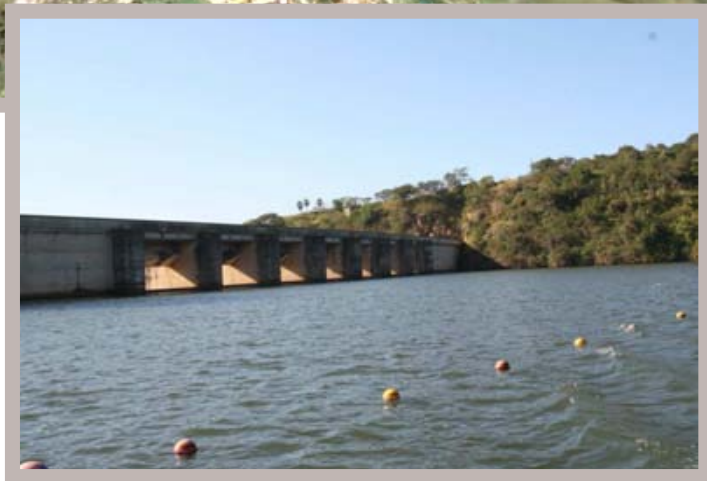

HAZELMERE DAM RESOURCE MANAGEMENT PLAN

BACKGROUND INFORMATION DOCUMENT

JUNE 2007



Department of
Water Affairs and Forestry

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1. INTRODUCTION AND BACKGROUND

1.1. BACKGROUND TO THE STUDY

EThekweni Municipality, together with Trade and Investment KZN, Department of Water Affairs and Forestry and Umgeni Water have indicated a need to promote development initiatives, and promote the responsible future management of the water resource and its surrounding natural environment. To this end the formulation of the **Hazelmere Dam Precinct and Resource Management Plan** was commissioned. In parallel to the Precinct and Resource Management Plan, a **Tourism Feasibility study** is also currently underway and will be executed in cognisance of this process. These studies are meant to ensure equitable access, compatible use, public safety, resource protection and to unlock the potential of Hazelmere Dam and effect the sustainable management thereof.

It is anticipated that the Precinct and Resource Management Plan for the dam should provide detail on the following areas:

- Establishing and understanding of the study area, including its **opportunities and constraints** taking into account the current Tourism Feasibility Study.
- Establishing **a vision and conceptual framework** for the area;
- Establishing **synergies** with proposed developments in the immediate vicinity;
- Establishing detail **implementation plan** for the area
- Ensuring the **sustainable and equitable development**, utilization and management of the Hazelmere Dam by compiling a **RMP**, based on the Departmental of Water Affairs and Forestry Guidelines on Integrated Resource Planning for the Use of Water for Recreational purposes through a **facilitated and consultative** planning process;
- Efficient allocation of land uses within the study area as per existing and projected demands, and
- Undertaking the above exercises through a **managed participation** exercise.

1.2. PURPOSE OF THIS DOCUMENT

The process of formulating these future orientated development and management plans for the dam area requires substantive participation with the affected communities and parties residing, investing in and/or using the dam and its surrounding resources. To this end a number of community and roleplayer interactions has been scheduled as part of the process for constructive engagement.

The purpose of this document is to serve as a background information document to summarise available information around the dam and assist roleplayers in preparation for engagements. This will ensure that all participants have the opportunity to peruse and comment on current findings and parttake in discussions with similar contextual information to their disposal.

It should be noted that Sections 1.3., 1.4. & 1.5. was extracted from the **Raising of Hazelmere Dam Feasibility Study (2003) EIA Report**.

It should be noted that Sections 2 & 3 was extracted from the **Draft Hazelmere Dam Document Review and Status Quo Analysis** report prepared by **Urban Econ Tourism** in June 2007.

