process the overall indicative RAP budget is estimated to be approximately **E 337 282 409.28**. A summary of the various costs is provided **Table 11**.

Table 11: Overall RAP Budget

#	COST ITEMS	UNIT	RATE	COST (EMALANGENI)
1	Nondvo Dam reservoir (rates-based compensation costs) ⁷			216 574 063.34
2	Railway line realignment (provisional compensation estimate)			26 939 153.35
3	MR19 road realignment (provisional compensation estimate)			42 444 470.28
4	Inconvenience / Disturbance Allowance and Relocation Assistance			8 306 085.10
5	Consultants / Specialists for RAP implementation	Specialists	Programme	4 000 000.00
6	Steering & other committees	Meetings	lump-sum	726 600.00
7	M&E Operations Team	Surveys	lump-sum	2 993 200.00
8	Livelihood Restoration Programmes	Study + Operations	Programme	8 636 800.00
	RAP COSTS			306 620 372.07
9	Contingency @ 10%			30 662 037.21
	Total RAP COSTS			337 282 409.28

The Government of Eswatini will be responsible for all costs associated with the RAP. The required funds will be budgeted through the DWA/ESSU as the project proponent. Eswatini Water Services Corporation, as the ultimate operator of the facilities, will secure additional funds from the Eswatini Government should there be budget overruns.

On the basis that the Project is still at the feasibility stage and final design details have not been concluded, including required bulk services to the resettlement sites, it is assumed that 10% of the compensation rate of the replacement of structures is to account for installation of bulk services. Based on the identified affected assets it is anticipated that approximately E21,500,000.00 of the identified budget would be allocated to the establishment of bulk services for the affected H/holds, schools and church. Provision of additional bulk infrastructure to the surrounding communities would have to be discussed and agreed to with the Government of Eswatini.

17. CONCLUSION AND RECOMMENDATIONS

Implementation of the proposed Nondvo Dam project is proposed to supply potable water to Mbabane and Manzini, which are currently suffering from intermittent water shortages, and where the anticipated future water demand is deemed to be highest. The additional water supply is also anticipated to support the growth and economic development of the population alongside the “Corridor” area connecting the two cities. Possible secondary benefits of the proposed dam are the potential for utilising the Nondvo Dam head for small-scale hydropower generation, as well as utilising the stored water for irrigation of approximately 800 Hectares (ha) of agricultural land in the surrounding region.

However, like most large-scale development projects, implementation of the Nondvo Dam would pose both positive and negative environmental and social impacts. Based on the current designs and surveys undertaken the social impacts include loss of property, including dwellings, farmland, crops and fruit trees, ecosystem services, community facilities (church and schools) as well as connectivity of the affected communities.

⁷ The cost for obtaining replacement land has been included in the compensation cost on a rates-based approach (either cash compensation or in-kind) as per Table 9-6. It is recommended that the assets be valued by Government recognised valuers prior to presenting compensation packages to affected HHs, or securing replacement land for HHs.

According to the findings of the ESIA, and surveys undertaken, there are no fatal flaws or impacts of such significance that cannot be mitigated to prevent the implementation of the Project.

This RAP (this document) has been developed to identify and addresses the potential displacement impacts of the project, as per currently designs. Elements of the project description are subject to change, including the re-alignment of road and railway infrastructure to accommodate the new reservoir. Against this background, the displacement impacts described herein are subject to updating and refinement as Project elements are finalised and the Project moves into the implementation phase.

The budget for this RAP has been prepared to estimate the costs required for implementation of the RAP, which is to be revised after the design of the dam and associated infrastructure is finalised and professional valuation and compensation rates adopted.

The RAP is to be implemented by systematically compensating economically impacted households and resettling all physically and economically impacted households affected by the proposed Nondvo Dam Project activities. Implementation of the proposed Livelihood Restoration initiatives will enable the PAPs to reinstate their livelihood status and ensure integration into the host communities.

Approval of the proposed Nondvo Dam should be informed by the following resettlement-related recommendations:

- Confirmation of host communities and alternative land should be concluded promptly. This action will afford time for the necessary consultation, and will give both the PAPs and the host communities an opportunity to consider the implications of the resettlement;
- Project implementation authorities must ensure that all PAPs identified for resettlement are allowed to participate in decisions with regard to the selection and allocation of land for their resettlement and are allowed to choose their preferred resettlement areas;
- Interaction between resettled households and host communities must be encouraged in order to accommodate the implementation of the Livelihood Restoration Programmes that are designed to benefit both the host and those resettled;
- Procurement of Consultants for the development of Livelihood Restoration Programmes as proposed together with preparatory works should be done promptly and concluded ahead of major contractors' arrival at Nondvo Dam Project site. This will ensure that Compensation disbursements are concluded punctually prior to the arrival of major contractors so as to safeguard project acquired land;
- Project implementation agencies must commit to tailored mitigation to ensure that local people will benefit from the project through the following:
 - Availability of employment opportunities;
 - Develop some targeted training;
 - Effective implementation of the RAP.
- The allocation of alternative land should take place timeously, and where possible in proximity to currently farmed land. With appropriate Livelihood Restoration Programmes support, this will enable PAPs to continue farming activities and practices that have been their means of livelihood for many years.

Furthermore, prior to displacing PAPs, several verifications need to be done:

- The RAP report is updated as per final verification assessment and validated, all RAP action plans are operational with dedicated budget and human resources;
- Authorities are informed about the co-ordination of activities that will be required during implementation, such as sensitising communities on issues relating to resettlement, the provision of services and infrastructure, including roads/streets, power supply lines, education, health, water and sanitation, and other community and social facilities serving the area.
- Plans for all infrastructures and houses are developed and finalized;
- PAPs, host communities and authorities have accepted the new sites and the general layout of the new areas and houses based on individual affinities;
- Consultation / sensitization of host communities;
- Land tenure for displacees has been determined (and secured) in close collaboration with host communities;

- All negotiations and agreements are signed and verification of asset valuation is done by PAPs. Displaced households confirm that the compensation and resettlement packages are acceptable and they agree on the compensation, livelihood restoration assistance and household choices. Sign-off should involve witnesses, and sign-off forms are to be stored in a database to be used for future monitoring.
- Payment of compensation and other allowances is to be done soon after sign-off.

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ANNEXURES

- 1 DATA MANAGEMENT
- 2 ASSET VERIFICATION FORMS
- 3 RAP DATABASE

ACRONYMS

ACRONYM	DESCRIPTION
ADF	African Development Fund
AfDB	African Development Bank (the Lender)
AIDS	Acquired Immuno-Deficiency Syndrome
ARAP	Abbreviated Resettlement Action Plan
ARVS	Anti-retroviral
BP	Best Practice
CAL	Community Area Leaders
CEDAW	Convention on Elimination of Discrimination against Women
CEO	Chief Executive Officer
CMP	Comprehensive Management Plan
CNHS	Critical Natural Habitats
CIMS	Compensation Information Management System
CRR	Comment and Response Register
CSO	Community Service organization
CSO	Civil Society Organisations
DFI	Development Finance Institutions
DWA	Department of Water Affairs
EAARR	Environmental Audit, Assessment and Review Regulations (2000)
EAP	Environmental Action Plan
EEA	Eswatini Environment Authority
EEC	Eswatini Electricity Company
EIA	Environmental Impact Assessment
ENTC	Eswatini National Trust Commission
ESF	Environmental and Social Framework
ESIA	Environmental and Social Impact Assessment
ESMP	Environmental and Social Management Plan
ESMMP	Environmental and Social Management and Monitoring Plan
ESMS	Environmental and Social Management System
ENHB	Eswatini National Housing Board

ACRONYM	DESCRIPTION
ESS	Environmental and Social Standards
ESSU	Environmental Social Services Unit
EPAP	Equator Principles Action Plan
EPFI	Equator Principles Financial Institution
EPs	Equator Principles
ERD	Eswatini Roads Department
EWAGAA	Eswatini Action Group Against Abuse
FAO	Food and Agriculture Organization
FDI	Foreign Development Investment
FFP	Food for Peace
FGD	Focus Group Discussion
FPIC	Free, Prior, and Informed Consent
FRAP	Full Resettlement Action Plan
FSL	Full Supply Level
GBV	Gender Based Violence
GC	Grievance Committee
GDP	Gross Domestic Product
GHG	Greenhouse Gases
GIS	Geographic Information system
GIIP	Good International Industry Practice
GM	Grievance Management
GO	Grievance Officer
GPS	Global Positioning System
ha	Hectare
HHs	Households
HIV	Human Immuno-deficiency Virus,
HPP	Hydropower Plant
ICP	Informed Consultation and Participation
ID	Identify Document
IESIA	Integrated Environmental and Social Assessment

ACRONYM DESCRIPTION

IFC	International Finance Corporation
IUCN	International Union for Conservation of Nature
IWRMP	Integrated Water Resources Master Plan
JMRBWS	Joint Maputo River Basin Water Resource Study
KIIs	Key Informants Interviews
km	Kilometre
LHDA	Lesotho Highlands Development Authority
LHWP	Lesotho Highlands Water Project
LLBWSS	Lesotho Lowlands Bulk Water Supply Scheme
LRI	Livelihood Restoration Improvement
LRP	Livelihood Restoration Plan
MDG	Millennium Development Goals
MDWSP	Metolong Dam Water Supply Programme
MHUD	Ministry of Housing and Urban Development
M&E	Monitoring & Evaluation
MPWT	Ministry of Works and Public Transport
MR	Main Road
MS	Microsoft
MW	Megawatts
MMA	Maphanga Mitchell Associates
NDS	National Development Strategy
NGOs	Non-Governmental Organisations
NRP	National Resettlement Policy
NRRP	National Rural Resettlement Policy
OHS	Occupational Health and Safety
OS	Operational Safeguard
PAP	Project Affected People
PAC	Project Affected Community
PAH	Project Affected Household
PCR	Physical Cultural Resources

ACRONYM DESCRIPTION

PRSP	Poverty Reduction Support Programmes
PSs	Performance Standards
QAQC	Quality Assurance and Quality Control
RAP	Resettlement Action Plan
RCC	Roller-Compacted Concrete Dam
RMC	Regional Member Countries
RPF	Resettlement Policy Framework
RoW	Right of Way
RWG	Resettlement Working Group
SC	Steering Committee
SADC	Southern African Development Community
SDA	Special Development Area
SEP	Stakeholder Engagement Plan
SES	Socio-Economic Survey
SIA	Social Impact Assessment
SNL	Swazi Nation Land
SWE	Senior Water Engineer
TDL	Title Deed Land
ToR	Terms of Reference
UN	United Nations
USAID	United States Agency for International Development
USD	United States Dollar
UTM	Universal Transverse Mercator
WB	World Bank
WBG	World Bank Group
WFP	World Food Programme
WGS84	World Geodetic System
WSP	WSP Environmental (Pty) Ltd

GLOSSARY OF TERMS

Affected Household: A household that stands to suffer some assets losses temporarily or permanently such as homesteads, arable land and trees, as a result of Nondvo Dam project related physical infrastructure construction activities, and for which compensation, and resettlement entitlements where applicable, are due.

Arable/Agricultural Land/Field: Land under regular cropping.

Assets: All individual/communal properties such as homesteads, arable lands, trees, resources such as forests, range lands, important cultural sites, commercial premises, tenancy, income-earning opportunities, and social and cultural networks and activities, for which compensation is due if adversely impacted upon.

Assets Inventory: Assembly of specified individual, communal, institutional and public assets (fixed properties) as determined or collected at a certain point in time using specific aerial photos, mapping, field survey, land survey, etc., for which assets register will be developed and compensation payments processed.

Assets Register: A compiled record of affected assets and ownership as adjudicated and valued, and ready to be used for compensation discharge processing. The information may be stored in a computerised database for easy manipulation, long term tracking of compensation liability discharge, and settlement of disputes.

Business/Commercial property: Licensed permanent buildings or structure, premises, facility or asset used primarily for the purposes of business activity.

Communal resources: Property such as land and vegetation containing pasture, brushwood, medicinal plants, wild vegetables, and other useful grasses (valuable for roofing, making hats, baskets, mats and variety of handicrafts), and to which rights have traditionally been held by the community and which are currently under the management authority of Community Councils,

Community: A group of people linked together by common characteristics, aims, culture and environment, often with family ties.

Community Council: The local area council elected through the Local Government Act with administrative and development control responsibilities of the concerned area.

Compensation: Replacement of property/assets loss with in-kind or its monetary equivalent or as a payment for loss of usage rights and annual production in the case of communal assets and arable land. It may be payment in cash or in kind for an asset/ resource that is acquired or affected by a project at the time the asset needs to be replaced. It is an entitlement to affected persons, as a policy imperative and/or as decreed by government laws/ regulations to replace the lost asset, resource, or income.

Consultation: A tool for managing culturally appropriate two-way communications between project sponsors and the public. Its goal is to improve decision-making and build understanding by actively involving individuals, groups, and organisations with a stake in the program, thus increasing a program's long-term viability and enhancing its benefits to Project-Affected People (PAP) and other stakeholders.

Culture: Shared beliefs, customs practices, and social behaviour of a particular group.

Cultural heritage: Resources (physical and non-physical) with which community members identify as a reflection and expression of their constantly evolving values, beliefs, knowledge, and traditions. Cut-off date: date of completion of the socio-economic census and assets inventory-taking of persons affected by the project, or any other mutually agreed date. Any persons who subsequently occupy the project area after the cut-off date are not eligible for compensation and/or resettlement assistance. Similarly, fixed assets (such as built structures, crops, fruit trees, and woodlots) established after the date of completion of the assets inventory, or an alternative mutually agreed on date, will not be compensated.

Displacement: The compulsory requirement for an asset to move out of the way or be destroyed by project activity or impact (physical and/or economic), hence triggering the need for compensation including physical resettlement or relocation in the cases of homesteads, premises, and such facilities, or where the means of livelihoods get affected.

Entitlement: Range of measures comprising compensation, income restoration, transfer assistance, income substitution, and relocation which are due to affected persons, depending on the nature of their losses, to restore and improve their economic and social base.

Evacuation Allowance: A payment a relocating household or

business owner receives to cover logistical expenses of moving in the absence of the program's logistical support. It can also be referred to as a Relocation allowance.

Field: Arable land used primarily for cultivation of non-horticultural crops.

Garden: Land forming part of homestead or forming part of a residential site, which is used for the cultivation of vegetables for consumption only purpose.

Homestead: A building or group of buildings within a residential site, inclusive of any other associated structures and facilities, occupied by a household as a home.

Household: A group of persons with one family head bound by blood, marital, legal or any other relationship, living together and operating as a single economic unit in a dwelling (home/ homestead).

Household Head: A person in the family who generally runs the affairs of the household and is regarded by other members as the main decision-maker.

Involuntary Resettlement: Compulsory removal of a household due to project activities and effects such as a project-related land acquisition or restrictions on land use which causes physical displacement (relocation, loss of shelter), economic displacement (loss of land, assets, or access to assets, including those that lead to loss of income sources or other means of livelihood), or both. Resettlement is considered involuntary when affected persons or communities do not have the right to refuse land acquisition or restrictions on land use that result in displacement.

Kraal: Unroofed structure serving as an enclosure for holding livestock, associated with the homestead, business or other facility that may keep livestock.

Land acquisition: Refers to all methods of obtaining land for project purposes, which may include outright purchase, expropriation of property and acquisition of access rights, such as easements or rights-of-way. Land acquisition may also include: (a) acquisition of unoccupied or unutilized land whether or not the landholder relies upon such land for income or livelihood purposes; (b) repossession of public land that is used or occupied by individuals or households; and (c) project impacts that result in land being rendered unusable or inaccessible. "Land" includes anything growing on or permanently affixed to land, such as crops, buildings, and other improvements.

Livelihood: Refers to the range of means that individuals, families, and communities utilize to make a living, e.g. wage-based income, agriculture, other natural resource-based livelihoods, petty trade, etc.

Local Authority: Local area chieftainship together with the Community Council having jurisdiction on the local administration affairs, including land allocation and development controls – as defined in the Local Government Act of 1997.

Natural resource: The environment, plants and animals and the products derived from them that are a benefit to humans.

Public Disclosure: The process of making information available to affected people and other interested parties, particularly with regard to the environmental and social aspects of the program. Disclosure of information should be done in a timely manner, in publicly accessible locations, and in languages and formats readily understood by affected groups.

Physical displacement: Loss of shelter and/or assets caused by acquisition of related land by the program and hence triggering resettlement or relocation.

Project-Affected Person (PAP): Any person who, as a result of project implementation, loses the right to own, use, or otherwise benefit from a built structure, land (residential, agricultural, or pasture), annual or perennial crops and trees, or any other fixed or moveable asset, either in full or in part, permanently or temporarily.

Project Area: Area affected by major project components, including infrastructure.

Rehabilitation: Re-establishing incomes, livelihoods, and social systems.

Relocation: Physical moving of affected household, business, facilities, etc. from pre-program location to a new location.

Replacement: Re-building or re-establishing the affected asset or facility with a new one in situ or in a new location.

Replacement Cost: The market value of the assets plus transaction costs. With regard to land and structures, IFC defines “replacement costs” as follows: 1) agricultural land—the market value of land of equal productive use or potential located in the vicinity of the affected land, plus the cost of preparation to levels similar to or better than those of the affected land, plus the cost of any registration and transfer taxes; 2) land in urban areas—the market value of land of equal size and use, with similar or improved public infrastructure facilities and services preferably located in the vicinity of the affected land, plus the cost of any registration and transfer taxes; 3) household and public structures—the cost of purchasing or building a new structure, with an area and quality similar to or better than those of the affected structure, or of repairing a partially affected structure, including labour and contractors’ fees and any registration and transfer taxes. In determining the replacement cost, depreciation of the asset and the value of salvage materials are not taken into account, nor is the value of benefits to be derived from the project deducted from the valuation of an affected asset.

Resettlement: The process of addressing the effects of physical and economic displacement, which incorporates compensation, relocation, and livelihood restoration. The entire process of relocation and rehabilitation or livelihoods restoration resulting from project- related activities and effects; covering all non-displaced persons experiencing land acquisition, and negative impacts on assets and income.

Resettlement Action Plan (RAP): A time-bound action plan with budget setting out resettlement strategy, objectives, entitlement, actions, responsibilities, monitoring and evaluation.

Residential Site: Piece of land allocated or leased to a household head or any individual for residential purposes.

Socio-economic census: enumeration of, together with the gathering of information on, all households and other persons occupying the land to be affected by a project and/or whose livelihoods and standards of living are to be adversely affected by project activities - whether through the loss of or access to assets/resources or through physical relocation or any other losses identified during the process of resettlement planning.

Stakeholders: Any/all individuals, groups, organisations, and institutions interested in and/or potentially affected by the program, have some vested interest in the resettlement, or play a critical role in developing the resettlement process.

Structure: A building of various shapes, forms and types of materials meant for human habitation. It extends to other constructed objects or facilities also meant for human activity purposes.

Trees: Stemmed woody plants of a size sufficient to make them useful for practical purposes such as fencing posts, construction timber or fuel, fruit bearing, etc.

Valuation: Calculation of the cash value of the affected asset, taking account of its market value and/or full replacement costs.

Vulnerable person: A person who by virtue of gender, age, physical or mental disability, economic disadvantage, or social status may be more adversely affected by the program than others, and who may have limited ability to claim or take advantage of assistance, benefits and opportunities availed by the program.

1 INTRODUCTION AND PROJECT BACKGROUND

The Kingdom of Eswatini (previously known as Swaziland) is a small landlocked country in Southern Africa, bordering Mozambique and South Africa. It covers an area of 17,360 km² and has a population of 1.39 million (mid 2012). The country is largely mountainous with 75.8% of the population living in rural areas and with livelihoods predominantly dependent on subsistence agriculture. Eswatini has relatively well-developed infrastructure in comparison to other Sub-Saharan African countries, but there are several critical areas that require further improvement.

The nature of the hydrological network of Eswatini, comprising rivers shared between states upstream and downstream, and coupled with highly seasonal rainfall patterns with relatively long periods of drought, makes the management of the country's surface water resources very difficult and vulnerable to climate change. The economic and demographic growth of the country as well as changes in water usage patterns have resulted in a significant increase in the demand for water resources. It has been determined that existing storage and distribution infrastructure will soon be inadequate to satisfy water demand. Furthermore, 'normal flow' in the rivers, most of them being transboundary, has been allocated under international treaty arrangements. The term 'normal flow' is applied to the volume of water that has been calculated to be available 80% of the time during the driest months of the year. Therefore, the only water that can be made available for allocation is surplus flow (especially during floods and rainy season). To be available for use this flow must be captured in large storage reservoirs. At present no water allocation can be made to new developments as demand far exceeds the 'normal flow'. This is a major challenge limiting further social and economic development in the country.

As a response to these constraints the Eswatini Government, through the Ministry of Natural Resources and Energy's Department of Water Affairs (DWA), plans to better exploit surface water resources in the Mbabane – Manzini Corridor. This will be done by storing water exceeding the abstraction limits established by the Tripartite Agreement signed with South Africa and Mozambique. The stored water will then be released as required for various downstream usages. A Maputo River Basin Water Resources Study (JMRBWS) was jointly undertaken by the Kingdom of Eswatini, the Republic of South Africa and the Republic of Mozambique (Skoy Plancenter Ltd, 2008). As part of this comprehensive study, a multi-criteria selection process was developed and applied to a number of possible water supply projects in order to identify the most promising options for further investigation.

The DWA appointed Studio Pietrangeli Consulting Engineers (Studio Pietrangeli) to undertake the relevant scoping and feasibility studies to "identify and design a project that meets competing water demands up to the Horizon 2050 through optimizing its dimensions and costs and minimizing socio-environmental impacts". Several project options were studied during the feasibility-scoping phase to meet the short- and long-term demands. Based on the results of the feasibility-scoping study the DWA selected the following options, as identified in **Table 1-1**, to be subjected to a detailed feasibility assessment (Studio Pietrangeli, 2019).

Table 1-1: Projects subjected to detailed feasibility assessment

SOLUTION PERIOD	PROJECT
Short Term Solutions (up to 2025)	– Hawane Dam (Raising of the wall by 3.5m) – Lumphohlo Dam (Raising of the wall by 5m)
Long Term Solutions (up to 2050)	– Nondvo Dam (construction of new dam)

As per the specified Terms of Reference (ToR), the ESIA and RAP only deals with the Nondvo Dam project. Although the Lumphohlo Dam raising is not being assessed as part of the ESIA and RAP the dimensioning of Nondvo Dam, as defined within the final feasibility study undertaken by Studio Pietrangeli, takes into account the benefit of the presence of the raised Lumphohlo Dam.

The main purpose of the Nondvo Dam is for the supply of potable water to Mbabane and Manzini, which are currently suffering from intermittent water shortages, and where the anticipated future water demand is deemed to be highest. The additional water supply is also anticipated to support the growth of the population alongside

the “Corridor” area connecting the two cities. Possible secondary benefits of the proposed dam are the potential for utilising the Nondvo Dam head for small-scale hydropower generation, as well as utilising the stored water for irrigation of approximately 800 Hectares (ha) of agricultural land in the surrounding region.

Note that two terms have been utilised in identification of the proposed dam, namely the ‘Mbabane – Manzini Corridor Dam’ and the ‘Nondvo Dam’. The Mbabane – Manzini Corridor Dam is reference to the geographical area that will be served by the dam, whilst the term “Nondvo Dam” is the official shortened version of the project. The term “Nondvo Dam” is used in this document.

2 SCOPE AND AIM OF THE RAP

This Resettlement Action Plan (RAP) addresses the potential displacement impacts of the Nondvo Dam project (the Project), as currently described (see Section 4). Elements of the project description are subject to change, including the re-alignment of road and railway infrastructure to accommodate the new reservoir. Against this background, the displacement impacts described here in relation to the inundation area are accurate at the time of undertaking the assessment, however displacement impacts related to road and railway alignment are estimates subject to updating and refinement as Project elements are finalised. It is anticipated that minor modifications to impacts and figures will occur following changes to PAP's circumstances and queries raised by a small number of PAPs over their valuations. Any changes will be captured in a separate register of changes managed by the RAP implementation team, during the first stage of implementation of the RAP.

The RAP has the following specific objectives:

- To prepare a RAP that aligns with the laws, regulations and procedures adopted by the Government of Eswatini and the African Development Bank (AfDB) as the lender;
- To identify and confirm the number of households and structures that will be affected by the project;
- To capture a profile of the Project Affected People (PAPs), including information on demography, organisation, incomes and livelihood strategies and resources;
- To evaluate lost community and public-owned assets;
- To determine and describe the assets potentially lost (houses, cultivated lands, etc.) and loss of income;
- To develop an entitlement matrix and compensation framework capturing responses to all displacement effects, both permanent and temporary;
- To develop a livelihood restoration program;
- To determine a preliminary budget for resettlement costs and assets compensation needs including land acquisition. The budget will identify sources of financing and approval process; and
- To establish responsibilities for land acquisition and resettlement measures, and for grievance management.

To facilitate implementation the RAP will:

- Use the Eswatini legal framework to guide land acquisition and compensation (aligned with international best practice);
- Develop compensation measures aligned with regulations and practices established by the Eswatini authorities (see Section 4);
- Present a resettlement schedule, covering all resettlement activities from project preparation through implementation;
- Provide a description of the linkage between resettlement implementation and the initiation of civil works;
- Identify agencies responsible for each activity;
- Prepare budgets for the implementation phase;
- Specify sources of funding and approval processes; and
- Propose monitoring and socio-economic follow-up studies in order to measure progress against baseline conditions.

The database developed during this study will be provided to the Client for use during the implementation and monitoring stages.

3 ASSUMPTIONS AND CONSTRAINTS

3.1 RAP ASSUMPTIONS

When embarking on this RAP assignment it was assumed that relevant stakeholders had been consulted regarding the finalisation of Nondvo Dam implementation. Initial railway line and MR 19 re-alignment has been included in the RAP; however, it was noted that these were high level assessments based on the feasibility study, variations of the routes may be proposed during the detailed design phase.

3.2 CONSTRAINTS TO RAP PREPARATION

The following were constraints to RAP preparation:

- The Nondvo Dam Special Development Area (SDA) has not been enacted in law. This posed challenges in the identification of affected households without fixed infrastructure locations and beacons, as well as project buy-in from the communities unsure of whether the project would go ahead. Furthermore, the absence of a Government Gazette declaring Nondvo an SDA may expose the Project to encroachment into impacted areas, without legal tools to manage influx;
 - The absence of a project specific Resettlement Policy Framework (RPF), which provides fundamental policy principles for the RAP. Among other things, the development of a Livelihood Restoration Programme (LRP) typically draws on the RPF;
 - Lack of approved Eswatini Compensation Rates. For the purpose of this RAP, compensation rates from similar projects in Lesotho have been used to arrive at budget compensation values for the Nondvo Dam affected properties (refer to Section 9.1 for further detail);
 - Limited direct engagement and open communication between DWA, other related departments and Inner Councils was perceived by some stakeholders as a stumbling block to the successful implementation of the Project. In order to ensure a smooth transition, DWA and other designated Departments should facilitate meetings of the Inner Councils of both Royal Kraals as soon as possible to ensure total buy-in to the Project;
 - The lack of final infrastructure designs disadvantaged the consultant in ensuring that all those who will be potentially affected physically and economically are identified in the current study. It is a fundamental principle of resettlement planning that impacts are minimised at design stage. An opportunity remains for this to be addressed during the detailed design phase;
 - The expected number of Community Area Leaders (CALs) to guide the RAP enumerators was reduced, with implications for the households that could be reached per day; and
 - Informal subdivision of arable land by families increased the number of PAPs and affected properties.
-

3.3 IDENTIFICATION OF REPLACEMENT LAND AND HOST COMMUNITIES

A screening analysis of proposed resettlement areas was undertaken, which included aspects such as; water supply, soil capacity /fertility, accessibility and distances from services, social acceptability and ecological risk. Four potential host sites were identified and assessed as part of the ESIA. The identified resettlement sites are located within the surrounding area (i.e. within close proximity to the affected areas to maintain social cohesion). The final allocation of resettlement areas is to be undertaken within the RAP implementation phase, based on final PAPs selection of compensation.

The establishment of the Nondvo Dam and inundation area is anticipated to affect 175 households (HHs), including with two (2) Schools, two (2) Churches and 6 businesses, which will be physically and/or economically displaced. In addition to those directly affected by the dam, another 39 HHs will potentially experience physical or economic displacement due to the realignment of the existing railway line, and a further 21 HHs due to the realignment of the existing MR19 road. The project therefore has the potential to result in the direct physical

and/or economic displacement of an estimated 235 HHs, comprising an estimated 1669 peoples⁸. This excludes those affected by the required relocation of the two schools, churches and businesses.

The dynamics of finalising replacement land within the host communities include the following;

- Relationships between the Mantabeni and Siphocosini Royal Kraals. Currently the two Royal Kraals have overlapping areas, which sometimes creates tension between the Royal Kraals. For example, in August 2019 there was an issue of land demarcation that had to be resolved because one chief apparently claimed land that did not belong to him;
- Land availability. Arable land is very scarce in Eswatini and people settling in the area are sometimes given residential plots without fields;
- Dual land claims. The asset survey identified that some families have informally subdivided properties to cater for two or three households. This matter will have to be addressed with the Inner Councils in order to establish whether this is an acceptable practice.

Considering the shortage of arable land in Eswatini, allocating land for land compensation will be difficult. In this context, it is essential that DWA engage the traditional leaders, and other relevant stakeholders, to assign alternative land following selection of compensation packages by PAPs. As indicated above, the identified host sites are located nearby so that minimisation of displacement associated impacts will be achieved. Aligning with the AfDB Safeguard Policy Guidelines as per the lender's (i.e. AfDB) requirements that "*the borrower should develop a resettlement plan only where physical displacement and loss of economic assets are unavoidable. The plan should ensure that displacement is minimized, and that the displaced persons are provided with assistance prior to, during and following physical relocation.*".

3.4 ADAPTIVE MANAGEMENT FOR RAP IMPLEMENTATION

In the context of the ongoing evolution of the project description, as peoples' individual circumstances change (e.g. through death in a family, development of a health issue, climate related impacts etc.), the constraints noted above, and the need for further engagement on key issues such as entitlement, compensation and replacement land, an adaptive approach to RAP implementation is required. Such an approach is common in resettlement planning, and RAPs are typically dynamic documents that require regular updates.

Against this background RAP refinement and updates will be undertaken within the RAP Implementation Phase, which is divided into two stages, namely a Consolidation stage and Implementation stage, as indicated below.

- Stage 1: The Consolidation Stage is to be based on final detailed designs, during which a final verification assessment and valuation, including cut-off date, will be undertaken to capture any changes in people's individual circumstances and define individual compensation packages for negotiations and acceptance by PAPs. The extend of land required for host sites will be finalised, based on PAPs acceptance of packages, and secured for allocation to individual PAPs.
- Stage 2: The Implementation Stage, during which compensation is issued and livelihood restoration activities implemented. This stage includes monitoring and evaluation of the resettlement process, including tracking impacts and objectives as well as auditing upon completion and post-project evaluation. The objective of post-project evaluation is to assess the long-term impact that resettlement has had on PAPs and host communities, and whether compensation and livelihood restoration initiatives achieved the intended benefits in a sustainable manner.

Figure 3-1 provides an overview of the elements of both stages of the RAP implementation phase. A detailed description of these elements is provided in **Section 16**.

⁸ Based on average household size of 7.1 occupants, as per survey results.

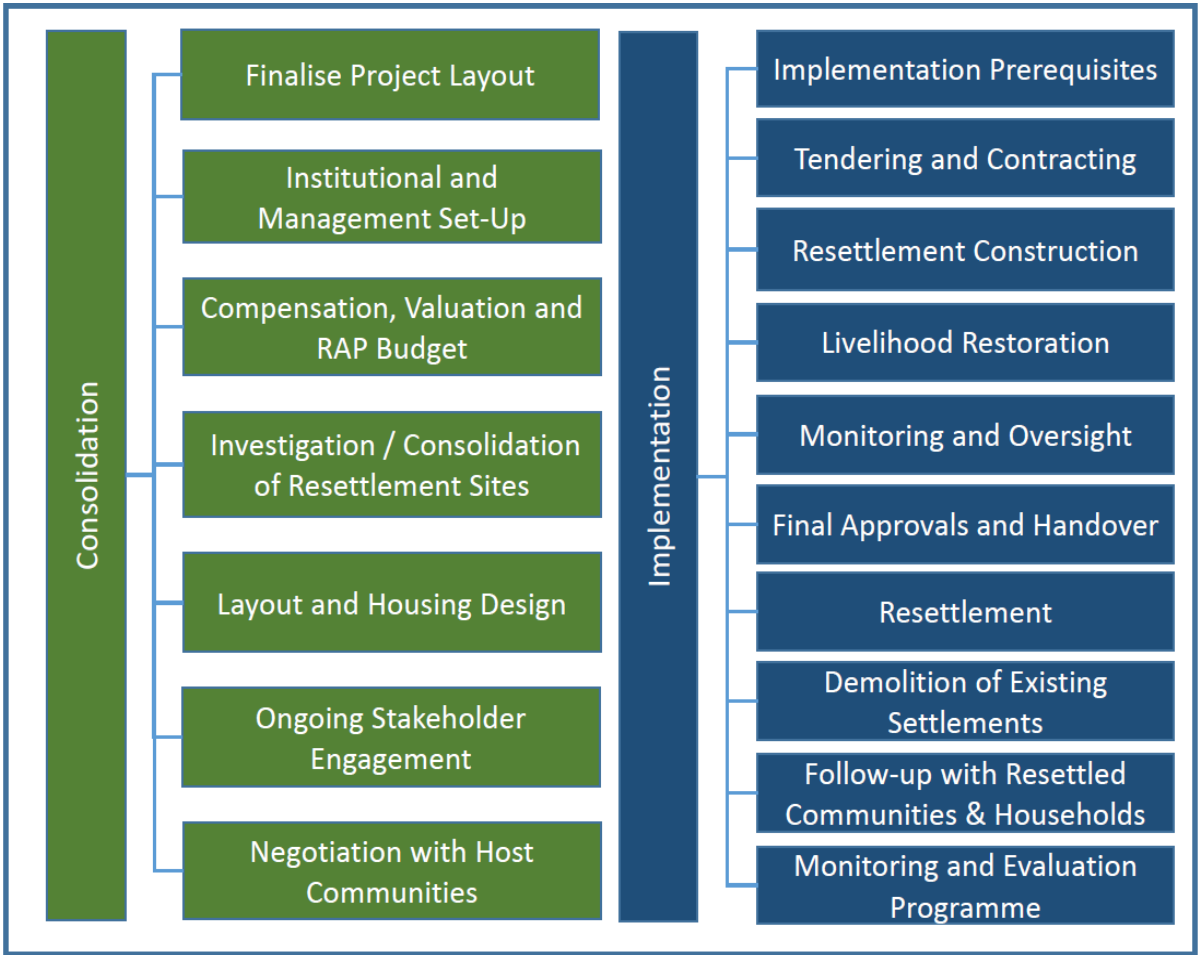


Figure 3-1: Overview of the Consolidation (Stage 1) and Implementation (Stage 2) of the RAP Implementation Phase

4 PROJECT DESCRIPTION AND LOCATION

Following the completion of the technical feasibility study, undertaken by Studio Pietrangeli (Studio Pietrangeli, 2019) it was determined that the Project would comprise a 38.6 m high gravity Roller Compacted Concrete (RCC) Dam and small hydropower plant (HPP) of less than 1 MW capacity. The dam will harvest flows along the Lusushwana River, regulated by the upstream Lumphohlo Dam, and its associated tributary, the Nondvo River, resulting in a storage reservoir with a total capacity of approximately 22 Mm³, delivering an assured yield of 9.8 Mm³ per year. The reservoir will cover a surface area of approximately 2.4 km² (240 ha) across two Royal Kraal areas, namely the Siphocosini and Mantabeni.

The dam will provide water to Mbabane, Manzini and areas between (Mbabane - Manzini corridor) to meet water demands up to 2050, for the following uses:

- Potable, industrial and tourist use;
- Irrigation of approximately 800 ha; and
- Energy production.

The proposed project site is situated approximately 12 km south of Mbabane and 26 km north-west of Manzini, along the south-eastern boundary of the Hhohho Region, Eswatini (see **Figure 4-1** and **Figure 4-2**). The proposed Nondvo Dam is to be situated on the Lusushwana River, at the following coordinates 26°25'39.04"S and 31°7'0.98"E (UTM, WGS84: 312220E; 7075564S), approximately 7 km downriver of the existing Lumphohlo Dam.

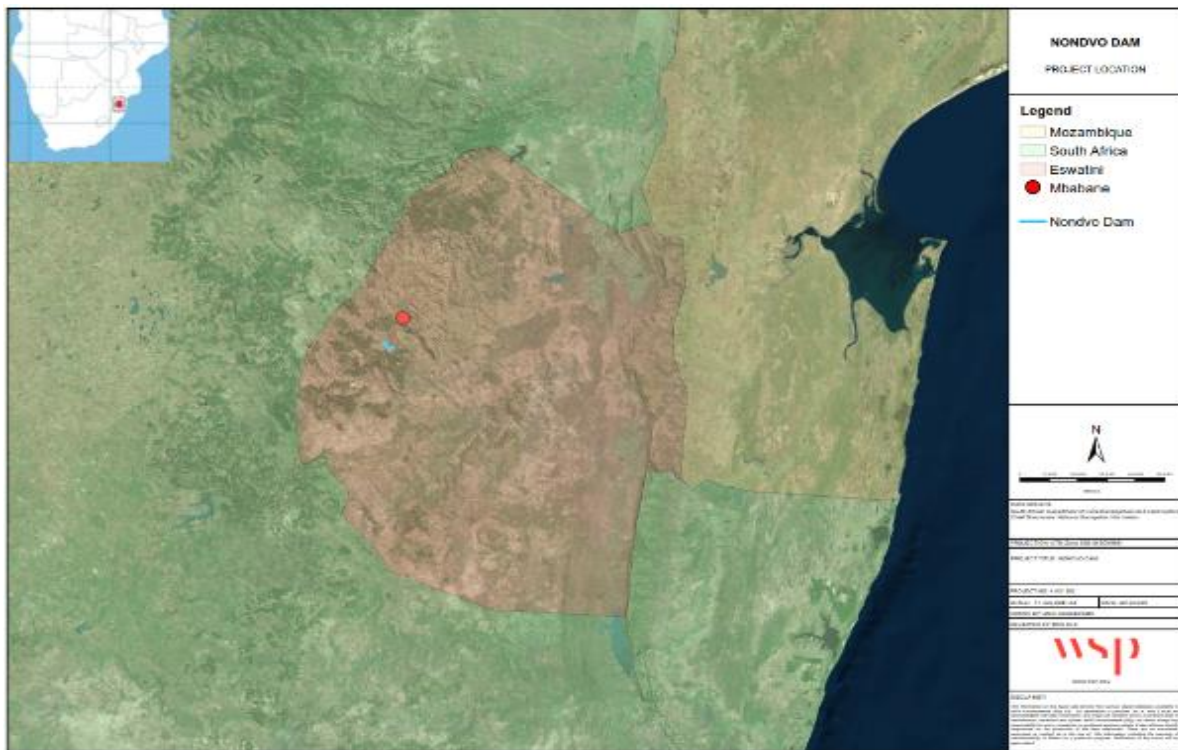


Figure 4-1: The general location of Nondvo Dam



Figure 4-2: Map indicating the Project Location

In order to ensure effective construction and operation of the dam temporary and permanent associated infrastructure is required, including river diversion works, access roads, site establishment works (i.e. site camps and offices) and quarries. Furthermore, certain existing infrastructure will be affected by the reservoir and will require realignment / relocation. These include the main road (MR19) and smaller informal roads, the railway line, electricity / communications lines, as well as private structures (i.e. dwellings, small businesses and religious and education facilities).

The Project therefore comprises the following elements as assessed within the ESIA:

- River diversion works;
- Nondvo Dam and auxiliary works;
 - Dam wall;
 - Spillway;
 - Intake;
 - Powerhouse (i.e. hydro power plant); and
 - Bottom outlet.
 - Temporary access roads;
 - Quarry;
 - Site camps and offices;
 - Electrical distribution system, connection to the existing low voltage electricity distribution scheme; and
- Realignment of the inundated parts of the Railway line and the MR19 road.

These components are illustrated in **Figure 4-3** to **Figure 4-7** below.

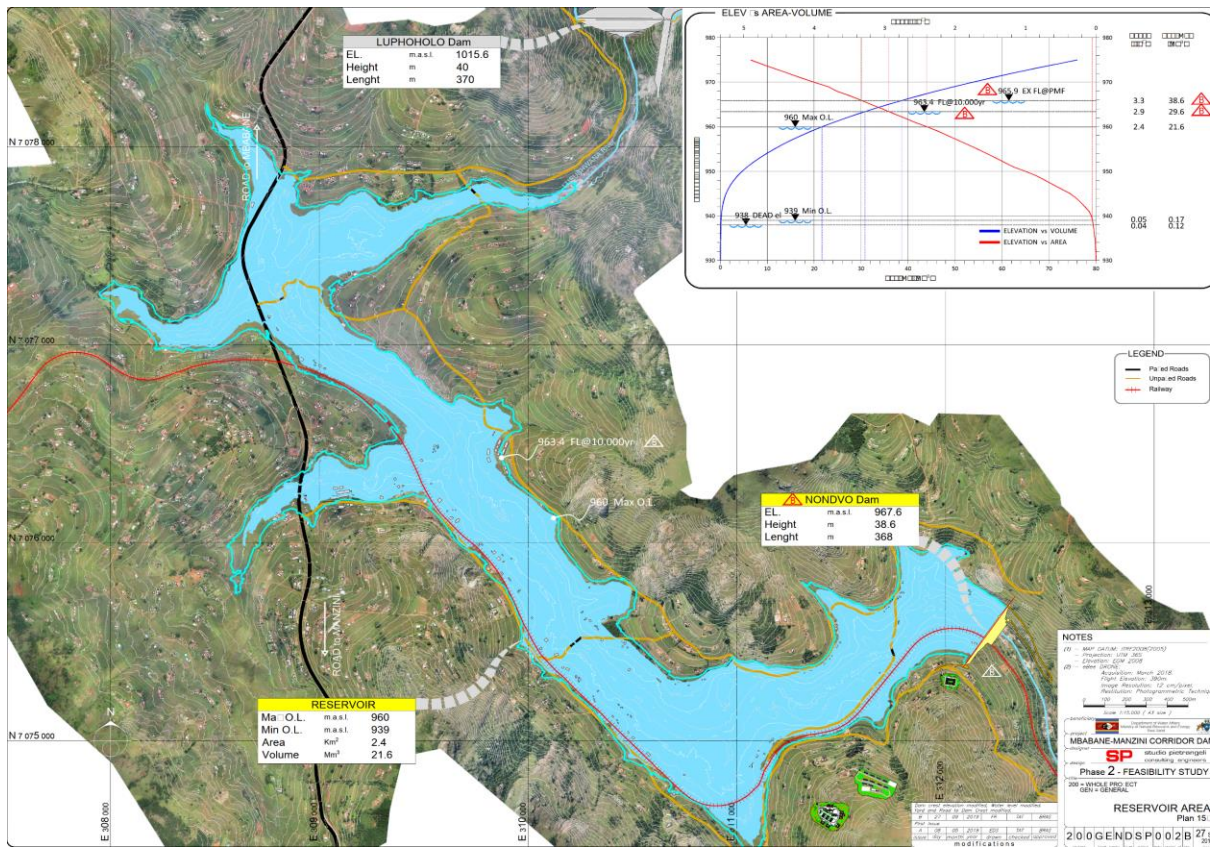


Figure 4-3: Layout of the Dam wall, reservoir area along with associated infrastructure

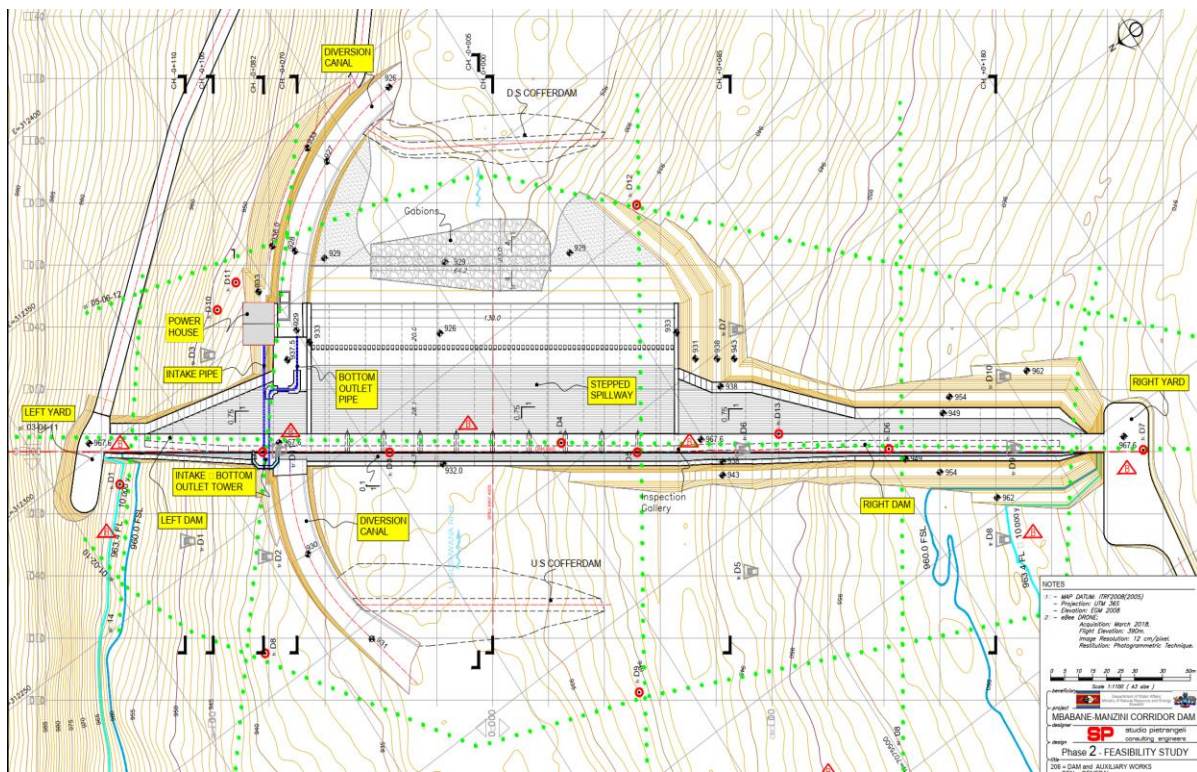


Figure 4-4: Plan of the dam wall and auxiliary works

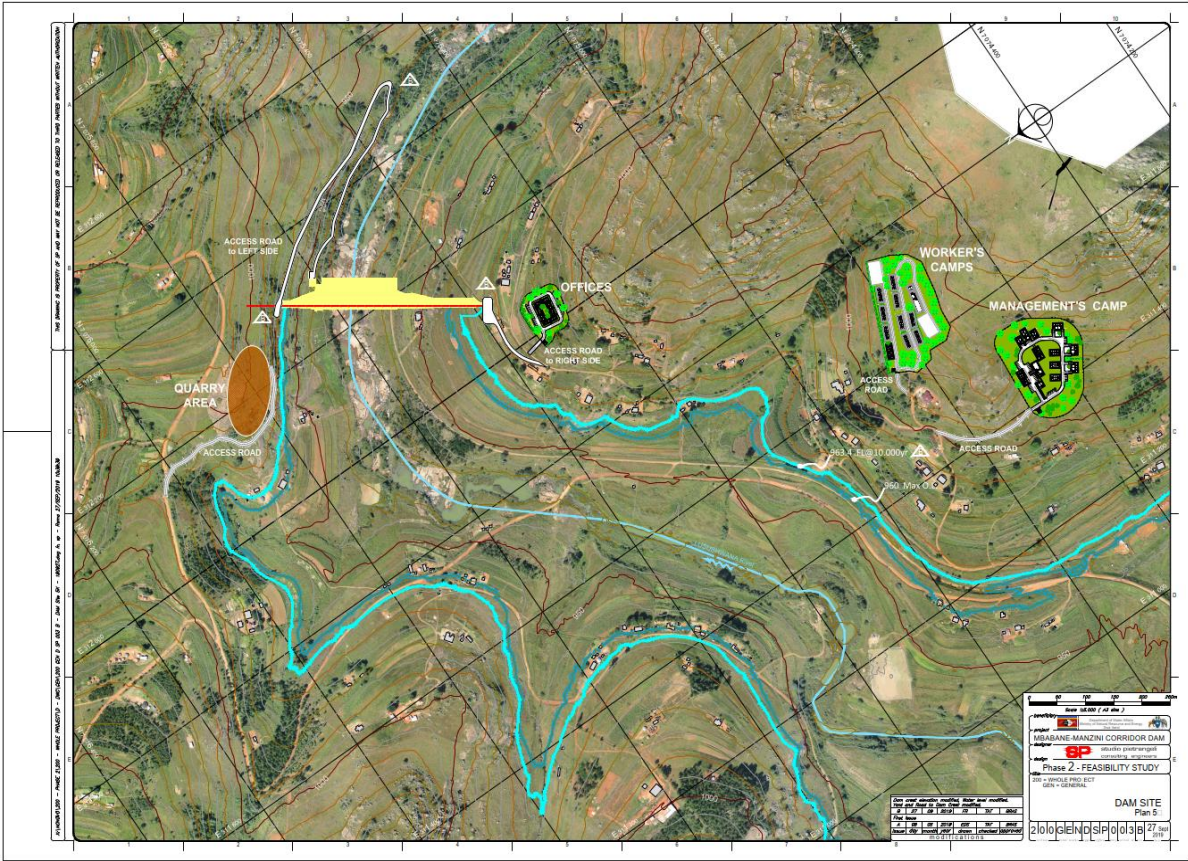


Figure 4-5: Layout showing the location and extent of the dam wall and associated infrastructure (quarry, site camps and offices, access roads)

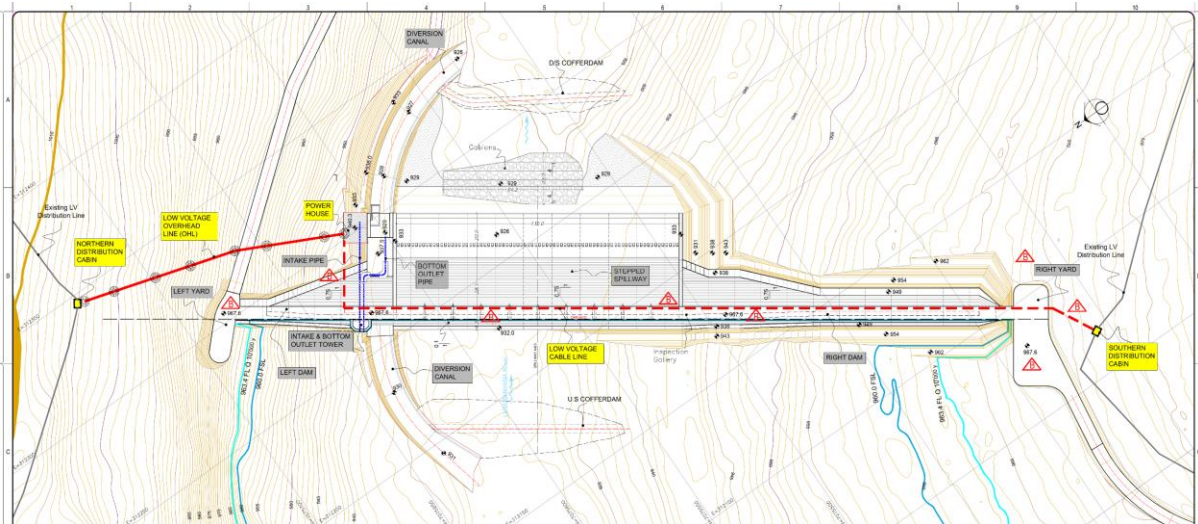


Figure 4-6: Low voltage distribution power lines

Aspects not assessed within the initial technical feasibility study report (Studio Pietrangeli, 2019) were initially excluded from the terms of reference for assessment within the ESIA and RAP. These included:

- Water distribution infrastructure (i.e. pipeline network connecting dam to end users);
- Realignment of the inundated internal access roads; and
- Realignment of the MR19.

The technical feasibility study was subsequently updated to include conceptual realignments of the MR19, as well as update the initial conceptual railway realignment (Studio Pietrangeli, 2020). According to Studio Pietrangeli, the proposed road and railway realignment have the following characteristics:

ASPECT	UNIT	MR19 ROAD	RAILWAY LINE
Length	m	6 020	6 250
Maximum Slope	%	8.8	2.0
No. of Bridges	#	0	3
Minimum Radius	m	N/A	250

The proposed re-routing alignments of the M19 road and the railway are shown in **Figure 4-7**.

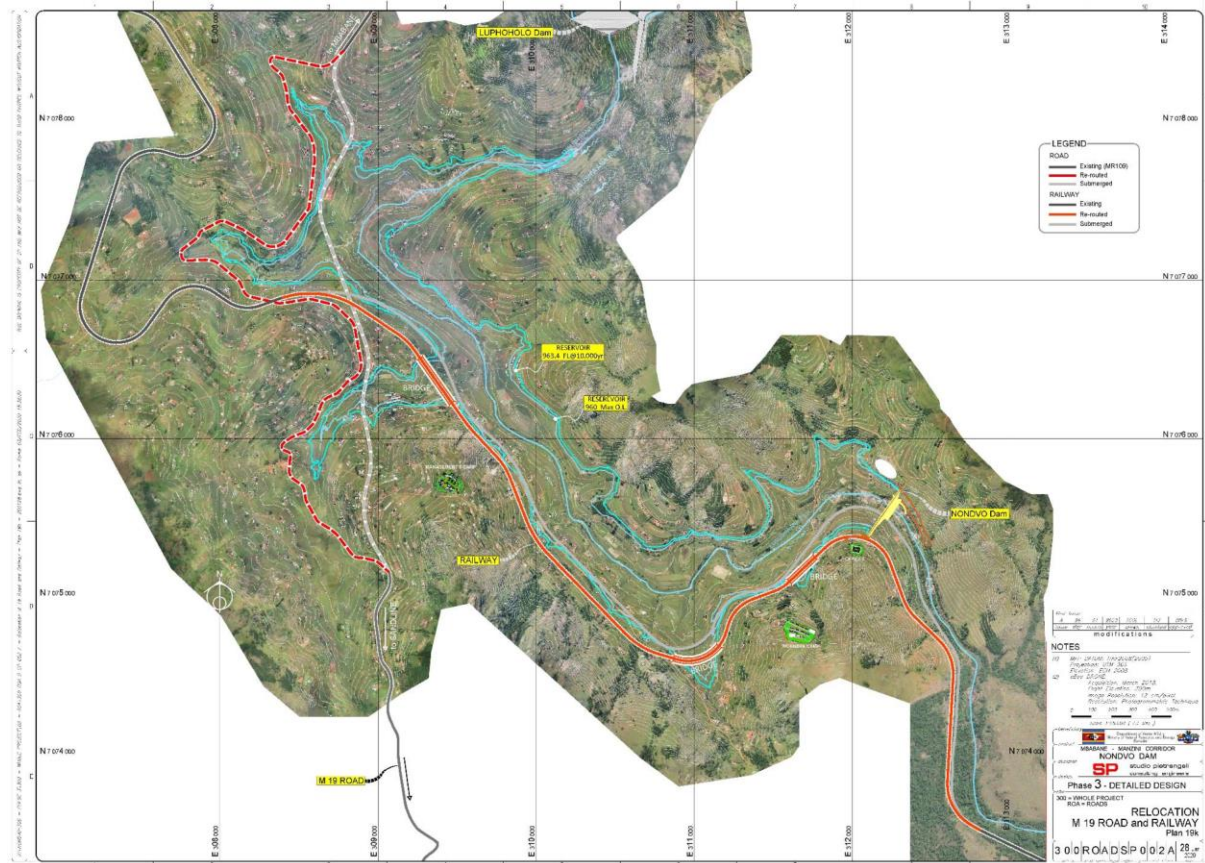


Figure 4-7: Proposed MR19 and Railway line realignment

As the proposed realignment detail of the MR19 and railway line was not available at the time of undertaking the RAP and associated asset surveys, a high-level assessment for the proposed realignment routes, based on satellite imagery, has been included within this report (see **Section 7.3** for details). A detailed assessment of the road and railway line realignment is to be undertaken during Stage 1 of the RAP implementation process, for confirmation purposes.

Furthermore, implementation of the proposed Project will not result in physical or economic displacement downstream of the dam. Potential impacts on downstream environments as well as downstream water users during the construction and operation phases are identified and assessed within the ESIA report. A major mitigating measure is the requirement for maintaining the current ecological flow thereby reducing the potential downstream impacts.

5 LEGAL AND POLICY FRAMEWORK

Project resettlement planning will seek to adhere to national laws, regulations and standards as well as to align with general principles and requirements established in State authorised policies and plans. In addition, the Project will seek to conform to the requirements of international good practice standards.

Based on the nature of the Project it is inevitable that activities will lead to land acquisition and loss of economic assets and resources and therefore, ultimately to resettlement and compensation of project affected people (PAP).

As the Project is currently in the feasibility stage, an interim Resettlement Action Plan (RAP) has been prepared as a separate standalone document forming part of the Environmental Assessment process to be submitted to the Eswatini Environment Authority. The RAP establishes the resettlement and compensation principles, organisational arrangements and design criteria to be applied to meet the needs of the people who may be affected by the project.

The RAP has been prepared according to existing Eswatini legislation and policy on resettlement and compensation (**Sections 5.1 to 5.3**) as well as the AfDB involuntary resettlement policy and Operational Safeguard 2 - Involuntary resettlement: land acquisition, population displacement and compensation (**Section 5.4.1**).

Should the DWA wish to apply for funding from other Development Finance Institutions (DFIs), the AfDB's involuntary resettlement policy generally compares well with the policies of other organisations, including the International Finance Corporation (IFC) and World Bank Group (WBG), as indicated in **Sections 5.4.2 and 5.4.3** respectively.

When final Project planning information becomes available and the affected land areas are confirmed, the RAP is to be updated by the DWA and submitted to the identified Lender for approval before any land acquisition, compensation, resettlement, or any other impact on livelihood occurs.

5.1 NATIONAL LAWS REGULATIONS AND STANDARDS

Numerous legislative instruments related to local government and land issues have been established over the years, however; at the time of compiling the RAP (2019 to 2020) no national laws, regulations or standards directly concerning resettlement have been promulgated. Nevertheless, various regulations or standards that indirectly make provision for resettlement and compensation aspects, specifically around land, are in place. Key legislation related to land acquisition and resettlement in Eswatini are presented below.

5.1.1 THE CONSTITUTION OF THE KINGDOM OF ESWATINI, 2005

The Constitution of 2005 is the ultimate law of Eswatini, and any law that is inconsistent with the Constitution will be deemed void. The Constitution establishes a number of fundamental human rights and freedoms granted to the citizens of Eswatini.

The introduction of the constitution corresponds with the government's decentralisation policy and implementation strategy. With particular respect to resettlement, the constitution specifically pronounces its position on property and compensation in Article 19(1), which states that “*a person has the right to own property alone or in association with others.*” Likewise, 19(2b) states that “*no one should be deprived of property ownership and in cases of public interest or safety owners shall be duly compensated*”.

Article 19 is further supported by Article 211(1-3) which identifies that all land in Eswatini, including any existing concessions, save for privately held title deed land, shall continue to be vested in Ingwenyama (The King) in trust for the Swazi Nation. Under the same article, a citizen of Eswatini, without regard to gender, shall have equal access to land for normal domestic purposes. Furthermore, that a person shall not be deprived of land without due process of law, and where a person is deprived of such land, he shall be compensated for any improvements on that land or loss consequent upon the deprivation unless otherwise provided by law.

The Constitution thus differentiates between the dual system of land tenure – or the rights conferred to customary and title deed land. Furthermore, Article 252(2) of the Constitution states that the principles of Swazi customary

law (Swazi law and custom) are recognised and adopted and shall be applied and enforced as part of the law of Eswatini. This further reinforces that customary rights to land are protected by the Constitution.

As well as protecting fundamental rights of all citizens, including persons with disabilities, Article 28 specifically enshrines the rights of women to equal treatment, political, economic, and social opportunities and commits the Government to enhancing their welfare, and provides for equal access to land irrespective of gender. Furthermore, under this article women may not be compelled to undergo or uphold any custom “*to which she is in conscience opposed*”.

Article 210 (1-2) of the Constitution identifies land, minerals, and water as national resources; and in the interests of the present and future generations, the State shall protect and make rational use of its land, mineral and water resources as well as its fauna and flora, and shall take appropriate measures to conserve and improve the environment.

5.1.2 ACQUISITION OF PROPERTY ACT, 1961

The Acquisition of Property Act, 1961 provides for the authorisation of property, by the State, for public and establishes the requirements with respect to compensation to be paid where land is acquired.

The Act allows the State to expropriate property for public purposes – including all projects wholly or partly funded by public funds or needed for state health and sanitation improvements, township and urban development, railways, roads and other public works. The development of dams and irrigation areas is not explicitly defined however it may be defined as an “other public works” to be undertaken by the State. The Project is funded by public funds and is deemed to be for public purpose, and hence this Act is seen to apply.

Property, under this Act, is defined as any real rights to immovable property in Eswatini, other than a mortgage bond over immovable property, including any lease, any rights to the use of public water whether derived from the common law or from statutes, as well as any land granted or ceded to any corporation, company or person. No specific reference is made to rights conferred to the individual under the dual system of land tenure, and rights conferred in terms of compensation. Hence the rights provided to persons residing on Swazi Nation Land, as is the case with the Project, are not explicitly defined under this Act.

Article 3 provides that the Minister responsible for Natural Resources may acquire any real property needed for public purposes, whether present or future, paying such consideration or compensation as may be agreed upon or determined under the provisions of this Act.

Once the Minister is satisfied that certain property is required for a public purpose, he shall give notice to the owner or any person claiming title thereof to sell and convey or lease the said property for the execution of the public purpose. Notices must include direct notification of the property owners, newspaper adverts and government gazette publications in compliance with Article 8. Article 7 allows the State to take possession of the land in question after the expiry of a period specified in the initial notice to the property owner.

The State may only enter these negotiations after the appropriate notification process. Where the compensation for the loss of property is in dispute, the State will establish a Board of Assessment (Article 10). The board will establish a formal inquiry into the dispute. The Board, in determining the value of compensation to be awarded shall take into the consideration the following matters:

- The market value of the property;
- Increase in value of other properties;
- Any damage sustained by the property owner from severing of the property from any other land;
- Any reasonable expenses incidental to a change of residence or place of business that is required because of the acquisition.

The decision on compensation by the Board of Assessment will be legally binding for the Ministry and the resident.

Exclusions to compensation include any property improvements made after the date of notification, or improvements made within 1 year immediately preceding the publication of the notice, unless it is proved that the improvement was needed and does not constitute speculative behaviour.

5.1.3 THE SWAZI LAND SETTLEMENT ACT, 1946

The Swazi Land Settlement Act, 1946 provides for the establishment, control and development of land settlement schemes for the Swazi Nation. According to the National Rural Resettlement Policy, 2003 (Government of the Kingdom of Eswatini, 2003), this Act is not directly used, although as it remains on the statute books it remains in-force.

Under the Act, certain areas of land were set aside for settlements. Persons may, however, only reside on, cultivate, or use the land within the settlement with permission of the Principal Secretary, or a duly delegated authority. Permission may constitute the allocation of land in the land settlement areas for agricultural, residential, and garden allotments, for afforestation and for commonage.

Consistent with current practice, the Principal Secretary and the Ministry of Agriculture and Co-operatives will play a critical role in the resettlement process. Specifically, this may include the identification of suitable replacement land as a host site, authorisation of the use of the land for resettlement and the rational planning of the host site for agricultural, residential, and grazing uses, amongst others.

5.2 SUPPORTING LEGISLATION

In addition to the legislation noted above, there is a range of supplementary laws that, while not directly related to resettlement, may inform elements. These are identified in **Table 5-1**.

Table 5-1: Summary of supporting legislation

TITLE OF THE ACT	FUNCTION
The Environmental Management Act, 2002	<p>Provides for the promotion and enhancement, protection and conservation of the environment and matters that are incidental thereto.</p> <p>This Act does not establish specific requirements or regulations with respect to resettlement and compensation. However, it does establish principles with respect to the protection of the natural and social environment – specifically physical, aesthetic, and cultural qualities or conditions that affect the health and well-being of people.</p> <p>This Act also governs the other Environmental Acts, which include but not limited to, The Forest Preservation Act of 1910, The Private Forest Act 1951, The Water Act of 2003, and the Flora Protection Act of 2001.</p>
The Environmental Audit, Assessment and Review Regulations, 2000	<p>Establishes the requirements and regulations with respect to environmental audits, the Environmental Impact Assessment (EIA) process, as well as the review and licensing of new projects.</p> <p>The Project will be required to prepare an EIA report and Comprehensive Management Plan (CMP), as well as undertake a public consultation process in compliance with this Act.</p> <p>No explicit reference is made to resettlement and compensation. This aspect is considered to be fundamentally linked to the requirement that environmental and socio-economic impacts are to be managed under the CMP. The RAP will form a critical sub-component of the CMP.</p>
The Eswatini Environment Authority Act, 1992	<p>Established the Eswatini Environment Authority and conferred general powers and functions of environmental protection. Act repealed by the Environmental Management Act, 2002 except for Section 11.</p>
Human Settlements Authority Act, 1988	<p>The Act establishes the Human Settlements Authority and its objectives and functions. It provides policy support to Government and the orderly development</p>

TITLE OF THE ACT

FUNCTION

	<p>of human settlements by allowing for and outlining procedures for the establishment of Human Settlements.</p> <p>It also makes provision for the establishment of human settlement development plans, the revocation or modification of development plans and finance mechanisms for the supply and maintenance of improved shelter and infrastructure.</p>
The Building and Housing Act, 1988	<p>The Act provides for the control and the safety of buildings and for incidental or connected matters. It deals with the classes of buildings, locations, design and construction and building regulations, including codes of practice.</p> <p>Procedures for applications are specified within the Act. The Principal Secretary of the Ministry of Housing and Urban Development (MHUD) makes the final decision, except in Mbabane and Manzini, where it is made by the City Council.</p> <p>This Act will be applicable in terms of the design specification of the replacement structures and community buildings.</p>
National Housing Board Act, 1988	<p>The Act deals with the establishment of the Eswatini National Housing Board (SNHB) and includes provisions to purchase, or by other means acquire and by sale, mortgage, or lease, dispose of any movable or immovable property. It details the objects and functions of the Board, which subject to the provisions of the Human Settlements Authority Act are to provide affordable housing generally in Eswatini and to take over such housing schemes as the government may determine. The SNHB make loans for acquisition of property and construction of housing or housing schemes.</p>
The Eswatini Posts and Telecommunications Corporations Act, 1980	<p>This Act provides for the establishment of the Eswatini Posts and Telecommunications Corporate and, albeit not substantively, provides for the procedure to be followed in the event there is a necessity to remove telephone lines or alter such lines positions.</p>
The National Trust Commission Act, 1972	<p>This Act provides for the operation of cultural institutions and the proclamation of national parks, monuments and matters incidental thereto. The Act provides further, at Section 21, that the owner or occupier of private land falling within the boundary of a reserve shall not without the prior consent of the Commission sell or lease such land or permit any portion of such land to be occupied without having given a prior option to the Commission to purchase, lease or otherwise occupy such land on the same terms.</p> <p>The person may not construct a building, roads, dams, or bridges without such consent. No excavation or material alteration of the natural configuration of such land can be made. The National Trust Commission should, in terms of this Act, have first preference in the purchase or lease of the property.</p>
Conveyance and Burial of Dead Bodies Act, 1970	<p>This Act deals with the conveyance of dead bodies, their burial and incidental or connected matters, which include but not limited to the exhumation in reburial of the said dead bodies.</p> <p>The Act provides that no person shall cause a body, or remains of a body, to be exhumed without a permit issued by the Minister or without an order of the High Court. The Act also provides that the body or remains of a person who died from an infectious disease shall only be exhumed after the lapse of four (4) years since death and that in all other cases the exhumation of a body or the remains of a body shall be permitted after the lapse of two (2) years.</p> <p>However, in special circumstances the Minister may waive the provisions of the paragraph relating to the exhumation of a body of a person who did not die from an infectious disease. The Minister referred to herein is the Minister of Tinkhundla Administration and Development.</p>

TITLE OF THE ACT	FUNCTION
Deeds Registry Act, 1968	<p>The Act consolidates and amends the laws in force in Eswatini relating to the Registration of Deeds. It establishes the Deeds Registry, appointment, duties and powers of the Registrar. It deals with the registration of land including transfers, substituted title deeds and endorsements and covers; change of title by endorsement; townships including requirements in case of sub-divisions of land into lots, transfer of township, extension of boundaries of an existing township.</p> <p>It further deals with bonds including execution, cession, transfer and registration of notarial bonds, the rights in immovable property and ante nuptial contract. A discussion concerning the township establishment process, in which this legislation plays an important part, is contained in relationship to the Human Settlements Authority Act.</p>
The Railway Act, 1962	<p>The Act provides for the construction and operation of the Eswatini Railway and for finances of the said Railway. The Act makes provision for the powers of the Eswatini Railway, one of which is to acquire land.</p> <p>This Act is relevant to the proposed realignment of the existing railway line that will be affected by the reservoir.</p>
Town Planning Act, 1961	<p>This act makes provision for the preparation and carrying out of town planning schemes in declared urban areas. In addition, it establishes the Town Planning Board, its functions, powers and duties. While the Act makes provision for land acquisition and compensation, it specifically targets town-planning schemes in declared urban areas only and does not make provision for rural areas.</p>
Land Survey Act, 1961	<p>The act provides for the survey of land and matters incidental thereto. It deals with interpretation including the definition of diagram, general plan, lot, owner, registration, and township. It deals with matters relating to the Surveyor-General and Surveyors, surveys and resurveys, beacons, and boundaries.</p>
Subdivision of Lands Act, 1957	<p>This Act consolidates and amends the law relating to the sub-division of land in Eswatini. The approval of Natural Resources Board is required for subdivision, whilst the Surveyor General is required to approve the diagram and the Registrar of Deeds to register transfer/lease.</p>
Swazi Administration Act, 1950	<p>The King may regulate the use of Swazi National Land under section 10 of the Swazi Administrations Act, including the use of such land for public purposes and the resettlement of persons living thereon if necessary.</p>
The Definition of Swazi Areas Act, 1917	<p>This Act describes areas set apart under the Concessions' Partition Act and declares and determines the conditions and restrictions subject to which the Swazi people are entitled to the sole and exclusive use and occupation of such areas. This Act defines the various Swazi Nation Land within the various districts, and it confers certain rights on Swazi nationals on the use of such land.</p>

5.3 NATIONAL POLICIES

5.3.1 NATIONAL RURAL RESETTLEMENT POLICY, 2003

The National Rural Resettlement Policy (Government of the Kingdom of Eswatini, 2003) was established to provide a practical framework for the planning of resettlement activities and the sustainable management of land in rural Eswatini. The policy focuses on aspects such as:

- improving land use in rural Eswatini in order to enhance sustainable livelihoods;
- correction of existing land-use problems through participatory planning by all stakeholders;
- prevention of future land-use problems; and
- ensuring that affected people are at least as well-off after resettlement as they were before.

The Policy makes provision for a range of resettlement principles that are largely based on international good practice, these are as follows:

- Optimum and sustainable land use by rural communities;
- Appropriate choice of land management strategies and resettlement models;
- Sustained community participation and involvement;
- Transparent, orderly and legitimate land allocation;
- Fair, equitable and adequate compensation of affected persons;
- Appropriate and effective legislation;
- Efficient management of land disputes; and
- Ensuring sustained monitoring and evaluation.

The Policy also makes specific provision with respect to national policy on key resettlement issues and establishes applicable policy statements in terms of how these issues should be addressed. It is however noted that many of the strategies and institutional arrangements called for in this Policy are not currently supported by the legal framework.

The development of the RAP has been aligned with the provisions and principles established in this Policy.

5.3.2 MINISTRY OF HOUSING AND URBAN DEVELOPMENT RESETTLEMENT POLICY & GUIDELINES 1994

The Ministry of Housing and Urban Development (MHUD) resettlement policy and guidelines lay a foundation through which resettlement can be carried out regarding MHUD projects. The Policy and Implementation Guidelines were compiled to meet the needs of the Eswatini Urban Development Project (SUDP). This project was jointly funded by the International Bank for Reconstruction and Development (IBRD) and the Government of Eswatini. The policy and guidelines were specifically intended to meet the World Bank's safeguard policy. This is evident in that the key objectives of the policy, which are outlined below, are virtually the same as that of the World Bank.

The key objectives of the policy are:

- Involuntary resettlement should be avoided or minimised, exploring all designs and alternative mechanisms to permit residents to remain;
- Where ten or more households are affected, a resettlement plan is required to be approved, which should consider the needs of vulnerable groups;
- Affected persons shall have their previous standard of living restored, and shall be no worse off;
- The costs of resettlement shall be borne neither by those displaced nor the host community;
- Those affected shall be compensated prior to moving for immovable assets, loss of income or livelihood, losses arising from disturbance, etc.;

Although the policy and guidelines focus on physical relocation, the rules apply to any loss of land or assets. Although developed specifically for MHUD Projects, the provisions and principles established in this Policy have also been considered in the Development of the RAP to limit the potential adverse effects of resettlement.

5.4 INTERNATIONAL STANDARDS, POLICIES AND GUIDELINES ON INVOLUNTARY RESETTLEMENT

These are standards and guidelines developed by international institutions related to land acquisition, resettlement and compensation aimed at optimizing land acquisition and resettlement performance.

In addition to national policies and legislation a series of measures will be implemented in accordance with the AfDB involuntary resettlement policy and integrated safeguard system, specifically Operation Safeguard 2, with a view to ensure that adequate mitigation measures are put in place by the project proponent to deal with any negative impacts on the project affected persons.

This section reviews the AfDB safeguards, as it is the funder for the project, as well as the IFC Standards as they are generally regarded as the guiding standard in the natural resources and infrastructure sectors.

5.4.1 AFRICAN DEVELOPMENT BANK

INVOLUNTARY RESETTLEMENT POLICY, 2003.

The primary goal of the involuntary resettlement policy of the AfDB, is to ensure that when a project requires people to be displaced, they are treated equitably and share in the benefits of the project that involve their resettlement and improving their living standards. The policy aims to ensure that disruption to the livelihoods of people in the project area is avoided or at least minimized, and that the displaced persons receive resettlement assistance to improve their living standards. It provides guidance to borrowers and sets up a mechanism for monitoring the performance of the resettlement programmes. Most importantly, it requires the preparation of a RAP under a development approach that addresses issues of the livelihood and living standards of the displaced persons as well as compensation for loss of assets, using a participatory approach at all stages of project design and implementation.

The Policy has the following key objectives:

- To avoid involuntary resettlement where feasible, or minimize resettlement impacts where population displacement is unavoidable, exploring all viable project designs. Particular attention must be given to socio-culture consideration such as culture or religious significance of land, the vulnerability of affected population, or the availability of in-kind replacement for assets, especially when they have important intangible implication. When a large number of people or a significant portion of the affected population would be subject to relocate or would suffer from the impacts that are difficult to quantify and to compensate, the alternative of not going ahead with the project should be give serious consideration;
- To ensure that the displaced people receive resettlement assistance, preferably under the project, so that their standards of living, income earning capacity, and production levels are improved;
- To provide explicit guidance to Bank staff and to the borrowers on the conditions that need to be met regarding involuntary resettlement issues in Bank operations in order to mitigate the negative impacts of displacement and resettlement and establish sustainable economy and society; and
- To set up a mechanism for monitoring the performance of involuntary resettlement programs in Bank operations and remedying problems as they arise to safeguard against ill-prepared and poorly implemented resettlement plans.

OPERATIONAL SAFEGUARD 2 – INVOLUNTARY RESETTLEMENT: LAND ACQUISITION, POPULATION DISPLACEMENT AND COMPENSATION

This Operational Safeguard (OS) aims to facilitate the operationalisation of the Bank's 2003 Involuntary Resettlement Policy in the context of the requirements of OS1 and thereby mainstream resettlement considerations into Bank operations.

