



DEPARTMENT OF WATER AFFAIRS AND FORESTRY

**SUSTAINABLE UTILISATION PLAN
VYGEBOOM DAM**

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SUSTAINABLE UTILISATION PLAN: VYGEBOOM DAM

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ACKNOWLEDGEMENTS

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

PROLOGUE

This Sustainable Utilisation Plan is the management, development and institutional plan for the Vygeboom Dam and can only be modified with Ministerial approval after consultation with all relevant stakeholders and specifically concessionaires. The aim of this plan to guide the management of the dam and surrounding state owned land in a manner that provides environmental, social and economic benefits in a sustainable and equitable manner.

By clarifying the management objectives, strategies and operational guidelines, and combining these with specific zones it is possible to ascertain the impact hat the Vygeboom Dam has in the region. Clarity regarding the roles and responsibilities of the management institution, it is possible to apportion both responsibility and accountability for management actions and activities.

ABBREVIATIONS

BPEO	Best Practicable Environmental Option
D:SES	Directorate Social and Ecological Services
DWAF	Department of Water Affairs and Forestry
ECA	Environment Conservation Act (Act No. 73 of 1989)
EIA	Environmental Impact Assessment
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 Vygeboom 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 Vygeboom Dam.

The purpose of the SUP for the 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 is protected;
- pollution and degradation of the water resource is reduced and prevented;
- international obligations can be met; and
- dam safety is promoted.

As part of the SUP, a suitable institution must be 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 ensure that the water of the Vygeboom Dam is *inter alia* protected and managed in a sustainable and equitable manner, for the benefit of all persons and in accordance with its constitutional mandate (National Water Act, 1998, (Act 36 of 1998) [NWA], Section 3).

Deemed to be an effective tool to assist the Minister in attaining these objectives, the Directorate Social and Ecological Services (D:SES) has developed the Sustainable

Utilisation Planning Procedure (SUPP), which has been tested at Vygeboom Dam.

The aim of the Vygeboom 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 management tool the institution responsible for managing the access and use of government waterworks, 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 Vygeboom Dam SUP will guide general access to and use of the dam, while DWAF will be responsible and accountable for specific approvals such as concessions and management contracts.

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

The principles underlying the SUP for the Vygeboom 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.

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

- National Heritage Resources Act (Act No. 25 of 1999);
- Provincial Regulations and legislation;
- Occupational Health and Safety Act (Act No. 85 of 1993);
- Environmental Conservation Act (Act No. 73 of 1989) [ECA];
- 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) and;
- Department of Transport Proposed Model Inland Waters (Navigation) Regulations, Government Notice 1115 of 1997.

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.

SECTION 3: BACKGROUND TO THE VYGEBOOM DAM

The Vygeboom 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.

Situated close to the Badplaas resort, the Vygeboom Dam was built to “store and regulate the floodwaters of the Upper Komati in order to create an assured water supply for proposed power stations” and “to effect a further stabilization of the river flow downstream of the dam” (South Africa, 1968). See Appendix 1 for Vygeboom Dam national and regional context maps and orientation map.

Numerous attempts have been initiated by both the public and private sectors as well as local communities to unlock the potential of the Vygeboom 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.

Several clubs have developed resorts and club facilities over the past decade, yet no long term contracts have been compiled, resulting in short term, ad hoc and temporary structures being developed. This situation has not resulted in optimal regional economic growth within the tourism industry.

The DWAF, D:SES developed a SUPP to guide the compilation of utilisation plans for water resources in an effort to attain the objectives of the NWA.

The SUPP for the Vygeboom 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 Vygeboom Dam, based on sound environmental principles, good business practices and equitable community involvement.

SECTION 4: SUSTAINABLE UTILISATION OF THE VYGEBOOM DAM

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

During these stakeholder workshops and planning sessions, all the roleplayers envisaged the conservation of Vygeboom 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 is accepted as being:

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

See Appendix 2 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 resource of the Vygeboom 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 resource of the Vygeboom Dam it is believed that substantial financial, social and environmental benefits will be generated, making the management and conservation thereof both meaningful and viable.

Ultimately the challenge is to stimulate economic growth in the region, while addressing the regional recreational needs.

