

SUSTAINABLE UTILISATION PLAN
PONGOLAPOORT DAM

Revision 1, January 2006

Prepared by:

Water Abstraction and Instream Use (Environment and Recreation)

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APPROVAL

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Approved for Ecotourism Afrika Trust

Mr. Paul Bewsher (Trustee)

Approved for the Department of Water Affairs and Forestry

Mr. J.G.G. Hansmann (Regional Director: KwaZulu Natal Water Resource Management)

Dr. Cornelius Ruiters (Manager: Water Use)

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The Department of Water Affairs and Forestry (DWAF) wishes to thank Ecotourism Afrika Trust for facilitating the planning procedure and compilation of this management, utilisation and development plan for Pongolapoort Dam.

As a participatory planning procedure, the success of the Sustainable Utilisation Plan (SUP) will only be ensured if all stakeholders, both interested and affected, actively participate in the process. In this regard DWAF appreciates the opportunity to thank all the participants, ranging from resource managers, community facilitators, neighbours, product managers, interested locals, to government officials and politicians.

Without the active participation of these people, who voluntarily sacrificed time and enthusiastically shared in the planning process, the SUP for the Pongolapoort Dam would not have been possible, nor would any plan truly reflect the needs and expectations of the community tasked with caring for, protecting and sustainably utilising the resources of the dam.

PROLOGUE

This Plan is the management, development and institutional plan for Pongolapoort Dam and can only be modified after consultation with all relevant stakeholders.

Compiled through the Sustainable Utilisation Planning Procedure (SUPP), the plan is based on the principles underlying sustainability addressing environmental, industry and community involvement aspects by providing clarity regarding policy and strategy as well as operational guidelines pertaining to each Key Performance Area (KPA).

As a document to guide the management of Pongolapoort Dam, based on the inputs of all stakeholders, the plan also serves as the base document for monitoring both performance and compliance regarding the various KPAs.

The structure of the plan consists of two broad parts, the first addressing the background, aims and objectives, encumbrances to the plan, and challenges facing the management institution.

The second part consists of an integrated environmental management plan ("The Plan"), zoning plan ("The Zones"), and the proposed institutional structure ("The Institution").

The Plan covers four key performance areas – Resource management; Private sector involvement; Community involvement and beneficiation; Monitoring and evaluation. Within each area the plan provides insight into the specific vision with the key performance area, the objectives, the policy and strategy, as well as operational guidelines which will focus the management decisions, actions and initiatives.

Various zones have been proposed for both the water surface of Pongolapoort Dam and the state land within the expropriation boundary for which the Department of Water Affairs and Forestry is the

user department, including a Public Use Zone, a Limited Use Zone and a Conservation Zone. The land adjacent to the dam has been zoned to complement the surrounding conservation zonation.

Several development cores based on the broad zonation plan as well as on environmental constraints have been identified including two public access sites, and the developments within the Limited Use Zones. Only access via one of the designated access points will be deemed legal. All developments will be subject to a fair and open procurement procedure, and will be dependent on the successful finalisation of community-public-private partnerships.

To effectively and efficiently manage the implementation of the plan, a proposal regarding the management institution as well as institutional structuring and arrangements is made. The responsibility regarding the implementation of the SUP will resort with a Water User Association.

Undertaken in this manner it is believed that the sustainable utilisation of Pongolapoort Dam can and will be attained.

ABBREVIATIONS

BPEO	Best Practicable Environmental Option
DWAF	Department of Water Affairs and Forestry
ECA	Environment Conservation Act (Act No. 73 of 1989)
EIA	Environmental Impact Assessment
DFA	Development Facilitation Act (Act No. 67 of 1995)
IEM	Integrated Environmental Management
NEMA	National Environmental Management Act (Act No.107 of 1998)
NWA	National Water Act (Act No. 36 of 1998)
PFMA	Public Finance Management Act (Act No. 1 of 1999)
PPP	Public Private Partnership
SUP	Sustainable Utilisation Plan
SUPP	Sustainable Utilisation Planning Procedure

SECTION 1: INTRODUCTION

In an effort to ensure that the water of the Pongolapoort Dam is protected, used, developed, conserved, managed and controlled in a sustainable and appropriate manner, and to ensure that access to and use of the dam is equitable, the Department of Water Affairs and Forestry (DWAF) commissioned the compilation of a Sustainable Utilisation Plan (SUP) for the Pongolapoort Dam.

The purpose of the SUP for the Pongolapoort Dam is to ensure the attainment of the National Water Act, 1998 (Act No. 36 of 1998) [NWA] Section 2 objectives, including that:

- access to water is equitable;
- past gender and racial discrimination is redressed;
- the utilisation of the water is efficient, sustainable and beneficial;
- social and economic development is facilitated;
- provision is made for the growing demand for water use, in particular the use of water for recreational purposes;
- both the aquatic and associated ecosystems, inclusive of their biodiversity are protected;
- pollution and degradation of the water resource is reduced and prevented;
- international obligations can be met;
- dam safety is promoted; and as part of the SUP
- a suitable institution is proposed that is representative of the host community both in racial and gender terms.

The Minister, as the public trustee of the nation's water resources, must through DWAF ensure that the water of the Pongolapoort Dam is *inter alia* protected and managed in a sustainable and equitable manner, for the benefit of all persons and in accordance with his constitutional mandate (see NWA, Section 3).

The aim of the Pongolapoort Dam SUP is to provide a broad policy framework, setting out key objectives, defining responsibilities and

operational guidelines for sustainable management and development of the water resource and surrounding state owned land.

As a planning tool the institution responsible for managing the Pongolapoort Dam, will use this plan for decision-making purposes, as well as an awareness tool for staff, neighbours and water users as to the vision, mission and operational guidelines of the dam.

Additionally, the Pongolapoort Dam SUP will guide the management institution in its provision of general access to and use of the dam, while DWAF will be responsible and accountable for specific approvals such as concessions and management contracts.

Incorporated into the Integrated Development Planning (IDP) process for the Local and District Municipality, the SUP could also serve as regional development guideline, ensuring that development objectives are obtained sustainably.

SECTION 2: LEGAL FRAMEWORK, CONCEPTS AND PRINCIPLES FOR UTILISATION AND SUSTAINABILITY PLANNING

Not only do these Acts and Ordinances guide the specific decisions and actions, they also provide the framework for monitoring performance and compliance, and provide guidelines regarding contravention, offences and penalties.

The principles underlying the SUP for the Pongolapoort Dam are based on general principles guiding the attainment of sustainability – sound resource management; equitable and appropriate community involvement and beneficiation; the creation of viable and sustainable business opportunities; and clear policies, objectives and operational guidelines.

The encumbrance survey illustrated that within the South African context, ensuring compliance with relevant legislation is pivotal to the attainment of sustainability. At the Pongolapoort Dam, not only the NWA is applicable, and is it imperative that all actions are compliant with relevant legislation such as:

- KwaZulu-Natal Wildlife Provincial Nature Conservation Ordinance;
- National Heritage Resources Act (Act No. 25 of 1999);
- Development Facilitation Act (Act No. 67 of 1995) [DFA];
- Civil Aviation Regulations
- Occupational Health and Safety Act (Act No. 85 of 1993);
- Environment Conservation Act (Act No. 73 of 1989) [ECA];
- Conservation of Agricultural Resources Act (Act No. 43 of 1983);
- National Environmental Management Act (Act No. 107 of 1998) [NEMA];
- Public Finance Management Act (Act No. 1 of 1999) [PFMA];
- Regulations framed in terms of paragraph (b), (c), and (j) of Section 70 of the Water Act, 1956 (Act No. 54 of 1956);
- Department of Transport Proposed Model Inland Waters (Navigation) Regulations, Government Notice 1115 of 1997; and
- Relevant Integrated Development Plans (IDPs).

SECTION 3: BACKGROUND TO THE PONGOLAPOORT DAM

The Pongolapoort Dam has tremendous potential to stimulate regional development, yet requires an effective plan to ensure sustainability. By compiling a SUP for the dam, it is envisaged that a harmonious balance can be attained between resource managers, affected communities and user groups. A clear policy framework, resulting in an implementable utilisation plan could contribute significantly to unlocking the potential of the dam in a just, appropriate and equitable manner.

The Pongolapoort Dam forms part of the Pongolapoort-Makatini Flats Government Water Scheme (GWS), which was proposed and developed in an effort *“to utilise the water resources of the Pongolo river, for the irrigation of sugar cane in Zululand in the area east of the Lebombo mountains.”* (Proposed Pongolapoort-Makatini Flats GWS; 1960/1961). The GWS consists of a major storage dam on the Pongolo River at the lower end of the Pongolapoort through the Lebombo Mountains, and a system of concrete-lined canals to distribute the stored water.

Part of the original plan and proposal, was the development of irrigation farms on the Makatini Flats, linked with the establishment of both associated industries and settlements, similar to the Pongola settlement.

Currently the Pongolapoort Dam, completed in the 1960's, is managed by DWAF as an irrigation and flood control dam. In 1979 the Administrator of Natal concluded a Deed of Agreement with the Minister of Water Affairs whereby the water surface area and the surrounding land be controlled and managed as though it is a Park, Game Reserve or Nature Reserve in accordance with the provisions of Section 11(1)(b) of the Nature Conservation Ordinance, 1974. Additionally, it was the intention to formally proclaim the area as a nature reserve, yet this has never been undertaken.

Current uses include sport angling, boating, commercial fishing and tourism activities. Water from the dam is used for irrigation and domestic purposes, while surplus water is released to allow for effective flood management.

(See Appendix 1 for a summary of contextual and background information on the Pongolapoort Dam.)

The Pongolapoort Dam is situated in an area of high conservation value, as reflected in the concerns raised by Paul Kruger, State President of the Zuid Afrikaanse Republiek, in 1884 regarding the decimation of wildlife by injudicious hunting practices. In 1889 the President again proposed that the Pongola area be proclaimed as a game reserve, formally protecting the game for future generations. Not until 1894 did the area receive official protection, when on 13 June 1894 the Pongola Game Reserve was proclaimed, the first formally protected area in Africa.

Today the land surrounding the Pongolapoort Dam is mostly protected, either as a public nature reserve, private game farm, or communally protected area. Land which once was irrigated with water from the dam is now used for conservation, seeing a return in wildlife which has been absent for nearly a century.

The area has been characterised by changes from conservation to agriculture, back to conservation, yet currently the fluctuation has been based on tourism grounds as opposed to political motives. The Lubombo Spatial Development Initiative identified the tourism potential of the Pongolapoort Dam, by affording the region *“International Node”* status.

Numerous attempts have been initiated by both the public and private sectors as well as local communities to unlock the potential of the Pongolapoort Dam, yet most of these have been scuttled by a lack of clear policy and guidelines to direct the formation of equitable structures focused on attaining and optimising synergy and development.

The SUPP for the Pongolapoort Dam has been a concerted effort by DWAF to redress this situation, and compile both a management plan and recommend institutional structures responsible for implementing the plan.

By assisting the affected community, conservation agencies and the user groups in the compilation of an acceptable and implementable plan, DWAF believes it can attain the objectives of the NWA.

The success of the planning procedure depended on the active involvement of all affected stakeholders, since the procedure was merely facilitated by DWAF, while the decisions, plans and recommendations were made by the participants.

The final SUP thus reflects the needs of the environmental managers, affected communities and user groups, as well as an institutional arrangement to manage the implementation of the plan.

It is believed that this SUP will result in the sustainable utilisation of the Pongolapoort Dam, based on sound environmental principles, good business practices and equitable community involvement.

SECTION 4: SUSTAINABLE UTILISATION OF THE PONGOLAPOORT DAM

Numerous stakeholders were identified and invited to participate in an open and consultative SUPP for the Pongolapoort Dam.