1.3. LOCALITY OF THE DAM

Hazelmere Dam is situated in a gorge on the Mloti River, about 5km upstream (north-west) of the town of Verulam. The dam is situated in the Magisterial District of Verulam (29°34' - 29°36'S; 31°00' - 31°02'E), and the relevant 1:50 000 scale topographical map is 2931CA VERULAM. (See Figure 1.) Access to Hazelmere Dam (northern bank only) is along a secondary (tarred) road (P100) which runs north from Verulam to Hazelmere for 8km, followed by 2km of minor (gravel) road. Access to the Msinsi Holdings Recreational Facility, on the southern bank of the reservoir and 8km from north of Verulam, is along a minor road (P239) that passes the Barnes Sewage Disposal Works.

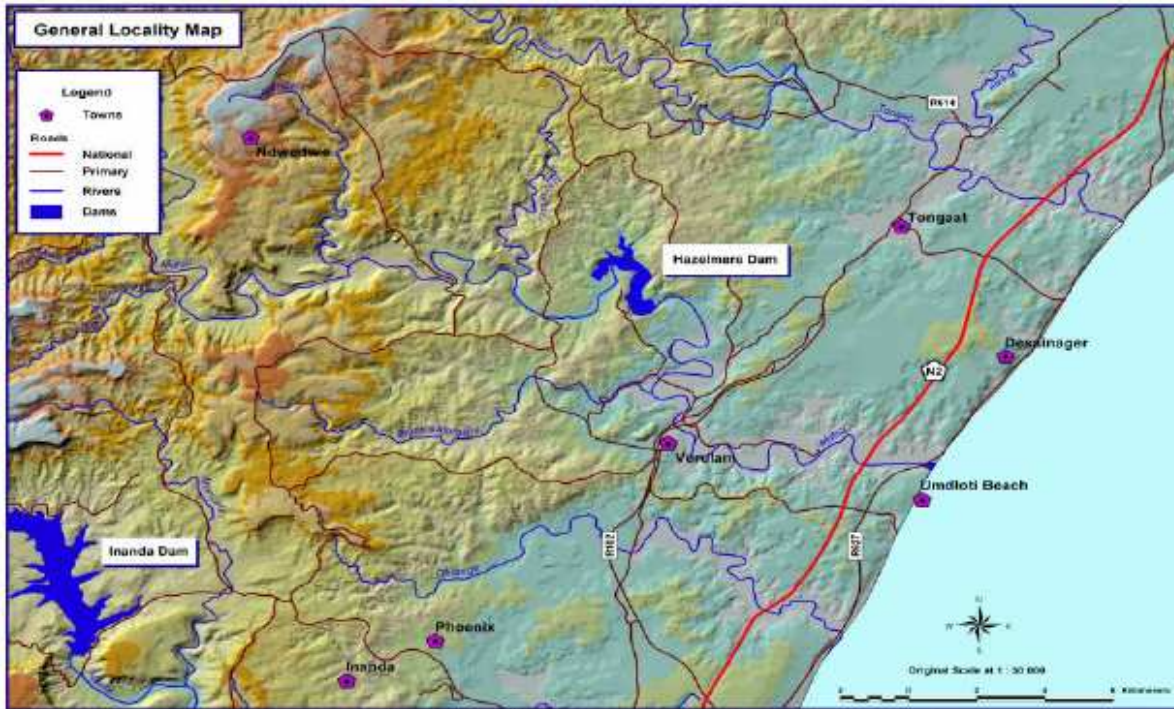


Figure 1. General locality map showing the Mloti River, position of Hazelmere Dam, the town of Verulam, and surrounding features.

1.4. CAPACITY OF DAM

Various estimates have been made of the original storage capacity of Hazelmere Dam. These range from 21 million m³ (Umgeni Water) to 24 million m³. The capacity has been reduced by sedimentation to an estimated 16,8 million m³, representing about 23% of the natural MAR (Table 1). While most of this loss has taken place on a gradual annual incremental basis, the 1987 flood resulted in a loss of some 2,5 million m³ of storage capacity within a few days. The capacity of the raised dam is estimated to be 36 million m³, representing about 50% of the natural MAR. In 1994 the historical firm yield of Hazelmere Dam was estimated to be 23 million m³/a. The estimated historical firm yield for a raised dam was 31 million m³ /a. Estimates of future yield for the year 2050 range between 0 and 15.9 million m³/a, depending on whether or not irrigation demands and ecological flow requirements are met.