Many aspects compound this challenge including climatic variation, changes in the

land use, economy and ownership, as well as current contracts and future development needs, 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 Vygeboom Dam: Key Objectives

To attain the vision and mission for the Vygeboom Dam, and accept the challenges, the key objectives for the dam's management, utilisation and development are acknowledged as being:

- *the conservation of the water resource, as well as state land surrounding the Vygeboom Dam;*
- *the establishment of clear guidelines regarding the utilisation of the water resource;*
- *the creation of opportunities for equitable access to the water resource and water based economy;*
- *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. 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.

resources can be aided and guided regarding possible solutions and pitfalls.

4.3 Role Players

The success of the Vygeboom Dam SUP and its implementation is dependant on the level of host community involvement and beneficiation. As such, the Vygeboom Dam should not function in isolation from its neighbours and surrounding communities, and should ideally be integrally part of the recreation 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 Vygeboom Dam will endeavour to assist in creating and supporting representative and democratic, legally bound structures and engage these in the management of benefit flow from the dam.

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

4.4 Implementation Policy

In an effort to optimise benefits to all roleplayers, the implementation of the SUP for the Vygeboom 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 Vygeboom Dam enhance these objectives.

Additionally, it will be the policy of the Vygeboom Dam Management to document activities, accomplishments, problems and solutions, so that other similar water

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 Vygeboom 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
- Tourism experience management
- Private sector involvement
- Recreation and tourism infrastructure
- Marketing
- Community participation and beneficiation
- Research projects
- Monitoring

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 objectives and vision, guided by clear policy statement. 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 Vygeboom Dam and surrounding land are well conserved through the application of adaptive, yet ecologically sound management processes, and that the natural resource management of the Vygeboom Dam obtain recognition as a water resource that achieves sustainability through utilisation.

That the Vygeboom Dam obtains recognition for its integrated management approach to recreational use of water and the management of state land, 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 Vygeboom Dam, as well as conserve the land surrounding the dam in terms of species and communities, and to utilise the resources in a sustainable and ethical manner, allowing for the optimal functioning of the ecosystem.

Secondary Objectives:

The secondary objective is to provide users of the Vygeboom Dam an enjoyable recreational 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 Vygeboom Dam's biotic and abiotic components can no longer function as a natural ecosystem, a policy of management interventions aimed at integrating land into ecological units will be applied, based on current knowledge, technology, time and financial resources, yet limited to plant and animal species historically indigenous to the Komati River System.

- **Strategy:**

Through improvement in knowledge and technology, together with a formal policy of management intervention, the strategy for managing the Vygeboom Dam will be to consistently apply adaptive management processes through outsourcing of resource management to adjacent land owners, 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:**

The management of the natural resources will be undertaken through agreement with adjacent landowners or concessionaires, addressing the following:

- **Alien Plant Control:**

No listed weeds or invasive plants will be introduced in or around the Vygeboom Dam. The objective is to remove all existing weeds and invasive 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.

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

- **Veld Management:**

The responsibility of veld management lies with each manager as part of the land management agreements. DWAF will guide the establishment of these management contracts.

- **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 considerations and evaluation, to provide informed decision making regarding hot or cold burns to control excess woody material.

- **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.

- **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.

– Fishing:

To enable the Vygeboom Dam to be managed on the principle of sustainability, sport 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 Vygeboom 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 be limited to grazing and sport fishing.

– Control of Illegal Use:

Illegal use of natural resources of the Vygeboom Dam is low, yet remains a latent threat, thus it is policy to retain an ongoing vigilance through cost effective surveillance and monitoring.

– Waste:

The Vygeboom Dam management team and surrounding land managers 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:**

For effective management of natural resources it is essential that performance be monitored utilising 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 Vygeboom Dam are identified and managed through an appropriate, dynamic and adaptive management process, compliant to relevant legislation.

• **Objectives:**

Primary Objectives:

The primary objective is to identify, document, research and protect the cultural resources within the Vygeboom 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 Vygeboom Dam and the surrounding area.

Tertiary Objectives:

The tertiary objective is to provide insight into the Komati River System, the establishment of the Vygeboom 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 Vygeboom 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 and concessionaires.

- **Operational Guidelines:**

- Identification:

Managers should be trained and capacitated 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 Vygeboom 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 Vygeboom Dam.