During these stakeholder workshops and planning sessions, all the roleplayers envisaged the conservation of the Pongolapoort Dam through sustainability being attained between resources utilisation, host community beneficiation, and industry participation, based on clear and acceptable public policy.

As such, the mission for the dam was accepted as being:

“A commitment to sustainably managing the water resources and surrounding state land of the Pongolapoort Dam, based on sound environmental principles, that benefit both the water user and host community in an equitable manner.”

The SUP procedure at the Pongolapoort Dam entailed several public meetings, discussions with Technical Task Teams, open days and discussions with the proposed management committee members. Throughout the planning process efforts were made to ensure effective inputs by all stakeholders regarding the development of the SUP for the Pongolapoort Dam.

See Appendix 3 for a stakeholder list as well as SUPP project schedule.

4.1 The Challenge

Sustainability is a term that is often used, yet seldom understood in terms of its complexity and implications. However, without a focus on sustainability, the water resources of the Pongolapoort Dam will never reach optimal potential nor contribute to the attainment of the objectives of the NWA.

Through the protection and sustainable utilisation of the water resources of the Pongolapoort Dam it is believed that substantial financial, social and environmental benefits will be generated, making the conservation thereof both meaningful and viable.

Many aspects compound this challenge including climatic variation, changes in land use, economy and ownership, government policies, and regional objectives.

By understanding these aspects, and incorporating dynamic strategies in the management of the dam, and to be willing to adapt to these changing environments, the management institution will effectively face the challenge and attain sustainability in a manner that is both acceptable and appropriate to all roleplayers and stakeholders.

4.2 Pongolapoort Dam: Key Objectives

To attain the vision and mission for the Pongolapoort Dam, and accept the challenges, the key objectives for the dam’s management, utilisation and development were acknowledged as being:

- the conservation of the water resource, as well as state land surrounding the Pongolapoort Dam;
- the creation of opportunities for equitable access to the water resource;
- the provision of socio-economic benefits to the region and its people; and
- the redressing of past imbalances.

Additional to these key objectives is the creation of an institution to manage the dam and its surrounding land, that is dynamic, focused and representative of the stakeholders and landowners of the host community, where the host community is defined as the community directly affected by and adjacent to the water resource. Through the provision of opportunities for capacitation of this institution, and empowering this body to play an effective role, it is believed that the objectives will be both attainable and manageable.

The performance of the institution in its endeavours to attain its objectives will be constantly audited and reviewed, to ensure that DWAF can assist wherever necessary and appropriate.

4.3 Role Players

The success of the Pongolapoort Dam SUP and its implementation is dependant on the level of host community involvement and beneficiation. As such, the Pongolapoort Dam should not function in isolation from its neighbours and surrounding communities, and should ideally be integrally part of the conservation and tourism industry. By forming close working relationships with private sector operators and concessionaires, benefits can emanate from the utilisation of the dam, allowing the Management of the dam the opportunity to disseminate these benefits in an equitable manner.

Since the host community is an essential partner and roleplayer, the Management of the Pongolapoort Dam will endeavour to assist in creating and supporting representative and democratic, legally bound structures and engage these communities in the management of benefit flow from the dam.

As elected representation of the community the Umkhanyakude District Municipality and Jozini Municipality is ideally positioned to ensure that the broad community shares in the benefits emanating from the sustainable management of the Pongolapoort Dam.

Without satisfied water users, it will not be possible to attain the key objectives set for the Pongolapoort Dam, and thus it is critical that these users are informed about the conservation, utilisation, community and economic objectives.

Institutions responsible for managing resources, both natural and cultural, play a central role in ensuring sustainability. However, these institutions are regulated in terms of their mandates and delegated powers, thus in the interest of co-operative governance these institutions must work together to ensure sound resource management.

Government, parastatal, communal and private institutions can be tasked to manage various aspects pertaining to the Pongolapoort Dam.

4.4 Implementation Policy

In an effort to optimise benefits to all roleplayers, the implementation of the SUP for the Pongolapoort Dam will be undertaken in an adaptive, dynamic and integrated manner based on sound ecological, social and economic principles.

The policy will be to seek advice and support from DWAF regarding the key objectives of the NWA, and ensuring that the activities of the Pongolapoort Dam enhance these objectives.

Additionally, it will be the policy of the Pongolapoort Dam Management to document activities, accomplishments, problems and solutions, so that management of other similar water resources can be aided and guided regarding possible solutions and pitfalls.

SECTION 5: THE PLAN

Without a plan it will be impossible to co-ordinate and manage the activities required to unlock the potential of the Pongolapoort Dam. Only by measuring the performance of specific actions and operational guidelines against objectives will it be possible to effectively manage the resources of the dam and surrounding land.

The structure of the plan is based on key performance areas, namely:

- Resource management – natural, cultural, and land expansion and incorporation
- Private sector involvement – procurement, product quality management, infrastructure, and marketing;
- Community participation and beneficiation
- Monitoring and evaluation – research projects and performance and compliance evaluation.

Within each of these key performance areas the following aspects are addressed:

- Vision
- Objectives – primary, secondary, tertiary
- Policy
- Strategy
- Operational Guidelines
- Monitoring

Undertaken in this manner, actions can be identified based on clear policies and objectives within each key performance area, and with operational guidelines to facilitate the co-ordination of actions to a common vision.

Decisions are based on the vision and objectives, guided by clear policy statements. In this way the management staff, host community and users will clearly understand why certain activities are allowed or prohibited.

5.1 Key Performance Area: Resource Management

5.1.1 *Natural Resources*

- **Vision:**

The biodiversity, bio-physical processes, quality and resources associated with the Pongolapoort Dam and surrounding land are well conserved through the application of adaptive, yet ecologically sound management processes, and that the management institution of the Pongolapoort Dam obtain recognition for its endeavours in managing the water resource sustainably through utilisation.

That the Pongolapoort Dam obtains international recognition for its integrated management approach to conservation and use for recreational purposes, emanating in substantial benefits to both the host community and users.

- **Objectives:**

Primary Objectives:

The primary objective is to maintain or improve the quality of the water in the Pongolapoort Dam, as well as conserve the land surrounding the dam in terms of biodiversity, species and communities, and to utilise the resources in a sustainable and ethical manner, allowing for the natural functioning of the ecosystem.

Secondary Objectives:

The secondary objective is to provide users of and visitors to the Pongolapoort Dam an enjoyable nature based experience by combining land and water based activities in highly marketable experiences, provided these do not compromise the primary objectives.

Tertiary Objectives:

The tertiary objective is to sustainably utilise the natural resources in a manner that maximises income and other benefits without compromising the primary or secondary objectives.

- **Policy:**

Since the Pongolapoort Dam's biotic and abiotic components can no longer function as a natural ecosystem, a policy of management interventions aimed at simulating or rehabilitating natural systems will be applied, based on current knowledge, technology, time and financial resources, yet limited to plant and animal species historically indigenous to the Pongolo River System.

- **Strategy:**

Through improvement in knowledge and technology, together with a formal policy of management intervention, the strategy for managing the Pongolapoort Dam will be to consistently apply adaptive management processes through outsourcing of resource management to adjacent land owners (refer 5.1.3), based on:

- a natural resource database, continuously updated;
- goals and objectives that are clear and measurable;
- appropriate technology and knowledge;
- acceptable monitoring systems;
- ecological review and evaluation; and
- a trained and capacitated management team and staff, well monitored and committed to attaining the objectives.

- **Operational Guidelines:**

Management of the natural resources will be undertaken through agreement with adjacent landowners (refer 5.1.3), addressing the following:

- Water Releases:

Input to the timeously releases of water will be provided by the Pongolapoort Dam management team through an open and consultative process with stakeholders around the Pongolapoort Dam. To enhance the natural resource management objectives of the dam it is essential that the management institution participate in negotiations regarding releases to ensure that the releases are environmentally sound and sustainable, based on ecological, social and economic considerations.

- Alien Plant Control:

No alien plants will be introduced in or around the Pongolapoort Dam. The objective is to remove all existing alien plants in and around the dam, and will be based on a five year plan including a follow up control procedure based on the latest alien plant control technology and knowledge.

A continuous programme will be compiled with the assistance of DWAF and other relevant government departments, and be budgeted for and implemented with the respective land managers. Programmes will include physical removal, chemical and fire control. Watercourses and kloofs will mainly be physical and chemical, while for the plains and hills fire will be utilised as part of the programme.

Biological control will be used where technology and knowledge have proven it to be acceptable or even preferable.

- Veld Burning:

Veld burning is recognised as an important intervention for achieving primary, secondary and tertiary objectives and will be applied according to seasonal and veld conditions.

Veld areas will only be burnt after full ecological consideration and evaluation, to provide informed decision making regarding hot or cold burns to control excess woody material. Fire-breaks are burnt

in early to mid winter, depending on environmental conditions as broad strips allowing for effective fire management.

– Bush Encroachment:

It is believed that the veld burning programme will control bush encroachment and achieve the primary, secondary and tertiary natural resource management objectives, yet species diversity will be monitored. In the event of these not being met, a bush control programme will be implemented based on cost effective procedure with a five year follow up plan.

Various defoliation techniques can be utilised, including mowing, yet must form part of an approved land management agreement.

– Erosion/Wave Action:

Soil erosion and erosion due to wave action is a natural process, yet where it is accelerated due to unsustainable water use practices or activities, active measures to mitigate, rehabilitate and control will be implemented.

Sheet and gully erosion will be managed according to conditions through the timing of controlled burns and packing of branches. The impact of these interventions will be monitored.

– Game Stocking Rate:

It is assumed that the primary objective of conserving the land surrounding the dam in terms of biodiversity and species, can best be attained by stocking animal populations at conservative levels between the ecological and economic carrying capacity of the dam and adjacent land. Only approved species will be introduced, according to an introduction plan to ensure sustainability and manageability.

– Game Management:

Since game significantly enhances the nature based experience, the introduction of animals will be considered both for the enhancement of game viewing as well as the maintenance of genetic diversity.

Animals that become dangerous or an excessive nuisance to persons and property due to either habituation or divergent behaviour may be captured and removed from the area. To minimise the need to control problem animals, efforts will be made to inform visitors about the dangers associated with habituation.

– Fishing:

To enable the Pongolapoort Dam to be managed on the principle of sustainability, sport fishing as well as commercial fishing will be zoned and controlled through limited access as well as concessions. Fish stocks will be monitored on a regular basis.

– Consumptive Utilisation:

To enable the Pongolapoort Dam to reach its mission and objective it will be necessary to consumptively utilise the natural resources of the dam, based on the principles of sustainability. Consumptive utilisation will include sport fishing and hunting, as well as limited firewood collection for controlled use in the lodges and camps.

These activities will all be managed ensuring minimal impact on the game viewing and related experiences, and the impact of consumptive use monitored on a continuous basis.

– Control of Illegal Use:

Illegal use of natural resources of the Pongolapoort Dam is low, yet remains a latent threat, thus it is policy to retain an ongoing vigilance through cost effective surveillance and monitoring, backed with reaction capabilities. Access to the dam will be controlled, and informants rewarded regarding the provision of information regarding illegal use.

- **Monitoring:**

For effective management of natural resources it is essential that the performance of the Pongolapoort Dam Management Team be monitored utilising record keeping techniques and procedures based on:

- assumptions regarding adaptive management;
- cost efficiency and applicability;
- appropriateness to management objectives;
- current ecological theory;
- BPEO; and
- consistency over time.

5.1.2 Cultural Resources

- **Vision:**

It is envisaged that the archaeological, historical and cultural resources surrounding the Pongolapoort Dam are well conserved through an appropriate, dynamic and adaptive management process, and that the management of the dam become recognised as a role model in integrated conservation management.

- **Objectives:**

Primary Objectives:

The primary objective is to identify, document, research and protect the cultural resources within the Pongolapoort Dam Basin. Specific consideration will be given to the palaeontological, archaeological, historical and cultural heritage resources in the following order of priority: international, national, provincial, local.