It relates to AfDB-financed projects that cause the involuntary resettlement of people. It seeks to ensure that when people must be displaced, they are treated fairly, equitably, and in a socially and culturally sensitive manner; that they receive compensation and resettlement assistance so that their standards of living, income-earning capacity,

production levels and overall means of livelihood¹⁰ are improved; and that they share in the benefits of the project that involves their resettlement.

The OS retains the requirement to provide compensation at full replacement cost; reiterates the importance of a resettlement that improves standards of living, income earning capacity, and overall means of livelihood; and emphasizes the need to ensure that social considerations, such as gender, age, and stakes in the project outcome, do not disenfranchise project-affected people.

The specific objectives of this OS mirror the objectives of the involuntary resettlement policy to:

- Avoid involuntary resettlement where feasible, or minimize resettlement impacts where involuntary resettlement is deemed unavoidable after all alternative project designs have been explored;
- Ensure that displaced people are meaningfully consulted and given opportunities to participate in the planning and implementation of resettlement programmes;
- Ensure that displaced people receive significant resettlement assistance under the project, so that their standards of living, income-earning capacity, production levels and overall means of livelihood are improved beyond pre-project levels;
- Provide explicit guidance to borrowers on the conditions that need to be met regarding involuntary resettlement issues in Bank operations to mitigate the negative impacts of displacement and resettlement, actively facilitate social development and establish a sustainable economy and society; and
- Guard against poorly prepared and implemented resettlement plans by setting up a mechanism for monitoring the performance of involuntary resettlement programmes in Bank operations and remedying problems as they arise.

In line with the framework in the involuntary resettlement policy, this OS covers economic, social and cultural impacts associated with AfDB-financed projects involving involuntary loss of land, involuntary loss of other assets, or restrictions on land use and on access to local natural resources that result in:

- Relocation or loss of shelter by the people residing in the project area of influence;
- Loss of assets (including loss of structures and assets of cultural, spiritual, and other social importance) or restriction of access to assets, including national parks and protected areas or natural resources; or
- Loss of income sources or means of livelihood as a result of the project, whether the people affected are required to move or not.

In accordance with the involuntary resettlement policy, three groups of displaced people are entitled to compensation or resettlement assistance for loss of land or other assets taken for project purposes:

- Those who have formal legal rights to land or other assets recognized under the laws of the country concerned. This category generally includes people who are physically residing at the project site and those who will be displaced or may lose access or suffer a loss in their livelihood as a result of project activities.
- Those who may not have formal legal rights to land or other assets at the time of the census/ evaluation but can prove that they have a claim that would be recognized under the customary laws of the country. This category may include people who may not be physically residing at the project site or persons who may not have any assets or direct sources of livelihood derived from the project site, but who have spiritual and/or ancestral ties with the land and are locally recognized by communities as customary inheritors. Depending on the country's customary land use rights, they may also be considered to have a claim if they are sharecroppers, tenant farmers, and seasonal migrants or nomadic families losing user rights.
- Those who have no recognizable legal right or claim to the land they are occupying in the project area of influence and who do not fall into either of the two categories described above, if they themselves or witnesses can demonstrate that they occupied the project area of influence for at least six months prior to a cut-off date established by the borrower or client and acceptable to the Bank. These groups may be entitled to resettlement assistance other than compensation for land to improve their former living standards (compensation for loss of livelihood activities, common property resources, structures and crops, etc.)

As indicated in **Table 5-2** below, the eligibility categories defined within this RAP align with the above (refer to **Section 9** for further detail).

Specific requirements are set out within the OS. These requirements are defined in **Table 5-2**, along with how the various requirements have been applied during the resettlement planning process to date, as well as requirements going forward.

Table 5-2: Summary of AFDB OS2 requirements and application within the RAP

AFDB - OS 2 REQUIREMENTS	APPLICATION WITHIN THE RAP
Eligibility classification:	
<p>Three groups of displaced people are entitled to compensation or resettlement assistance for loss of land or other assets:</p> <ul style="list-style-type: none"> — Those who have formal legal rights to land or other assets recognized under the laws of the country concerned. — Those who may not have formal legal rights to land or other assets at the time of the census/ evaluation but can prove that they have a claim that would be recognized under the customary laws of the country. — Those who have no recognizable legal right or claim to the land they are occupying in the project area of influence and who do not fall into either of the two categories described above, if they themselves or witnesses can demonstrate that they occupied the project area of influence for at least six months prior to a cut-off date established by the borrower or client and acceptable to the Bank. 	<p>Eligibility within the RAP is categorised as follows:</p> <ul style="list-style-type: none"> — Persons with formal legal rights to land or assets, including customary and traditional rights recognised under the laws of Eswatini (i.e. Title Deed Land (TDL) / Swazi Nation Land (SNL)). — Persons with no formal legal rights to land, but with a claim to such land or assets, provided that such claims are recognised under the laws of Eswatini or become recognised through a process identified in the RAP. — Persons with no recognisable legal right or claim to the land they are occupying.
Project design:	
<p>The borrower or client considers feasible alternative project designs, including re-siting and re-routing, to avoid or minimise physical or economic displacement, while balancing environmental, social, and financial costs and benefits.</p>	<p>The technical feasibility study assessed various alternative locations and heights of the dam wall to determine the preferred location and height to meet the required water storage capacity while resulting in the smallest possible project footprint within the identified catchment area that meets the water supply demand requirements to 2050.</p>
Consultation, participation and broad community support:	
<p>When displacement cannot be avoided, the borrower or client must consult in a meaningful way with all stakeholders, particularly the people affected and the host communities, and involve them at all stages of the project cycle in a clear and transparent manner—in designing, planning, implementing, monitoring, and evaluating the Resettlement Action Plan.</p> <p>Community participation helps to ensure that compensation measures, development programmes and service provisions reflect the needs and priorities of the people affected and their hosts. The borrower or client also gives special attention to consultations that involve vulnerable groups.</p>	<p>This RAP has been developed in consultation with various stakeholders, including project affected people, community members and leaders, political and cultural leaders, to name a few.</p> <p>The stakeholders have been consulted in a meaningful way. With information about the project having been shared with the stakeholders by various means, both written and verbal. Community meetings involved both men and women and vulnerable groups including the elderly, youth, ill, disabled; those who are affected directly with the project and those in the surrounding areas.</p> <p>The consultations for the community members were conducted in English and Siswati (the local language commonly spoken in the project area).</p> <p>Consultation is to continue throughout the project implementation.</p>
Resettlement planning:	
<p>The borrower or client carries out a comprehensive socioeconomic survey – in line with international standards for social and economic baseline studies as agreed to in the environmental and social assessment process - including a population census and an inventory of assets (including natural assets upon which the affected people may depend for a portion of their livelihoods). This survey identifies the people who will be displaced by the project; all the relevant</p>	<p>A socioeconomic survey was carried out to ascertain a social and economic baseline. Additionally, a census and asset inventory was undertaken. The results of which are captured within this RAP.</p> <p>As the project is still at the feasibility stage and the final design yet to be approved, the reservoir inundation area has not surveyed as accurately as possible with the existing information. A final verification assessment and valuation,</p>

AFDB - OS 2 REQUIREMENTS

APPLICATION WITHIN THE RAP

<p>characteristics of those people, including conditions of vulnerability; and the magnitude of the expected physical and economic displacement.</p>	<p>including cut-off date, is to be undertaken in Stage 1 of the RAP implementation process, following approval of the final design and site survey to demarcate the inundation area.</p> <p>Compensation rates have been utilised for budgeting purposes only. Should the Project be approved for implementation professional valuation is to be undertaken in Stage 1 of the RAP implementation process to determine effective rates to be applied for the proposed Project to enable the making of ‘entitlement offers’ to affected asset owners for implementation purposes.</p>
<p>Grievance Management:</p>	
<p>As early as possible in the resettlement process, the borrower or client works with informally constituted local committees made up of representatives from key stakeholder groups and, in particular, vulnerable communities to establish a culturally appropriate and accessible grievance and redress mechanism to resolve, in an impartial and timely manner, any disputes arising from the resettlement process and compensation procedures.</p>	<p>During the RAP planning process grievances were managed and addressed through the consultation process and established community leadership process.</p> <p>The RAP sets out the grievance management procedure associated with the RAP.</p>
<p>Resettlement Action Plan:</p>	
<p>The borrower or client prepares a Full Resettlement Action Plan (FRAP) for (i) any project that involves 200 or more persons (as defined by the involuntary resettlement policy), or (ii) any project that is likely to have adverse effects on vulnerable groups.</p> <p>For any project in which the number of people to be displaced is fewer than 200 people and land acquisition and potential displacement and disruption of livelihoods are less significant, the borrower or client prepares an Abbreviated Resettlement Action Plan (ARAP).</p> <p>Project planners work transparently to ensure that the affected people give their demonstrable acceptance to the FRAP/ARAP and that any necessary displacement is done in the context of negotiated settlements with those people.</p> <p>The borrower or client submits the FRAP/ARAP as a formal document to the relevant national, local and/or municipal agencies and to the Bank. The Bank posts the FRAP/ARAP in its Public Information Centre and on its website for public review and comment.</p>	<p>A full RAP has been prepared, with adequate stakeholder engagement and public participation undertaken.</p> <p>The RAP outlines the requirement for an LRP as well as defining the terms of reference to develop the livelihood restoration programmes defined. Details of the LRP inputs are to be developed with appropriate technical support, and with inputs from government and community stakeholders. The fully developed LRP must be in place prior to RAP implementation, allowing the informed selection of options by beneficiaries.</p> <p>As the project is still at the feasibility stage and the final design yet to be approved, the reservoir inundation area has not surveyed as accurately as possible with the existing information. A final verification assessment and valuation, including cut-off date, is to be undertaken in Stage 1 of the RAP implementation process, following approval of the final design and site survey to demarcate the inundation area.</p> <p>Additional stakeholder engagement and public participation will be required during this process.</p>
<p>Compensation procedures:</p>	
<p>The units that are entitled to compensation (e.g., family, household, and individual) are decided through consultation with those to be displaced.</p> <p>Affected people are compensated for all their losses at full replacement costs before their actual move; before land and related assets are taken; and, if the project is implemented in phases, before project activities begin for each particular phase. The borrower or client gives preference to land-based resettlement strategies and as a matter of priority offers land-to-land compensation and/or compensation-in-kind in lieu of cash compensation where feasible; further, the borrower or client clearly explains to affected people that cash compensation very often leads to rapid impoverishment.</p>	<p>As the project is still at the feasibility stage, compensation rates have been utilised for budgeting purposes only. Should the Project be approved for implementation professional valuation is to be undertaken in Stage 1 of the RAP implementation process to determine effective rates to be applied for the proposed Project to enable the making of ‘entitlement offers’ to affected asset owners for implementation purposes.</p> <p>The valuation of properties will follow the concept of replacement cost. No construction will take place before PAPs have received their compensation and have been relocated.</p> <p>PAPs have been informed of the risks associated with cash compensation and advised accordingly.</p>

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APPLICATION WITHIN THE RAP

<p>A comprehensive livelihood improvement programme is formulated and implemented as part of the Resettlement Action Plan. The affected populations are offered a range of different compensation package, resettlement assistance, and livelihood improvement options, as well as options for administering these measures at different levels (e.g., family, household and individual), and the affected persons themselves are given the opportunity to express their preferences.</p>	
<p>Host communities:</p>	
<p>The borrower or client carries out a detailed analysis of host communities to identify potential problems associated with receiving displaced people, and to address these problems so that adverse impacts on host communities are minimised and the host communities are able to share in the development opportunities provided through the resettlement process.</p>	<p>Four potential host sites have been identified within the two Royal Kraals.</p> <p>Whilst still requiring engagement and input by the Royal Kraals and the PAPs, the relocation sites identified minimize the displacement of communities. DWA and the Chiefs will have to consider these options, but the advantage is that the community will retain their social and cultural networks and kinship links. Should the proposal of the current identified areas be adopted, the current community will be the host community.</p>
<p>Vulnerable groups:</p>	
<p>Member countries and other borrowers/clients are responsible for protecting the physical, social and economic integrity of vulnerable groups and for paying particular attention to health needs, particularly for women, including access to female health care providers and to such services as reproductive health care and appropriate counselling for sexual and other abuses.</p>	<p>Vulnerable groups within the project affected communities include households with very poor female heads, elderly, chronically ill, and child headed households.</p> <p>The team has had special engagement with these groups.</p>
<p>Implementation, monitoring and evaluation:</p>	
<p>The borrower or client is responsible for the implementation, monitoring and evaluation of the activities set out in the Resettlement Action Plan, and it keeps the Bank informed of progress. An independent third party monitors the implementation of large-scale or complicated Resettlement Action Plans, with regular feedback from the affected people.</p>	<p>A monitoring and evaluation plan is outlined in this RAP to enable DWA to monitor the resettlement and compensation process.</p>

AFDB GENDER POLICY, 2001

The policy is based on the premise that Africa has pronounced, region-specific gender characteristics that are of direct relevance to its economic and social development. It considers the international agenda, which calls for transformation, aimed at achieving full and equal partnership between men and women. Gender has become an issue for development intervention. First, inequalities continue to exist between women and men despite significant improvement in the absolute status of women and gender equality in most African countries. The following guiding principles form the basis of AfDB assistance in the area of gender/women empowerment:

- Gender analysis will be an integral part of all Banks' policies, programmes and projects.

Gender analysis will be conducted for all Bank intervention to design intervention that respond to the needs and priorities of both men and women. Experience has shown that women and men differ in the way they respond to and/or benefit from development and in the absence of specific attention to differences between women and men, planning for "the people" can result in the exclusion of women or men as participant or beneficiaries of planned change.

- Attention will be paid to the Co-operative Relation between Women and Men

The concept of gender implicitly embodies a culture that entails cooperation and interdependence between men and women rather than separation. It is oriented towards an equitable and sustainable development with women and men as equal partners in decision-making. Focus on women without considering their relations with men can undermine the objective of reducing disparities. Women do not live in isolation and by addressing them as such, development practitioners risk alienating must strive to empower both men and women to transform relations between them by taking into account the needs and interests of both genders and ensuring that all benefit equally from development.

- Women’s economic empowerment will be considered as key to sustainable development

Women in Africa are active in a variety of economic areas. Moreover, they often shoulder the primary responsibility for the well-being of the family. However, due to legal and customary barriers women lack access to credit and this impedes their effective economic participation. Experience has shown that providing credit services to women enhances productivity and promotes efficient lab our allocation. In addition, relative to men, women who possess economic means, invest more in education and health of their children. Measures will therefore be taken to support Regional Member Country (RMC) initiatives that target women entrepreneurs and producers in both formal and informal sectors and which adopt innovative lending policies and practices;

- Women will not be considered to be homogeneous group.

Although they may face some common difficulty due to the way a particular society defines gender, other important factors such as class, race, ethnicity, and religion also contribute to their position in the society. Thus, activities targeting an in differentiated category “women” may provide opportunities to some women and at the same time leave other groups disadvantaged. Program and project will take account of difference between women; and a Strategic Choice will be made on the use of the Mainstreaming Strategy/Target Input.

Targeted projects for women or men and gender mainstreaming are not incompatible responses. The question is one of strategic and operational choice depending on a particular situation. Targeted intervention may be required to address the disadvantages and limitations experiences by women because of the way the gender concept is conducted in a specific context. Thus, projects should be designed to address gender disparities, or, to target issues, which specifically affect women such as ownership of land, access to credit or legal literacy. Similarly, activities could target the special gender division of lab our and male responsibility in reproductive health issues.

This policy codifies the Banks’ formal commitment to the gender mainstreaming approach. It seeks to define a more systematic approach to planning of development interventions so that they can address the priorities of women as well as men for greater efficiency, effectiveness, and sustainability unlike the former Women in Development (WID) policy. The focus of this policy is gender relations, which shape outcome for both men and women. With introduction of the gender analytical framework, the fundamentally social nature and gender differences that result in inequalities between women and men gains greater visibility. The policy adopts the concept of “gender mainstreaming” as a key strategy for overcoming women’s exclusion from decision-making and from access to any control over development resources and benefits.

As identified in Section 5.1.1, the Constitution of Eswatini (2005) seeks to eliminate gender discrimination in law, custom, and practices related to land and property. The AfDB Gender Policy (2001) reinforces the provisions of the Constitution by providing specific direction on how gender issues are to be handled during the project.

This policy was therefore adhered to during public consultations and in the course of preparing this RAP Report. Women have been encouraged to participate in the process, right from the onset. They were encouraged to witness the asset assessment exercise, attend stakeholder meetings, and their views captured during public meetings and Focus Group Discussions.

POLICY GUIDELINES ON CO-OPERATION WITH CIVIL SOCIETY ORGANIZATIONS, 1999

The policy reflects the AfDB vision and its commitment to:

- Stakeholder participation as a key strategy to achieve its objectives of poverty reduction and good governance;
- Improved governance – a task area in which the Bank intends to play an active leadership role;
- Expanding the range of civil society organization which the Bank may work, corresponding to the broader objectives, and overcoming limitations only on “NGOs”;

- Improved effectiveness on the ground by learning more about how its regional member countries (RMCs) can better work with civil society organizations.

Through public statements, consultative practices and lending decisions, the Bank has made clear its intention to engage the NGOs, and other Civil Society Organisations (CSOs). It has committed itself to Client – focused gender- sensitive and participatory approaches involving a broad range of stakeholders.

The principal mandate of the AfDB is to lend to governments for development purposes in RMCs. The pursuit of improved co-operation with CSOs does not imply a shift in emphasis to by-pass the former in favour of the latter. The AfDB acknowledges that governments’ role and function in promoting development for its people is irreplaceable and it cannot be substituted by the involvement of the CSOs but can only be enhanced. Where CSOs are selected as implementing partners of the AfDB and RMC, the existence of sound and verifiable finance management and reporting systems will be applied as additional criteria.

DISCLOSURE AND ACCESS TO INFORMATION, 2012

This revised policy supersedes the AfDB Policy on disclosure of information dated October 2005. The Policy provides the AfDB group with an improved framework within which to disclose information on policies and strategies and key decision made during project development and implementation.

The policy aims to:-

- Maximize disclosure of information within the AfDB Groups possession and limit the list of expectations to reflect the AfDB willingness to disclose information;
- Facilitate access to and share information on the AfDB Group’s operations with a broad range of stakeholders;
- Promote good governance, transparency and accountability to provide leadership in this areas to RMCs;
- Improve on implementation effectiveness and better co-ordinate the information disclosure processes;
- Give more visibility to the AfDB Group’s mission, strategies and activities to stakeholders;
- Support the AfDB Group’s consultative process in its activities and stakeholders participation in the implementation of AfDB financed projects
- Ensure harmonization with other Development Finance Institutions (DFIs) on disclosure of information.

HANDBOOK ON STAKEHOLDERS CONSULTATIONS AND PARTICIPATION ON AFDB FUNDED PROJECTS, 2001

Participation in development can be defined as the process through which people with an interest (stakeholders) influence and share control over development issues that affect them. Measures have to be taken to identify the relevant stakeholders and involve them in the process of formulating the project. This entails sharing with them the objective of the project and seeking their views for integration in the project design before decisions are concluded. It might be necessary to take the stakeholders through a process of training and thus empowering them not only to meaningfully to contribute to the project design but also for their future participation in the sustainability of the project.

According to the Handbook, many methods and technique have been developed to promote participation by stakeholders in development. Some of the methods and techniques used include:

- Participatory stakeholders analysis;
- Participatory meetings and workshops;
- Participatory research /Data collection; and
- Participatory planning.

In some instances, it might be necessary to combine the above techniques depending on the nature of the project at hand and the complexity of the stakeholders involved.

5.4.2 INTERNATIONAL FINANCE CORPORATION

The International Finance Corporations (IFC) Sustainability Framework articulates the Corporation’s strategic commitment to sustainable development and is an integral part of IFC’s approach to risk management. The

Sustainability Framework comprises IFC's Policy and Performance Standards on Environmental and Social Sustainability, and IFC's Access to Information Policy. The Policy on Environmental and Social Sustainability describes IFC's commitments, roles, and responsibilities related to environmental and social sustainability. IFC's Access to Information Policy reflects IFC's commitment to transparency and good governance on its operations and outlines the Corporation's institutional disclosure obligations regarding its investment and advisory services.

The Performance Standards (PS) are directed towards clients, providing guidance on how to identify risks and impacts, and are designed to help avoid, mitigate, and manage risks and impacts as a way of doing business in a sustainable way, including stakeholder engagement and disclosure obligations of the client in relation to project-level activities.

PERFORMANCE STANDARD 5 – LAND ACQUISITION AND INVOLUNTARY RESETTLEMENT

PS5 reaffirms that that project-related land acquisition and restrictions on land use can have adverse impacts on communities and persons that use this land. With involuntary resettlement referring both to physical displacement (relocation or loss of shelter) and to economic displacement (loss of assets or access to assets that leads to loss of income sources or other means of livelihood) as a result of project-related land acquisition and/or restrictions on land use.

Resettlement is considered involuntary when affected persons or communities do not have the right to refuse land acquisition or restrictions on land use that result in physical or economic displacement. This occurs in cases of (i) lawful expropriation or temporary or permanent restrictions on land use and (ii) negotiated settlements in which the buyer can resort to expropriation or impose legal restrictions on land use if negotiations with the seller fail.

Unless properly managed, involuntary resettlement may result in long-term hardship and impoverishment for the Affected Communities and persons, as well as environmental damage and adverse socio-economic impacts in areas to which they have been displaced. For these reasons, involuntary resettlement should be avoided. However, where involuntary resettlement is unavoidable, it should be minimized and appropriate measures to mitigate adverse impacts on displaced persons and host communities should be carefully planned and implemented. The government often plays a central role in the land acquisition and resettlement process, including the determination of compensation, and is therefore an important third party in many situations. Experience shows that the direct involvement of the client in resettlement activities can result in more cost-effective, efficient, and timely implementation of those activities, as well as in the introduction of innovative approaches to improving the livelihoods of those affected by resettlement.

To help avoid expropriation and eliminate the need to use governmental authority to enforce relocation, clients are encouraged to use negotiated settlements meeting the requirements of this Performance Standard, even if they have the legal means to acquire land without the seller's consent.

The objectives of PS5 are to:

- Avoid, and when avoidance is not possible, minimize displacement by exploring alternative project designs.
- Avoid forced eviction.
- Anticipate and avoid, or where avoidance is not possible, minimize adverse social and economic impacts from land acquisition or restrictions on land use by (i) providing compensation for loss of assets at replacement cost and (ii) ensuring that resettlement activities are implemented with appropriate disclosure of information, consultation, and the informed participation of those affected.
- Improve, or restore, the livelihoods and standards of living of displaced persons.
- Improve living conditions among physically displaced persons through the provision of adequate housing with security of tenure⁵ at resettlement sites.

Specific requirements are set out within the PS. These requirements are not in conflict with the AfDB safeguards. For emphasis, the requirements of PS5 are reviewed against the AfDB OS Requirements in **Table 5-3**.

Table 5-3 provides a broad comparison of the IFC and World Bank standards for resettlement with the AfDB requirements. As evident in from the table, the IFC requirements are not in conflict with the AfDB safeguards.

5.4.3 WORLD BANK GROUP

The World Bank (WB) Environmental and Social Framework (ESF) sets out the World Bank's commitment to sustainable development, through a Bank Policy and a set of Environmental and Social Standards that are designed to support Borrowers' projects, with the aim of ending extreme poverty and promoting shared prosperity.

This Framework comprises The World Bank Environmental and Social Policy for Investment Project Financing, which sets out the mandatory requirements that apply to the Bank; and The Environmental and Social Standards, together with their Annexes, which set out the mandatory requirements that apply to the Borrower and projects.

The WB ESS provide safeguards that are not in conflict with AfDB safeguards. For emphasis ESS5, land acquisition, restrictions on land and involuntary resettlement, is reviewed below.

ENVIRONMENTAL AND SOCIAL POLICY FOR INVESTMENT PROJECT FINANCING

The Bank is committed to supporting Borrowers in the development and implementation of projects that are environmentally and socially sustainable, and to enhancing the capacity of Borrowers' environmental and social frameworks to assess and manage the environmental and social risks and impacts of projects. To this end, the Bank has defined specific Environmental and Social Standards (ESSs), which are designed to avoid, minimize, reduce or mitigate the adverse environmental and social risks and impacts of projects.

ENVIRONMENTAL AND SOCIAL STANDARD 5: LAND ACQUISITION, RESTRICTIONS ON LAND AND INVOLUNTARY RESETTLEMENT

The World Bank's Environmental and Social Standard 5 on Land Acquisition, Restrictions on Land and Involuntary Resettlement (ESS5) applies where project-related land acquisitions and restrictions on land use may cause physical displacement (relocation, loss of residential land or loss of shelter); and/or economic displacement (loss of land, assets or access to assets, leading to loss of income sources or other means of livelihood).

The key objectives of ESS5 are to:

- Avoid involuntary resettlement or, when unavoidable, minimize involuntary resettlement by exploring project design alternatives.
- Avoid forced eviction.
- Mitigate unavoidable adverse social and economic impacts from land acquisition or restrictions on land use by: (a) providing timely compensation for loss of assets at replacement cost and (b) assisting displaced persons in their efforts to improve, or at least restore, their livelihoods and living standards, in real terms, to pre-displacement levels or to levels prevailing prior to the beginning of project implementation, whichever is higher.
- Improve living conditions of poor or vulnerable persons who are physically displaced, through provision of adequate housing, access to services and facilities, and security of tenure.
- Conceive and execute resettlement activities as sustainable development programs, providing sufficient investment resources to enable displaced persons to benefit directly from the project, as the nature of the project may warrant.
- Ensure that resettlement activities are planned and implemented with appropriate disclosure of information, meaningful consultation, and the informed participation of those affected.

Table 5-3 provides a broad comparison of the World Bank and IFC standards for resettlement with the AfDB requirements. As evident in from the table, the World Bank requirements are not in conflict with the AfDB safeguards.

WORLD BANK GROUP POLICY ON POVERTY REDUCTION

The goal of the Bank's poverty policy is to ensure that poverty in Africa is reduced. This involves development of strategies that facilitate national ownership, participation, and an orientation towards improvements in the welfare of the poor, especially in the achievement of Millennium Development Goals (MDGs).

The objectives of the policy are to bring poverty reduction to the forefront of the Bank's lending and non-lending activities and to support its Regional Member Country's (RMCs) in their efforts towards poverty reduction.

Support for country-owned Poverty Reduction Support Programmes (PRSPs) plays an important role in this respect. The following are the policy Guiding principles:

- **Poverty Focus.** Poverty reduction has become the overarching goal of the Bank for the last four years. The realization of this goal requires a more focused analysis of the incidence, depth and causes of poverty in Africa. Such focus on poverty reduction instance, it is necessary to go beyond a general support for agricultural, human resource and private sector development by designing and implementing pro-poor policies within these broad areas.
- **National ownership, participation, and outcome orientation.** The principles of the new strategic framework form the basis for the policies discussed in this chapter. A number of policy measures such as support for national capacity building, promotion of the participatory approach development of new forms of partnerships and establishment of poverty monitoring systems relate directly to these principles.
- **Internal policy coherence.** The importance of the priority areas and the crosscutting issues has been discussed in the Banks sector specified policies. The purpose of the poverty policy is to strengthen existing sector policy prescriptions and to fill gaps on specific areas from standpoint of poverty reduction.
- **Country-led partnership.** The policy also underscores the importance of a coordinated donor response to the demand from RMCs for supporting their PRSPs. A strong partnership ensures the consistency between the Bank's poverty policy and the poverty reduction strategies of its RMCs as articulated in the PRSPs for African Development Fund (ADF) countries and similar planning documents for African Development Bank (AfDB) member countries.
- **Enriched conceptual framework.** The policy takes into account the new conceptual framework which expands the concept of poverty beyond income measures and its causes. It also addresses the economic and non-economic causes of poverty.

In many African countries, problem of poverty is exacerbated by episodes of frequent drought, crop failure and natural disaster like floods, political conflict, and epidemics. For instance, in many African countries, the number of internally and externally displaced people due to political conflict is quite high.

The Bank recognizes that the success of safety-net programs depends on several factors including fiscal affordability, the availability of adequate information on the potential beneficiaries and the administrative capacity to reach targeted groups. To this effect, the Bank will support provision of the following social protection related activities:

- Public program works that create employment for the able-bodied poor, particularly in rural areas;
- Re-training of public employees that are retrenched as a result of adjustment programs;
- Child feeding programs, especially for HIV/AIDs related orphans; and
- Provide emergency relief including food aid in time of natural disasters.

Table 5-3: High –level comparison of the AfDB, IFC and Work Bank requirements relating to involuntary resettlement

CATEGORY	AFDB - OS 2	IFC - PS 5	WORLD BANK - ESS 5
Minimise Land Take and Involuntary Resettlement	The borrower or client considers feasible alternative project designs, including re-siting and re-routing, to avoid or minimise physical or economic displacement, while balancing environmental, social, and financial costs and benefits.	The client will consider feasible alternative project designs to avoid or minimize physical and/or economic displacement, while balancing environmental, social, and financial costs and benefits, paying particular attention to impacts on the poor and vulnerable.	The Borrower will demonstrate that involuntary land acquisition or restrictions on land use are limited to direct project requirements for clearly specified project purposes within a clearly specified period. The Borrower will consider feasible alternative project designs to avoid or minimize land acquisition or restrictions on land use, especially where this would result in physical or economic displacement, while balancing environmental, social, and financial costs and benefits, and paying particular attention to gender impacts and impacts on the poor and vulnerable.
Eligibility	Three groups of displaced people are entitled to compensation or resettlement assistance for loss of land or other assets: — Those who have formal legal rights to land or other assets recognized under the laws of the country concerned. — Those who may not have formal legal rights to land or other assets at the time of the census/ evaluation but can prove that they have a claim that would be recognized under the customary laws of the country. — Those who have no recognizable legal right or claim to the land they are occupying in the project area of influence and who do not fall into either of the two categories described above, if they themselves or witnesses can demonstrate that they occupied the project area of influence for at least six months prior to a cut-off date established by the borrower or client and acceptable to the Bank.	Displaced persons may be classified as persons: — (i) who have formal legal rights to the land or assets they occupy or use; — (ii) who do not have formal legal rights to land or assets, but have a claim to land that is recognized or recognizable under national law; or — (iii) who have no recognizable legal right or claim to the land or assets they occupy or use.	Affected persons may be classified as persons: — a) who have formal legal rights to land or assets; — b) who do not have formal legal rights to land or assets, but have a claim to land or assets that is recognized or recognizable under national law; or — c) who have no recognizable legal right or claim to the land or assets they occupy or use.

CATEGORY	AFDB - OS 2	IFC - PS 5	WORLD BANK - ESS 5
Consultation and Disclosure	<p>When displacement cannot be avoided, the borrower or client must consult in a meaningful way with all stakeholders, particularly the people affected and the host communities, and involve them at all stages of the project cycle in a clear and transparent manner—in designing, planning, implementing, monitoring, and evaluating the Resettlement Action Plan.</p> <p>Community participation helps to ensure that compensation measures, development programmes and service provisions reflect the needs and priorities of the people affected and their hosts. The borrower or client also gives special attention to consultations that involve vulnerable groups.</p>	<p>The client will engage with Affected Communities, including host communities, through the process of stakeholder engagement described in Performance Standard 1.</p> <p>Disclosure of relevant information and participation of Affected Communities and persons will continue during the planning, implementation, monitoring, and evaluation of compensation payments, livelihood restoration activities, and resettlement.</p>	<p>The Borrower will engage with affected communities, including host communities, through the process of stakeholder engagement.</p> <p>Decision-making processes related to resettlement and livelihood restoration will include options and alternatives from which affected persons may choose.</p> <p>Full disclosure is required.</p>
Census and Asset Inventory	<p>The borrower or client carries out a comprehensive socioeconomic survey – in line with international standards for social and economic baseline studies as agreed to in the environmental and social assessment process - including a population census and an inventory of assets (including natural assets upon which the affected people may depend for a portion of their livelihoods). This survey identifies the people who will be displaced by the project; all the relevant characteristics of those people, including conditions of vulnerability; and the magnitude of the expected physical and economic displacement.</p>	<p>Where involuntary resettlement is unavoidable, either as a result of a negotiated settlement or expropriation, a census will be carried out to collect appropriate socioeconomic baseline data to identify the persons who will be displaced by the project, determine who will be eligible for compensation and assistance, and discourage ineligible persons, such as opportunistic settlers, from claiming benefits. In the absence of host government procedures, the client will establish a cut-off date for eligibility. Information regarding the cut-off date will be well documented and disseminated throughout the project area.</p>	<p>Where land acquisition or restrictions on land use are unavoidable, the Borrower will, as part of the environmental and social assessment, conduct a census to identify the persons who will be affected by the project, to establish an inventory of land and assets to be affected, to determine who will be eligible for compensation and assistance, and to discourage ineligible persons, such as opportunistic settlers, from claiming benefits.</p>
Resettlement Action Plan	<p>The borrower or client prepares a Full Resettlement Action Plan (FRAP) for (i) any project that involves 200 or more persons (as defined by the involuntary resettlement policy), or (ii) any project that is likely to have adverse effects on vulnerable groups.</p> <p>For any project in which the number of people to be displaced is fewer than 200 people and land acquisition and potential displacement and disruption of livelihoods</p>	<p>In the case of physical displacement, the client will develop a Resettlement Action Plan (RAP) that covers, at a minimum, the applicable requirements of this Performance Standard regardless of the number of people affected. This will include compensation at full replacement cost for land and other assets lost.</p> <p>The Plan will be designed to mitigate the negative impacts of displacement; identify development</p>	<p>In the case of physical displacement, the Borrower will develop a plan that covers, at a minimum, the applicable requirements of this ESS regardless of the number of people affected.</p> <p>It will include a resettlement budget and implementation schedule and establish the entitlements of all categories of affected persons (including host communities).</p>

CATEGORY	AFDB - OS 2	IFC - PS 5	WORLD BANK - ESS 5
	<p>are less significant, the borrower or client prepares an Abbreviated Resettlement Action Plan (ARAP).</p> <p>Project planners work transparently to ensure that the affected people give their demonstrable acceptance to the FRAP/ARAP and that any necessary displacement is done in the context of negotiated settlements with those people.</p> <p>The borrower or client submits the FRAP/ARAP as a formal document to the relevant national, local and/or municipal agencies and to the Bank. The Bank posts the FRAP/ARAP in its Public Information Centre and on its website for public review and comment.</p> <p>A comprehensive livelihood improvement programme is formulated and implemented as part of the Resettlement Action Plan.</p>	<p>opportunities; develop a resettlement budget and schedule; and establish the entitlements of all categories of affected persons (including host communities). Particular attention will be paid to the needs of the poor and the vulnerable.</p> <p>The client will document all transactions to acquire land rights, as well as compensation measures and relocation activities.</p> <p>In the case of projects involving economic displacement only, the client will develop a Livelihood Restoration Plan (LRP) to compensate affected persons and/or communities and offer other assistance that meet the objectives of this Performance Standard.</p> <p>The Livelihood Restoration Plan will establish the entitlements of affected persons and/or communities and will ensure that these are provided in a transparent, consistent, and equitable manner.</p>	<p>The Borrower will document all transactions to acquire land rights, provision of compensation and other assistance associated with relocation activities.</p> <p>In the case of projects affecting livelihoods or income generation, the Borrower's plan will include measures to allow affected persons to improve, or at least restore, their incomes or livelihoods.</p>
Compensation	<p>Affected people are compensated for all their losses at full replacement costs.</p> <p>The borrower or client gives preference to land-based resettlement strategies and as a matter of priority offers land-to-land compensation and/or compensation-in-kind in lieu of cash compensation where feasible; further, the borrower or client clearly explains to affected people that cash compensation very often leads to rapid impoverishment.</p> <p>The affected populations are offered a range of different compensation package, resettlement assistance, and livelihood improvement options, as well as options for administering these measures at different levels (e.g., family, household and individual), and the affected persons themselves are given the opportunity to express their preferences.</p>	<p>When displacement cannot be avoided, the client will offer displaced communities and persons compensation for loss of assets at full replacement cost and other assistance to help them improve or restore their standards of living or livelihoods.</p> <p>Compensation standards will be transparent and applied consistently to all communities and persons affected by the displacement.</p> <p>Where livelihoods of displaced persons are land-based, or where land is collectively owned, the client will, where feasible, offer the displaced land-based compensation.</p> <p>The client will also provide opportunities to displaced communities and persons to derive appropriate development benefits from the project.</p>	<p>When land acquisition or restrictions on land use (whether permanent or temporary) cannot be avoided, the Borrower will offer affected persons compensation at replacement cost, and other assistance as may be necessary to help them improve or at least restore their standards of living or livelihoods.</p> <p>Where livelihoods of displaced persons are land-based, or where land is collectively owned, the Borrower will offer the displaced persons an option for replacement land, unless it can be demonstrated to the Bank's satisfaction that equivalent replacement land is unavailable.</p> <p>If people living in the project area are required to move to another location, the Borrower will: (a) offer displaced persons choices among feasible resettlement options, including adequate replacement housing or cash compensation; and (b) provide relocation assistance</p>

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			suited to the needs of each group of displaced persons. New resettlement sites will offer living conditions at least equivalent to those previously enjoyed, or consistent with prevailing minimum codes or standards, whichever set of standards is higher.
Resettlement Site and Host Community	The borrower or client carries out a detailed analysis of host communities to identify potential problems associated with receiving displaced people, and to address these problems so that adverse impacts on host communities are minimised and the host communities are able to share in the development opportunities provided through the resettlement process.	Engagement with host communities is required. The resettlement site must offer improved living conditions. Displaced persons' preferences with respect to relocating in pre-existing communities and groups will be taken into consideration. Existing social and cultural institutions of the displaced persons and any host communities will be respected.	If new resettlement sites are to be prepared, host communities will be consulted regarding planning options, and resettlement plans will ensure continued access, at least at existing levels or standards, for host communities to facilities and services. The displaced persons' preferences with respect to relocating in pre-existing communities and groups will be respected wherever possible. Existing social and cultural institutions of the displaced persons and any host communities will be respected.
Livelihoods	Strategies to improve livelihoods of PAPs are required.	Strategies to improve livelihoods of PAPs are required.	Strategies to improve livelihoods of PAPs are required.
Vulnerable Groups	Member countries and other borrowers/clients are responsible for protecting the physical, social, and economic integrity of vulnerable groups. Particular attention needs to be paid to health needs, particularly for women, including access to female health care providers and to such services as reproductive health care and appropriate counselling for sexual and other abuses.	Special attention needs to be paid to the poor and vulnerable groups and special provisions required in the RAP process.	Particular attention will be paid to gender aspects and the needs of the poor and the vulnerable.
Gender	Special consideration must be paid to the needs and rights of women. In the context of gender vulnerability, the client must give careful consideration to actively facilitating consultation with, and participation by both women and men in ways that are sensitive to the social and political constraints and barriers that women and	The consultation process must ensure that women's perspectives are obtained and that their interests are factored into all aspects of resettlement planning and implementation. Addressing livelihood impacts may	Particular attention to be paid to gender impacts and impacts on the poor and vulnerable. The consultation process should ensure that d women are adequately represented, and their perspectives are

CATEGORY	AFDB - OS 2	IFC - PS 5	WORLD BANK - ESS 5
	<p>men may face. The provision of health care services, particularly for pregnant women and infants, may be important during and after relocation, to prevent increases in morbidity and mortality due to malnutrition, the psychological stress of being uprooted, and the increased risk of disease.</p> <p>The RAP must include a specific protocol specifying safeguards for the quality and quantity of land to be allocated to women, especially widows and divorcees, to ensure their means to generate income and achieve food security.</p> <p>Land titles at the resettlement site are to be in the name of both spouses or of single heads of household, regardless of gender, if this does not conflict with the borrower or client's own laws and legislation.</p> <p>Husbands and wives, unmarried women, and elderly sons and daughters are explicitly included as eligible for compensation, including compensation for loss of land, shelter, livelihoods and any other privately owned assets. Compensation payments to families are made to both husbands and wives when this is technically feasible and socially acceptable.</p>	<p>require intra-household analysis in cases where women's and men's livelihoods are affected differently.</p> <p>Women's and men's preferences in terms of compensation mechanisms, such as compensation in kind rather than in cash, should be explored.</p>	<p>obtained and their interests factored into all aspects of resettlement planning and implementation.</p>
Security of Tenure	Required.	Required.	Required.
Communal Resources	<p>Compensation is required if communal property and natural resources. If possible, compensation is made in kind for loss of common property resources, such as rivers, lakes, or forest resources. Particular attention is given to replacing not only the common property itself, but also the services and community interlinkages that it provided.</p> <p>When a project involves the loss of public facilities, infrastructure, and common property resources, the borrower or client consults with the affected community</p>	<p>Compensation is required if communal property and natural resources such as marine and aquatic resources, timber and non-timber forest products, freshwater, medicinal plants, hunting and gathering grounds and grazing and cropping areas are impacted.</p>	<p>Compensation is required for restriction on access to land or use of other resources including communal property and natural resources such as marine and aquatic resources, timber and non-timber forest products, fresh water, medicinal plants, hunting and gathering grounds and grazing and cropping areas.</p>

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	<p>to identify and agree on suitable alternatives that are equivalent to, or an improvement on, those being lost.</p> <p>The project promotes the notion of benefit sharing and improvement of the economic status of communities when designing common property compensation provisions.</p>		
Resettlement assistance	<p>Displaced people are provided with targeted resettlement assistance with the aim of ensuring that their standards of living, income-earning capacity, production levels and overall means of livelihood are improved beyond pre-project levels.</p>	<p>Displaced people are provided with targeted resettlement assistance with the aim of ensuring that their standards of living, income-earning capacity, production levels and overall means of livelihood are improved beyond pre-project levels.</p>	<p>Displaced people are provided with relocation assistance suited to the needs of each group of displaced persons.</p> <p>Transitional support will be provided as necessary to all economically displaced persons, based on a reasonable estimate of the time required to restore their income-earning capacity, production levels, and standards of living.</p>
Cut-off date	<p>There is a requirement to establish a cut-off date for eligibility that is acceptable to the Bank. The borrower or client documents the cut-off date(s) and disseminates information about it (them) throughout the project area of influence in a culturally appropriate and accessible manner, before taking any action on clearing land or restricting local community access to land.</p>	<p>The client is required to establish a cut-off date for eligibility. Information regarding the cut-off date is to be well documented and disseminated throughout the project area</p>	<p>The Borrower will establish a cut-off date for eligibility. Information regarding the cut-off date will be well documented and will be disseminated throughout the project area at regular intervals in written and (as appropriate) non-written forms and in relevant local languages.</p>
Timing of Compensation	<p>Compensation is to be made before PAPs move; before land and related assets are taken; and, if the project is implemented in phases, before project activities begin for each phase.</p>	<p>The client will take possession of acquired land and related assets only after compensation has been made available and, where applicable, resettlement sites and moving allowances have been provided to the displaced persons in addition to compensation.</p>	<p>The standard requires that the taking of land and related assets may occur only after compensation has been paid and, where applicable, resettlement sites and moving allowances have been provided.</p>
Grievances	<p>As early as possible in the resettlement process, the borrower or client works with informally constituted local committees made up of representatives from key stakeholder groups and, in particular, vulnerable communities to establish a culturally appropriate and</p>	<p>The client will establish a grievance mechanism consistent with Performance Standard 1 as early as possible in the project development phase. This will allow the client to receive and address specific concerns about compensation and relocation raised by displaced</p>	<p>The Borrower will ensure that a grievance mechanism for the project is in place, as early as possible in project development to address specific concerns about compensation, relocation or livelihood restoration</p>

CATEGORY	AFDB - OS 2	IFC - PS 5	WORLD BANK - ESS 5
	accessible grievance and redress mechanism to resolve, in an impartial and timely manner, any disputes arising from the resettlement process and compensation procedures.	persons or members of host communities in a timely fashion, including a recourse mechanism designed to resolve disputes in an impartial manner.	measures raised by displaced persons (or others) in a timely fashion.
Monitoring	<p>The borrower or client is responsible for the implementation, monitoring and evaluation of the activities set out in the Resettlement Action Plan, and it keeps the Bank informed of progress.</p> <p>An independent third party monitors the implementation of large-scale or complicated RAPs, with regular feedback from the affected people.</p> <p>For largescale resettlement operations quarterly reviews are recommended, and in-depth reviews of midterm progress, consistent with the overall project scheduling, are critical.</p>	<p>The client will establish procedures to monitor and evaluate the implementation of a RAP or LRP and take corrective action, as necessary.</p> <p>The extent of monitoring activities will be commensurate with the project's risks and impacts. For projects with significant involuntary resettlement risks, the client will retain competent resettlement professionals to provide advice on compliance with this PS and to verify the client's monitoring information. Affected persons will be consulted during the monitoring process.</p> <p>It may be necessary for the client to commission an external completion audit of the RAP or LRP to assess whether the provisions have been met, depending on the scale and/or complexity of physical and economic displacement associated with a project.</p>	<p>The Borrower will establish procedures to monitor and evaluate the implementation of the plan and will take corrective action as necessary during implementation.</p> <p>The extent of monitoring activities will be proportionate to the project's risks and impacts.</p> <p>For all projects with significant involuntary resettlement impacts, the Borrower will retain competent resettlement professionals to monitor the implementation of resettlement plans, design corrective actions as necessary, provide advice on compliance with this ESS and produce periodic monitoring reports.</p> <p>Affected persons will be consulted during the monitoring process. Periodic monitoring reports will be prepared and affected persons will be informed about monitoring results in a timely manner.</p>

5.5 LEGAL FRAMEWORK GAP ANALYSIS

The RAP must be consistent with existing legislation and policies, regulations, and procedures of the Government of the Kingdom of Eswatini as well as relevant internal standards, specifically the AfDB involuntary resettlement policy and OS 2 - Involuntary Resettlement: Land Acquisition, Population Displacement and Compensation.

This section provides an overview of gaps between the Eswatini legal framework and the AfDB requirements as it relates to land acquisition, compensation, and resettlement with the Nondvo Dam Project RAP. Where gaps between the provisions of national legislation and OS 2 are identified, the provision that is superior, and that provides better compensation and entitlement to PAPs is to be applied. This is consistent with the objective that PAPs should not be made worse off than pre-project levels and that it is desirable for their livelihood to be improved rather than prejudiced by the physical or economic displacement.

The Constitution of 2005 is an Act that provides for the minimum standards acceptable in the Bill of Rights; while the Acquisition of property Act of 1961 provides for the manner and circumstance under which property, including land will be acquired and the redress mechanisms and procedures for so doing in the interest of public development.

Although the DWA, as the RAP implementing agent, as a public utility it is the Government that has eminent domain in terms of acquisition of land and associated compensation requirements.

The results of the gap analysis are presented in **Table 5-4** along with measures to address the identified gaps. Where it was determined that that the Eswatini legislation does not correspond to AfDB requirements, then AfDB OS 2 has been followed.

Table 5-4: Comparison of Eswatini National Legislation and Policy with AfDB Operational Safeguard 2

ASPECT	AFDB OS 2	ESWATINI LEGAL FRAMEWORK	ESWATINI POLICIES	FINDING
Eligibility Classification	<p>1) Those who have formal legal rights to land or other assets recognized under the laws of the country concerned.</p> <p>2) Those who may not have formal legal rights to land or other assets at the time of the census/ evaluation but can prove that they have a claim that would be recognized under the customary laws of the country.</p> <p>3) Those who have no recognizable legal right or claim to the land they are occupying in the project area of influence and who do not fall into either of the two categories described above, if they themselves or witnesses can demonstrate that they occupied the project area of influence for at least six months prior to a cut-off date established by the borrower or client and acceptable to the Bank.</p>	<p>The Constitution of the Kingdom of Eswatini, 2005</p> <p>Although the Constitution does not specifically classify different categories of eligibility:</p> <ul style="list-style-type: none"> – Section (14)(1)(c) secures the right of individuals to protection of their property rights. – Section 14(1)(d) guarantees the right of all individuals the protection from deprivation of property without compensation. – Section 211(3) states that “<i>a person shall not be deprived of land without the due process of the law and where a person is deprived, that person shall be entitled to prompt and adequate compensation...</i>” – Section.20(1) states “<i>all persons are equal before and under the law in all spheres of political, social, economic and cultural life and in every other respect and shall enjoy equal protection of the law</i>”. – Section 20(2) further states that “<i>for the avoidance of any doubt, a person shall not be discriminated against on the ground of gender, ..., or social or economic standing ..., age or disability</i>”. 	<p><u>National Resettlement Policy, 2003</u></p> <p>Identifies that “<i>all persons affected by resettlement shall have their livelihoods, living standards and conditions restored</i>”, however includes that “<i>with respect to homesteads that settle in areas not designated for settlement, such as road reserves, rangeland, no compensation will be paid in the event they are required to relocate or vacate</i>”.</p> <p><u>MHUD Policy, 1994</u></p> <p>1) Owners of free hold land will be eligible for compensation based on the title deed, the current value of the land and any improvements on the land.</p> <p>2) Established residents - residents of the area without title deed or living on traditionally held land are also entitled to compensation, however; this will be limited to the value of improvements on land held and costs associated with relocation.</p> <p>3) Those who live as illegal squatters, without legal title nor traditional claims to land, these stakeholders will be compensated for relocating and the value of improvements on the land.</p>	<p>All persons are protected by the law regardless of their social or economic standing, age, or disability so long as they occupy land earmarked for the proposed project.</p> <p>The National Resettlement Policy does not align to AfDB requirements, however the MHUD Policy does.</p> <p>Given that the National laws guarantee the protection of all occupiers of land to be affected by land acquisition, National laws suffice.</p> <p><u>Measure required:</u></p> <p>None</p>
Compensation value and livelihoods	Affected people are compensated for all their losses at full replacement costs before their actual move; before land and	Acquisition of Property Act 10, 1961	<u>National Resettlement Policy, 2003</u>	The Acquisition of Property Act, particularly Section 15, which encompasses

ASPECT	AFDB OS 2	ESWATINI LEGAL FRAMEWORK	ESWATINI POLICIES	FINDING
	related assets are taken; and, if the project is implemented in phases, before project activities begin for each particular phase.	<p>Section 15 identifies the factors that need to be considered when determining compensation, namely: -</p> <ul style="list-style-type: none"> — market value of the property; — damages sustained by the person interested by severing of any land; — damages sustained by reason of the acquisition injuriously affecting any other property of the person; — any reasonable expenses incidental to a change of residence or business because of the acquisition. <p>The factors listed in Section 15 in essence require that the person affected by the acquisition should be placed in a position as he was, had he not been affected by the move, if not better.</p> <p>Sections 9 and 10 articulates the procedure for settlement of disputes for compensation, by the Board of Assessment as appointed in terms of Section 10.</p>	<p>All persons affected by resettlement shall have their livelihoods, living standards and conditions restored so that within a reasonable time from when they suffered losses and inconvenience, they are no worse off than they were before the process of resettlement began.</p> <p>With respect to the types of compensable losses, if the objective is to restore people to an equal or better condition, then it is necessary to consider loss of any rights to or interests in land (i.e. loss of buildings and other improvements); loss of livestock and other animals; loss of income-bearing trees; losses from arable and garden land; loss of rights to access to communal assets like grazing land, wood lots, forests and the like; loss of sources of income, loss of access to public facilities; costs associated with relocating, etc.</p> <p><u>MHUD Policy, 1994</u></p> <p>Guideline 3: Impacted persons shall be compensated for their losses at replacement cost prior to the actual move.</p>	<p>all expenses such as the replacement cost in determining compensation, adequately addresses this requirement.</p> <p>The National Resettlement Policy and MHUD Policy align to the AfDB requirements.</p> <p><u>Measure required:</u></p> <p>None</p>
Compensation offers	The affected populations are offered a range of different compensation package, resettlement assistance, and livelihood improvement options, as well as options for administering these measures at different levels (e.g., family, household and individual), and the affected persons themselves are given the opportunity to express their preferences.	While the Acquisition of Property Act 10, 1961 applies to all PAPs affected by the proposed project, regarding the procedure for acquiring land, it is does not specifically address the issue of offering a range of different compensation packages and support. It only speaks to compensation in terms of monetary value.	<p><u>National Resettlement Policy, 2003</u></p> <p>With respect to the forms of compensation, the principle of restoration suggests that payment in kind is often more appropriate than payment of cash. Thus, where persons are displaced from their land, they should be provided with land that is at least equivalent to the land taken, in terms of productive potential and other factors. In other cases, non-land-based options</p>	<p>Existing legislation does not include the requirement for offering a range of different compensation packages.</p> <p>The National Resettlement Policy indicates that payment in kind is often more appropriate than payment of cash, however in certain cases non-land-based options might be best.</p> <p>The MHUD Policy requires monetary compensation for immovable assets,</p>

ASPECT	AFDB OS 2	ESWATINI LEGAL FRAMEWORK	ESWATINI POLICIES	FINDING
			<p>might be best.</p> <p><u>MHUD Policy, 1994</u></p> <p>Guideline 3-D: Compensation for immovable assets shall be on a financial basis. All compensation shall be on monetary terms.</p> <p>Guideline 3-I: In addition to compensation for immovable assets, a single inconvenience payment shall also be made to cover any possible costs which may be incurred due to possible increases in transportation costs, loss of social network, disruption of life, the bother of having to relocate, and possible mental anguish.</p> <p>Guideline 3-F: Compensation for all losses of farm or grazing land shall be worked out on a case-by-case basis. It shall be the intention of the PST that, if feasible, subsistence farm and grazing land on Swazi Nation Land (SNL) should be replaced rather than compensated for financially. The PST, working with the relevant Tinkhundla, shall facilitate discussion with the community and chief in this regard.</p>	<p>however; for subsistence farming and grazing land on Swazi Nation Land (SNL) should be replaced rather than compensated for financially.</p> <p><u>Measure required:</u></p> <p>PAPs are to be offered a range of compensation packages in line with OS2, and the affected persons themselves are to be given the opportunity to express their preferences.</p>
<p>Land-for-land compensation of equal production use or potential</p>	<p>The borrower or client gives preference to land-based resettlement strategies and as a matter of priority offers land-to-land compensation and/or compensation-in-kind in lieu of cash compensation where feasible.</p> <p>In rural areas, the resettlement programme gives priority to land-for-land compensation options for affected people whose livelihoods are based on land.</p>	<p>While the Acquisition of Property Act 10, 1961 applies to all PAPs affected by the proposed project, regarding the procedure for acquiring land, it is silent on the issue of allocating land of equal production use or potential. It only speaks to compensation in terms of monetary value.</p>	<p><u>National Resettlement Policy, 2003</u></p> <p>It is a National Policy that displaced persons should be given land with an equivalent or better production potential. This could include provision of irrigation facilities and other strategies to improve the land productivity. Where this is not possible, efforts should be towards retaining or</p>	<p>The legal framework is silent on allocating land of equal production use or potential; however, the National Policy indicates that displaced persons should be given land with an equivalent or better production potential.</p> <p><u>Measure required:</u></p>

ASPECT	AFDB OS 2	ESWATINI LEGAL FRAMEWORK	ESWATINI POLICIES	FINDING
	<p>Whenever replacement land is offered, displaced people are provided with land for which a combination of productive potential, locational advantages and other factors is equivalent to, or better than, the land taken. The land provided should also provide access to safe drinking water and irrigation facilities. For rural resettlements, provisions may also include access to agricultural equipment and other agricultural inputs.</p> <p>When land is not the preferred option of the displaced people whose livelihoods are land-based, non-land-based options - built around creating employment opportunity or self-employment - are considered.</p>		<p>improving the livelihood of the effected persons.</p> <p><u>MHUD Policy, 1994</u></p> <p>There is no reference to replacement land having to be of equivalent to or better than the lost land; however, compensation shall also be paid as transitional support geared to the reestablishment of fields.</p>	<p>DWA to apply National Policy and OS2 provision on replacement land, where feasible.</p>
Resettlement assistance / support	<p>Displaced people are provided with targeted resettlement assistance with the aim of ensuring that their standards of living, income-earning capacity, production levels and overall means of livelihood are improved beyond pre-project levels. To this end, a comprehensive livelihood improvement programme is formulated and implemented as part of the Resettlement Action Plan. Strategies to improve livelihoods may involve providing access to training through appropriate technologies.</p> <p>The affected populations and host communities are provided with support before, during, and after relocation, for a transition period that covers a reasonable period necessary for them to re-establish themselves and improve their standards of</p>	<p>There is no legislated requirement for the provision of resettlement assistance / support.</p>	<p><u>National Resettlement Policy, 2003</u></p> <p>There is no reference to provision of support/assistance.</p> <p><u>MHUD Policy, 1994</u></p> <p>Reference is made to the following forms of support/assistance:</p> <ul style="list-style-type: none"> — single inconvenience payment; — relocation assistance (transport); — temporary housing may be made available; — assist, upon request, to approach the Regional Administration Offices for reestablishment of traditional homestead rights in another area within 6 months. 	<p>There is no legislated requirement for the provision of resettlement assistance / support. Nor is it mentioned in the National Policy, however the MHUD Policy makes provision for support/assistance.</p> <p><u>Measure required:</u></p> <p>A comprehensive livelihood restoration programme is to be developed and implemented as part of the Resettlement Action Plan in line with OS2.</p>

ASPECT	AFDB OS 2	ESWATINI LEGAL FRAMEWORK	ESWATINI POLICIES	FINDING
	<p>living, income-earning capacity, production levels and overall means of livelihood.</p> <p>Social structures and community networks among the affected persons should be maintained. Support and advice are made available to help the affected persons cope with, and benefit from, the resettlement process.</p>			
Opportunities for PAPs to derive appropriate development benefits	The borrower or client makes every effort to provide opportunities to the affected people to derive appropriate development benefits from the project that involves their resettlement. The borrower or client specifically engages with the affected people as project beneficiaries and discusses with them how project-related development benefits - for example, access to electricity, roads, sources of irrigation or domestic water supply - might be obtained and spread most effectively among them.	There is no legislated requirement for the provision of opportunities for PAPs to benefit from developments.	There is no reference to the provision of opportunities for PAPs to benefit from developments.	<p>There is no legislated requirement for the provision of opportunities for PAPs to benefit from developments.</p> <p><u>Measure required:</u></p> <p>Engage with PAPs regarding potential project-related development benefits in line with OS2.</p>
Security of tenure	All housing for physically displaced people is provided with security of tenure.	The Constitution of the Kingdom of Eswatini, 2005 guarantee the protection of all occupiers of land to be affected by land acquisition.	There is no reference to security of tenure; however, the MHUD Policy indicates assistance is to be provided, upon request, for the reestablishment of traditional homestead rights.	<p>Given that the National laws guarantee the protection of all occupiers of land to be affected by land acquisition, National laws suffice.</p> <p><u>Measure required:</u></p> <p>None required.</p>
Loss of common property resources	If possible, compensation is made in kind for loss of common property resources, such as rivers, lakes, or forest resources. Particular attention is given to replacing not only the common property itself, but also	There is no legislation which deals with this aspect.	<p><u>National Resettlement Policy, 2003</u></p> <p>Types of compensable losses covered in the Policy include loss of rights to access to communal assets like grazing land, wood</p>	There is no legislation which deals with this aspect; however, the National Policy includes compensation for communal assets and access thereto.

ASPECT	AFDB OS 2	ESWATINI LEGAL FRAMEWORK	ESWATINI POLICIES	FINDING
	<p>the services and community interlinkages that it provided.</p> <p>When a project involves the loss of public facilities, infrastructure, and common property resources, the borrower or client consults with the affected community to identify and agree on suitable alternatives that are equivalent to, or an improvement on, those being lost.</p>		<p>lots, forests, and the like; loss of access to public facilities.</p> <p><u>MHUD Policy, 1994</u></p> <p>There is no reference to common property resources.</p>	<p><u>Measure required:</u></p> <p>Consultation is to be undertaken with the affected community to identify and agree on suitable alternatives that are equivalent to, or an improvement on, those being lost; in line with OS2.</p>
Counselling	<p>When cash payments are made, the affected people should be provided with counselling to ensure that they have the knowledge to use the compensation wisely.</p>	<p>There is no legislation that deals with this aspect.</p>	<p>There is no reference to counselling.</p>	<p>There is no legislation which deals with this aspect.</p> <p><u>Measure required:</u></p> <p>Counselling is to be provided to PAPs receiving cash compensation in line with OS2.</p>
Host Communities	<p>The borrower or client carries out a detailed analysis of host communities to identify potential problems associated with receiving displaced people, and to address these problems so that adverse impacts on host communities are minimised and the host communities are able to share in the development opportunities provided through the resettlement process.</p>	<p>There is no legislation that deals with this aspect.</p>	<p><u>National Resettlement Policy, 2003</u></p> <p>It is a National Policy that resettlement will be undertaken in a way that minimises social disruption to either displaced people or host communities, ensuring, to the extent possible and desired by affected people, that existing social and cultural institutions and livelihood systems are preserved. Furthermore, where resettlement involves the resettlement of displaced people into an existing "host" community, that community should also be considered an affected party as the bringing in of more homesteads could limit their access to communal resources and have an impact on services like schools, clinics and many others.</p>	<p>There is no legislation that deals with this aspect, however; National Policy indicates that host communities should also be considered an affected party.</p> <p><u>Measure required:</u></p> <p>Assessment of, and consultation with, host communities is to be undertaken and measures identified in a comprehensive livelihood restoration plan to be developed and implemented as part of the Resettlement Action Plan in line with OS2.</p>

ASPECT	AFDB OS 2	ESWATINI LEGAL FRAMEWORK	ESWATINI POLICIES	FINDING
			<p><u>MHUD Policy, 1994</u></p> <p>There is no reference to host communities.</p>	
Vulnerable Groups	<p>Member countries and other borrowers/clients are responsible for protecting the physical, social, and economic integrity of vulnerable groups.</p> <p>Particular attention is given to ensuring that the interests of both women and men and of the elderly and the handicapped are taken into account when formulating and implementing compensation packages, resettlement assistance measures and livelihood improvement measures.</p> <p>Borrowers or clients prepare a Community Development Plan for projects that have clear risks for affected communities, which need to be mitigated.</p>	<p>The Constitution of the Kingdom of Eswatini, 2005 guarantee the protection of all occupiers of land to be affected by land acquisition, however no mention is made of vulnerable groups.</p>	<p><u>National Resettlement Policy, 2003</u></p> <p>It is a National Policy that special attention shall be directed to the needs of vulnerable groups among the displaced population, such as those below the poverty line, the landless, the elderly, women and children, and ethnic minorities. Additionally, that underutilized land owned by these groups should be leased on seasonal basis.</p> <p><u>MHUD Policy, 1994</u></p> <p>Guideline 6: Impacted persons who are particularly vulnerable to the adverse effects of resettlement shall have their specific needs addressed through this guideline. The elderly, handicapped, low-income earners and women receive special attention. Notably, Guideline 6-D1 states “<i>All women participating in Ministry of Housing and Urban Development Projects shall be given the opportunity to finance, own title to land, and fully participate in any development project sponsored by the Ministry on an equal footing to their male counterparts, without the signature or approval of a legal age male.</i>”</p>	<p>There is no legislation that deals with this aspect, however; however, National Policy indicates that the needs of vulnerable groups should receive special attention.</p> <p><u>Measure required:</u></p> <p>In the absence of a national legislation regarding vulnerable groups, National Policy and OS2 shall apply.</p>
Implementation, monitoring and evaluation	<p>The borrower or client is responsible for the implementation, monitoring and evaluation of the activities set out in the Resettlement Action Plan, and it keeps the Bank informed of progress.</p>	<p>Other than recording transactions, as addressed in the Acquisition of Property Act 10, 1961; there is no legislation governing the monitoring and evaluation aspects.</p>	<p><u>National Resettlement Policy, 2003</u></p> <p>It is a National Policy that monitoring, and evaluation, must be carried out continuously by the institution responsible for resettlement. Resettlement plans should</p>	<p>There is no legislation that deals with monitoring and evaluation aspects; however National Policy identifies that monitoring and evaluation are essential elements for any resettlement process.</p>

ASPECT	AFDB OS 2	ESWATINI LEGAL FRAMEWORK	ESWATINI POLICIES	FINDING
			<p>be gazetted upon completion, to encourage chiefs to follow professionally developed and implemented land use plans. Should need for altering or revising the plans arise, the institution responsible for resettlement shall see to it that it happens.</p> <p>The principle is that monitoring, and evaluation, of rural resettlement programmes should be an integral part of resettlement process, with verifiable indicators based on programme objectives.</p> <p><u>MHUD Policy, 1994</u></p> <p>There is no reference to monitoring and evaluation.</p>	<p><u>Measure required:</u></p> <p>Implementation, monitoring and evaluation of the process is to be undertaken in line with National Policy and OS2.</p>

6 IDENTIFICATION OF RESETTLEMENT IMPACTS

6.1 OVERVIEW

The Project will require acquisition of permanent land for the purpose of construction of the Nondvo Dam, associated infrastructure and to accommodate the reservoir, which will cover a surface area of approximately 2.4 km² (240 ha) of land in the valleys and tributary catchments of the Lusushwana and the Nondvo rivers. Temporary occupation of land will also occur during the construction period for construction of the management offices, management camps, labour camps and works areas. Implementation of the Nondvo Dam project will therefore lead to involuntary resettlement resulting from physical and economic displacement, with potentially significant impacts on the livelihoods and socio-economic status of the local population (Nondvo Dam ESIA (2019)).

DWA as the custodian of the Project must comply with the international standards, such as the AfDB Safeguard Policy ensuring that the risks associated with resettlement are addressed and that the livelihoods of project affected people are restored. An important responsibility is to explore all viable project designs, to avoid involuntary resettlement where feasible and to minimize resettlement impacts where population displacement is unavoidable. Particular attention must be given to socio-cultural issues such as the cultural or religious significance of land, the vulnerability of affected populations, and the replacement for of and other assets, especially when they have important intangible value. The resettlement related potential impacts are outlined below.

The Nondvo Dam has potential impacts that are both negative and positive. The land-take impacts are largely in the inundation area, the work camp and office areas, the quarry area and on the site of the dam wall, all of which take land permanently. Impacts also stem from construction roads and sites, which may affect land and other assets temporarily during the construction phase. **Table 6-1** below summarises the land-take impacts of the Project as caused by its major components as well as associated aspects (i.e. realignment of the railway line and MR19 road).

Table 6-1: Project components affecting PAP land

PROJECT COMPONENT	NATURE OF IMPACT
Nondvo Dam, including: <ul style="list-style-type: none"> – Dam and reservoir; – Work camps and offices; – Quarry and access roads. 	Establishment of the dam will result in the displacement of: <ul style="list-style-type: none"> – 175 HHs - of these 102 HHs will experience physical and economic displacement, while 73 HHs will experience economic displacement only. Included in the affected assets are approximately 94.2 ha of arable land and 28.8 ha of residential land. The above includes: <ul style="list-style-type: none"> – Two schools, namely the Bhekephi Primary School and Masibekela High School, which require relocation; and – One church, namely the Devine Healing Church, which requires relocation.
Railway line realignment	Rerouting the railway line will affect approximately 39 HHs ⁹ .
MR19 road realignment	Rerouting the MR19 road will affect approximately 21 HHs. ¹⁰

^{9 & 10} Estimated affected HHs are based on desktop review, as details of the proposed realignment were not available at the time of undertaking the infield investigations.

Table 6-2 details the above impact by summarising the identity of the affected asset type and the magnitude of losses as measured for the Nondvo Dam. Whereas **Table 6-3** and **Table 6-4** detail the above impact by summarising the potential affected asset type and the magnitude of losses as estimated for the Railway line realignment and MR 19 road realignment, respectively.

Table 6-2: Asset Type and Magnitude of Losses resulting from the Nondvo Dam

#	ASSET TYPE	QUANTITY	TOTAL SIZES	UNIT OF MEASURE
1	Arable Land ¹¹	191	942 105	sqm
2	Borehole	1	1	Point
3	Building/ Secondary Structures	10	290	sqm
4	Business Plot	2	3 459	sqm
5	Chicken Coup	54	1 038	sqm
6	Church	1	226	sqm
7	Church Plot	1	2 584	sqm
8	Commercial Orchard	1	70	sqm
9	Dwellings/ Primary Structures Brick and Mortar	150	13 684	Point
10	Dwellings/ Primary Structures Corrugated iron	1	10	sqm
11	Dwellings/ Primary Structures Mud	34	840	Point
12	Dwellings/ Primary Structures Wood	14	412	sqm
13	Forest	11	26 587	sqm
14	Formal business Structure	2	322	sqm
15	Fruit Tree	12	991	Point
16	Fuel Tree	21	425	sqm
17	Garden land	3	343	sqm
18	Grave	2	4	Point
19	Guard House	2	2	point
20	Incomplete Structure	5	273	sqm
21	Informal Business Structure	5	67	sqm
22	Kraal	17	915	sqm
23	Medicinal Plant	2	4	sqm
24	Outbuilding/ Secondary Structures Grain storage	101	1 379	sqm
25	Pigsty	3	18	sqm
26	Pump House	1	2	Point

¹¹ Due to the extended timeline of the proposed implementation schedule (i.e. from Project commencement to inundation), compensation for standing crops has been excluded from the RAP as sufficient notice is to be provided for the PAPs to harvest final crops before relocating. This is also based on the requirement that prior to relocation PAPs will have access to his/her replacement land (where required), which has been adequately prepared, to plant the following seasonal crop.

#	ASSET TYPE	QUANTITY	TOTAL SIZES	UNIT OF MEASURE
27	Residential Plot	100	287 820	sqm
28	School building	18	4 626	sqm
29	School Plot	2	113 979	sqm
30	Septic Tank	2	2	Point
31	Sports Field	2	11 454	sqm
32	Sports Ground	1	10 225	sqm
33	Stable	4	91	sqm
34	Standpipe	33	37	Point
35	Toilet	71	148	Point
36	Useful Grasses	1	10	sqm
37	Water Tank	28	44	point
38	Wild Vegetables	1	40	sqm

Table 6-3: Asset Type and Magnitude of Losses resulting from the Railway realignment

#	ASSET TYPE	QUANTITY	TOTAL SIZES	UNIT OF MEASURE
1	Dwellings	23	2 637.40	sqm
2	Outbuildings	56	2 043.12	sqm
3	Residential plots	21	55 160.66	sqm
4	Arable land	25	166 499.73	sqm

Table 6-4: Asset Type and Magnitude of Losses resulting from the MR 19 Road realignment

#	ASSET TYPE	QUANTITY	TOTAL SIZES	UNIT OF MEASURE
1	Dwellings	39	5 132.70	sqm
2	Outbuildings	56	1 851.20	sqm
3	Residential plots	39	1 934.06	sqm
4	Arable land	29	86.79	sqm

In addition to the assets identified above, three low level crossings and two footbridges will be inundated by the reservoir, the location of which are shown in **Figure 6-1**. Alternative access routes will be provided for pedestrian and vehicular traffic at both the northern and southern ends of the reservoir. This will facilitate movement around the dam as part of ensuring that life of the PAPs in the communities of the Mantabeni and Siphocosini Royal Kraals returns to normalcy as far as possible, as per the prescripts of the AfDB Safety Policy and Guidelines and GIIP.

As indicated earlier, implementation of the proposed Project will not result in physical or economic displacement downstream of the dam. Potential impacts on downstream environments as well as downstream water users during the construction and operation phases are identified and assessed within the ESIA report. A major mitigating measure is the requirement for maintaining the current ecological flow thereby reducing the potential downstream impacts.

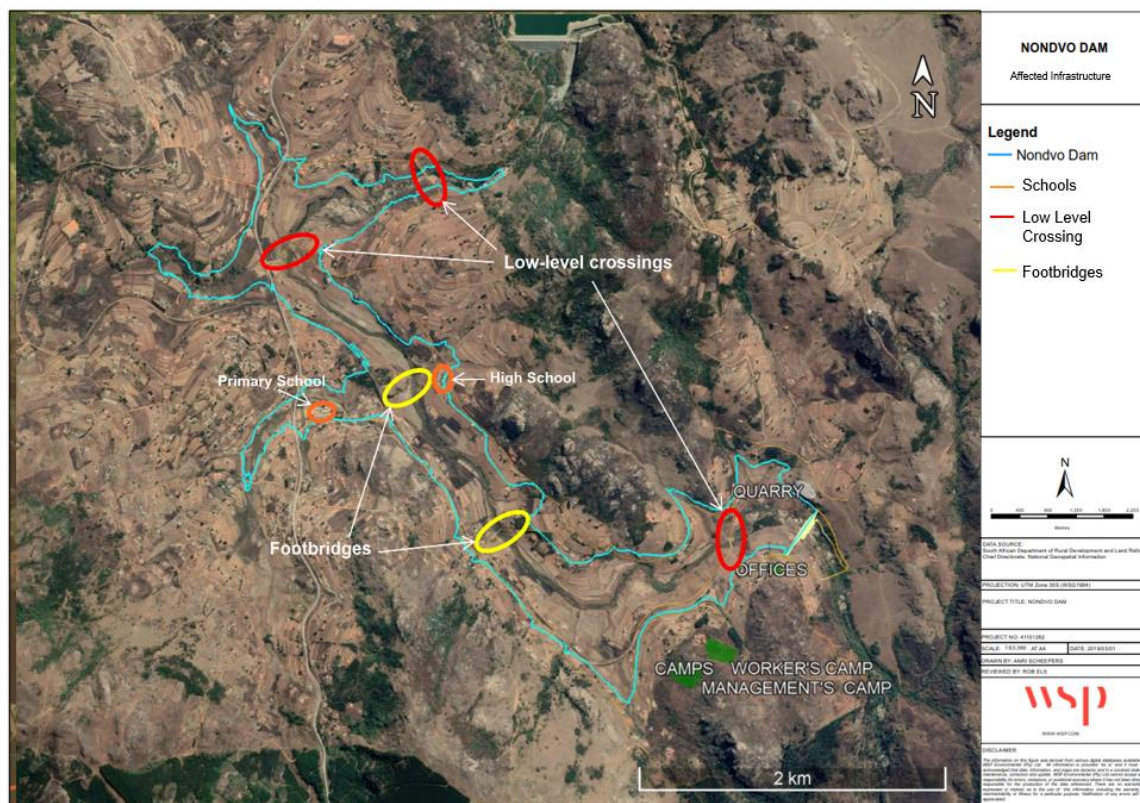


Figure 6-1: Map showing Low Level Crossings

6.2 POTENTIAL NEGATIVE IMPACTS IDENTIFIED

As indicated above and identified within the ESIA (Nondvo Dam ESIA (2021), implementation of the Nondvo Dam project will result various environmental and social impacts, including physical and economic displacement of project affected households within the Project area. The potential Project related impacts are identified and assessed in detail in the ESIA report, however; some of the potential negative impacts that may arise within the Project area of influence as a result of the Project include:

- Inundation of Nondvo Dam. Land loss associated with inundation will lead to the loss of arable land, the physical / economic displacement of 175 households (with associated host community impacts), as well as displacements of businesses, schools and a church;
- Loss of land and other assets due to the realignment of existing roads and the railway line;
- Associated host community impacts;
- Influx of job seekers;
- Possible social pathologies arising from influx (such as criminal and anti-social behaviours e.g. drug dealing, prostitution etc.);
- Increase in crime levels;
- Impacts related to construction and other traffic and roads;
- Impacts related to physical intrusion on the sense of place;
- Displacement of graves and loss of heritage sites;
- Loss of natural resources;
- Disruption to education of youth; and
- Impeded access due to loss of low-level crossings and footbridges.

6.3 POTENTIAL POSITIVE IMPACTS IDENTIFIED

As identified within the ESIA implementation of the Nondvo Dam project will also lead to potential positive impacts. These include:

- Water security for the towns of Mbabane and Manzini and in the development corridor;
- Economic revival for the country with possible attraction for investment;
- The creation of temporary employment opportunities and social benefits;
- Irrigation of arable land for improved productivity; and
- Improvement of local infrastructure – such as roads and water supply.

7 METHODOLOGY

The RAP was undertaken using several instruments, including desktop review, site visits, community and PAP consultations, and physical identification, enumeration, and measurement of affected properties. The instruments are described in more detail below.

7.1 DESKTOP BASED DATA REVIEW

Relevant secondary data was collected and reviewed, including a review of studies undertaken for the Project to date. These included:

- The Technical Feasibility Study undertaken by Studio Pietrangeli 2019 / 2020 (Scoping & Final);
- AfDB guidelines (applicable to the project); and
- Relevant Eswatini Legislation.