- **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 management

- **Vision:**

The vision of the Vygeboom Dam and surrounding state land is management as an ecological unit, by consolidating both the management and operation of the various public and private areas into a single management area.

- **Objectives:**

Primary Objectives:

The primary objective with integration and consolidation is to ensure effective management of both recreation and resource management.

Secondary Objectives:

The secondary objective is to facilitate the creation of opportunities for private sector to unlock the recreational potential in a sustainable and equitable manner.

Tertiary Objectives:

The tertiary objective is to generate awareness regarding the value of sound resource management and effective partnerships, specifically related to environmental management, heritage management, community beneficiation and product management.

- **Policy:**

Partnerships require 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 Vygeboom Dam and surrounding state land.

- **Strategy:**

Based on the policy, the first strategic step will be the creation of a Vygeboom 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 utilisation of the entire area, using the Vygeboom Dam and surrounding state land as catalyst.

- **Operational Guidelines:**

- Core Area Consolidation:

The Vygeboom Dam is surrounded by a thin strip of state land. This situation compounds effective and sustainable management.

To rectify this situation two phases must be undertaken, the first being the formation of management agreements with the adjacent landowners for the areas where no concessions have been issued. DWAF will enter into these agreements based on caretaker agreement policies.

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

The second phase would be to include resource management components in the concession agreements.

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- **Monitoring:**

A record of all land 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: Tourism Experience Management

- **Vision:**

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

- **Objectives:**

Primary Objectives:

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

Secondary Objectives:

Ensuring that all the tourism products and projects are undertaken by private sector operators and developers through concession agreements with DWAF, managed by the management institution, 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 Vygeboom Dam will serve a wide range of nature based activities aimed at highlighting the recreational objectives and history of the region, and will include activities such as boat cruises, watersports, fishing and sailing experiences. Land based activities will be complementary to the adjacent water based activities.

- **Strategy:**

The strategy regarding tourism experience management will be to encourage private sector involvement, as well as guiding these

operators regarding the objectives of the Vygeboom Dam.

- **Operational Guidelines:**

- Outsourcing:

All tourism products and programmes will be outsourced through an open and transparent procedure compliant with the requirements of the PFMA, Treasury Regulations and the NWA, where the management institution will be responsible for ensuring that the specific conditions related to concessions are adhered to. The institution will be responsible for the output as opposed to the input regarding tourism and recreational water use activities.

- Operational Rules:

All concessionaires and contractors will be subject to a common set of operational rules for the dam and surrounding land. These operational rules will form part of the concession agreement or contract, and will be updated regularly, at least annually.

- Visitor Densities:

To enhance the tourist experience, as well as attain the conservation objectives, visitor densities will be set for each concessionaire. These densities may only be exceeded during special events authorised by DWAF.

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 well managed activities and high quality experiences through trained and capacitated staff; and

- monitoring of impacts on environment, experience and community perspective.

- Development Cores:

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

- Two types of concession areas, namely access concessions and development concessions,
- a public access zone; and,
- a community development zone.

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 Vygeboom 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 approved and authorised access sites.

Staff providing access, either as part of the Vygeboom Dam contracted service provider or concession areas, 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 and contractors will be responsible for managing their visitors, providing them with zonation plans, operational rules and restrictions pertaining to the dam and surrounding land.

- **Monitoring:**

By maintaining a record of incidents regarding visitors, either positive or negative, as well as complaints, compliments and concerns, the Vygeboom 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.

5.3 Key Performance Area: Private Sector Involvement

- **Vision:**

In compliance with official government policy, Vygeboom 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 Vygeboom Dam will be outsourced, either through tenders or management agreements, and managed as concessions or contracts. Two access concessions, three development concession areas, and one public access contract form the basis of the tourism developments.

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 the Department of Finance.

- **Policy:**

All tourism 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 Vygeboom Dam management are all stakeholders in the dam, necessitating good relationships and communication.

- **Strategy:**

To unlock the economic potential of the Vygeboom 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 Vygeboom 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:**

- Selection Procedure and Criteria:

All existing operators will be requested to verify their water use with DWAF.

All concession opportunities should be advertised publicly and contracts awarded according to 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.