Secondary Objectives:

The secondary objective is to document the history of the Pongolapoort Dam and the surrounding area.

Tertiary Objectives:

The tertiary objective is to provide insight into the Pongolo River System, the establishment of the Pongolapoort Dam, and the cultural heritage resources associated with the area to visitors and users in an engaging and interesting manner.

- **Policy:**

Based on the guidelines of the National Heritage Resources Act and continuously updating and expanding the knowledge base regarding cultural resources, through research, documentation and conservation,

as well as staff training and capacitation, it will be possible to effectively manage the cultural resources of the Pongolapoort Dam.

- **Strategy:**

Since cultural resource management is a new management field within environmental management, the guiding strategy within the adaptive management process will be based on:

- current legislation;
- clear and measurable goals and objectives;
- the compilation of a cultural resource data base;
- continuous updating of the knowledge base;
- adapting to new technologies;
- acceptable monitoring systems;
- review and evaluation by external cultural resource managers; and
- support of cultural resource management initiatives.

As for Natural Resource Management, these actions will be outsourced to the adjacent land owners (refer 5.1.3).

- **Operational Guidelines:**

- Identification:

Staff will be trained in the identification of cultural heritage resources, focusing on both tangible and intangible features of palaeontological, archaeological, historical and cultural significance.

- Documentation:

Through a process of documentation regarding the cultural heritage resources of the Pongolapoort Dam and surrounding land, a database will be created and continuously updated by staff.

- Research:

Once staff have documented cultural heritage resources, it is critical that resources are researched to ascertain the status of their significance, any threats to the resources, and the most appropriate conservation methods to be used.

– Conservation:

Where cultural resources are threatened or where developments are proposed, conservation work will be undertaken based on the guidelines and regulations as provided by the relevant authority. Without the necessary or relevant authorisation, neither conservation work nor development will be undertaken.

– Utilisation:

Wherever possible cultural resources, both tangible and intangible, will be incorporated into the visitor experience programmes and products at Pongolapoort Dam. It is believed that by creating authentic and culturally correct experiences the broad conservation objective of the Pongolapoort Dam can be attained.

• **Monitoring:**

As an essential step in the effective management of cultural resources, it is imperative that the performance of management interventions be monitored, based on aspects such as:

- attainment of management objectives;
- compliance with legislative guidelines;
- current monitoring theory;
- cost efficiency; and
- effectiveness.

5.1.3 Land Expansion and Incorporation

- **Vision:**

The vision regarding the management of the Pongolapoort Dam and surrounding state land is conservation as an ecological unit, as well as incorporation into the wider conservation initiatives of the region, consolidating both the management and operation of the various public, private and communal conservation areas into a single conservation area.

- **Objectives:**

Primary Objectives:

The primary objective with integration and consolidation is to ensure maximum biodiversity, together with the natural functioning of ecosystems within the land surrounding the Pongolapoort Dam.

Secondary Objectives:

The secondary objective is to facilitate effective management of the land surrounding the Pongolapoort Dam, as well as the enhancement of the tourism experience, through a common set of management principles, as well as management institution.

Tertiary Objectives:

The tertiary objective is to generate awareness regarding the value of consolidation and integration, specifically related to environmental management, heritage management, community beneficiation and product management.

- **Policy:**

Consolidation requires commitment from all stakeholders, based on a common set of rules acceptable to all, necessitating the policy to be the creation of an initial management body to manage the Pongolapoort

Dam and surrounding state land, followed by the consolidation of the entire area.

- **Strategy:**

Based on the policy, the first strategic step will be the creation of a Pongolapoort Dam management institution, with a dedicated management team. Once this institution has been created and clarity provided regarding the operational guidelines for the water surface and surrounding state land, discussions can focus on the encumbrances regarding the consolidation of the entire area, using the Pongolapoort Dam as catalyst and focal point.

- **Operational Guidelines:**

- Core Area Consolidation:

The Pongolapoort Dam is surrounded by a thin strip of state land, except for the Poort region where a Permission to Occupy the land through inundation has been attained. This situation compounds effective and sustainable management.

To rectify this situation two phases must be undertaken, the first being the formation of co-management agreements with the adjacent landowners. DWAF, as the primary user department of the state land, will enter into such agreements after consultation with KZN Wildlife and the management institution.

These agreements must include aspects such as game stocking rates, veld burning, roads, game counts and environmental benchmarks, as well as acceptable activities which the manager may perform on the land.

The second phase would be to find synergy between the various landowners and consolidate all land surrounding the dam into a single, consolidated unit.

Following this consolidation it would be possible to extend the land surrounding the dam through agreements with adjacent owners, yet based on the same criteria.

It is envisaged that the Pongolapoort Dam and surrounding protected area could become an anchor within a larger protected area stretching from Ithala Game Reserve, to Mkuzi Game Reserve and the Greater St. Lucia Wetland Park, as well as the proposed Transfrontier Park. This will however be dependent on the degree of shared vision and focus among all land owners surrounding the dam.

- **Monitoring:**

A record of all management agreements must be kept, as well as a record of annual reports regarding the conditions of the agreement, as well as compliance with the conditions and objectives.

5.2 Key Performance Area: Private Sector Involvement

5.2.1 Development, Access and Use Authorisation

- **Vision:**

In compliance with official government policy, Pongolapoort Dam encourages private sector involvement in all tourism related and economic development activities that can be implemented in a cost-effective, socially responsible and environmentally acceptable manner and thus it is envisaged that all tourism and economic development opportunities at the Pongolapoort Dam will be outsourced, through tenders and management agreements, or managed as concessions.

It is envisaged that this approach to development, investment and management will maximise local employment, skills development and local economic benefit.

- **Objectives:**

Primary Objectives:

The primary objective regarding private sector involvement is formalising the relationship with existing operators, ensuring that all activities are authorised in terms of relevant legislation, and are compliant with the objectives of the NWA.

Secondary Objectives:

The secondary objective is to optimise tourism and economic development opportunities in an equitable manner based on the opportunities and constraints posed by the dam environment.

Tertiary Objectives:

The tertiary objective is to ensure that private sector involvement is equitable, and that market related fees are paid for the use of the water

and state land compliant with the policy as developed by DWAF and National Treasury.

Policy:

All tourism and economic development will be Government led, private sector driven and community based.

Furthermore, in the spirit of co-operation, it is accepted as policy that the private sector, host community and Pongolapoort Dam management are all stakeholders in the dam, necessitating good relationships and communication.

- **Strategy:**

To unlock the economic potential of the Pongolapoort Dam, the private sector will play an essential part in the planning, development, funding, management, marketing and operation of activities and related infrastructure, or implementing projects and managing them on a contract basis where appropriate. These activities create employment and business opportunities, and therefore where practical and feasible the existing operations and initiatives must be recognised and their activities acknowledged through existing DWAF procedures.

The Pongolapoort Dam management will be responsible for output, not input, and therefore it is strategically important that where practical, feasible and cost effective supplies, contracts and opportunities must be outsourced, with the primary focus on local people and business.

- **Operational Guidelines:**

- Rules of Engagement

Operators, developers, concessionaires and contractors must operate within defined codes of conduct and rules as provided by the Pongolapoort Dam management, and amended as required.

- Development and Water Use Authorisation

All developments and operations within the Pongolapoort Dam must be authorised in terms of relevant legislative requirements including the ECA, DFA and NWA.

– Public Private Partnerships (PPP)

All existing operators will be requested to verify their water use with DWAF. PPP opportunities will then be advertised publicly and contracts awarded according to National Treasury and DWAF policy and procedures, after adjudication against pre-set criteria which includes environmental, community, commitment, expenses and expectations, existing entitlements, access, employment opportunities, cost and impact.

All commercial operations within the dam basin will be subject to PPP contracts. Fees will be commensurate with rights, impacts and benefits in terms of the zonation of the dam. It will be market related and may consist of an upfront payment and basic lease.

PPP fees will be collected by the Pongolapoort Dam management team on behalf of DWAF, based on DWAF policy, for utilisation regarding the following:

- catchment management fees (payable to DWAF or relevant water management institution);
- development and operational costs of infrastructure;
- development and management costs of conservation; and
- contribution to community beneficiation projects and programmes.

DWAF will enter into the agreements, yet once procured and awarded the contracts will be administered by the Pongolapoort Dam management. The Pongolapoort Dam management team will be responsible for ensuring that the specific conditions related to PPPs are adhered to and will be responsible for the output as opposed to the input.

Generally, contracts will be awarded to companies and individuals with proven track records in the industry, however, smaller contracts or lease opportunities could be given to smaller, emerging companies or individuals. Priority will be given to local people where equity, efficiency and standards are commensurate to the needs of the Pongolapoort Dam.

All PPPs will have clearly defined limits placed on sizes, numbers and levels of development, as well as type of activity and restrictions of zones. The private parties will be responsible for compliance.

PPPs, visitor numbers and developments are limited to the following:

- 10 eco-tourism PPPs;
- 1 aquaculture programme.

These levels have been set through a participation process to ensure the following:

- financial viability and attractiveness to private sector;
- stimulation of local economy;
- maximum visitor satisfaction;
- significant contribution to management and conservation; and
- maximum communal and social benefits.

Request for proposals will be issued to actively solicit and invite offers from interested parties based on this SUP for the Pongolapoort Dam. Appropriate media will be utilised to ensure sufficiently wide distribution, yet allowing for local entrepreneurs and investors to effectively participate.

Contracts will be awarded on a competitive basis in the case of:

- existing contracts or agreements expiring;
- concessionaires default; and

- concessionaires express an intent to sell their operation.

In the event of unsolicited bids being received, these would have to be evaluated against available PPP opportunities and objectives for the Pongolapoort Dam.

– Public Access Management

To manage and provide for public access, 2 public access management contracts will be awarded.

DWAF will enter into these agreements, yet once procured and awarded the contracts will be administered by the Pongolapoort Dam management.

- **Monitoring:**

A record of all concessions, concessionaires, contracts and conditions will be kept to monitor compliance and performance.

Annual reports regarding visitor data, satisfaction levels, environmental performance and community benefits will be submitted to DWAF.

5.2.2 Product Quality Management

- **Vision:**

It is envisaged that tourists and recreators that utilise the Pongolapoort Dam will return to the dam based on enjoyable experiences within an aesthetically pleasing, safe, well managed and conserved environment.

- **Objectives:**

Primary Objectives:

By clearly addressing visitor needs and expectations in an appropriate manner, based on unique and well managed projects and products, it will be possible to attain the vision.

Secondary Objectives:

Ensuring that all the products and projects are undertaken by private sector operators and developers through concession agreements with DWAF, managed by the Pongolapoort Dam management team, will be the basis of this secondary objective.

Tertiary Objectives:

The tertiary objective will be to ensure that the concessionaires operate within specific conditions regarding environmental issues, community beneficiation and industry norms and standards.

- **Policy:**

The Pongolapoort Dam will serve a wide range of ecotourism activities aimed at highlighting the conservation objectives and history of the region, and will include activities such as boat cruises, canoeing safaris, fishing and houseboat experiences, yet will exclude full-contact watersports and related activities due to the dangers associated with crocodiles and hippo. Land based activities will be complementary to the adjacent conservation areas.

- **Strategy:**

The strategy regarding product quality management will be to encourage private sector involvement, as well as guiding these operators regarding the objectives of the Pongolapoort Dam.

- **Operational Guidelines:**

- Visitor Densities:

To enhance the tourist experience, as well as attain the conservation objectives, visitor densities will be set for each concessionaire. Densities will be based on impact as opposed to number of guests. Impact will include aspects such as launch sites, moorings, jetties, visual impact, operational procedures, associated infrastructure, and number of boats.

These densities may only be exceeded during the annual Tigerfishing Bonanza, which should be a combined event arranged by all concessionaires and approved by the management institution.