Project Maps and engineering drawings were also studied prior to undertaking fieldwork. In addition to this, more information was sourced from printed and electronic reports and documents, including relevant websites. Demographic Surveys and Census reports were also reviewed, and the Nondvo Dam ESIA report was used as a key reference.

7.2 SITE VISITS AND CONSULTATIONS

A reconnaissance site visit to the Project area was undertaken on 29th May 2019 to collect information related to various aspects of the Project. The visit was led by the team specialist in the field of resettlement and compensation, socio-economic matters, and cadastral surveying. The main purpose was to explore the Nondvo Dam and reservoir footprint in relation to the settlements and activities in the valley. Site visit activities and stakeholder engagements took place as follows:

- 29th May 2019: the reconnaissance field trip was undertaken by members of the team to become familiar with the project location, enabling work planning and preliminary identification of affected assets and locations on project maps.
- 29th July to 17th August 2019: Meetings were held with the local authorities of Siphocosini and Mantabeni and both communities. The objectives of the meetings were the following: to disseminate information, to seek support and participation in the RAP/SIA study and to identify and register assets. The main meetings were:
 - 17th August 2019: Meeting with the Mantabeni community at a public gathering.
 - 30th August: Meeting with the community representatives of both Mantabeni and Siphocosini.
 - 20th – 23rd October 2019: Follow up consultation meetings with the following stakeholders:
 - CAL and community members on asset registration and verification;
 - Meetings with the Indvuna for both Mantabeni and Siphocosini to provide feedback on the completion of the register of assets;
 - Meeting with the Department of Water Affairs to seek the department’s organogram structure; and
 - Meeting with Railway authorities to seek understanding on the railway line corridor and buffer.

7.3 RAILWAY LINE AND MR19 ROAD REALIGNMENT

7.3.1 RAILWAY LINE REALIGNMENT

The existing railway line, now out of service, runs alongside the Lusushwana River in the Nondvo project area. As a section of the railway line will be flooded by the Nondvo reservoir at the Full Supply Level (FSL), the Government of Eswatini has decided that the railway line should be relocated so that it can one-day be reinstated.

The proposed realignment route, as defined within the final feasibility study report (Studio Pietrangeli, 2020), has not yet been approved by the Eswatini Railways. The current route design is therefore conceptual. As such, it was not possible for the consultant to identify the affected households conclusively. For planning purposes, a high-level assessment, based on satellite imagery, has been undertaken to ascertain the potential resettlement activities associated with the proposed realignment.

The final design of the railway line realignment is still to be undertaken. The impact on properties may therefore differ between conceptual and final realignment designs.

According to Eswatini Railways, the standard corridor for the railway line is 25 meters from the centre line. Therefore, the following principles were followed to provisionally identify the affected properties and households based on desktop review.

- The properties that will fall along the 50 meter corridor of the conceptual route will be counted and measured for relocation;
- The properties that will lose access to important facilities will also be listed for relocation;
- Fields falling between the old and new railway lines not affected by construction of the new railway line, and those within the buffer zone for the railway line will still be available for use.
- There are properties that are affected by the realignment as they either fall along the new railway line or are between the old railway line and the proposed realignment. These households are affected by the construction of the railway and by losing access since they would be trapped between the old railway line, the reservoir and the new railway. Since the railway crossings have not been identified, it is therefore assumed that all households that fall between both the old and new railway line would have to relocate.

Based on the principles set out above there are approximately 21 HHs with 125 assets that are affected by the provisional realignment of the railway line. This number is indicative given the provisional status of the conceptual route.

7.3.2 MR19 ROAD REALIGNMENT

The M19 road is an asphalted road that connects the city of Mbabane to the town of Sandlane located close to the border with South Africa. As two sections of the road will be flooded by the Nondvo reservoir at the FSL, a section of the road needs to be realigned to facilitate continued traffic along this route.

The proposed realignment route, as defined within the final feasibility study report (Studio Pietrangeli, 2020), has not yet been approved by the Eswatini Roads Department. The current route design is therefore conceptual. Additionally, the proposed realignment detail was not available at the time of undertaking the RAP. As such, it was not possible for the consultant to identify the affected households conclusively. For planning purposes, a high-level assessment, based on satellite imagery, has been undertaken to ascertain the potential resettlement activities associated with the proposed realignment. The final design of the road realignment is still to be undertaken. The impact on properties may therefore differ between conceptual and final realignment designs.

It is anticipated that the engineering design for M19 road realignment to Mhlambanyatsi shall be conducted in a way that comply with the Roads and Outspans Act of 1931, Width of Roads, Section 4. The width of public roads as prescribed by the aforementioned Act indicates the following infrastructure, including unmade portions thereof, shall have the following widths: (a) main roads and trunk roads, 38 m; (b) branch roads, 16 m; (c) bridle paths, not exceeding five metres.

Therefore, the following principles were followed to provisionally identify the affected properties and households based on desktop review.

- The properties that will fall within the 38 m width, will be counted and measured for relocation,
- Similarly, fields that will be affected by the construction of the MR19 road will be measured for compensation while the remaining part will still be available for use by the owner.
- Trees and outbuildings within the affected area will be counted and measured.

Based on the principle set out above, there are approximately 39 HHs with 163 assets that are affected by the provisional realignment of MR19 road. This number is indicative given the provisional status of the conceptual route.

7.4 ASSET REGISTRATION AND CADASTRAL SURVEY

A key element of the planning process was the identification and determination of the number of PAPs (physically and economically affected), as well as their affected assets. A desk top study of the affected area was undertaken as well as field visits to confirm the properties and to work with community structures. Asset registration and verification targeting homestead/household heads was undertaken over a period of two weeks from 29th July to 17th August 2019 in collaboration with the ESIA team. A total¹² of 792 assets were registered for 108 HHs, as well as two schools and a church, in seven communities within the two Royal Kraals. Identification and registration of assets occurred in the presence of owners or their representatives and CALs to check for the correctness of surveyed / measured assets and ownership details.

The household asset types that were registered were as follows:

- Residential plot;
- Primary dwelling primary type;
- Outbuildings (kraals, chicken coops etc.);
- Incomplete structures;
- Fruit trees;
- Fuelwood trees;
- Gardens;
- Arable land¹³;
- Commercial structures;
- Informal business structures;
- Forest areas;
- Water points (stand pipes / water tanks), and
- Toilets.

As the project is still at the feasibility stage and the final design yet to be approved, the reservoir inundation area has not been accurately surveyed. As such, google earth imagery and GPS devices were utilised to identify affected sites as accurately as possible, however without a detailed survey there will be some variances. A final verification assessment and valuation, including cut-off date, is to be undertaken to capture any changes in people's individual circumstances and define individual compensation packages for negotiations and acceptance by PAPs during the consolidation stage of the RAP implementation process. The final verification assessment is to be undertaken following approval of the final design and site survey to accurately demarcate the inundation area.

7.5 CENSUS SURVEY (OF PAPS)

The census¹⁴ comprises the following tasks:

- Register each household as uniquely identified by Royal Kraal, community and full names of household head;
- Identify affected assets;
- Capture GPS coordinates of households (on tablet or Google map print out);
- Transfer records from tablets to MS Access through csv files;

¹² The figures presented here are for the Nondvo Dam and reservoir only.

¹³ Due to the seasonality of crops and duration for implementation crops were only identified, not registered. The extent of crops on the arable land is to be assessed once the final layout has been approved as part of the implementation process. It is noted that due to the extended timeline associated with the proposed project prior to inundation it is anticipated that all PAPs will be able to harvest final crops. As such no compensation for crops is anticipated in the budget.

¹⁴ The survey excluded those PAPs affected by the MR19 road and railway line realignments, as details of the proposed routes had not yet been provided by the technical feasibility technical team. Provisional estimates are provided for these aspects based on desktop surveys or the proposed realignment routes.

- Merge data from the different tablets in MS Access;
- Verify consolidated records in MS Access; and
- Correct logical mistakes in MS Access.

7.6 ASSETS RECORDING METHODOLOGY

The asset registration exercise records all permanent and temporary losses incurred by the affected households, enterprises, institutions/ government, and communities. The inventory of affected assets differentiated between:

- Private or individual assets such as residential structures, gardens and fields;
- Communal assets such as rangeland; and
- Community/ institution/ Government assets and facilities.

Each asset was given a unique reference number. The assets registered included the following:

- Houses and associated structures – dwellings, toilets, storerooms, and kraals/stables;
- Non-moveable assets such as residential land, agricultural fields, gardens, trees and thickets;
- Private enterprises such as shops and other business establishments, including churches; and
- Public amenities and structures affected, e.g. schools, standpipes, meeting grounds and other amenities as included under the affected assets list.

The information to be recorded for each household may include as applicable:

- Number of buildings and sizes in square metres;
- The total area of the residential site in square metres;
- Coordinates of household's buildings within the footprint;
- All secondary structures owned by the household, like water and sanitation facilities, kraals, pigsties, poultry shelters, tanks, water ponds and fences;
- Affected field(s) of households, indicating location and assigning a number to the field linked to the household number;
- All field perimeters measured in meters, to one decimal place, with coordinates marking the corners of the fields;
- Vegetable/food gardens;
- The total number of graves and ash-heaps as applicable; and
- Number of affected fruit and any other privately owned trees.

The same procedure is followed to record affected private enterprises.

7.7 MINIMISING RESETTLEMENT

As identified in the ESIA, the technical feasibility study assessed various locations and heights of the dam wall to determine the preferred location and height to meet the required water storage capacity while resulting in the smallest possible project footprint within the identified catchment area. The provisional realignment route of the railway line and MR19 road have not been approved the relevant entities. Since this is not a final design it is anticipated that the current number of affected properties may vary based on the final detailed design. There is therefore potential for the number of PAPs to be reduced during the detailed design phase.

7.8 SUMMARY OF STEPS IN ASSET DETERMINATION, VALUATION AND COMPENSATION

The methodology and steps undertaken to identify PAPs, and properties that will be affected by the inundation and associated infrastructure is summarised in **Table 7-1**.

Table 7-1: PAPs and Assets Determination Methodology

METHODOLOGY STEPS	ACTIVITY AND OUTCOME DESCRIPTION
<p>STEP 1: Design of asset registration instruments.</p> <p>(1) Development of data gathering FORMs to be installed in Tablets for data capturing (including photographing) per PAP.</p> <p>(2) Capture of Asset Type in the field.</p> <p>(3) Downloading information into the central data management system for storage, analysis, and other usages.</p> <p>(4) (4) Form 1 and 4 are used in hard-copy form for signing purposes.</p>	<p>Five (5) Forms were designed for the field data capturing as follows:</p> <ul style="list-style-type: none"> — FORM 1: Identification of affected assets and owners (hard copy used in the field) — FORM 2: Asset Register (tablets use in the field) — FORM 3: Asset Inventory Summary (hard copy used for signatures in the field) — FORM 4: Asset Verification Form (hard copy use for signatures in the field) — FORM 5: The Data Management System was designed for data capture, storage, analysis, and planning as appended in this report.
<p>STEP 2: Recruitment and of data collecting teams.</p> <p>(1) Asset Recording/ registration,</p> <p>(2) Asset Verification (of PAPs),</p> <p>(3) Tablets were secured and programmed for data capturing in the field and subsequent downloading into the central MS Access platform and the GIS.</p>	<p>Tablets were secured for community-wide socio-economic data collection, by Teams of 6 enumerators from 29 July to 7 August 2019.</p> <p>Two Asset Recorders used Tablets (divided into two Teams led by Resettlement Specialists). They were in the field 29 July to 7 August and 12 to 17 August 2019.</p> <p>Asset verification by two asset recording teams was undertaken to enable confirmation of assets for valuation and compensation processing purposes.</p> <p>All teams were recruited and trained in line with field work programming.</p>
<p>STEP 3: Community and PAPs briefings.</p> <p>The public consultation team facilitated briefings with affected communities and PAPs to solicit their cooperation and participation in the project activity steps.</p>	<p>Workshop-type briefings were held with community representatives on 31 July 2019 to give a general briefing about pending project activities.</p> <p>Community-wide public meetings were held with Siphocosini and Mantabeni communities to solicit their cooperation with respect to the pending socio- economic surveys and subsequent activities (July to August 2019). Specific briefings of Chiefs, Councillors and affected asset owners regarding assets, owner identification and asset recording were held.</p>
<p>STEP 4: Updated project Plans.</p> <p>These were secured and overlaid on the latest orthophoto maps to identify affected assets. Also secured project drawings, overlaying them on orthophoto maps to locate affected assets before verifying their existence and updating in the field.</p>	<p>GIS and Google maps with contour lines depicting the full supply level (FSL) and Buffer Zone were secured to be used as a basis for identifying PAPs and associated properties that would be affected. They were also used to identify the households and properties that would be indirectly affected, and including public infrastructure, schools, and religious properties.</p>
<p>STEP 5: Identification of affected assets and owners.</p> <p>Identifying assets on the maps, followed by field checking (verification) and securing names of owners through Chiefs and CALs. Preliminary identification of the asset owners is the first step of identifying those eligible for compensation (PAPs).</p>	<p>The affected assets (sites, fences, structures, trees, gardens, etc.) were identified on the maps and then verified and updated in the field in the periods 29 July to 7 August and 12 to 17 August 2019 - following the reconnaissance field trip of 29 May 2019. The field-based identification of affected assets was undertaken together with identification of ownership through the presence of community representatives. The list was used to determine the locations and quantum of affected assets for the follow-up work of surveying, recording and registration of assets.</p>

METHODOLOGY STEPS**ACTIVITY AND OUTCOME DESCRIPTION**

<p>STEP 6: Asset recording and registration. Recording affected assets in the presence of asset owners, Chiefs (or representatives) and Councillors. Undertaken by a team comprising cadastral surveyors, asset recorders, and consultation team members.</p>	<p>The Asset registration exercise took place in the field from 29 July to 7 August. The purpose was to cadastrally survey individual assets through the cadastral surveyors (2), and to record them through the asset recorders (2), with consultation teams (1) facilitating, and in the presence of asset owners, Chiefs (or representatives) and area community leaders. It became necessary to repeat the exercise during the week of 12 to 17 August 2019 to complete the remaining assets. A third week was necessitated by the absence of owners and increased numbers of properties due to the previously noted reallocation of property to household members.</p>
<p>STEP 7: Asset and compensation register. A Data Management System was established to gather and store data and to provide for analysis, manipulation, programme developments, monitoring and evaluation. Compatibility with Client systems will be assured where possible.</p>	<p>The Data Management System was designed to record and store PAP information details. The information is stored via MS Access and is linked to the GIS where spatial information (asset maps and related photographs) is stored. Individual PAP data comes from the asset registration and census exercises. This information was used to derive entitlements and compensation values, and to inform livelihoods and other sub-plans, RAP documentation and M&E. The System is designed to be compatible with the Compensation Information Management System (CIMS) of the Client (see Data Management System - Annexure 1).</p>
<p>STEP 8: Affected assets verification. This step follows the asset field recording exercise and database / GIS capture. Populated Asset Verification FORMs per asset owner will be generated for PAPs to verify and sign to enabling next planning steps.</p>	<p>The asset verification exercise requires that all surveyed and registered asset information, inclusive of IDs, ownership, and other related documents, is put together in a Verification FORM per asset per owner and presented to the asset owner to inspect and sign. The signing is witnessed by the Chief, a Councillor, and the Client.</p> <p>Verified assets data will then enable valuation to take place so that compensation entitlements can be computed, and compensation values derived. Later, compensation entitlement can be made to PAPs for acceptance and for subsequent disbursements in line with physical implementation schedules.</p> <p>Following final approval of the design and gazetting of the Nondvo Dam Special Development Area (SDA), a verification assessment process must be undertaken.</p>
<p>STEP 9: Affected assets valuation.</p>	<p>This step follows the asset verification exercise so that valuations can be calculated.</p>
<p>STEP 10: Cut-off dates declaration.</p>	<p>Cut-off dates will be set at the time of the asset verification assessment to prevent influx into the area and will be declared by the Eswatini Government. The process of verification and adjudication can continue after the cut-off date.</p>
<p>STEP 11: Physical relocation and compensation disbursements.</p>	<p>Both physical relocation and compensation disbursements need to be implemented in alignment with a detailed implementation programme (not yet developed).</p> <p>The risk of encroachment on inventoried assets and other violations is high due to limited control capacity.</p>
<p>STEP 12 Livelihoods restoration.</p>	<p>This step will be informed by the socio-economic census of PAPs and the identification of vulnerable people and gender mainstreaming requirements. Detailed programmes will be developed a specialised livelihoods programme consultant.</p>
<p>STEP 13 Monitoring and evaluation (M&E).</p>	<p>A Monitoring and Evaluation System for RAP implementation is separately prepared and will be informed by RAP related studies (SIA, ESMP, RAP and LRP). Active M&E will commence with resettlement and LRP implementation.</p>

The above stepped process is executed by the following teams of specialists and technicians:

- Public consultation (led by (MMA Local Public Consultation));

- Asset recorders and registration (lead by the Resettlement and Compensation Specialist);
- Cadastral surveying (2 Surveyors);
- GIS (GIS Specialist); and
- Data Management (Data Management Specialist).

8 SOCIO ECONOMIC ENVIRONMENT

8.1 SOCIO ECONOMIC BASELINE AND PROFILE OF THE PEOPLE IN THE PROJECT AREA

8.1.1 STUDY AREA

The aim of the socio-economic baseline and profile is to establish a portrait of the socio-economic conditions of the households and communities proximate to the Project area and to evaluate the nature and extent of the impacted elements (cultivated and other lands, structures, etc.). These will form the basis for performing cost estimations for compensation and relocation. The main structures and houses of the impacted households and community structures (school, churches, etc.) were located using GPS technology. The baseline presents a view of the area before any development associated with the Nondvo Dam Project.

Eswatini is a small landlocked country in Southern Africa, bordering Mozambique and South Africa. It covers an area of 17,360 km² and has a population of approximately 1.39 million (mid 2012). The country is largely mountainous with 75.8% of the population living in rural areas with livelihoods predominantly dependent on subsistence agriculture.

The study area is made up of the two Royal Kraals of Mantabeni and Siphocosini. The two Royal Kraals are informally subdivided into smaller communities, as listed in **Table 8-1** below and shown in **Figure 8-1**. The Royal Kraals are situated in the Hhohho administrative District, under the Motjane (Tikundla) constituency. The capital city of Mbabane is some 17.5 km to the north of the study area.

Table 8-1: Communities within the Mantabeni and Siphocosini Royal Kraals

ROYAL KRAAL	COMMUNITIES		
Mantabeni	– Mhlane	– Masibekela	– Mahlatsini
	– Majadvula	– Mahothoza	– Nkhube
	– Ndlelalula	– Ndlolotsi	– Spete
Siphocosini	– Mhlane	– Sithobela	– Spete 2
	– Ncabaneni	– Spete 1	

From **Figure 8-1** it is evident that there is significant overlap between the two Royal Kraals. As such, for project purposes allocation of households to each community was assigned according to each household's response as to which Royal Kraals and community they considered themselves to fall within, rather than assignment by geographic location.

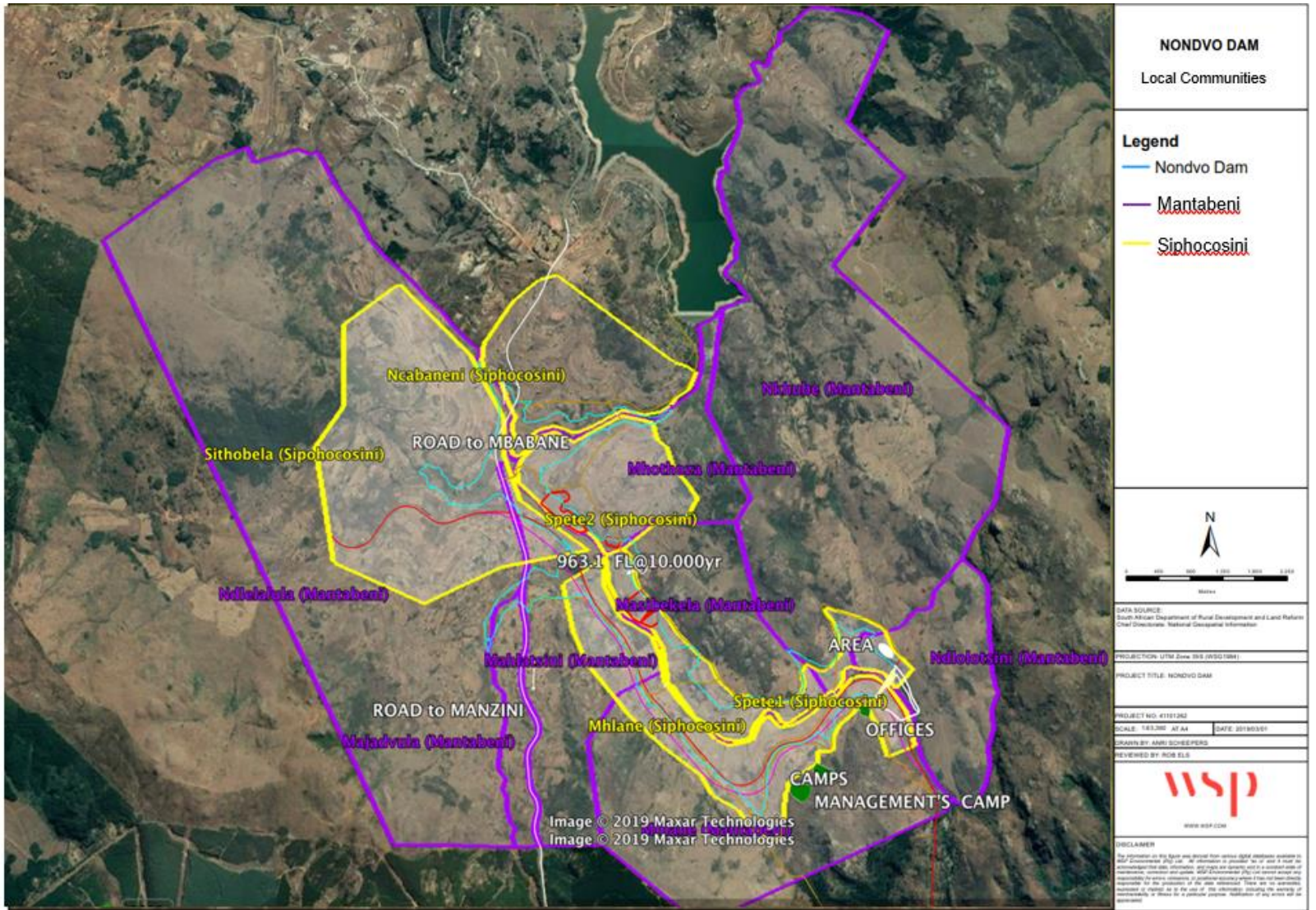


Figure 8-1: Layout showing the extent of the Siphocosini (yellow) and Mantabeni (purple) Royal Kraals in relation and extent of the proposed dam

8.2 NATIONAL LAND TENURE SYSTEM

The land tenure system in Eswatini is divided into two basic categories: Title Deed Land (TDL) and Swazi Nation Land (SNL). According to the Government of Eswatini (1989) TDL tenure currently accounts for 37% of the land area of the country. Holders of TDL have exclusive right of access to a defined piece of land with titles held by individuals or corporate bodies. Owners of TDL titles can sell or use the land as collateral. The State can withdraw title in land required for national development only after making appropriate compensation.

SNL refers to land held by the King in trust for the nation. It is allocated by chiefs to homestead heads, who under Swazi law and custom are men. Swazis living on SNL do not have title deeds and can never use their land as collateral for bank loans. In some cases, land has been allocated to women through male proxies even though many women are the defacto heads of homesteads. This practice continues in some chiefdoms. The report of the Committee on Elimination of Discrimination Against Women (CEDAW, 2012) notes that in some areas, chiefs have relaxed restrictions on land access by women. The Royal Kraals of Mantabeni and Siphocosini fall into this category, adhering to Section 211 of the Eswatini Constitution which provides for equal access to land for men and women for normal domestic use.

SNL includes land bought from TDL landowners by a reigning monarch for holding in trust for the Swazi Nation. Such land has been leased in some cases to private companies, to attract private capital and expertise to SNL. The use of this land does not reflect the traditional and political relations between chiefs and people as provided for under Swazi law and custom. The Royal Kraals of Mantabeni and Siphocosini are part of the SNL system and are guided by its prescripts.

8.3 NATIONAL ECONOMY

The economy of Eswatini is fairly diversified with agriculture, forestry, and mining accounting for approximately 13% of the country's GDP; while the manufacturing sector, textiles and sugar related processing represent 37%. Services including government services contribute 50% of the country's GDP. The World Bank 2018 indicates that Eswatini's GDP in 2018 was worth 4.70 billion US dollars in 2018, or 0.01 percent of the global economy. GDP in Eswatini averaged 1.52 USD Billion from 1960 until 2018, reaching a peak of 4.82 USD Billion in 2011 and a record low of 0.04 USD Billion in 1961.

The economic growth of Eswatini is said to have lagged behind that of its neighbours. Real GDP growth since 2001 has averaged 2.8% nearly 2% points lower than growth in other Southern African Customs Union (SACU) countries.

8.4 POPULATION AND DEMOGRAPHICS

According to the Census 2017 and the World Population Review (2019), the population of Eswatini is 1,093,238 million people. The population of the Mantabeni and Siphocosini Royal Kraals is 7,482 people, consisting of approximately 1,320 households distributed across the 12 sections.

8.4.1 PROJECT AFFECTED PEOPLE

PAP identification was made possible by the boundary of the reservoir inundation area and applied buffer zone, as per the technical feasibility designs. These specify the maximum water level and a safe zone around the impoundment. It was necessary to estimate the number of PAPs and community representatives per community to identify and quantify impacts, and to estimate the amount of work and costs for carrying out the Resettlement Planning at the implementation stage.

The first step was to secure Google maps with inundation area, buffer zone and gazetted road widths overlaid to enable identification of potentially affected households and their assets. This approach was applied to ensure that both the socio-economic study and the RAP are as accurate as possible in their identification of PAPs and their assets. Google maps proved to be a useful instrument for enumerating households located in, or with assets inside the FSL and / or the buffer zone.

On this basis, the RAP will assist in providing a diagnosis of the Project impacts on individual households. It will also build on PAP identification to ensure alignment with the AfDB requirements Involuntary Resettlement (AfDB (2003) Guidelines on Involuntary Displacement and Resettlement in Development Projects). Among other things, the guidelines stipulate the following:

- Displaced people must be treated equitably and share in the benefits of the project that involves their displacement;
- Efforts should be made to minimise disruptions to livelihoods and to ensure that the displaced persons receive resettlement assistance to improve their living standards;
- Close attention should be paid on the displacement of disadvantaged groups such as female headed households, child headed households, elderly people, the poor and marginalised communities;
- The borrower should set up mechanism to monitor the performance of the RAP; and
- The guidelines recognise that borrowing countries have laws and regulations dealing with various issues pertaining to displacement and compensation for loss of assets, and with rights in this context. The borrower is encouraged to take a long-term view where local laws and regulations are inadequate, and to address gaps where necessary.

8.5 SAMPLED HOUSEHOLDS

A detailed socio-economic survey (SES) of 187 households of the community initially identified to fall within the Project affected area was conducted to provide a baseline for planning and implementation. The 187 surveyed households include all 177 affected households (PAPs) and represents approximately 14% of the total community households and are both physically and economically affected.

Figure 8-2 below depicts the proportion of households sampled in both Royal Kraals (55.61% of Mantabeni households and 42.25% of Siphocosini). It is noted that four households (i.e. 2.14%) did not identify with either community.

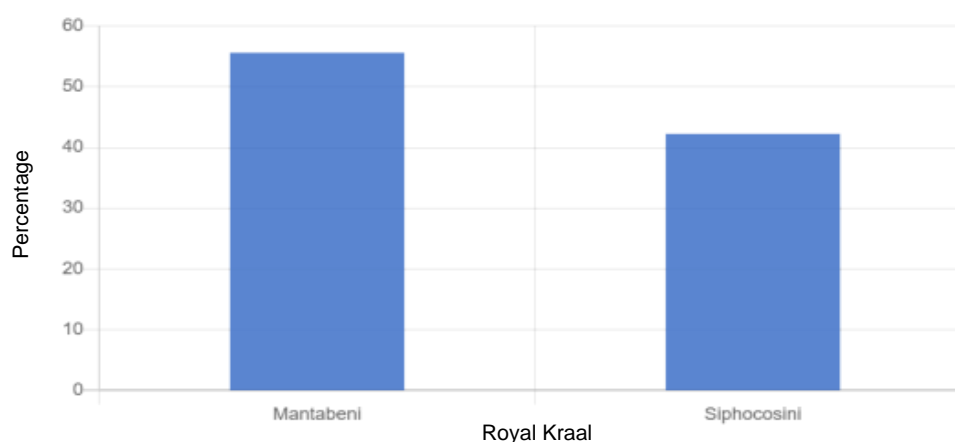


Figure 8-2: Interviews conducted by Royal Kraals represented as a percentage

Table 8-2 below shows the number of households (HH) per community in Siphocosini and the percentage thereof, which is graphically presented in **Figure 8-3**.

Table 8-2: Summary of the number of surveyed households per community within Siphocosini

COMMUNITY	NUMBER	PERCENTAGE OF TOTAL HHs
Spete 1	40	21.39
Sithobela	13	6.95
Ncabaneni	12	6.42
Mhlane	9	4.81
Spete 2	11	1.07
Total	85	40.63

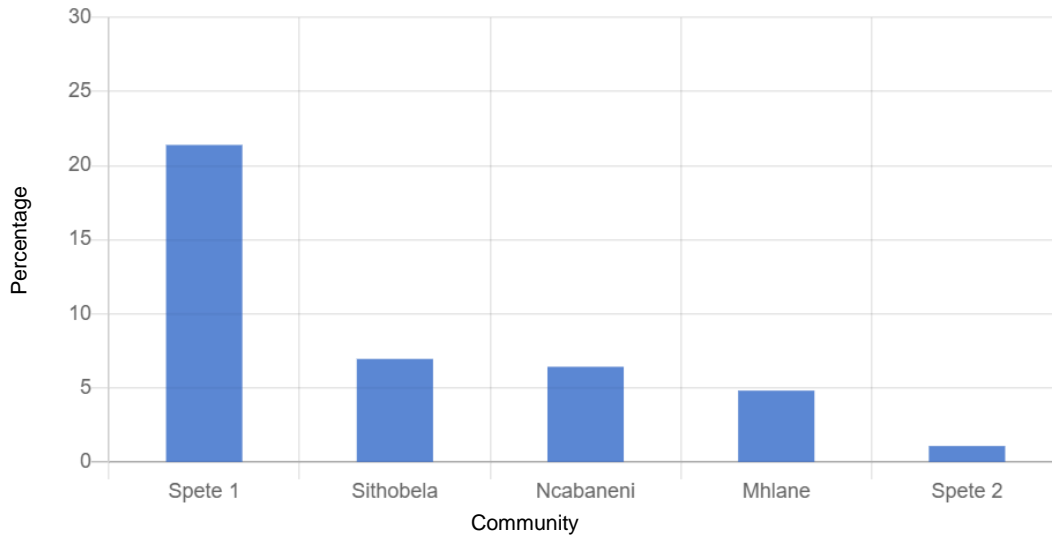


Figure 8-3: Summary of the number of surveyed households per community within Siphocosini

Table 8-3 below shows the number of HH per community in Mantabeni and the percentage thereof, which is graphically presented in **Figure 8-4**.

Table 8-3: Summary of the number of surveyed households per community within Mantabeni

COMMUNITY	FREQUENCY	PERCENTAGE
Mhlane	77	41.18
Majadvula	13	6.96
Ndlelalula	3	1.6
Mahothoza	3	1.6
Masibekela	2	1.07
Mahlatsini	2	1.07
Nkhube	1	0.53
Total	101	51.01

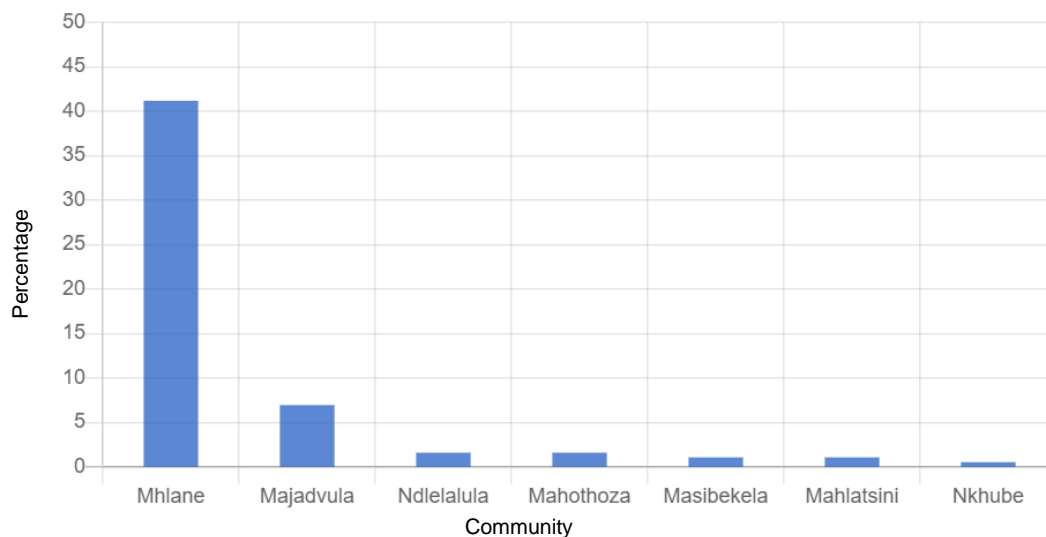


Figure 8-4: Summary of the number of surveyed households per community within Mantabeni

From the above it is evident that the communities of Mhlane (Mantabeni) and Spete 1 (Siphocosini) are the most populous in the area and are therefore likely to be the most impacted communities of the two Royal Kraals.

8.6 AGES OF HEAD OF HOUSEHOLD RESPONDENTS

The following are the ages of household heads in the sample survey: 43.32 % were people between 56 years and older 27.81 between ages 46 and 55, 17.65% between ages 36 and 45, 8.02% between 26 and 35 and 1.07% were between 15 and 25 years. In some households where parents were unavailable because they worked out of town, children responded on their behalf while others clearly were households headed by children.

Table 8-4: Ages of household heads

AGE	FREQUENCY	PERCENTAGE
56 & Older	81	43.32
46-35	52	27.81
36-45	33	17.65
26-35	15	8.02
15-25	2	1.07
Total	183	97.87

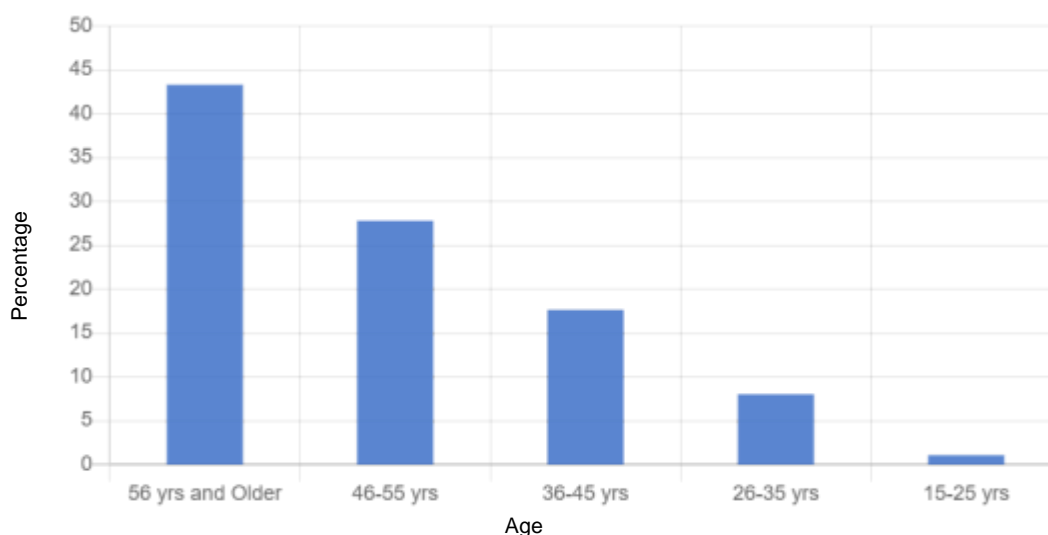


Figure 8-5: Ages of household heads

8.7 AVERAGE HOUSEHOLD SIZE

Based on the 187 respondents, the average household comprises approximately seven occupants, as indicated in **Table 8-5**. As the Nondvo Dam and reservoir is anticipated to affect 108 HHs, it is anticipated that a total of 767 peoples will be affected via physical or economic displacement. While the realignment of the MR19 road and railway line is anticipated to affect approximately 149 and 277 peoples, from 21 and 39 households respectively, via physical or economic displacement, based on the proposed provisional realignment routes. Based on these figures, it is anticipated that a total of 1,193 people will be directly affected in relation to either physical or economic displacement because of the project. This does not however account for the number of households with school going children that will be affected by the relocation of the two schools.

Table 8-5: Average number of household occupants as per 187 household survey respondents

	ADULTS	CHILDREN	TOTAL
Total number of occupants	712	616	1328
Average per household	3.8	3.3	7.1

8.8 GENDER EQUALITY AND PARTICIPATION OF WOMEN IN COMMUNITY ACTIVITIES

In view of social and cultural norms that may disadvantage some population groups, gender equity is given special attention in resettlement studies to ensure that women are not disproportionately impacted by the implementation of displacement-inducing projects and disadvantaged should economic or social opportunities be available.

The section below examines selected gender indicators in Mantabeni and Siphocosini, where elements of patriarchy may still prevail. In the surveyed population, there are 33 single adult women who make up 17.65% of the population of 187 respondents. The frequency of separation and divorce in the community was recorded at 2.14% of marriages. Single women who came from outside the Royal Kraals had followed the process of *ukuKhonta* - the application to the Chief or Inner Council to live in the community. Membership in a local community is a condition for the right to receive or to be allocated land and is granted through the *ukuKhonta* process. Sometimes applicants or new residents are required to pay a stipulated amount or cows to the Inner Council towards the upliftment of the community.

Most single women who live in the community are new residents (having lived in the area for less than 10 years) and majority are employed by government as public servants. Additionally, there are two categories of women whose properties were bequeathed to them as the only survivors in their families while others are widowed.

Questions relating to awareness of gender equality were raised in the survey. Out of 187 interviewees, 178 responded. Among these, 137 stated that they understand what gender equality represents and 41 had no conception thereof. Asked how they acquired information on gender equality, 105 responded out of the sample of 187. Six indicated that radio programmes had influenced them, 42 learned through discussions with other community members, 38 gained information from public gatherings, 11 from pamphlets and 8 from other sources. On the question whether women and men should be afforded the same opportunities, 180 offered responses; 128 agreed while 42 disagreed and 10 were uncertain. This response was interesting especially since the government of Eswatini has sought to ensure attention to gender equality through the Constitution of Eswatini.

In addition to delineation of gender roles, seating arrangements in community meetings were clearly segregated. In Siphocosini women did not actively participate in the community meetings, and only asked questions after the meeting was concluded. In Mantabeni women asked questions during the general meeting and participated fully throughout the proceedings. Seating arrangements were less segregated than in Siphocosini.

8.9 PREVALENCE OF GENDER BASED VIOLENCE

Violence against women and girls is one of the most systematic and widespread human rights violations globally. According to a 2013 global review of available data, 35% of women worldwide have experienced either physical and/or sexual intimate partner violence or non-partner sexual violence. Eswatini has also experienced the scourge of gender-based violence in all its forms including sexual assault, domestic violence, and sexual harassment. According to the Eswatini Action Group Against Abuse (SWAGAA) 9 in 10 children will experience some form of physical or psychological abuse in their lifetime. Hence, Section 18 of the Constitution of Eswatini as well as the Sexual Offences and Domestic Violence Act 2018 are steps in the right direction toward curbing the scourge of GBV. The Act prohibits violence in all spheres and seeks to strengthen and consolidate common law and statutory provisions to adequately deal with sexual offences and domestic violence.

Out of 175 respondents 109 were not certain of the existence of gender-based violence in the community. This is no surprise since victims of GBV often do not report it due to fear of stigma or self-blame. Only 50 respondents affirmed its prevalence and 18 disagreed that there was any gender-based violence. However, out of 167 respondents 120 indicated that women are mostly affected by gender-based violence, 32 noted abuse of children,

six of men and two stated that elderly are often victims. One person stated that people living with a disability are also victims. The high School Principal indicated that there was a prevalence of gender-based violence in the community to an extent where the school has often sought police intervention in such cases.

It is noted that many respondents did not feel comfortable with this question. This could be attributed to socio-cultural factors such as fear of social stigma, attitudes, and social pressures. These collectively prevent victims of violence from reporting cases of violence, particularly to institutional structures (such as police and health services), which are inherently patriarchal (Lowe, Morna et al, 2017).

8.10 PERCEPTION ABOUT WOMEN PARTICIPATING IN THE WORKFORCE

Out of 172 respondents, 166 said men should actively participate in of the workforce while six (6) agreed that women should participate. Among those that responded that women should not participate, the main reasons offered were the following:

- Women do not have the required strength;
- Men are the breadwinners; and
- Women cannot work deep in the forest because it is dangerous.

From the responses above it is clear that the point of reference is the fact that a high percentage of males in the community are employed in timber forests in surrounding areas.

8.11 POSITION AND ROLE OF WOMEN IN THE COMMUNITY

Since women in the Project-affected area may be considered vulnerable, a detailed analysis was undertaken to determine their socio-economic position in the area and to assess how they would be affected by the project. The survey results were consistent with the well understood roles and relations between the men and women in semi-rural communities based on prevailing cultural norms. When a few single women were asked why they chose to settle in this community, the following were the responses:

- This area is not culturally oppressive;
- Single women like me are able to *Khonta* and are not subject to discrimination in any way;
- I was given support in the community when I first came to settle; and
- The fact that I am a teacher in the local school worked in my favour.

No overt evidence of discrimination of or marginalisation of women was recorded throughout the survey. For instance, the women of Mantabeni and Siphocosini are actively engaged in social and economic activities (formal or informal) in their communities, like their male counterparts. This situation is generally consistent with the gender policies of the country.

8.12 DURATION OF RESIDENCE OF HOMESTEADS IN MANTABENI AND SIPHOCOSINI

The analysis of data revealed that among the households that were have been between 1-10 years, 31.55% are homeowners. Among those who have lived in the community between 11-40 years, 60.97% are owners. Older homesteads have more established homes often built from brick and mortar or mud. They may also have toilets, kraals, sheds, traditional grain sheds, fields, and boreholes. Sheds and kraals are typically made from wood. The older homesteads are located throughout the two Royal Kraals, however; the homesteads of new residents are often located closer to the main roads. New homestead households often do not have assets such as fields, woodlots, kraals, and sheds. Their homes are often modern with toilets and bathrooms inside as well as outside. Older homesteads typically have their toilets and showers outside.

Table 8-6: Duration of survey respondent residence in the community

YEARS LIVED IN COMMUNITY	NO. OF PEOPLE	PERCENTAGE
>40	50	26.74
21-40	37	19.79
11-20	27	14.44
6-10	26	13.9
1-5	37	16.58
1	2	1.07
No Information	8	4.28
Total	187	100

8.13 LEVEL OF EDUCATION OF HOUSEHOLD RESPONDENTS

According to the Convention on the Elimination of All forms of Discrimination of Women (CEDAW) literacy levels in Eswatini were high among both males and females (above 90%). It was further noted that teenage pregnancies might affect the ability of young women to stay in school and later to go on to find employment (CEDAW, 2012). Despite this, Eswatini has reached gender equality in secondary education (GenderLinks, 2015).

The SES found that 21.39% of respondents have tertiary and vocational education and 39.58% have high school education. Around 31.02% have primary education only and 3.07% are illiterate. The survey information shows that the Project-affected area has a relatively high level of education. This analysis is consistent with the national statistics of Eswatini.

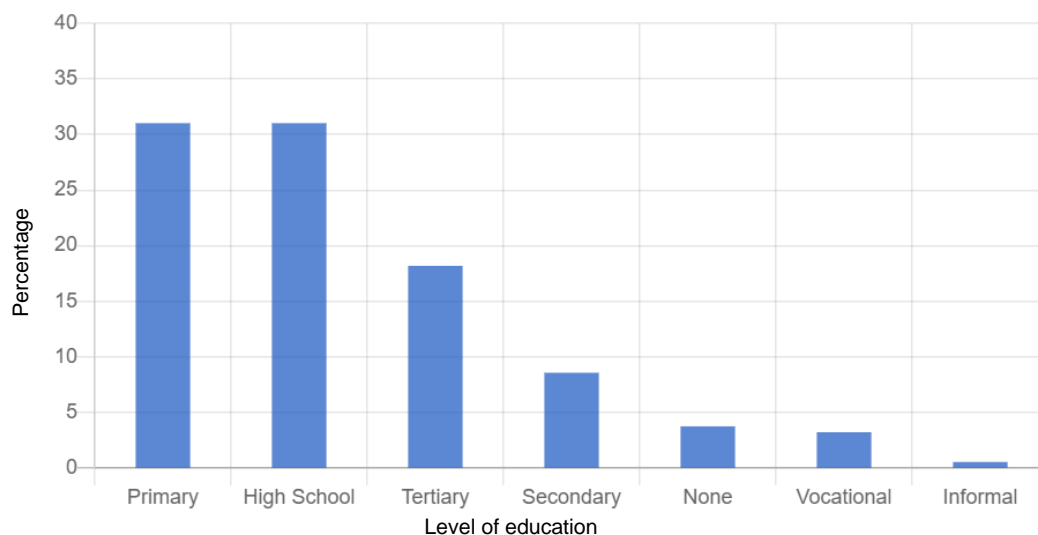


Figure 8-6: Level of education of household respondents

8.14 EMPLOYMENT AND SKILLSETS

The survey results show that people aged 18-55 comprise 65% of the respondents while those 56 and older make up 32.09% of the sample. The proportion of those who are currently unemployed and those who have been seeking

work in the past three months is 12.50%. Data provided in this study is consistent with Eswatini statistics which confirm the high levels of unemployment.

The spread of skills in the sampled population is shown in **Table 8-7** below.

Table 8-7: Skills available in Mantabeni and Siphocosini

SKILLS	NUMBER OF INDIVIDUALS	PERCENTAGE
Bricklaying	34	18.18
Brickmaking	22	11.76
Roofing	20	10.70
Driving	14	7.49
Carpentry	11	5.88
Welding/Metal Work	9	3.74
Electrical	7	3.74
Plumbing	7	3.21
Tiling	6	2.14
Cabinet Making	4	0.53
Thatching	1	0.5
Iron Mongering	1	0.53
No skill set	51	27.3
Total	187	100

When large infrastructure projects are about to be implemented in various places there are always high expectations from local communities regarding employment opportunities. A question was posed whether members of the community believe that locals would be the first to be considered for employment during the Nondvo Dam construction. Out of 187 respondents 72 strongly agreed, 40 agreed, 23 disagreed and 14 strongly disagreed with this assertion. A follow-up question sought to establish the possession of skills relevant to the Project.

Table 8-8 indicates the various skills indicated related to water projects by members of surveyed households. Of the 187 households surveyed, a total of 19 individuals were identified to have experience in terms of water supply projects. Therefore approximately 10% of households potentially have requisite skills for employment within the scope of the proposed Project. Extrapolating from these findings, among approximately 1320 households in the Project-affected area, there are potentially 132 persons with applicable skills to be employed. Public perception would be positively influenced should such a number of local community members be employed on the project. This move would be a step in the right direction since unemployed rate amongst youth in Eswatini in 2017 was 43.04%.

Table 8-8: Skills related to water infrastructure projects

TYPE OF SKILL	NO. OF SKILLED PEOPLE
Maintenance	6
Electrical	4
Fitting and Turning	2
Operating	1
Mechanical	1

TYPE OF SKILL	NO. OF SKILLED PEOPLE
Instrumentation	1
Driving	2
Miscellaneous	2
Total	19

8.15 OCCUPATIONS OF THE PEOPLE OF MANTABENI AND SIPHOCOSINI

The SES revealed a spread of occupations in the Project-affected area. For example, there are two members of parliament, teachers who teach in both the local primary and high schools, soldiers, policemen, engineers, public servants, farmers and shop owners.

Table 8-9 outlines the type of employment of the head of household for each household surveyed.

Table 8-9: Occupations of the respondents of Mantabeni and Siphocosini

TYPE OF EMPLOYMENT	NUMBER	PERCENTAGES
Formal employment	70	37.43
Self Employed	22	19.25
On Farm Production (animal and farm production)	13	6.96
Informal Employment	8	4.28
Piece Work	10	5.35
Not in Labour Market	36	19.25
Unemployed not seeking work	18	9.63
Unemployed Seeking work in the past 3 Months	5	2.67
No response	5	2.67

8.16 MONTHLY EXPENDITURE OF FAMILIES

When respondents are requested to discuss or disclose their income they frequently underreport or opt for non-disclosure. For the purposes of the SES SI-Futures decided to use broad ranges to ensure that people are not forced to disclose exact figures. This question was often preceded by an explanation regarding the necessity of the information. Of the 187 households surveyed, 178 responded. The findings show that 14 households live with an income below E1000, 109 below E3000, while 55 stated that their monthly income was in excess of E3000.

A total of 115 PAPs stated that they did not have any reliable income. On further probing it was established that some are self-employed while others are farmers engaged in agriculture and livestock farming. Among other things, reliance on agriculture and livestock renders households vulnerable to the impacts of drought and variable rainfall (FAO, 2013).

8.17 REMITTANCES

Some household heads work outside the community in Mbabane, Manzini or even in South Africa. The SES showed that many families are taken care of by family members working outside the community. Forty out of 175 households' respondents (39%) indicated that family members provide remittance from outside their community. Out of those who provided remittances - sons constituted 8.56%, daughters 4.81%, fathers 4.28%, mothers 3.74% and 6.95% other.

This data is consistent with the statistics provided by the Eswatini Household Income and Expenditure Survey of 2016/17 which indicated that 11.39% of households received money from outside the country while 42.99% received funds from inside the country.

8.18 MEANS OF LIVELIHOOD

Subsistence farming is the main source of staple food production and is the livelihood foundation of rural people in Africa (Boko et al., 2007). Each of the 187 households visited during the survey had a garden and or fields that are in operation. All 187 respondents had fruit trees such as guavas, avocado pears, peaches, bananas, mulberries in their homestead areas. Livestock owned by the households included poultry, goats, sheep, pigs, and cattle.

Out of the 187 respondents, none went to bed without meals on any given day. This was supported by the observation that most of the gardens in the surveyed homesteads were being cultivated. Most respondents indicated that their gardens and fields are their primary sources of livelihood. Although none were identified through the SES, many Eswatini households live below the poverty line. According to Youth and Public Policy 2015, 63% of the Eswatini population lives on less than \$1 per day. The table shows the various means of livelihood in the community.

Table 8-10: Means of livelihood

MEANS OF LIVELIHOOD	NUMBER OF RESPONDENTS	PERCENTAGE %
Farmer	93	49.73
Vegetables and Fruit Sales	58	31.02
Formally Employed	51	27.27
Livestock Sales	31	16.58
Casual Labour	20	10.70
Pension	11	5.88
World Food Programme AID (WFP)	5	2.67
Artisan	1	0.53
Other	43	22.99

Most project affected households surveyed (97.33%) are involved in the agricultural sector. Some 38.50% have sole or additional livelihoods outside of this sector. The construction of the dam will have negative impacts on the agricultural fields since many will be inundated.

Only five households are dependent on World Food Programme Aid (WFP). During the 2016 and 2017 El Niño drought response, Food for Peace (FFP) worked with World Vision and the UN World Food Program in Eswatini to provide emergency food and nutrition assistance to drought-affected populations (USAID Food Assistance Fact Sheet, Eswatini 2018). Through World Vision food-for-asset activities, households participated in the creation and rehabilitation of sustainable grazing land, infrastructure and water and sanitation assets to improve community resilience to future environmental shocks. Extra vigilance will be required to monitor Project impacts on these vulnerable families.

8.19 MAIN SOURCES OF COOKING AND LIGHTING

As shown in **Table 8-11**, electricity is used mainly for lighting (78.67% of surveyed households) while 11.23% use candles. Some 48.66% of households use firewood for cooking and 44.39% use electricity. The proportion using gas and solar is 4.46%.

According to the Eswatini Household Income and Expenditure Survey 2016/17, 63.67% of households have access to electricity and 64.38% use it for lighting and 32.50% for cooking.

Table 8-11: Sources of cooking and lighting

RESOURCE	COOKING		LIGHTING	
Firewood	91	48.66 %	4	2.14 %
Electricity	83	44.39 %	146	78.67 %
Gas	7	3.40 %	2	1.07 %
Solar	1	0.53 %	2	1.07 %
Other	1	0.53 %	2	1.07 %
Candles	0	0	21	11.23 %

8.20 DEPENDENCE ON WATER

From the SES, 113 households stated that their vegetable gardens require water, 68 needed water for their livestock, and 68 for fruit trees. Most respondents (115) indicated that income from these properties varies and is unreliable. Looking at incomes derived from these properties, 16% of respondents indicated that they derived E2000 and above annually. Those earning between E1000-1500 were 2% of respondents, while 1% earn between E500-1000. The rest of the respondents did not provide data.

8.21 SOURCES OF FRESH WATER IN THE COMMUNITIES

There are various sources of fresh water in both Mantabeni and Siphocosini. Out of 179 respondents 63 indicated that they have formally reticulated water supply, 35 use public standpipes, 24 draw water from streams or rivers, 22 from wells, 19 from hand pumped borehole, five from traditional hand dug wells, four from springs, four from electrically pumped boreholes, two from rainwater tanks and two from other sources.

Figure 8-7 below graphically indicates the percentage of fresh water sources utilised by respondents.

Regarding the condition of local water, 106 respondents were very positive stating that the water was clean even though during the dry winter months of June and July. A positive aspect of the community water supply is the fact that it is free and mostly reliable. Negative features include vulnerability to drought and lack of maintenance in some situations. Water directly from the Lusushwana River is mainly used for irrigation and other sources are used for household activities.

The distance from water sources varies, with 5 km being the furthest reported distance a person would travel to get water (**Table 8-12**). This is probably an overestimate, possibly due to a lack of sense of distance among rural people. Out of 177 respondents 156 obtained water within 0-1 km. The rest travelled further, probably particularly during winter months.

Many women still walk long distances to reach the nearest water points. Men often do not participate in the activity water collection because they are at work or involved with other activities. Unfortunately, women are often alone collecting water or wood which makes them more vulnerable to danger and gender-based violence. Improved access to water points will benefit women and other vulnerable people, for example people with disability, children from child-headed households as well as the elderly. From the table above it is clear that, in the surveyed areas of Mantabeni and Siphocosini, most water sources are relatively close to homesteads.

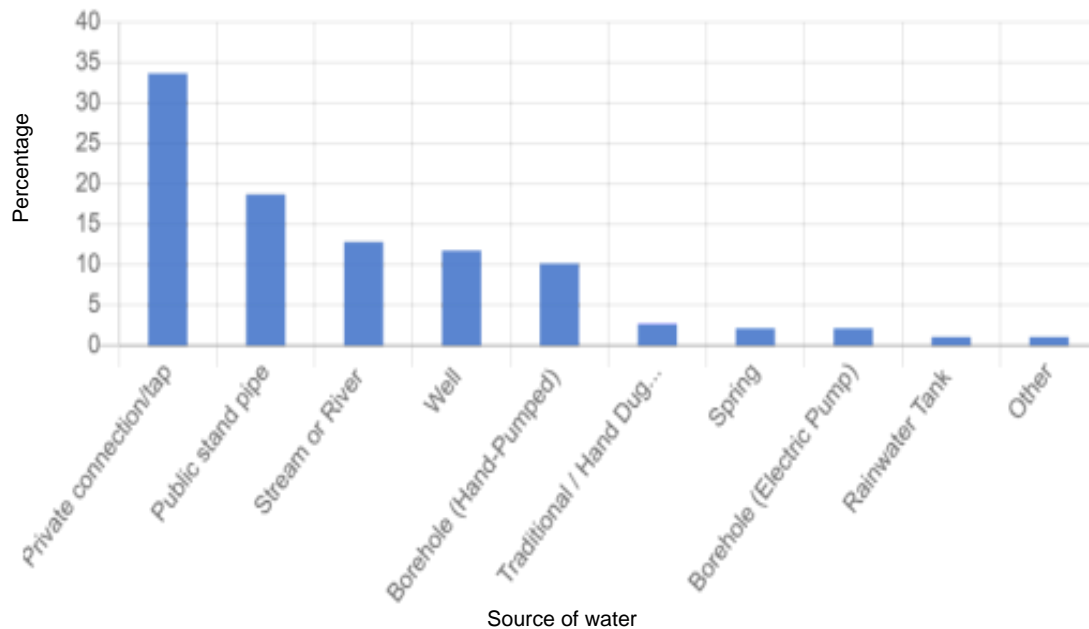


Figure 8-7: Sources of Water in Mantabeni and Siphocosini

Table 8-12: Distance from Water Sources

DISTANCE (KM)	0-1	1-2	2-3	3-4	5 AND OVER
Number of Households	156	8	3	2	8

Literature has shown that in African countries where the majority of the people still live in rural areas and are still enduring the challenges related to inadequate supply of water and poor sanitation, the job of providing water and ensuring proper and hygienic sanitation still lies with women (UN Commission on Sustainable Development). Women tend to be users, providers, and managers of water (World Bank, 2002) and in Eswatini like many other countries, it is the cultural practice for women and girls to fetch water used for household purposes. This is well reflected in the SES responses. Although some respondents argue that this is the case because women are the ones who use more water than other family members, this is more of an engendered responsibility.

8.22 VULNERABLE GROUPS

Vulnerable groups are distinct categories of physically, socially, and economically disadvantaged people who might suffer disproportionately from the effects of displacement. When projects of this magnitude are proposed or implemented, extra vigilance is required to ensure that vulnerable groups comprising people with disabilities, the elderly, orphans, people living with mental illness, female headed households, the very poor and the youth are recognised and recorded and that their rights are not jeopardised. Hence in the SES it was essential that information was gathered about the vulnerable groups and who might suffer more than others from the effects of displacement by the various phases of Nondvo Dam construction.

Out of a total 182 respondents for the question on vulnerability, 26 were reported to have disabilities. Among these, 18 suffer from impaired mobility, two from blindness, two are mute and four are unspecified.

In the context of the greater community, HIV/AIDS has had devastating effects with a number of children left behind as orphans under the care of aging grandparents, relatives and sometimes alone. The Principal of Masibekela High School underlined the negative impacts of HIV/AIDS in the community noting awareness of 85 child headed households and 49 households where the household heads are aged 70 years old or older. Additionally, of the approximately 469 orphaned children residing within the community 170 are students at Masibekela. The Principal indicated that the school provides food care packages as well as vegetables from the school fields and gardens to assist these households. The issue of teenage pregnancy was also flagged as part of a challenge faced by the community.

8.23 HEALTH ISSUES AND AVAILABILITY OF HEALTH FACILITIES

There is only one clinic/health facility that serves the Royal Kraals of Mantabeni and Siphocosini, located in Siphocosini. Respondents indicated having visited the clinic occasionally for various sicknesses. Some respondents further indicated that they had been referred to a hospital in Mbabane for serious illnesses by the health facility.

8.24 DISTANCE TO THE HEALTH FACILITIES

The distances people travel between their home, the clinic in Siphocosini and public hospitals in both Mbabane and Manzini vary (**Table 8-13**). It is important to note that all roads in the Royal Kraals are gravel and are not always maintained. Further, there is no signage indicating directions and distances. The overstatement of distances is prevalent among rural non-drivers. In the case the interviewed households, some stated that they travel up to 20 km to the clinic, which is in fact much closer. Mbabane is approximately 17 km from the Project site, highlighting the misconception of distance.

Table 8-13: Distance from Home to Health Facilities

DISTANCE	1-5 KM	6 - 10	11- 15	16 - 20	21- 25
Number of Households	29	26	7	17	1

8.25 HIV/AIDS AWARENESS

Eswatini, like so many other Southern African Countries, has not been spared the effects of the HIV/AIDS epidemic. Despite its small population of 1.3 million, Eswatini has the highest HIV prevalence in the world, with devastating impacts. Twenty-six percent of adults 15 to 49 years of age are HIV-positive, with women representing 59 percent of those infected. Eswatini is ranked as a lower middle-income country where more than two thirds of the population live below the poverty line (United Nations Country Team 2009). However, over the past decade there have been great efforts to mitigate the impacts through improved access to health care and testing, and the provision of free anti-retroviral (ARV) drugs. Conversations with the community indicated that both Royal Kraals of Mantabeni and Siphocosini have also suffered greatly from the effects of HIV/AIDS over the years.

Out of 179 respondents responding to a question on HIV awareness, 172 responded affirmatively while 7 stated that they were not aware thereof. From the analysis of the survey, the effect extensive awareness campaigns is evident. These have been conducted using mediums such as radio, clinic information sessions, public gatherings, schools, pamphlets and posters, workplaces and churches. Many respondents acknowledged benefiting from the campaigns, securing knowledge on how to avoid getting infected, the transmission of the disease, how to live with the disease and where to obtain ARVs.

A group of 149 Respondents acknowledged having tested for HIV/AIDS while 32 indicated that they had not. Frequency of testing was also raised with the respondents. Responses were the following: 69 had tested in the past three months, 26 in the past 6 months, 30 in the past year and 22 in the past 2 years.

On the question of awareness of the existence of HIV/AIDS support groups, out of 180 respondents only 63 were aware. Among these 60 stated that they were satisfied with the services offered by the support groups. In general, the conclusion can be drawn that Eswatini Government has fared well in their efforts to curb new infections and to secure the destigmatisation of HIV/AIDS.

8.26 COMMUNITY EXPECTATIONS AROUND DAM CONSTRUCTION

SES respondents expressed several expectations regarding the proposed Nondvo Dam. The responses fell into the following categories:

- Water quality improvement;
- Piped water to each household;
- Easy access as roads, bridges and foot bridges will be built by the Project;
- Job creation and employment;
- Improved transportation; and
- Drilled boreholes to support agriculture.

Among those interviewed, the question on expectations yielded a spectrum of responses. For example, among 116 responses, 34 people expected nothing from the dam construction, 25 expected more jobs to be realised, 19 hoped they would get clean reliable water, 15 expected overall development and eight were disillusioned. The disillusioned residents stated that they have first-hand information regarding what happened to PAPs at Lumphohlo Dam, regarding non-payment of compensation and lack of development in the area. This group was categorical in the wish that the Nondvo Dam project would not succeed because they believe it would impoverish and disadvantage the people of Mantabeni and Siphocosini.

During discussions around expectations, the consultants attempted provide more information on the scope of the Project including the primary objective that water from the dam is to be distributed to the Mbabane and Manzini areas. It was also noted that the Project was still at the feasibility stage and that there is no guarantee that it will go ahead.

8.27 LUPHOHLO DAM CONSTRUCTION NEGATIVE LEGACY

As indicated, several respondents expressed misgivings around the proposed Nondvo Dam project, citing disappointment regarding compensation and development at Lumphohlo Dam.

Against this background it is essential that lessons learned from Lumphohlo Dam are heeded in order to mitigate the negative legacy spilling into the Nondvo Dam context.

The following are some of the interventions the client should consider and implement:

- DWA to adhere to the prescripts of AfDB;
- Sound information and transparency in communication with all PAPs and other stakeholders;
- The resettlement and compensation process to be undertaken effectively based on approved rates and valuation process; and
- A clear communication strategy to be developed for Nondvo Dam Project. Any negative perception should be addressed timeously to avoid reputational risk.

8.28 ENTITLEMENTS OF PAPS

The Nondvo Dam and reservoir will affect approximately 175 households, comprising an estimated 1240 residents, and 991 identified assets, including two schools and one church. Siphocosini has 51 affected HHs and 138 assets while in Mantabeni has 122 affected HHs and 984 assets¹⁵.

Table 8-14 summarises the entitlements of the PAPS by Royal Kraals, community, number of households, and assets.

Table 8-14: Overview of PAPS Compensation Entitlement per Affected Royal Kraals and Community

ROYAL KRAAL	COMMUNITY	NUMBER OF HH	NUMBER OF ASSETS
Mantabeni	Mahlatsini	6	49
	Mahothoza	1	19
	Majadvule	27	144
	Masibekela	3	4
	Mhlane	83	562
	Nkhube	1	17
	Spete	1	13
	Subtotal	122	808
Siphocosini	Mhlane	4	18
	Ncabaneni	18	33
	Sithobela	4	13
	Spete	25	74
	Subtotal	51	138
Schools	All	2	45
Total		175	991

Furthermore, based on desktop survey¹⁶, the provisional railway realignment will affect approximately 21 HHs with 125 assets; and the provisional MR19 road realignment is anticipated, to affect approximately 39 households and 163 identified assets.

As the project is still at the feasibility stage and the final design yet to be approved, the reservoir inundation area has not been demarcated and the Nondvo Dam Special Development Area (SDA) has not been enacted in law. As such, google earth imagery and GPS devices were utilised to identify affected sites as accurately as possible, however without a detailed survey there will be some variances. A final verification assessment and valuation, including cut-off date, is to be undertaken during the Consolidation Stage of the RAP implementation process, which is to be based on final detailed designs. The verification assessment is to capture any changes in people's individual circumstances and define individual compensation packages for negotiations and acceptance by PAPS.

¹⁵ Following presentation of asset registers to HHs, additional clarification surveys were required to update the asset registers where discrepancies were identified by individual HHs. The information presented within the RAP is accurate as of 31 March 2021, following confirmation of 80% of all identified assets.

¹⁶ Realignment of the MR19 road was not included in the Feasibility Study report (Studio Pietrangeli, 2019). The RAP has been updated based on the proposed realignment route provided in the Detailed Design Report (Studio Pietrangeli, 2020). As this information was not available at the time of undertaking the census surveys, this information is based on desktop assessment of available satellite imagery.

The extent of land required for host sites will be finalised, based on PAPs acceptance of packages, and secured for allocation to individual PAPs.

9 ENTITLEMENT AND COMPENSATION FRAMEWORK

9.1 RESETTLEMENT POLICY FRAMEWORK

As noted in the introduction to this RAP, a Resettlement Policy Framework (RPF) for the Nondvo Dam project was not developed by the Government of Eswatini. A RPF typically guides the valuation of assets and definition of entitlements and compensation within the RAP. In the absence of a suitable RPF, and national valuation rates, direction was drawn from resettlement processes and frameworks undertaken for similar large-scale dam infrastructure projects in Lesotho, specifically the Lesotho Highlands Water Project (LHWP), which were financed by the AfDB.

The rationale for the use of resettlement and compensation frameworks from projects undertaken in Lesotho as a reference point is based on several factors. These include:

- Geographic similarities, both being small mountainous landlocked countries in Southern Africa.
- Governance similarities, both being Kingdoms with land vested in the Basotho and Swazi Nations respectively and held by the State.
- Demographics similarities, with 65% and 75% of Lesotho and Eswatini's populations living in rural areas with livelihoods predominantly dependent on subsistence agriculture.
- Both are SADC countries that are signatories to the Revised Protocol on Shared Watercourses 2000. The objectives include fostering closer cooperation for judicious, sustainable, and coordinated management, protection and utilisation of shared watercourses and advance the SADC agenda of regional integration and poverty alleviation. As well as the promotion research, technology, development, information exchange, capacity building, and the application of appropriate technologies in shared watercourses management.
- Lesotho is one of the countries in the SADC region that has built several large-scale reservoirs and have dealt with the same challenges that Eswatini is faced with in terms of population relocation and loss of people's assets. For instance, the LHWP and Maguga Dam Project Authorities, in Eswatini, often shared lesson learned by conducting site visits of these projects. Furthermore, lessons learned from Maguaga Dam Project were also used as examples to be heeded in the implementation of some of the LHWP socio economic studies. It is deemed appropriate that one should use examples closer to our environment with similar conditions and operational and legal framework provided by structures such as the Orange Senqu Commission (Orasecom) and SADC.
- The compensation policy rates used from Lesotho have been used over a period of years and have been based on the IFC PS5 and AfDB OS2 requirements; where compensation rates are to be applied equitably, in a transparent and consistent manner. The rates were developed, and approved, under the guidance of the AfDB and World Bank.

9.2 PAP CATEGORIES AND ELIGIBILITY TO ENTITLEMENTS

Eligibility is defined as those who will be affected directly by resettlement and are eligible for compensation and other assistance. Eligible PAPs require definition and identification, with criteria set for determining their eligibility. Entitlements, as per the AfDB OS2 and World bank ESS5, related to land compensation are presented in **Table 9-1**.

Table 9-1: Affected Persons Categories and Land Related Compensation Entitlements

CATEGORIES OF AFFECTED PERSONS	COMPENSATION ENTITLEMENTS	LAND RIGHTS OWNERSHIP RELATED REMARKS
Persons with formal legal rights to land or assets, including customary and traditional rights recognised under the laws of Eswatini (i.e. Title Deed Land (TDL) / Swazi Nation Land (SNL)).	Compensated (including physical resettlement) for each identified land/ asset loss; and are further entitled to other assistance as provided for in the RAP.	Almost all PAPs with land/asset affected by the Nondvo Dam belong to the formal rights owning category, however, non-existence of evidential formal documentation due to previous non-requirements may present logistical challenge to rectify.
Persons with no formal legal rights to land, but with a claim to such land or assets, provided that such claims are recognised under the laws of Eswatini or become recognised through a process identified in the RAP.	Compensated (including physical resettlement) for each identified land and assets losses and are further entitled to other assistance as provided for in the RAP.	This category of land rights claimers relates mostly to informal traders within road reserves at busy areas and road intersections within large settlements. Their formal land occupational rights normally consist of temporary rights given by the Royal Kraals for trading purposes in the public road space to be vacated when physical developments are undertaken.
Persons with no recognisable legal right or claim to the land they are occupying.	Rehabilitation assistance (such as access to livelihood restoration programmes) in lieu of compensation for the land they occupy, other assistance as provided for in the RAP or Entitlement Matrix, if they occupied such land before the cut- off date for entitlements declaration.	This category of non-existent formal land rights also consists largely of informal traders within road reserves but with no occupational rights to the space they are occupying.

Table 9-2 details the categories of affected/impacted individuals/groups that are potentially eligible for entitlements, as well as types of entitlement available.

Table 9-2: Categories of Affected Individuals / Groups and Types of Entitlements

AFFECTED CATEGORIES	POTENTIAL LOSSES	TYPE OF ENTITLEMENT
The Government, as legal owner of affected land tracts	Loss of land	Rates / Valuation based replacement or cash compensation
	Loss of fixed assets, including government structures	Rates / Valuation-based replacement or cash compensation
	Loss of production, productive capability (income, service to the community)	Evaluation-based cash compensation
	Loss of rental income from buildings, land	Evaluation-based cash compensation
Landholders with registered rights to land	Loss of land	Rates / Valuation based replacement or cash compensation
	Loss of fixed assets, including homestead /business structures	Rates / Valuation-based replacement or cash compensation
	Loss of production, productive capability (subsistence, income)	Evaluation-based cash compensation
	Loss of rental income from buildings, land	Evaluation-based cash compensation
	Loss of usufruct arrangements on land	Evaluation-based cash compensation
Unregistered landholders with socially recognised traditional/ customary rights to land	Loss of land	Rates / Valuation based replacement or cash compensation
	Loss of fixed assets, including homestead/ business structures	Rates / Valuation-based replacement or cash compensation

AFFECTED CATEGORIES		POTENTIAL LOSSES	TYPE OF ENTITLEMENT
		Loss of production, productive capability (subsistence, income)	Evaluation-based cash compensation
		Loss of rental income from buildings, land	Evaluation-based cash compensation
		Loss of usufruct arrangements on land	Evaluation-based cash compensation
Unregistered landholders with no recognisable legal right/ claim to land they are occupying	People with usufruct rights to land (e.g. renters, leaseholders, share-croppers)	Loss of usufruct arrangements on, and thus access to land	Evaluation-based cash compensation
		Loss of production, productive capability (subsistence, income)	Evaluation-based cash compensation
		Loss of fixed assets on the land	Replacement or Valuation- based cash compensation
	People who have encroached on land without legal rights or claims to land	Loss of land	Evaluation-based cash compensation
		Loss of production, productive capability (subsistence, income)	Evaluation-based cash compensation
		Loss of usufruct arrangements on land	Evaluation-based cash compensation
		Loss of fixed assets, including homestead and/or business	Valuation-based replacement or cash compensation
	Building tenants/ renters	Loss of rented accommodation.	Evaluation-based cash compensation
		Loss of rented space for business enterprise (income, business networks/clientele).	Evaluation-based cash compensation
Loss of production, productive capability (subsistence, income).		Evaluation-based cash compensation	
Agricultural labourers		Loss of income.	Evaluation-based cash compensation
Employees of households and business enterprises		Loss of income	Evaluation-based cash compensation
		Loss of accommodation	Evaluation-based cash compensation
Communities		Loss of communal assets	Rates-based or Evaluation-based replacement or cash compensation
		Impeded/constrained access to facilities, services, social networks	Replacement compensation
Households/families		Loss of grave sites	Relocation/ Reburial
Neighbouring and host communities		Loss of land (communal and private)	Rates / Valuation based replacement or cash compensation
		Loss of fixed assets on the land	Rates / Valuation-based replacement or cash compensation
		Loss of production, productive capability (subsistence, income)	Evaluation-based cash compensation
		Loss of usufruct arrangements on land	Evaluation-based cash compensation
		Impacts on services, facilities, and utilities	Replacement compensation

In terms of the above criteria, the eligible PAPs would be those who sustain losses due to program-related causes, whether individual, institutional, or communal, and whether physically displaced or otherwise. These PAPs will be eligible for compensation. Such PAPs will include the following categories of people in relation to the Siphocosini and Mantabeni Project areas:

- The population resident in areas affected by construction and operational works including the feeder roads, dam wall construction, quarry site and work camps and offices;
- Landholders and/or users of land in areas affected by construction and operational works of the Project, including the inundation zone, and associated infrastructure;

- Those who will be economically displaced losing income through loss of employment, such as employees of households and business enterprises, and agricultural labourers; and
- The host populations of resettlement areas where applicable.

Most of those fitting the eligibility criteria will be identified through the adjudication/asset recording exercise. Information on special groups, such as the vulnerable, will be obtained through the socio-economic census surveys and confirmed through the consultation process.

Table 9-3 below presents Nondvo Dam Project - specific impacts and the entitlements used in this RAP.

Table 9-3: Specific Impacts and Actual Entitlement Matrix

TYPE OF IMPACT	ENTITLEMENT
Permanent acquisition of residential and commercial land (rural/ undeveloped)	Cash compensation based on existing Rates or valuation by the Registered Valuer; or Land for land (depending on land availability). And participation in livelihood restoration programs
Permanent acquisition of residential and commercial land (urban/ undeveloped)	Cash compensation based on existing Rates or valuation by the Registered Valuer; or Land for land (depending on land availability). And participation in livelihood restoration programs
Permanent acquisition of institutional, communal, Government land	Cash compensation based on existing Rates or valuation by the Registered Valuer; or
Permanent acquisition of formal residential and commercial structures (urban and rural)	Cash compensation based on existing Rates or valuation by the Registered Valuer; or Relocation/ replacement where dwellings are displaced. And participation in livelihood restoration programs
Permanent acquisition of outbuildings and informal structures (urban and rural)	Cash compensation based on existing Rates or valuation by the Registered Valuer; or Relocation/ replacement where dwellings are displaced. And participation in livelihood restoration programs
Permanent acquisition of agricultural land	Cash compensation based on existing Rates or valuation by the Registered Valuer; or Land for Land depending on land availability. And participation in livelihood restoration programs
Permanent acquisition of food garden land, loss of fruit trees, loss of timber/fuel trees	Cash compensation based on existing Rates or valuation by the Registered Valuer. And participation in livelihood restoration programs

9.3 UNITS OF ENTITLEMENT

The Project will affect a wide range of households, business operators, institutions, and community members. These impacts will manifest at individual and group levels. In this context, a definition of the unit of entitlement is required:

- For compensation against the loss of arable land (fields and gardens) – the unit of entitlement is the landholder and those with usufruct rights;
- For privately-held assets and resources – the unit of entitlement is the owner;
- For loss of employment – the unit of entitlement is the individual directly affected;
- For livelihood restoration assistance – the unit of entitlement is a household member. For example, where household subsistence and survival strategies may be disrupted through the loss of land or the relocation of

business enterprises, rehabilitation measures may be extended to an adult household member or members other than the household head to support the restoration and diversification of household livelihoods;

- For loss of communal assets (pastureland, medicinal plants, thatching grass, trees, river sand, etc.) – the unit of entitlement is the affected community through the Chief or Inner Council;
- For affected gravesites – the unit of entitlement is the affected household/family.
- The unit of entitlement for other losses will vary depending on the category of affected individual or group. Specifically, due to the prevalent poverty amongst the affected population, any disruption to their livelihoods exacerbates their plight; hence, a special category of such affected persons is defined and described under the Livelihood Restoration Measures section.