Hazelmere Dam has a low retention time and a high flushing rate. The average length of time that water was held in the reservoir (when full, and before sedimentation), is estimated to be 120 days. This gives an average flushing rate of three times per year when the reservoir is full. With sedimentation this was reduced to 86 days, with an average flushing rate of 4.2 times per year. The raised dam is likely to extend the theoretical retention time to 185 days, with a theoretical flushing rate of twice per year. The actual retention time may vary greatly, as water level and the operating rules determine this.

1.5. HISTORY OF HAZELMERE DAM¹

The planning of Hazelmere Dam, on the Mdloti River, culminated in a White Paper that was approved by Parliament in 1971 (White Paper K-'71). The white paper details the water availability and water requirements in the area at the time. In summary, the dam was needed to provide a reliable water supply to irrigation development and the rapidly growing urban and industrial users that were supplied at the time by the North Coast Regional Water Corporation, and today by Umgeni Water. A number of alternative dam sites was examined, and Hazelmere on Blocks A and B of the farm Cottonlands 1575 was found to be the most suitable site (White Paper K-'71). This was followed by an investigation of various types of dam including an earth/rockfill dam, a concrete buttress dam, a concrete gravity dam, and a concrete gravity dam with left bank earthfill embankment.

The studies concluded that the most suitable structure would be a concrete gravity dam that would be completed in two phases. The first phase would create a Full Supply Level (FSL) at 85,98masl, and the second phase would raise the FSL by seven meters to 93,00masl. Detailed studies that followed were summarised in a second White Paper that was approved by Parliament in 1974 (White Paper O-'74). The first phase of the dam was completed in 1976. No Environmental Impact Assessment was required at the time, but relevant socio-economic aspects of the environment were considered in the planning of the dam. These included compensation for expropriated land, and compensatory releases of 12 250 m³ /d for downstream users (W.P. K-'71).

When Hazelmere Dam was planned, the greater part of the dam basin was expropriated taking into account the raised FSL of the dam of 93masl. Although the full impact of the proposed raised dam on the surrounding land was anticipated, the Department of Water Affairs and Forestry decided not to expropriate land in the vicinity of the inflow into the dam. This decision was in keeping with state policy that dictates that land should only be expropriated when necessary, and that freehold owners should continue to enjoy the benefits of land ownership until such time. Concerns around acquisition of land in the Oakford Priory area was the reason for not originally purchasing all the land that might be required for the raising of the dam.

Floods in September 1987 introduced large volumes of sediment into the impoundment that reduced the storage capacity of the dam by 10%. This, together with normal rates of sedimentation, has reduced the storage capacity of Hazelmere Impoundment by 28% (Table 1). The reduced capacity of the impoundment, together with water shortages and growing water requirements along the coast north of Durban, prompted the Department of Water Affairs and Forestry and Umgeni Water to investigate the feasibility of raising the FSL of the dam's impoundment as one of the options for satisfying the water demand in northern KwaZulu-Natal.

Various options for raising the wall were considered and included various types of gates (radial, flap, fuse, and buoyancy) and raising the concrete wall. Radial gates were selected as the preferred option because of their low cost and reduced environmental implications. The main environmental advantage of radial gates is greater flexibility in controlling dam levels. Furthermore, the installation of radial gates is expected to have limited environmental impacts during construction, as it would involve a small labour force and can be done relatively quickly. The downside of radial gates is that they are not as safe as a concrete wall as their operation and maintenance is subject to human error and influence.