The maximum number of boats will be 300 for the annual event, yet the impact will be monitored to ensure enhancement and attainment of objectives.

The utilisation of a variety of visitor management techniques will ensure flexibility regarding visitor carrying capacity, while reducing impacts and will include:

- zonation;
- monitoring of visitor profiles, needs and expectations;
- time and spatial arrangements;
- enhancing experience through the provision of information, orientation and documentation;
- focus on low volume, low impact activities and high quality experiences through trained and capacitated staff; and
- monitoring of impacts on environment, game and bird behaviour.

– Development Cores:

Infrastructural development within the Pongolapoort Dam will be limited to the following cores:

- Golela;
- Mvubu Bay;
- Mpalane Bay;
- Pongolwane Peninsula;
- Mpeta Bay;
- Senekal Pumpstation;
- Poortopia; and
- The Poort.

All development will be subjected to authorisation in terms of DWAF regulations and requirements.

No additional infrastructural development may take place without recommendation from the management team, and without authorisations from DWAF, Department of Environmental Affairs and Tourism (DEAT) and any other relative legislative authority.

– Monitoring Attitudes and Satisfaction:

The Pongolapoort Dam management team will encourage feedback from visitors and tourists in the form of questionnaires and personal interviews, as well as invitations for comment via telephone, fax and e-mail. Through constant monitoring of visitor satisfaction with the service levels of concessionaires, environmental standards and overall experience, the management team can ensure that visitors' needs and expectations can be met.

– Access Control:

Public access will only be allowed through the Golela, Dubula, Leeukop, Leeuspoor, Nkonkoni and Lebombo gates.

Staff providing access, either as part of the Pongolapoort Dam management team, or as contracted service providers, must be trained to provide a prompt, efficient and friendly welcome to visitors, as well as provide information regarding the zonation, operational rules and restrictions to these visitors.

– Visitor Management:

Concessionaires will be responsible for managing their visitors, providing them with zonation plans, operational rules and restrictions pertaining to the dam and surrounding land.

– House Boat Location:

House Boat concessionaires may operate within the identified limited use zones, as well as within the public use area, yet may not overnight in any area that impacts on existing lodges or operations. Overnight zones must be agreed to by management and DWAF (Directorate Civil Design) regarding *inter alia* safety, visibility and impacts on other operators.

– Waste:

The Pongolapoort Dam management team, surrounding land managers, operators and public access contractors will adopt a responsible and environmentally friendly waste management plan, which will address liquid as well as solid waste.

Ideally, liquid waste will be treated on-site according to site development plans, and the impact of waste treatment closely monitored.

Solid waste should be separated and sorted, with biodegradable waste being composted, recyclables stockpiled, combustibles incinerated and disposed of in a responsible manner.

Research will be undertaken to identify the *Best Practicable Environmental Option (BPEO)* regarding each type of waste stream.

- **Monitoring:**

By maintaining a record of incidents regarding visitors, either positive or negative, as well as complaints, compliments and concerns, the Pongolapoort Dam management team will be able to monitor visitor satisfaction levels, and therefore also manage concessionaires appropriately.

Compliance with operational rules, visitor densities and developments can also be used as performance monitoring tool by the management team.

5.2.3 Infrastructure

- **Vision:**

It is envisaged that all infrastructure related to the Pongolapoort Dam and surrounding land will be authorised and developed in an aesthetically pleasing, environmentally friendly and cost effective manner by the concessionaire, based on the vision of the Pongolapoort Dam.

- **Objectives:**

Primary Objectives:

The primary objective of the Pongolapoort Dam regarding infrastructure development is to enhance the environmental objectives, as well as comply with all relative environmental and related legislation, such as the ECA, Environmental Impact Assessment (EIA) regulations and NWA.

Secondary Objectives:

The secondary objective is to ascertain the level of current infrastructural development, and where necessary and appropriate ensure authorisations for these developments.

Tertiary Objectives:

The tertiary objective is to limit all further infrastructural development through the authorisation and conditions attached to concessions.

- **Policy:**

All infrastructural development within the Pongolapoort Dam Basin will be authorised, and based on the conditions attached to concessions.

- **Strategy:**

The management team will check and recommend all plans for infrastructural development, whether for themselves or for concessionaires, and ensure that all relevant legislation is complied with and that the necessary authorisations have been obtained prior to development taking place.

All existing infrastructure will be catalogued and where necessary either authorised or removed, based on operational standards and guidelines.

- **Operational Guidelines:**

- Standards:

Industry norms and standards will form the base minimum for the establishment of infrastructural development and the onus will resort with the developer to provide evidence of compliance.

- Plans:

All plans for operational development will be submitted to the Pongolapoort Dam management team for evaluation and recommendation. These plans must indicate location, land ownership, any encumbrances, and compliance to concession conditions.

- Authorisations:

All infrastructural development will comply with the EIA as well as DWAF regulations where applicable. All buildings must comply with the applicable ordinances of the KwaZulu Natal Town Planning Commission and local authority legislative requirements.

Existing infrastructure will be subjected to authorisation, licences or accreditation, and will be catalogued as such. Where necessary any unauthorised development will be removed at the developers cost, and the site rehabilitated within acceptable standards.

- Roads:

All existing roads and tracks on state land will be GPS logged and catalogued. The need for, and condition of these roads ascertained and decisions regarding their use and maintenance made.

No roads will be developed or allowed in sensitive areas, nor without the necessary EIA authorisations.

All roads will be maintained according to a set of standards for each class of road, as compiled by the management team.

Roads should be contoured and provided with spillways and drainage. Erosion will be monitored and no off-road driving allowed.

– Buildings and Visitor Facilities:

All buildings or structures must be authorised by DWAF in terms of its legislation and development policy, and all leases for development must comply with National Treasury Regulations and the PFMA.

Facilities such as hides, trails, picnic areas, jetties and ablutions will be developed according to approved plans compliant with all relevant authorisations and regulations.

– Services:

Wherever possible, services such as telephone lines, electricity and water should be underground or provided in an aesthetically pleasing manner. All services are to be maintained by the developer, including decommissioning.

– Aircraft and Overflight Policy:

No airstrip will be allowed within the purchase boundary, yet the Pongolapoort Dam management team will support the use of neighbouring or regional airstrips wherever necessary.

No flights will be allowed over the Pongolapoort Dam without management approval and within Civil Aviation restrictions.

– Fencing:

Any fences that cross the state land will be compliant to provincial standards, and will be maintained by the relevant land owner at his own cost, to a standard acceptable to the Pongolapoort Dam management team.

Where possible a fence maintenance road should be developed to ensure the management, maintenance and security of the fence, as well as facilitate spraying to clear it of vegetation.

– Safety and Security:

The Pongolapoort Dam management team must ensure that all concessionaires comply with, and that their visitors comply with relevant boating regulations, industry norms and standards regarding boats, vessels, canoes and vehicles, as well as relevant legislation such as the Occupational Health and Safety Act.

Additionally, the management team must provide concessionaires with information regarding zonation, restrictions and codes of conducts for both the operators and visitors.

It is also imperative that all concessionaires provide guarantees to the management team that they have sufficient public liability insurance cover for their operation.

• **Monitoring:**

By maintaining a database of all authorised infrastructure, as well as incidents, it will be possible to monitor compliance and performance regarding the provision and maintenance of infrastructure.

The format, updating and auditing of infrastructure should form part of the management team's functions.

5.2.4 Marketing

- **Vision:**

The Pongolapoort Dam management team envisages that the dam obtain recognition, both locally and regionally, for its anchor role as tourism and economic development catalyst and successes in applying innovative and adaptive management principles, including sustainable use of resources, community involvement and participation, private sector commitment and participation, and that these initiatives be marketed ethically to the public.

Aspects that can be addressed in the marketing of the dam include the adoption of Lake Jozini as the brand name for the Pongolapoort Dam. These type of details will be discussed between the concessionaires and management team as part of the joint marketing initiatives.

- **Objectives:**

Primary Objectives:

The primary objective is to create awareness regarding the management and importance of the Pongolapoort Dam through ethical marketing.

Secondary Objectives:

The secondary objective is to ensure consistency and accuracy regarding the content of marketing brochures, documents and programmes.

Tertiary Objectives:

The tertiary objective is to maximise economic benefits for the region through the establishment of awareness regarding the dam, its products and programmes.

- **Policy:**

The policy regarding the marketing of the Pongolapoort Dam will be based on the principle of those who stand to benefit from the marketing of the product are responsible to carry the costs associated with the marketing. No marketing or the contents thereof is permitted that conflicts with the operations, policy or management guidelines of the Pongolapoort Dam.

- **Strategy:**

The Pongolapoort Dam management team will screen all marketing material prior to publication, including marketing material compiled by concessionaires.

- **Operational Guidelines:**

- Marketing Roles:

The management team is responsible for both the promotion of the concept of the Pongolapoort Dam as integrated part of the region, its philosophy and policies, as well as the promotion of concessions and developments.

The promotion of the products and programmes will be undertaken by the individual operators or concessionaires.

Local and provincial government will be tasked with the promotion of the region as a destination, yet the management team will endeavour to ensure that these agencies include the Pongolapoort Dam in regional and national marketing strategies and campaigns.

- Joint Marketing:

The utilisation of the Pongolapoort Dam will provide some opportunity for joint marketing of the concept and products, and where appropriate the management team should work together with the private sector.

- Screening of Marketing Material:

All marketing material, both print and electronic, concerning the Pongolapoort Dam should be screened by the management team to avoid the creation of false impressions, and if not done or approved, the Pongolapoort Dam may not be held liable for any statements concerning issues related to the Pongolapoort Dam, its management, or policies.

- **Monitoring:**

As one of the most difficult aspects to monitor, marketing however is an essential component, and requires continuous monitoring both in scope as well as content to ensure maximum effect and impact. Since most marketing will be undertaken by the private sector, the main focus with the monitoring of marketing efforts will be the screening of material to ensure compliance to objectives and consistency of message.

Good communication should form the basis for the relationship between the operators and management team, of which this monitoring could be one aspect.

5.3 Key Performance Area: Community Participation and Beneficiation

- **Vision:**

Since the Pongolapoort Dam should have a significant positive impact on the neighbouring community, it is the vision of the management team that benefits emanating from the utilisation of the dam and surrounding land should flow into the host community and neighbouring community in an equitable manner.

- **Objectives:**

Primary Objectives:

The primary objective is to establish an institution consisting of representatives from the neighbouring community, the management team and selected external persons to oversee the benefit flow from the Pongolapoort Dam.

Secondary Objectives:

The secondary objective is to illustrate and highlight the benefits of integrated conservation planning, management and utilisation to the neighbouring community, and to create a mechanism for their equitable participation.

Tertiary Objectives:

The tertiary objective is to stimulate conservation and tourism related projects and activities within the neighbouring community through the training, capacitation and empowerment of individuals with proven interest and entrepreneurial skills.

- **Policy:**

The Pongolapoort Dam recognises its role as an important economic catalyst within the region, and will strive to ensure that the utilisation of the dam provides tangible benefits to the host community, as well as neighbouring community in an equitable and appropriate manner, supportive of the resource management and other objectives of the Pongolapoort Dam.

- **Strategy:**

To assist the Pongolapoort Dam management team in achieving its objectives regarding community participation and beneficiation, the strategy will include:

- the establishment of a Pongolapoort Dam Development Foundation;
- participation in appropriate fora regarding community beneficiation;
- the compilation and facilitation of awareness programmes and related initiatives in the neighbouring communities;
- guidelines for the selection and utilisation of local entrepreneurs and service providers; and
- the compilation of a database of local service providers.

- **Operational Guidelines:**

- Institutional Body:

The Pongolapoort Dam management team must establish an independent Development Foundation with representatives from the neighbouring communities, management team and selected independent individuals to manage the benefits flowing from the utilisation of the dam. These benefits will be determined through the business plan as a percentage of the income after operational costs have been settled.