9.4 COMPENSATION MODEL

The proposed compensation model includes cash compensation as well as in-kind compensation, and/or a combination of both. The proposed compensation packages, as identified in **Table 9-4**, are to be presented and discussed with the PAPs. The aim is to provide compensation that is both beneficial and sustainable to the affected PAPs. As such, PAPs households will have the choice to opt for once off lump sum payments (not recommended), annual cash compensation or in-kind compensation.

Table 9-4: Compensation model packages

COMPENSATION PACKAGES		DESCRIPTION	
1	Cash Compensation		
	A	Once-off compensation	Short to medium term dedicated compensation administration structure. <ul style="list-style-type: none"> – The livelihood restoration projects, and their training is only in place for 5 years. – Rationale for the livelihood restoration is to ensure that lump sum payment is used for sustainable projects. – DWA to ensure that all PAPs are in a position to take up development projects, income generation projects that are sustainable. – Collaboration between the different Government departments is encouraged to promote success.
	B	Annual cash compensation	A long-term obligation that would require a dedicated management structure to administer compensation: <ul style="list-style-type: none"> – Periodic compensation payments. – Compensation queries. – Audit and update compensation register annually. – Resolve family disputes related to compensation.
2	In-Kind Compensation		
	A	Land for land / Replacement structures	Where the Nondvo Project can replace arable / garden land with land of similar size and quality, the project would provide readily prepared land to households at similar cost (where land is available). <p>Where replacement housing is required, concept designs for different housing prototypes will be presented to individual affected households for selection and approval. Completed dwellings will be handed over to HH once construction is complete.</p>

COMPENSATION PACKAGES		DESCRIPTION
B	Annual in-kind compensation (maize & pulses)	Dedicated long term management compensation structure that will administer the following: <ul style="list-style-type: none"> – Periodic compensation payments. – Compensation Queries. – Audit and update compensation register annually. – Resolve family disputes related to compensation.

9.5 METHODS OF VALUATION

As identified in Section 9.1, in the absence of a project specific RPF, national Compensation Policy and procedures in Eswatini, it was agreed that for expediency and planning purposes, as the Project is still at the feasibility stage, the consultant use the rates applied for similar large-scale dam infrastructure projects undertaken in Lesotho. The rationale for the use of resettlement and compensation frameworks from projects undertaken in Lesotho as a reference point is based on several factors. These include similarities in terms of Geography, Governance, and Demographics. Furthermore, the compensation policy rates used from Lesotho have been used over a period of years and have been based on the IFC PS5 and AfDB OS2 requirements; where compensation rates are to be applied equitably, in a transparent and consistent manner. The rates were developed, and approved, under the guidance of the AfDB and World Bank.

The rates below are only used as a guide for the Nondvo Dam Project to derive proposed compensation values and indicative budgets for the RAP. Asset verification and valuation is to be undertaken in the initial stage of the RAP implementation process, based on approved designs, and following gazetting of the Nondvo Dam Special Development Area (SDA).

The asset valuation process in the report is therefore based on various sources including the Lesotho Highlands Development Authority (LHDA) rates and Metolong Dam and Water Supply Programme (MDWSP) Policy and rates. The MDWSP rates were mostly based on the Lesotho Highlands Development Authority (LHDA) rates of 1997. These were updated to 2019/20 using the Lesotho Consumer Price Index (CPI) as required by the Policy. **Table 9-5** indicates the CPIs utilised for updating the MDWSP Policy Rates.

Table 9-5: CPIs for Updating the LHWP and MDWSP Compensation Policy Rates

	2010/11	2011/12	2012/13	2013/14	2014/15	2015/16	2016/17	2017/18	2018/19	2019/20
CPI	4.2%	3.6%	7.2%	5.0%	5.6%	2.1%	7.5%	4.4%	4.8%	5.2%

The LHDA has also developed new rates as published in 2016/17, which have the advantage of including many more assets to be compensated. The Lesotho Lowlands Bulk Water Supply Scheme (LLBWSS) asset values have also increased, hence the sourcing of rates for these has also been based on the new LHDA rates. This is with the exception of residential and business land for which the LHDA recommends professional valuation if not directly replaced. It was found that the Eswatini Road Directorate in the Ministry of Works and Public Transport (MPWT) has its own rates specifically for residential and business sites' and these were used where applicable.

The Lilangeni is the national currency of Eswatini; however, the rates for the Lesotho compensation policies are prescribed in Loti, the official national currency of Lesotho. Therefore, the Lesotho rates were converted to Emalangeni¹⁷ (E) on a 1:1 basis as per the exchange rate at the time of writing the report.

Table 9-6 presents suggested Rates (2019/20 values) for the identified affected Asset Types.

¹⁷ Emalangeni is the plural of lilangeni.

Table 9-6: Asset Types and Suggested Valuation Rates

ASSET TYPE	ASSET MEASUREMENT UNIT	ONCE OFF COMPENSATION (EMALANGENI)	ANNUAL COMPENSATION (EMALANGENI)	RATE SOURCING
Arable Land	sqm	16.11	0.78	LHWP phase 2
Building/ Secondary Structures	Sqm	934.00		LHWP phase 2
Business Plot	sqm	59.00		Roads Directorate
Chicken Coupe	sqm	100.00		LHWP Phase 2
Church Building	sqm	7,805.84		LHWP Phase 2
Church Plot	Sqm	59.00		LHWP Phase 2
Commercial Orchard	sqm	588.00		MDWSP
Dwellings/ Primary Structures Brick and Mortar / Mud	sqm	7,805.84		LHWP Phase 2
Dwellings/ Primary Structures Corrugated iron / Wood	sqm	934.40		LHWP Phase 2
Forest	sqm	980.00		MDWSP
Formal Business Structure	sqm	7,805.84		LHWP Phase 2
Fruit trees	Point	2,480.31	299.96	MDWSP
Fuel trees	Point	885.57	107.11	MDWSP
Garden land	sqm	281.39	14.02	MDWSP
Grave	H/Hold	10,869.00		LHWP Phase 2
Guard House	sqm	13,381.00		Construction/ valuation
Incomplete Structure	sqm	857.00		Construction / Valuation
Informal Business Structure	sqm	857.00		LHWP Phase 2
Kraal (enclosure for farm animals such as cattle, sheep etc.)	sqm	140.16		LHWP Phase 2
Medicinal Plants	Point	9,648.33	467.20	MDWSP
Outbuilding/ Secondary Structures Grain storage	sqm	1,264.00		Construction / valuation
Pigsty	sqm	100.00		LHWP Phase 2
Residential Plot	sqm	19.71		MDWSP
School building	sqm	7,805.84		LHWP Phase 2
School plot	sqm	59.00		LHWP Phase 2
Sports Field	sqm	19.71		RD BASED
Stable	sqm	136.26		LHWP Phase 2
Standpipe	Point	3,725.00		LHWP Phase 2

ASSET TYPE	ASSET MEASUREMENT UNIT	ONCE OFF COMPENSATION (EMALANGENI)	ANNUAL COMPENSATION (EMALANGENI)	RATE SOURCING
Toilet	Point	5,356.24		LHWP Phase 2
Useful Grasses	sqm	10,613.16	513.92	MDWSP
Water Tank	Point	2,500.00		Construction / valuation
Wild Vegetables	sqm	19,296.66	934.40	MDWSP
Inconvenience Allowance (for economically displaced)	H/hold	1,052.10		LHWP Phase 2
Disturbance Allow - Full Resettlement	H/hold	51,419.86		LHWP Phase 2

Note: The rates provided for land, structures and trees are average compensation rates for budget purposes only. Assets are to be assessed and valued by registered/ licensed valuers in terms of the Eswatini National Rural Resettlement Policy, 2003 to account for variances in standards / quality of structures, prior to presentation of compensation value to PAPs.

9.6 CUT-OFF-DATE TO ENTITLEMENTS AND MORATORIUM ON FURTHER DEVELOPMENTS

A ‘cut-off-date’ to entitlements and a moratorium on further developments in the Project-affected area is essential to cement agreed arrangements and to avoid opportunistic asset claims. It signals the point at which the Project is ready to offer the PAPs their compensation entitlement packages for acceptance, followed by disbursements and/or relocation processes. It further means that compensation cannot be claimed for structures constructed and land obtained after the declaration date. With cut-off there is a potential for disputes between the Project Authorities and wilful speculators who would opportunistically violate the moratorium.

A final verification assessment and valuation, including formal declaration of cut-off date, will be undertaken in the initial stage of the RAP implementation process to capture any changes in people’s individual circumstances and define individual compensation packages for negotiations and acceptance by PAPs. With the registration and signing of all affected property, the cut-off date is to be officially announced by the Eswatini Government. The process of asset verification post inventory taking will still have to be undertaken, and the verification will continue until all forms have been completed and signed by the PAPs.

Declaring and enforcing the moratorium on further developments in the Project-affected area is an administrative challenge for the Client and Local Government authorities, who must assist in carrying out the required enforcement. This is more so in the event that a significant time gap develops between formal declaration of the cut-off-date, and the start of site hand-over to the construction contractor.

10 RELOCATION FRAMEWORK

10.1 COMPENSATION AND RELOCATION PLANNING

Physical construction of the Nondvo Dam, as well as the railway line and MR19 Road re-alignment, will impact individual households and communities within the Project footprint. The land acquisition needs for the construction of the Nondvo Dam and associated infrastructure will lead to both physical and economic displacement through the loss of structures, land, fields, and other income generating assets. This Section deals with physical relocation aspects, while Section 11 deals with loss of livelihoods.

The process of compensation and relocation planning will be concluded with the preparation of individual Household Compensation and Relocation Plans for each physically and economically displaced household. Beside basic biographic information, Household Compensation and Relocation Plans will detail the following for each household:

- Affected assets based on household asset inventories;
- Compensation and relocation entitlements;
- Compensation and relocation choices and agreements; and
- Relocation sites and replacement housing designs for physically displaced households.

As a basis for the Compensation and Resettlement Agreements that will be signed between the Client and affected households, Household Compensation and Resettlement Plans will be:

- Made available in English and Siswati versions; and
 - Signed off by individual households.
-

10.2 RELOCATION APPROACH

Compensation and relocation planning for the PAPs will be specifically guided by the following international best practice principles:

- The principle to engage affected households through systematic and sustained consultation;
- The principle to avoid and minimize physical and economic displacement.

To process relocation, the affected households would have to make informed choices and decisions on compensation and relocation issues. To enable households to exercise their choices, comprehensive understanding of the following would be of critical importance:

- The Compensation Procedures and Rates for individual assets;
- Household asset inventories;
- Household compensation generated entitlements.

It will also be important to understand physical displacement provisions and mechanisms. As an example, residential plots will be replaced at relocation sites, or compensated as a lump sum determined according to the agreed compensation value. Replacement cost will determine compensation for the loss of houses, structures, and the compensation for residential structures could be taken either as:

- Project constructed houses based on agreed standard plans, replacement floor area etc.; or
- Owner-builder, with the household itself taking responsibility for construction of replacement structures.

These principles, as well as other relevant policy provisions, will be discussed in depth with physically displaced households to ensure that households losing residential land and household structures understand the implications of their decisions, and make informed choices that maximize their benefits.

10.3 SELECTION AND PLANNING OF RELOCATION SITES.

Most of the households will be faced with relocation to new resettlement sites, hence the importance of consultations to visit the resettlement sites, to choose the preferred site locations and to agree the layout plan with associated infrastructure such as provision of domestic water, access roads and standard sanitation facilities. Households will be encouraged to resettle locally, as there will be no need for the provision of replacement social infrastructure, community facilities and amenities where they already exist. In most cases along the railway line business structures could be replaced, close to the existing premises, outside the servitude.

To ensure adherence to Eswatini regulations and standards, all relocation sites, whether identified for the replacement of public facilities, selected by individual households relocating locally, or designated by the Project will be:

- Identified through Project-established engagement structures in close cooperation with the Department of Lands, Surveys and Physical Planning within the Ministry of Local Government;
- Planned by the Town Planner according to the Planning Standards for Eswatini (Building Act 1968);
- Technically assessed by an engineer; and
- Submitted to District Physical Planning Units, Local Community Councils through their respective Land Allocation Committees and Local Area Chiefs for approval.

The Eswatini Environmental Management Act, 2002 (Section 32, subsection 12) lays out the legal process required before development can commence, and activities “out of character with surroundings” as well as “major changes in land use”, are Listed Activities for which the Minister must give approval. It is expected that the relocation of affected households may result in developments that will be “out of character” with current land use, but should that be the case, the Consultant will prepare a Project Brief for submission to the Eswatini Department of Environment for the approval by the Minister, before the development of resettlement sites commences.

10.4 PREPARATION OF REPLACEMENT HOUSING

Land and replacement housing, where applicable, can only be occupied once the land has been demarcated and replacement housing is completed. The replacement of affected dwellings and houses is naturally on the critical path of the schedule for the construction of the Nondvo Dam, and the replacement of housing will be a key focus area of the process of compensation and relocation planning. Houses will be replaced at an equivalent floor area, using standard modern materials, and will be based on households’ asset inventories and preferences. The guiding principle will be the full involvement of affected households in the design and layout of replacement houses, and the objective will be to improve the standards of the dwellings and outbuildings of the affected household structures.

Where replacement housing is required, an architect will produce concept designs for different housing prototypes. These will be submitted to the Client for approval, and the final approved prototypes will be presented to individual affected households. The designs will be discussed with the affected households by the implementation team. During these discussions, the preferences of the affected people will be taken into consideration, resulting in a customized preliminary design for each household. The designs will specify the building materials, and material similar to or better than the materials of impacted structures will be allowed. They will also include a ventilated improved pit latrine and a traditional fireplace per household. The Architect’s final drawings, which will adhere to the country’s building and sanitation standards as a minimum requirement, will be submitted to the Client for final approval. Where the original structure was of high standard in terms of building material and architectural plan, the building will be replaced using a similar architectural plan with all amenities such as electricity and a running water system.

10.5 INSTITUTIONAL AND ORGANISATIONAL FRAMEWORK AND ITS RATIONALE

The Department of Water Affairs under the Ministry of Natural Recourse, as the Project Proponent, has the responsibility to undertake all technical, administrative, and financial responsibilities related to the Project. For the Project to succeed a strong Social and Environment institutional base and capacity is required within the DWA, including the establishment of Project-related structures and relevant stakeholders' engagement groupings. Currently all Water-related projects within the DWA are managed by the Senior Water Engineer (SWE), overseen by the Chief Engineer Services under the leadership of DWA Director of the Ministry of Natural Resources and Energy. This institutional arrangement will not be adequate for the management of the complex Nondvo Dam Project, and the associated resettlement.

10.6 RESPONSIBILITIES

In the absence of the environmental and social and economic unit in DWA it is recommended that the DWA establish an Environmental and Social Services Unit (ESSU) to undertake all project related technical, administrative, and financial responsibilities related to implementation of safeguard requirements and RAP matters.

With the ESSU in place, all socio-economic and resettlement issues, including implementation of safeguard requirements and RAP matters would be managed by the Chief Executive Officer (CEO), overseen by the DWA Director, with input from the Chief Water Engineer (planning), Chief Water Engineer (Services) and the Technical Assistant to the Project. Upon completion the Nondvo Dam Project will be handed over to the relevant intuitional entity for operation and maintenance.

Proposed responsibilities for Project implementation within the Eswatini Government are presented in the **Table 10-1**.

Table 10-1: Responsibilities of various Implementing Bodies

DEPARTMENT OF WATER AFFAIRS	RESPONSIBILITIES	
Director of DWA	Responsible for overall implementation socio-economic and resettlement issues, safeguard requirements.	Director of DWA oversees the entire project.
Chief Engineer	Provide input of the overall technical implementation to the team.	
Senior Water Engineer		
Water Resources and Technical Assistant to the Project		
Procurement Manager	Responsible for undertaking procurement processes (including contracted engineers and architects for review of plans of the future houses; suppliers and construction contractors).	
Chief Executive Officer	Implementation of environment and social programmes.	

The scope of the proposed ESSU within DWA will include coordinating, managing, and implementing all matters relating to resettlement, social and environmental programmes. It is recommended that the ESSU comprise a CEO, and a project team with sufficient personnel and resources. The project team should include:

- **A Resettlement/Livelihoods Restoration Specialist** dedicated to the Program, given that the Project components will involve loss of land and involuntary resettlement;
- **A Grievance Officer (GO)**, to co-ordinate all functions relating to Project grievances;

- **A Community Participation and Liaison Officer (CPLO)**, with particular skills in community development work, focusing on participation and liaison;
- **A number of Community Liaison Officers (CLOs)**, drawn from Project-affected Communities (PACs), with the specific responsibility of working in direct consultation with the communities on Project-related matters;
- **A GIS and Database Specialist**, dedicated to GIS mapping, and to database development, upgrade, coordination, and maintenance. Responsibility will include ongoing operation of information systems and databases, including those for compensation, grievances, and monitoring and evaluation, and
- **A Monitoring and Evaluation Specialist**, a position with the responsibility of overseeing both internal and external M&E processes, with assistance from a Safeguards Officer within the DWA to ensure compliance.

The CEO and CSO will assess any measures required to strengthen the Section's capacity to design and carry out resettlement activities, including technical assistance. In addition all staff should, on appointment, be given extensive induction and training in resettlement-related issues, including:

- Environmental and social overview of a project, including any ESIA and ESMP undertaken to date;
- National regulations and acts, and international resettlement/compensation best practice;
- The Project's compensation and relocation objectives, principles and procedures;
- Land acquisition procedures and livelihood restoration and diversification;
- The Grievance Mechanism, and how it is applied;
- The process of M&E, and how it relates to their specific task's, community participation and development, with specific focus on the requirements of vulnerable social categories; and
- GIS, and the project's database on socio-economic information and assets, including records of grievances.

The ESSU will be supported by Consultants to provide additional expertise as and when required, as per Terms of Reference to be prepared by the DWA. Recognizing that the resettlement process is consultative and representative, the DWA will work in co-operation with Project structures set up specifically for components of the resettlement program.

The relevant institutional entity responsible for operation and maintenance, as beneficiaries and end users of the infrastructure to be developed, is responsible for ensuring that environmental and social compliance is adhered to throughout Project operation. The proposed implementation Institutional arrangement is illustrated in **Figure 10-1**.

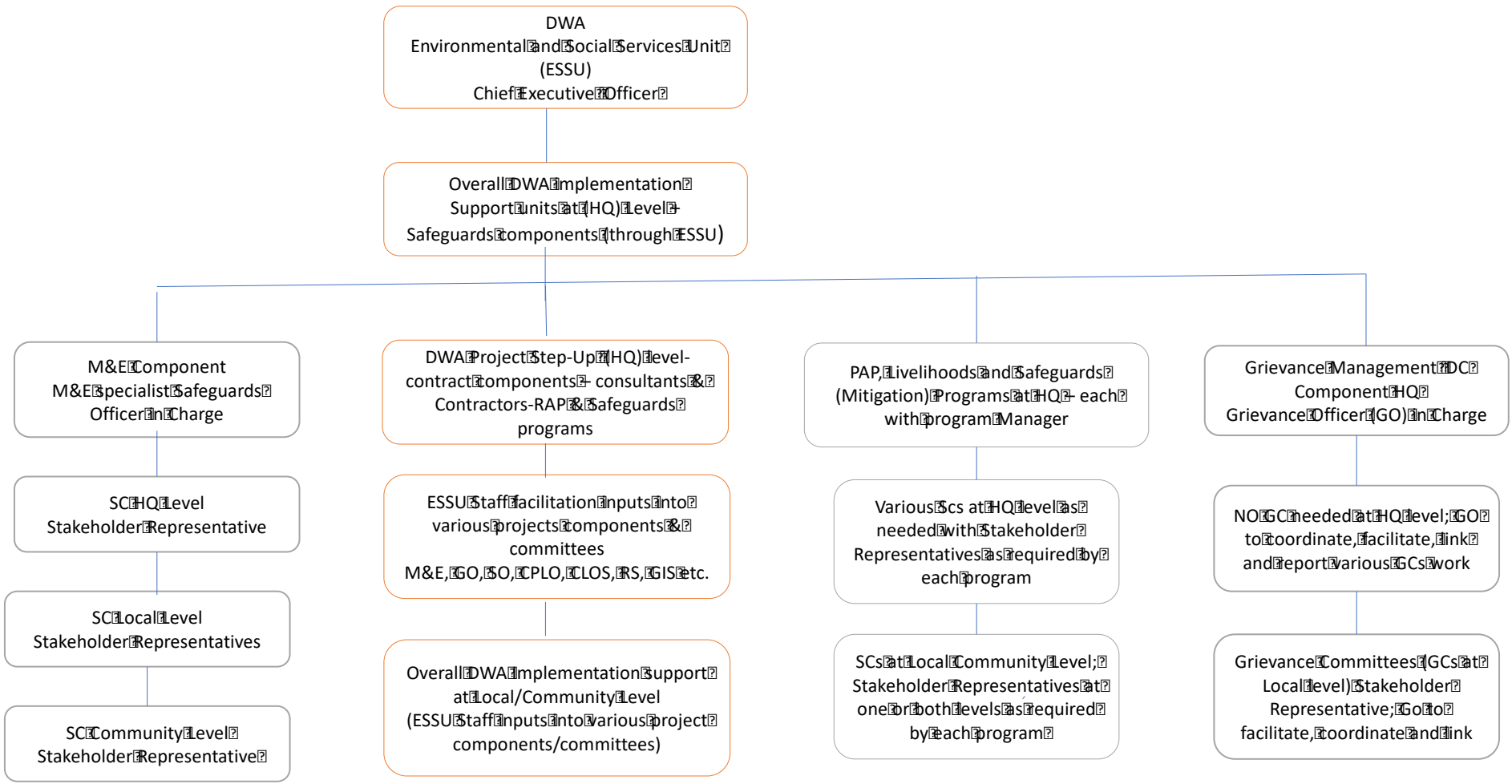


Figure 10-1: Proposed DWA ESSU Implemented Institutional Arrangement

11 LAND REPLACEMENT OPTIONS FOR PAPS

11.1 RESIDENTIAL AND AGRICULTURAL LAND

Four potential resettlement sites were identified, these are indicated as A, B, C and D¹⁸ in **Figure 11-1** below. To minimise resettlement and host community impacts the consultant sought to identify possible relocation sites within the Royal Kraals. However, due to the lack of available / open land within the Royal Kraals, land outside of the Royal Kraals had to be considered. The suitability of the proposed sites is assessed in **Table 11-1**.

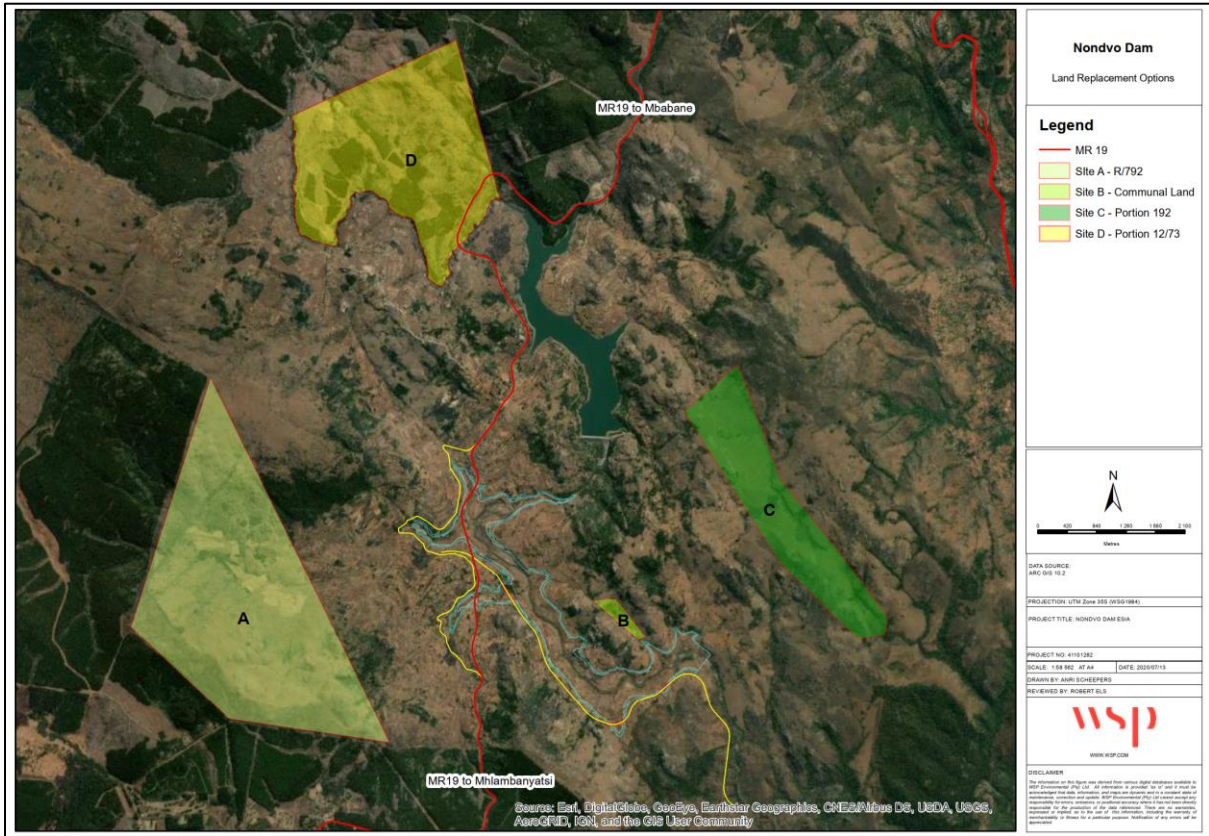


Figure 11-1: Proposed residential and agricultural resettlement sites

¹⁸ Three potential resettlement sites (namely sites A, B and C in Figure 2) were initially identified and evaluated. Based on community consultation a request was made for the inclusion of an additional relocation site to provide for individual sites for the community members from the Siphocosini and Mantabeni Royal Kraal. As such, an additional site (namely Site D) was identified and assessed

Table 11-1: Proposed Relocation Site Evaluation

ASPECT	RELOCATION SITE			
	SITE A	SITE B	SITE C	SITE D
Ownership	R/792 - Ingwenyama In Trust for the Swazi Nation	Communal Land	Portion of 192 - Trustees of the Mlilwane Game Sanctuary	Portion of 12/73 - Public Service Pension Fund
Size of Site (ha)	871	14.3	299	595
Water Supply	No existing potable water supply; however, within walking distance from either spring water or water provision points. Site A and B are more favourable to provision of bulk infrastructure due to proximity to dam and terrain.			
Soil Fertility	The site is situated on a slight slope; however, the soil is fertile for agricultural use.	The site has a steep slope and is characterised by rocky outcrops.	The site has a steep slope in some areas and irrigation of all crops may not be feasible. In addition, the site is divided by a tributary to the Nondvo River.	The site has moderate slopes with rocky outcrops in some areas. However, there are existing agricultural activities taking place alongside some forestry. The site is also characterised by a tributary to the Nondvo River. Based on desktop investigations, in some areas the soil is fertile for agricultural use.
Social Acceptability	Site A is situated within the Manzini District and thus entails the PAPs to be relocated to an area outside of their Royal Kraals. There are existing roads to the site.	The site is situated within the Hhohho District and within the Mantabeni Community. There are no existing roads to the site.	The site is situated within the Hhohho District and within the Mantabeni Community. There are existing roads to the site.	The site is situated within the Hhohho District and within the Siphocosini Community. There are existing roads to the site.
Ecological Risk	The site is considered to have a low mammal habitat sensitivity. Low to High avifauna habitat sensitivity.	The site is considered to have a low to moderate mammal habitat sensitivity. High avifauna habitat Sensitivity.	Within the Mlilwane Wildlife Sanctuary. The site is considered to have a moderate mammal habitat sensitivity. Low to moderate avifauna sensitivity.	The site is considered to have a moderate mammal habitat sensitivity. Low to moderate avifauna sensitivity.
Current Land Use	The area is sparsely populated however, the land use is considered homesteads and subsistence farming.	The site is situated within the rocky grassland. Close to the Masibekela refuge cave.	Part of the Mlilwane Wildlife Sanctuary. The site is situated within the rocky grassland and subsistence farming.	Existing agricultural activities taking place alongside some forestry.

Based on the above evaluation, Site C is considered the least preferred relocation site as it is situated within the Mlilwane Game Sanctuary reserve. It is advised that this site be avoided if possible. Site B if feasible however is considered too small to accommodate all PAPs. Sites A and D are considered the most favourable, albeit additional economic compensation would be required due to farming and forestry activities currently taking place in portions of the identified area.

Whilst still requiring engagement and input by the Royal Kraals and the PAPs, the relocation sites identified minimize the displacement of communities. DWA and the Chiefs / Inner Councils will have to consider these options; however, due to the sites being in close proximity to the affected area the communities will be able to retain their social and cultural networks and kinship links.

11.2 REPLACEMENT LAND FOR SCHOOLS

As identified earlier, one primary and one high school will be inundated following the Nondvo Dam impoundment. In terms of GIIP, any impact to the social infrastructure of local communities is to be rehabilitated or restored as of pre-project condition and mitigated to ensure minimum impacts. A high-level screening assessment was undertaken to identify potential sites for the relocation and re-establishment of the two schools. **Figure 11-2** shows the identified potential replacement land for both schools within the surrounding area, with the intention of keeping the schools as close as possible to their original location.

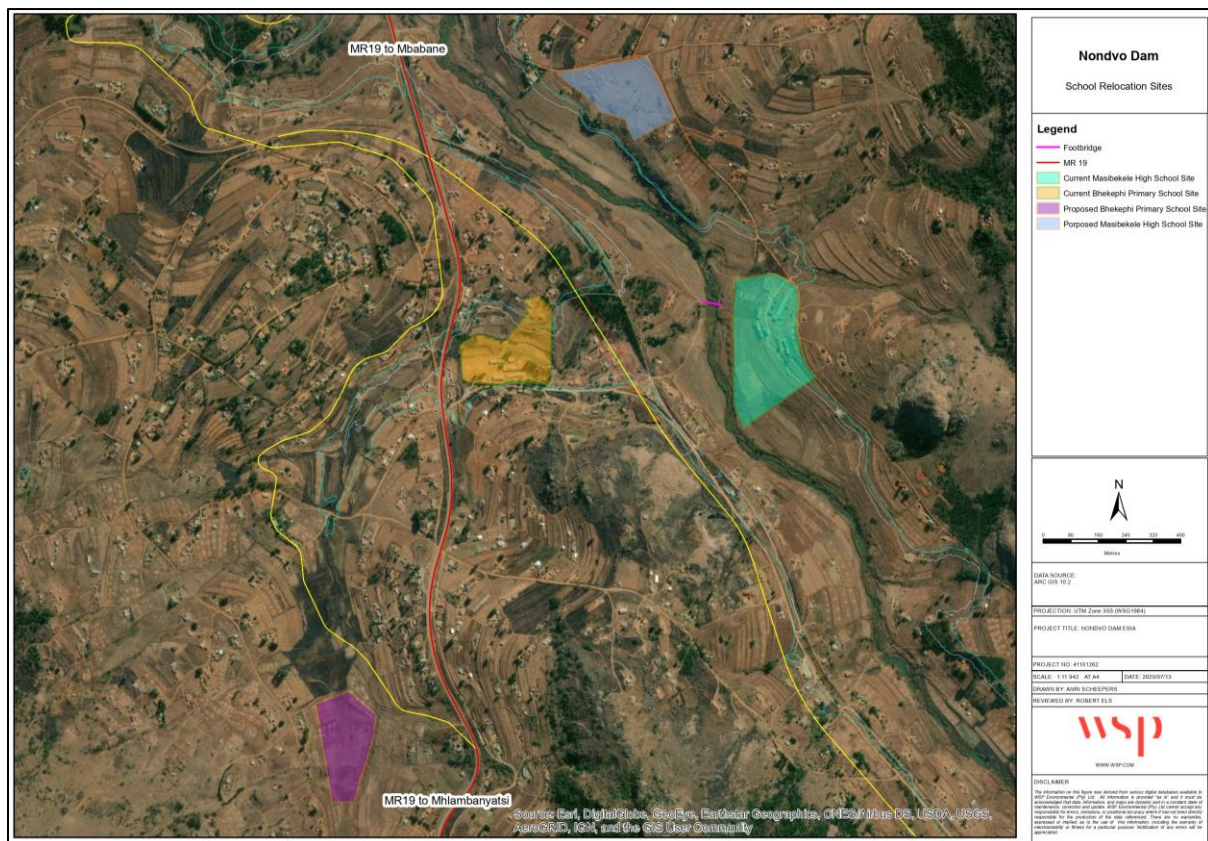


Figure 11-2: Proposed School Relocation Options

As evident from the layout, the proposed site for the Masibekela High school has been maintained on the eastern side of the proposed reservoir, within its original setting to reduce the negative impact by relocating it further. Access to the proposed Masibekela High school relocation site would still be on the same existing primary road. This road provides access to the current population on the eastern side of the Nondvo Dam and the condition of which may be improved during the upgrade of the feeder roads.

Bhekephi Primary school too, has been relocated further from its original location to continue serving the existing communities and the relocated communities on the western side of the dam. There are more households on this side of the dam, subsequently the availability of large enough open space/ land for relocation is quite limited. Access to the relocation site is reasonably good but would need to be improved. With the relocation of the MR19 road, this would provide access closer to the school.

During the process of identifying potential sites for relocation, consideration was provided to placing the two schools (i.e. High School and Primary school) on one site. However, a large enough piece of available land, to

accommodate both schools within walking distance¹⁹, could not be identified. Should this consideration be taken further, during detailed planning, additional resettlement would be required to retain a large enough portion of land. This additional resettlement would have to be accounted for within the RAP and/or LRP.

An aspect that must be taken into consideration during final placement of the schools is the level of interconnectedness between the schools. Both in terms of transfer of resources as well as demographics of the pupils (i.e. younger siblings accompanied by older siblings to and from school). Currently the schools are situated near the other. Albeit on opposite sides of the river footbridges provide access easy to each. The loss of the current footbridges, and greater distance between the schools, may result in additional issues for the community. These aspects, as well as others such as the potential for relocating the two schools to a single site, and political aspects such as the source of funding provided for the establishment of the schools, will have to be addressed by the DWA in detailed planning prior to relocation. The Eswatini Ministry of Education and Training will play a key role in the detailed planning process for the relocation of the two schools.

11.3 IMPACTS ON HOST COMMUNITIES

Host communities can be defined as communities living, or making use of land or livelihood resources, at or near a resettlement site. As identified in the ESIA report, resettlement may in certain instances give rise to impacts on host communities, these include:

- increased pressure on infrastructure / social services;
- increased competition for land;
- increases demand for goods and services; and
- conflict between resettled PAPs and host community members.

The appearance of resettled people into the community increases demand for goods and services. While this generally increases the trade of small business operators (which is usually positive), it also increases demand on public services, which may not be able to cope with the additional demand. This may result in increased congestion or delays in being able to access services. There may even be shortages of key requirements, water, electricity, fuel etc. The increased demand in the economy may potentially lead to local inflation.

Additionally, there may be resentment between the host community and the resettled households, especially if the host community feels that the resettled people are being given special treatment, like modern houses, preferential access to jobs or other benefits that are not available to them. In some cases, this resentment may result in a degree of unpleasantness displayed towards the resettled people, with the relocated people being made to feel that they are not welcome. In severe cases there can be hostility or violence between the host community and resettled people. Social disintegration / conflict is expected to be an unlikely occurrence, given the Project's intention to move PAHs together within Royal Kraal / district boundaries, with the exception of Alternative Site A which is located within the adjacent Manzini District. Should Alternative Site A be selected extensive engagement with, and sensitization of, the host community will be required along with additional livelihood restoration support measures (to be defined during host community engagement).

As mentioned earlier, the actual requirement for resettlement will be finalised following selection of compensation packages by PAPs. It is anticipated that most cases of physical displacement could be dealt with by relocating displaced households to suitable locations within in the surrounding area within the same Royal Kraal. In view of the above, it is expected that the "host communities" for physically or economically displaced persons in the context of this Project will, in most instances, be the communities in which they currently reside. Where resettlement is required to be undertaken further away from the Project area, it is anticipated that the communities from each Royal Kraal will elect to relocate together to retain community structures, thereby reducing potential impacts.

Additionally, as indicated above, identification of suitable areas of replacement land may, in some cases, be a challenge. Displacement in the host communities should be avoided wherever possible, however it is possible that some landowners / users in the Project area will experience some form of secondary displacement, in that persons

¹⁹ GIIP indicates that the maximum distance between children's homes and school should be equivalent to a 45-minute walk.

not directly affected by Project-induced displacement may be required to sell land to make way for replacement houses or farms. This impact will likely be more significant for Alternative Site A due to the presence of various land users in the area. Whereas Alternative Sites C and D comprise land within the Mlilwane Game Sanctuary and forested land, respectively. Secondary displacement impacts can be mitigated by providing support through livelihood restoration support measures for the development of more intensive agricultural practices (i.e. practices that would deliver similar yields but would require less land) for relocated persons as well as for members of host communities who would experience secondary displacement. Where land is required for the resettlement of PAHs, the same entitlement matrix must apply to compensation for affected landowners and farmers as the one applicable to primary impacts, with compensation and inclusion in LRP, as warranted.

In addition to such compensation and livelihood restoration benefits to landowners or the host community, getting host communities to agree to give unused land for resettlement sites is usually facilitated by negotiated tradeoffs such, improvements to host community infrastructure for example roads, water, and/or power.

The project must obtain the displaced communities' agreement to the proposed resettlement sites as well as site development options. A host community committee, comprising representatives of relevant interest groups in the host community, is to be established to negotiate the tradeoffs and seek formal agreement in the development of a resettlement site in the host community.

Host communities, along with the project displaced workers, must be considered as first priority in terms of recruitment training and employment opportunities associated with the project.

12 PUBLIC CONSULTATION AND DISCLOSURE OF INFORMATION

12.1 INITIAL ENGAGEMENT

The public consultation aspect of the RAP commenced with the discussions with the Local Authorities of the Siphocosini and Mantabeni Royal Kraals, leading to the arrangement of *itimbito* (public gatherings) where Project information could be disseminated, and cooperation solicited to facilitate planned project activities. These activities included the socio-economic survey with focus group discussions, affected property identification and registration, the census survey, RAP preparation, etc.

12.2 STAKEHOLDER IDENTIFICATION AND MAPPING

The Project area includes communities within the two Royal Kraals of Mantabeni and Siphocosini. Each Royal Kraal has an Inner Council and as the local authority is responsible for governance, dissemination of information, coordination, and the development and implementation of projects. Maphanga Mitchell Associates (MMA) facilitated introductions of WSP consultants to the Inner Councils of Mantabeni and Siphocosini by submitting Project introductory letters. The aim of the introductory letters was to officially record the presence of the consultants and share the preliminary plan of action, including the surveys to be conducted. This institutional set-up will continue for further consultations with the affected community members and PAPs since it has proved workable.

Other stakeholders include Government Ministries and Departments at national and district level, relevant agencies, and NGOs. Public consultation activities started on 31 July 2019, following the reconnaissance familiarisation visit of 17 August 2019. Original consultations were also meant to confirm identified stakeholders and proposed stakeholder categories. Further stakeholder groups like Project Affected Persons (PAPs) were identified separately through the RAP related affected assets adjudication exercise.

Table 12-1 below presents the stakeholder mapping of the project area.

Table 12-1: Stakeholder Categorisation

STAKEHOLDER LEVELS	STAKEHOLDER GROUPS	AREAS OF INTEREST / INFLUENCE	LEVEL OF INTEREST	LEVEL OF INFLUENCE
Local Level				
Primary Stakeholders	Affected households	Residential sites, properties, arable land, trees etc.	High	Medium
Secondary Stakeholders	Area Chiefs and headmen	Communal property, Schools, Clinic, Communal Water Taps, and Grazing land	Medium	Medium
	Formal and informal businesses along the Mhlambanyatsi Road route and taxi operators	Disruption or temporary disturbances / closure of operations	Low	Medium
	Schools	Safety and disturbances on ease movement / access	Medium	Low
National Level				
Primary Stakeholder	Ministry of Natural resources & Energy	Policy, planning and implementation and regulation	High	High

STAKEHOLDER LEVELS	STAKEHOLDER GROUPS	AREAS OF INTEREST / INFLUENCE	LEVEL OF INTEREST	LEVEL OF INFLUENCE
	Department of Water Affairs	Policy, planning and implementation	High	High
	Railway line	Policy, planning and implementation	Medium	Low

12.3 PUBLIC MEETINGS

Public meetings followed consultation with the Area Chiefs and Community Inner Councils who participated in the planning process for the meetings and further consultations. The meetings started from 31 July 2019.



Figure 12-1: Photo of public gathering

The aim of the public meetings was to provide information about the proposed Nondvo Dam project and what is entailed in the SIA and RAP processes. Furthermore, the meetings were meant to solicit the concerns and recommendations of the communities regarding the Project. The meetings also facilitated an understanding of the Project, and its related activities and impacts. The activities encompass the planning and implementation of resettlement and compensation for all households and communities to be affected by the Nondvo Dam Project and other related infrastructure components. Specific activities discussed included the following:

- The socio-economic survey of sample households and focus group discussions involving women of different ages;
- Identification of the affected assets and the initial listing of the owners (where chiefs and council members participate);
- Engagement of the affected persons in the registration and survey of their assets; and
- Confirmation of ownership of such assets and discussion of the activities that will be carried out following this process.

12.4 SUMMARY COMMENTS AND RESPONSES

A summary of comments and responses to the most frequently voiced queries are presented in the **Table 12-2**, with responses provided largely by the Consultants.

Table 12-2: Summary of Comments and Responses

COMMENTS	RESPONSES	ACTION/ RECOMMENDATION
The Indvuna suggested that where possible, the Project provide technical/financial assistance to the communities through construction of facilities to meet the social amenity needs of the community. E.g., the construction camps to be handed to communities after completion for economic use.	The suggestion was noted and will be communicated to the DWA for consideration	Construction camps to be handed to communities after completion.
When are we going to be moved to the new resettlement areas?	Once the Government has completed the studies and sourced funding for the project, the communities will be notified about the Resettlement Implementation Plan	Regular consultations with the local structures need to be maintained to keep the PAPs apprised of the process.
Where are we being moved to?	The Government of Eswatini through the DWA will identify suitable resettlement areas and consult all the affected people to inform them about the possible destination areas in order for the PAPs to make their choices	Considering the shortage of arable land in Eswatini, finding land for land compensation will be difficult. In this context it is essential that DWA should engage the Chiefs to identify alternative land nearby so that minimisation of displacement will be achieved. Identification of host communities and alternative land should be concluded promptly.
Would the resettles have access to the host community amenities (e.g. communal grazing land is currently within the community reach).	The resettles will be given a choice to visit the resettlement areas to assess the suitability of the area and will be allowed to make informed decisions about their choice of resettlement destination. This concerns will be taken into consideration in the planning stage of the resettlement.	As above.
Will the Government build us new houses?	It is the intention of the Government of Eswatini and the AfDB to provide suitable housing to the PAPs that will be earmarked for resettlement/relocation.	Where replacement housing is required DWA is to appoint an architect to produce concept designs for different housing prototypes. These will be submitted to the Client for approval, and the final approved prototypes will be presented to individual affected households. DWA is to appoint suppliers and contractors for construction of the replacement houses and associated structures. Land and replacement housing, where applicable, can only be occupied once the replacement housing is completed.
Is the Government going to transport our belongings to the new destination?	The government will ensure that the DWA and implementing Agency provides adequate means of transport for resettlement/relocation of the PAPs	DWA to provide assistance to PAPs during relocation.

COMMENTS	RESPONSES	ACTION/ RECOMMENDATION
Will the project pay compensation of fields for lifetime period since the use is generational?	According to the laws of the land and the project funding bodies, the affected people will not be made worse off by the project but will be compensated accordingly.	Compensation policy with rates needs to be developed to address the current developments as a means to amend the Land Act of 1961.
Why is the Government using our valley to harness the water for other people and take away our livelihoods?	The Government has done studies to identify suitable valleys that could provide needed water resources for the development of the economy, and your area has been found to be suitable to harvest enough water and generate electricity.	-
What is going to happen to the two schools, Bhekephi Primary and Masibekela High school?	Both schools fall in the inundation zone and therefore have to be relocated within the same locality as they will continue to serve the remaining communities in the Nondvo river valley.	The DWA and school authorities in consultation with the local administrative structures are to identify and secure suitable relocation sites and replacement of the two schools.
Will the contractor come with externally sourced labour or are the locals going to be considered and how?	It has become a common practice that local people will be preferred to do unskilled jobs, and even the skilled ones as applicable because it cut costs.	Recruitment policy to be developed which will favour employment of PAPs and locals.
When will the construction and implementation process start and finish?	It is anticipated that two steps have to be fulfilled before government takes a decision - one is the completion of the feasibility study and adoption of its recommendations, second is the signed agreement between government and the relevant funding organization.	DWA to keep local community structures appraised of the process.
Will the encroaching roadside vendors be considered for compensation even when they have no documents for the sites?	All assets to be affected will be compensated as per the policy.	Compensation to be undertaken in line with entitlement matrix.
Indvuna raised an issue that land is scarce for relocation in the area, and cited the difficulty of Masibekela High School, to identify the suitable land for its current location.	A joint effort between the school authorities and the Indvuna is highly recommended to identify the suitable location for the schools in the area.	As above

13 LIVELIHOOD RESTORATION PLAN

13.1 OVERVIEW

One of the major challenges associated with resettlement, particularly in rural contexts where people are reliant on land and the use of natural resources, is the restoration of existing livelihood strategies. Livelihood restoration focuses on the restoration, and potential enhancement, of livelihoods of the PAHs, as well as the existing inhabitants of the host communities, whose livelihoods will also potentially be disrupted.

In cases where compensation alone, whether in cash or in-kind, will not guarantee the restoration or improvement of displaced families' existing livelihoods, a Livelihood Restoration Plan (LRP) must be introduced to those HHs who are eligible for such support. Generally, this is when physical resettlement or economic displacement significantly affects the income-earning or production capacity of the affected families.

The overall aim of the LRP is to ensure that there is a measurable improvement in the lives and livelihoods of eligible PAHs. This section summarizes the Project's approach to livelihood restoration activities that will meet the following objectives:

- Provide sustainable livelihood packages for PAHs that are designed to enable the PAP and PAH to move beyond dependence on external resources;
- Provide mechanisms for those receiving cash compensation to optimize opportunities;
- Where possible leverage off existing skills and interests, however, also provide an environment for the development and enhancement of new skills; and
- Support self-reliance and promote socio-economic empowerment to improve, or at least restore, the livelihoods and standards of living of the displaced persons and their households.

The LRP comprises a package of livelihood restoration options that are to be offered to PAPs and PAHs. The level of support provided is to be aligned with the level of impact experienced by a household as well as their potential vulnerability.

Households identified during the socio-economic survey process as potentially vulnerable will be further engaged to determine if these factors require a more customized level and type of support to enable them to restore their livelihoods.

13.2 LIVELIHOOD RESTORATION AND ENHANCEMENT PROGRAMME

13.2.1 OBJECTIVES AND PRINCIPLES OF THE LIVELIHOODS RESTORATION PROGRAM (LRP)

The main objective of the LRP is to restore or improve the livelihoods of PAPs. Principles underpinning livelihood restoration are the following:

- Livelihood support will include a range of restoration measures;
- Potential beneficiaries must participate actively in the selection of options;
- Restoration measures must consider vulnerable people and groups where appropriate;
- Pending mobilisation and full implementation of the LRP, transitional support may be required to support the income earning capacity of eligible households;
- Delivery of LRPs will require technical and institutional support;
- Local capacity is essential for the sustainability of LRPs, requiring purposeful capacity building; and

- Ongoing monitoring and evaluation must be in place to ensure the effective delivery of LRPs, and to inform progressive improvement where possible.

13.2.2 STRUCTURE AND PHASING OF THE LIVELIHOODS RESTORATION PROGRAMME

The project aims at providing training and start-up inputs to PAPs in content areas as outlined below. The livelihood restoration programme will be aligned with existing resources, knowledge, skills, and household experiences. The proposed LRP is built around four major initiatives, each with sub-initiatives:

- Compensation for losses, including transitional support pending the mobilisation of LRP initiatives;
- Financial management training, including household level budgeting and money management training;
- Land based livelihood support, including inputs addressing land preparation, crop improvement and crop diversification, and improved livestock keeping and management (including poultry) bee keeping; and
- Non-land based livelihood support, including the promotion of enterprise development.

Details of the LRP inputs will be developed with appropriate technical support, and with inputs from government and community stakeholders. The fully developed LRP must be in place prior to RAP implementation, allowing the informed selection of options by beneficiaries.

13.3 SUSTAINING LIVELIHOODS

The United Kingdom-based Department for International Development (DfID) has developed a Sustainable Livelihoods Framework, seeking to ensure that displacement- induced livelihood impacts are assessed inclusively and holistically. Based on the Framework, community assets required to sustain livelihoods include the following forms of capital:

- Social Capital – including networks, associations, and governance structures.
- Human Capital – including health, abilities, and vulnerability.
- Physical Capital – including infrastructure and production inputs.
- Natural Capital – naturally occurring assets including land and water.
- Financial Capital – including private and collective financial resources.

Livelihood restoration must recognise all five forms of livelihood capital and ensure that none are neglected or underemphasised.

13.4 LIVELIHOOD RESTORATION INITIATIVES

The elements of the proposed LRP are described in more detail in **Table 13-1** to **Table 13-4** below.

Table 13-1: LRP Input 1 - Compensation for losses

LRP INPUT 1	COMPENSATION FOR LOSSES
Objective	– To ensure immediate support to households that have lost livelihood-supporting assets.
Description	<ul style="list-style-type: none"> – Compensation packages will serve as supplementary assistance so that households can meet basic needs until they recover from their losses and restore their livelihoods to pre-Project levels. All PAHs, as well as schools and church, will be entitled to compensation, but as detailed in Section 10 the quantum of compensation will be determined by the extent of the losses experienced. – Compensation will consist primarily of monetary entitlements / in-kind replacement based on assets lost to the Project. Where households are affected temporarily or partially by the loss of productive assets, cash bridging may suffice until access to land is restored or the lost portion of the asset is replaced. Where agricultural land and / other productive assets are lost

LRP INPUT 1 COMPENSATION FOR LOSSES

	<p>permanently, PAPs will rely on the Project for sustained livelihoods and will require assistance from the Project restorative programmes.</p> <ul style="list-style-type: none"> – Continuous PAP assessment and monitoring will track the replacement of livelihoods (including salaried employment, agricultural production, and commercial activities). Household monitoring will determine whether vulnerable and households require further financial support. More specific monitoring criteria will be developed by the ESSU implementation agency and the implementation team. – It is critical for ESSU to provide financial management training before any cash disbursement. Thereafter compensation must commence before Project start-up. This will avoid undue hardship and build trust and commitment to participate in the livelihood’s restoration programmes.
Potential Partners	<ul style="list-style-type: none"> – ESSU, – Local NGOs, – Ministry of Agriculture,

Table 13-2: Financial Management Training

LRP INPUT 2 FINANCIAL MANAGEMENT TRAINING

Objective	<ul style="list-style-type: none"> – To assist PAPs to use cash compensation effectively in the restoration of livelihoods
Description	<ul style="list-style-type: none"> – All PAPs will be eligible for financial management training. Training will include household budgeting and money management, savings, and strategic use of money. Financial management will commence shortly before households receive cash compensation. – Follow up training will be done after the first year of resettlement to enhance household income management skills. Households will also be linked to micro-credit facilities in the area. This is to encourage savings and enable households to invest in their businesses and restore their livelihoods. – Financial management training should be extended to the remaining community members not directly affected by the construction and operation of the dam (i.e. direct physical or economic displacement), as well as host communities.
Potential Partners	<ul style="list-style-type: none"> – Micro credit and communal savings organisations. – Local banks. – Local NGOs – Ministry of Commerce

Table 13-3: Land-based livelihood support

LRP INPUT 3 LAND-BASED LIVELIHOOD SUPPORT

Objectives	<ul style="list-style-type: none"> – To improve and sustain crop production. – To broaden the spectrum of cash and food crops. – To improve livestock rearing practices and products.
Description	<ul style="list-style-type: none"> – Land-based livelihood support will target crop production and / or livestock rearing. The greatest challenges that PAPs face in these areas include poor access to inputs and extension services. Accordingly, land-based livelihood programming will focus on improved production of staple crops and on crop diversification through support for the preparation of arable land, gardens etc., improved inputs and good sustainable agricultural practices. – Support for crop farming will be provided to PAPs who have lost permanent agricultural land and host communities. This support for crop farming will continue for three planting seasons. This is because international experience in teaching good agricultural practices and providing extension services demonstrates that subsistence farmers normally require two seasons to adopt new or improved techniques. Support will be extended into a third season to cement good practice and to enable monitoring and evaluation of the programming’s success.

LRP INPUT 3**LAND-BASED LIVELIHOOD SUPPORT**

	<ul style="list-style-type: none"> – Support for livestock rearing will be provided to all PAPs who currently raise livestock or those who do not have access to replacement land and would like to transition their livelihoods from farming to the raising of livestock. Specific support provided will include advice on breeding stock, training on better husbandry practices, advice on marketing and better access to extension services. – Land-based livelihood support should be extended to the remaining community members not directly affected by the construction and operation of the dam (i.e. direct physical or economic displacement), as well as host communities
Potential Partners	<ul style="list-style-type: none"> – Agricultural and livestock extension services. – Ministry of Commerce – Local NGOs

Table 13-4: Non land-based Livelihood Support**LRP INPUT 4****NON LAND-BASED LIVELIHOOD SUPPORT**

Objective	<ul style="list-style-type: none"> – To enhance livelihood opportunities that are not based on land.
Description	<ul style="list-style-type: none"> – Non land-based livelihood support will provide skills training to support PAP transition into alternative livelihoods, or the scaling up of existing non land-based livelihoods. This type of livelihood support will target enterprise development in the context of value adding and processing, or technical and vocational training. – Support for value adding will be an option for all PAPs. Support for technical and vocational training will initially focus on the short term, providing a two to four-week training course on technical skills for existing livelihoods and new livelihood options. Existing livelihoods where skills could be upgraded include tailoring, mechanical work, carpentry, masonry, painting, pottery, steel bending, welding, and knitting. Potential new skills based on locally available training expertise could include mobile phone repairs, shoe making, soap and detergent making, bead making and agricultural feed production. – Technical training has been chosen as a livelihood programming option given that stakeholders reported significant skill shortages in the trades. PAPs have repeatedly requested that technical training be incorporated into the LRP. – The timing of the vocational and technical training will be within the first year after the land acquisition and technical assistance will be continued during the three-year period of the LRP. – Non land-based livelihood opportunities include intermittent employment with the Project. The Project is committed to hiring locally where workers have the skills required. This means that during Project construction, it is expected that a number of employment opportunities with the Project will be available. These shorter-term positions will not represent the complete re-establishment of livelihoods to pre-project levels for those hired but are nonetheless significant opportunities and will be integrated into the LRP. – Non land-based livelihood support should be extended to the remaining community members not directly affected by the construction and operation of the dam (i.e. direct physical or economic displacement), as well as host communities. – Additional support mechanisms, such as provision of a school bus pick-up / drop-off service, should be investigated in consultation with the schools, governing bodies, education department and NGO's to assist families with learners who may have to travel further due to the relocation of the schools.
Potential Partners	<ul style="list-style-type: none"> – Enterprise development and skills training NGOs – Ministry of Commerce

13.5 CONSULTANCY TO DEVELOP LIVELIHOOD RESTORATION PROGRAMS – TERMS OF REFERENCE

The purpose of the Terms of Reference in **Table 13-5** below is to develop the livelihood restoration programmes described. All impacted persons will be eligible but highly impacted households, as defined in the RAP above, will be given priority. The livelihoods restoration programs will be developed through an outsourced programme development consultancy. When the work is completed, the consultants may advise the Client on procurement, serve as technical supervisors of all or some programs, or become the implementer of some of them.

Table 13-5: Terms of Reference for the Development of Livelihood Restoration Programmes

ELEMENTS	DESCRIPTION
Scope	The role of the consultancy will be to facilitate the participatory planning and design of the programmes and to provide technical support and supervision during implementation. Selected service providers / NGOs will carry out the actual design and implementation of the programmes. A team of national consultants / NGOs will carry out stakeholder consultations and generation of information for the preparation of the programmes in both the Siphocosini and Mantabeni communities. They will have expertise in socio-economic assessments, institutional capacity assessment, community engagement and development capacity.
Purpose	The purpose of this assignment is to prepare full livelihood restoration initiatives.
Tasks	<ul style="list-style-type: none"> – Identification of specific sites for project intervention and collect appropriate baseline information to inform programme design and implementation; – Review of relevant documentation, including the following: RAP, ESIA, ESMP and SIA; – Assembly of additional /supplementary information as required; – Analysis of information analysis and preparation of initial proposals for mitigation/enhancement measures (including input from the PAPs and other stakeholders). Share the proposals with the client for approval; – Organize and facilitate technical and consultative meetings with local government and community stakeholders to assist in the detailed planning and design of LRP and the implementation thereof and develop a communication strategy with communities and facilitate their participation in the LRP; – Develop detailed proposals on the approved mitigation/ enhancement programs with costings; – Describe programs financing options and processes; – Describe implementation arrangements (types of required service providers (NGOs, consultancies, contractors, etc.) and their supervision and reporting); – Describe implementation arrangements (actors at program, government, district and community levels); – Advise service providers’ procurement and their project implementation work and supervision; – Develop a sustainability and exit strategy for the Project (i.e., a way forward once the funding is exhausted and after project withdrawal of inputs and support) – Assist with building community development partnerships and engage the government ministries (Ministry of Sports Culture and Youth, Ministry of Commerce, Ministry of Agriculture and NGOs) for continuity in implementation of sustainable community interventions; – Develop implementation scheduling, monitoring and reporting documentation; – Assist with review of bidder qualifications and capability if required.
Deliverables	<p>Planning: Inception Report, including assignment methodology.</p> <p>Assessment: Livelihood assessment report for the Livelihood Restoration program (main report 10-12 pages with executive summary 2-3; recommendations supported by annexes addressing themes such as stakeholder analysis, gender analysis, policy analysis, risks etc.). PowerPoint presentation to share the findings.</p>

ELEMENTS	DESCRIPTION
	<p>Plans: Livelihood Restoration Plans for short and medium term-objectives, (including SWOT, priorities, strategies, activities, risks and mitigation; resource and capacity plan).</p> <p>Implementation: Project implementation plan for the four LRP initiatives.</p>
Timing	LRP to be developed prior to presentation of compensation packages to PAPs.

13.6 IMPLEMENTATION OF THE LIVELIHOOD RESTORATION PROGRAMME

Livelihood restoration programmes will be implemented by a mix of implementation agencies, summarised in **Table 13-6**.

Table 13-6: Main responsibilities for implementation of the LRP

ORGANISATION	ROLE	RESPONSIBILITY
ESSU	Project Developer and Agency responsible for operating the infrastructure and restoration of livelihoods	Implementation of RAP Coordination with other government ministries and NGOs, monitoring
ESSU	Training of PAPs on financial management and disbursement of compensation	Implementation of livelihood restoration programmes
ESSU Consultants	Financial management training	Design financial management training programs to support PAPs manage their compensation finances
ESSU Consultants/ Ministry of agriculture	Land-based livelihood support	Design land-based livelihoods support programmes, implement the programmes and monitoring.
ESSU Consultants/ Ministry of agriculture	Non land-based livelihood support	Design non land-based livelihood support programmes, implementing and monitoring
ESSU Consultants	Agency responsible for resettlement and construction of relocation sites	Implementation of RAP and LRP monitoring
NGOs	Represent and support the PAPs	Provide technical assistance and intervention during dispute resolution
ESSU implementation agency	Implementing Agency	Identify buyers for products and connect households to markets

14 MONITORING AND EVALUATION

14.1 ELEMENTS OF MONITORING AND EVALUATION

Monitoring and Evaluation (M&E) is required to ensure that in planning and implementing the Nondvo Dam resettlement, the DWA is meeting relevant national and international requirements, standards, and guidelines. M&E will also track progress against schedule and budget.

The overall objective of the M&E program is to monitor, assess and report on the effectiveness of the implementation of resettlement, and particularly the application of mitigation measures. This includes asset acquisition, disbursement of compensation, physical progress with land resettlement and rehabilitation activities, effectiveness of consultation and participation, and the sustainability of livelihood restoration efforts. M&E will thus form an integral part of project implementation, providing the necessary information about the involuntary resettlement aspects of the project, measuring the extent to which the goals of the RAP have been achieved, and the effectiveness of mitigation measures.

The basic components of an M&E framework are:

- Internal M&E;
- External M&E; and
- Completion audit.

It is essential that an M&E Specialist coordinates and manages M&E functions, with assistance from a Safeguards Officer within the DWA. Internal M&E is an ongoing management function of the ESSU and is a required management a process. Information may be obtained through:

- Review of available project documentation, including internal reports, minutes of meetings, computer databases and analyses, and GIS mapping;
- On-the-ground observation, through site visits and attendance at community-based meetings;
- Personalised interviews with selected stakeholders; and
- Focus group discussions with PAP, particularly those with specialised interests, such as chiefs and elders, farmers, women, and vulnerable groups.

14.1.1 INTERNAL MONITORING AND EVALUATION

Internal M&E may include Standardised (Quantitative) Monitoring using baseline surveys to continually monitor physical/ economic displacement indicators, the changing socio-economic status of PAPs, the impact of loss of assets and relocation upon PAP well-being, and the restoration of PAP livelihoods. Participatory Monitoring and Evaluation (PME) is an interactive M&E tool implemented through a continual process of engagement between affected individuals, the ESSU, and other relevant stakeholders such as project-related structures. Through the process, the PAPs and PACs are assisted in:

- Monitoring their own progress toward recovering pre-project standards of living;
- Evaluating the effectiveness of mitigation measures;
- Developing their own solutions to outstanding problems; and
- Communicating their findings to the ESSU, and requesting remedial action where required. This monitoring component uses Participatory Rural Assessment (PRA) or similar approaches, with qualitative indicators emerging from the process, such as:
 - Attitudes to key resettlement initiatives and implementation operations (e.g. relocation sites, compensation); Perceptions and suggestions relating to positive/negative impacts;
 - Disturbances to social practices and fabric (e.g. resettlement to another area, influx of construction workers);

- Pressure on the service provision required of local authorities; and
- Attitudes to the consultation/participation process. The outcome of this process is an assessment of the PAP's and PAC's attitudes, perceptions, and views, with identifiable solutions, regarding both general and specific elements of the resettlement implementation process.

14.1.2 EXTERNAL MONITORING AND EVALUATION

It will be the Client's responsibility to facilitate the carrying out of external reviews. These must be conducted out by a qualified independent Environmental/Social Consultant or a Monitoring and Evaluation Consultant not directly associated with DWA or its implementing bodies. External reviews are meant to advise independently on all aspects of the Project, including evaluation of the resettlement component of the Nondvo Dam construction. An advisory panel (if established) would assist in reviewing progress and on the extent and quality of any EA work completed. The functions of the independent reviewer and/or panel would, amongst other things, entail assessment and evaluation of resettlement activities through:

- Establishing the progress of the resettlement program;
- Examining all internal and external reports, with an emphasis on the evaluation of monitoring reports;
- Random site visits and consultation with the affected population, to verify the success of implementation;
- Evaluating project institutions, including capacity and operational constraints;
- Reviewing grievances, grievance redress, and the grievance management system;
- Analysing budgets and expenditure in relation to milestones and realities on the ground; and
- Advising the DWA/ESSU, and affected communities, of any emergent issues, together with recommendations on how to address issues and how to improve the practices, focus and orientation of the resettlement program. In addition to the various indicators assessed by other forms of monitoring, external evaluation would consider process and sustainability indicators.

14.1.3 COMPLETION AUDIT

This audit must be prepared by an independent agency at the end of the Project's resettlement program, drawing on the information collected through the M&E program. The overall aim of the audit is to verify that all resettlement implementation activities have been undertaken in compliance with the objectives and principles of the project, and specifically to:

- Confirm that alignment and compliance with all relevant standards, laws and guidelines has been achieved;
- Confirm that all physical inputs have been delivered;
- Confirm all that outputs have been achieved under the program;
- Assess whether the outcomes of the program have had the desired beneficial impacts;
- Assess whether the criteria for completion of resettlement implementation have been met; and
- Describe any outstanding issues that require attention prior to the closing of a project's resettlement program.

14.2 ACCESS TO AND MANAGEMENT OF DATA

14.2.1 MONITORING AND EVALUATION DATA

Monitoring and evaluation is informed by baseline information. This provides a point of reference against which to assess changes prompted by Project activities. The above baseline information is termed Monitoring and Evaluation (M&E) data when it is used for tracking and assessing implementation progress toward project objectives over a stipulated time. M&E data is to be stored in the Project information system (aligned with Client systems and requirements). The database will be linked to the Geographical Information System (GIS) where related spatial data is stored.

The sources of information and the procedures for M&E data collection are both quantitative and qualitative. **Table 14-1** presents M&E data in terms of its type, source, and frequency of collection.

Table 14-1: Monitoring and Evaluation Data by Type, Source and Collection Frequency

TYPE OF DATA	DATA CONTENT	SOURCE/ RESPONSIBLE	FREQUENCY
Demographic	Composition and characteristics of households/ household head: (age, gender, educational status, marital status, employment, type of settlement and how long acquired, etc.)	Socio-economic survey	Baseline, mid-term, and end of the project
Socio- economic	Means of livelihood: Household income and expenditure, source of energy used, food security (availability/affordability), ownership of movable and fixed assets, skills and experience in construction work, property owned requiring water usage for income generation, income earned on owned property.	Project site monitoring	Quarterly and annually
Service Provision	Basic services in the area, health issues and HIV and AIDS, awareness campaigns, media used to disseminate information, knowledge of HIV and AIDS status of community members, existence of support groups	Project site monitoring	Quarterly and annually
Gender Related Issues	knowledge of gender equality, prevalence of gender-based violence, people most affected by gender violence, people who believe that women and men should be given same opportunities, people most employed in other projects,	Socio-economic survey	Baseline, mid- term and end of the project
Water Consumption /Usage Patterns	Source of drinking and washing water, time of water scarcity, reasons for using water sources, level of satisfaction with current water system, quality of water from water source, options for improvement of water quality, distance travelled to fetch water, travel time to fetch water, person that draws water often,	Project site monitoring	Quarterly and annually
Biodiversity	Availability of medicinal plants in the area and their types /purpose, other use of plants, existence of wild animals	Project site monitoring	Quarterly and annually
Impact	Qualitative data on the knowledge of impact of the project: benefits for the community derived from the proposed water improvement and negative benefits, Archaeological and social significance sites / artefact, individual and community properties that are likely to be affected by the water pipes, etc.	Socio-economic survey	Baseline, mid-term, and end of the project

The above data as collected and analysed requires the data management system for storage, analysis, planning and reporting purposes.

14.2.2 DESIGN FOR DATA COLLECTION AND PROCESSING

Data collection and processing should proceed as outlined in **Table 14-2**.

Table 14-2: Type of Monitoring Data to be collected

TYPE OF DATA	FREQUENCY	SOURCE	PROCESSING
Project Reports	Monthly, Quarterly, Annual	ESSU	ESSU
Secondary data (census, poverty line, etc.)	Annually, every 5 years	Bureau of Statistics and other line Ministries and Implementing Partners	Processed and disseminated through Statistical Reports by BOS
Special surveys	Interviews/ Questionnaire	ESSU/ Consultants	ESSU/ Consultants
Meetings of staff, beneficiaries.	Minutes/Reports	ESSU/ Steering Committee/ District Committee	ESSU

The Project reports will provide data on overall Nondvo Dam indicators and will be reported as shown in the above Table. The monitoring committees will report to the ESSU quarterly and annually. The secondary data will provide other indicators such as people living below poverty line which is currently measured only at national level. During the project cycle, special surveys may be conducted when the need arises and during mid-term reviews to make necessary interventions when deemed necessary. These special surveys are usually conducted by consultants for a defined purpose. Proceedings of meetings of staff and beneficiaries provide a wealth of information and should always be documented and disseminated to relevant stakeholders.

14.2.3 DATA COLLECTION AND PROCESSING

Data collection and processing will take several forms although it is necessary to devise methods of how particular kinds of data should be obtained. There are several methods and sources for data collection. These include:

- Reports (monthly, quarterly and annual);
- Secondary data from the Bureau of Statistics and other line Ministries and institutions;
- Direct measurements (field, land etc.);
- Surveys - interviews or questionnaires, focus group discussions, rapid assessments;
- Key informants - Project staff, district staff, local authorities, and community members; and
- Internal Monitoring Meetings - of staff, of beneficiaries, joint (staff, institutions, beneficiaries). Decisions must be made on desirable quantity and quality of data and the cost implications for their collection.

14.2.4 DATA STORAGE

All data is to be stored in a user-friendly database - MS-Access/MS Excel linked to GIS (see Annexure 1 - Data Management). The database will be updated by the M&E Specialist (ESSU) regularly as and when the data has been collected. Data will be stored as hard copies as well. It is highly recommended that the computer used must be always protected.

14.3 REPORTING

Reporting is a critical component of the M&E process. The purpose of M&E reporting is to:

- Ensure early detection of conditions that require mitigation measures; and
- Provide information on the progress and results of mitigation.

Reports must be prepared at regular intervals: monthly, quarterly and/or annually as required by the monitoring domain. The reporting requirements will be determined when developing the reporting aspects of the M&E framework. Internal Reporting, reporting within the DWA, will comprise the following aspects:

- Documentation of the results of all resettlement activities carried out during the project by all consultants and other organisations. The findings should be archived by the dedicated M&E person within the DWA ESSU on an ongoing basis;
- A monthly progress report should be submitted by the Project’s locally based Project Information Office, for inclusion in a monthly internal report compiled by the DWA ESSU, and in a quarterly report for wider distribution;
- All activities will be monitored against planned milestones by the M&E of the DWA ESSU;
- Participatory M&E: if undertaken, PME will be coordinated by the DWA ESSU. Information will be recorded for use by DWA and other structures, with copies of reports provided to the communities that participated in the exercises.

14.3.1 MONTHLY, QUARTERLY AND ANNUAL REPORTING

Reports by the Project Manager, Local Authority committee, are to be submitted to the Chair of the SC before Committee meetings and during the supervision missions;

Reports made at the community level by leaders and technical staff such as Auxiliary Officers and Community Health Workers should be submitted to the Local Area Chair;

Reports from other implementing agencies like the gender sensitive NGOs engaged in the sensitization of the PAPs must submit them to the DWA and to the Project Manager.

The monthly, quarterly, and annual reports can be provided in standardized formats provided by the Project Manager.

14.3.2 EXTERNAL REPORTING:

External reporting will be implemented as follows:

- Reporting to all stakeholders on project-related matters, on an ongoing basis, primarily through project structures;
- Reporting by and to an Evaluation Panel. The Panel will initially undertake bi-annual site visits; thereafter they will meet annually for the duration of the project; and
- Undertaking a Completion Audit at the end of the compensation/relocation program.

14.4 MONITORING AND EVALUATION INSTITUTIONAL ARRANGEMENTS

14.4.1 INSTITUTIONAL ARRANGEMENT AND RESPONSIBILITIES

The body responsible for managing the project will be the Eswatini Department of Water Affairs (DWA) which falls under the Ministry of Natural Resources. The ESSU would undertake all technical, administrative, and financial responsibilities related to the Project. **Table 14-3** below summarises the proposed institutional arrangements at various levels, together with responsibilities.

Table 14-3: Institutional Arrangements and Responsibilities

M&E INSTITUTIONAL ARRANGEMENT	RESPONSIBILITIES
At the <u>top level</u> , DWA has been given responsibility for Project management.	ESSU is responsible for all technical, administrative, financial affairs of the Project, including its implementation.

M&E INSTITUTIONAL ARRANGEMENT**RESPONSIBILITIES**

<p>At the <u>second-tier</u> level the Chief Environmental Officer (CEO) manages all the socio-economic and resettlement issues of the Nondvo within the ESSU (assisted by Safeguard Officer and overseen by the DWA Director, with input from the Chief Engineer, Water Resources, and the Technical Assistant to the Project).</p>	<p>To oversee all resettlement planning and socio-economic issues of the Nondvo Dam within the ESSU, including implementation of safeguard requirements. .</p>
<p>At the <u>third-tier</u> level, the position of Monitoring and Evaluation Specialist is responsible for managing the socio-economic monitoring system with the assistance of a Safeguards Officer within the ESSU to ensure compliance. As part of the GIS development, the ESSU will be collecting data from all relevant sources, including projects' geo-referenced data such as the socio-economic data for inclusion in the common GIS set-up for the water sector.</p>	<p>To monitor and evaluate progress of the project activities including the environmental and socio-economic issues and the implementation of the RAP.</p>

14.4.2 MONITORING COMMITTEES AT VARIOUS LEVELS

The Steering Committee (SC) is based at the national level. Information flows from the DWA, ESSU to the Steering Committee, then through to the Local Chiefs and their Community Councils. Ideally, the implementing agencies like contractors and the project staff should present reports of their activities regularly at the monthly/quarterly committee meetings. The Project Manager reports to the SC chair.

It is recommended that the Local Area Chiefs chair their Steering Committees at the area level with the members of the above-mentioned line Ministries, Departments and Agencies. This will facilitate data sharing for the updating of the socio-economic information system. The most important monitoring committee will be at community level where the Chief / Community Councillor will chair the monitoring committee with members from the line ministries and auxiliary workers and health workers who reside with the PAPS. This approach will encourage transparency and forge trust among members, especially community members.

Table 14-4 below summarises the proposed institutional arrangements together with responsibilities.

Table 14-4: Institutional Arrangements and Responsibilities of Monitoring Committees

MONITORING COMMITTEES	RESPONSIBILITIES
<p><u>National Level Coordination/Steering Committee (SC)</u> It is recommended that the National Level Coordination /Steering Committee be formed with composition as follows:</p> <ul style="list-style-type: none"> — Director DWA as the Chair of the SC; — Nondvo Project Manager; Other members of the Steering Committee (SC) will be from: <ul style="list-style-type: none"> ▪ Ministry of Finance; ▪ Ministry of Development Planning; ▪ Ministry of Agriculture; ▪ Ministry of Social Development; ▪ Ministry of Health; ▪ DRWS; ▪ DWA Water Engineer, the Project Operator will provide secretarial services. 	<p>The role of the Steering Committee is to:</p> <ul style="list-style-type: none"> — Approve annual work-plans and budget; — Approve annual reports and audit reports; — Approve any proposed changes in objectives, activities and other project arrangements; — Advice on issues related to national policies and legislation; — Facilitate linkages with local government authorities (District Council Secretaries, Administrators, Chiefs, Councillors, etc.) <p>The M&E system will provide information to the Steering Committee for decision-making and the development of annual work- plans. The PMO coordinates all the project activities from the district level to national level and reports to Chair of the Project. The Chair convenes the meeting quarterly and during the supervision missions.</p>

MONITORING COMMITTEES

RESPONSIBILITIES

Steering Committees (SCs) at Community/ Council level.

The most important Monitoring Committees will be at community level where the Councillor/ Chief will chair the Monitoring Committee with members from the line Ministries operating at that level and auxiliary workers and health workers who reside with the PAPs. ESSU will provide secretarial services.

To facilitate data sharing for the updating of the socio-economic information system.