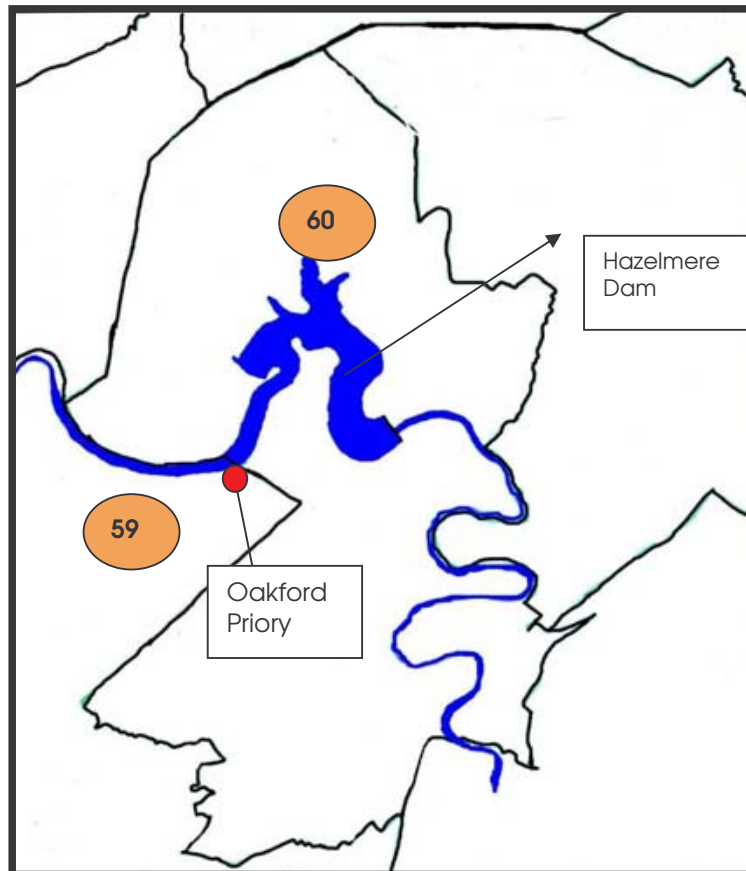
¹ This section has been extracted verbatim from the "Hazelmere Dam raising feasibility study EIA Report"

2 BRIEF STATUS QUO ANALYSIS

The purpose of a status quo analysis is to examine the general situation in the study area.

2.1. SOCIO-ECONOMIC INDICATORS OF THE HAZELMERE DAM AREA

The study area falls entirely within the eThekweni ward number 60 as shown in Figure below.



Of key importance therefore is the socio-economic analysis of Ward 60. However, the Oakford Priory, listed by all previous studies as possessing tourism potential, falls within Ward 59. But, as the priory is positioned very close to the boundary of Ward 60 this analysis is limited to the socio-economic analysis of ward 60.

Through a socio-economic analysis of a given area, insight can be gained into specific needs in the area, socio-economic issues that need to be addressed for a development to overcome potential hurdles, and skills and education levels which can aid or hinder a local development. Finally, an understanding of socio-economic conditions of a given area can be used at a later stage to determine the impact a given development has had on a certain area in terms of changed socio-economic conditions.

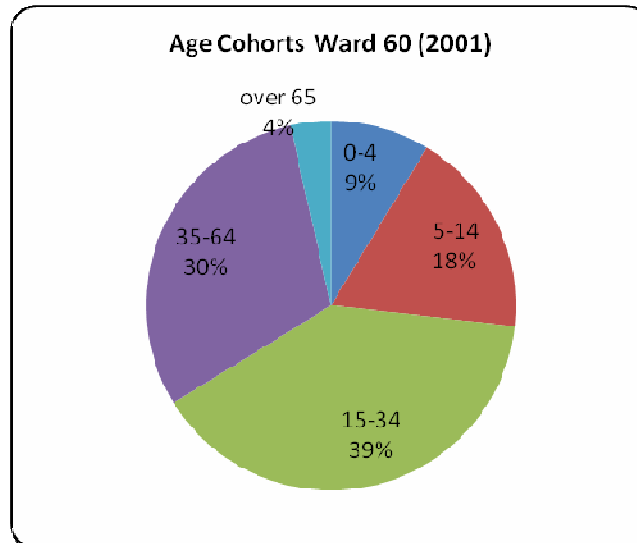
The socio-economic analysis conducted here is for ward 60 and examines the following;