- Concession Allocation:

All concessions and operations within the dam basin will be subject to lease or

management contracts. The cost of the concession will be commensurate with its rights, impacts and benefits in terms of the zonation of the dam, and must be market related.

The duration of the agreement will determine which organ of state – DWAF or Public Works Department, will enter into the agreement or lease, yet once procured and awarded the contracts will be administered by the Vygeboom Dam management.

The agreements must be awarded through a public procurement process compliant with relevant legislation – DWAF, PFMA and the Vygeboom Dam management.

– Allocation Criteria:

Generally, leases and concession contracts will be awarded to companies and individuals with proven track records in the recreational 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 Vygeboom Dam.

– Vygeboom Dam Rules and Regulations:

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

– Limits of Development and Use:

All concession agreements and management contracts will have clearly defined limits placed on sizes, numbers and levels of development, as well as type of activity and restrictions of zones. Concessionaires are responsible for compliance.

– Concession Fees:

Concession fees will be levied for the rights to operate commercial activities at the Vygeboom Dam. Concession fees will be collected by the Vygeboom Dam

management team on behalf of DWAF, based on DWAF policy, as well as criteria such as:

- exclusivity;
- size of the operation;
- location of the operation; and
- impact of the operation.

The concession fees may consist of an upfront payment and monthly fees.

– Allocation of Concession Fee Income:

All fees levied and all income earned will be payable to DWAF via the management institution, for utilisation regarding the following:

- catchment management fees;
- development and operational costs of infrastructure;
- development and management costs; and,
- contribution to community beneficiation projects and programmes.

– Authorisations:

All developments and operations within the Vygeboom Dam must be authorised in terms of the ECA and NWA requirements.

– Numbers of Concessionaires and Developments:

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

- Two access concession areas;
- Three development concession areas; and,
- One public access management contract.

These levels have been set 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.

– Concession Development and Contracting:

Request for proposals will be issued to actively solicit and invite offers from interested parties based on this SUP for the Vygeboom 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 concession opportunities and objectives for the Vygeboom Dam.

- **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.

5.4 Key Performance Area: Tourism Infrastructure

- **Vision:**

It is envisaged that all infrastructure related to the Vygeboom 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 Vygeboom Dam.

- **Objectives:**

Primary Objectives:

The primary objective of the Vygeboom Dam regarding infrastructure development is to stimulate regional economic development and 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 Vygeboom 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 Vygeboom 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 provincial and local ordinances.

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 roads, 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 concessions for access and development must comply with Treasury Regulations and 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.

– Fencing:

Any fences that cross the state land will be compliant to provincial standards, and will be maintained by the relevant land owners at their own cost, to a standard acceptable to the Vygeboom 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 Vygeboom 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 conduct 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 tourism infrastructure.

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

5.5 Key Performance Area: Marketing

- **Vision:**

The Vygeboom Dam management team envisages that the dam obtain recognition, both locally and regionally, for its anchor role as tourism 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.

- **Objectives:**

Primary Objectives:

The primary objective is to create awareness regarding the management and importance of the Vygeboom 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 Vygeboom 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 Vygeboom Dam.

- **Strategy:**

The Vygeboom 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 Vygeboom 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 Vygeboom Dam in regional and national marketing strategies and campaigns.

- Joint Marketing:

The unifying factor of the utilisation of the Vygeboom 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 Vygeboom Dam should be screened by the management team to avoid the creation of false impressions, and if not done or approved, the Vygeboom Dam management team may not be held liable for any statements concerning issues related to the Vygeboom 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 of monitoring marketing 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.

5.6 Key Performance Area: Community Participation and Beneficiation

- **Vision:**

Since the Vygeboom 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 Vygeboom Dam.

Secondary Objectives:

The secondary objective is to illustrate and highlight the benefits of integrated 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 recreation 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 Vygeboom 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 resources management and other objectives of the Vygeboom Dam.

- **Strategy:**

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

- the establishment of a Vygeboom Dam Development Trust or 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 Vygeboom Dam management team must establish an independent Development Trust or 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 Trust or foundation should be properly constituted and institutionalised, with clear mandates, so that it can operate as a Section 21 Company, or as a Foundation.

- Neighbour Relations:

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

- 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.

possible to ensure benefits based on specific needs and measurable criteria.