The Development Foundation should be properly constituted and institutionalised, with clear mandates, so that it can operate as a Section 21 Company.

– Communication:

Through regular two-way communication with recognised community institutions and structures, it will be possible to monitor community perceptions and attitudes, as well as expose entrepreneurs in these communities to the regional opportunities and initiatives that are available.

Ideally the Pongolapoort Dam management team should provide documentation through media such as a newsletter, webpage and e-mails, thereby establishing a formal means of communication with all stakeholder groups.

The Pongolapoort Dam management team will establish formal relationships with its neighbours through existing fora, working groups and any other formal institutions that may exist.

The management team should develop an awareness programme based on its vision, objectives and policies. Wherever possible this awareness programme should be implemented to ensure that all stakeholder groups and interested parties know what the Pongolapoort Dam is all about, and why certain activities or zones have been established or are restricted. This awareness programme should be dynamic and adaptable for variation in audiences, and should clearly highlight the benefits of sustainable utilisation.

– Database:

To maximise community benefit it is essential that a database be established and regularly updated consisting of local service providers. Not only can the management team draw on this pool of expertise, but all the concessionaires should be encouraged to do the same. Where possible, only service providers listed with the management team on the database should be requested to provide services to the Pongolapoort Dam.

The needs and requirements of the Pongolapoort Dam management team should be provided to service providers so that a synergistic and effective partnership can be established.

• **Monitoring:**

Only by monitoring aspects such as the establishment and updating of the database, use of local suppliers and service providers and participation of the management team in fora, meetings and related structures will it be possible to ensure benefits based on specific needs and measurable criteria.

5.4 Key Performance Area: Monitoring and Evaluation

5.4.1 Research Projects

- **Vision:**

All research projects, both basic and applied, contribute significantly to the Pongolapoort Dam management team attaining its primary, secondary and tertiary objectives.

- **Objectives:**

Primary Objectives:

The primary objective is to initiate and support research projects, which contribute to performance and compliance measurement regarding the management and development of the Pongolapoort Dam.

Secondary Objectives:

The secondary objective is to undertake and support research aimed at attaining sustainability regarding the utilisation of the Pongolapoort Dam.

Tertiary Objectives:

The tertiary objective is to support research regarding the ripple effect of the Pongolapoort Dam, specifically environmental issues, community benefits and visitor satisfaction levels, as well as education and training.

- **Policy:**

The official policy regarding research projects at the Pongolapoort Dam will be to initiate, undertake and support research projects that contribute to improved insight into the functioning and impact of the dam on the surrounding community and environment.

- **Strategy:**

Research project proposals will be screened by the Pongolapoort Dam management team, and must be approved by this team before commencement.

Approval must be obtained based on the research project's objective, contribution to sound management, available budget and staff requirements, as well as contribution to the achievement of overall objectives.

Research institutes will be approached to assist the Pongolapoort Dam where management lacks expertise or manpower.

Only research programmes where comprehensive budgets have been submitted or prepared, and funds approved, will be undertaken or supported, to ensure successful completion.

- **Operational Guidelines:**

- Needs Assessment:

The Pongolapoort Dam management team will undertake a research needs assessment regarding environmental, community, industry and policy issues specific to the dam and surrounding land. Guidelines regarding these needs and possible projects, as well as assessment criteria must be compiled and must be aligned with the outcomes of the annual performance and compliance audit (refer 5.4.2).

- Approval:

All research projects and programmes must be subjected to an approval process, based on needs, evaluation criteria, contribution and available budget. The process must be led by the management team.

No project may commence without the approval of the management team and submission of project implementation schedule.

– Current Projects:

All approved projects will be evaluated in terms of the project implementation schedule and the Pongolapoort Dam objectives. Decisions will be made as to whether the projects should continue or not.

– Future or Proposed Projects:

Any new projects or research needs that are proposed or identified by either the management team or outside researchers, will be subject to the evaluation process, with clearly defined goals, milestones, costs and management implications.

• **Monitoring:**

For effective management of research projects it is essential that the Pongolapoort Dam management team continually monitor the research projects and programmes regarding the objectives; time frames; impacts and budgets. Based on the monitoring of the projects, decisions can be made regarding authorisation of new and continuation of existing projects.

5.4.2 Performance and Compliance Monitoring and Evaluation

- **Vision:**

It is envisaged that all activities undertaken within the Pongolapoort Dam will be subjected to monitoring, and that an overall performance and compliance evaluation be undertaken to ensure the integration of management activities.

- **Objectives:**

Primary Objectives:

The primary objective with monitoring and evaluation is to ensure that all key performance area activities are integrated synergistically, and have available relevant information to assist in decision making.

Secondary Objectives:

The secondary objective is to develop an overall performance and compliance management system based on the individual key performance areas.

This management system, will form the basis of both internal and external review.

Tertiary Objectives:

The tertiary objective with monitoring and evaluation is to ensure cost efficiency regarding management interventions by limiting duplication.

- **Policy:**

Recognising the fact that each key performance area is a specialised field of expertise, it will be the policy of the Pongolapoort Dam to integrate the monitoring and evaluation of each area into a single integrated organisational and management framework which will ascertain overall as well as individual performance and compliance.

- **Strategy:**

To attain the vision for monitoring and evaluation it is imperative that a monitoring system be developed for each key performance area, as well as an integrated evaluation and information management system to manage overall performance and compliance.

- **Operational Guidelines:**

- Measuring Performance and Compliance:

For effective management it is important that effective measurement tools be developed within each key performance area. A common data capturing template must be developed and must be continuously updated.

- Annual Audit:

Based on these measurement tools an overall audit must be developed, linked to the management system. This approach will allow for regular review and adaptations to management based on performance and compliance criteria.

An annual audit will be prepared for the Pongolapoort Dam based on both performance and compliance regarding environmental management, community beneficiation, industry development and visitor satisfaction. These audits can be compiled internally, yet require DWAF verification bi-annually.

SECTION 6: THE ZONES

The zonation of the Pongolapoort Dam has been undertaken to ensure organized development, equitable visitor access, sound resource management and optimal community beneficiation. This approach also minimises the potential conflict that could arise between the various user groups. The zonation of the Pongolapoort Dam has been based on:

- the overall vision and concept of the Pongolapoort Dam;
- accessibility for identified target markets;
- the physical, aesthetic and environmental potential of the region, as well as capacities and constraints of the terrain;
- suitability for specific types of developments and activities;
- access to support infrastructure;
- linkages and relationships with neighboring zones, developments and activities; and
- efficiency of management.

Various categories of zones have been identified based on landownership (See Map 4 Appendix 1); current knowledge; climatic conditions; visitor needs and expectations; economic and social criteria, guided by the principles accepted by the International Union for the Conservation of Nature.

6.1 Public Use Zone

Map 1; Appendix 3.

The largest zone in the Pongolapoort Dam is set aside for access to the general public, to satisfy their desire and right to enter and utilise a government waterwork. Facilities and activities for using water for recreational purposes may be provided in this zone to optimise the carrying capacity of the Pongolapoort Dam. Infrastructural developments will be provided both in the north and south to minimise impact and optimise utilisation. A restricted speed zone with a width of

100 m along the shoreline reduces environmental impacts and increases public safety.

6.2 Limited Use Zones

Map 1; Appendix 3.

Two limited use zones have been identified for use by concessionaires only. While the use is limited to concessionaires within these zones, they are not restricted to this zone. The Pongolapoort Dam management team retains access and all management rights in these zones at all time.

Operators retain any agreed access, use and development rights subject to relevant EIA and DWAF policy and authorisations, and carry any costs associated with renegotiations.

A maximum of five operators will be allowed in each zone.

6.3 Conservation Zones

Map 1; Appendix 3.

Areas have been set aside for the conservation of natural ecosystems with limited outside interference. Access is restricted, and is limited to slow speed, and preferably high quality guided activities that can highlight the importance of the management guidelines and zonation.

No permanent developments will be allowed.

6.4 Development Sites

Map 2; Appendix 3.

Several sites have been identified where access is provided, as well as where developments such as slipways, jetties, moorings and related infrastructure may be provided.

All developments must be authorised in terms of relevant legislation.

Access to the Pongolapoort Dam can only be obtained from the following points:

- Golela Gate
- Dubula gate
- Leeukop Gate
- Leeuspoor Gate
- Nkonkoni Gate
- Lebombo Gate

Access in the Poort will be provided on both sides of the Dam based on environmental planning, assessment and relevant approvals.

Management will have additional access at:

- Jozini

Slipways, jetties and moorings for boat launching will be provided at:

- | | |
|--------------------------|-------------------------|
| • Golela | Slipway; jetty; mooring |
| • Golela Peninsula | Mooring |
| • Mvubu Bay | Slipway; jetty; mooring |
| • Mpalane Bay | Slipway; jetty; mooring |
| • Mpeta Bay | Slipway |
| • Lebombo | Slipway; jetty; mooring |
| • Senekal Pumpstation | Mooring |
| • Ndabeni | Mooring |
| • Poort Limited Use Zone | 5 moorings; jetty |

Management will also be able to launch at:

- Jozini Slipway

A zone for aquaculture development has been identified in the Poort Area, based on access, level fluctuations, community benefits, services, etc. This development will be subject to authorisations in terms of relevant legislation.

6.5 Land Management Zones

Map 3; Appendix 3.

The land adjacent to the dam has been zoned in compliance to the surrounding land use, and caretaker agreements will guide the management of this land. The land, which is governed in terms of the Ingonyama Trust Act, 1994 (Act No. 3 of 1994), could be incorporated into the overall plan, yet this decision resorts with the two tribal authorities – Nyawo and Myeni (represented by the Umkhanyakude District Municipality). However, the opportunity has been created through which these two communities could share substantially in the benefits emanating from the utilisation of the dam.

SECTION 7: THE INSTITUTION

To successfully manage the sustainable utilisation of the Pongolapoort Dam it is imperative that an institutional arrangement be established which can effectively strive to attain the primary, secondary and tertiary objectives set out in the management plan.

The proposal has been guided by the NWA, as well as by the 1979 agreement between the Minister of Water Affairs and the Administrator of Natal.

In terms of this agreement, the Administrator of Natal concluded a Deed of Agreement with the Minister of Water Affairs and Forestry, whereby the water surface area and the surrounding land was handed over for Provincial Administration control. On 27 February 1979, the Executive Committee resolved that the Pongolapoort Dam Basin *'be controlled and managed as though they are a Park, Game Reserve or Nature Reserve in accordance with the provisions of Section 11 (1)(b) of the Nature Conservation Ordinance (Ordinance 15 of 1974).'*

Except for the area immediately adjacent to the dam wall, the Minister transferred the *'right of control and supervision'* of the dam's water surface and of the surface of the dam terrain to the Administrator of Natal, for the following purposes:

- occupation and control;
- to exercise supervision over the water surface of the dam and the surface of the dam terrain;
- public recreation; and
- conservation of fauna and flora.

Clause 3 of the agreement allowed the Administrator to delegate his rights and powers to the Natal Parks Board (currently KZN Wildlife), provided that the Minister provide written approval, and subject to conditions prescribed by the Minister. This agreement does not affect or derogate any of the powers, functions and duties of the Minister in

terms of the NWA, or any other Act relating to the Pongolapoort Dam or to the control, supply and use of the water or dam terrain.

For the effective *'control and supervision'* of the surface of the dam, as well as the surface of the dam terrain, it was necessary that a *'general plan for the development of the dam terrain'* be submitted to the Minister for approval. Any departure from the plan shall also meet with the Minister's approval.

The SUP for Pongolapoort Dam will serve as the *'general plan for development'*, in terms of Clause 12 of the 1979 Agreement.