- Age distribution
- Education
- Employment Status
- Occupation
- Employment per sector

(Note: All socio-economic data in the following section is derived from Census 2001)

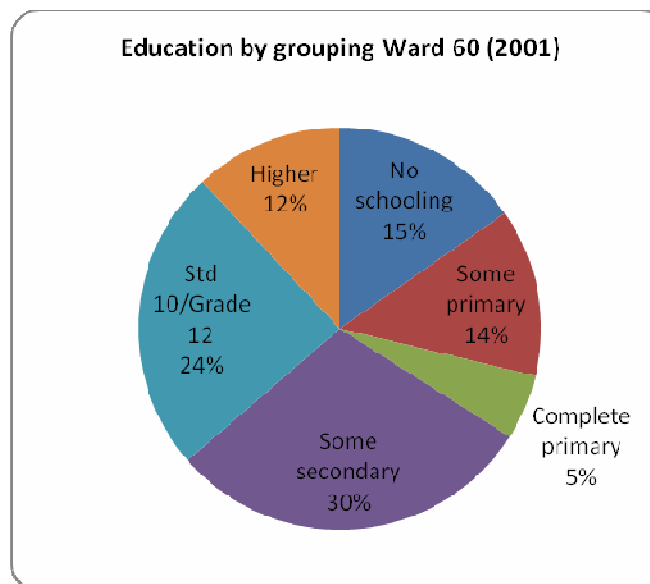
Table 1: Age distribution

Age Distribution Ward 60	
Description	Number
0-4	2268
5-9	2265
10-14	2460
15-19	2679
20-24	2599
25-29	2783
30-34	2231
35-39	2124
40-44	1858
45-49	1399
50-54	1159
55-59	810
60-64	557
65-69	403
70-74	269
75-79	145
80 and over	106



In terms of age as per the graphs and tables above, the largest proportion of the population of ward 60 is of working age. This bodes well for job opportunities which are labour intensive.

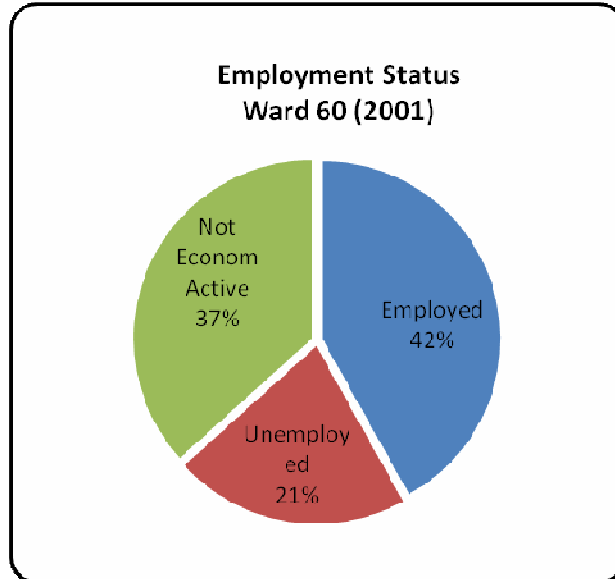
Education Grouped	
Description	Ward 60 (2001)
No schooling	2512
Some primary	2220
Complete primary	862
Some secondary	4870
Std 10/Grade 12	4011
Higher	1967



The census breaks down educational levels into each year of study. For the purpose of this report, the educational levels are grouped into key schooling and higher educational categories. As can be seen by the above charts the majority of residents in ward 60 have some secondary education, but only a quarter have a grade 12 qualification. Of greater concern is that only 12% of the population have moved beyond schooling to receive some kind of higher education. The implication of this for this project is that the majority of residents in ward 60 will not have received any kind of training to equip them to become active participants in the tourism sector.