15 GRIEVANCES MANAGEMENT

15.1 THE NEED FOR A GRIEVANCE MECHANISM

An appropriate grievance and dispute resolution mechanism is required to enable all stakeholders affected by the Nondvo Dam project to raise grievances and concerns, and to secure structured and effective responses. Particularly Project Affected Communities (PAC) and PAPs, who feel inadequately or unfairly treated in the project implementation, can submit grievances and complaints on any project-related aspect of land acquisition, compensation, livelihood restoration and implementation in general to the Project Authorities for consideration and redress. Effective grievance management must allow affected individuals or groups to voice concerns as they arise and, where appropriate, corrective action must be taken timeously and in a satisfactory and culturally sensitive manner. A sound and trusted mechanism decreases the chances of overt resistance to the project from disgruntled PAPs, as well as minimising the chances of avoiding lengthy and expensive court settlements.

15.2 TYPES OF GRIEVANCES

Grievances may occur at different stages of the Project and are useful indicators of Project performance. A high volume of grievances may show the need to adjust work practices or procedures to mitigate adverse impacts and conflicts. **Table 15-1** below gives examples of resettlement-related grievances that may arise during the different stages of project development and implementation.

Table 15-1: Examples of Grievances per Project Stage

PROJECT STAGE	TYPES OF GRIEVANCES
Pre-Construction: land and other asset registration and verification and acquisition.	<ul style="list-style-type: none"> – At compensation determination, disputed asset surveys (counting and measurement), and valuation and offered compensation amounts; amount, and timing of payment of compensation for assets, both temporarily and permanently acquired; – Confirmed ownership of assets, involving disputed/incorrect identification of landholders; – Eligibility criteria and associated compensation, particularly around unregistered land users, and informal settlers on land; – Implementation of compensation procedures; – Damage by the project’s preliminary works to assets prior to their formal acquisition (structures; land, crops, and trees, etc.).
Resettlement (RAP) implementation	<ul style="list-style-type: none"> – Affected people who do not qualify for resettlement eligibility; – Delay in resettlement activities ahead of construction; – The location of resettlement sites, site-related services provision, allocated land size and suitability, distance from services; – potential conflict between resettlees and host communities, etc.; – Livelihood restoration, rehabilitation, and support, including replacement of lost business /income- generating opportunities.
Construction stage/ period	<ul style="list-style-type: none"> – Damage to assets not earmarked for disturbance by project works (structures, standing crops, trees); – Disruption or damage to local roads, and closure of access routes; – Increase in traffic load, and road accidents; – Disruption or damage to water sources (such as wells), electricity and telephone lines and other infrastructure; – Nuisance from dust, noise and vibrations; – Health problems and accidents; – Seemingly unfair selection practice of employees for project-related jobs; and

PROJECT STAGE TYPES OF GRIEVANCES

	— Misconduct of project personnel/workers.
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The above grievances can be avoided or minimised through grievance management. A mechanism for the Nondvo Dam resettlement process is described below.

15.3 REQUIRED GRIEVANCE PROCEDURE METHODOLOGY

In general, grievances should be addressed through a stepwise and transparent process aimed at reaching consensus between the Project and the affected parties. **Table 15-2** below details the process.

Table 15-2: Grievance Management Procedure

GRIEVANCE MANAGEMENT STEPS

i)	Aggrieved persons to lodge a grievance in writing, or verbally, to dedicated staff of the Resettlement Implementation Team (RIT) of DWA, local traditional leaders or Councillors, or witness NGO.
ii)	All grievances need to be presented in writing, in the form of a signed letter before they are entered onto a Grievance Form for input into the Grievance Database.
iii)	Record, register and sort (eligibility of) grievance in a complaint log as part of the Grievance Database: <ul style="list-style-type: none"> — The complaint is to be screened for eligibility for the project’s General Manager (GM). If it is considered unrelated to the project, it will be passed on to an appropriate body for resolution, keeping the complainant aware of the referral, but still retaining that information in the Grievance Form and the Grievance Database. — If eligible, details of the complaint are to be recorded on the Grievance Form, with a copy given to the complainant. Official records will be kept in English, whereas documents given to the complainant should be in isiSwati or English depending on the preference of the complainant. — Once the complaint has been received and the Grievance Form filled out, the Grievance Officer (GO) can begin to populate the Grievance Database.
iv)	Conduct an initial assessment of, and investigation into, the grievance: <ul style="list-style-type: none"> — Regardless of who will deal with the complaint, the complaint will be investigated and assessed, and the findings recorded. Depending on the nature of the complaint, the GO will call on people or organisations to provide further information assisting in the resolution of the complaint.
v)	Refer grievances to appropriate person or organisation: <ul style="list-style-type: none"> — The GO, in coordination with the RIT, decides whether the complaint can be dealt with fully at the GO level, or be referred to the Grievance Committee (GC) for resolution.
vi)	Determine the resolution process; <ul style="list-style-type: none"> — The person or group dealing with the complaint (GO or GC) will decide on action to address the complaint and communicate this to the complainant for approval. Once approved, the action will be recorded on the Grievance Form, delineating tasks allocated to relevant individuals, groups or organisations, with corresponding deadlines. — If the complainant does not accept the resolution proposed by the GO and/or the GC, the grievance can be referred to the RIT or WD for resolution. — All complainants will, through their own means, have recourse to National Law through the judiciary if they do not believe their complaint has been dealt with adequately or fairly. It is however, recommended that, if no agreement is reached at the project level, the preferred means of settling disputes be through arbitration, to be constituted by the disputing parties as per relevant laws. This local-level conflict resolution mechanism is suggested for its’ timesaving, non-bureaucratic, cost-saving, traditional, functional, and accepted nature.

GRIEVANCE MANAGEMENT STEPS

vii)	Direct relevant agencies responsible for implementing action: <ul style="list-style-type: none">– The GO will be responsible for implementing the agreed actions or managing the actions when being implemented through another person, group or organisation. These actions will be recorded on the Grievance Form and in the Grievance Database.
viii)	Close out the case, and notify complainant of the outcome: <ul style="list-style-type: none">– Once the recommended actions have been completed, the complainant will be asked to sign, confirming acceptance of the solution and closure of the case.
ix)	Track, monitor, document and evaluate: <ul style="list-style-type: none">– M&E (internal and external) are tools for measuring the GM's effectiveness, and allows for trends to be tracked and changes made to any procedures;– Internally, grievances will be tracked and monitored by the GO as they proceed through the GM system, to ensure that the process of dealing with the PAC and PAP is as required and is a fair and equitable one that respects the fundamental rights of those affected. A summary report on grievances (raised, dealt with or outstanding) shall be produced each month, to present to the WD/RIT and to the GC.– Externally, a witness NGO can be brought in to provide monitoring oversight to ensure that the GO and GC are correctly carrying out the GM process.

If the aggrieved person is not satisfied with the decision taken by the RIT or GC, s/he will be able to resort to the judiciary system.

15.4 REQUIRED PUBLIC AWARENESS PROGRAM

The Grievance Mechanism must be widely publicised among stakeholder groups such as the PAP and PAC, the District Administrations, other government agencies, institutional organisations, NGOs/CSOs and project-related structures. An awareness campaign would typically include the following components:

- Purpose and scope of the GM;
- Who can access the GM;
- Roles of different personnel and bodies involved, such as the GO, CPLO, CLOs and the GC;
- How complaints can be reported, required information, and to whom, detailing the address of the Project Information Office, and phone numbers and email addresses of the GO, CPLO, CLOs and GC members; and
- Procedures and time frames for initiating and concluding the grievance redress process.

Information can be communicated amongst others by community forums and discussions, poster displays, brochure distribution, websites, and print media.

15.5 REQUIRED MANAGEMENT SYSTEM

The grievance management system should:

- Incorporate database and reporting functionality, with sufficient capacity to record and track the logging and management of reportable grievances. It should also provide reporting on an ad hoc and regular basis, with sufficient levels of security access to ensure confidentiality.
- Have a document management system that captures all correspondence relating to grievances, with tracking as a grievance process progresses.
- Have adequate resources to ensure the smooth running of the system. Training will also be required for all personnel involved, to manage the system efficiently and appropriately. This could involve:
 - Capacity building;
 - Methods of creating awareness of the GM amongst stakeholders;
 - Procedural training on receiving, registering, and sorting grievances;

- Grievance assessment.

Effective communication, negotiation, and facilitation skills.

16 RAP IMPLEMENTATION PHASE AND SCHEDULE

At the time of RAP preparation an overall Project implementation schedule had not been issued. Once issued a detailed programme covering all resettlement activities should be linked to the overall project schedule and project plan.

RAPs are dynamic documents that need to be updated throughout RAP process. As noted in Section 3.4, the RAP implementation phase is to be undertaken in two stages, firstly a consolidation stage followed by an implementation stage. Tasks under the consolidation and implementation stage are described below.

16.1 CONSOLIDATION STAGE

16.1.1 FINALISE PROJECT LAYOUT AND DESIGNS

The current technical study on which this RAP report is based is a feasibility study. Ideally, resettlement planning is based on a final project layout and designs. The final layout of the project and project associated facilities (pipeline, access roads, etc.) could lead to minor changes in the number of PAPs and the entitlement matrix may need to be reviewed.

16.1.2 INSTITUTIONAL AND MANAGEMENT SET UP

Institutional and management arrangements must be set up to facilitate further work, especially during the implementation phase. Set-up includes:

- Appointing and training staff within the ESSU to commence with resettlement-related activities;
- Opening a Project Information Office on site, with available information for dissemination, and as an access point for grievances; and
- Establishing Project structures. Preparation of the social environment is essential for the establishment of the relevant structures, to enable effective consultation and dissemination of information to take place. This will involve finalising ToR for all organisational structures, including the roles and responsibilities of members; and designing and implementing a capacity building programme for all participants as appropriate, including training around the background to the Project and methods of reporting back, with a focus on the community-based representatives on Project structures.

16.1.3 COMPENSATION, VALUATION AND RAP BUDGET

The current RAP provides an approximate budget for resettlement compensation and livelihood restoration. As identified in Section 3.2, in the absence of national rates, Lesotho rates were used and adapted using the Consumer Price Index to reflect the standard of living in Eswatini. However, all structures/ assets are to be valued by Government recognised valuers to account for differences in building standards/ quality, prior to presenting compensation packages to affected HHs. Furthermore, the outcome of negotiation on compensation with affected communities and census/asset register updates due to changes in individual people's circumstances may require reviewing rates and the RAP budget during implementation.

16.1.4 INVESTIGATION AND CONSOLIDATION OF RESETTLEMENT SITES

The RAP has provided preliminary proposals for resettlement sites. As the actual extent of land required will only be established following negotiations with PAPs and acceptance of compensation packages, the assessment has identified potential host community sites that can feasibly accommodate the affected HHs. Structured engagement

with Government, host communities and PAPs is required during implementation to finalise allocation of resettlement sites.

16.1.5 LAYOUT AND HOUSING DESIGN

Where in-kind compensation is selected, resettlement site and housing designs must be developed, budgeted, and tested with stakeholders and PAPs. All infrastructure, houses and facilities must be approved by the relevant authorities prior to handover of dwellings to affected HHs.

16.1.6 ONGOING STAKEHOLDER ENGAGEMENT

This RAP has carried out consultations with affected communities. However, additional consultations and negotiations with affected communities are necessary. Several contexts for additional engagement are listed above. Outcomes of such consultations are to be documented and included in the RAP.

16.1.7 NEGOTIATION WITH HOST COMMUNITIES

Negotiation may require developing additional measures to ensure successful integration of PAPs in host communities. These measures may aim at securing land tenure and livelihood restoration for displaced people, building social infrastructures for both host and displaced communities, and mitigating impacts on host communities.

16.2 IMPLEMENTATION STAGE

Implementation of any RAP is complex, requiring careful planning, effective management, ongoing engagement and information sharing, implementation monitoring and provision for the identification and response to grievances. The key elements of the Implementation stage are outlined below:

16.2.1 IMPLEMENTATION PREREQUISITES

Prior to displacing PAPs, several verifications need to be done:

- The RAP report is finalized and validated, all RAP action plans are operational with dedicated budget and human resources;
- Authorities are informed about the co-ordination of activities that will be required during implementation, such as sensitising communities on issues relating to resettlement, the provision of services and infrastructure, including roads/streets, power supply lines, education, health, water and sanitation, and other community and social facilities serving the area.
- Plans for all infrastructures and houses are developed and finalized;
- PAPs, host communities and authorities have accepted the new sites and the general layout of the new area and houses based on individual affinities;
- Host communities have been consulted and impacts on host communities have been taken into account in the RAP;
- Land tenure for displacees has been determined (and secured) in close collaboration with host communities;
- All negotiations and agreements are signed and verification of asset valuation is done by PAPs. Displaced households confirm that the compensation and resettlement packages are acceptable and they agree on the compensation, livelihood restoration assistance and household choices. Sign-off should involve witnesses, and sign-off forms are to be stored in a database to be used for future monitoring.
- Payment of compensation and other allowances is to be done soon after sign-off.

16.2.2 TENDERING AND CONTRACTING

Where in-kind compensation is selected by PAPs, tendering for the construction of the new sites must be done as soon as possible to avoid long delays before PAPs can be physical resettled. The following are milestones:

- Assessment of local labour and skills and capacities and capacity building to ensure that members from affected communities are employed in the development of new sites;
- Production of tendering documents to for the-
 - Construction / installation of public infrastructure;
 - Construction of houses;
 - Transport arrangements;
 - Demolition of existing structures; and
- Production of tendering documents for the preparation of the social environment, including social service programs, and capacity building and skills enhancement and livelihood restoration.

16.2.3 RESETTLEMENT CONSTRUCTION

Resettlement construction is based on a construction management plan:

- Construction of the houses, roads, and other public infrastructure by contractors. This must take place before resettlement; and
- Official ceremonies may be held to mark the start and completion of construction.

16.2.4 LIVELIHOOD RESTORATION

Livelihood restoration is land and non-land based. Preparation for both is required:

- Land demarcation and production of land titles (statutory land titles) to secure land;
- Land preparation for agriculture by contractors; and
- Training for PAPs and implementation of other livelihood restoration activities.

16.2.5 IMPLEMENTATION MONITORING AND EVALUATION

Participatory monitoring of implementation is important to pre-empt grievances and to ensure community buy-in. Participatory monitoring may have the following elements:

- Regular visits by resettling households and authorities to the construction site to oversee the process; and
- A handover and maintenance committee made of stakeholders may be formed to supervise construction.

16.2.6 FINAL APPROVALS AND HANDOVER

All infrastructure, houses and facilities must be approved by the relevant authorities.

16.2.7 PHYSICAL RESETTLEMENT

Key activities in physical resettlement are:

- Notification of move dates and type of assistance offered;
- Payment of approved moving allowances; and
- Transport by a contractor of personal belongings.

16.2.8 DEMOLITION OF EXISTING SETTLEMENTS

Demolition of previous houses by a contractor to ensure that no one moves back to the site and salvage of demolition wastes. Alternatively, PAPs may remove structures, to be negotiated during finalisation of compensation packages.

16.2.9 FOLLOW UP WITH RESETTLED COMMUNITIES AND HOUSEHOLDS

Implementation of a follow up program to ensure that PAPs are satisfied with the process and their new homes.

16.2.10 MONITORING AND EVALUATION PROGRAMME

Monitoring and Evaluation (M&E) is an essential part of the resettlement process and should be applied throughout the implementation of the RAP, as well as at regular intervals post-implementation. The objective of monitoring is to provide feedback to the developer as well as to relevant stakeholders on RAP implementation, and to identify problems and successes as early as possible to allow timely adjustment of implementation arrangements. M&E is also critical to confirming the success of sustainable livelihood restoration of the affected people, as per the LRP.

Four main types of monitoring will be undertaken:

- (i) Process monitoring, which is an internal monitoring activity with the aim of tracking the impact of the resettlement implementation process on the PAPs, their HHs and host communities. It ensures efficient resettlement implementation management through identification and timeous implementation of corrective actions. Monthly internal reports on project progress and issues are to be compiled.
- (ii) Compliance monitoring, which is aimed at establishing whether resettlement implementation is meeting key objectives; that PAPs received due compensation in line with the entitlement framework; and that they were able to restore their livelihoods upon resettlement. Compliance monitoring is usually conducted by a qualified party, at regular intervals during the implementation process. The independent monitor is to review the performance of the RAP implementation bi-annually for up to two years following resettlement, after which it should be undertaken at least annually.
- (iii) A completion audit, upon completion of RAP / LRP implementation, will be conducted by an independent and qualified external party. The main purpose of the completion audit is to verify whether PAPs have been able to restore their livelihoods or whether corrective measures are to be taken. This is to be completed post-implementation (approximately 36 months after relocation of PAPs). At this point, the Project will end its resettlement monitoring programme, but may decide to undertake a post-project evaluation.
- (iv) A post-project evaluation, which is to be undertaken to be completed at an interval to be determined in consultation with the relevant project team (potentially three to five years after implementation of resettlement). The objective of this audit is to assess the long-term impact that resettlement has had on PAPs and host communities, and whether compensation and livelihood restoration initiatives achieved the intended benefits in a sustainable manner.

Refer to Section 14 for further details.

16.3 IMPLEMENTATION SCHEDULE

The implementation schedule shown in **Table 16-1** may be subject to change, based on overall Project schedule changes, and the roll out of the consolidation and implementation phases. The schedule reflects engineering and design, construction, land acquisition, resettlement, and livelihood restoration.

Table 16-1: RAP Implementation Schedule

RAP IMPLEMENTATION SCHEDULE	YEAR 1	YEAR 2	YEAR 3	YEAR 4	YEAR 5
1.0 Engineering Program					
Engineering Procurement Phase	■				
Engineering Planning and Design Phase		■			
Construction Tendering Phase		■			
Construction Supervision			■	■	■
2.0 Construction Program					
Mobilisation Phase			■		
Construction Phase			■	■	■
3.0 Resettlement Program / Land Acquisition					
Institutional arrangements and formation	■				
Livelihood consultant procurement ToRs	■				
Data management system updating	■				
Updating of RAP asset information	■				
PAPs Compensation offers and acceptance		■			
Compensation distribution related training		■			
Compensation distribution phase		■			
Project Management	■	■	■	■	■
4.0 Livelihood Restoration Program					
Livelihood consultant procurement phase	■				
Livelihood consultant study phase	■	■			
Livelihood Programmes development	■	■			
Livelihood programs approval and resourcing	■	■			
Implement approved LRP programs		■	■	■	■
LRP Program phase-out					■

16.4 RISK IDENTIFICATION

Table 16-2 summarises the main institutional and other risks to the implementation of the resettlement program, with related minimisation requirements.

Table 16-2: RAP Implementation Risks Identified

POTENTIAL RISK	DESCRIPTION	REQUIRED MINIMISATION	
1	Changing tender- stage layout plans upon contractor's arrival thus affecting PAPs' numbers and compensation as paid-out before site hand-over.	There is tendency to modify layout plans after contractor's site take-over, thus affecting PAPs' numbers and compensation as paid-out before site hand-over, newly affected would require extra funding while those already paid but no longer affected would have expended their payments.	Compensation disbursements based on the 'final layout plan' to be synchronised with site hand-over to the contractor to avoid or minimise wasteful payments. Avoid significant layout changes after commencement of construction. Supervising engineer, the Client and RAP unit to work together to ensure that cooperation is always maintained.
2	Never-ending required land ownership disputes, affecting timely access to land.	Land acquisition process is fraught with ownership disputes, which may affect project timely access to land.	Set up and implement a Grievance Mechanism as suggested in this document. Also, Compensation/ Resettlement Officer and Participation Officers need to be deployed early to ensure that access to land will happen on time and with all relevant grievances being

POTENTIAL RISK	DESCRIPTION	REQUIRED MINIMISATION
		considered as per the Grievance Mechanism process. Compensation on any disputable plots should be withheld till resolution is achieved.
3	Compensation amounts rejected by PAPs affecting timely access to land.	Some PAPs may dispute compensation amounts, even to the extent of court cases, which may affect timely access to land. Their objections should be processed via the Grievance Mechanism and where the process takes longer or was referred to national court, the compensation amounts should be deposited to an escrow account until the matter is resolved and asset owner is paid. Also, Compensation/ Resettlement Officer and Participation Officers need to be deployed early to pursue the offer acceptance through negotiations, to ensure that timely access to land will happen without any unreasonable delays.
4	Project's start delays post tender stage, affecting timing of access to land, resulting in speculative encroachments.	Construction tender stage award delays may risk speculative incursions into the project land where communication is lacking, which may affect timely access to land since development control mechanisms at local level are generally weak. Tendering to award and start of construction work schedule should be strictly adhered to, as well as maintaining the cut-off date, to enable actors dealing with land access to manage the risk of encroachers.
5	Bureaucracy causing delays, leaving inadequate time for processes required before contractor arrival.	Bureaucracy could cause delays incl., participation committees formation at central and district levels, resourcing and start of operationalization, all of which may hamper effective project implementation. Institutional responsibilities should be set up and clarified and communicated to all parties early in line with project schedule to enable RAP timely start of implementation and proper synchronisation of activities.
6	People Influx into the project area and conflicts over access to employment opportunities.	High rate of unemployment may cause conflicts over access to jobs, sometimes leading to fights, especially when outsiders also come to seek employment. Employment policies in the ESMP should be used to manage the risk of influx controls and equitable access to jobs by locals. There are local employment experiences which may help avoid such conflicts.

17 IMPLEMENTATION BUDGET

17.1 SCOPE OF THE BUDGET

As the Project is still at the feasibility stage, the budget has been prepared to cover compensation and related measures as at the time of the assessment based on the feasibility designs, as detailed in the following sections. These include permanent acquisitions, as well as costs for Livelihoods Restoration Programmes and operations of the participatory and operational committees.

The budget is based on the land and assets recorded within the inundation zone of the Nondvo Dam reservoir and provisional MR19 road and railway line realignment. As the Project is still at the feasibility stage the final design/alignments have not been approved, as such these may be adjusted prior to implementation.

Costs for the following construction works related items have been excluded in the budget:

- Assets to be affected by feeder roads as the routes are not yet known (replacement/reinstatement of such losses);
- Replacement / reinstatement of feeder roads, railway line realignment and associated structures (i.e. bridges etc. required to facilitate realignment) as well as realignment of the MR19;
- Destruction of standing crops, as the project implementation schedule has not been confirmed and seasonality of crops varies (furthermore, due to the extended timeline of the proposed activities sufficient notice should be provided for the PAPs to harvest final crops before relocating); and
- Reinstatement/replacement of any structures, including vending stalls damaged by, or removed for, actual construction activities.

This approach represents a conservative baseline scenario, as it covers current enumerated assets before the assignment of a cut-off-date. Should the design / alignments be altered prior to implementation there is the potential for the number of affected assets to increase or decrease, the extent of which is also dependent on the period between the current asset enumeration and effective cut-off date to be assigned for implementation purposes. A contingency amount, calculated as 10% of the RAP costs, has been included in the budget to allow for the potential variation. The budget is therefore prepared for planning purposes. A final verification assessment and valuation, including cut-off date, is to be undertaken to capture any changes in people's individual circumstances and define individual compensation packages for negotiations and acceptance by PAPs during the consolidation stage of the RAP implementation process.

17.2 COMPENSATION RATES

17.2.1 APPLIED RATES

As identified in Section 3.2, and expanded upon in Section 9.5, due to the lack of an Eswatini Compensation and Resettlement Policy and RPF for the Project, the RAP has applied compensation rates from similar large water infrastructure projects in Lesotho to arrive at compensation values for the Nondvo Dam affected assets. The rates applied for the various asset types identified are detailed in **Table 9-6** above.

The identified compensation rates have been utilised for budgeting purposes. Should the Project be approved for implementation professional valuation of the affected assets is to be undertaken during the initial stage of the RAP implementation phase to determine effective rates to be applied for the proposed Project to enable the making of 'entitlement offers' to affected asset owners.

17.2.2 COSTING FOR BULK SERVICES

On the basis that the Project is still at the feasibility stage and final design details have not been concluded, including required bulk services to the resettlement sites, it is assumed that 10% of the compensation rate of the replacement of structures is to account for installation of bulk services. As per **Table 9-6** the compensation rate applied for the replacement of Dwellings/ Primary Structures is E7,805.84. Based on the identified affected assets it is anticipated that approximately E21,500,000.00 of the identified budget would be allocated to the establishment of bulk services for the affected H/holds, schools and church. Provision of additional bulk infrastructure to the surrounding communities would have to be discussed and agreed to with the Government of Eswatini.

17.3 INDICATIVE BUDGET

The indicative budget presented below has been prepared for planning purposes only, as it is based on conceptual planning in some cases due to the Project still being in the feasibility stage. Official compensation rates, for implementation purposes, have not been adopted by the Government of Eswatini.

As identified above the rates applied are based on figures developed for similar water infrastructure projects in Lesotho. These are considered to be the most relevant currently available valuations; however, these are to be updated in line with professional valuations, during the initial stage of the RAP implementation process and adopted by the Government of Eswatini.

Based on the identified assets and proposed implementation process the overall indicative RAP budget is estimated to be approximately **E 337 282 409.28**. A summary of the various costs is provided in **Table 17-1** with additional detail provided in **Table 17-2** to **Table 17-9**.

Table 17-1: Overall RAP Budget

#	COST ITEMS	UNIT	RATE	COST (EMALANGENI)
1	Nondvo Dam reservoir (rates-based compensation costs) ²⁰			216 574 063.34
2	Railway line realignment (provisional compensation estimate)			26 939 153.35
3	MR19 road realignment (provisional compensation estimate)			42 444 470.28
4	Inconvenience / Disturbance Allowance and Relocation Assistance			8 306 085.10
5	Consultants / Specialists for RAP implementation	Specialists	Programme	4 000 000.00
6	Steering & other committees	Meetings	lump-sum	726 600.00
7	M&E Operations Team	Surveys	lump-sum	2 993 200.00
8	Livelihood Restoration Programmes	Study + Operations	Programme	8 636 800.00
	RAP COSTS			306 620 372.07
9	Contingency @ 10%			30 662 037.21
	Total RAP COSTS			337 282 409.28

²⁰ The cost for obtaining replacement land has been included in the compensation cost on a rates-based approach (either cash compensation or in-kind) as per Table 9-6. It is recommended that the assets be valued by Government recognised valuers prior to presenting compensation packages to affected HHs, or securing replacement land for HHs.

Table 17-2: Assets affected by the Nondvo Dam project

ASSET TYPE	QTY	TOTAL SIZE	ASSET UNIT	RATE (EMALANGENI)	COST (EMALANGENI)
Arable Land	191	942 105	sqm	16.11	15 177 311.55
Building/ Secondary Structures	10	290	sqm	934	270 860.00
Business Plot	2	3 459	sqm	59	204 081.00
Chicken Coupe	54	1 038	sqm	100	103 800.00
Church Building	1	226	sqm	7805.84	1 764 119.84
Church Plot	1	2 584	sqm	59	152 456.00
Commercial Orchard	1	70	sqm	588	41 160.00
Dwellings/ Primary Structures Brick and Mortar	150	13 684	Point	7805.84	106 815 114.56
Dwellings/ Primary Structures Corrugated iron	1	10	sqm	934.4	9 344.00
Dwellings/ Primary Structures Mud	34	840	Point	7805.84	6 556 905.60
Dwellings/ Primary Structures Wood	14	412	sqm	934.4	384 972.80
Forest	11	26 587	sqm	980	26 055 260.00
Formal business Structure	2	322	sqm	7805.84	2 513 480.48
Fruit trees	12	991	Point	2480.31	2 457 987.21
Fuel trees	21	425	sqm	885.57	376 367.25
Garden land	3	343	sqm	281.39	96 516.77
Grave	2	4	Point	10869	43 476.00
Guard House	2	2	point	13381	26 762.00
Incomplete Structure	5	273	sqm	857	233 961.00
Informal Business Structure	5	67	sqm	857	57 419.00
Kraal	17	915	sqm	140.16	128 246.40
Medicinal Plants	2	4	sqm	9648.33	38 593.32
Outbuilding/ Secondary Structures Grain storage	101	1 379	sqm	1264	1 743 056.00
Pigsty	3	18	sqm	100	1 800.00
Pump House	1	2	Point	26762	53 524.00
Residential Plot	100	287 820	sqm	19.71	5 672 932.20
School building	18	4 626	sqm	7805.84	36 109 815.84
School Plot	2	113 979	sqm	59	6 724 761.00
Sports Field	2	11 454	sqm	19.71	225 758.34
Sports Ground	1	10 225	sqm	59	603 275.00
Stable	4	91	sqm	136.26	12 399.66
Standpipe	33	37	Point	3725	137 825.00
Toilet	71	148	Point	5356.24	792 723.52
Useful Grasses	1	10	sqm	10613.16	106 131.60
Water Tank	28	44	point	2500	110 000.00
Wild Vegetables	1	40	sqm	19296.66	771 866.40
TOTAL					216 574 063.34

Table 17-3: Assets affected by railway realignment (provisional estimated figures)

ASSET TYPE	QTY	TOTAL SIZE	ASSET UNIT	RATE (EMALANGENI)	COST (EMALANGENI)
Dwellings	23	2 637.40	sqm	7 805.84	20 587 122.42
Outbuildings	56	2 043.12	sqm	1 264.00	2 582 503.68
Residential plots	21	55 160.66	sqm	19.71	1 087 216.61
Arable land	25	166 499.73	sqm	16.11	2 682 310.65
TOTAL					26 939 153.35

Table 17-4: Assets affected by the MR19 road realignment (provisional estimated figures)

ASSET TYPE	QTY	TOTAL SIZE	ASSET UNIT	RATE (EMALANGENI)	COST (EMALANGENI)
Dwellings	39	5 132.70	sqm	7 805.84	40 065 034.97
Outbuildings	56	1 851.20	sqm	1 264.00	2 339 916.80
Residential plots	39	1 934.06	sqm	19.71	38 120.32
Arable land	29	86.79	sqm	16.11	1 398.19
TOTAL					42 444 470.28

Table 17-5: Consultants / Specialists for RAP implementation (provisional estimated figures)

COST ITEM	UNIT	RATE (EMALANGENI)	COST (EMALANGENI)
RAP Consultant – finalise valuations and compensation packages to signature	1	500 000.00	500 000.00
Architects – housing prototype and resettlement areas	1	500 000.00	500 000.00
Demolition of structures	1	3 000 000.00	3 000 000.00
TOTAL			4 000 000.00

Table 17-6: Inconvenience / Disturbance Allowance and Relocation Assistance (provisional estimated figures)

COST ITEM	QTY	UNIT	RATE (EMALANGENI)	COST (EMALANGENI)
Inconvenience Allowance (Economic Displacement)	75	HH	1 052.10	78 907.50
Disturbance Allow - Full Resettlement (Dam)	100	HH	51 419.86	5 141 986.00
Disturbance Allow - Full Resettlement (Railway)	21	HH	51 419.86	1 079 817.06
Disturbance Allow - Full Resettlement (Road)	39	HH	51 419.86	2 005 374.54
TOTAL				8 306 085.10

Table 17-7: Steering & other committees

COST ITEM	UNIT	RATE (EMALANGENI)	COST (EMALANGENI)
Workshops and Meetings			
Workshops for community leaders (10 members from each community 2 workshops at inception of the project, for 5 days each)	100	1800	180 000.00
Transport to the 2 inception workshops	80	120	9 600.00
Monthly meetings (community representatives and NONDVO representative monitor the employment & influx into the area allowances)	720	150	108 000.00
Quarterly review meetings (steering committee members and representative of the community)	240	150	36 000.00
Quarterly review meetings (steering committee members and representative of the community to address the compensation complaints matters)	240	150	36 000.00
Meetings with groups of resettles to choose housing types and plan to visit the relocation sites	300	150	45 000.00
Preparation meetings to address the resettlement related issues (mobilisations of communities to visit selected resettlement sites)			
Transport PAPs groups to the selected sites (50 members per visit)	160	50	8 000.00
Transport PAPs groups to the selected sites (50 members per visit to observe and agree on the location of their replacement structures)	160	50	8 000.00
Transport PAPs groups to the inspect their new houses before moving (50 members per visit)	160	50	8 000.00
Relocation related costs			
Transport hire of trucks -households and their belongings (per physically displaced HH)	160	1 200.00	192 000.00
Hire additional combi for transporting families	160	600.00	96 000.00
TOTAL			726 600.00

Table 17-8: Monitoring and Evaluation Operations Team

COST ITEM	Period	UNIT	RATE (EMALANGENI)	COST (EMALANGENI)
M&E specialist	36	1	25 500	918 000.00
M&E officers	36	2	16 500	1 188 000.00
Transport (2 vehicles 4x4)	Once-off	2	350 000	700 000.00
Running costs (maintenance and fuel)	36	2	2 600	187 200.00
TOTAL				2 993 200.00

Table 17-9: Livelihoods Restoration Programme (LRP)

#	DESCRIPTION	COST (EMALANGENI)
1	Compensation Training Workshops	793 900.00
2	Financial management training	608 300.00
3	Land based livelihood support.	608 300.00
4	Non land-based livelihood support	608 300.00
5	Operational costs	1 518 000.00
6	Commission Development Studies	4 500 000.00
TOTAL		8 636 800.00

The Government of Eswatini will be responsible for all costs associated with the RAP. The required funds will be budgeted through the DWA/ESSU as the project proponent. The Project implementor, as the ultimate operator of the facilities, will secure additional funds from the Eswatini Government should there be budget overruns.

18 CONCLUSIONS AND RECOMMENDATIONS

18.1 CONCLUSIONS

Implementation of the proposed Nondvo Dam project is proposed to supply potable water to Mbabane and Manzini, which are currently suffering from intermittent water shortages, and where the anticipated future water demand is deemed to be highest. The additional water supply is also anticipated to support the growth and economic development of the population alongside the “Corridor” area connecting the two cities. Possible secondary benefits of the proposed dam are the potential for utilising the Nondvo Dam head for small-scale hydropower generation, as well as utilising the stored water for irrigation of approximately 800 Hectares (ha) of agricultural land in the surrounding region.

However, like most large-scale development projects, implementation of the Nondvo Dam would pose both positive and negative environmental and social impacts. Based on the current designs and surveys undertaken the social impacts include loss of property, including dwellings, farmland, crops and fruit trees, ecosystem services, community facilities (church and schools) as well as connectivity of the affected communities.

According to the findings of the ESIA, and surveys undertaken, there are no fatal flaws or impacts of such significance that cannot be mitigated to prevent the implementation of the Project.

This RAP (this document) has been developed to identify and addresses the potential displacement impacts of the project, as per currently designs. Elements of the project description are subject to change, including the re-alignment of road and railway infrastructure to accommodate the new reservoir. Against this background, the displacement impacts described herein are subject to updating and refinement as Project elements are finalised and the Project moves into the implementation phase.

The budget for this RAP has been prepared to estimate the costs required for implementation of the RAP, which is to be revised after the design of the dam and associated infrastructure is finalised and professional valuation and compensation rates adopted.

The RAP is to be implemented by systematically compensating economically impacted households and resettling all physically and economically impacted households affected by the proposed Nondvo Dam Project activities. Implementation of the proposed Livelihood Restoration initiatives will enable the PAPs to reinstate their livelihood status and ensure integration into the host communities.

18.2 RECOMMENDATIONS

Approval of the proposed Nondvo Dam should be informed by the following resettlement-related recommendations:

- Confirmation of host communities and alternative land should be concluded promptly. This action will afford time for the necessary consultation, and will give both the PAPs and the host communities an opportunity to consider the implications of the resettlement;
- Project implementation authorities must ensure that all PAPs identified for resettlement are allowed to participate in decisions with regard to the selection and allocation of land for their resettlement and are allowed to choose their preferred resettlement areas;
- Interaction between resettled households and host communities must be encouraged in order to accommodate the implementation of the Livelihood Restoration Programmes that are designed to benefit both the host and those resettled;
- Procurement of Consultants for the development of Livelihood Restoration Programmes as proposed together with preparatory works should be done promptly and concluded ahead of major contractors’ arrival at Nondvo Dam Project site. This will ensure that Compensation disbursements are concluded punctually prior to the arrival of major contractors so as to safeguard project acquired land;

- Project implementation agencies must commit to tailored mitigation to ensure that local people will benefit from the project through the following:
 - Availability of employment opportunities;
 - Develop some targeted training;
 - Effective implementation of the RAP.
- The allocation of alternative land should take place timeously, and where possible in proximity to currently farmed land. With appropriate Livelihood Restoration Programmes support, this will enable PAPs to continue farming activities and practices that have been their means of livelihood for many years.

Furthermore, prior to displacing PAPs, several verifications need to be done:

- The RAP report is updated as per final verification assessment and validated, all RAP action plans are operational with dedicated budget and human resources;
- Authorities are informed about the co-ordination of activities that will be required during implementation, such as sensitising communities on issues relating to resettlement, the provision of services and infrastructure, including roads/streets, power supply lines, education, health, water and sanitation, and other community and social facilities serving the area.
- Plans for all infrastructures and houses are developed and finalized;
- PAPs, host communities and authorities have accepted the new sites and the general layout of the new areas and houses based on individual affinities;
- Consultation / sensitization of host communities;
- Land tenure for displacees has been determined (and secured) in close collaboration with host communities;
- All negotiations and agreements are signed and verification of asset valuation is done by PAPs. Displaced households confirm that the compensation and resettlement packages are acceptable and they agree on the compensation, livelihood restoration assistance and household choices. Sign-off should involve witnesses, and sign-off forms are to be stored in a database to be used for future monitoring.
- Payment of compensation and other allowances is to be done soon after sign-off.

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ANNEXURE 1: DATA MANAGEMENT

This section seeks to outline the development of data collection tools, collection methods and the management of the data.

DATA COLLECTION, TOOLS AND EQUIPMENT

- Socio-Economic Questionnaire.
- Design of Asset Recording database and electronic data collection tools
- Use of Android smart phones, tablets and GeoMeasure E600 Base and Rover GNSS RTK w/ CW400

DATA MANAGEMENT SYSTEM

Data contained both Siphocosini and Mantabeni's project's Data Management System. The data will be ready to be loaded to the Client's central Compensation Information Management System (CIMS) which will be made confidential, and secure. The database design adheres to recognized resettlement database standards, using normalized data tables linked via unique identifiers (key fields), as well as a menu-based front-end for ease of use and navigation. The data was collected using Android tablets and smart phones, while coordinates and property measurement were collected using RTK GPS equipment.

The database incorporates the following key datasets:

- Details of affected persons and households;
- The asset registration information; and
- Relocation information.

The data in the database is accessed using Forms, allowing it to be captured and verified quickly and accurately. Controls such as pick-lists, data selectors and option boxes have been used to streamline data capture and verification, and to minimize data input errors.

Photographs and other image-based documents are physically stored in the database, hence making them easily viewable. Global Positioning System (GPS) coordinates are stored in the database as attributes and used to create shape-files, which can be viewed in a GIS system.

The outcome of this task will be an adaptable, quality data management system with integrity. The envisaged deliverables are:

- Database management system in Microsoft Access

DATA COLLECTION, PROCESSING AND STORAGE

- Field workers collected **alpha-numerical data** digitally by means of Tablets and smart phones. The data was entered in a Survey Questionnaire Format. An **Android Application** with a touch-screen based user interface was developed for this purpose. The information entered were details of the project-affected assets and census/socioeconomic data of the Project Affected Persons (PAPs).
- Control types for entering each response on the Questionnaire /Form were selected to prevent ambiguous or erroneous entries. Validation rules were applied prior to saving each record for verification of entries.
- Data storage in the Tablets was implemented using the built-in **Android SQLite database engine**.
- The data entered in the Tablets was then transferred to the **MS Access database on a central computer**. The uploading of data from the tablets was done on a daily basis.
- All field data is first stored in Buffer Tables within MS Access system. All records were checked one at a time and was only committed to the main data storage tables after being marked as verified. The verified data was transferred back to the Tablets to enable fieldworkers to follow up on any outstanding information where necessary.
- The data required for the existing Client's Compensation and Information Management System (CIMS) if it exists, will be exported using a file format that the client will specify, or can be developed based on the client's specifications.

SPATIAL DATA

- All GPS coordinates were captured by land surveying equipment;
- The Surveying Team undertook cadastral survey of all affected land parcels as well as fixed assets using GeoMeasure E600 Base and Rover GNSS RTK w/ CW400. Coordinates were generated for each asset for the accurate determination of the asset location, surface areas and lengths;
- All GPS coordinates were stored in a CSV file as attributes and used to create asset maps;
- The sizes of land parcels and structures were calculated, checked and entered into the Asset Register. Only the centroid coordinates of the assets were recorded in the Assets Database for uploading into Compensation and Information Management System (CIMS) (if it exists).

DOCUMENTS AND IMAGES

- The Tablets were also used by field staff to take photos of assets and their owners. The Tablets are also used to photograph documents such as Identity documents, marriage certificates and proof of ownership documents;
- These images are hyperlinked to the corresponding alpha-numerical and GIS records at the time of capturing; and
- These images together with all reports generated for the project will be stored in a separate data base.

PROCEDURES FOR ELECTRONIC CAPTURING AND PROCESSING OF DATA

The following procedures apply to data capturing and processing activities that will be implemented by different teams in the field:

ASSET SURVEY AND REGISTRATION

- Upload consolidated household list and preliminary list of assets on the Tablets;
- Confirm assets;
- Link assets to households;
- Register beneficiary details for each asset in Tablet;
- Generate a unique code for each asset using the Android application;
- Provide Asset Code to the Surveyor;
- Surveyor captures asset coordinates i.e. point, line or polygon;
- Label asset coordinates with unique code provided by Asset Registration Team;
- Take photos of the assets, beneficiary and IDs in Tablet;
- Transfer records from Tablets to MS access through csv files;
- Store coordinates in a GIS;
- Create shapefiles in ArcGIS and overlay on satellite images;
- Calculate accurate centre coordinates for each asset;
- Update MS Access with GPS coordinates of each asset;
- Update MS Access with asset dimensions;
- Create survey diagram and location map on a satellite/orthophoto background for each asset in a GIS; and
- Upload diagram and map into MS Access.

ASSET VERIFICATION

- Generate asset verification form and attachments based on recorded survey and registration data; and
- Scan and upload signed asset verification forms.

CENSUS SURVEY (OF PAPS)

- Register household as uniquely identified by Royal Kraals, Community and full names of household head (Community Council, Chief, ...)
- Identify affected assets;

- Capture GPS coordinates of household (on Tablet or Google map print out);
- Transfer records from Tablets to MS Access through csv files;
- Merge data from the different Tablets in MS Access;
- Verify Consolidated records in MS Access; and
- Correct logical mistakes in MS Access.

SOCIO-ECONOMIC SURVEY (COMMUNITY-WIDE)

- Upload consolidated household list on all the Tablets;
- Collect socio-economic information from the households;
- Copy data from Tablets to MS Access; and
- Consolidate all socio-economic data in MS Access.

INFORMATION REPORTING

The overall aim was to systematize reporting. The report data would be presented in numeric and descriptive form (including comments on activities) as well as in graphical form for any type of reporting. Once the various data tables have been correctly structured and populated, a wide range of reporting options are possible.

The reporting component of the system can summarize each of the key datasets and combine them in useful ways. This includes:

- A comprehensive report on each affected household summarizing affected household members, their houses/ structures, socio-demographic characteristics, household assets and including all relevant photographic evidence of assets;
- A comprehensive report on each affected business or other entity summarizing legal name and address of the entity, affected structures and assets with relevant photographic evidence;
- A compensation certificate/resettlement contract agreement incorporating all relevant disbursements, compensation amounts, relevant legal conditions as well as details of resettlement housing;
- A comprehensive report on each affected household and business summarizing relocation information inclusive of GPS coordinates, relocation sites and photographs of resettlement housing;
- Resettlement summary reports;
- Resettlement status - progress to date, total households compensated;
- Number and percentage of signed agreements; and
- Total households resettled.

RESOURCING

The Data Management Specialist was responsible for the design, development, testing, documentation, training and support for the data collection, validation and aggregation tools. This included the database server with MS Access database; link with GIS station; a laptop with MS Access database; survey Tablets with Census, Asset and Socio-economic survey applications and data transfer tools to move data between these platforms.

The specialist managed the effective and efficient collection, validation, correction and dissemination of data and the monitoring and reporting on the status of these processes. Additionally, providing Forms, reports and extracts required for the effective viewing, validation, correction and transfer of data between platforms to the Client as well as prepare reports on data management as and when required.

The data specialist was responsible for ensuring the day-to-day operations ensuring the efficient allocation of tasks to the Tablet survey teams; collection and aggregation of the data collected by the survey teams and the validation and integration of data from all sources into the MS Access database. The Data Management Specialist further ensured that the correct data and formats were used to provide the Client with the required csv extract and related data.

The GIS Officer was required to:

- Maintain the correct set of orthophotos with the latest centrelines and servitudes marked on them;
- Receive boundary vertex and centroid data for identified assets from the land surveyor;

- Map the boundary and centroid data properly identified with the asset identifiers;
- Provide images of orthophoto maps with servitude and asset information superimposed to the Database Server; and
- Source missing information identified by the validation processes from the Surveyor.

ANNEXURE 2: ASSET VERIFICATION FORMS

NOT FOR PUBLIC DISCLOSURE

(EXAMPLE VERIFICATION FORMS PROVIDED FOR REFERENCE PURPOSES)

EXAMPLE OF VERIFICATION FORMS

ASSET VERIFICATION FORM		
Type of Institution:	Name of Institution:	

Household Details

Household Head: **Raymond Mandlenkhosi**
 Household Head Surname : **Ginindza**
 Household Head ID No.: **7804016100024**
 Resident Village Name: **Mhlane**
 Region: **Mantabeni**
 Household Number: **101414**



Owner ID

SPOUSE/CO-OWNER

CoOwner First Name: **Thulisile Octavia**
 CoOwner Surname: **Maseko**
 CoOwner ID Number: **8401311100293**



Spouse/CoOwner ID

Asset Details

Asset Reference Number: **16-101414-6-245**
 Asset Type: **Dwellings/ Primary Structures Wood**
 Asset Loss Size (no./sqm): **33.00**
 X Coordinates: **2923294.379**
 Y Coordinates: **-9121.534**
 Asset Location: **Mhlane**



Asset

I/we the undersigned confirm that I/we have consented freely to participate in the Cadastral Survey and Asset Registration and confirm that I/we am/are the rightful owner of the Asset shown above, and eligible for any compensation to be paid by Water Commission in the event that these Assets will be affected by the Project. I/We further confirm that we understand and agree that we will not make any claims for any alterations, changes and additions effected to these assets as they have been registered. I/We agree that we shall address any future requests, complaints and grievances to Water Authority, Mbabane.

I, _____ have been given Power of Attorney to act on behalf of the Beneficiary/ies mentioned above and understand the content and purpose of this Asset Verification Form.

OWNER:

Name	Signature	Date

SPOUSE/
CoOwner:

Name	Signature	Date

Prepared By: <div style="text-align: center; font-size: small;">SiFutures / WSP</div>	Approved by: <div style="text-align: center; font-size: small;">Water Authority</div>	Witnessed By: <div style="text-align: center; font-size: small;">Council Rep</div>	Witnessed By: <div style="text-align: center; font-size: small;">CHIEF Stamp</div>
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Raymond Mandlenkhosi Ginindza

NONDVO DAM ASSET VERIFICATION	
LEGEND:	 Asset Loss
Imagery:	2016 ESRI Base Map
Date:	2019/06/10
Scale:	1: 1000
Compiled by:	GIS Consultant and Surveyor
Approved by:	Richard Ramoetsi
 	
Client:	Eswatini Water
	
Centroid:	Northing: 2923294.379 Easting: -9121.534
16-101414-6-245	
Mhlane	



ASSET VERIFICATION FORM



Type of Institution: _____

Name of Institution: _____

Household Details

Household Head: **Cecilia Ntombifuthi**
 Household Head Surname : **Dlamini**
 Household Head ID No.: **6506131100067**
 Resident Village Name: **Mhlane**
 Region: **Mantabeni**
 Household Number: **101415**



Owner ID

SPOUSE/CO-OWNER

CoOwner First Name: **Fikile Pauline**
 CoOwner Surname: **Dlamini**
 CoOwner ID Number: **5611221100133**



Spouse/CoOwner ID

Asset Details

Asset Reference Number: **16-101415-24-259**
 Asset Type: **Toilets**
 Asset Loss Size (no./sqm): **2.00**
 X Coordinates: **2923103.964**
 Y Coordinates: **-8829.310**
 Asset Location: **Mhlane**



Asset

I/We the undersigned confirm that I/we have consented freely to participate in the Cadastral Survey and Asset Registration and confirm that I/we am/are the rightful owner of the Asset shown above, and eligible for any compensation to be paid by Water Commission in the event that these Assets will be affected by the Project. I/We further confirm that we understand and agree that we will not make any claims for any alterations, changes and additions effected to these assets as they have been registered. I/We agree that we shall address any future requests, complaints and grievances to Water Authority, Mbabane.

I, _____ have been given Power of Attorney to act on behalf of the Beneficiary/ies mentioned above and understand the content and purpose of this Asset Verification Form.

OWNER:





Name	Signature	Date

SPOUSE/
CoOwner:

Name	Signature	Date

Prepared By: <div style="text-align: center; font-size: small; color: gray;">SiFutures / WSP</div>	Approved by: <div style="text-align: center; font-size: small; color: gray;">Water Authority</div>	Witnessed By: <div style="text-align: center; font-size: small; color: gray;">Council Rep</div>	Witnessed By: <div style="text-align: center; font-size: small; color: gray;">CHIEF Stamp</div>
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Cecilia Ntombifuthi Dlamini

NONDVO DAM ASSET VERIFICATION	
LEGEND:	 Asset Loss
Imagery:	2016 ESRI Base Map
Date:	2019/06/10
Scale:	1: 1000
Compiled by:	GIS Consultant and Surveyor
Approved by:	Richard Ramoelisi
 	
Client:	Eswatini Water
	
Centroid:	Northing: 2923103.964 Easting: -8829.31
16-101415-24-259	
Mhlane	



ANNEXURE 3: RAP DATABASE

ELECTRONIC FORMAT ONLY

END

APPENDIX

J ENLARGED MAPS





Figure 0-1: Map indicating the Project Location

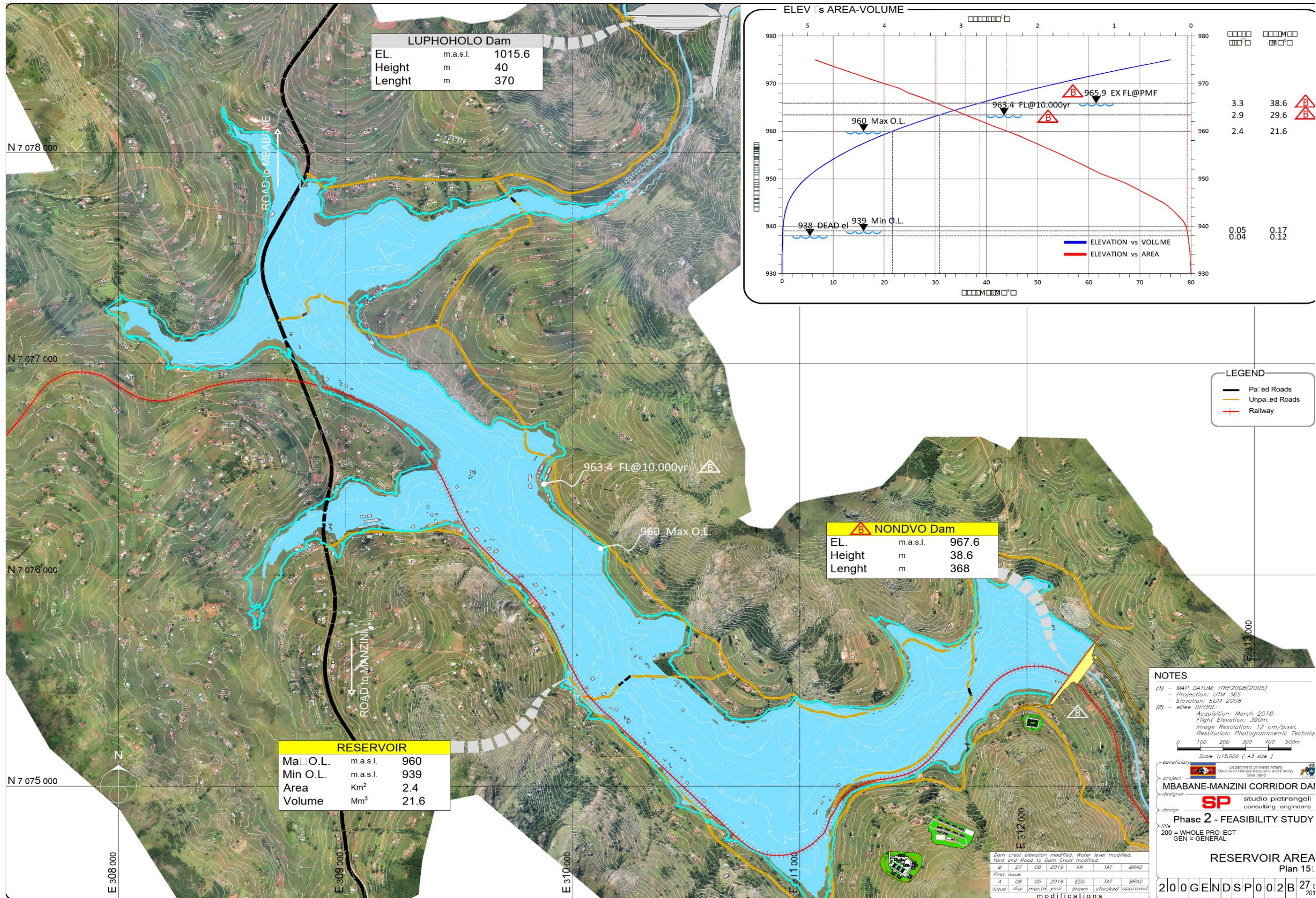


Figure 0-2: Nondvo Dam Layout

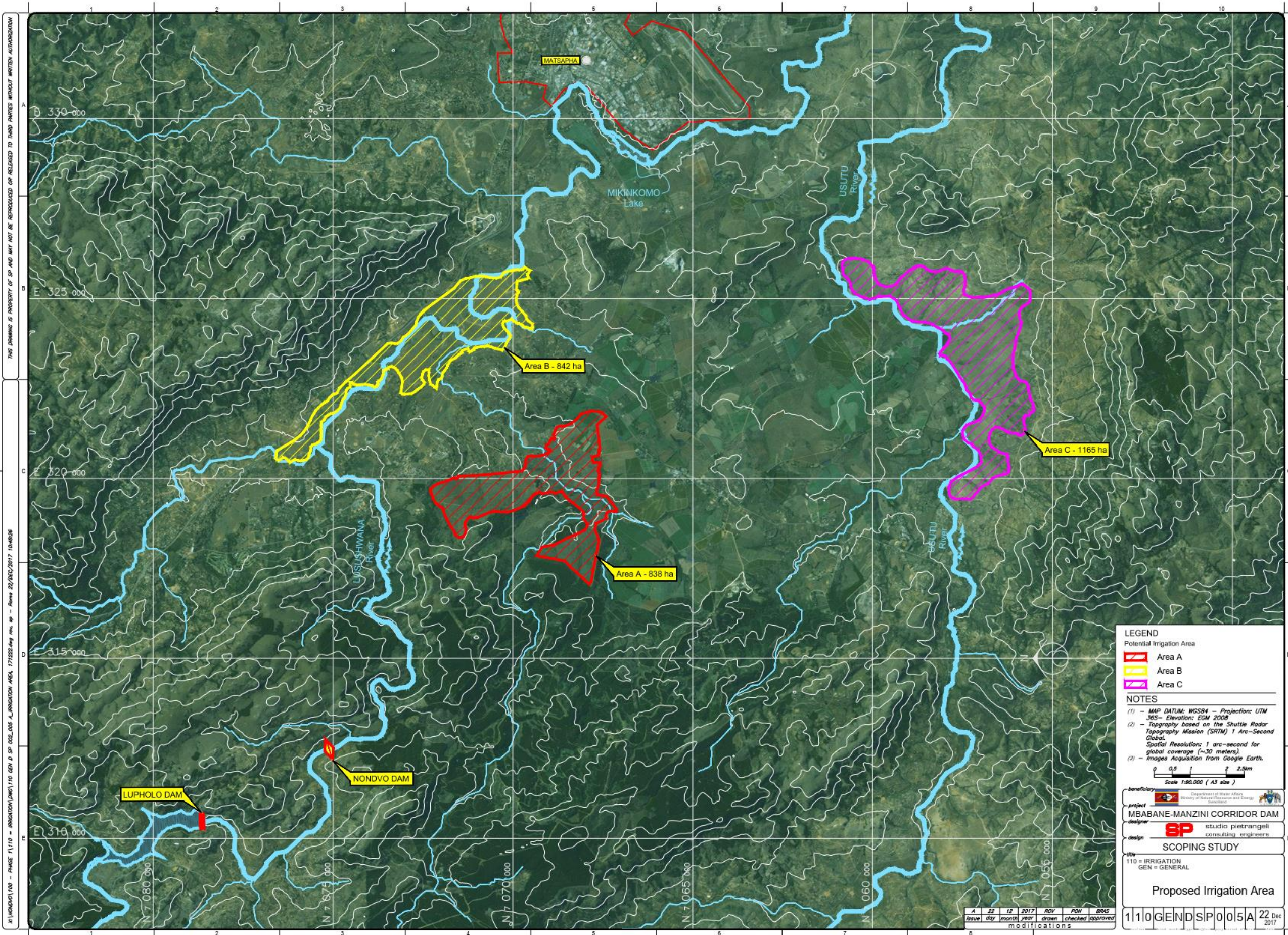


Figure 0-3: Proposed Irrigation Areas



Figure 0-5: Proposed Nondvo Dam



Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community

Nondvo Dam

Quarry Area

Legend

- Proposed Nondvo Dam
- Quarry



DATA SOURCE:
ARC GIS 10.2

PROJECTION: UTM Zone 35S (WGS1984)

PROJECT TITLE: NONDVO DAM ESIA

PROJECT NO: 41101262

SCALE: 1:5 000 AT A4 DATE: 2020/07/13

DRAWN BY: ANRI SCHEEPERS

REVIEWED BY: ROBERT ELS



DISCLAIMER

The information on this figure was derived from various digital databases available to WSP Environmental (Pty) Ltd. All information is provided "as is" and it must be acknowledged that data, information, and maps are dynamic and in a constant state of maintenance, correction and update. WSP Environmental (Pty) Ltd cannot accept any responsibility for errors, omissions, or positional accuracy where it has not been directly responsible for the production of the data referenced. There are no warranties, expressed or implied, as to the use of this information, including the warranty of merchantability or fitness for a particular purpose. Notification of any errors will be appreciated.

Figure 0-6: Location of Quarry Area



<h3>Nondvo Dam</h3> <p>Site Offices, Workers Camp and Management Camp</p>	
<p>Legend</p> <ul style="list-style-type: none"> — MR 19 Proposed Nondvo Dam Workers Camp Offices Management's Camp Quarry 	
<p>0 125 250 375 500 625 Meters</p>	
<p>DATA SOURCE: ARC GIS 10.2</p>	
<p>PROJECTION: UTM Zone 35S (WGS1984)</p>	
<p>PROJECT TITLE: NONDVO DAM ESIA</p>	
<p>PROJECT NO: 41181282</p>	
<p>SCALE: 1:17 707 A4</p>	<p>DATE: 2020/07/13</p>
<p>DRAWN BY: ANRI SCHEEPERS</p>	
<p>REVIEWED BY: ROBERT ELS</p>	
<p>WWW.WSP.COM</p>	
<p>DISCLAIMER</p> <p><small>The information on this figure was derived from various digital databases available to WSP Environmental (Pty) Ltd. All information is provided "as is" and is used for informational purposes only. WSP Environmental (Pty) Ltd. cannot accept any responsibility for errors, omissions, or positional accuracy where it has not been directly responsible for the production of the data referenced. There are no warranties, expressed or implied, as to the use of this information, including the accuracy, completeness or fitness for a particular purpose. Utilization of any errors will be appreciated.</small></p>	

Figure 0-7: Layout Showing Proposed Location and Extent of the Site Offices, Workers Camp and Management Camp



Figure 0-8: Satellite View of the Preliminary Selected Perimeter for Targeted Areas



Nondvo Dam

MR19 - Northern
Affected Section

Legend

- Existing MR 19
- Proposed MR19 Relocation
- Proposed Nondvo Dam



DATA SOURCE:
ARC GIS 10.2

PROJECTION: UTM Zone 35S (WGS1984)

PROJECT TITLE: NONDVO DAM ESIA

PROJECT NO: 41101262

SCALE: 1:11 284 AT A4 DATE: 2020/07/13

DRAWN BY: ANRI SCHEEPERS

REVIEWED BY: ROBERT ELS



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Figure 0-9: Layout Showing the Northern Affected Section of the MR19



Nondvo Dam

MR19 - Southern
Affected Section

Legend

- Existing MR 19
- Proposed MR19 Relocation
- Proposed Nondvo Dam



DATA SOURCE:
ARC GIS 10.2

PROJECTION: UTM Zone 35S (WGS1984)

PROJECT TITLE: NONDVO DAM ESIA

PROJECT NO: 41101202

SCALE: 1:8 184 AT A4 DATE: 2020/07/13

DRAWN BY: ANRI SCHEEPERS

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Figure 5 34: Layout Showing the Southern Affected Section of the MR19



Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community

Nondvo Dam	
Relocation MR19	
Legend	
	Existing MR 19
	Proposed MR19 Relocation
	Proposed Nondvo Dam
DATA SOURCE: ARC GIS 10.2	
PROJECTION: UTM Zone 35S (WGS1984)	
PROJECT TITLE: NONDVO DAM ESIA	
PROJECT NO: 41101262	
SCALE: 1:20 000 AT A4	DATE: 2020/07/13
DRAWN BY: ANRI SCHEEPERS	
REVIEWED BY: ROBERT ELS	
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Figure 5 35: MR19 Proposed Realignment



Figure 5 36: Internal Road Network, including Four Low-level Crossings, Affected by Reservoir

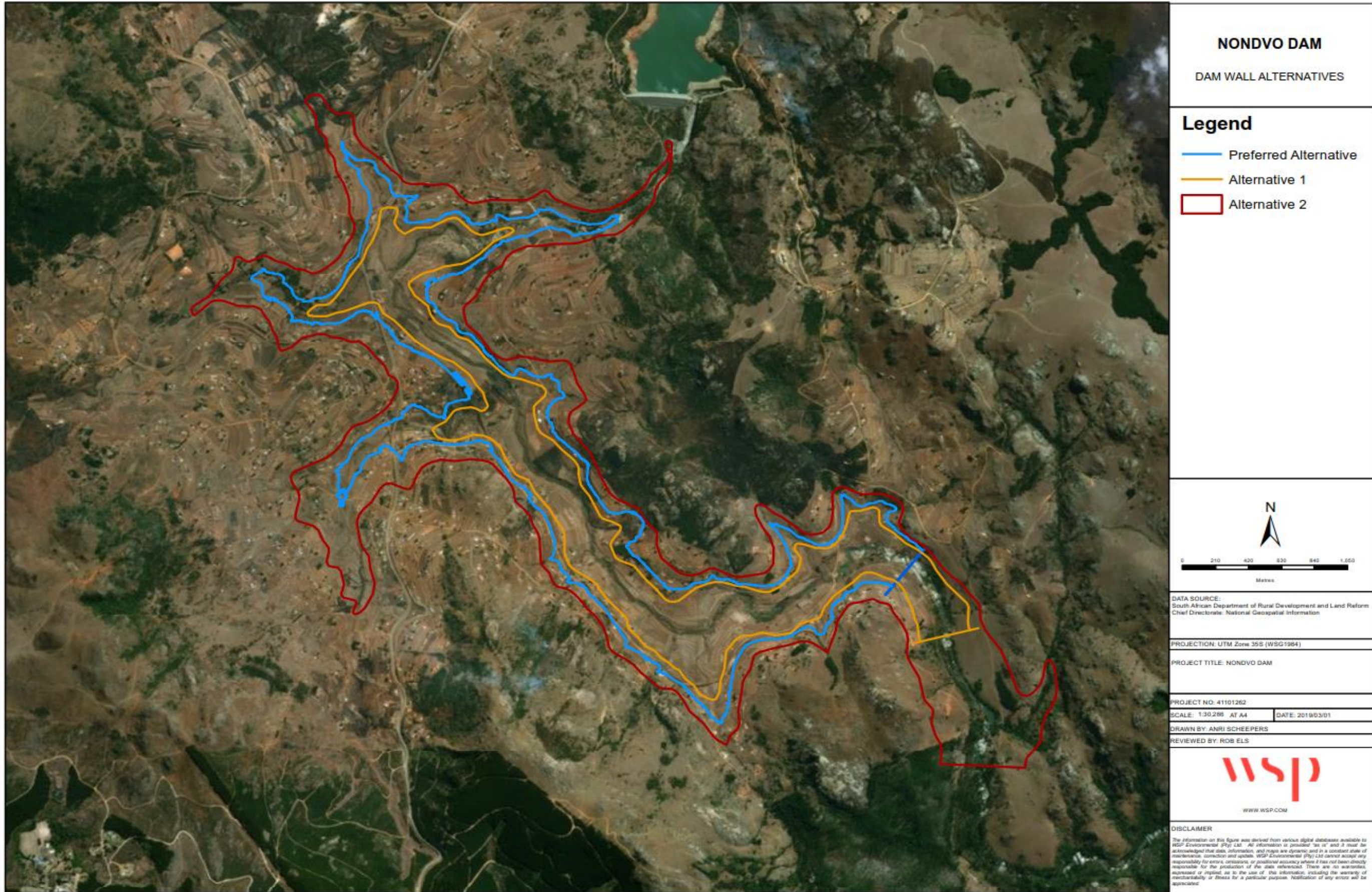


Figure 0-10: Reservoir Footprint of Dam Wall Location Alternatives (Studio Pietrangeli Consulting Engineers, 2017)

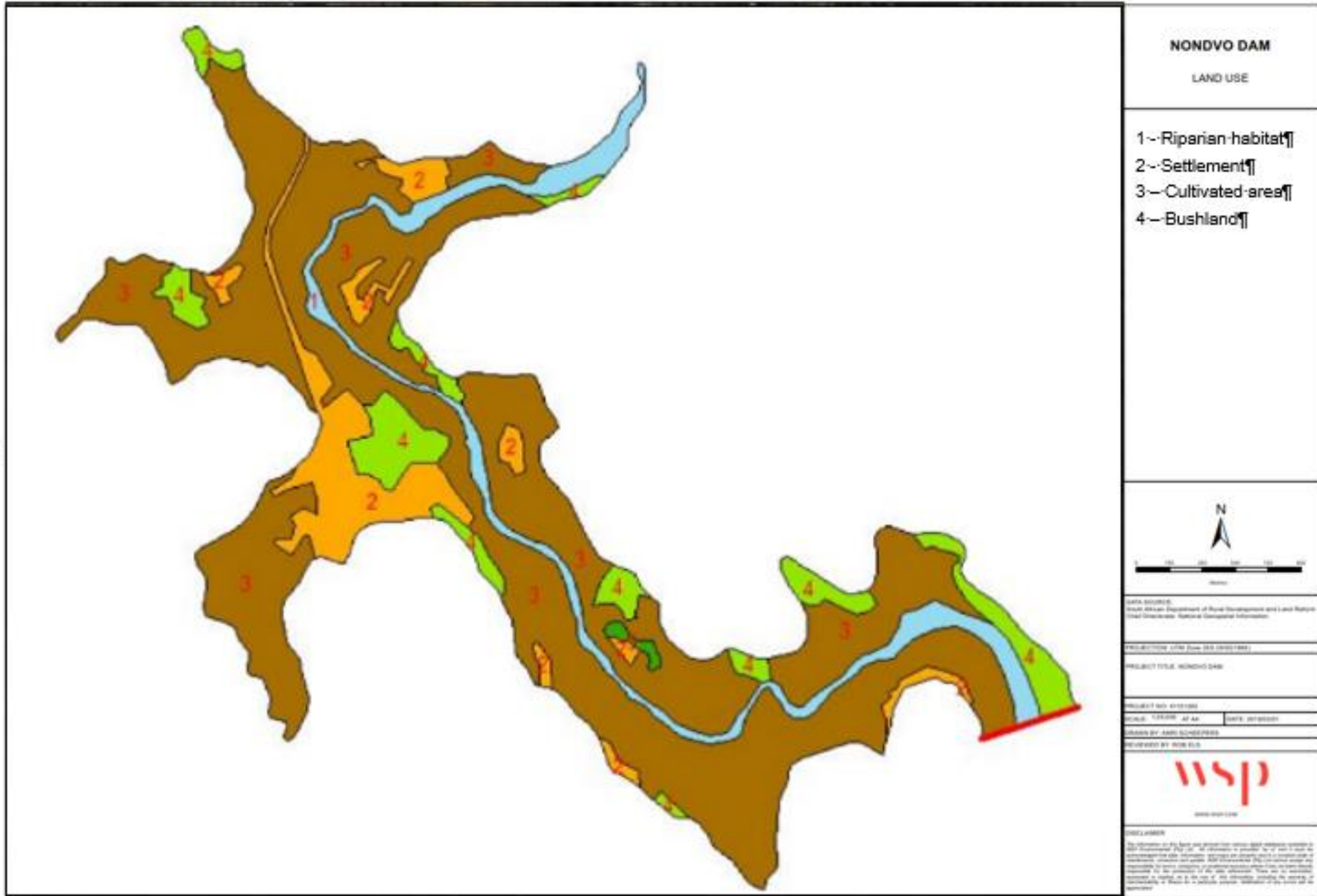


Figure 0-11: Land Use within Inundated Area for 980 masl Crest Height (Alt 1)

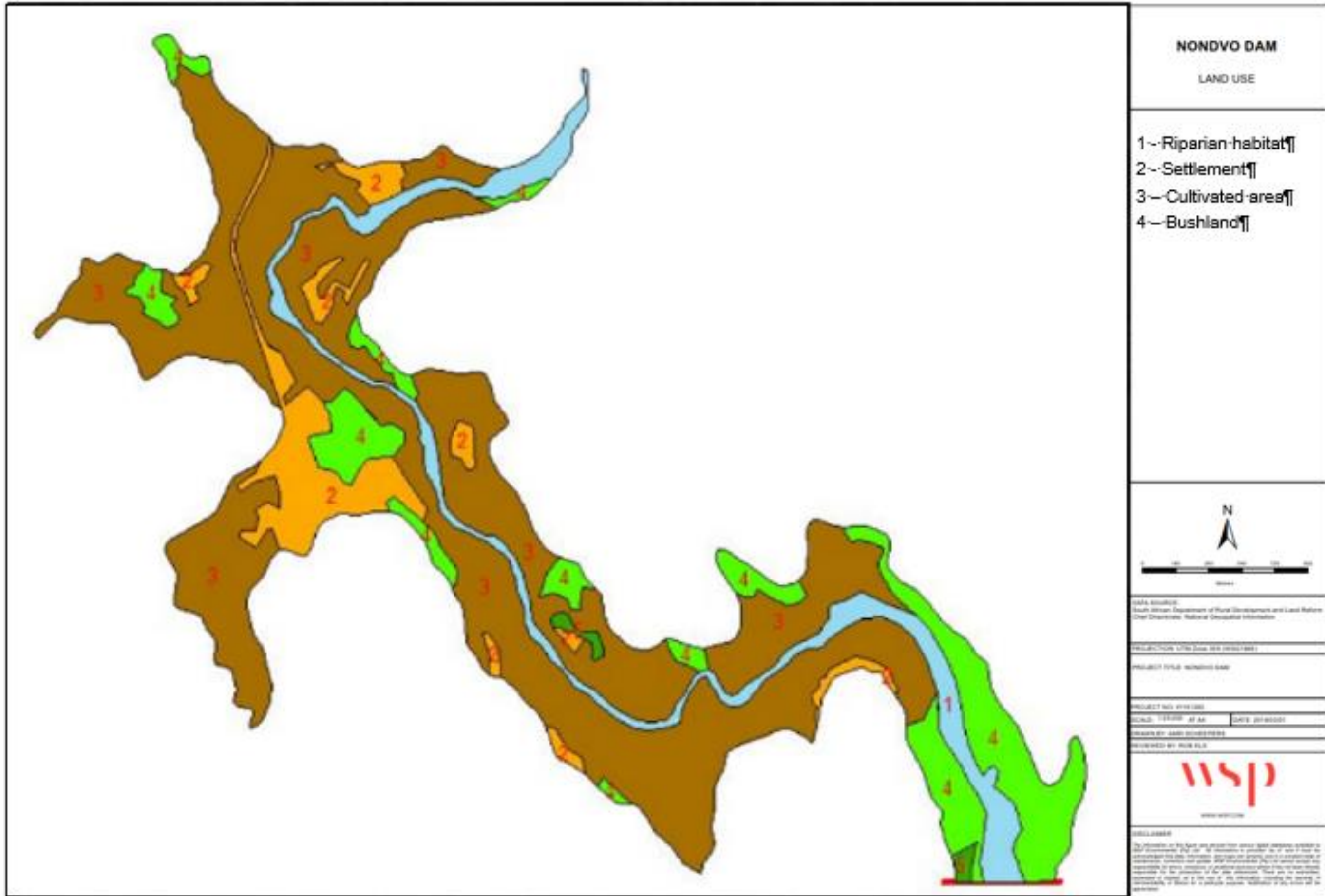
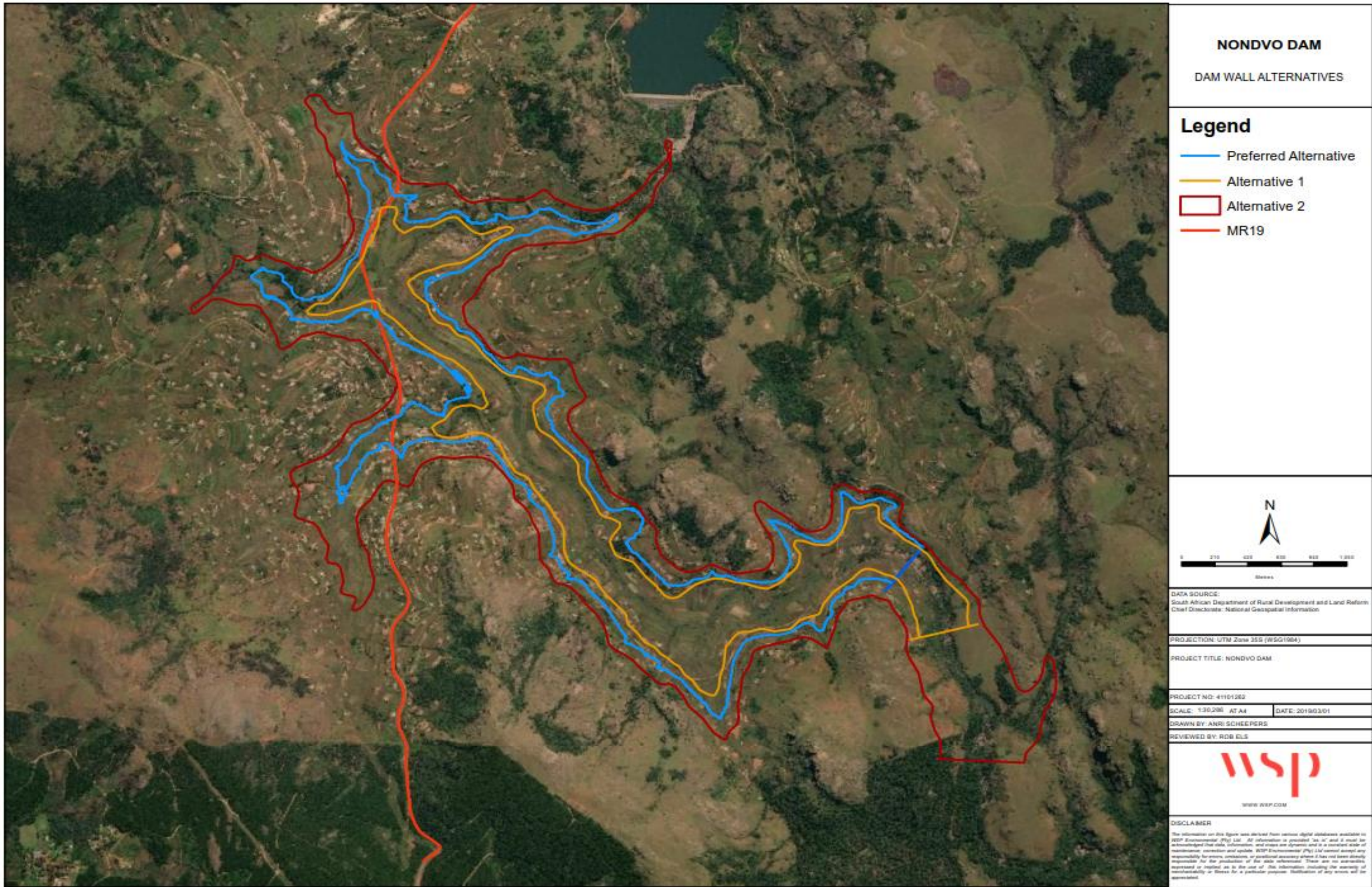