Guided by this agreement and stakeholder input through the SUPP, DWAF recommends the establishment of a Water User Association (WUA) consisting of founding representation from:

- Umkhanyakude District Municipality;
- Pongola Game Reserve South Owners Association;
- Pongola Game Reserve North;
- Ezemvelo KZN Wildlife;
- Swaziland Ministry of Natural Resources and Energy; and
- Swaziland Ministry of Economic Planning, and

(Vide Appendix 4.)

This WUA, constituted in terms of the NWA will become the delegated authority responsible for the development of, and the control over, public recreation, as well as for conservation of fauna and flora, and have the right of control and supervision over the dam surface and the surface of the surrounding state land within the dam basin.

The responsibility of control and supervision will include overseeing and facilitating:

- resource management;
- private sector involvement through service contracts and concessions compliant to the NWA and Treasury Regulations; and
- community development and benefit flow.

The WUA will be obligated to and responsible for implementing the SUP including:

- controlling all access to the dam, both its surface and surrounding land;
- ensuring that access is equitable;
- managing the utilisation of the water surface through the demarcation of zones, appropriate signage and documentation;
- ensuring that the utilisation is environmentally, socially and economically acceptable and viable;
- managing the utilisation of the state land adjacent to the dam through agreements and service contracts between DWAF and the land owners or managers and service providers;
- ensuring that the agreements and contracts are compliant with the objectives of the Pongolapoort Dam SUP, and any other relevant legislation;
- monitoring the performance of the management agreements and service contracts against set objectives;
- evaluating proposed concessions against ecological, social, economic and operational guidelines;
- monitoring compliance with the conditions of the allocated concessions;
- the establishment of a Pongolapoort Dam Development Foundation, with representation from the surrounding communities, government authorities and select individuals;
- monitor community benefit flow on a regular basis;
- measure the ripple effect of the Pongolapoort Dam on the surrounding environment; and
- report on the successes and failures of the Pongolapoort Dam as catalyst for community beneficiation.

In terms of Schedule 4 and 5 of the NWA, business plans for the WUA must be prepared and submitted to DWAF on an annual basis providing guidelines for a period of three years, annually updated.

In terms of this institutional structure, the Pongolapoort Dam Development Foundation will be responsible for all external projects,

within the surrounding community. Individual projects or initiatives within these communities can approach the Development Foundation for support, based on specific criteria and within clear budgets. The Development Foundation has the right to source additional donor or grant funding for these projects, and therefore need not rely solely on the percentage accruing to it from the concessions.

Any projects, not only those related to water use, can be supported if the Development Foundation believes that it could contribute to attaining the objectives set for the Pongolapoort Dam, as well as those of the NWA.

The joint management agreements required for the effective management of the state land adjacent to the dam will be entered into between DWAF and the adjacent landowners or managers. KZN Wildlife will be responsible for compiling the conditions of these agreements, as well as the criteria against which management performance will be measured, based on the guidelines of the Pongolapoort Dam SUP.

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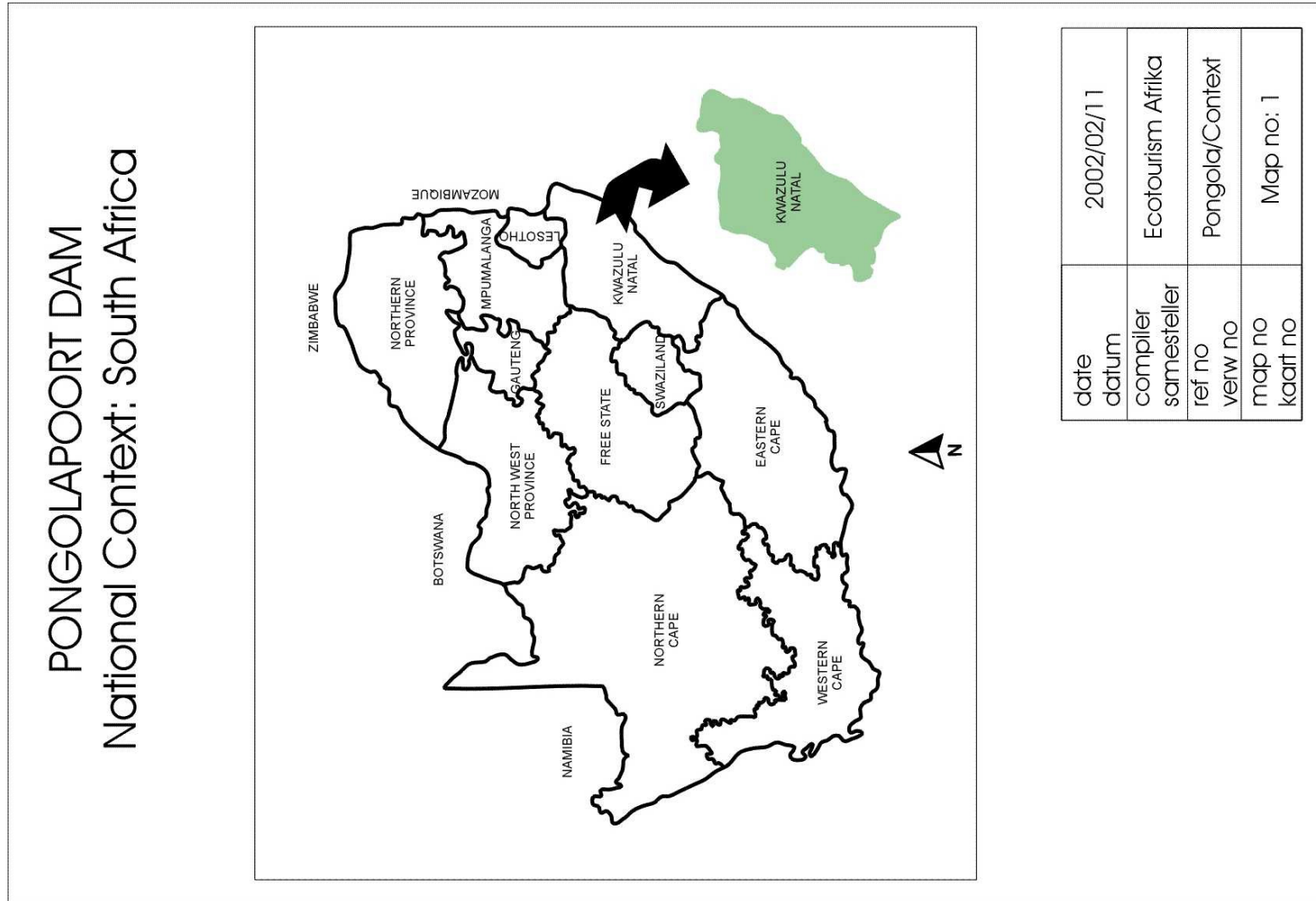
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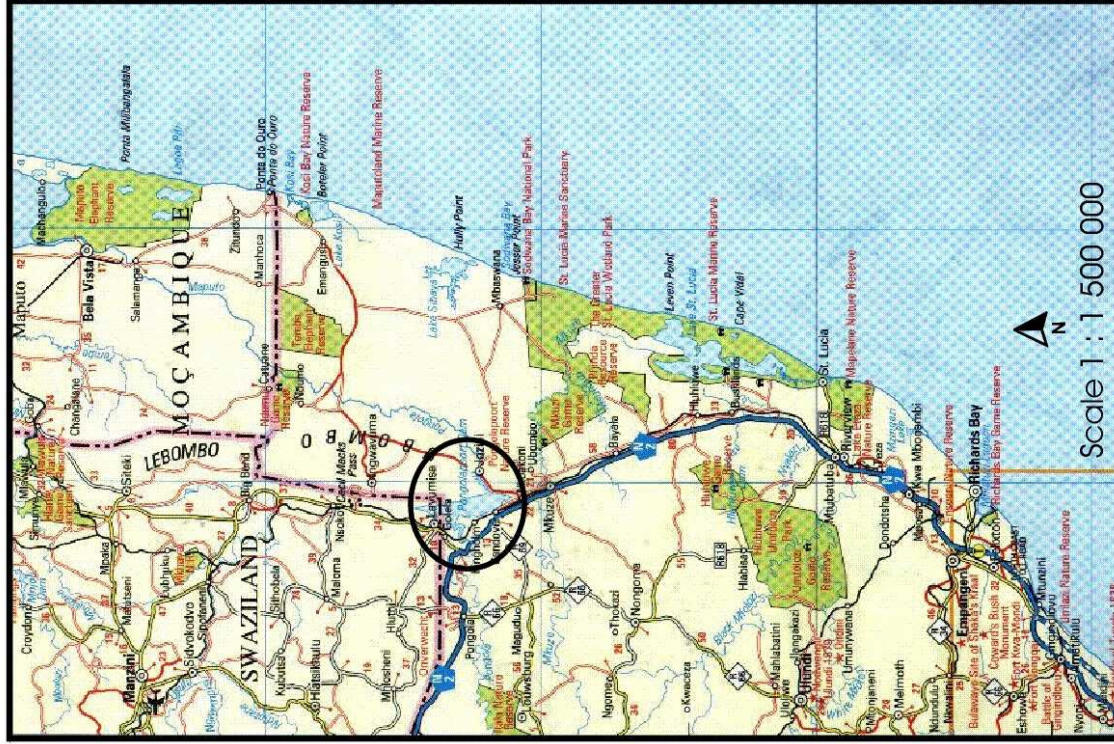
APPENDIX 1

Map 1: Pongolapoort Dam: National Context



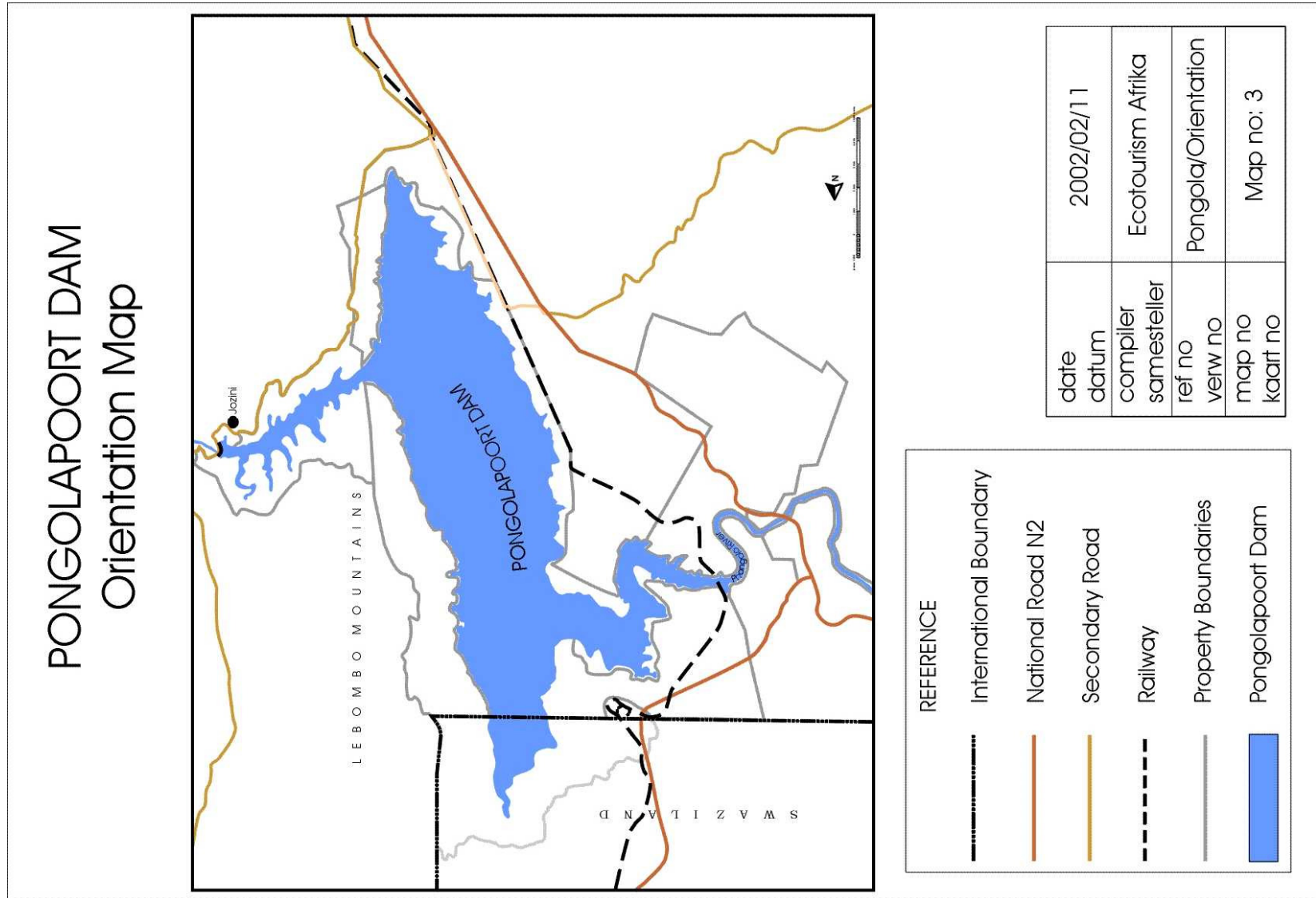
Map 2: Pongolapoort Dam: Regional Context