In terms of employment levels within ward 60, the following graphs and tables are indicative:

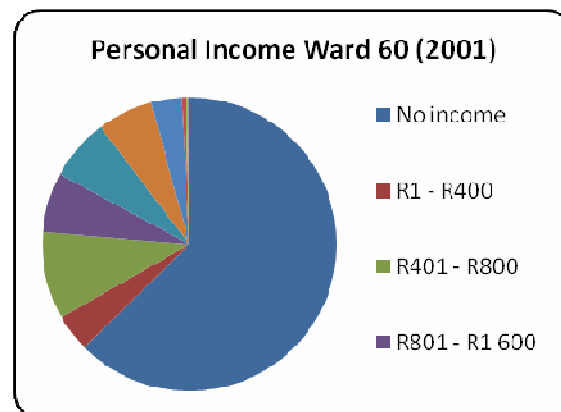
Employment Status	
Description	Ward 60 (2001)
Employed	7666
Unemployed	3912
Not Economically Active	6713



Only 42% of the residents of working age of ward 60 are employed. Of greater concern is that 37% of the residents are not economically active suggesting they no longer seek to become employed. This speaks to the fact that there is a large proportion of persons within ward 60 who have limited income sources and few hopes that this situation will change in the future. The direct impact that this has

for this study is that there is a large pool of potential labour should tourism development projects be implemented that are labour intensive. However, as shown above, it is unlikely that the unemployed in this region have the necessary skills to enter the tourism market. Another implication of such low employment figures in the area is that this is often accompanied by poverty and high crime levels, a strong deterrent for tourism in an area.

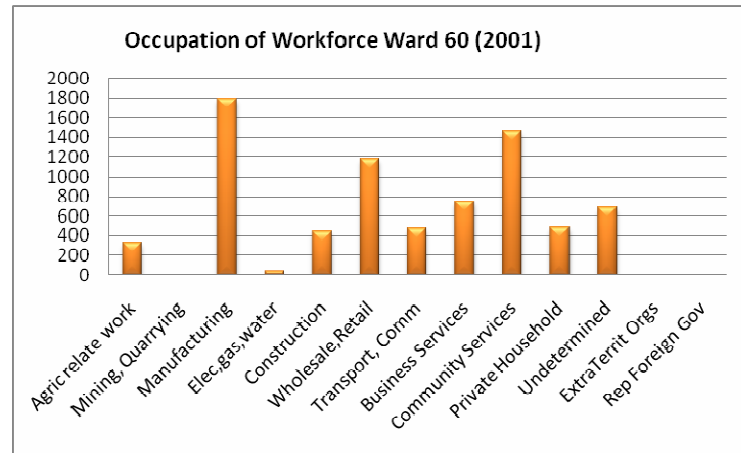
Personal Income	
Description	2001
No income	16353
R1 - R400	1067
R401 - R800	2514
R801 - R1 600	1722
R1 601 - R3 200	1770
R3 201 - R6 400	1597
R6 401 - R12 800	867
R12 801 - R25 600	135
R25 601 - R51 200	56
R51 201 - R102 400	24
R102401-R204800	6
R204 801 or more	3



The graph and table above reinforce the suggestion above that there are low income levels in Ward 60. More than half the residents receive no income at all!

Of those that are employed, it is important to have an understanding of the level of their work expertise in a project such as this. The graph and table below indicate this for Ward 60 of the eThekweni Municipality.

Occupation	
Description	2001
Senior Officials	544
Professionals	653
Tech/Assoc Prof	847
Clerks	1157
Service workers	807
Skilled agric work	80
Other	904
Elementary occupation	1376
Occupations NEC	385
Plant Operators	913



As can be seen in the table above, the majority of workers from ward 60 are involved in manufacturing, wholesale and retail, and community services. However, as per the table above, the majority of these are menial, low skilled and low paying positions listed as elementary occupations. Again, this reinforces the assumptions above that skills, qualifications and experience in the local ward are not conducive to tourism development and interventions will be required to up skill local labour for this sector were it to be developed.