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

– Awareness Groups:

The Vygeboom Dam 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 Vygeboom 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 Vygeboom Dam.

The needs and requirements of the Vygeboom 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

5.7 Key Performance Area: Research Projects

- **Vision:**

All research projects, both basic and applied, contribute significantly to the Vygeboom 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 measurement regarding the management and development of the Vygeboom Dam.

Secondary Objectives:

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

Tertiary Objectives:

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

- **Policy:**

The official policy regarding research projects at the Vygeboom 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 Vygeboom 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 Vygeboom 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 Vygeboom 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.

- 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 Vygeboom 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 Vygeboom 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.

5.8 Key Performance Area: Monitoring

- **Vision:**

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

- **Objectives:**

Primary Objectives:

The primary objective with monitoring is to ensure that all key performance area activities are integrated synergistically.

Secondary Objectives:

The secondary objective is to develop an overall performance audit based on the individual key performance areas.

This audit, together with a management system, will form the basis of both internal and external review.

Tertiary Objectives:

The tertiary objective with monitoring 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 Vygeboom Dam to integrate the monitoring of each area into a single integrated performance audit which will ascertain overall performance as well as individual activities.

- **Strategy:**

To attain the vision for monitoring it is imperative that a monitoring system be developed for each key performance area, as well as an integrated audit to measure overall performances.

- **Operational Guidelines:**

- **Measuring Performance:**
For effective management it is important that effective performance measurement tools be developed within each key performance area.

Based on these measurement tools an overall performance audit must be developed, linked to a management system.

This approach will allow for regular review and adaptations to management based on performance criteria.

- **Ecotourism Audit:**

An annual Ecotourism Audit will be prepared for the Vygeboom 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 Vygeboom 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 Vygeboom Dam has been based on:

- the overall vision and concept of the Vygeboom 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 current utilisation; knowledge; climatic conditions; visitor needs and expectations; economic and social criteria, guided by accepted recreational and conservation principles. See Map 2 Appendix 3.

6.1 Public Use Zone

A zone in the Vygeboom Dam is set aside for access to the general public, to satisfy their desire and right to enter and utilise a government waterworks. Facilities and activities for using water for recreational purposes may be provided in this zone to optimise the carrying capacity of the Vygeboom Dam. Infrastructural developments will be provided in this zone to minimise impact and optimise utilisation. A restricted speed zone with a width of 50 m along the shoreline reduces environmental impacts and increases public safety.

6.2 Limited Use Zones

Five limited use zones have been identified for use by concessionaires only. The Vygeboom 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 development, EIA and DWAF policies and authorisations, and carry any costs associated with renegotiations.

6.3 Conservation Zones

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

No permanent developments will be allowed.

Caretaker agreements for the land management and utilisation component will guide the conservation of the land.

6.4 Community Development Zone

A zone close to both the DWAF offices and public access zone has been identified for community development. Ideally within this zone, aspects such as a community hall, school, sport field and related infrastructure will be developed.

6.5 Land Management Zones

The land adjacent to the dam has been zoned in compliance to the surrounding land use, and management agreements will guide the management of this land, either through caretaker agreements or through service contracts.

6.6 Development sites

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. See Map 3 Appendix 3.

All developments must be authorised in terms of relevant legislation.

Access to the Vygeboom Dam can only be obtained from these points Management will have additional access at the DWAF offices.

Slipways, jetties and moorings for boat launching will be provided at the concession sites, as well as public access area, according to approved and authorised plans.

No zone for aquaculture development has been identified yet if a proposal is received from the private sector it must be entertained in terms of access, level fluctuations, community benefits, services, etc. This development will be subject to authorisations in terms of relevant legislation.

SECTION 7: THE INSTITUTION

To successfully manage the sustainable utilisation of the Vygeboom Dam it is imperative that an institutional arrangement be established which can effectively strive to attain the primary, secondary and tertiary objectives of the SUP.

The establishment of the management body has been guided by the NWA and the SUPP and it is recommended that a Water User Association (WUA), facilitated by DWAF be established, consisting of executive representation from:

- access providers including adjacent land owners, development and access concessionaires:
- [add];
- local government; and

co-opted representation from:

- service contractors;
- Development Foundation; and
- resource managers.