PONGOLAPOORT DAM
Regional Context: Northern KwaZulu-Natal

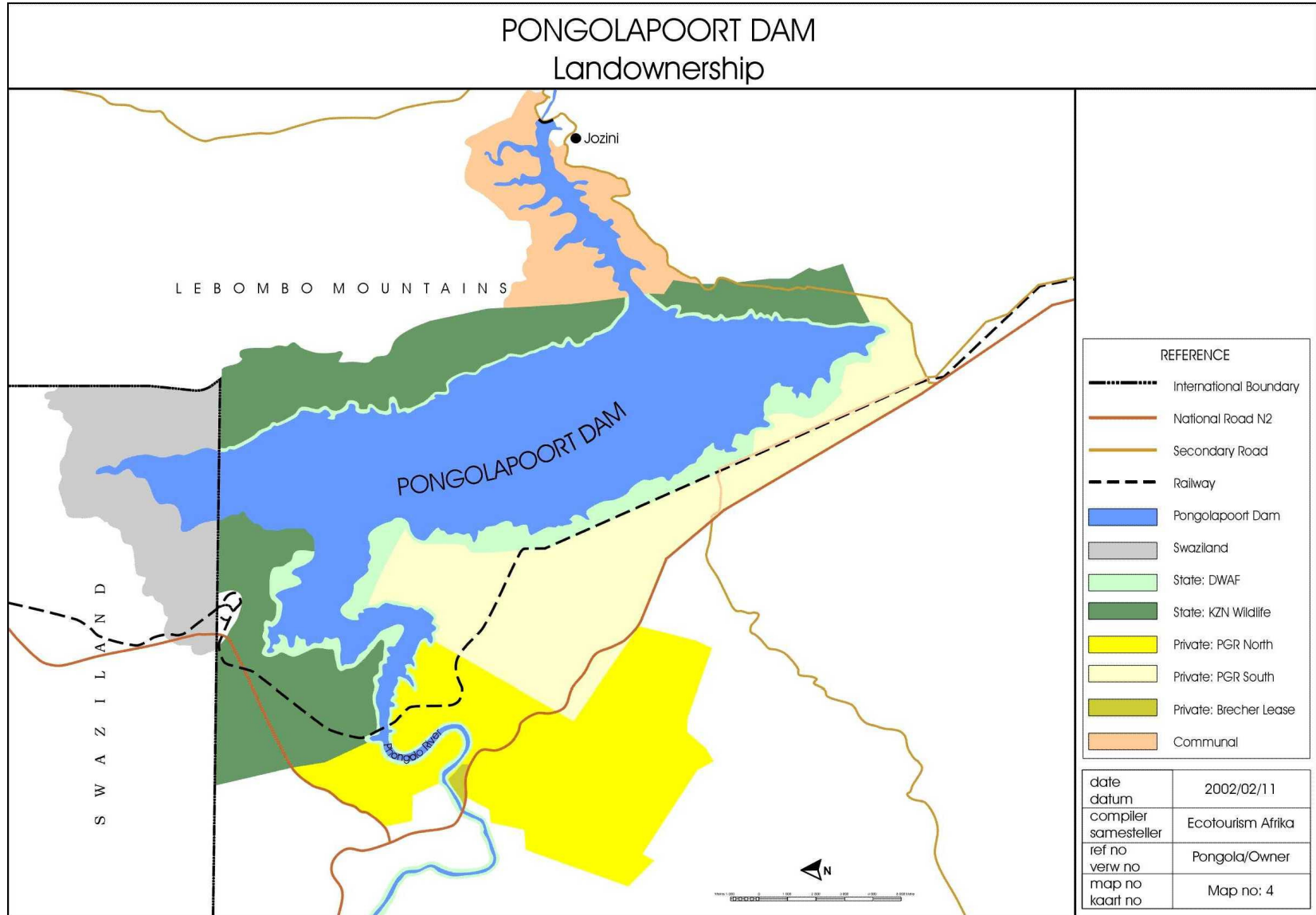


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Map 3: Pongolapoort Dam: Orientation Map



Map 4: Pongolapoort Dam: Landownership



APPENDIX 2

SUP Procedure Stakeholder List

NAME	REPRESENTATIVE	CONTACT DETAILS
<i>Authorities</i>		
1	Clive Arendse	DWAF KZN Regional Office Tel (031) 336 2723 Fax (031) 305 9927 Cell 082 808 2695 arendsec@dwaf.kzntl.gov.za
2	Anthony Chancellor	DWAF KZN Regional Office Fax (033) 2101
3	H Honiball	DWAF Pongolapoort Dam (035) 572 1234
4	Malcolm Thomson	KZN Wildlife Tel (034) 435 1012 Fax (034) 435 1012/ (035) 572 1221 Cell 082 478 2151
5	Derek Potter	KZN Wildlife Tel (033) 845 1513 Fax (033) 845 1693
6	Pete Connant	KZN Wildlife Tel (035) 870 0552 Fax (035) 870 0861
7	Des Archer	KZN Wildlife Tel (033) 845 1729 Fax (033) 845 1399
8	Roger Porter	KZN Wildlife Tel (033) 845 1458 Fax (033) 845 1499
9	Vusi Gumbi	KZN Wildlife - Community Officer Fax to Malcolm Thomson Cell 082 661 6648
10		Nyawo Tribal Authority Fax to Malcolm Thomson
11		Myeni Tribal Authority Fax to Malcolm Thomson
12		Zululand District Council Tel (034) 413 2451
13	Jaco Nia Mmgome Zulu	Ubombo District Council Tel (035) 572 1292 Fax (035) 572 1266

NAME	REPRESENTATIVE	CONTACT DETAILS
14	Wally Plant	uPongolo Municipality Tel (034) 413 1223 Fax (034) 413 1706
15	Eurika Havemann	PGR Manager 082 321 4918 Fax (034) 435 1982
16	Clive Poultney	Lubombo Waterways Programme 082 491 0062 nsimbi@iafrica.com
<i>Landowners</i>		
1	Karel Landman	Tel (034) 435 1011 Fax (034) 435 1104 info@pongolagamereserve.co.za
2	Heinz Kohrs	drheinzmweb.co.za drheinzxsinet.co.za Tel (034) 413 2492 Fax (034) 413 2496 Cell 083 255 0742
3	Howard Jones	Tel (035) 772 3068 Tel (034) 413 1388 Fax (034) 413 3897 hwjones@iafrica.co.za Cell 083 265 0928
6	Alexis Steenkamp	Tel (035) 787 2171 Fax (035) 772 2558 (ask Gene) alexissteenkamp@mweb.co.za
7	Conrad & Ewald Weber	Tel (017) 826 0039 Fax (017) 826 3920 stanweb@worldonline.co.za
8	Hein Sunkel	Tel (017) 826 2905 Fax (017) 826 2022 delfkom@xsinet.co.za
9	David Haggeman	Fax (035) 550167 fell@saol.com

NAME	REPRESENTATIVE	CONTACT DETAILS
10	Mandfred Kohrs	Chairman: Landowners Ass. Tel/Fax (031) 312 5769 Cell 083 250 1551 mkohrs@mweb.co.za
11	Charl Senekal	Cell 082 555 1961
12	Dreyer Senekal	Cell 082 447 2128 Fax (034) 413 1317
13	Diggs Pascoe	Community liaison Tel (035) 474 2038 Cell 082 926 2571 Fax (035) 474 1131 annepascoe@mweb.co.za
14	Keith Stannard	keith@lodgelogistics.com P.O. Box 70737 Bryanston 2021
<i>User Groups</i>		
1	Arthur Duvenhage	Sodwana Angling Club Cell 082 896 5110 Fax (034) 413 1496 ask 845
2	Lappies Labuschagne	Josini Angling Club Fax (035) 572 1221
<i>Commercial Operators</i>		
1	Brian Blevin	Shaya Moya Lodge Tel (034) 435 1164 Fax (034) 435 1008 P.O.Box 784, Pongola, 3170 shyalodge@saol.com lindyb@saol.com
2	Karel Landman	Mpalane/Mvubu/ Nkwazi Tel (034) 435 1123 Fax (034) 435 1104
3	Heinz Kohrs	White Elephant Fax (034) 435 1982
4		Gilnetters - Dam Wall Via Vusi Gumbi
5	Sue Rutherford	Ghost Mountain Inn Tel (035) 573 1025 Fax (035) 573 1359 Cell 082 565 5649
6	Brownwyn Grey	Camera Africa admacaf@iafrica.com Tel (031) 266 9134
7	Malcolm McCulloch	Wilderness Safaris Fax (031) 305 9927