Figure 0-12: Land Use within Inundated Area for 980 masl Crest Height (Alt 2)

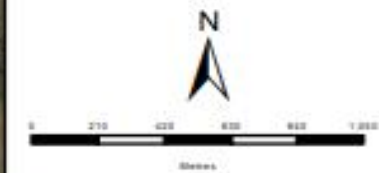


NONDVO DAM

DAM WALL ALTERNATIVES

Legend

- Preferred Alternative
- Alternative 1
- Alternative 2
- MR19



DATA SOURCE:
South African Department of Rural Development and Land Reform
Chief Directorate: National Geospatial Information

PROJECTION: UTM Zone 35S (WGS1984)

PROJECT TITLE: NONDVO DAM

PROJECT NO: 41101262

SCALE: 1:30,296 AT A4 DATE: 201903/01

DRAWN BY: ANR SCHEEPERS

REVIEWED BY: ROB ELS



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Figure 0-13: Dam Wall Alternatives in Relation to Existing Roads

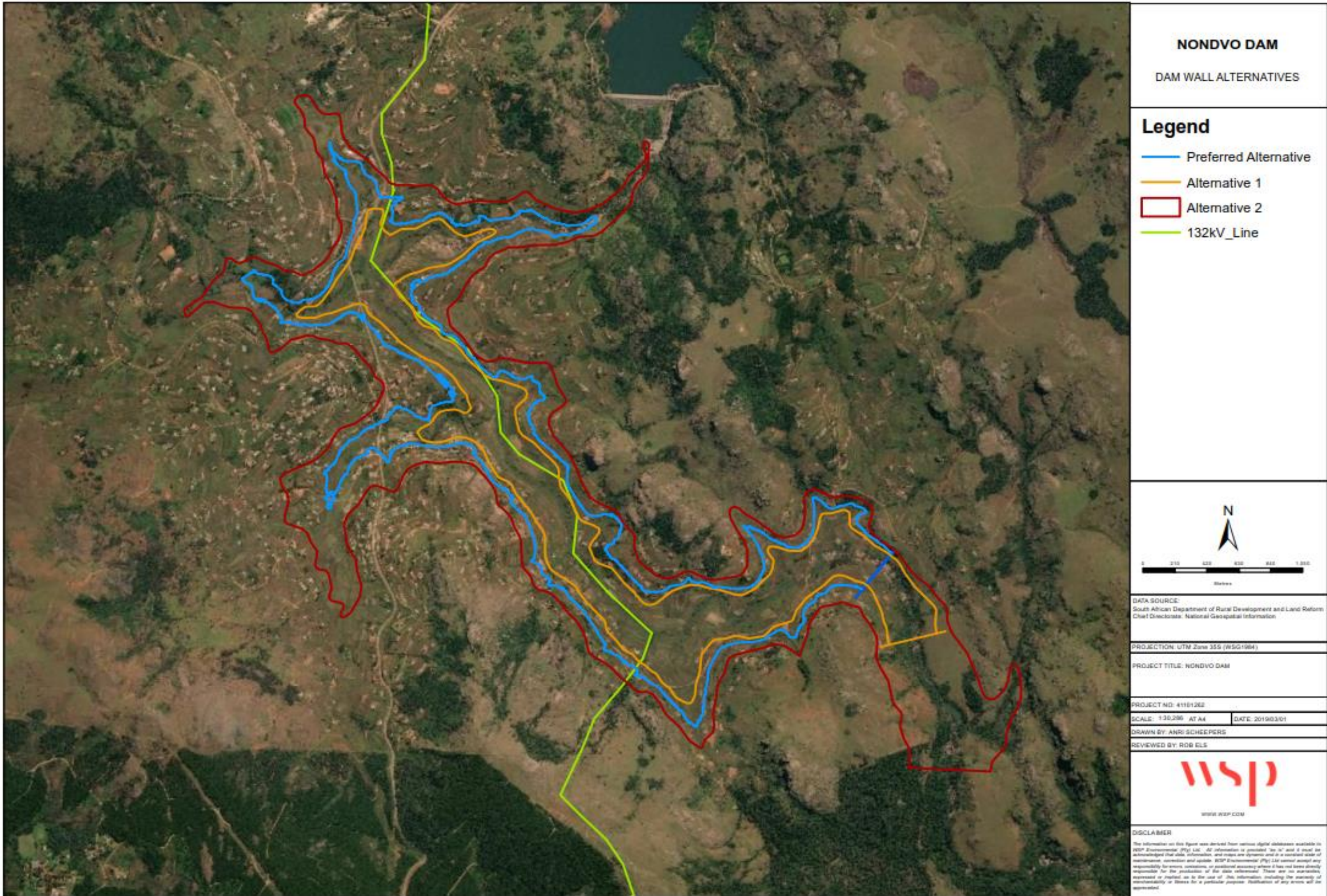


Figure 0-14: Dam Wall Alternatives in Relation to the 132KV Powerline

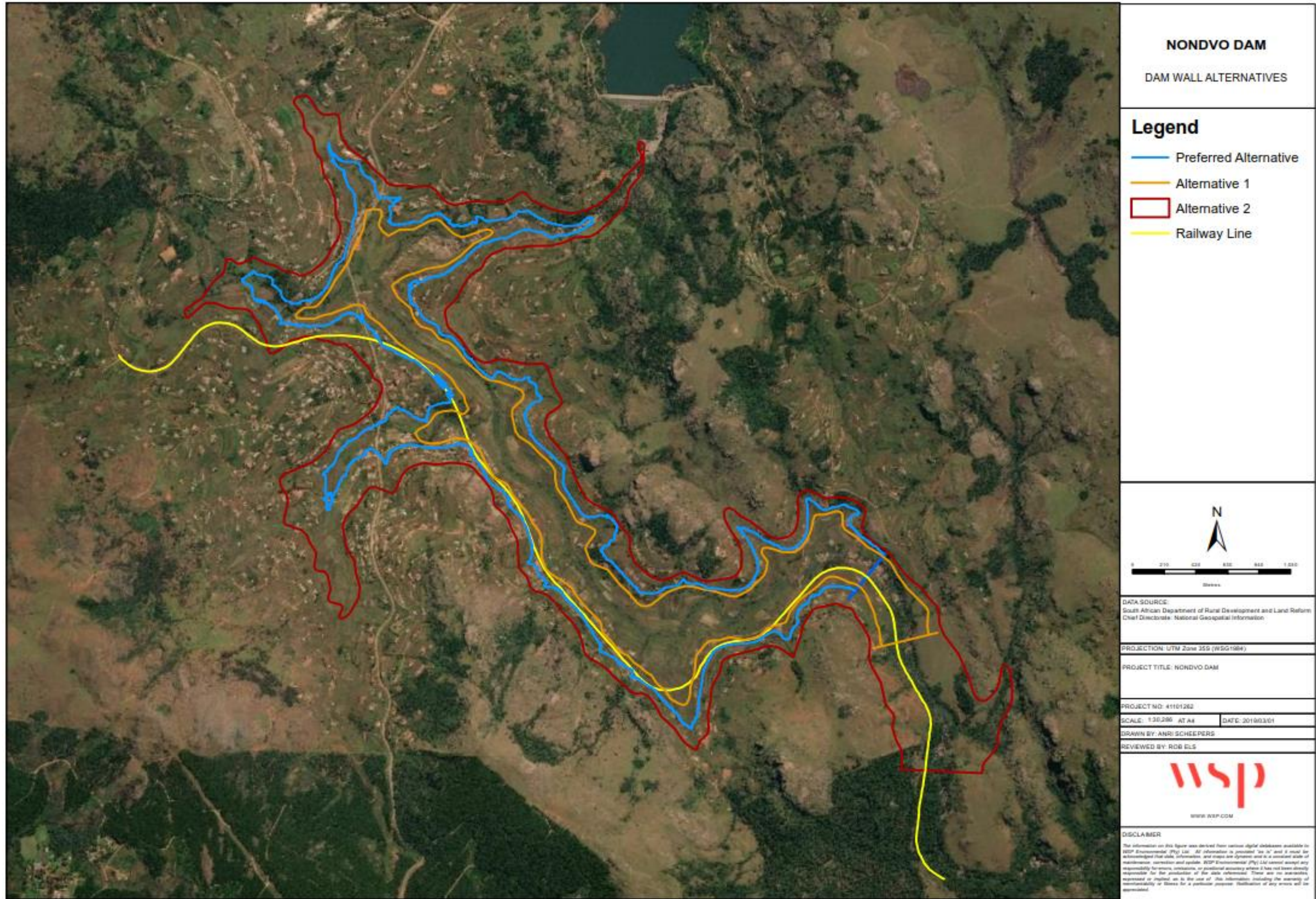


Figure 0-15: Dam Wall Alternatives in Relation to the Railway Line

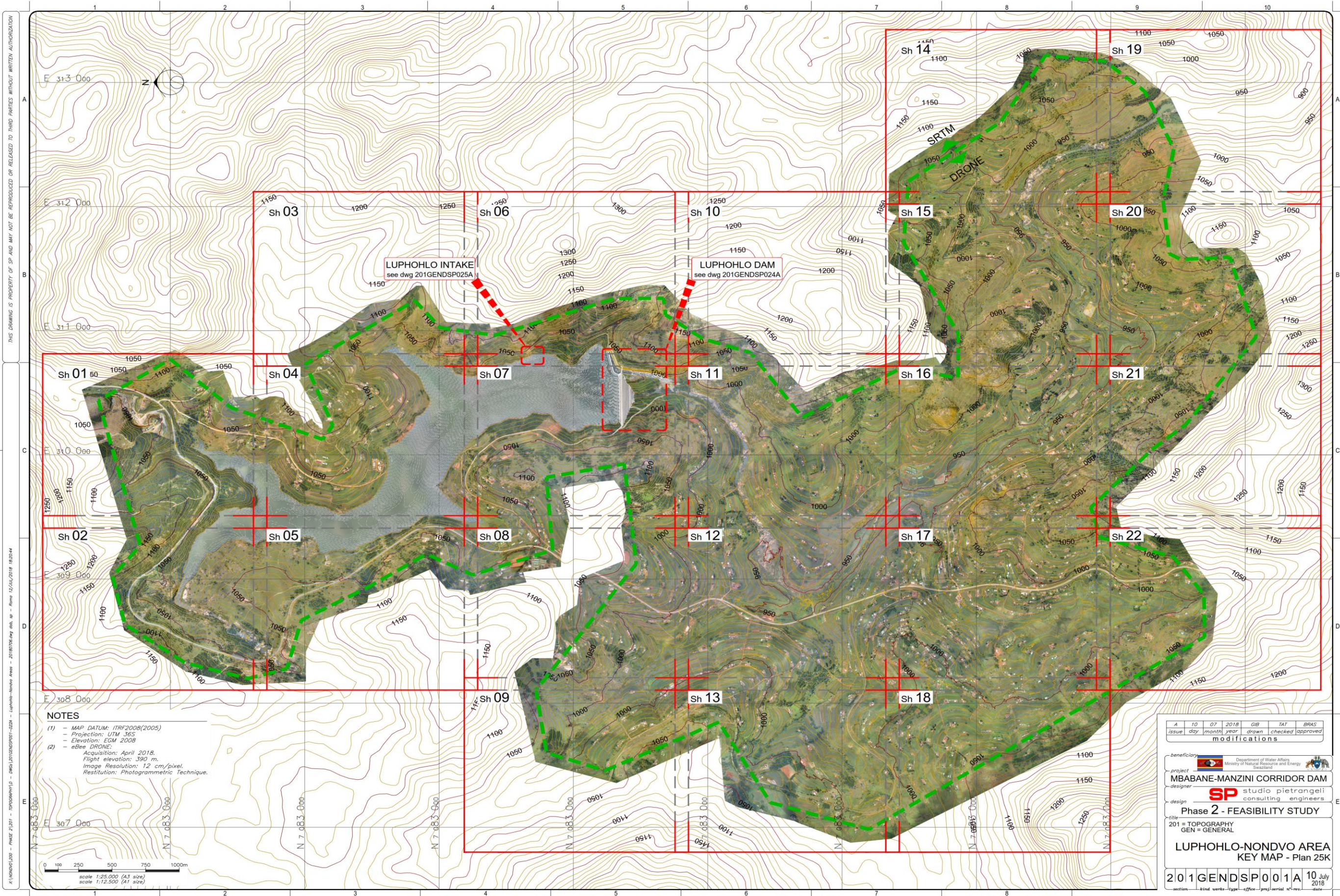


Figure 0-16: Topographical Survey Extent

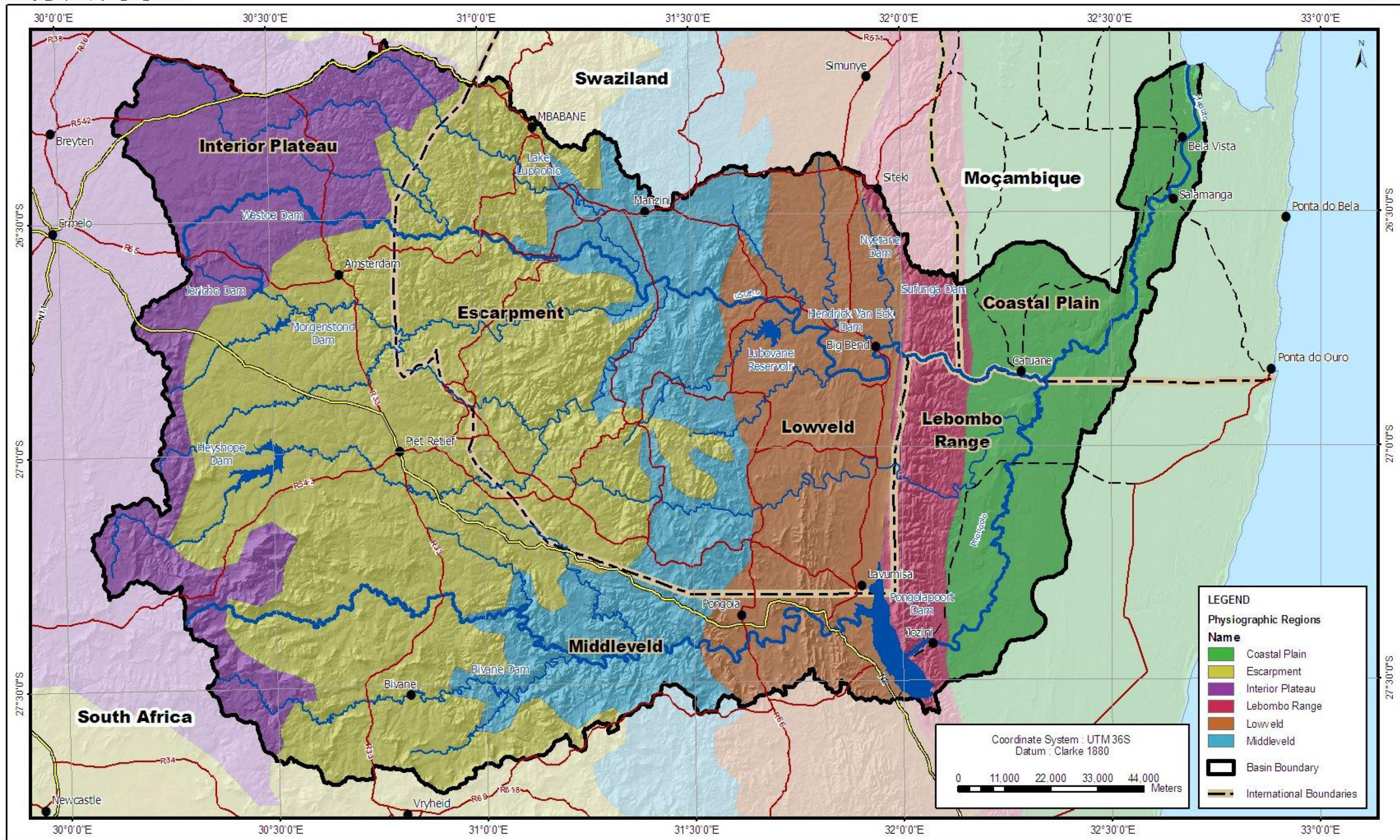


Figure 0-17: Physiographic Regions of the Maputo River Basin (Source: (Beuster, 2008))

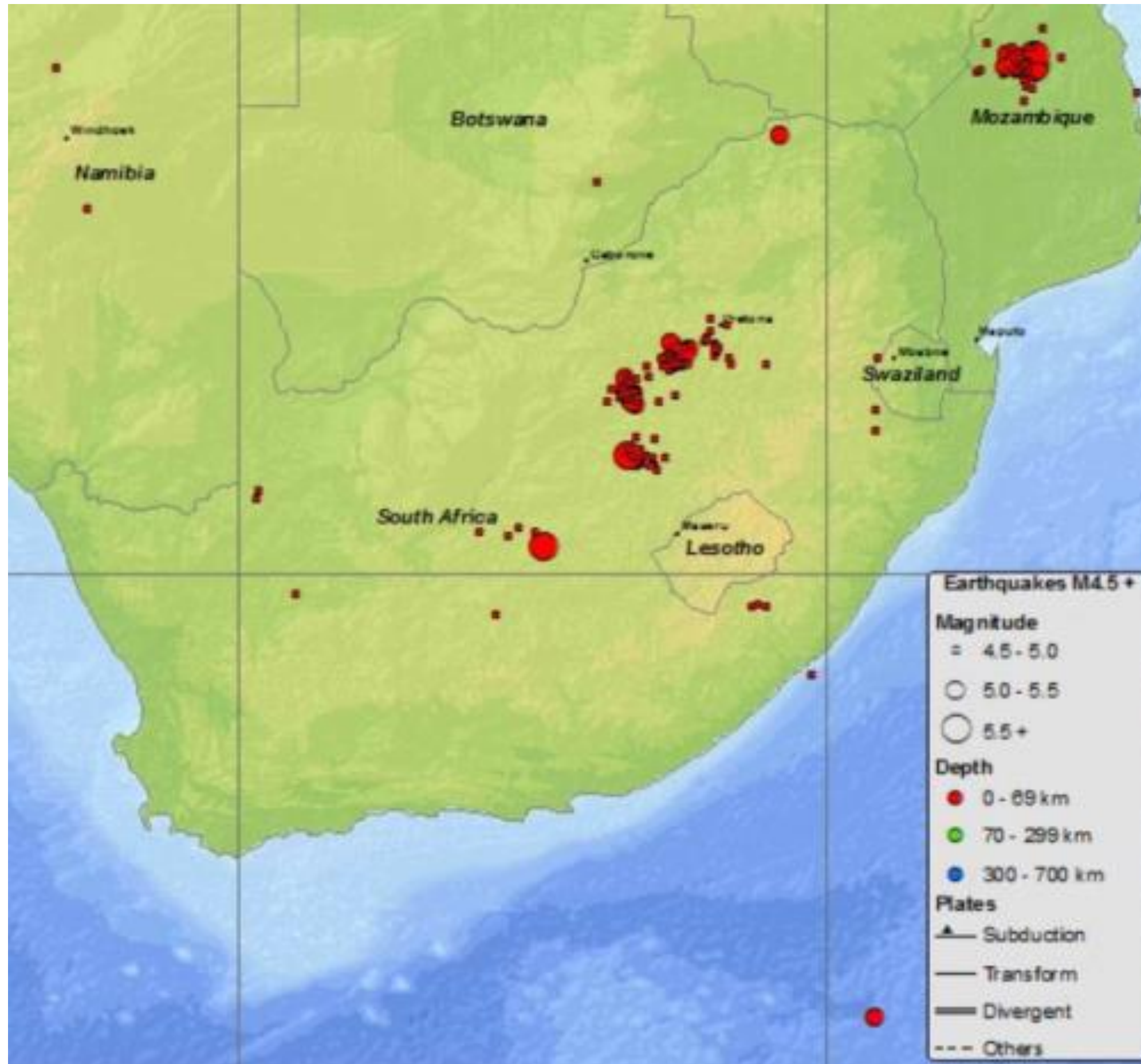


Figure 0-18: Southern Africa: Seismicity Map (Studio Pietrangeli, 2019)

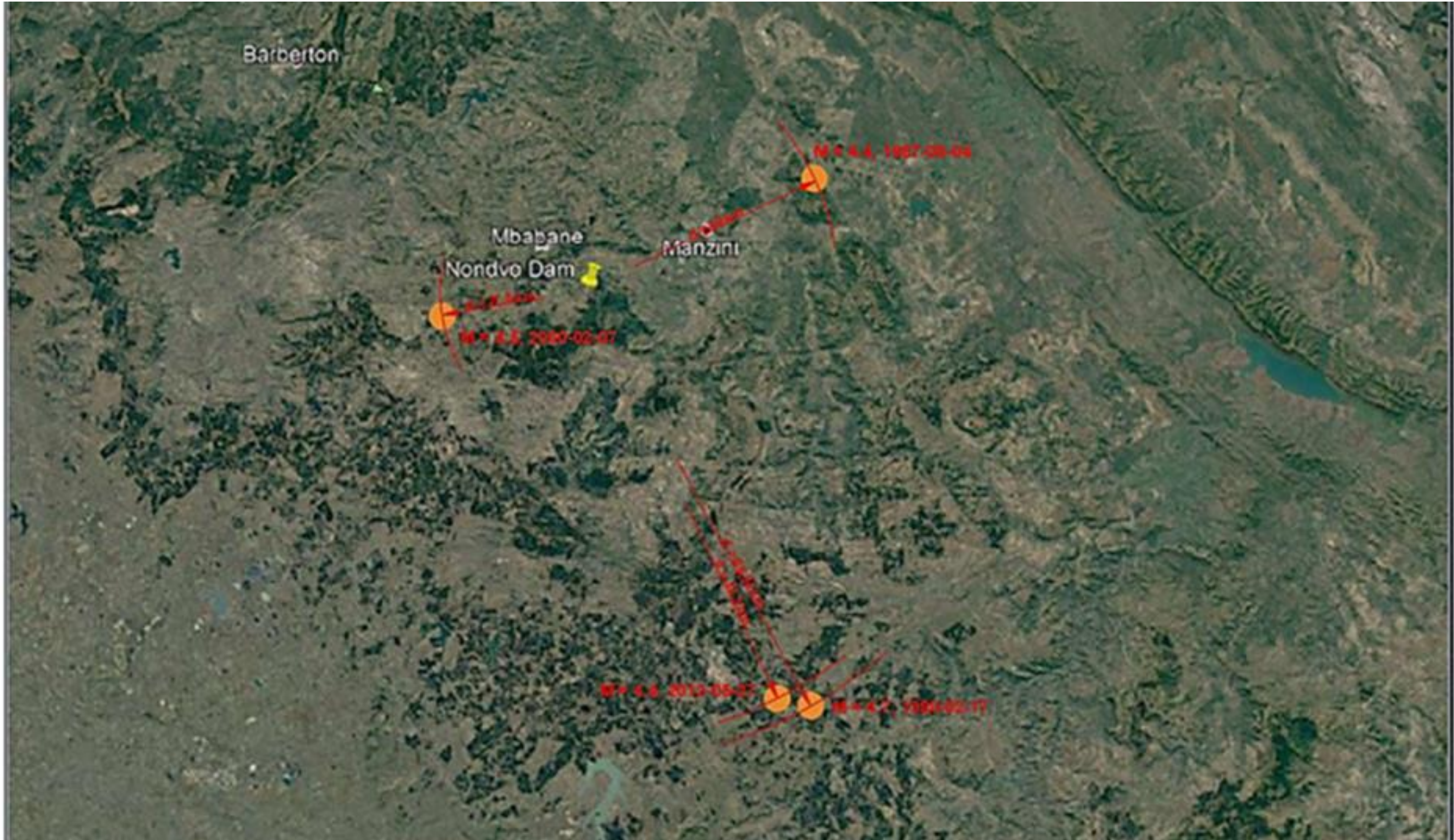
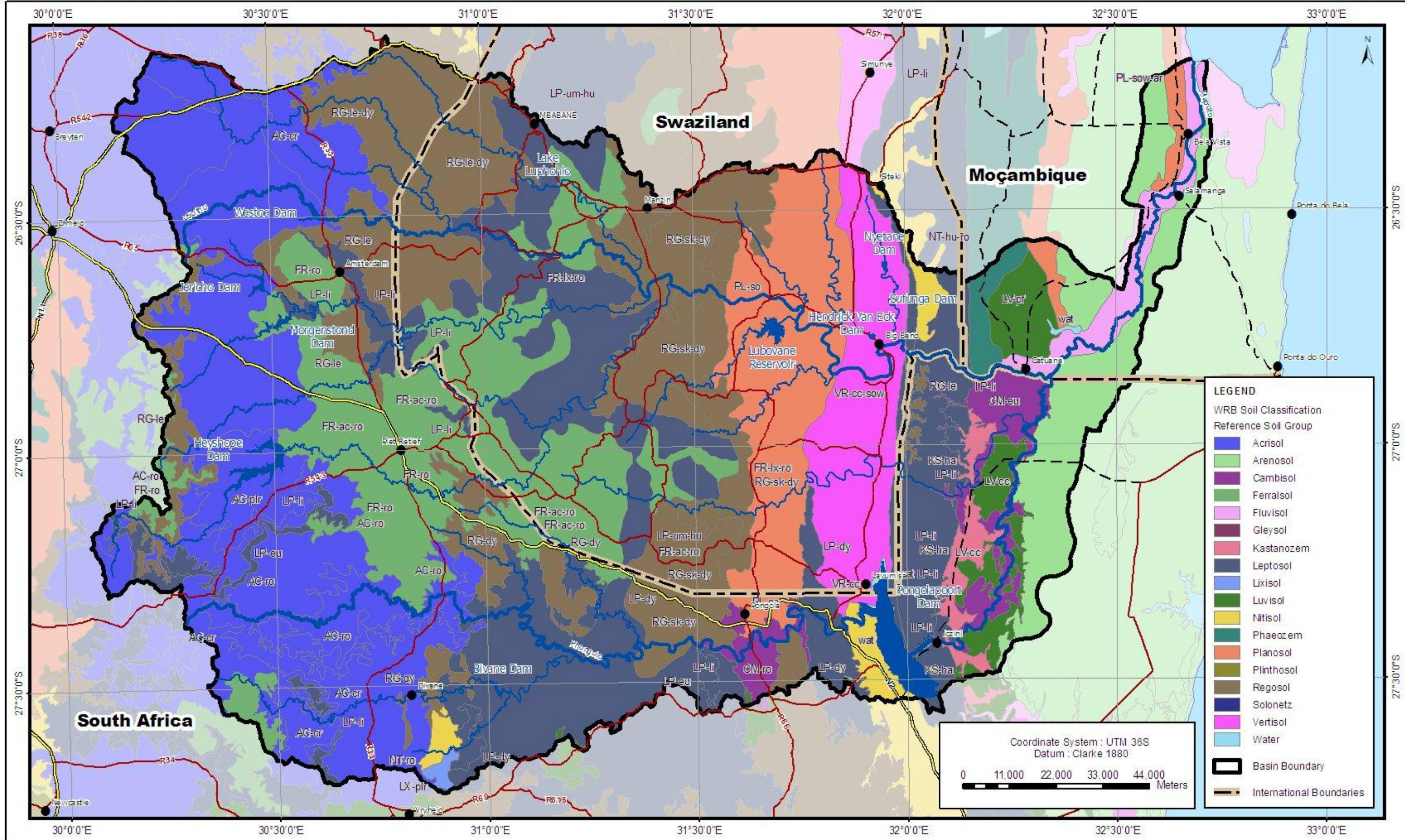


Figure 7 7: Distribution of Earthquake Eepicentres Close the Project Area since 1900 (ref. USGS Earthquake Catalog)



Project Team :
 PlanCenter Ltd
 in association with
 Ninham Shand Consulting Services
 Water for Africa
 Diversity and Transformation Solutions

Joint Maputo River Basin Water Resources Study

Soils

Client :
 Prepared for the Kingdom of Swaziland
 Ministry of Natural Resources and Energy
 Water Resources Branch
 Acting on behalf of:
 The Tripartite Permanent Technical Committee
 (TPTC) of Mozambique, South Africa & Swaziland

Figure 0-19: Soils of the Maputo River Basin

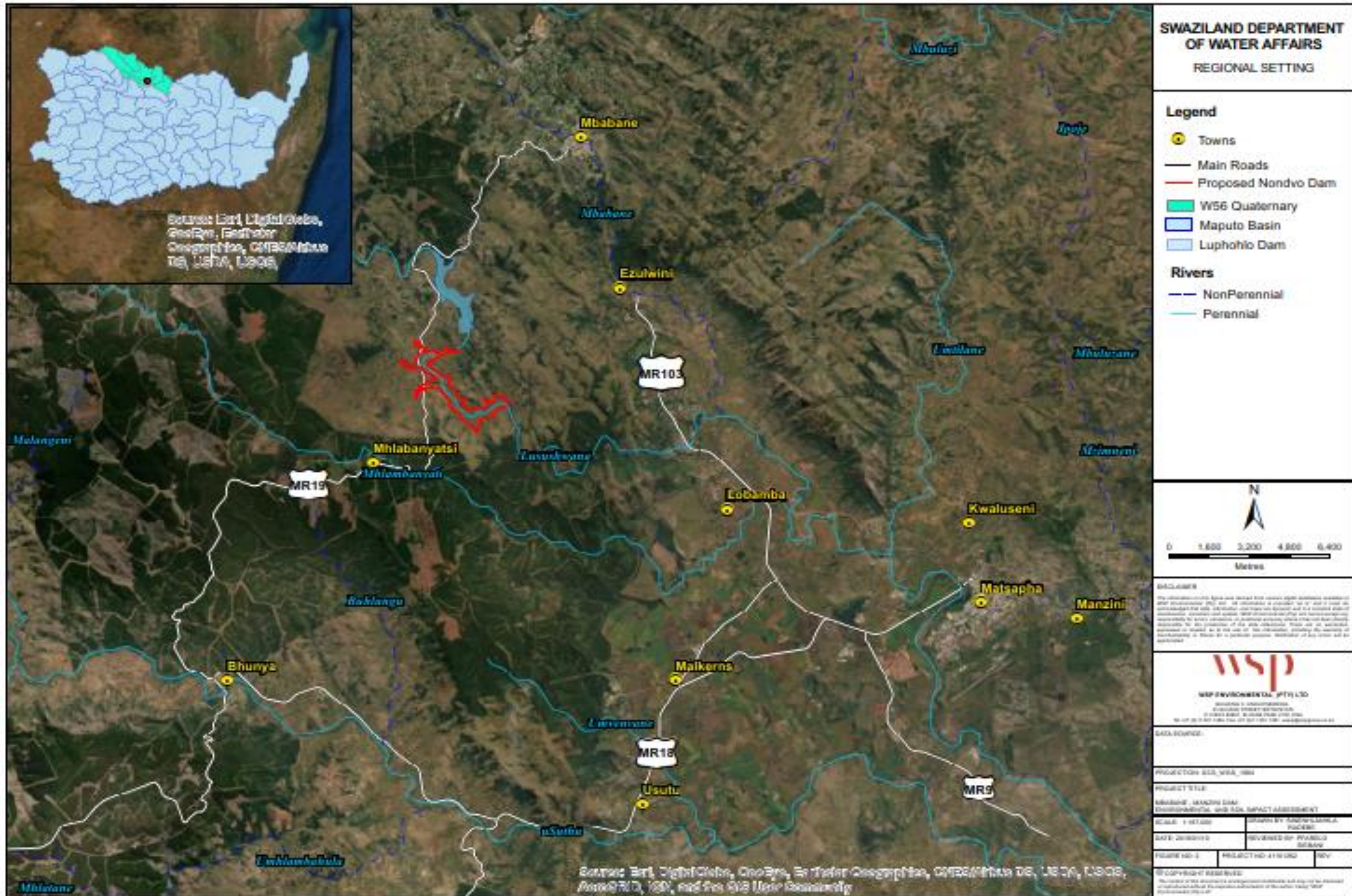


Figure 0-20: Regional Drainage Setting (WSP, 2019)



Figure 0-22: Local Hydrological Setting (TBC, 2019)

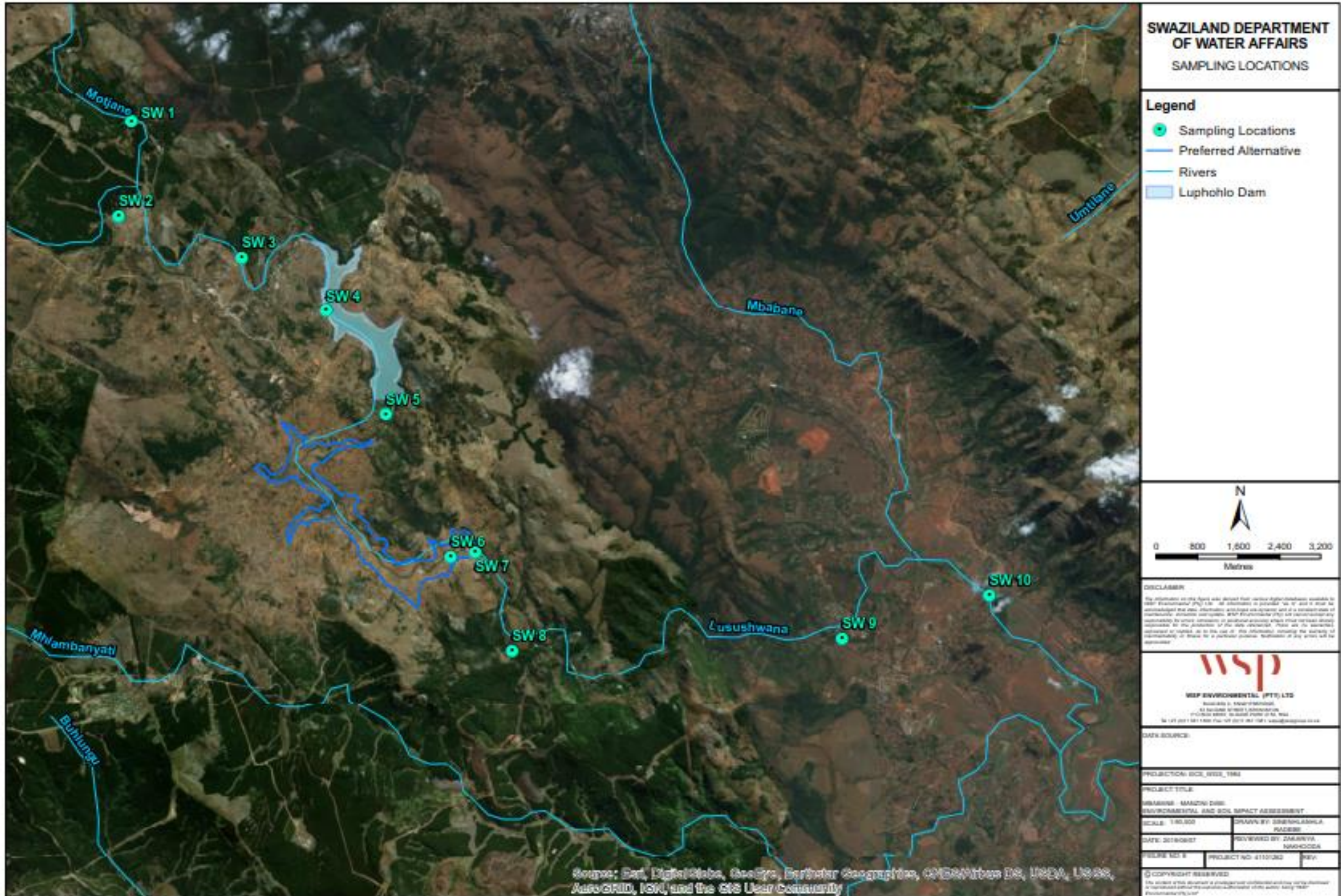


Figure 0-23: Water Quality Sampling Locations

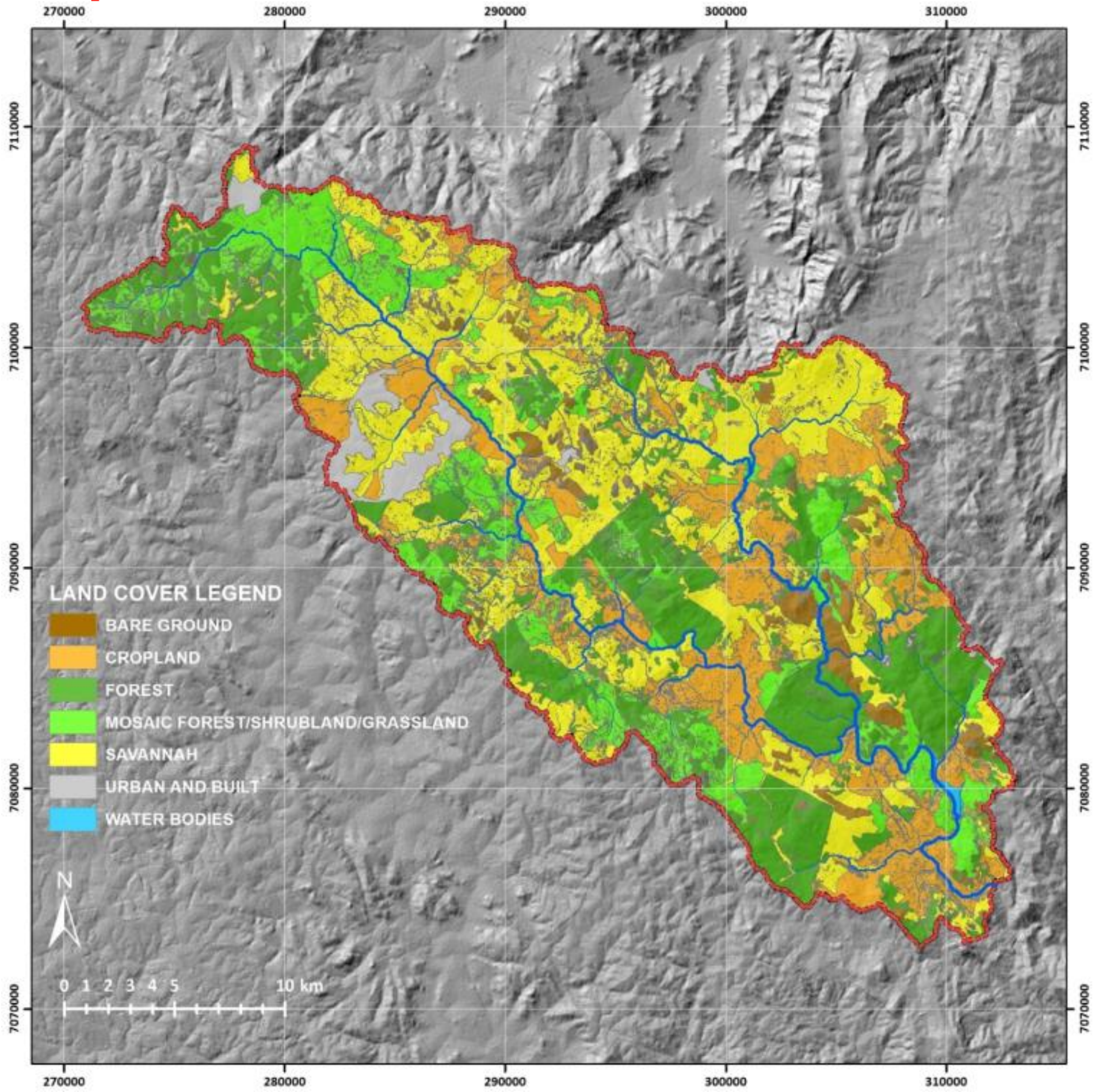


Figure 0-24: Land Use within the Project Affected Area (Studio Pietrangeli, 2018)

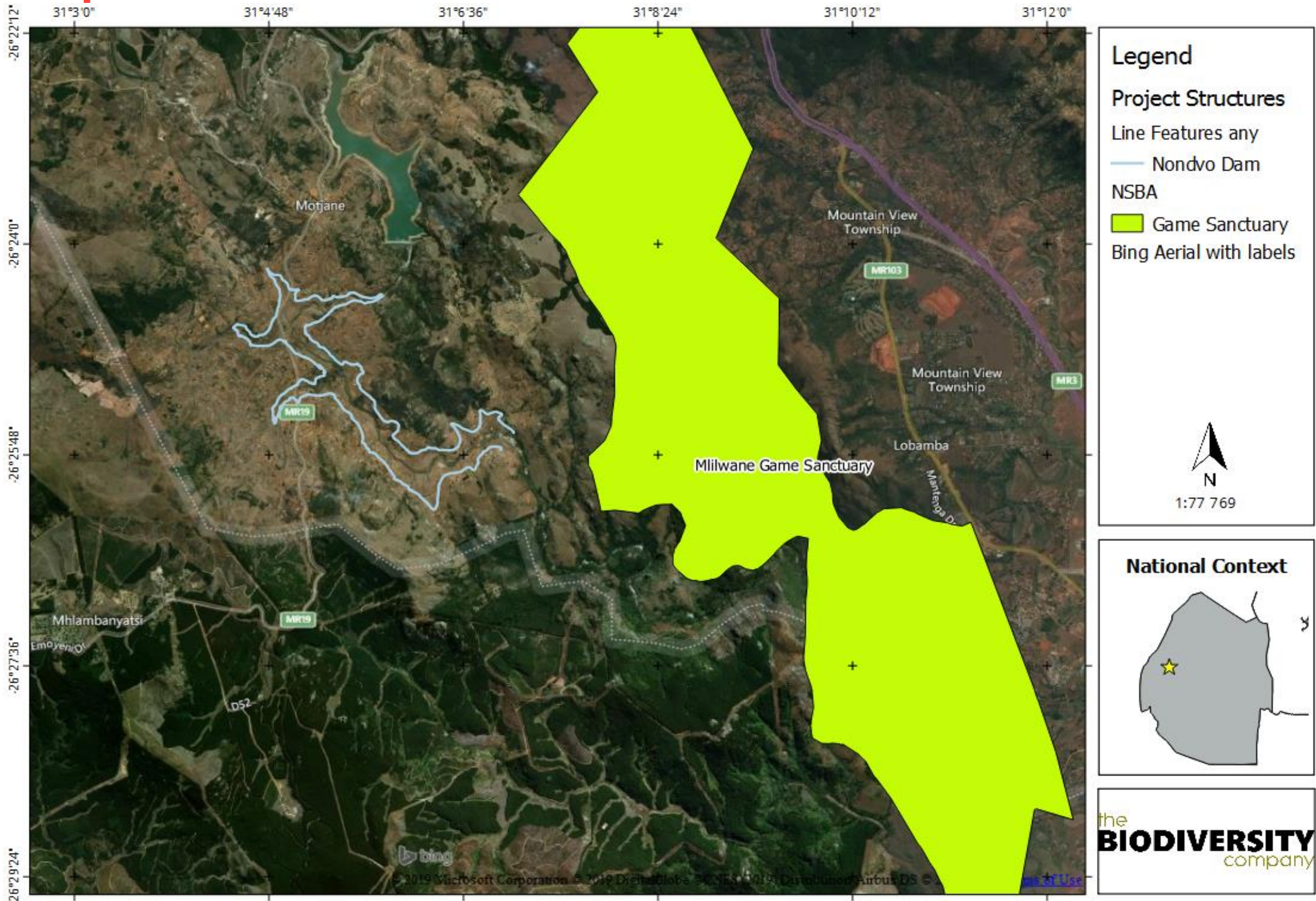


Figure 0-25: Formally Protected Areas Adjacent to the Project Area (Source, <http://www.thekingdomofeswatini.com/central-eswatini/mantenga-reserve-village-falls/>)

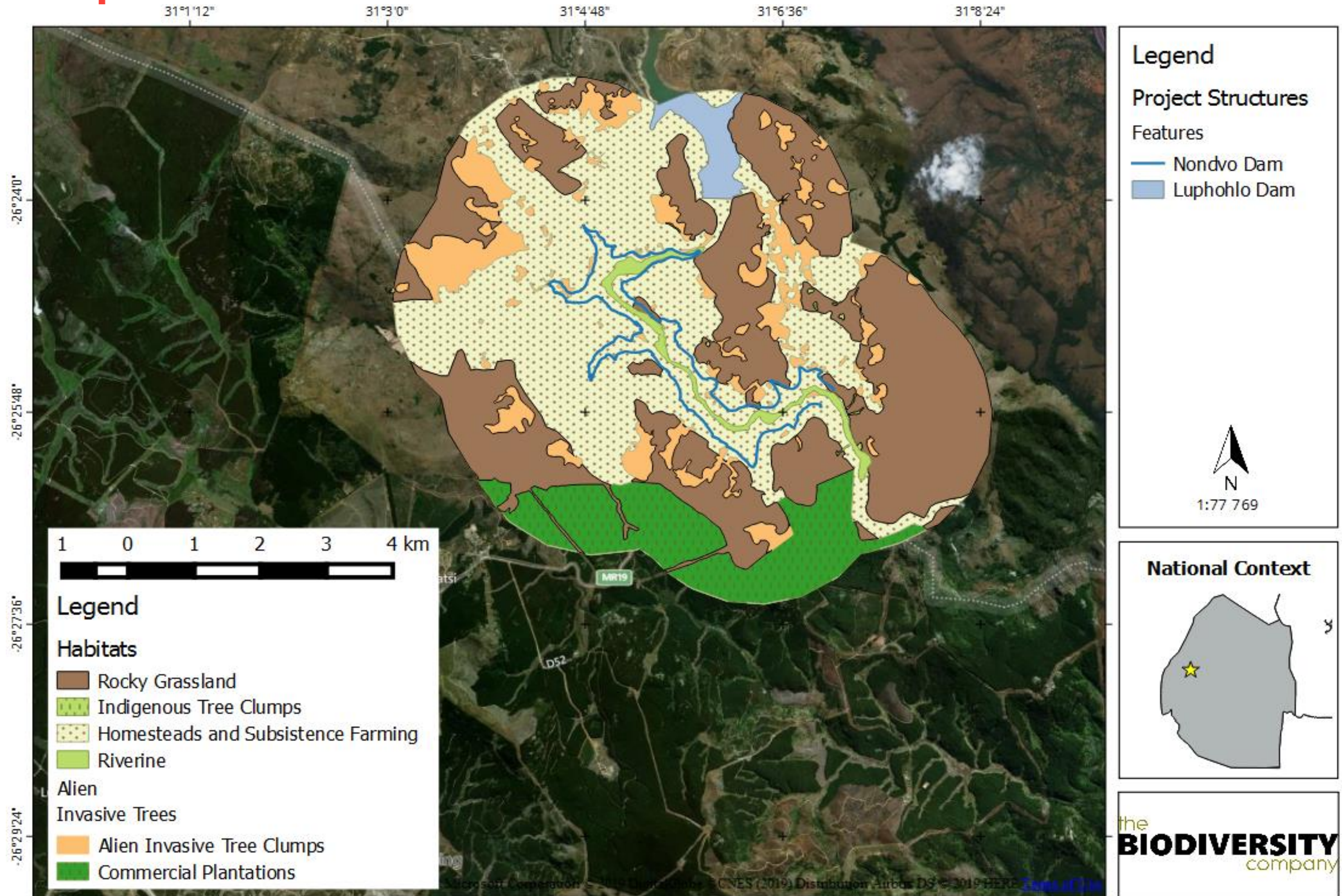


Figure 0-26: Habitats Delineated for the Project Area (TBC, 2019)

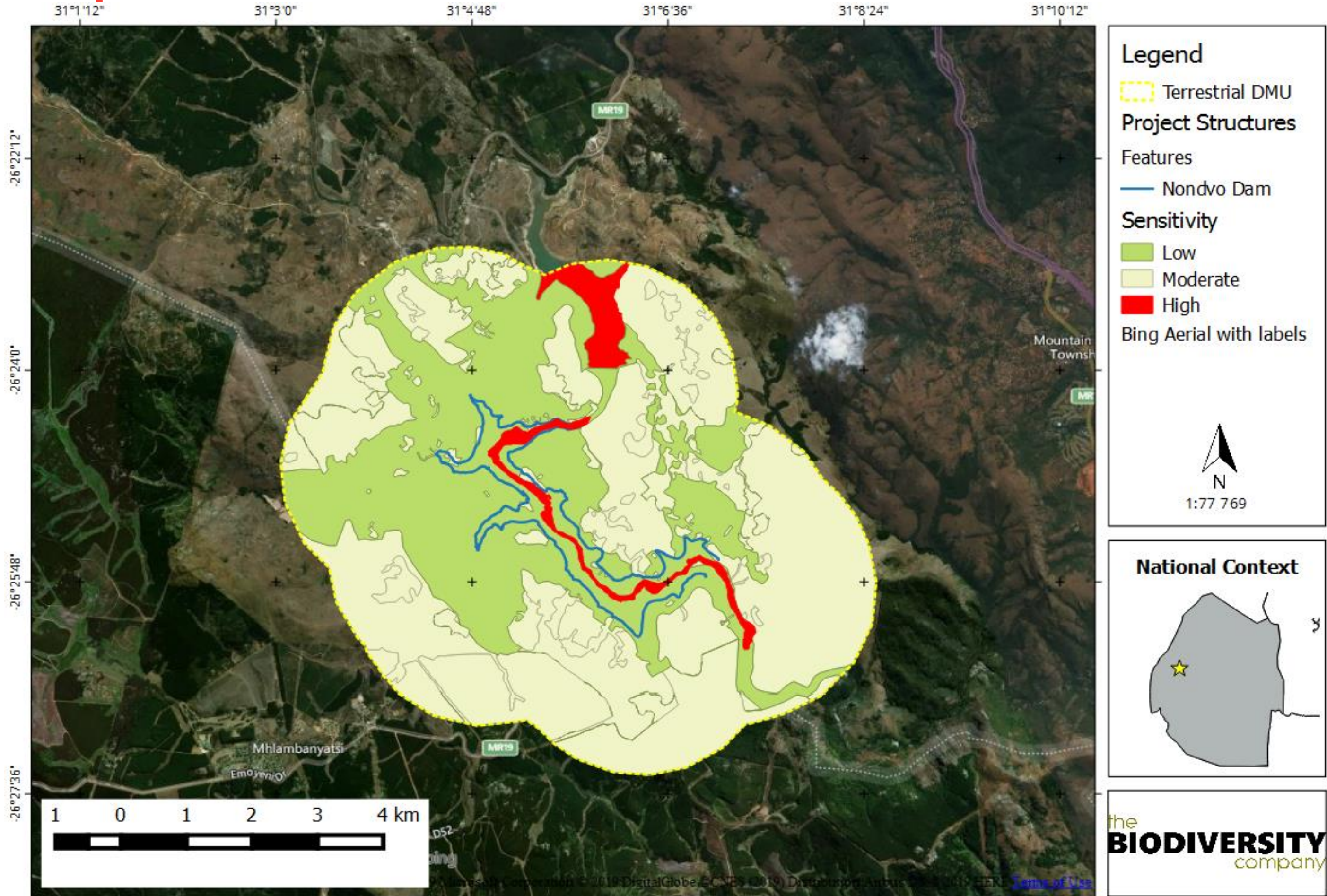


Figure 0-27: Habitat Sensitivity of the Mammal Habitats

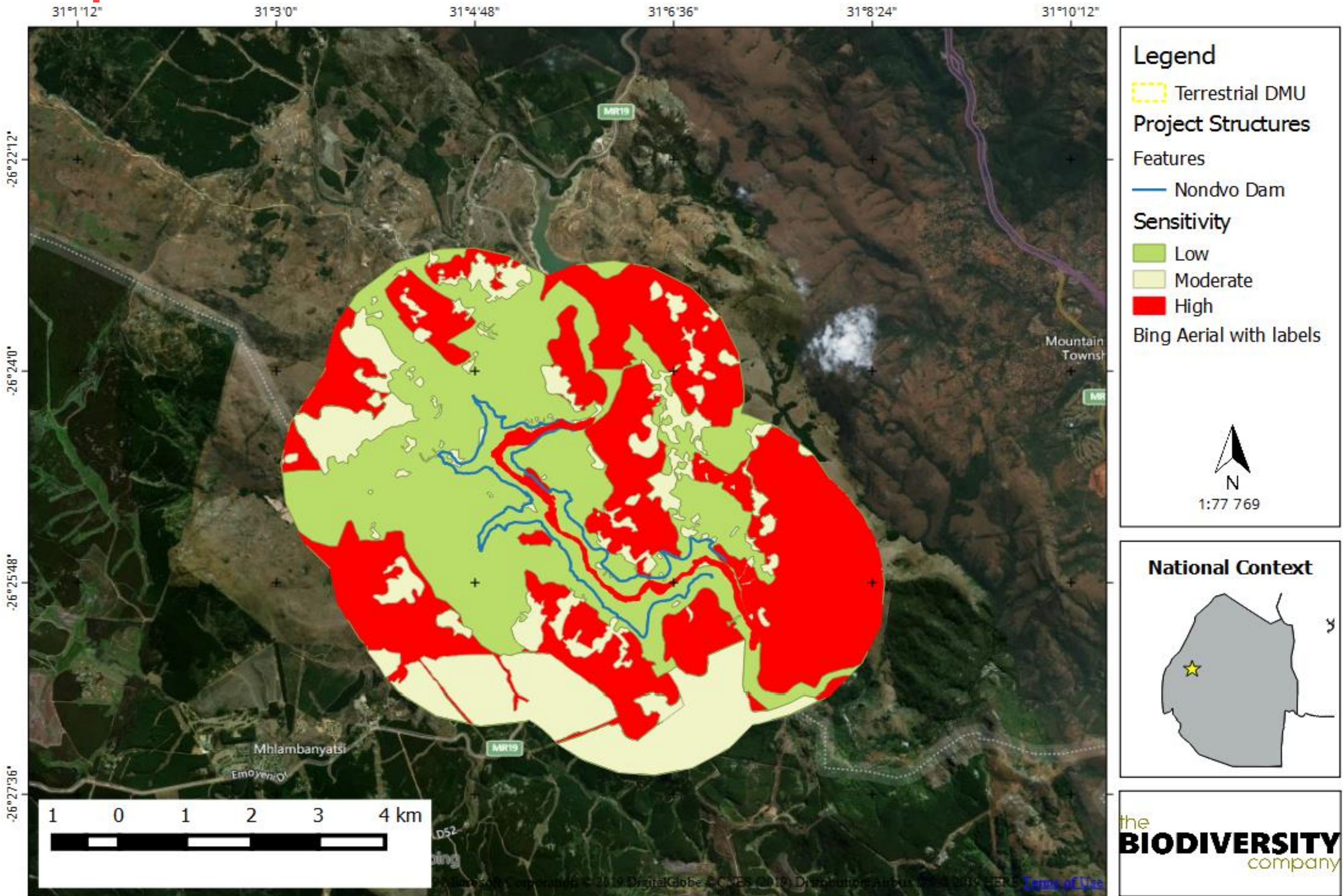
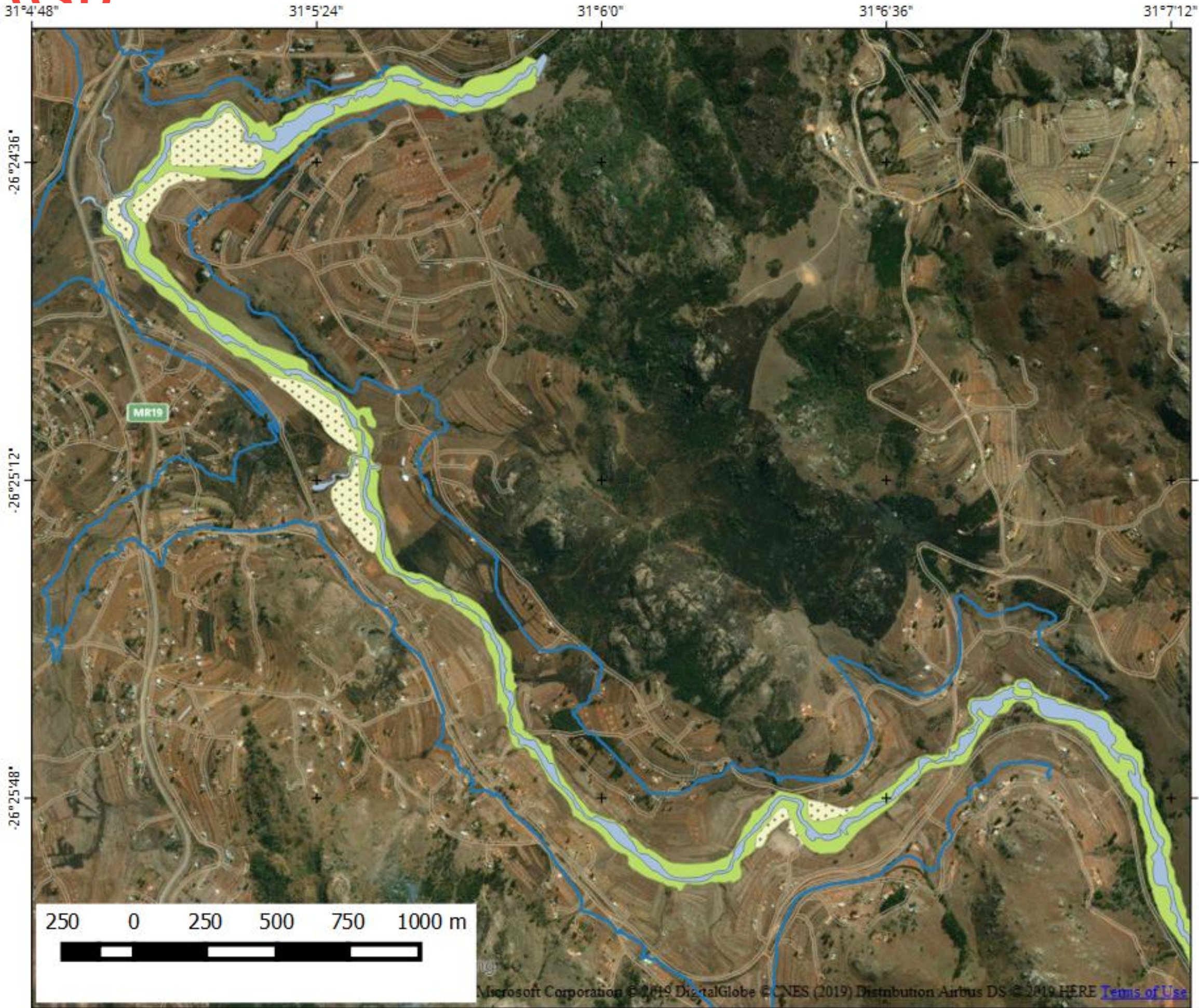


Figure 0-28: Avifaunal Habitat Sensitivity



Legend

Project Structures

Features

- Nondvo Dam

Habitats

- Instream
- Floodplain
- Riverine

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BIODIVERSITY
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Figure 0-29: Riparian Habitat in the Lusushwana River

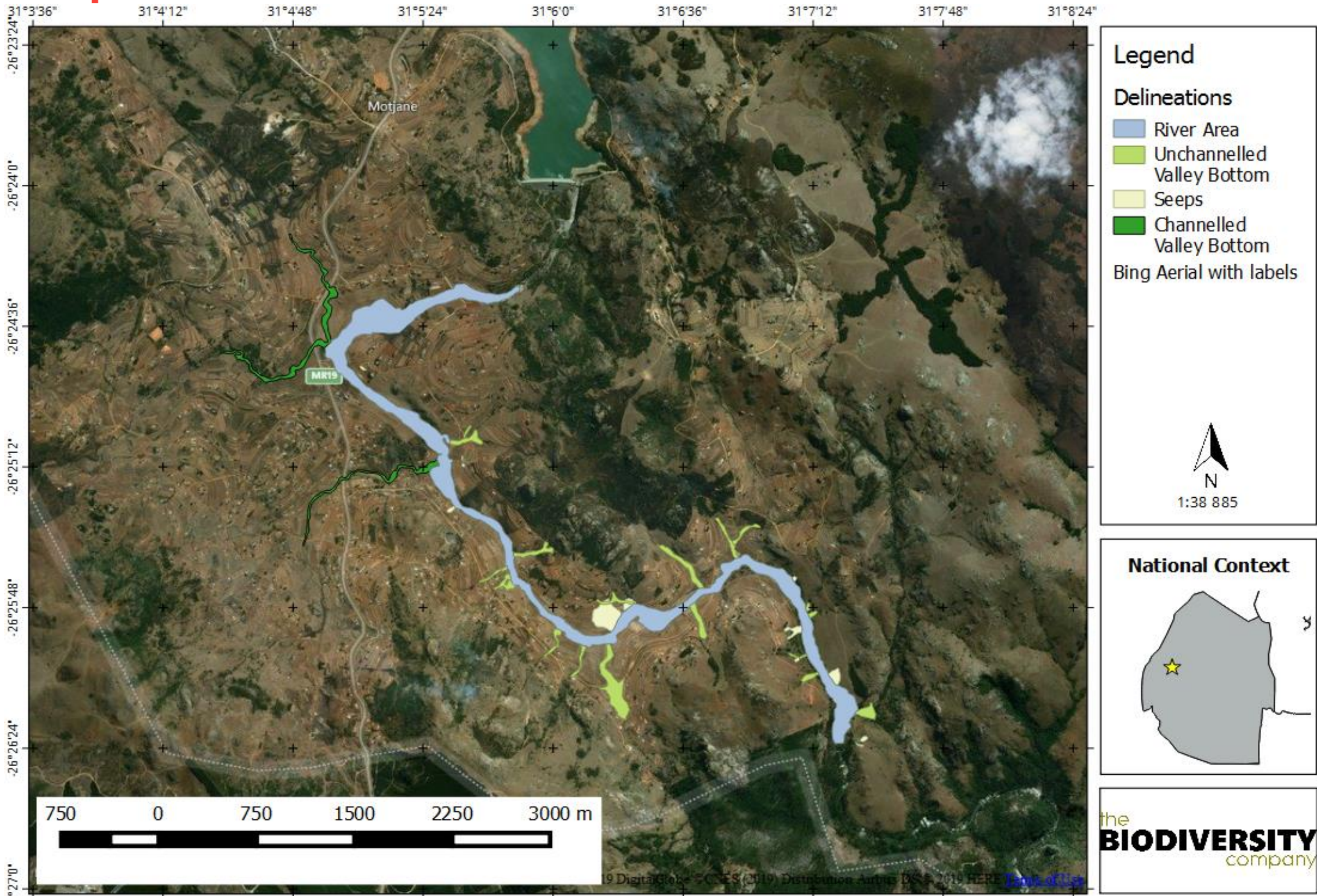


Figure 0-30: The Wetland Areas Delineated for the Assessment

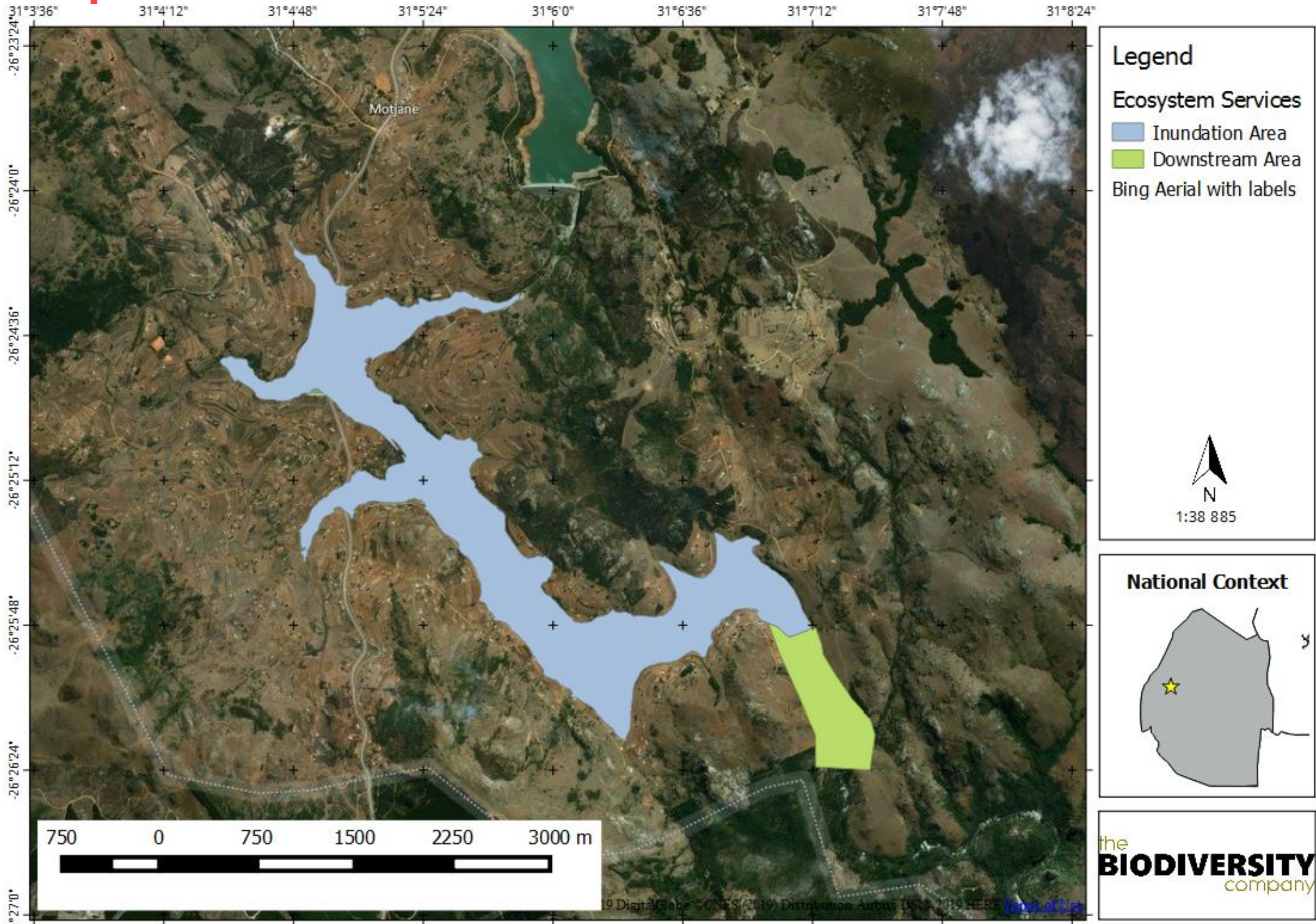


Figure 0-31: The Project Area of Influence Considered for the Ecosystem Services

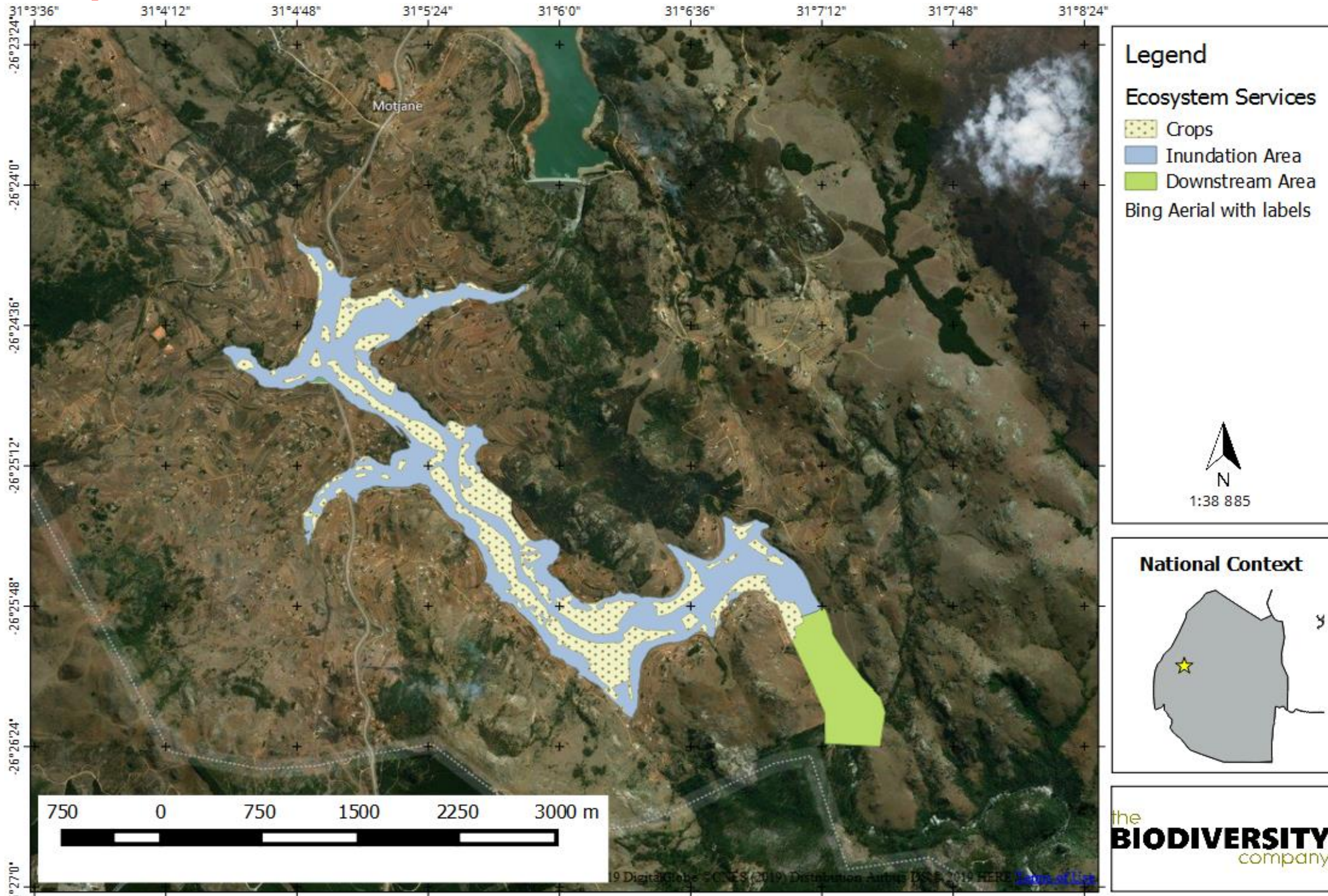


Figure 0-32: The Location and Extent of Ccrop Fields Delineated for the Assessment

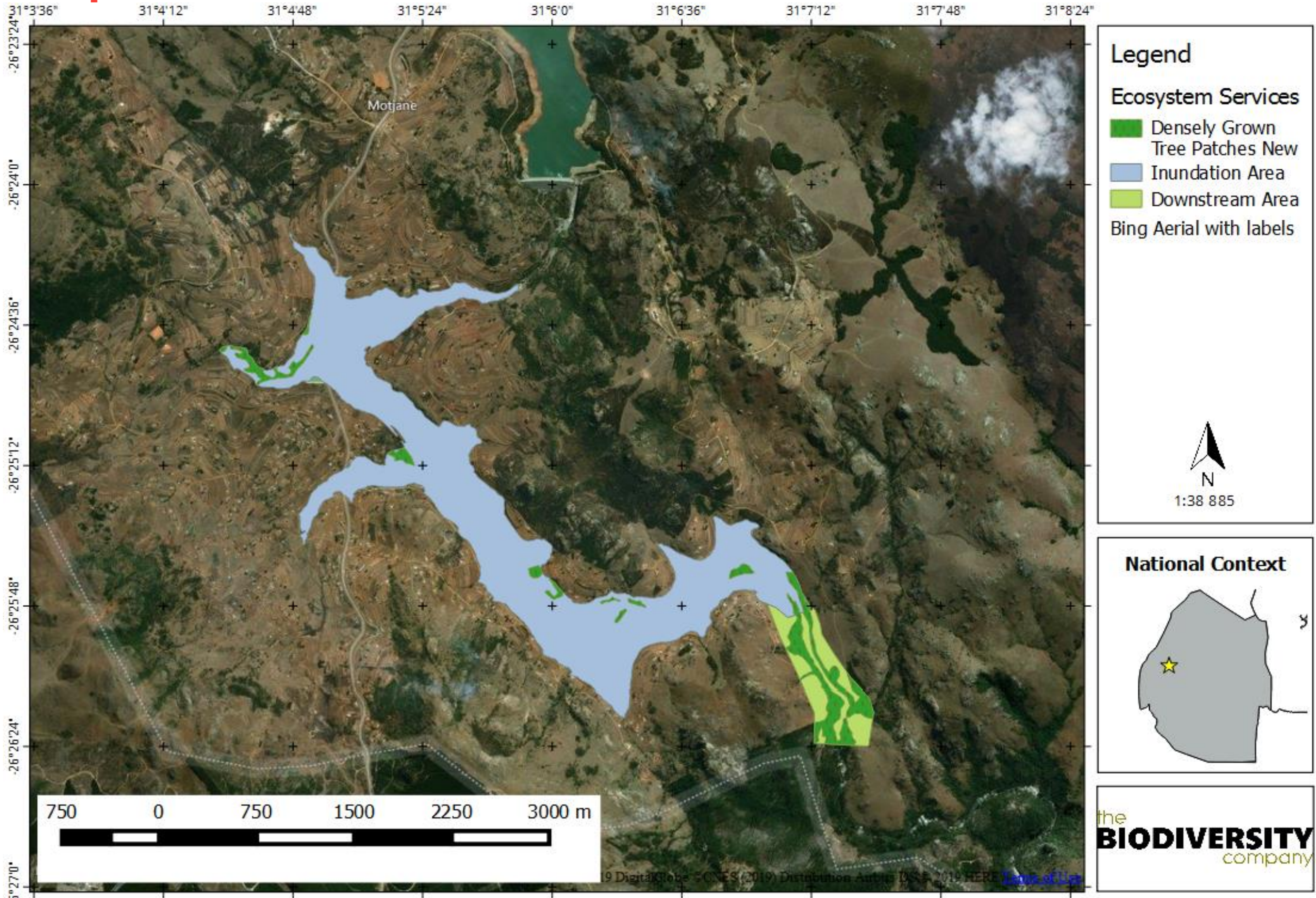


Figure 0-33: The Location and Extent of Densely Grown Tree Patches Delineated for the Assessment