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 and its management team will be obligated to and responsible for implementing the management plan 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 management agreements with adjacent landowners or concessionaires;
- ensuring that the management agreements are compliant with the objectives of the Vygeboom Dam SUP, and any other relevant legislation;
- monitoring the performance of the land management agreements 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 Vygeboom Dam Development Trust/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 Vygeboom Dam on the surrounding environment; and
- report on the successes and failures of the Vygeboom Dam as catalyst for community beneficiation.

In terms of this institutional structure, the Vygeboom Dam Development Trust or Foundation will be responsible for all external projects, within the surrounding community. Individual projects or initiatives within these communities can approach the Development Trust or Foundation for support, based on specific criteria and within clear budgets. The Development Trust or 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 Trust or Foundation believes that it could contribute to attaining the objectives set for the Vygeboom Dam, as well as those of the NWA.

The 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 concessionaires.

Model 1 Appendix 4 depicts the proposed Vygeboom Dam institutional structure.

REFERENCES

- BROHMAN, J, 1996, New directions in tourism for third world development. *Annals of Tourism Research*, Vol 23, No 1, pp 48-70.
- BRUNTLAND REPORT, 1987. World Commission on Environment and Development. *Our Common Future*. Oxford University Press, Oxford and New York.
- DEPARTMENT OF ENVIRONMENTAL AFFAIRS AND TOURISM, 1996, *White Paper on the Development and Promotion of Tourism in South Africa*. Pretoria: The Department.
- DEPARTMENT OF ENVIRONMENTAL AFFAIRS AND TOURISM, 1997, *White Paper on the conservation and sustainable use of South Africa's biological diversity*. *Government Gazette*, Vol 385, No 18163, 28 July 1997.
- DEPARTMENT OF ENVIRONMENTAL AFFAIRS AND TOURISM, 1998, *A national strategy for Integrated Environmental Management in South Africa. Discussion document*. Pretoria: The Department.
- DEPARTMENT OF ENVIRONMENTAL AFFAIRS AND TOURISM, 1998, *Tourism in Gear. Tourism development strategy 1998-2000*. Pretoria: The Department.
- DEPARTMENT OF ENVIRONMENTAL AFFAIRS AND TOURISM, 1998, *White Paper on environmental management policy for South Africa*. *Government Gazette*, Vol 395, No 18894, 15 May 1998.
- DEPARTMENT OF TRANSPORT, 1997, *Proposed model for inland water (navigation) regulations..*
- DEPARTMENT OF WATER AFFAIRS, 1964, *Regulations framed in terms of paragraphs (b), (c) and (j) of section seventy of the water act, 1956 (Act 54 of 1956)*.
- GROBLER & VERSTER, 2001. *Opinion – In re vesting and control of State-owned land surrounding the Hartebeespoort Dam*.
- HEEG, J. & BREEN, C.M. 1982. *Man and the Pongolo Floodplain*. South African National Scientific Programmes Report No. 56. June 1982. CSIR. Republic of South Africa.
- IUCN/UNEP/WWF, 1991. *Caring for the Earth*.
- MINISTRY FOR PROVINCIAL AFFAIRS AND CONSTITUTIONAL DEVELOPMENT, 1998, *White Paper on Local Government*. *Government Gazette*, Vol 393, No 18739, 13 March 1998.
- MUNRO, 1995. *A Sustainable World*. Ed. T.C. Trzyna & J.K. Osborn. International Center for the Environment and Public Policy, California.
- REPUBLIC OF SOUTH AFRICA, 1996, *Constitution of the Republic of South Africa, Act 108 of 1996*. *Government Gazette*, Vol 378, No 17678, 18 December 1996.
- REPUBLIC OF SOUTH AFRICA, 1995. *Development Facilitation Act. Act 67 of 1995*.
- REPUBLIC OF SOUTH AFRICA, 1998, *National Water Act, Act 36 of 1998*. *Government Gazette*, Vol 398, No 19182, 26 August 1998.
- REPUBLIC OF SOUTH AFRICA, 1989, *Environment Conservation Act, Act 73 of 1989*. *Government Gazette*, Vol 5999, 5 September 1989.
- REPUBLIC OF SOUTH AFRICA, 1998, *National Environmental Management Act, Act 107 of 1998 Government*.
- US NATIONAL PARKS SERVICE, 1988, *Management Policies*.