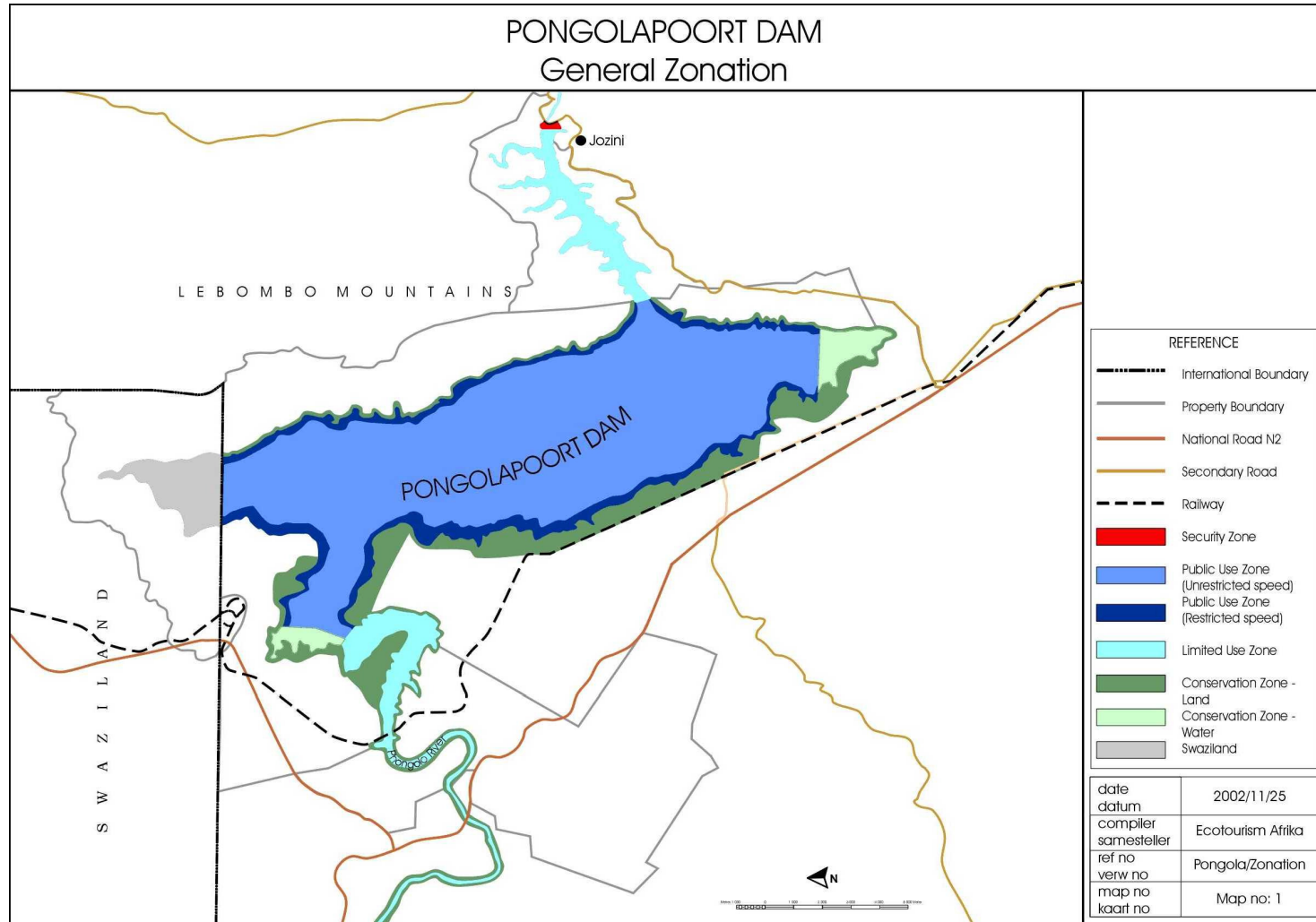
NAME	REPRESENTATIVE	CONTACT DETAILS
<i>Other Interested Parties</i>		
1	Dirk Versveld	DWAF dirki@iafrica.com Cell 082 377 4084 Tel/ Fax (021) 424 1787
2	Harris Pienaar	DWAF harrisonp@dwaf.gov.za Tel (012) 336 8238 Fax (012) 336 8947
3	J. Lourens	Cell 083 233 9085
4	T.D. Mabuyakhulu	Tel (035) 595 8191
5	Zeph Nyathi	Mboza Village Project Cell 083 281 2272
6	C. Bruwer	Cell 082 805 0190

SUP Procedure Project Schedule

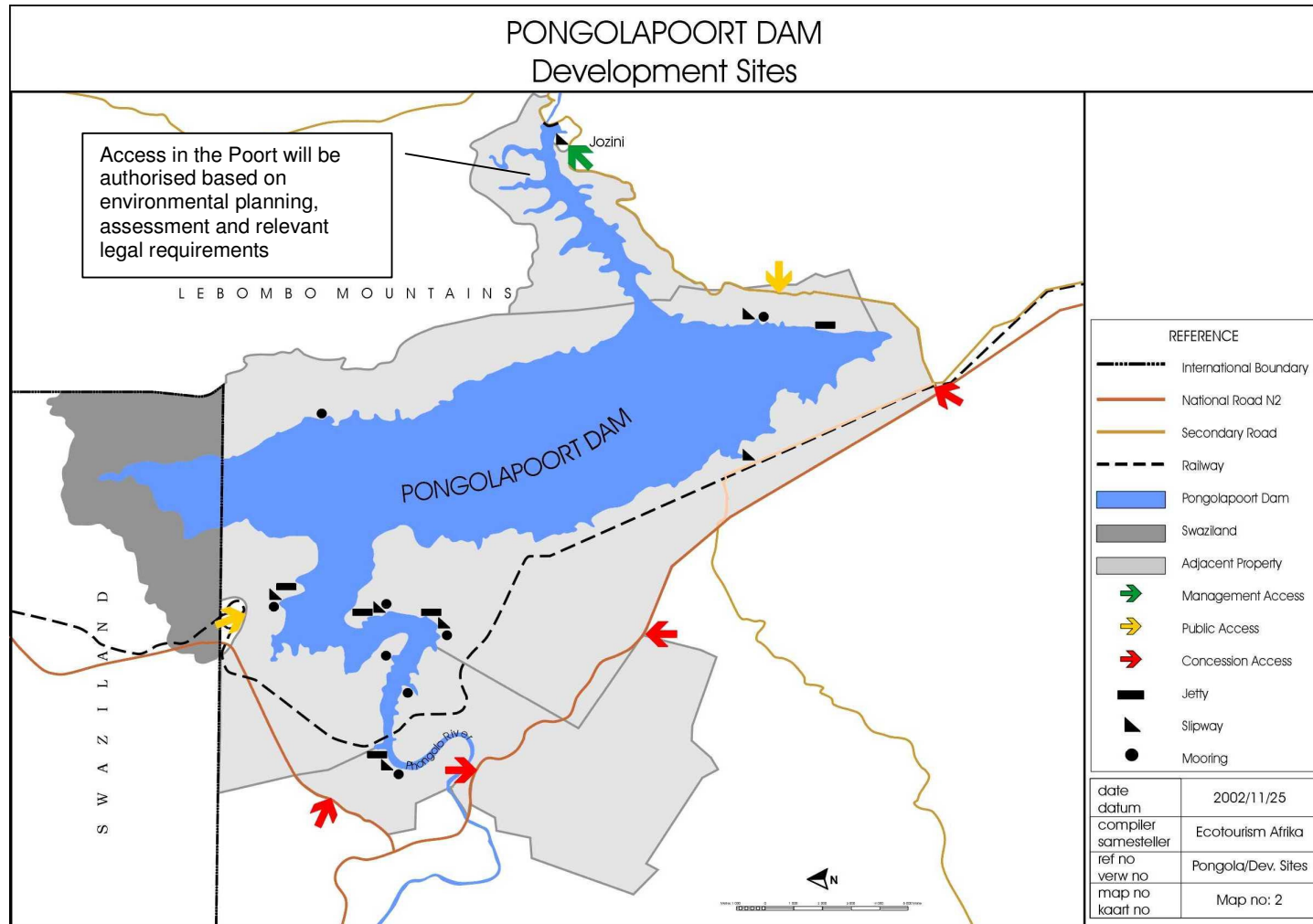
SUP PROCEDURE SCHEDULE TO DATE			
No	Workshop/Meeting Description	Date	Venue
1	"Setting the Objectives": First Public Meeting	Fri 17 Aug 2001	Pongola Game Reserve
2	Planning Workshop	Mon 29 Oct 2001	Shayamoya Lodge, Pongola
3	Joint Planning Meeting DWAF & KZN Wildlife	Tue 27 Nov 2001	Pietermaritzburg
4	Technical Task Team Meeting	Mo 10 Dec 2001	Ghost Mountain Inn, Pongola
5	Draft SUP to Technical Task Team for comment	Thu 14 Feb 2002	Pongola
6	Public Review Phase	24 Jun – 27 Jul 2002	Pongola
7	Open Day	25/26 Jul 2002	Pongola Game Reserve
8	Final Presentation and Approval - KZN Wildlife Board	29 Nov 2002	Pietermaritzburg
9	Meeting with founding members of the MANAGEMENT COMMITTEE to discuss draft constitution	21 Jan 2003	Phongolo Nature Reserve
10	DWAF Cluster and Regional Presentation and Approval	27 Jan 2003	Durban DWAF Regional Office
11	Constitution Founding Members Meeting	27 Feb 2003	KZN Wildlife Offices, Phongolo Nature Reserve
12	Constitution Founding Members Meeting	19 Jun 2003	Pongola Game Reserve
13	Submission of Final SUP	End Jul 2003	DWAF Head Office

APPENDIX 3

Map 1: General Zonation

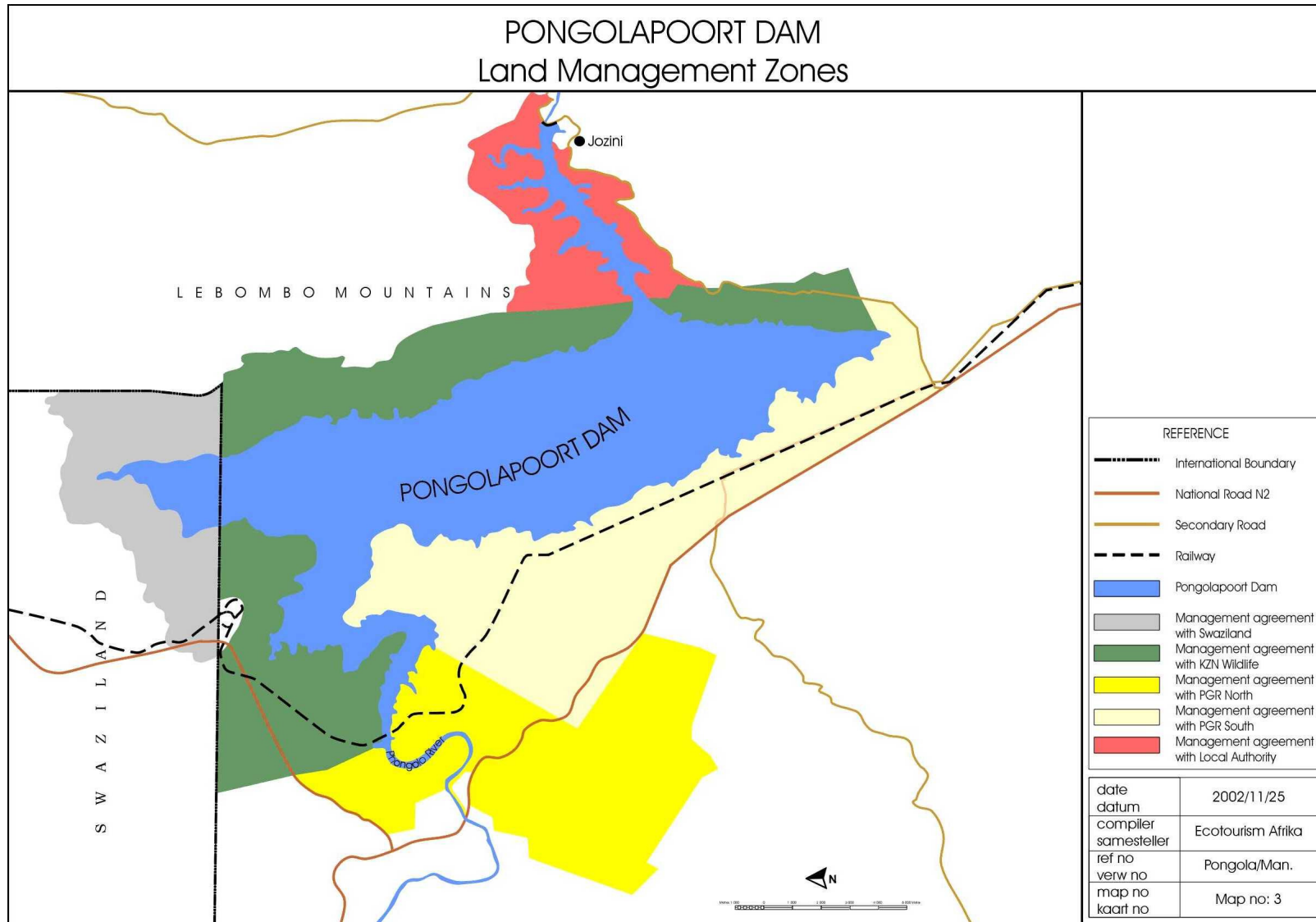


Map 2: Development Sites



Note: Access in the Poort will be provided on both sides of the Dam based on environmental planning, assessment and relevant approvals.

Map 3: Land Management Zones



APPENDIX 4

Proposed Institutional Structure