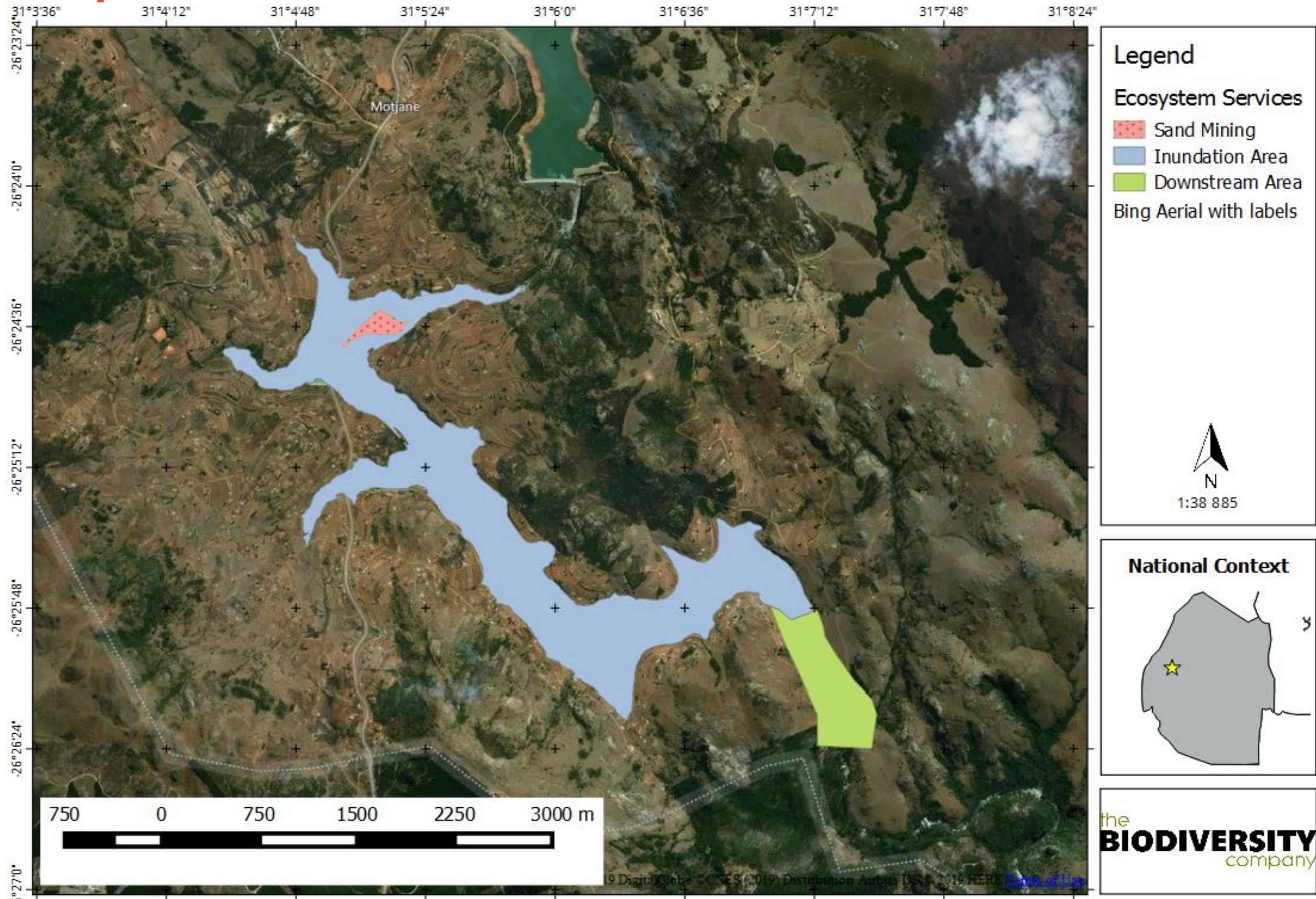


Figure 0-34: The Location and Extent of Sand Mining Identified for the Assessment

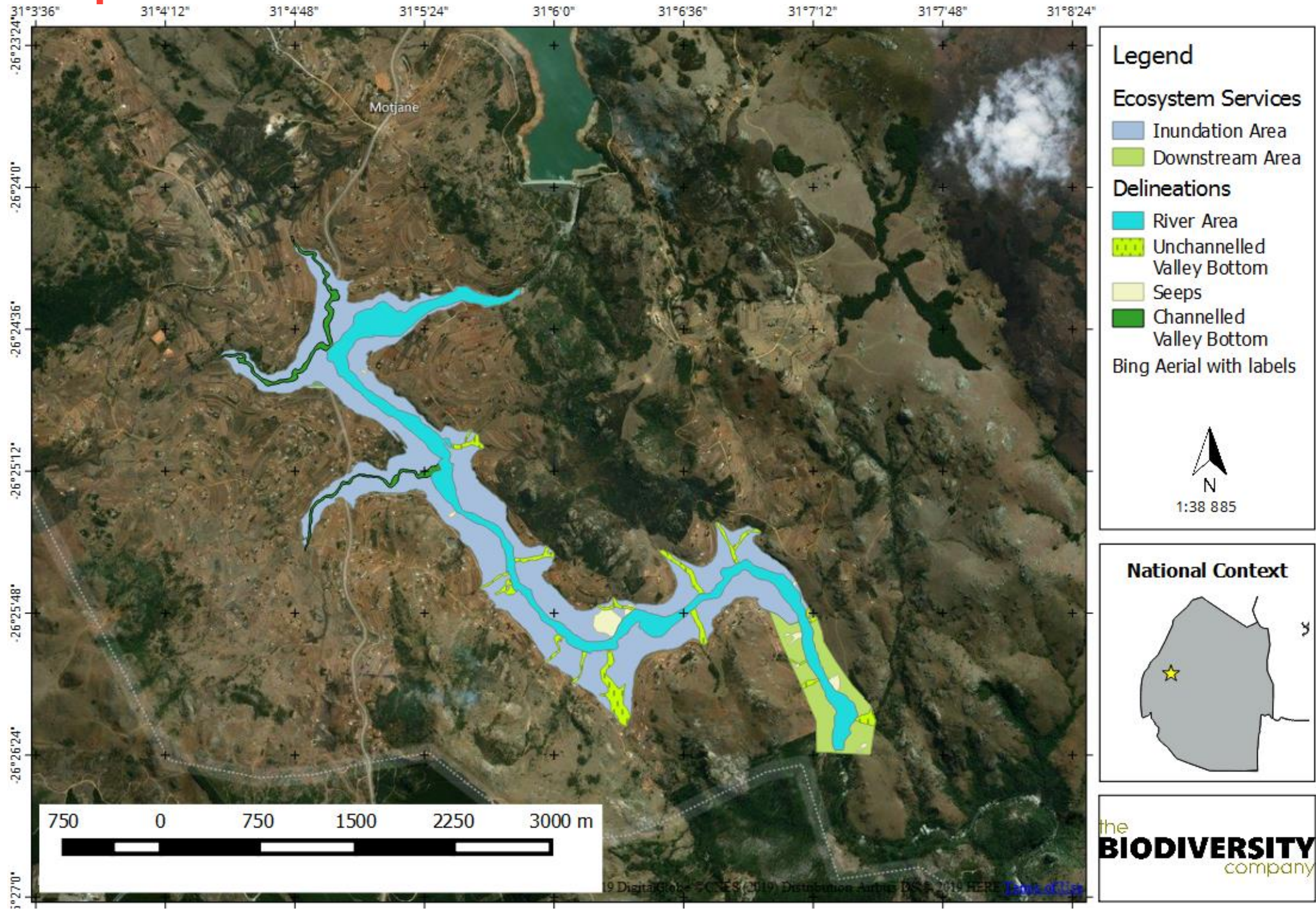


Figure 0-35: The Extent of the Delineations Considered for the Assessment

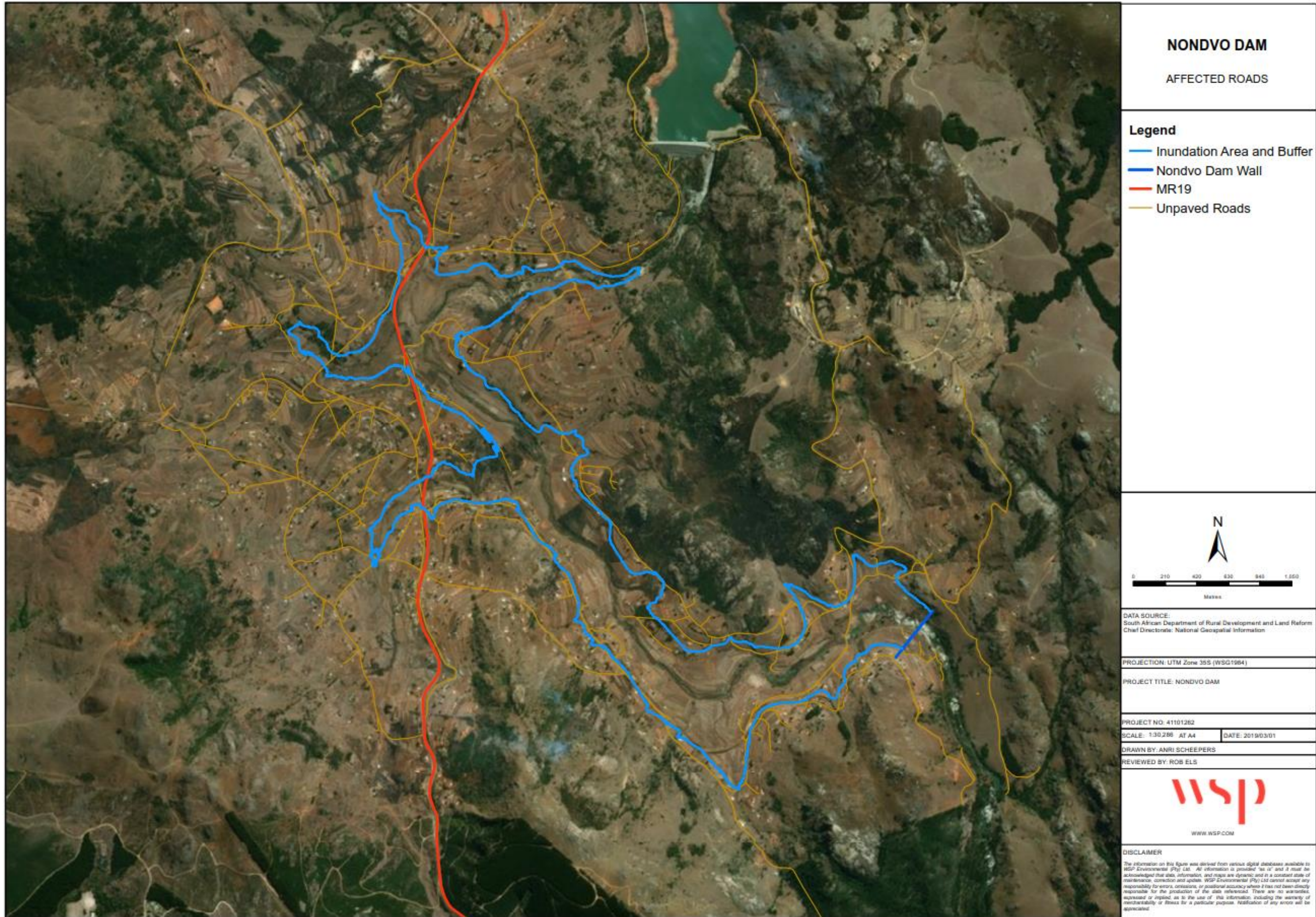


Figure 0-36: Existing Road Network within the Project Area

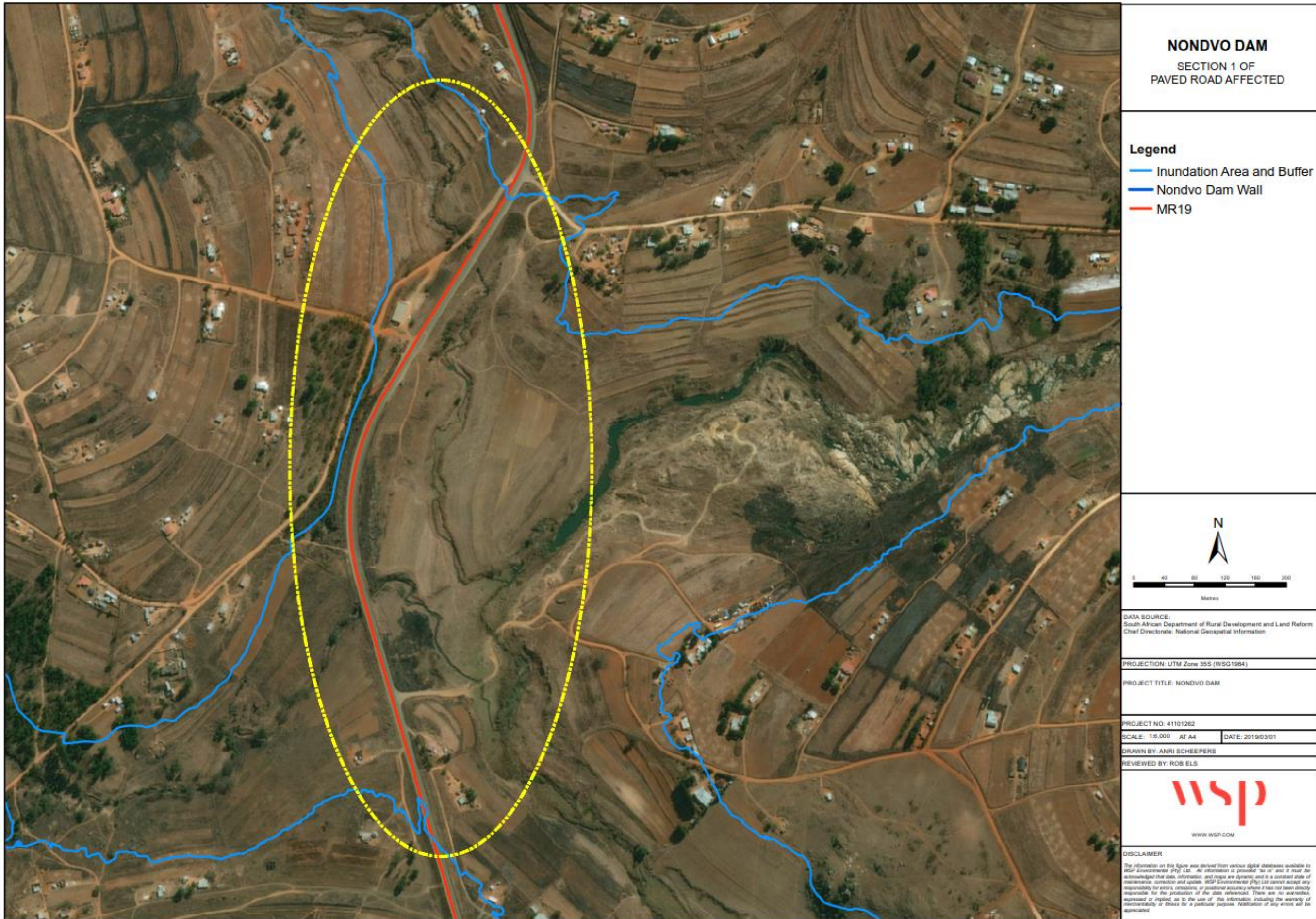


Figure 0-37: Section 1 of Paved Road Affected by the Proposed Reservoir



Figure 0-38: Section 2 of Paved Road Affected by the Proposed Reservoir



NONDVO DAM

AFFECTED RAILWAY

Legend

- Inundation Area and Buffer
- Nondvo Dam Wall
- Railway Line



DATA SOURCE:
South African Department of Rural Development and Land Reform
Chief Directorate: National Geospatial Information

PROJECTION: UTM Zone 35S (WGS1984)

PROJECT TITLE: NONDVO DAM

PROJECT NO: 41101262

SCALE: 1:30,266 AT A4 DATE: 2019/03/01

DRAWN BY: ANRI SCHEEPERS

REVIEWED BY: ROB ELS



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Figure 0-39: Existing Railway Line Route and Affected Section Requiring Relocation



Figure 0-40: Authorised 132KV Powerline

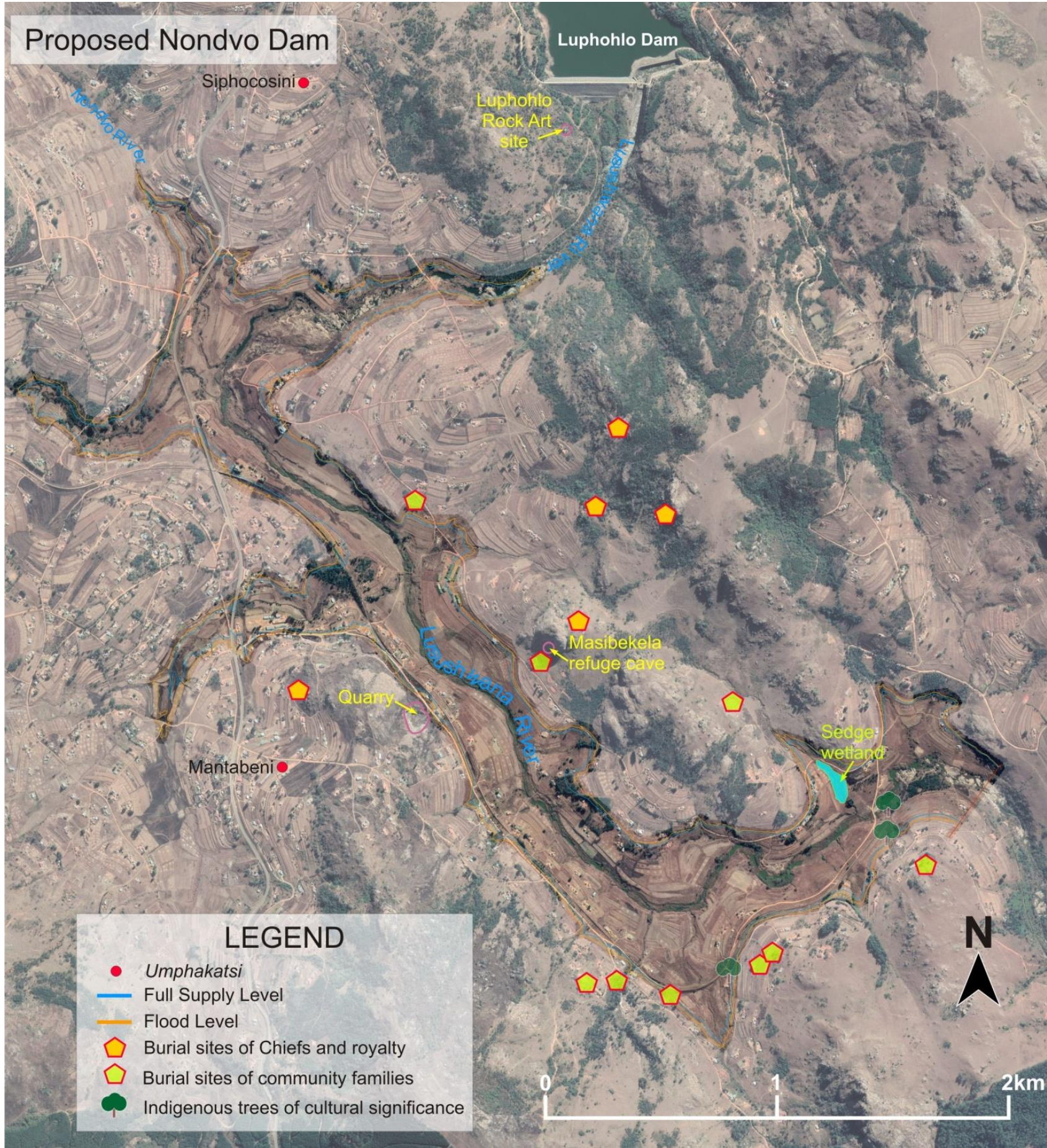


Figure 0-41: Location of Archaeological and Cultural Heritage Sites

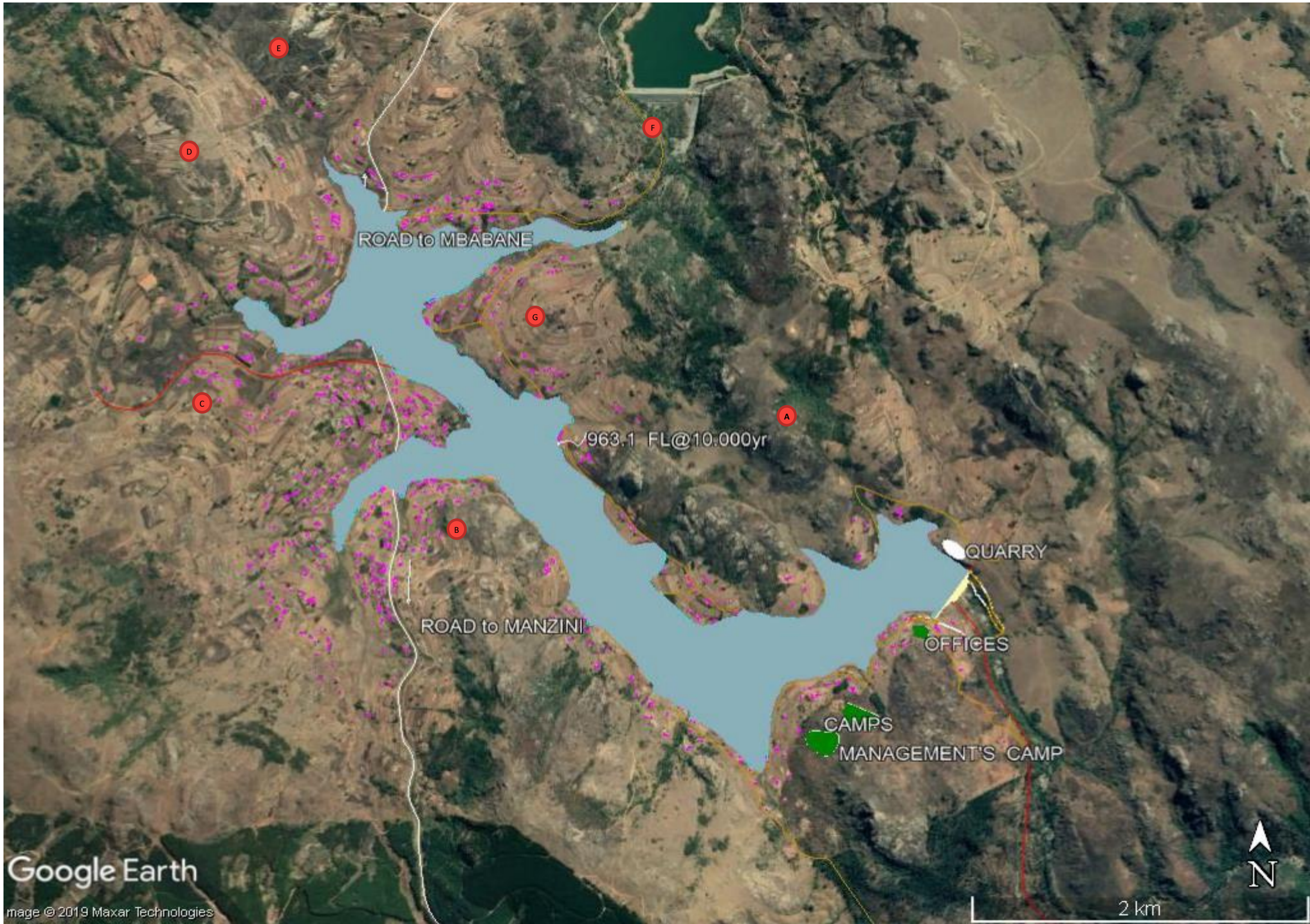


Figure 0-42: Visual Receptors



Figure 7 70: Homesteads Located Below the Dam (Pink)



Figure 0-43: Proposed Impoundments in the Usuthu/Maputo River Catchment (JMRBWRs, 2008)



Figure 0-44: Authorised 132KV Powerline



ENVIRONMENTAL AND SOCIAL IMPACT ASSESSMENT OF THE PROPOSED MBABANE - MANZINI CORRIDOR DAM PROJECT, ESWATINI

ENVIRONMENTAL AND SOCIAL MANAGEMENT PLAN (ESMP) MAPS

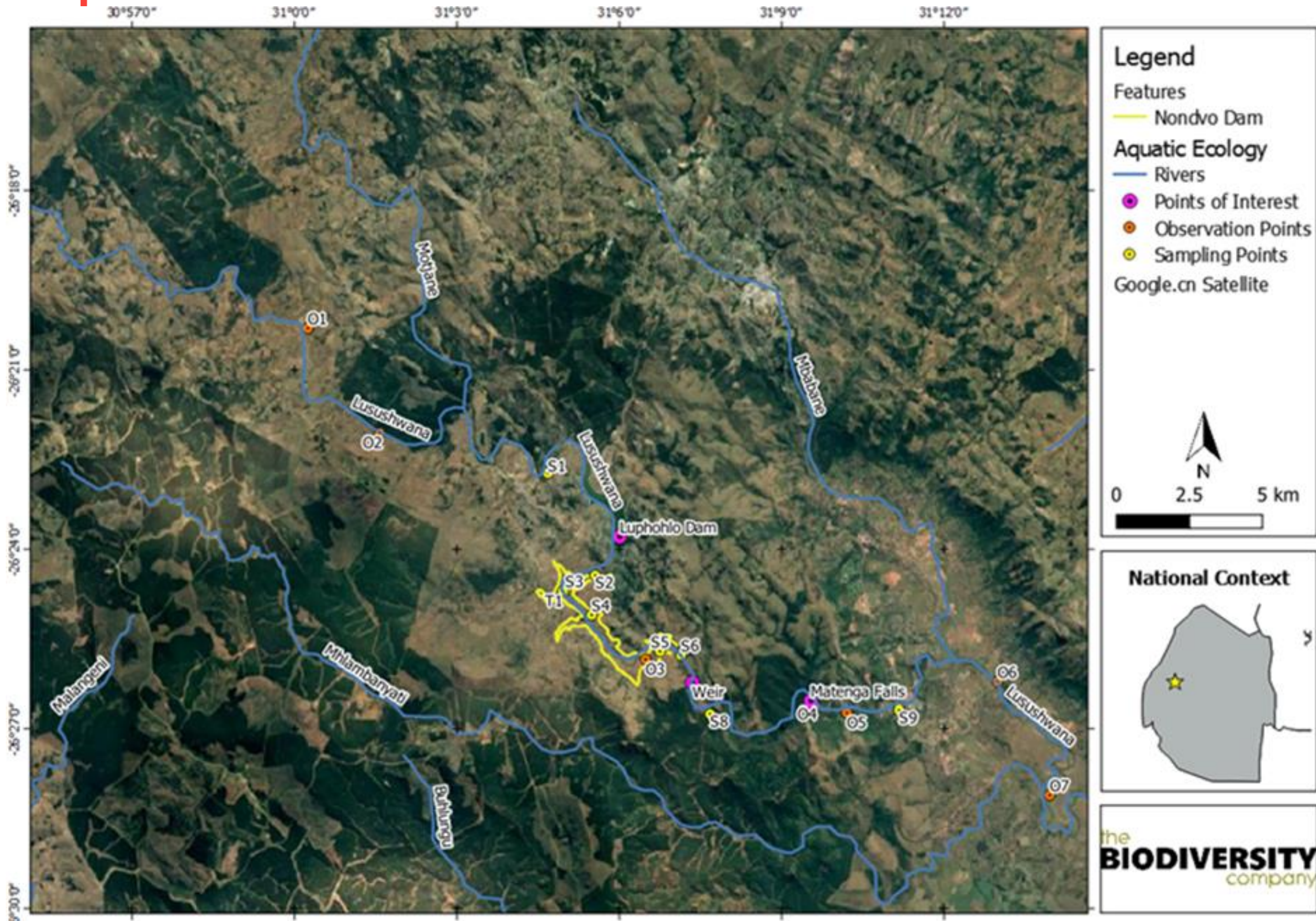


Figure Error! No text of specified style in document.-2: Reference Map for Riverine Aquatic Biomonitoring Sampling Locations (The Biodiversity Company, 2019)

MBABANE - MANZINI CORRIDOR DAM PROJECT: MORPHODYNAMIC ASSESSMENT

MAPS



Figure 1: Locality of the Project Area



Figure 2: Dam Wall Alternatives



Figure 8: Topography around the Project Area

MBABANE - MANZINI CORRIDOR DAM PROJECT: ENVIRONMENTAL AND SOCIAL IMPACT ASSESSMENT
BASIN PROTECTION ASSESSMENT
MAPS

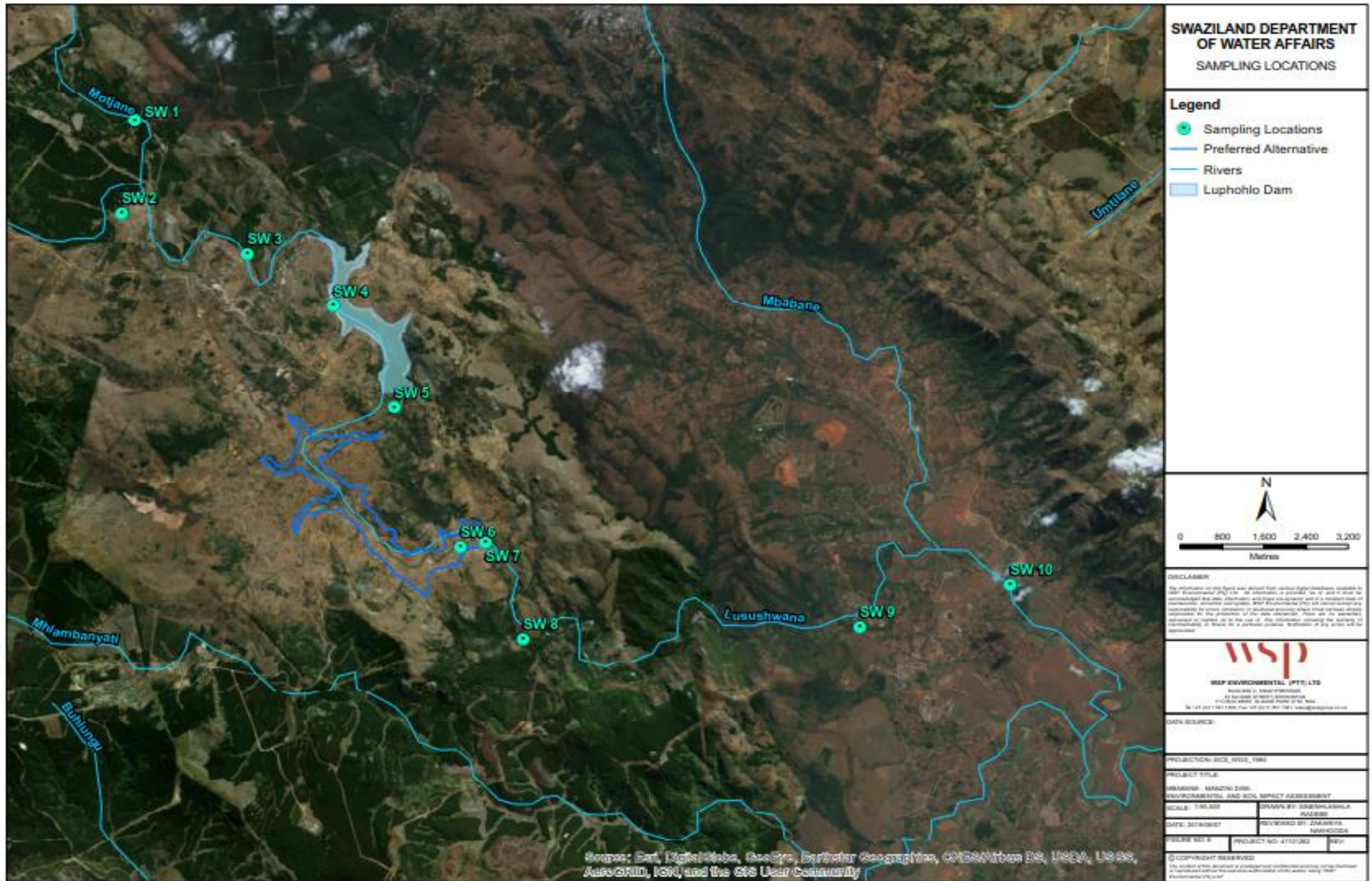


Figure 4: Sampling Location

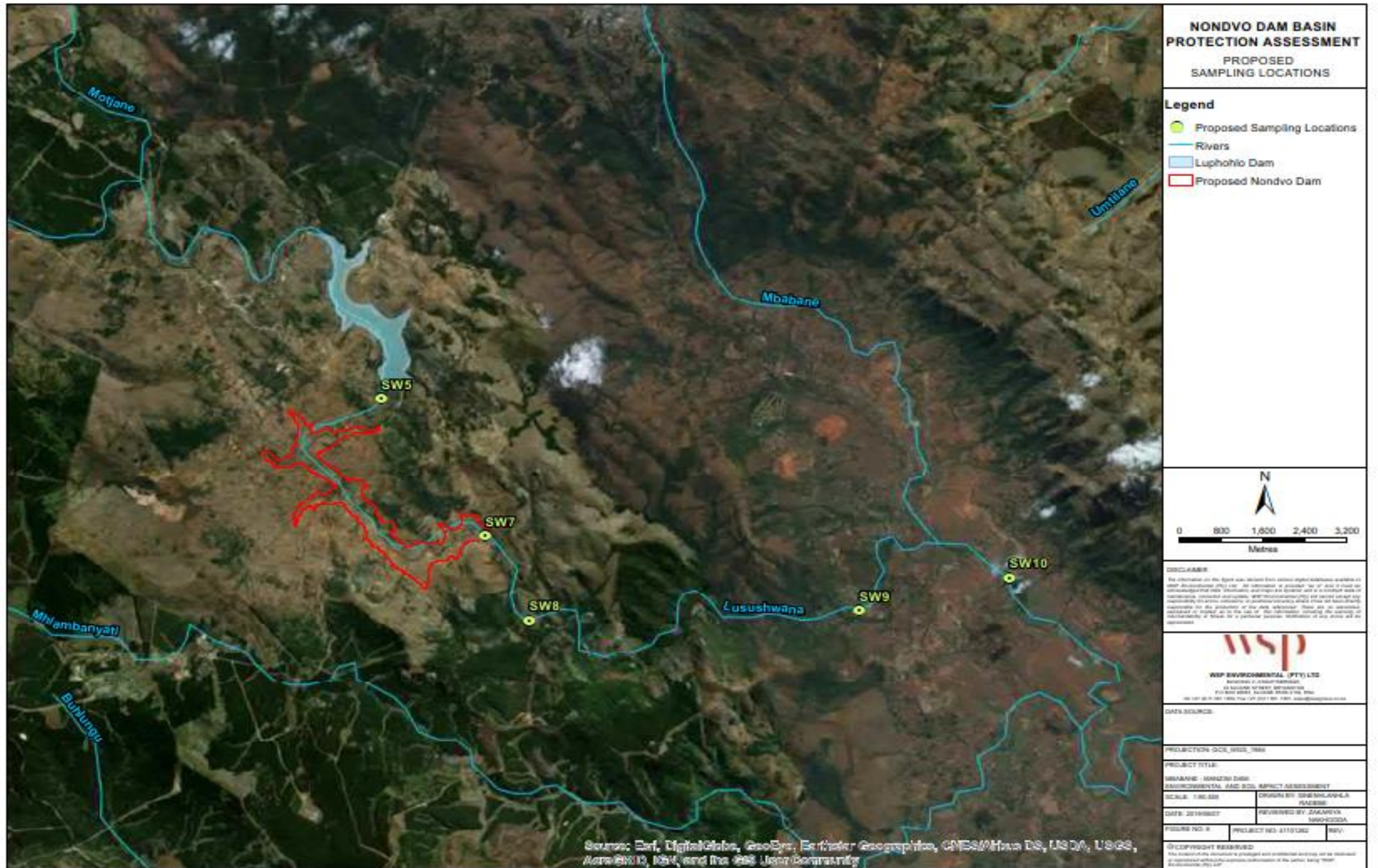


Figure 8: Proposed Sampling Locations



MBABANE – MANZINI CORRIDOR DAM (NONDVO DAM)

SOCIO-ECONOMIC IMPACT ASSESSMENT MAPS



Figure Error! No text of specified style in document.-2: Layout indicating the location and extent of the proposed Nondvo Dam

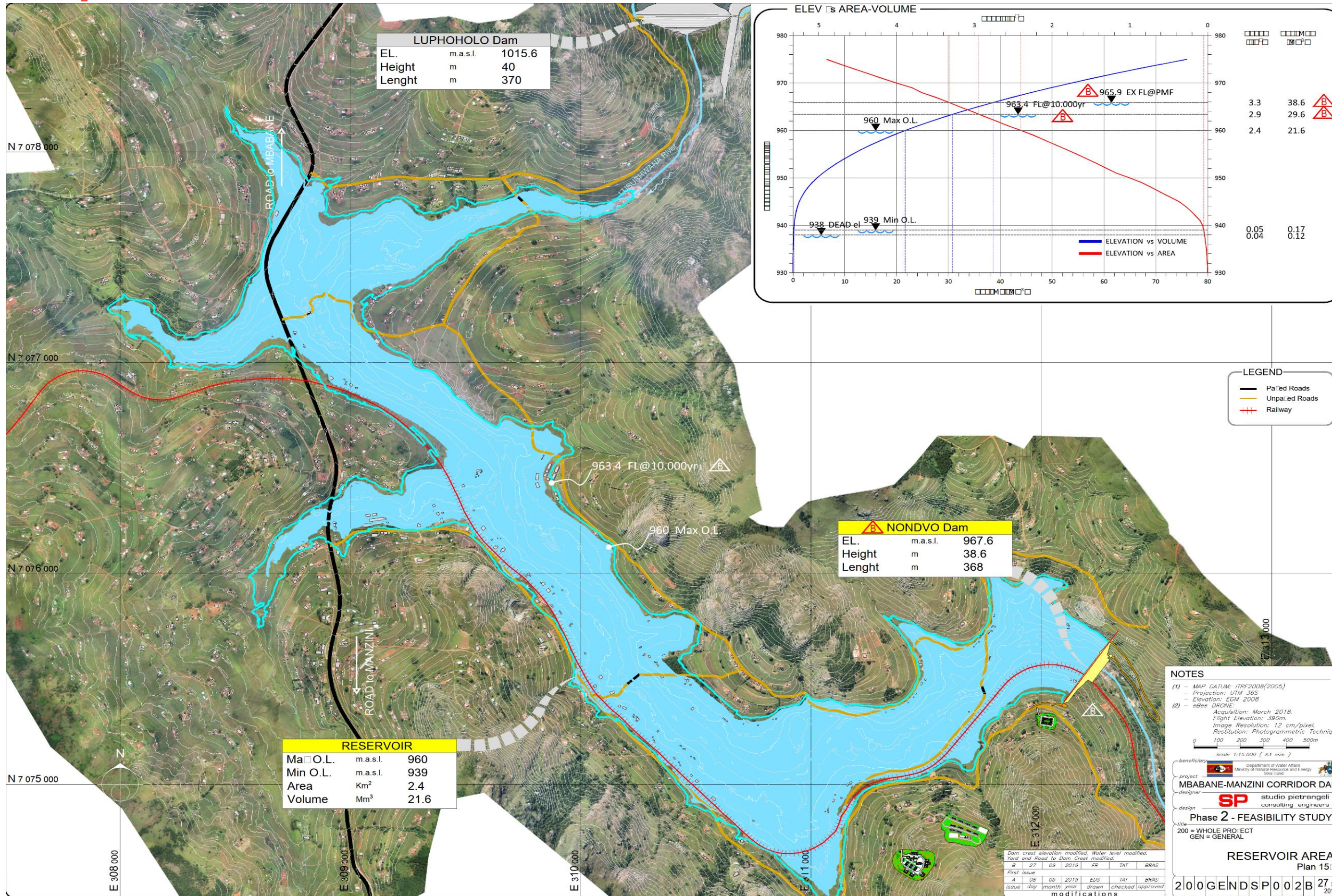
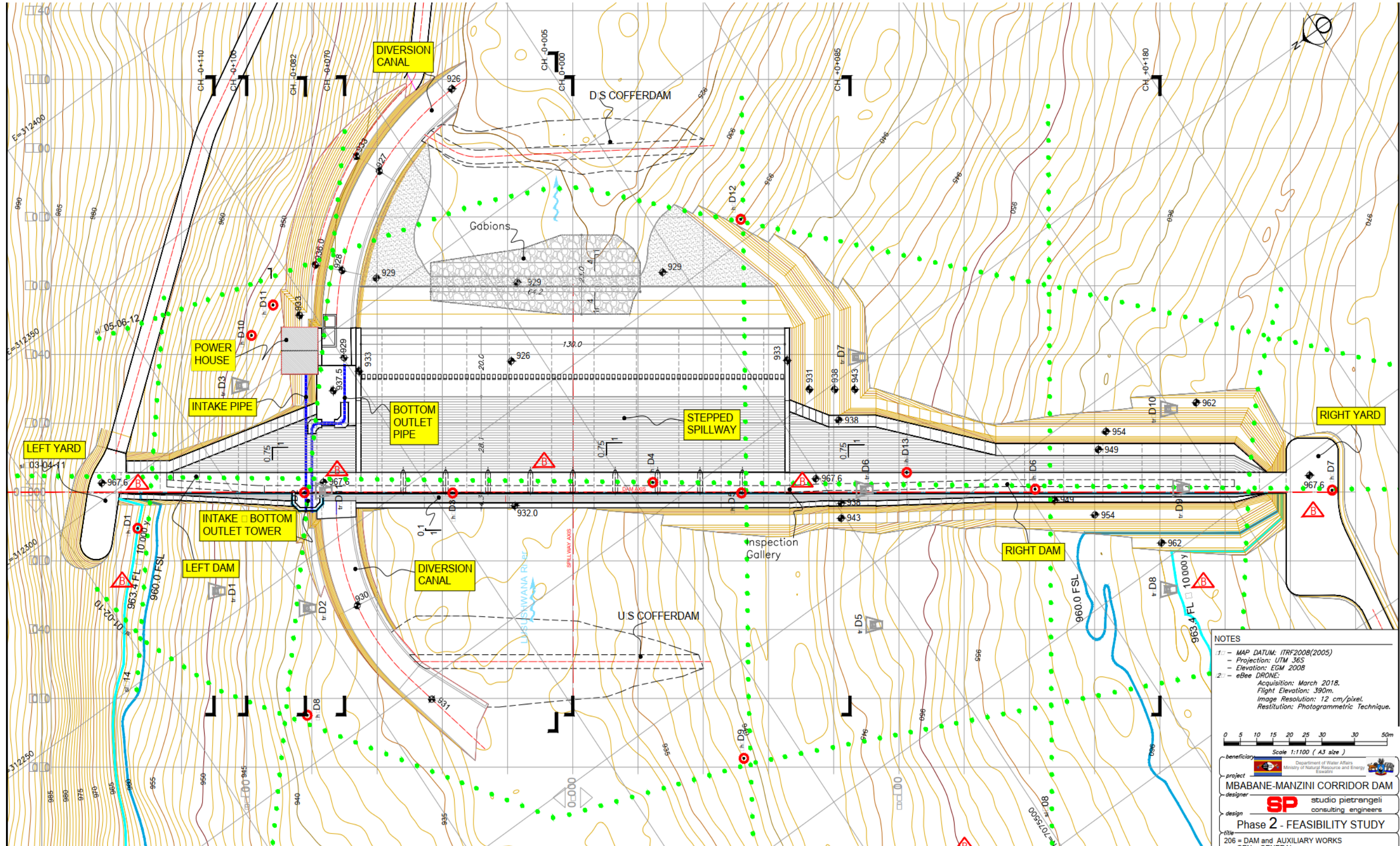


Figure Error! No text of specified style in document.-3: Layout showing the dam wall and reservoir area along with associated infrastructure



NOTES

- MAP DATUM: ITRF2008(2005)
Projection: UTM 36S
Elevation: EGM 2008
- eBee DRONE:
Acquisition: March 2018.
Flight Elevation: 390m.
Image Resolution: 12 cm/pixel.
Restitution: Photogrammetric Technique.

Scale 1:1100 (A3 size)

beneficiary: Department of Water Affairs, Ministry of Natural Resource and Energy, Eswatini

project: MBABANE-MANZINI CORRIDOR DAM

designer: **SP** studio pietrangeli consulting engineers

design: Phase 2 - FEASIBILITY STUDY

title: 206 = DAM and AUXILIARY WORKS

Figure Error! No text of specified style in document.-4: Plan of the dam wall and auxiliary works

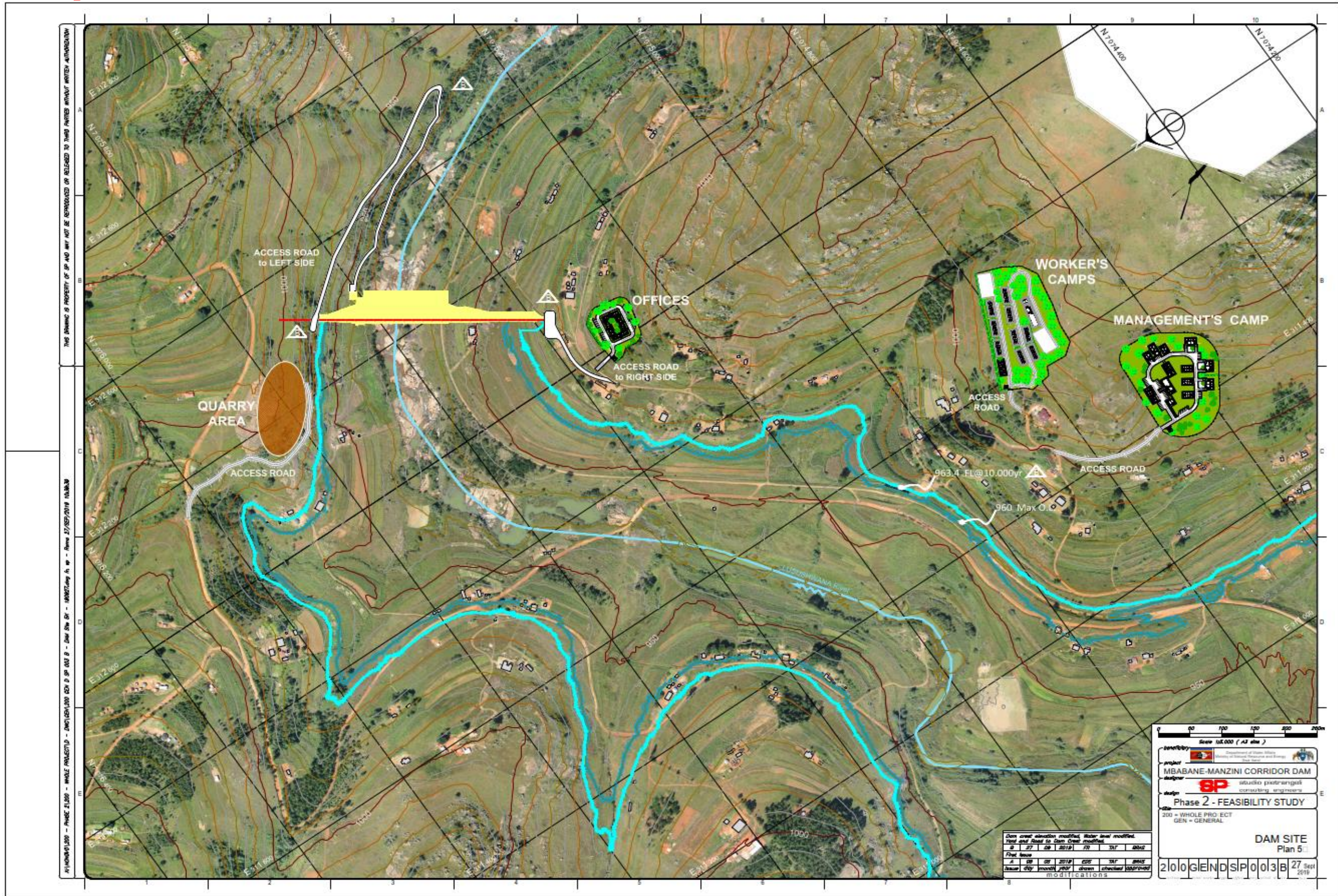


Figure Error! No text of specified style in document.-5: Layout showing the location and extent of the dam wall and associated infrastructure (quarry, site camps and offices, access roads)

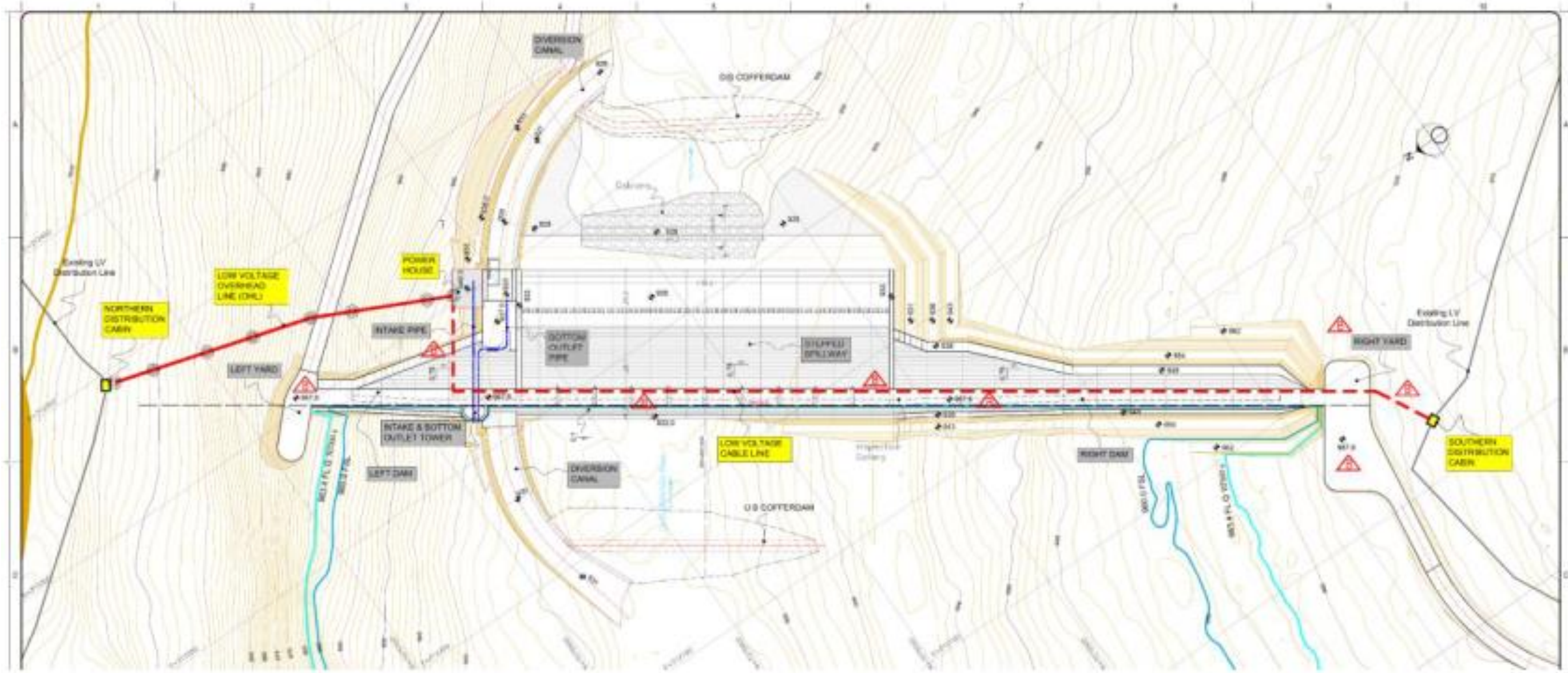


Figure 2-6: Low voltage distribution power lines

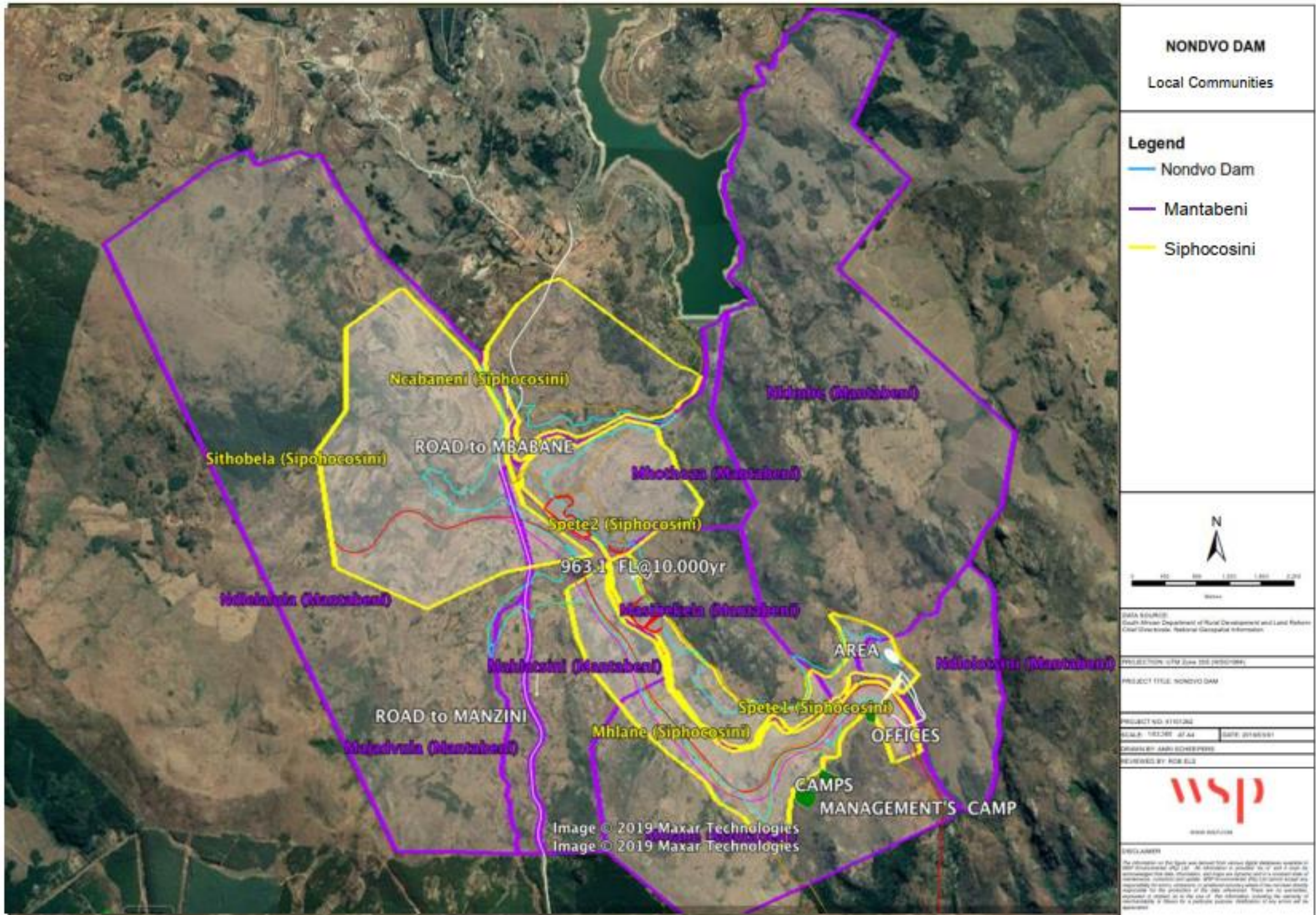


Figure Error! No text of specified style in document.-6: Layout showing the extent of the Siphocosini (yellow) and Mantabeni (purple) Communities in relation and extent of the proposed dam reservoir



Figure Error! No text of specified style in document.-7: Layout showing the Project footprint including reservoir at flood level of 963.4 masl (blue line) and location of affected social infrastructure.



Figure Error! No text of specified style in document.-8: Layout showing the two schools and footbridge crossing the Lusushwana River



Biodiversity Baseline & Impact Assessment for the proposed Nondvo Dam Project

Mhlambanyatsi, Eswatini

Maps

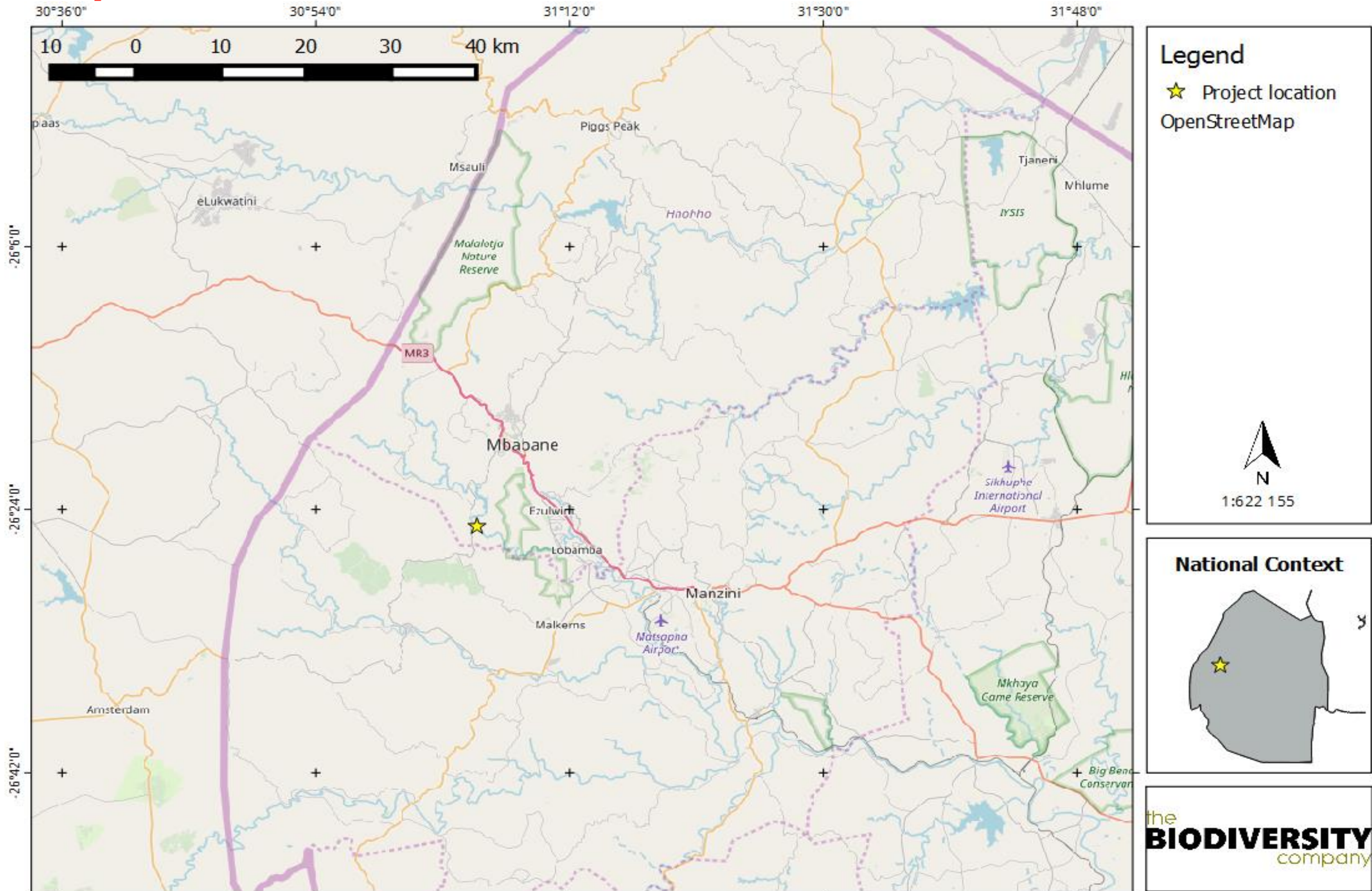


Figure 1: Locality map of the project area in relation to the local setting

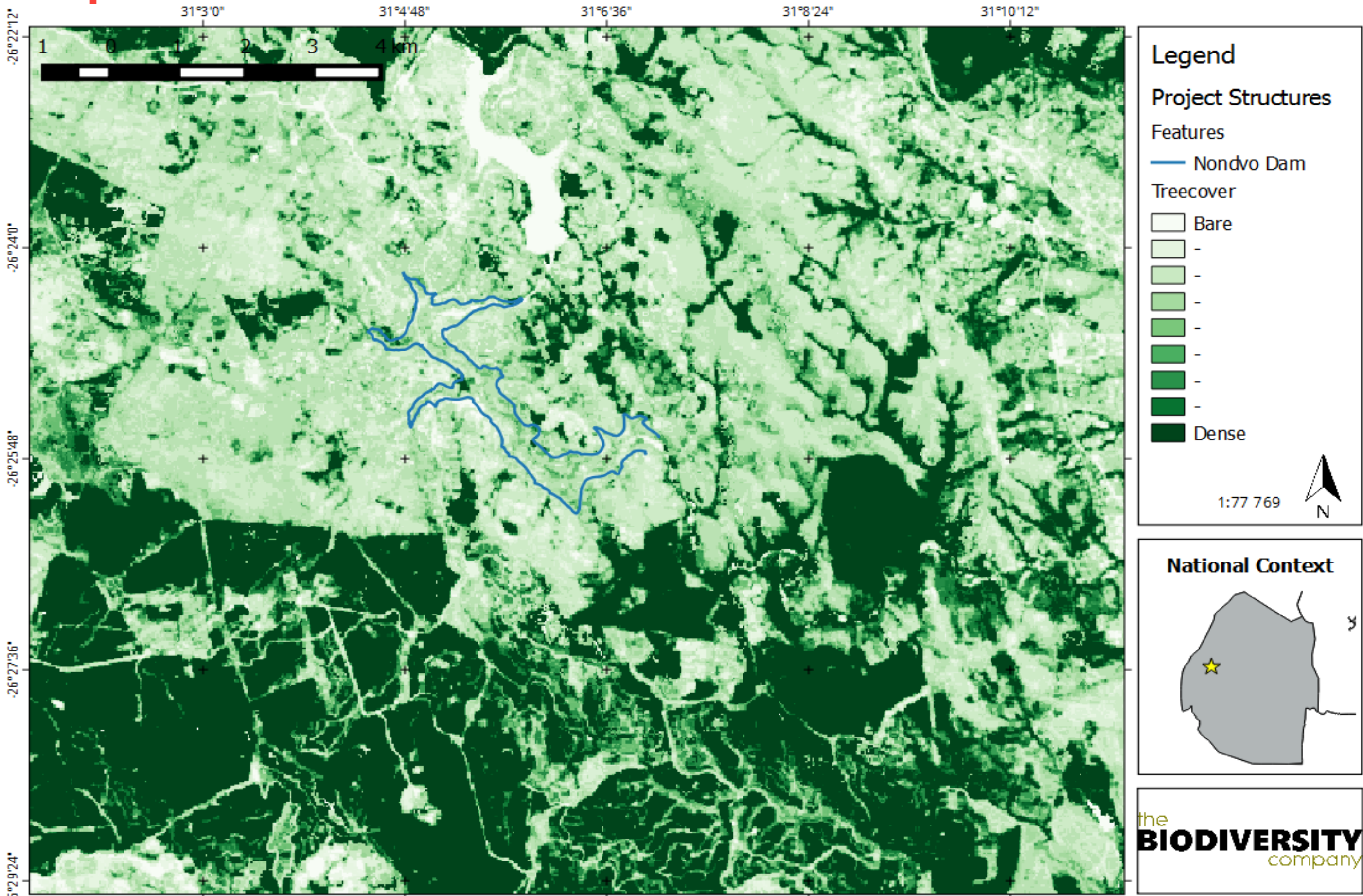


Figure 2: The tree cover for the region (Hansen et al. 2013)

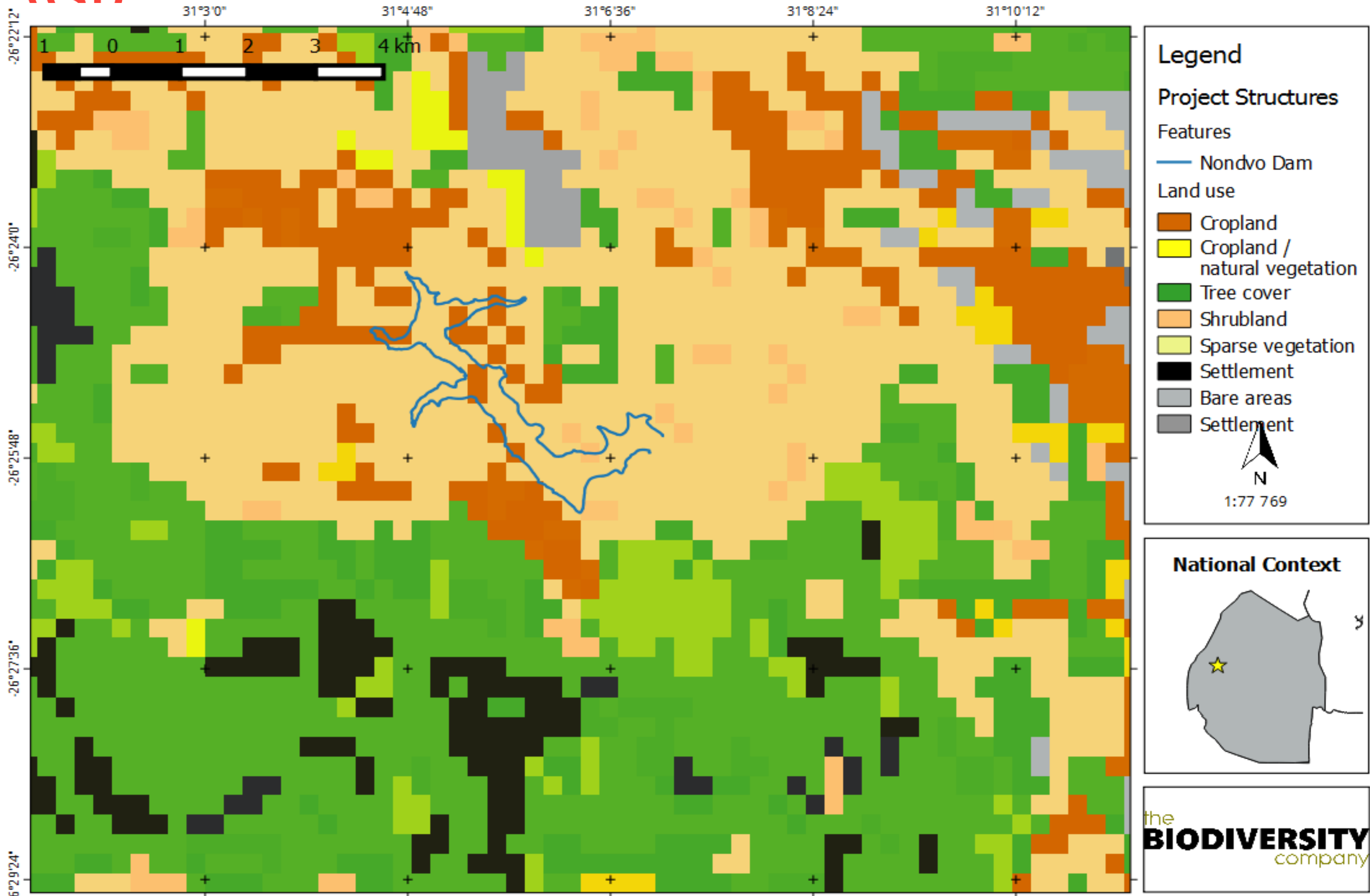


Figure 3: Land cover classes (broad level) associated with the project area (ESA, 2017)

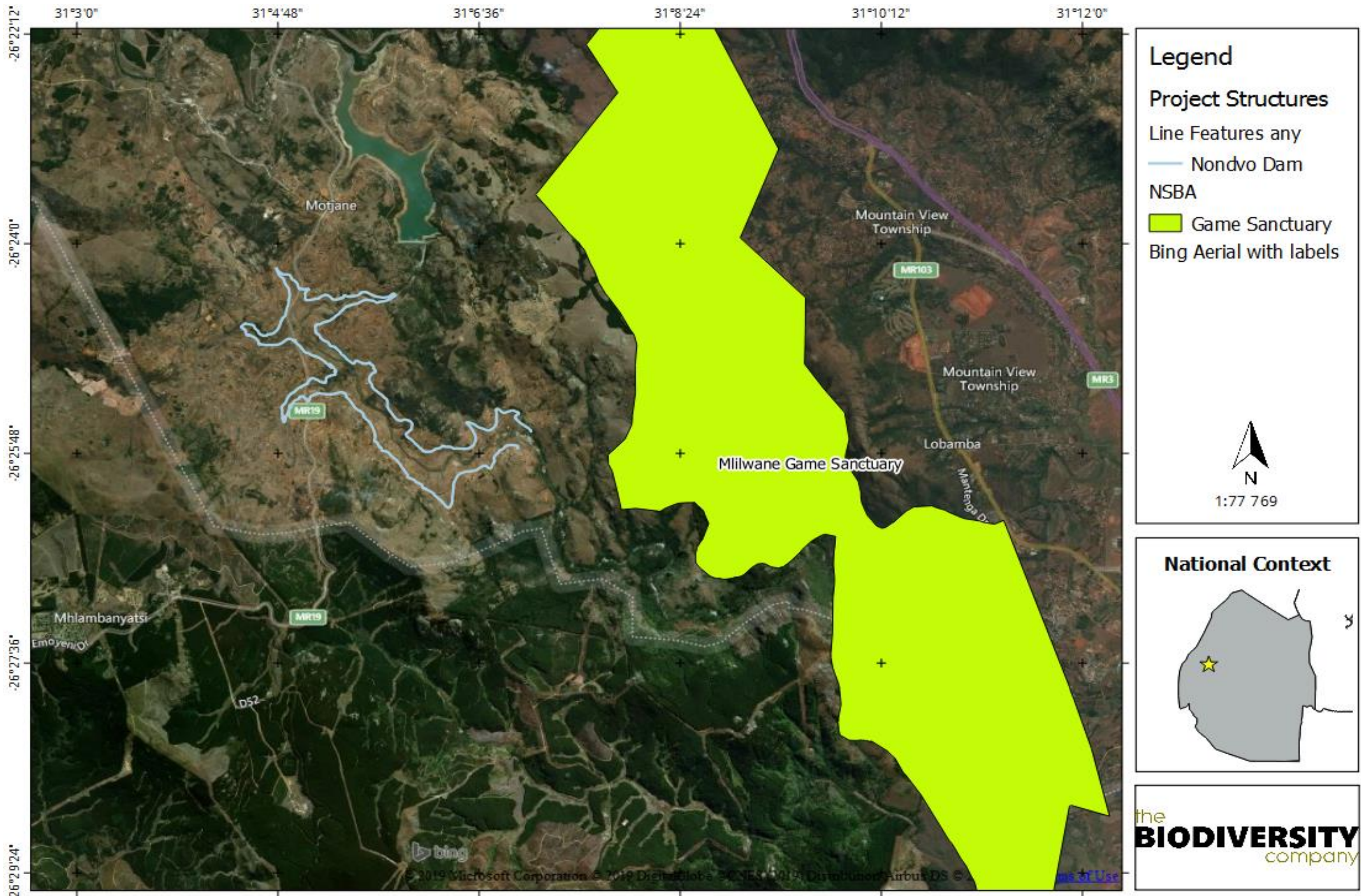


Figure 4: Formally protected areas adjacent to the project area (source, <http://www.thekingdomofeswatini.com/central-eswatini/mantenga-reserve-village-falls/>)

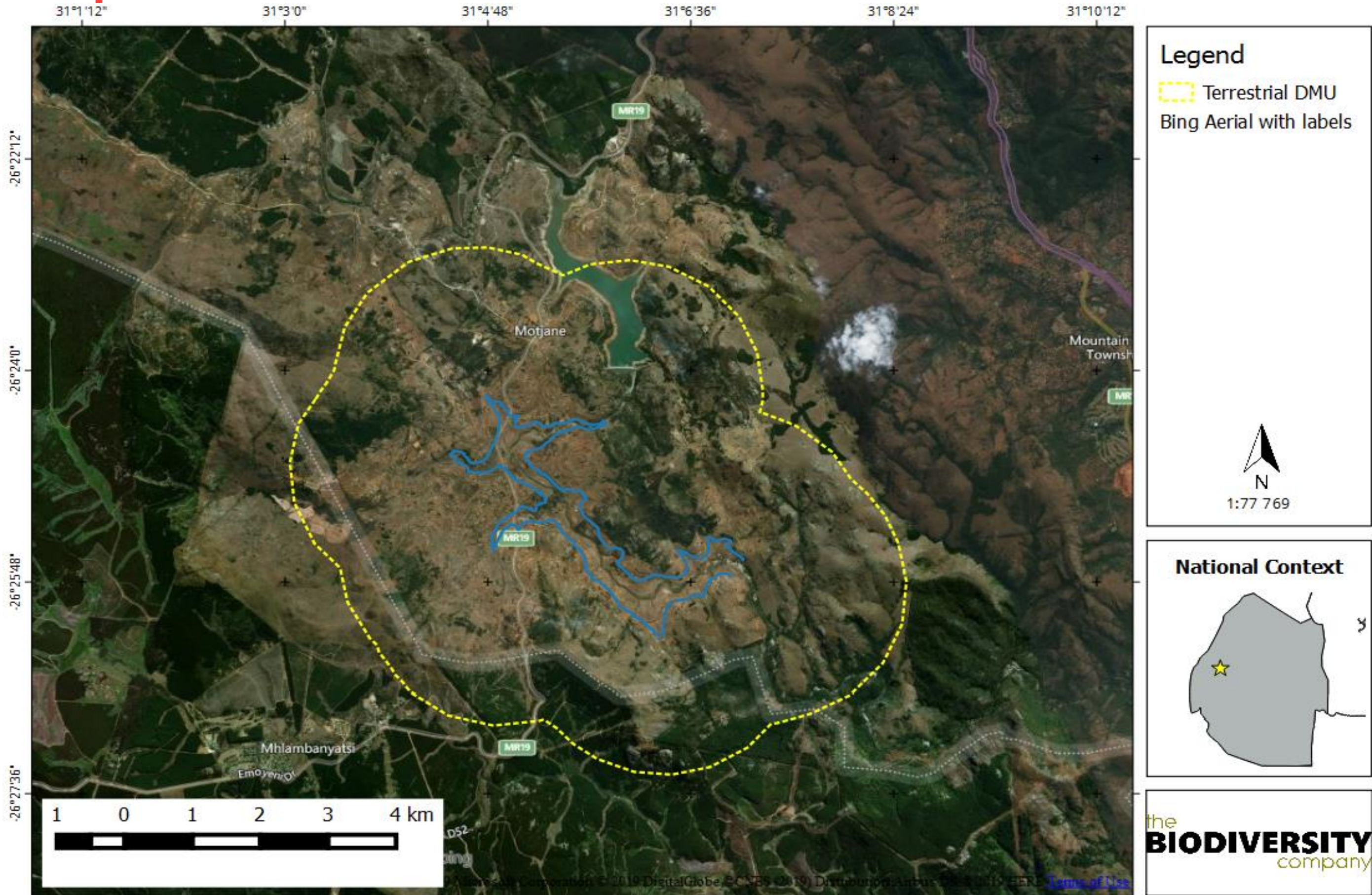
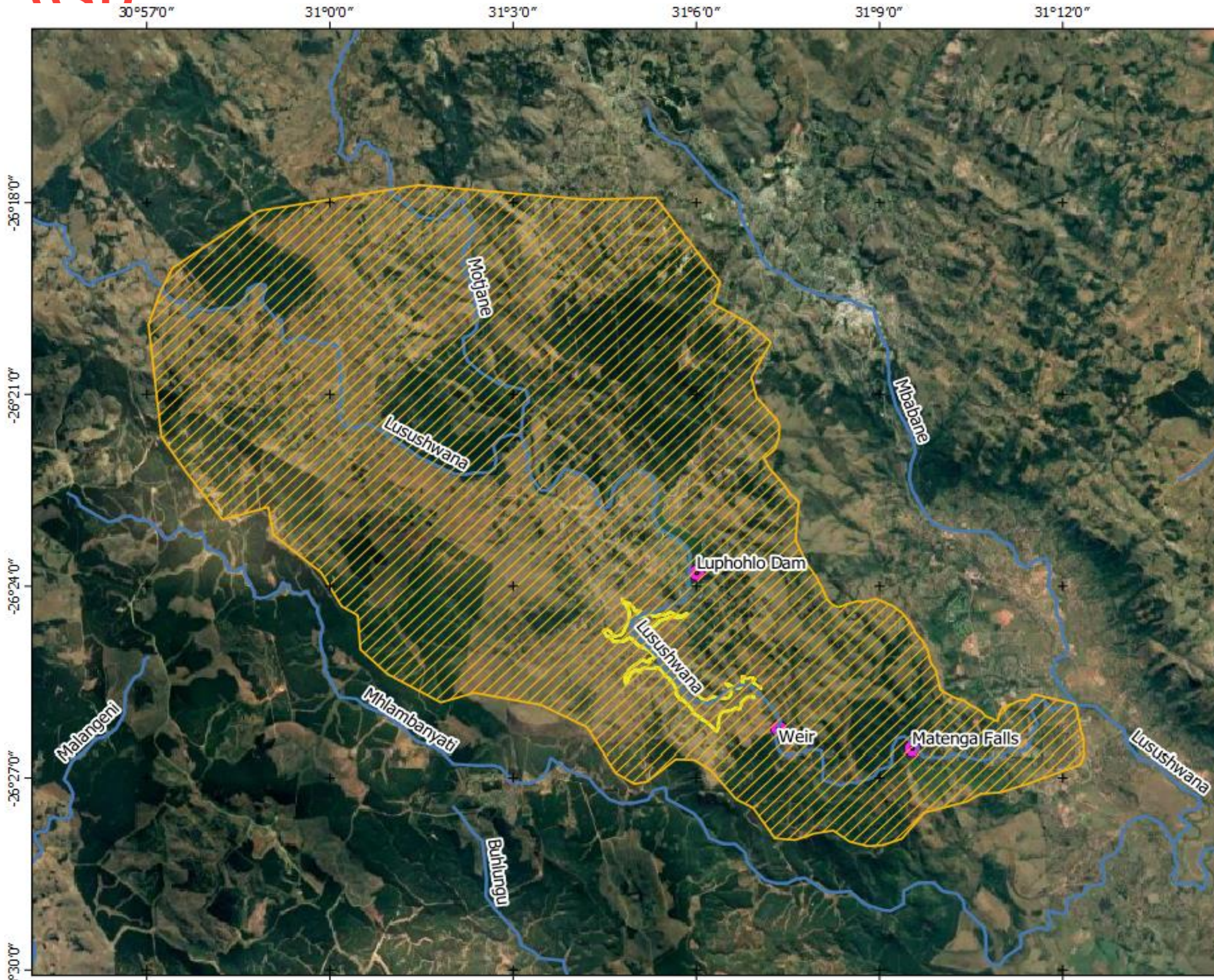