APPENDICES

APPENDIX 1

MAP 1: Vygeboom Dam: National Context

MAP 2: Vygeboom Dam: Regional Context

MAP 3: Vygeboom Dam: Orientation

APPENDIX 2

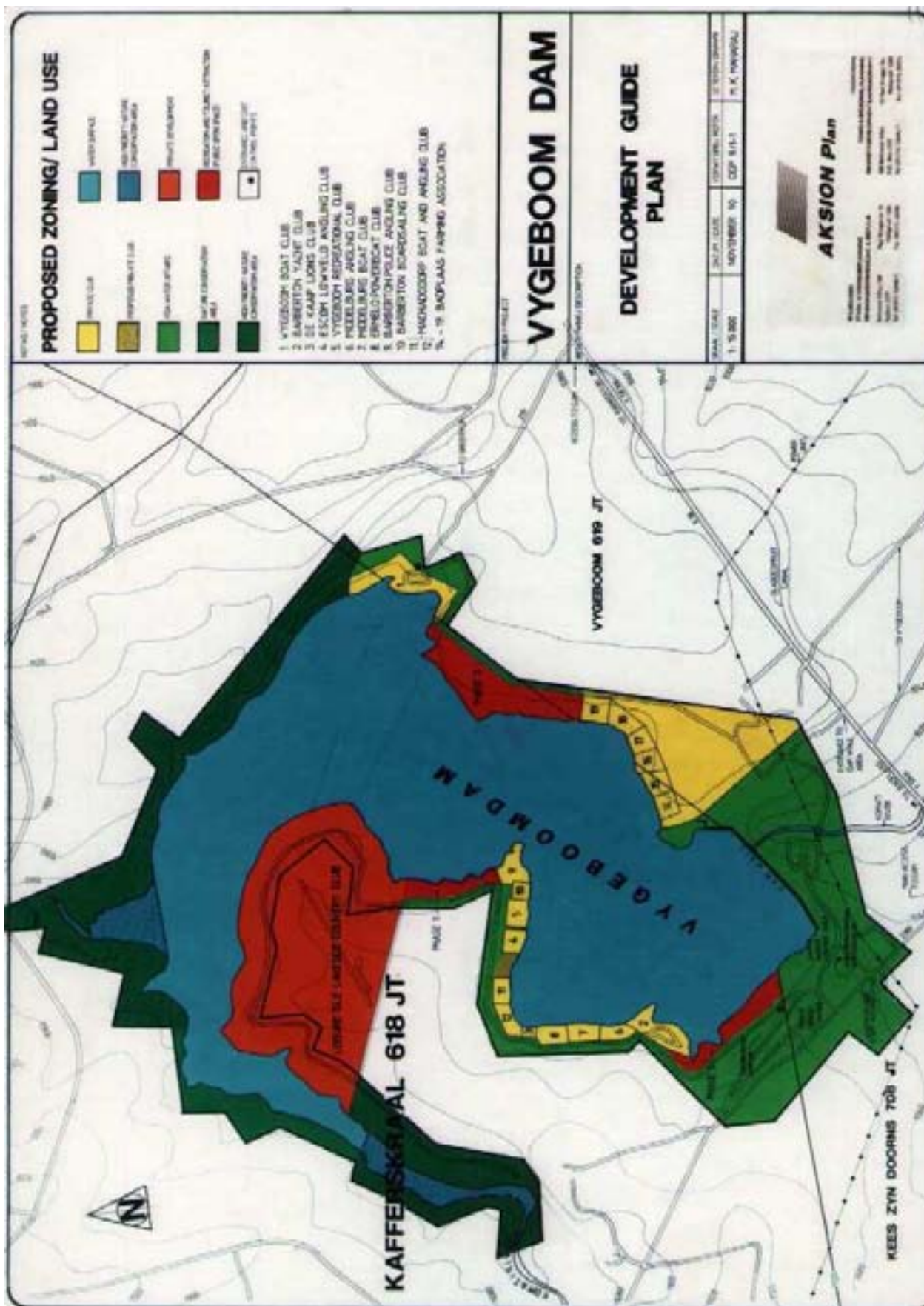
SUP Procedure Stakeholder List