Figure 5: Extent of the Terrestrial DMU defined for this assessment



Legend

Features

- Nondvo Dam

Aquatic Ecology

- DMU
- Rivers
- Points of Interest

Google.cn Satellite

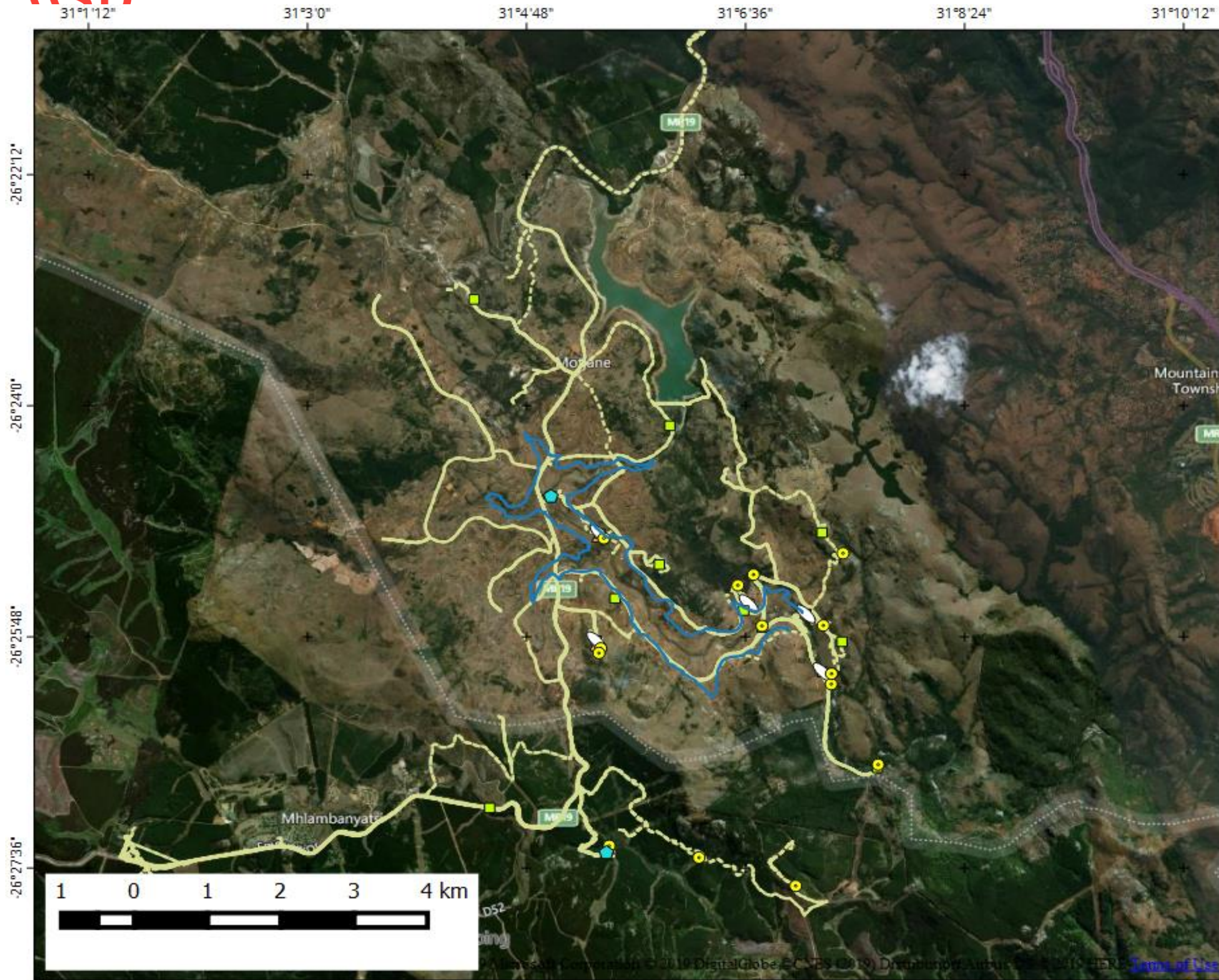
0 2.5 5 km

N

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Figure 6: Extent of the Aquatic Discrete Management Unit defined for this assessment



Legend

Project Structures

Features

- Nondvo Dam

Terrestrial Ecology

- ◆ Bat Recordings
- Camera Traps
- Herpetology Sites
- Meanders
- ▲ Shermans Traps
- - - Tracks

Bing Aerial with labels

N

1:77 769

National Context

Figure 7: The specialist site coverage for the terrestrial ecology assessment



Figure 8: The specialist site coverage for the aquatic ecology assessment

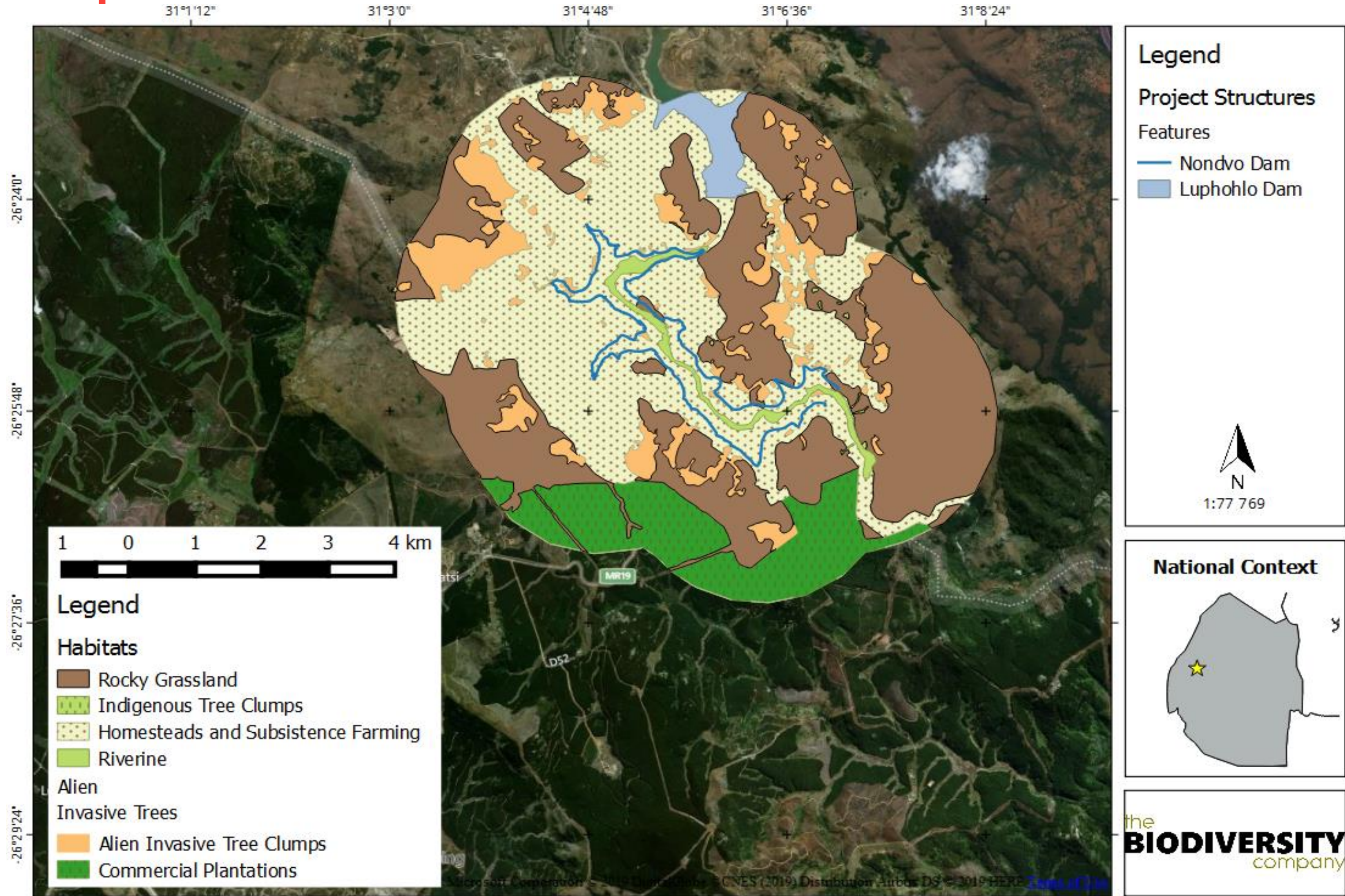


Figure 9: Habitats delineated for the project area

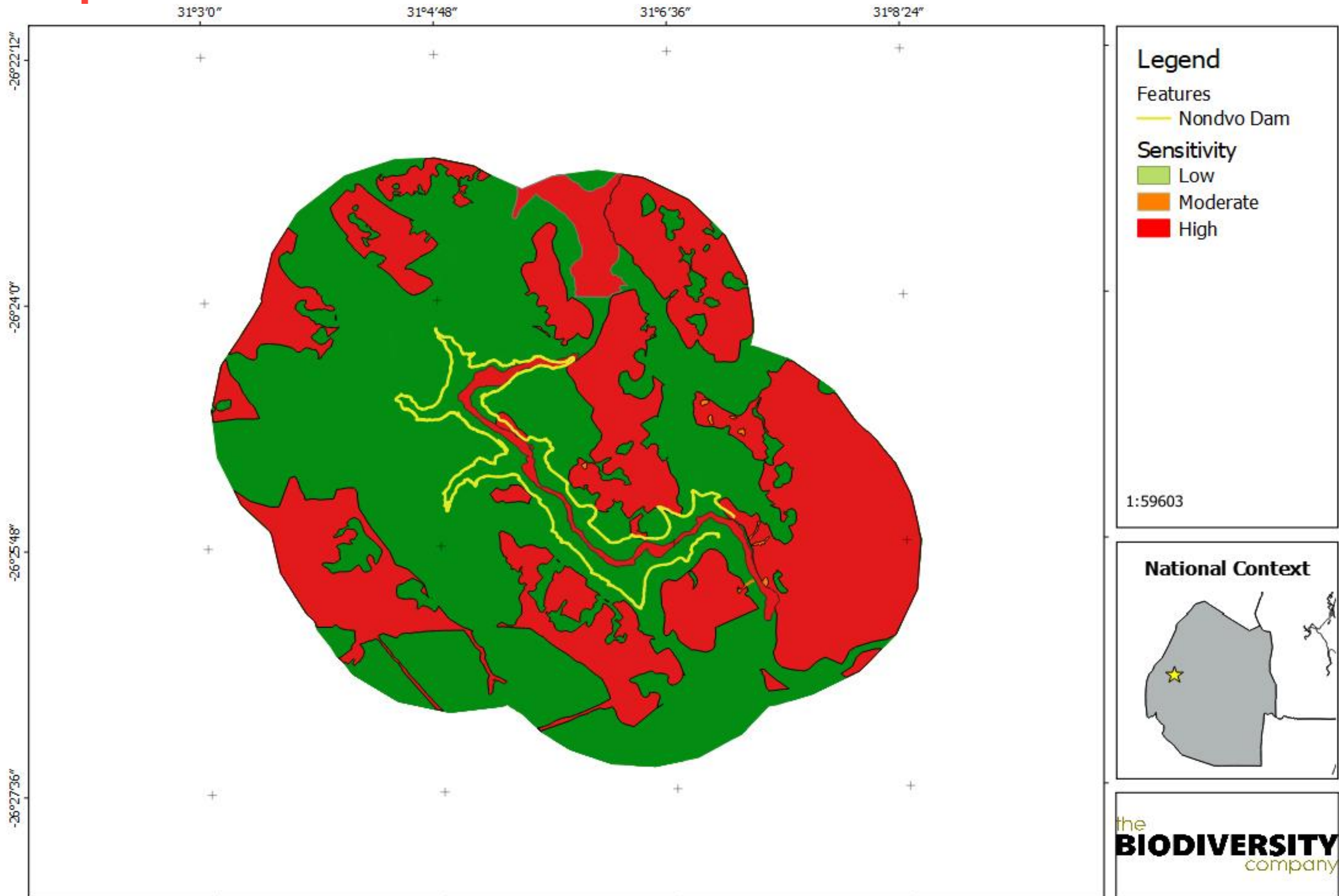


Figure 10: Habitats sensitivity for the project area

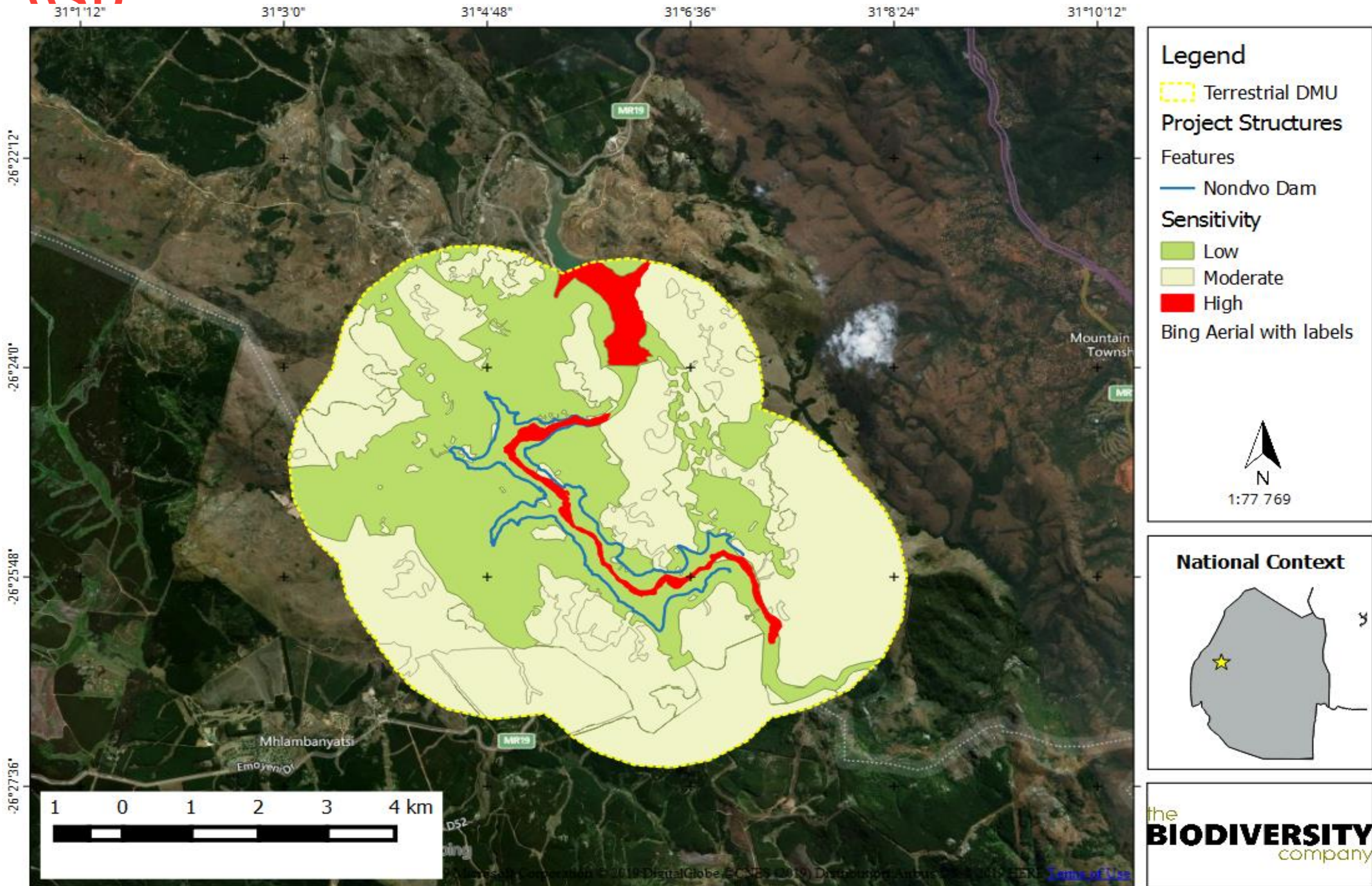
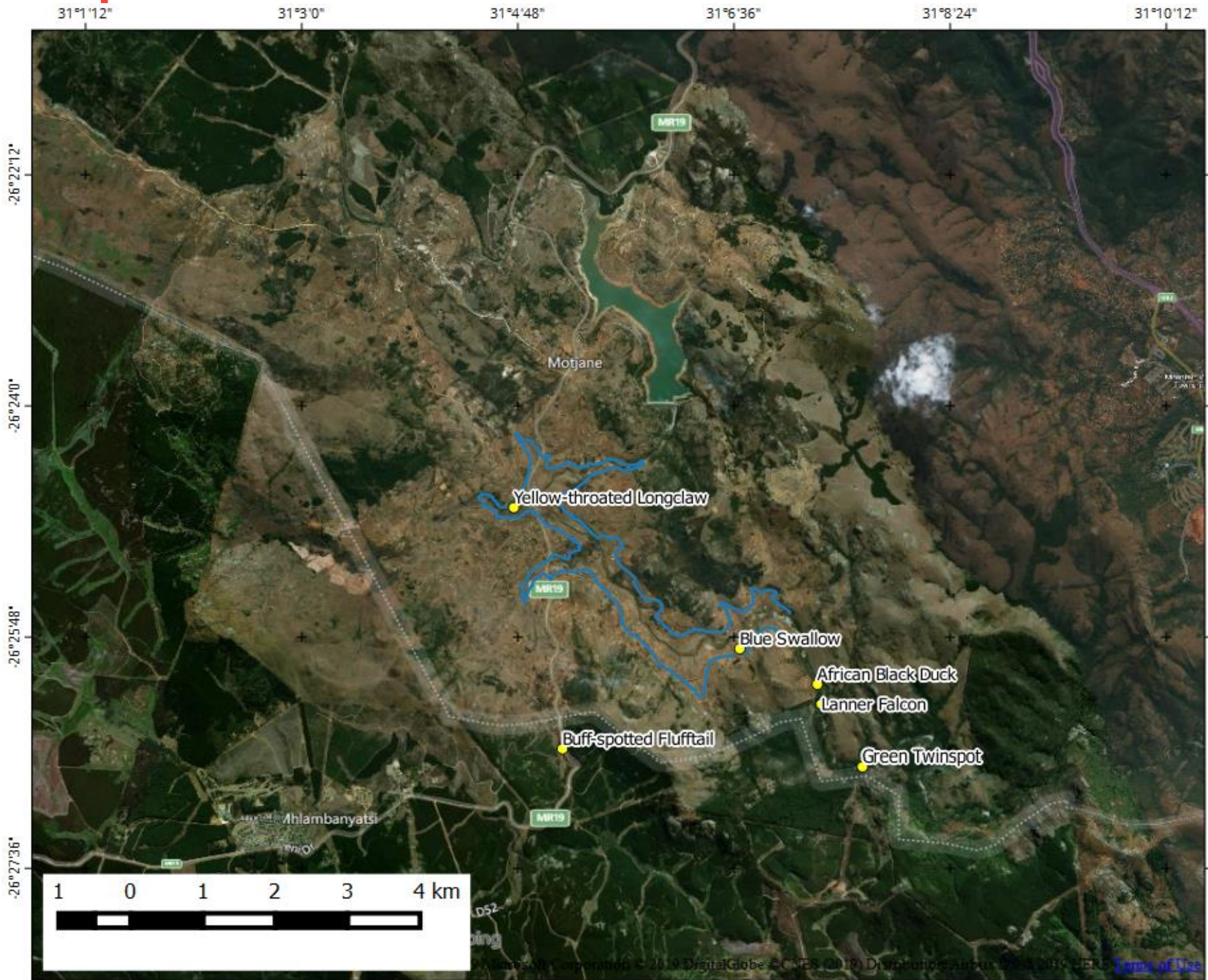


Figure 11: Habitat sensitivity of the mammal habitats.



Legend

- Avifauna

Project Structures

Features

- Nondvo Dam

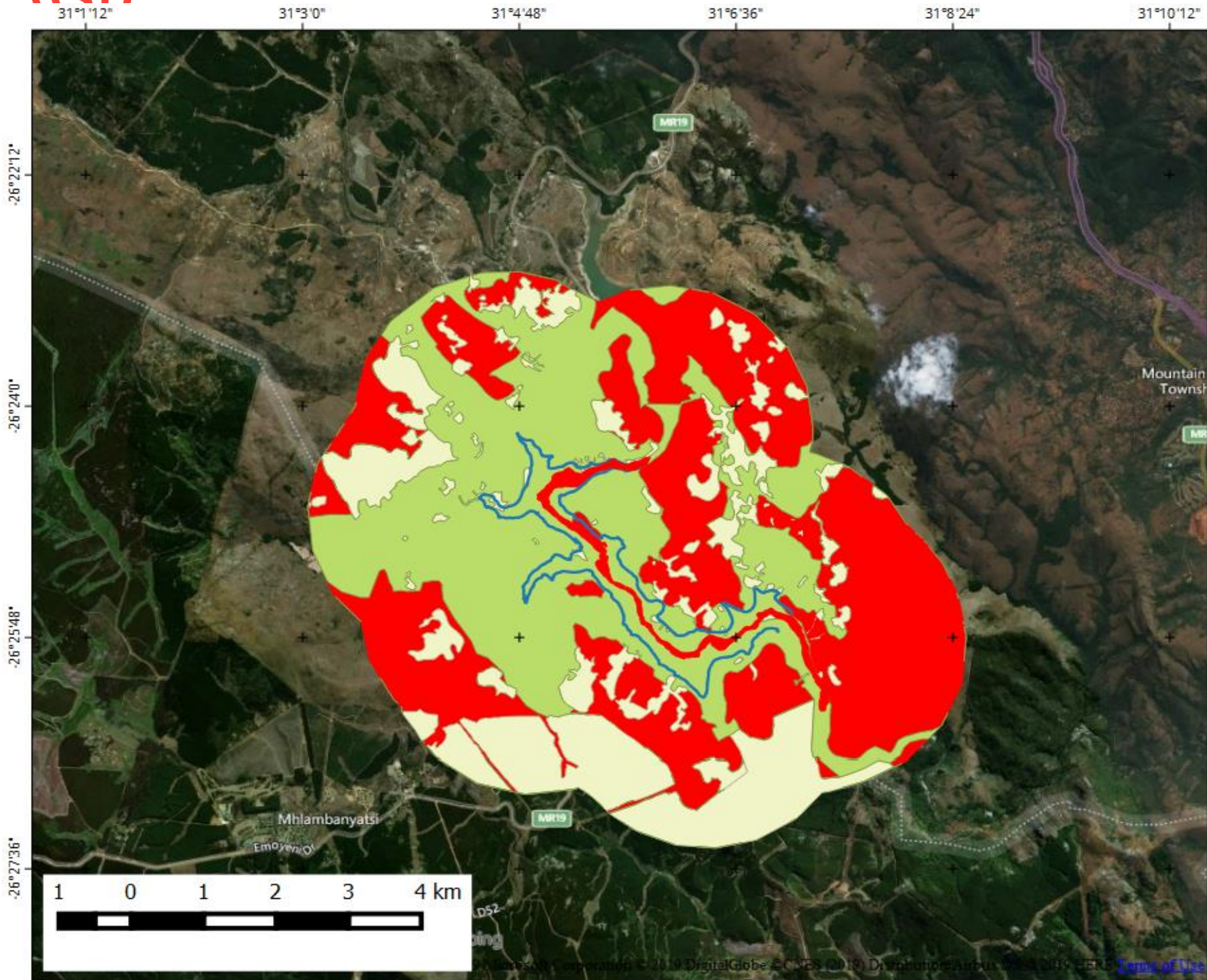
Bing Aerial with labels

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National Context

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Figure 12: Location of some avifaunal species observed during the wet season



Legend

- Terrestrial DMU
- Project Structures
- Features
 - Nondvo Dam
- Sensitivity
 - Low
 - Moderate
 - High
- Bing Aerial with labels

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1:77 769

National Context

the **BIODIVERSITY** company

Figure 13: Avifaunal habitat sensitivity

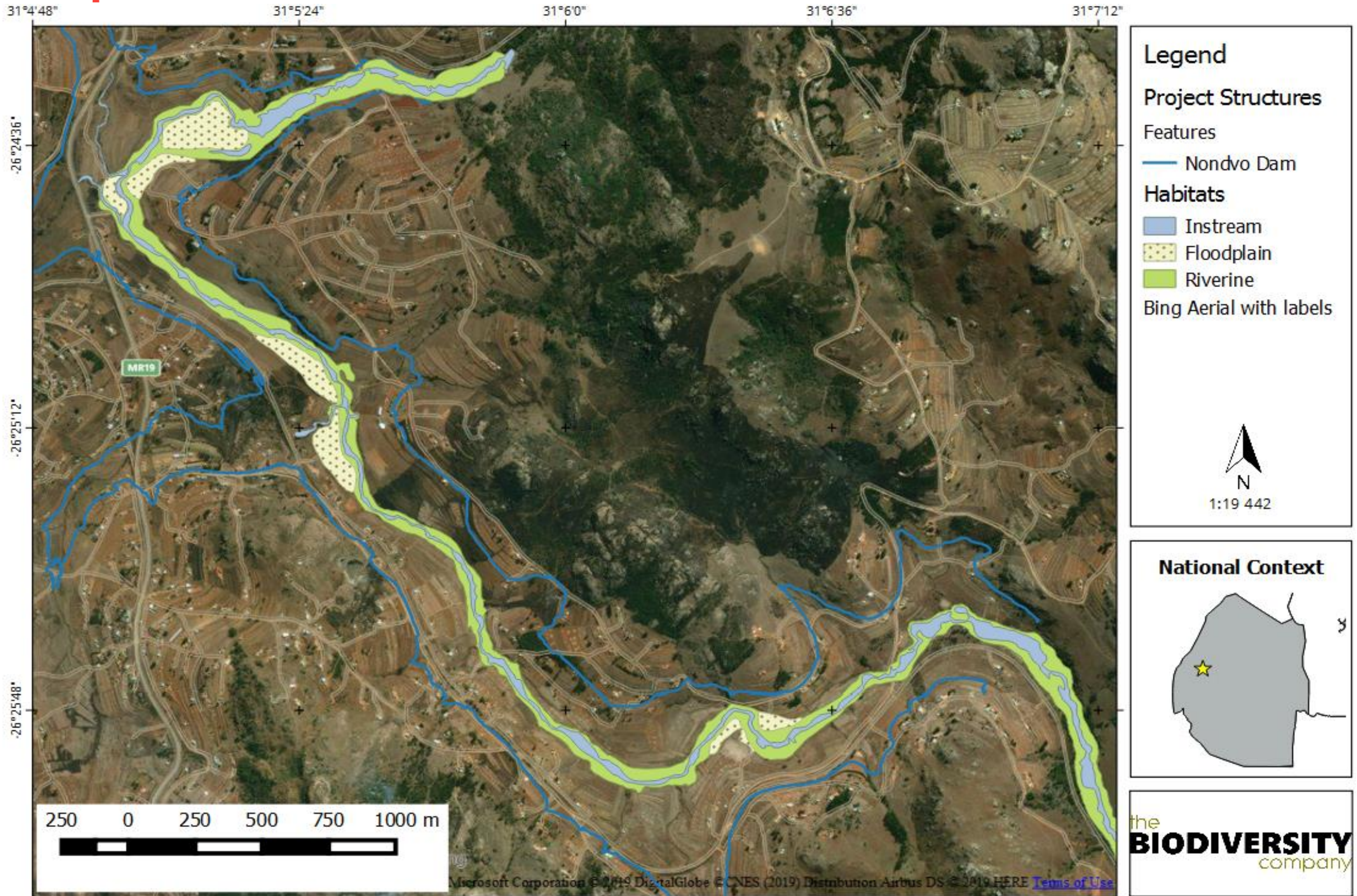
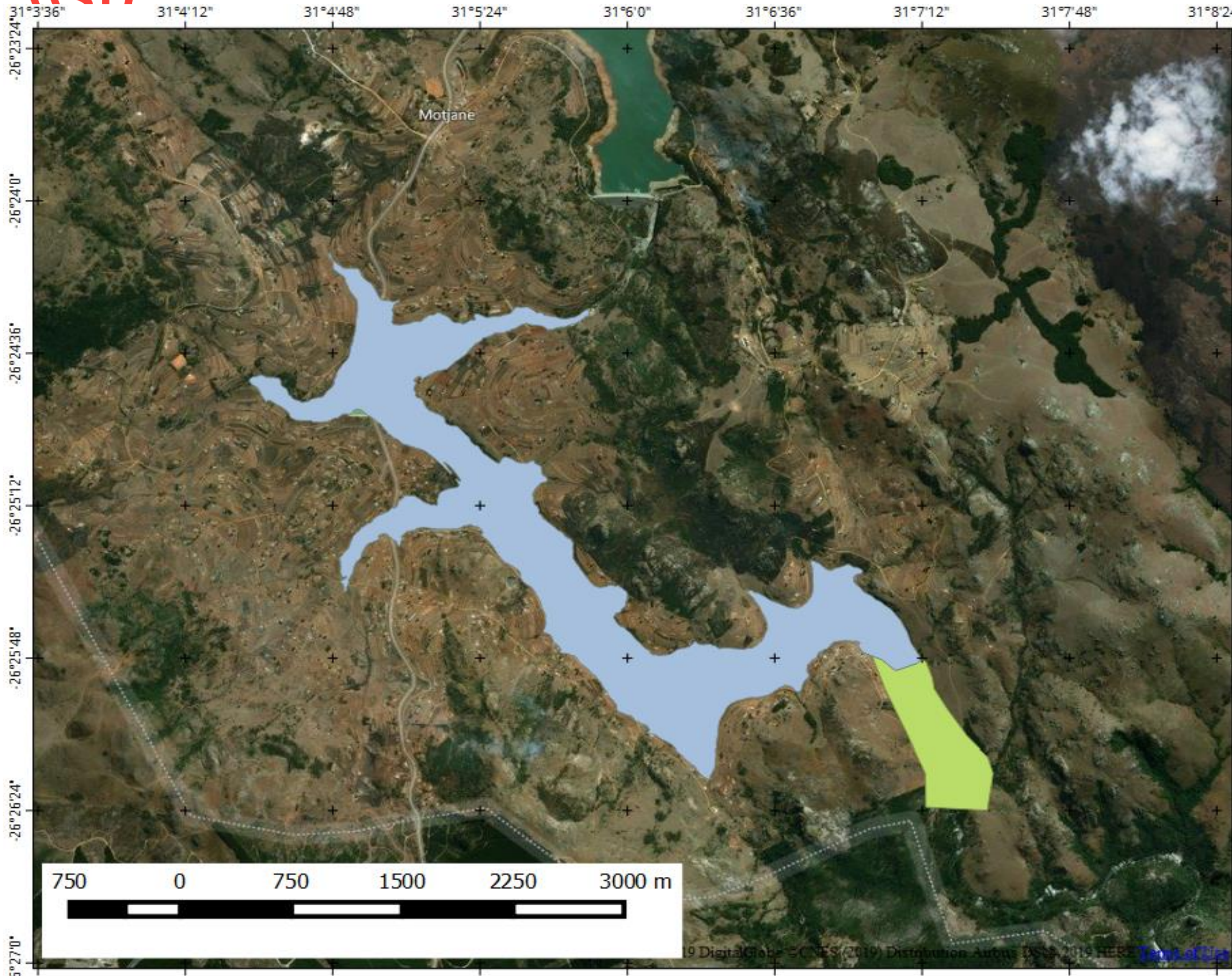


Figure 14: Riparian Habitat in the Lusushwana River



Legend

Ecosystem Services

- Inundation Area
- Downstream Area

Bing Aerial with labels

N
1:38 885

National Context

the **BIODIVERSITY** company

Figure 15: The project area of influence considered for the ecosystem services

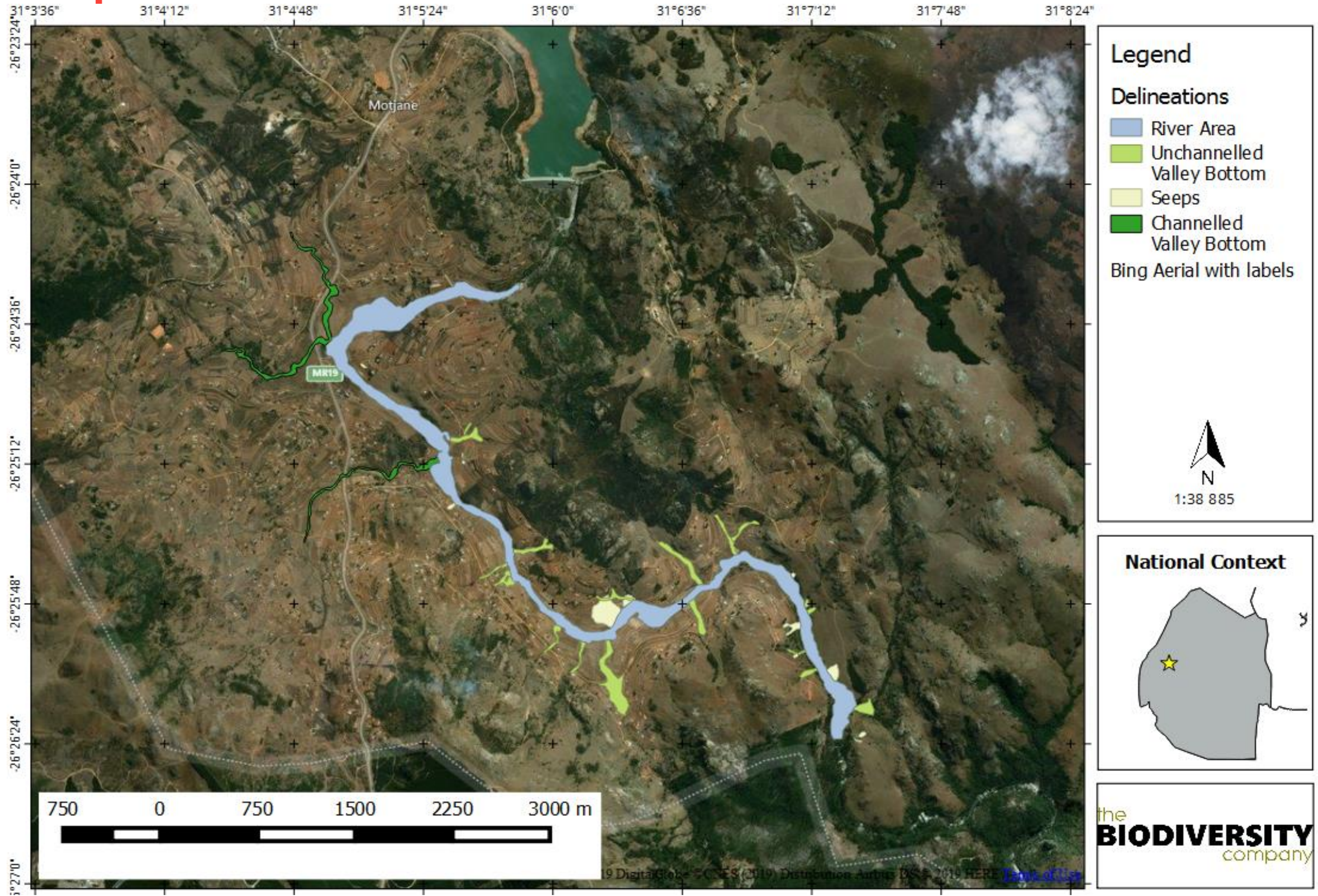


Figure 16: The wetland areas delineated for the assessment

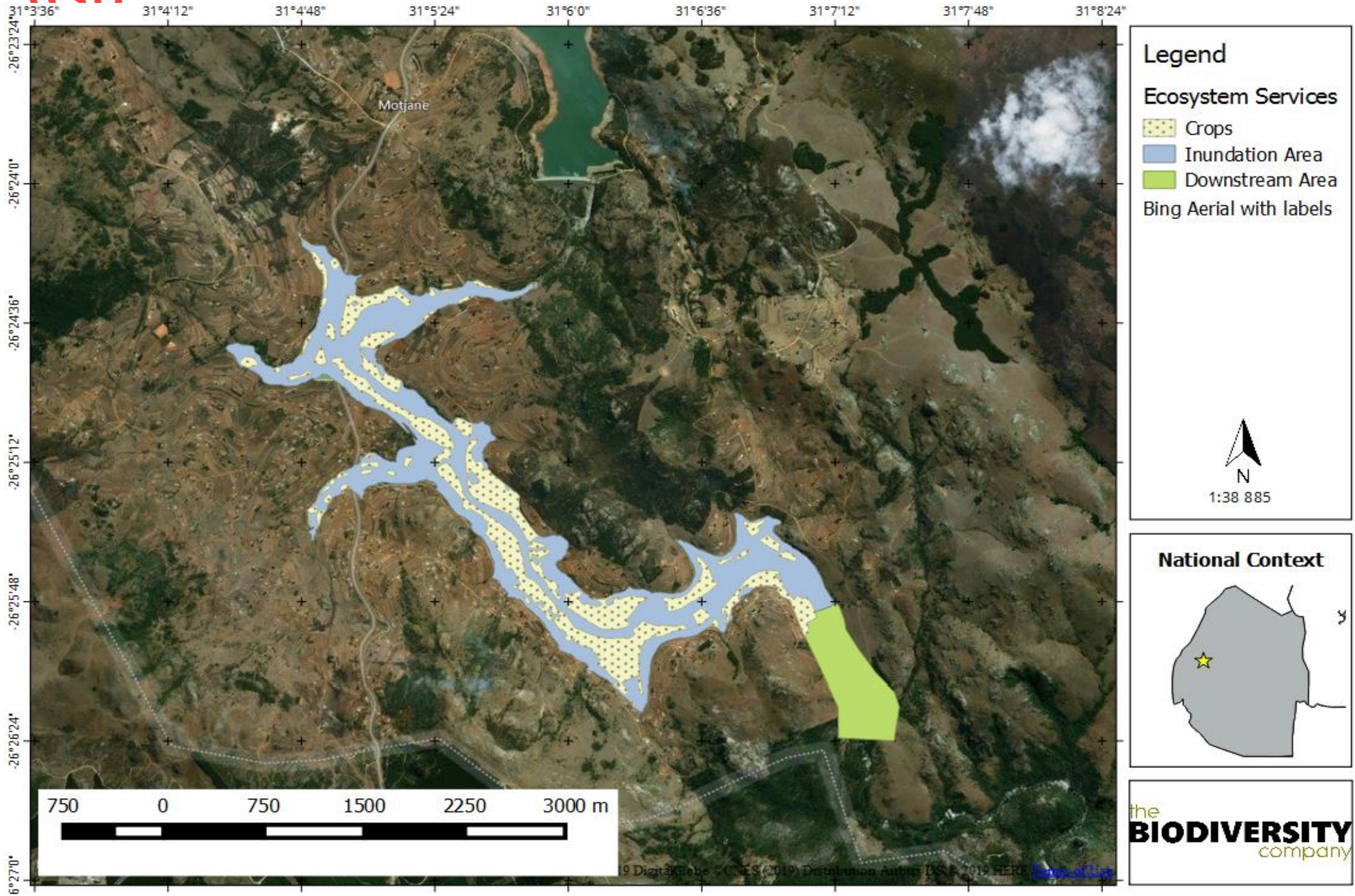


Figure 17: The location and extent of crop fields delineated for the assessment

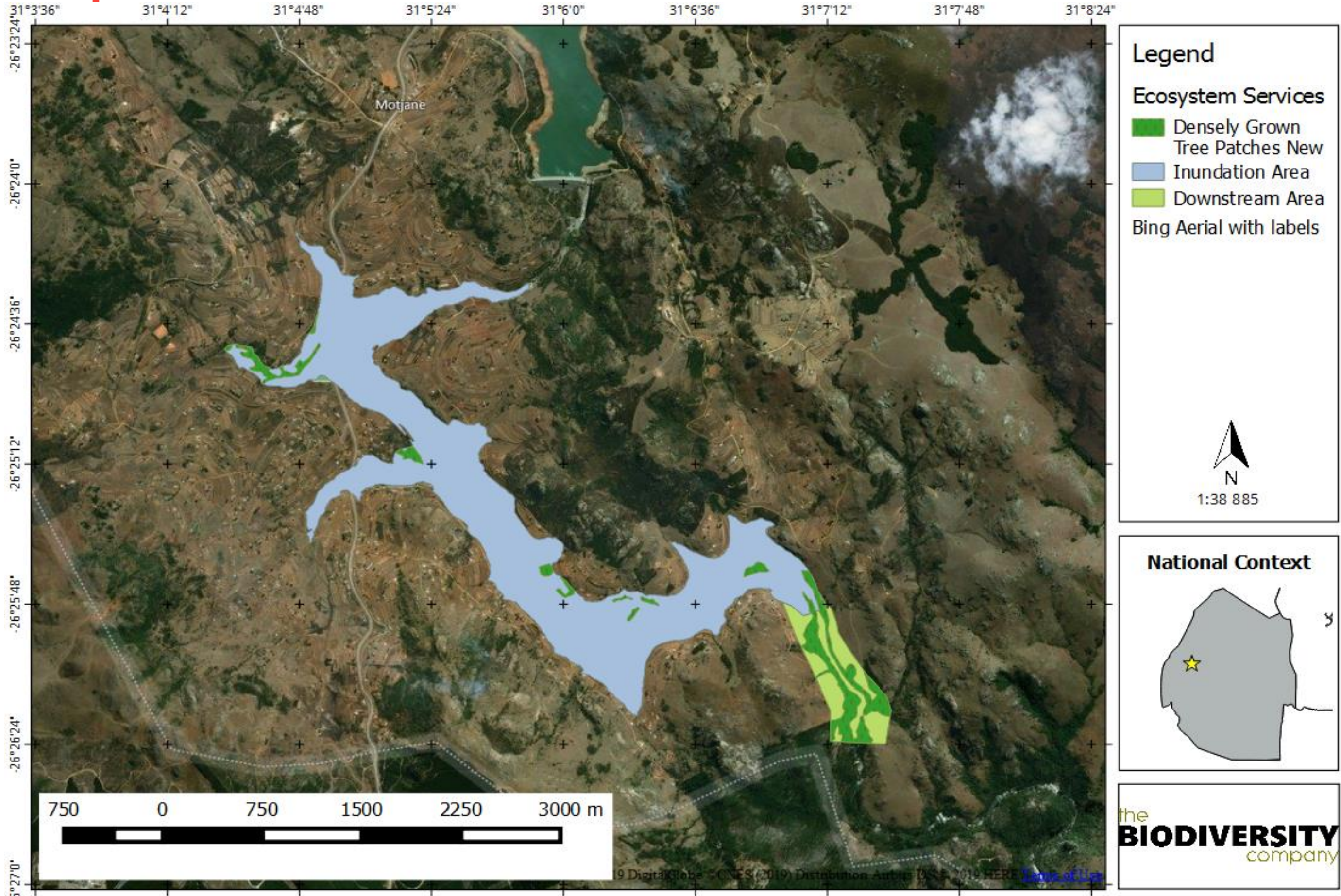
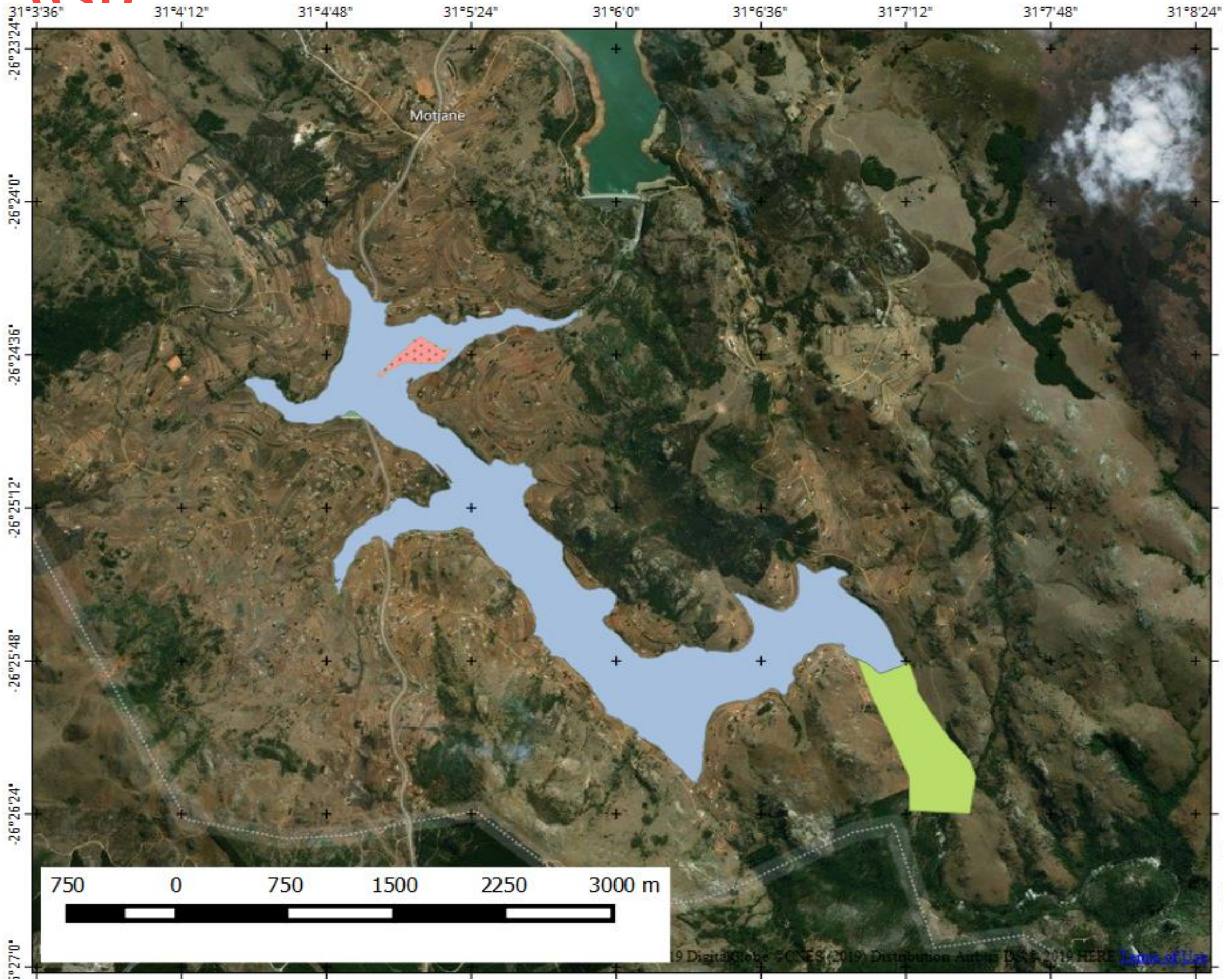


Figure 18: The location and extent of densely grown tree patches delineated for the assessment



Legend

Ecosystem Services

- Sand Mining
- Inundation Area
- Downstream Area

Bing Aerial with labels

1:38 885

National Context

the **BIODIVERSITY** company

Figure 19: The location and extent of sand mining identified for the assessment

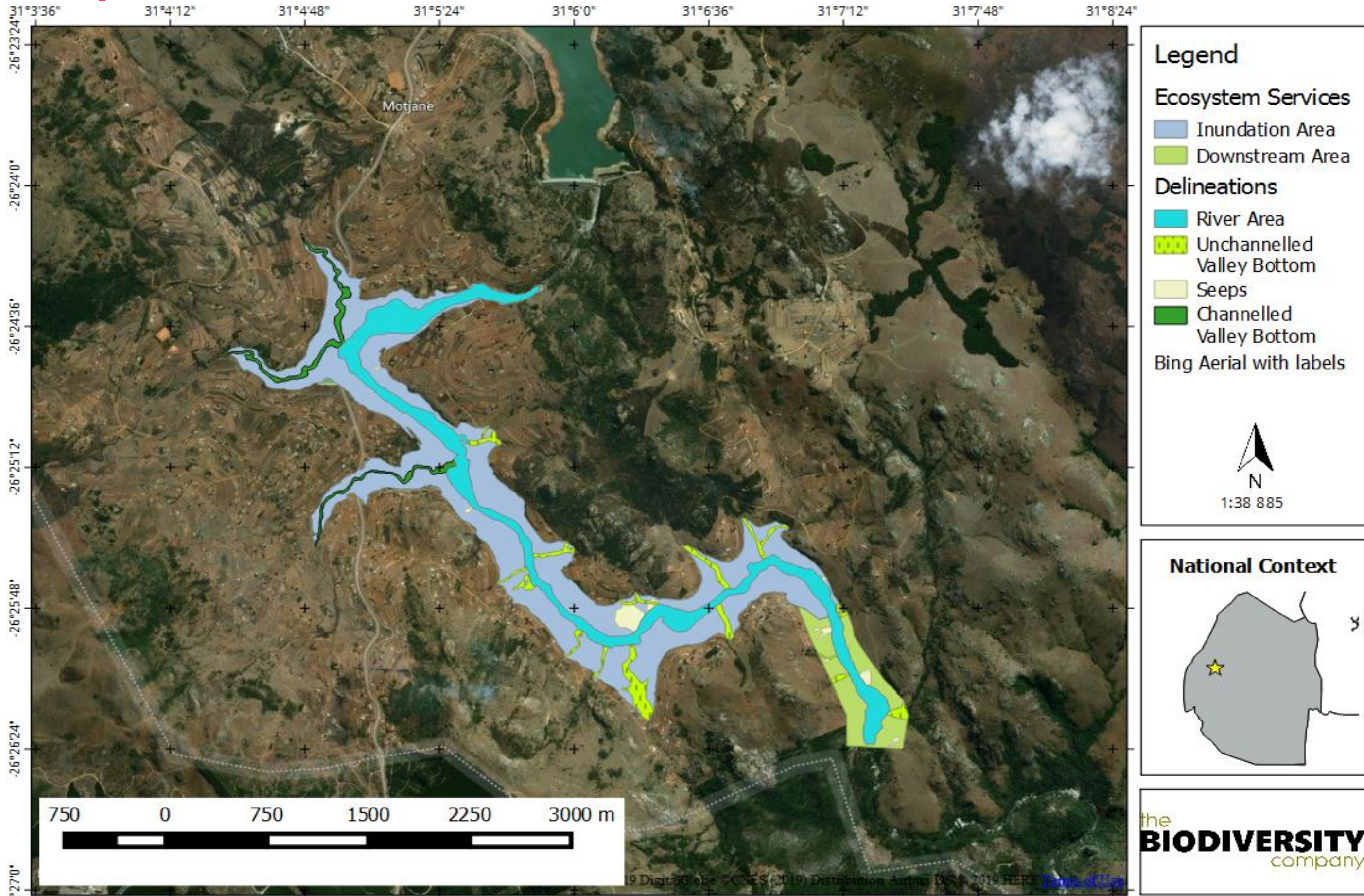


Figure 20: The extent of the delineations considered for the assessment

31°4'48"

31°6'36"

-26°24'0"

-26°25'48"



Legend

Project Structures

Features

- Camp / Offices
- Quarry
- Dam Wall

Features

- Main Road
- Existing Railway
- Nondvo Dam
- Road

Proposed Servitudes

- Dam Crest road
- Railway

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National Context

Figure 101 : The Project aspects considered for the impact assessment

PROPOSED MBABANE – MANZINI CORRIDOR DAM (NONDVO DAM)

HERITAGE SURVEY REPORT

MAPS

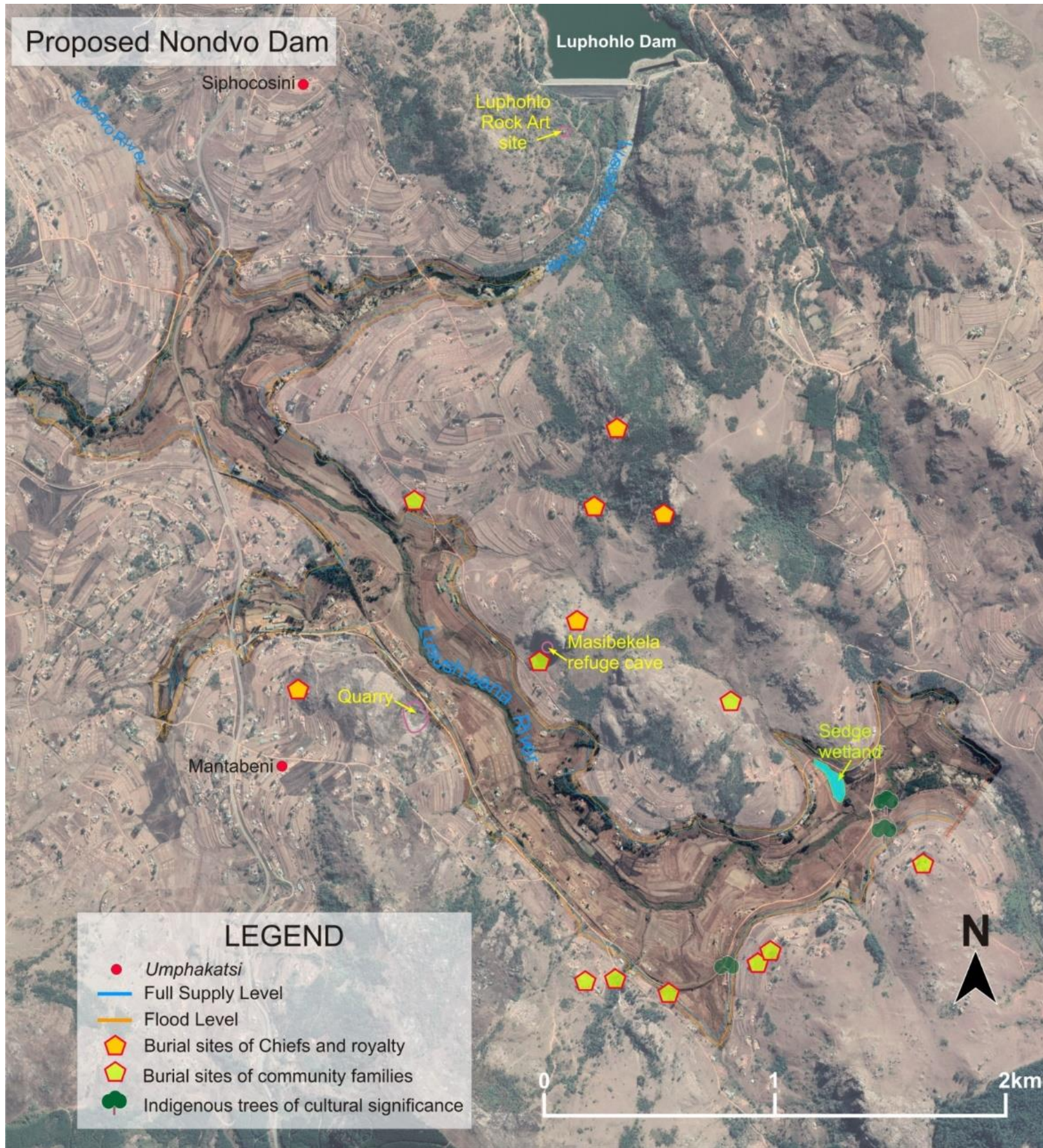


Figure 2. Location of archaeological and cultural heritage sites.

ENVIRONMENTAL AND SOCIAL IMPACT ASSESSMENT OF THE PROPOSED MBABANE - MANZINI CORRIDOR
DAM PROJECT, ESWATINI

STAKEHOLDER ENGAGEMENT PLAN
MAPS



Error! No text of specified style in document.-1: Map Indicating the Project Location

Figure



MBABANE - MANZINI CORRIDOR DAM FEASIBILITY STUDY

RESETTLEMENT ACTION PLAN

MAPS



Figure Error! No text of specified style in document.-1: The general location of Nondvo Dam



Figure Error! No text of specified style in document.-2: Map indicating the Project Location

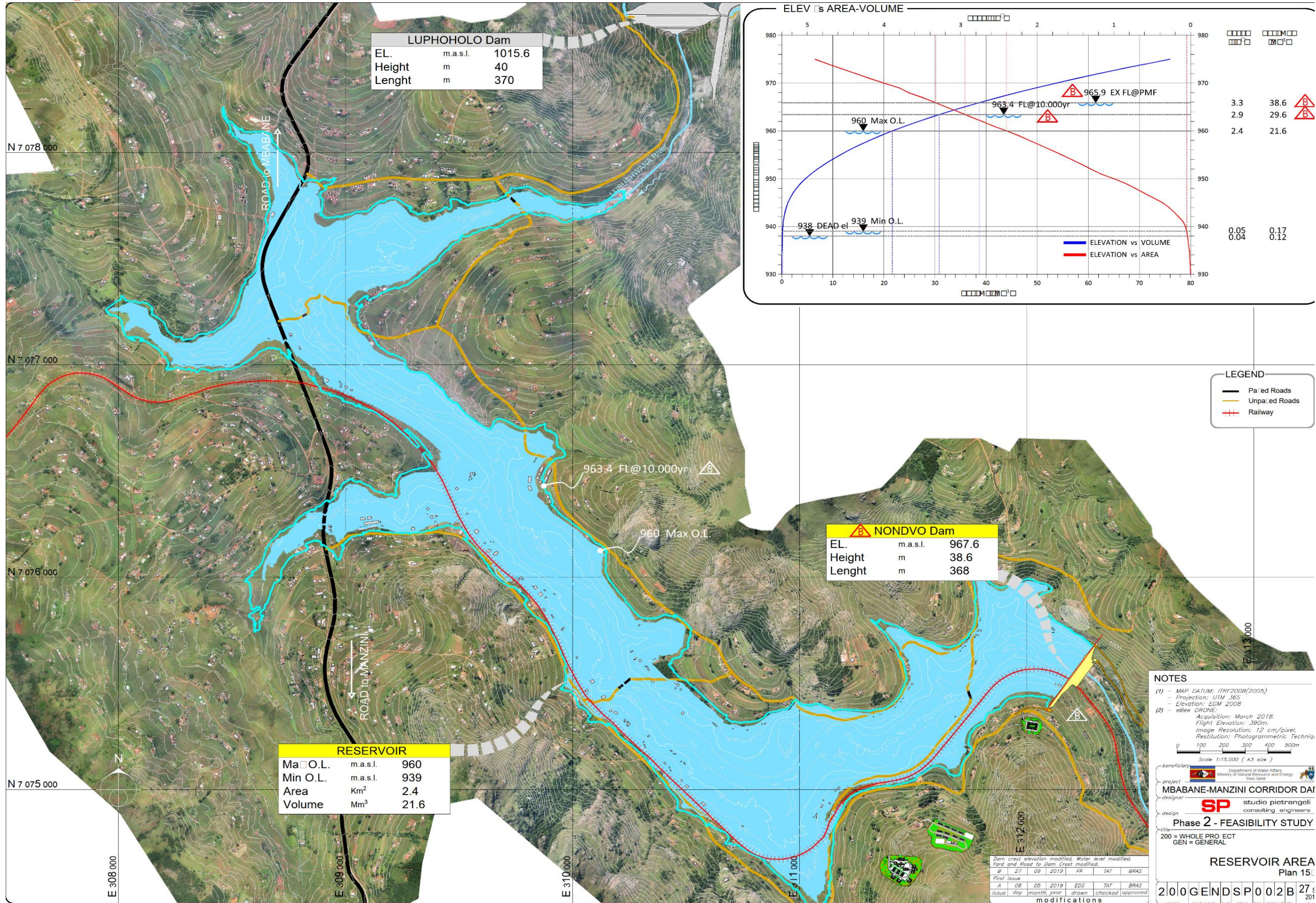


Figure Error! No text of specified style in document.-3: Layout of the Dam wall, reservoir area along with associated infrastructure

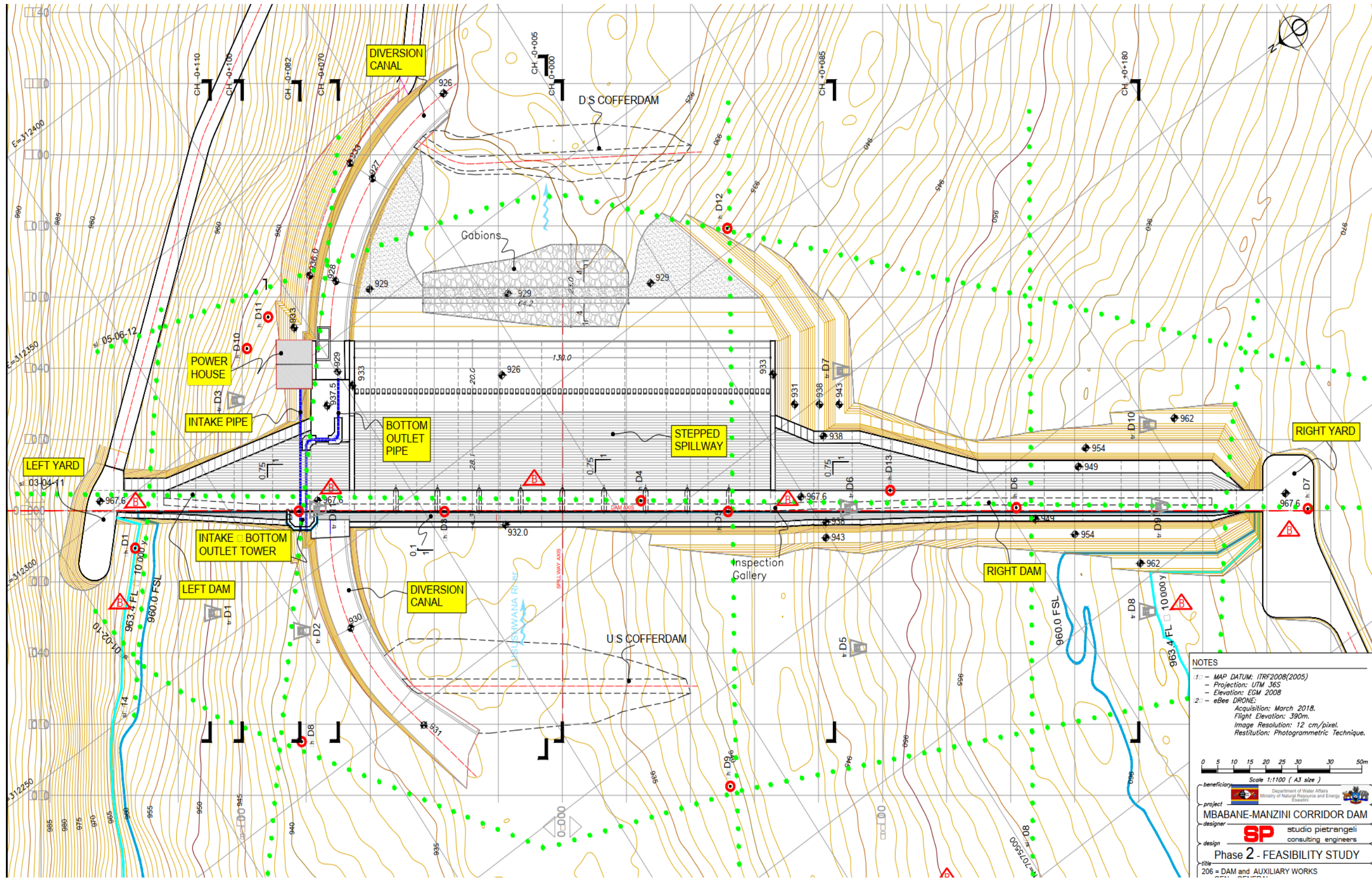


Figure Error! No text of specified style in document.-4:

Plan of the dam wall and auxiliary works

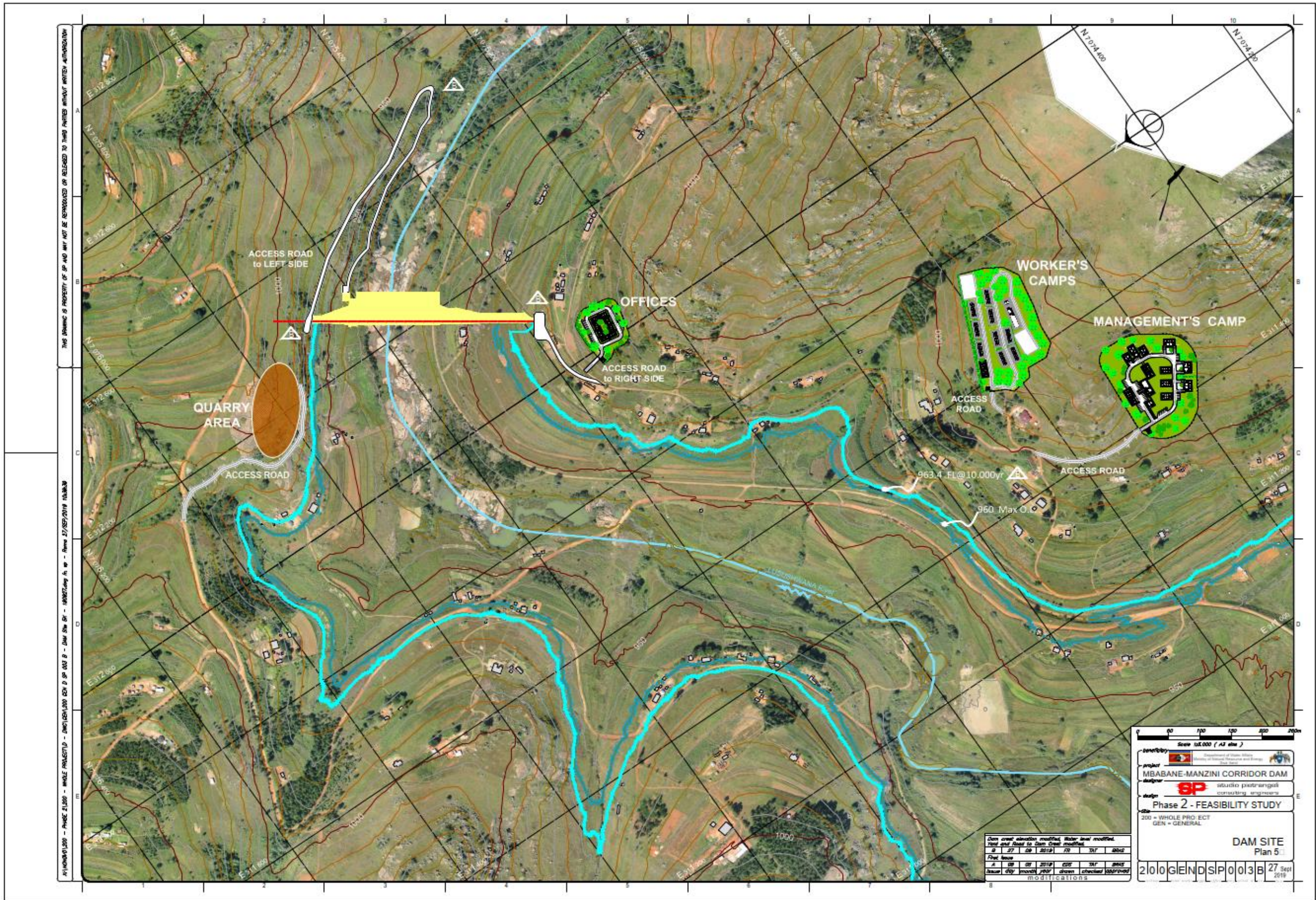


Figure Error! No text of specified style in document.-5: Layout showing the location and extent of the dam wall and associated infrastructure (quarry, site camps and offices, access roads)



Figure Error! No text of specified style in document.-6:

Map showing Low Level Crossings

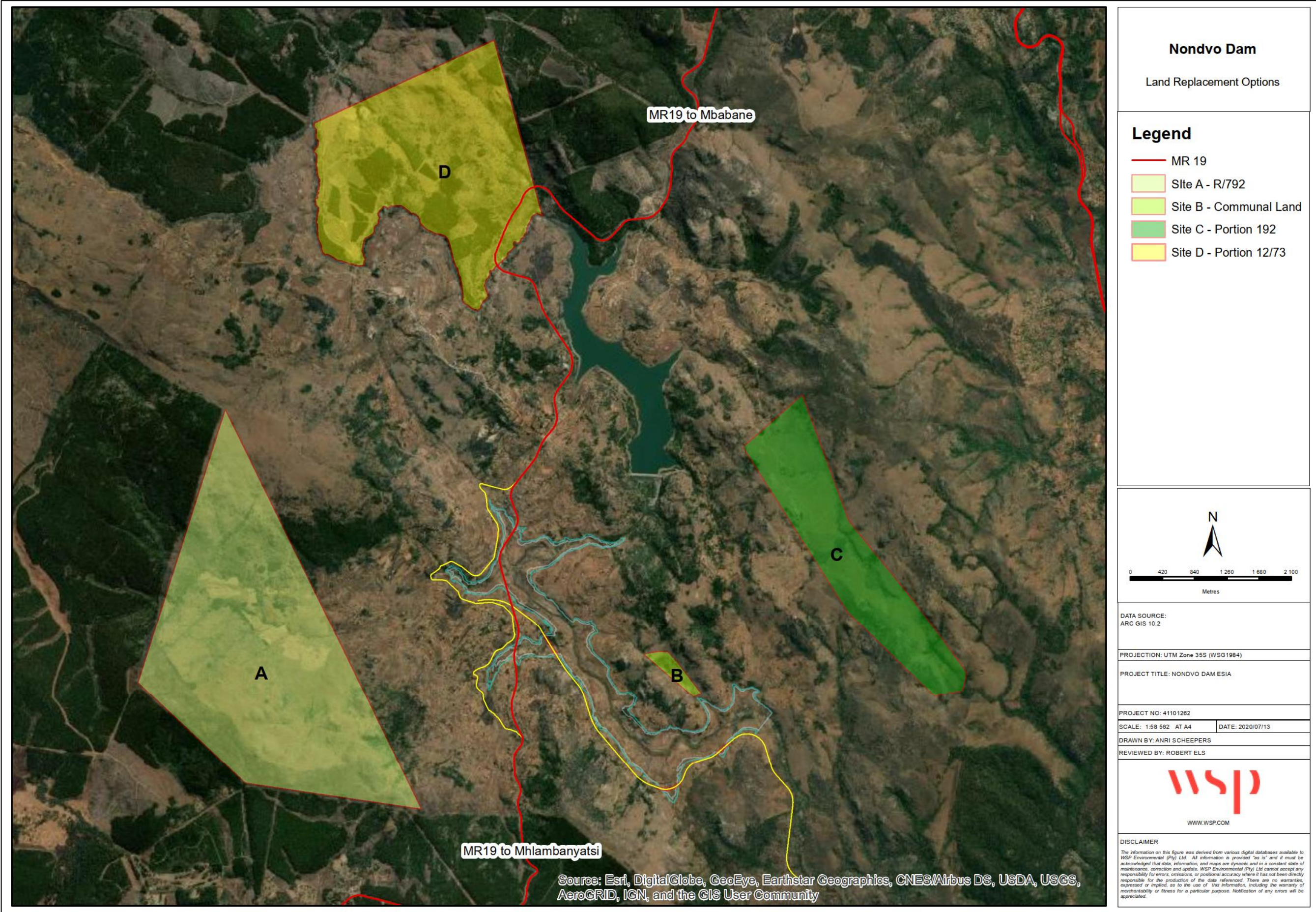
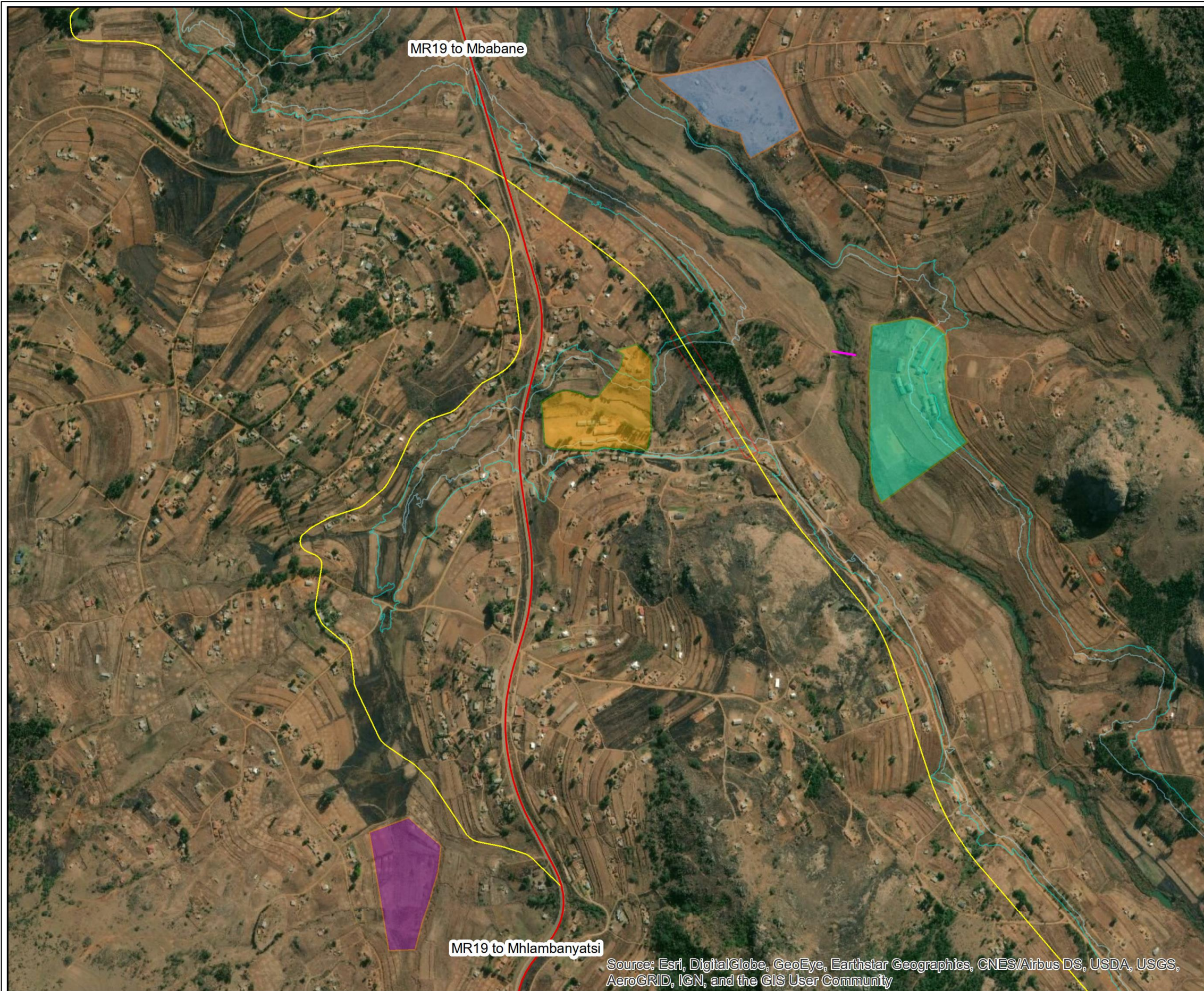


Figure Error! No text of specified style in document.-8:

Proposed residential and agricultural resettlement sites



Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community

Nondvo Dam

School Relocation Sites

Legend

- Footbridge
- MR 19
- Current Masibekele High School Site
- Current Bhekephi Primary School Site
- Proposed Bhekephi Primary School Site
- Porposed Masibekele High School Site

0 80 160 240 320 400
Metres

DATA SOURCE:
ARC GIS 10.2

PROJECTION: UTM Zone 35S (WSG1984)

PROJECT TITLE: NONDVO DAM ESIA

PROJECT NO: 41101262

SCALE: 1:11 942 AT A4 DATE: 2020/07/13

DRAWN BY: ANRI SCHEEPERS

REVIEWED BY: ROBERT ELS

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Proposed School Relocation Options