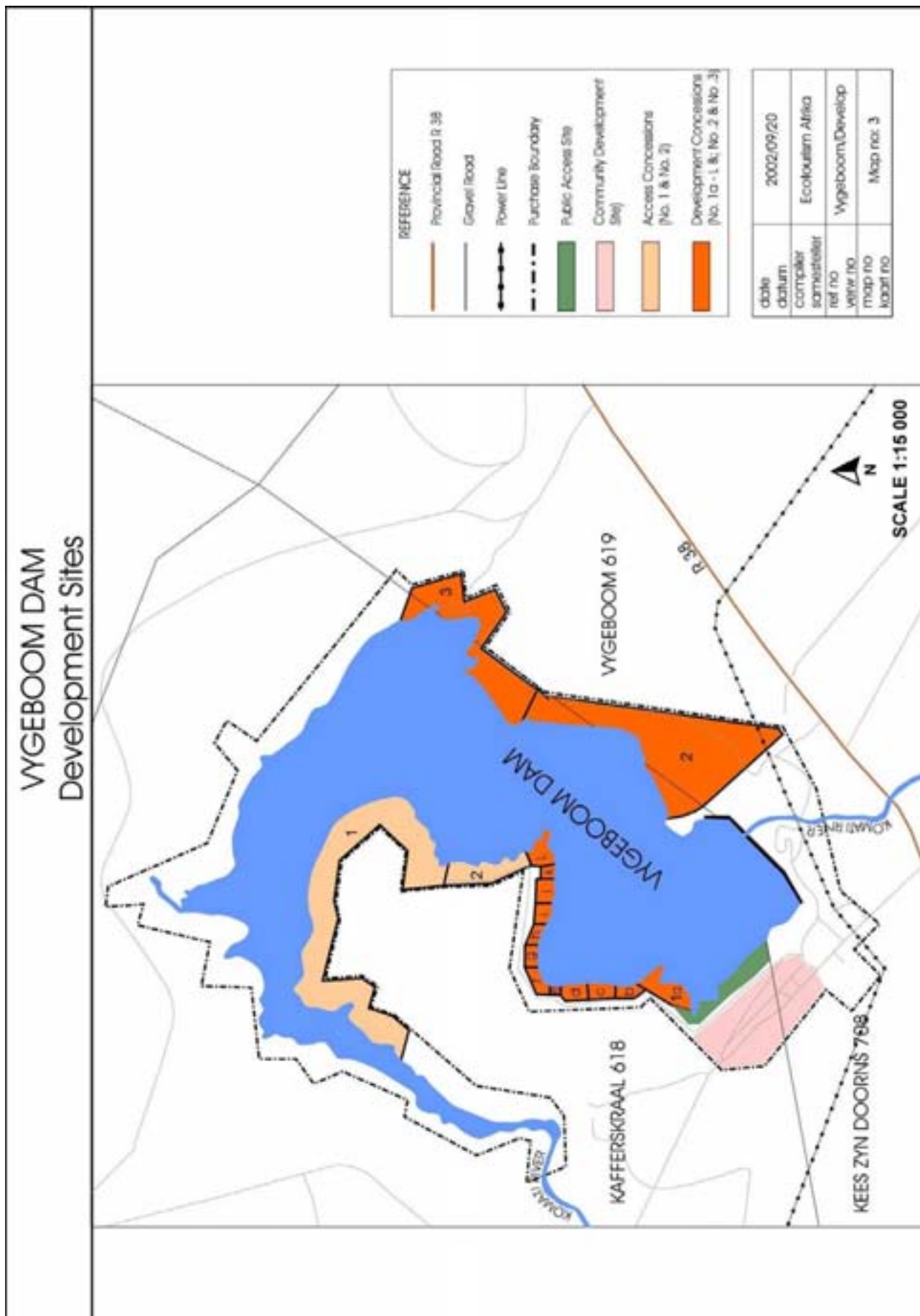
SUP Procedure Project Schedule

APPENDIX 3

Map 1: Purchase Boundary

Map 2: General Zonation





APPENDIX 4

Model 1: Vygeboom Dam Institutional Structure