2.2. HAZELMERE DAM BUSINESS AND ECONOMIC ACTIVITIES

This section of the report examines in brief the business and economic activities in the area. The purpose of such an analysis is that it leads to an understanding of where the economic strengths and weaknesses are in the area, and where key economic activities take place. While the focus of this report is a tourism one, it must be remembered that the tourism sector is dependent on inputs from other economic sectors for its functioning. The table below is a summary of the key economic activities in the areas immediately surrounding the Hazelmere Dam. This is represented by key economic activities in the four quadrants of the area under study. Following this table, a visual representation of the economic distribution is shown by means of a map.

	NW Region	NE Region	SW Region	SE Region
Tourism	Msinsi resort Boat storage	Lakeside Lodge		Forest Lodge
Agricultural	Litchi trees	Furveron Poultry Farm Cow Pens	Litchi trees	
Manufacturing				Canelands Industrial Park
Mining			Sand Winning	
Community Services			Oakford School Oakford Priory Islamic Mosque	Golden Steps School
Retail		Chicken Sales Petrol station Hairdresser Spazashop Phone container	General Superette	

3. SUMMARY OF PREVIOUS STUDIES

The purpose of this section of the report is to examine relevant previous studies that have been conducted around Hazelmere Dam. The key reports to be examined in this regard are presented in chronological order and greater emphasis is placed on the more recent studies. Where the information is available, this section looks at each of the previous studies to determine the following;

- Purpose of the Study
- Methodology
- Key finding
- Implications for tourism at Hazelmere Dam

Previous studies examined here are as follows;

- 1999 Ndwedwe Sub Regional Plan
- 1999 Hazelmere Local Development Plan
- 2003 Raising of Hazelmere Dam Feasibility Study
- 2003 eThekweni Rural Development Framework
- 2004 KwaSomubi Draft Framework Plan
- 2004 Community Based Tourism at Hazelmere Dam Feasibility Study
- 2005/2006 eThekweni Integrated Development Plan Review
- 2006 Rural ABM Tourism Strategy

3.1. NDWEDWE SUB REGIONAL PLAN (1999)

This study, conducted in 1999 includes the Hazelmere Dam area into development area three, and as such, highlights development opportunities for this development area. This planning process is wide and for the purpose of this study, only those with tourism relevance were examined as part of this study.

Key finding

The study points to key recreational, tourism and commercial development opportunities at the Hazelmere Dam and the Oakford Priory. The study proposes developments related to tourism and recreation amenities, commercial and local manufacturing areas, urban agricultural development etc.

Implications for tourism at Hazelmere Dam

No specific tourism projects were recommended in this report except for those opportunities at the Oakford Priory. As such, this report has no specific impact on tourism in the Hazelmere Dam area.

3.2. HAZELMERE LOCAL DEVELOPMENT PLAN (1999)

Purpose of the Study

At the time of the study, Hazelmere Dam was situated within the iLembe Regional Council area. Due to development pressures in the area, the development plan was developed to;

- Prepare and integrated plan based on a participatory approach
- To take into account social, environmental, tourism, infrastructural and housing issues within the area
- Adopt an integrated approach
- Examine other local planning initiatives
- Provide land use guidelines for geographic areas and development components.

Methodology

The study examined the status quo of the area looking at land use, socio-economic conditions and the commercial and services activities in the area. The study then examined development issues in the area and influences such as pressures for local residential development. A development vision was created which informed the local development plan which followed. This plan consisted of development concepts expressed in spatial, social, economic and institutional levels and included a implementation framework.

Key finding

The Local Development Plan pointed to tourism potential in the area stating that the "Hazelmere Dam has the potential to be developed into a regional recreation and tourism facility." In particular, the study highlighted the Oakford Priory as a potential node to develop for community benefit, but also for tourism development. The Plan also points towards further development of the existing recreational resort at the dam. The plan also suggests developing linkages between the existing resort and the Oakford Priory.

In short the key findings of the Local Development Plan were as follows;

"The spatial development framework supports the upgrading of the existing Hazelmere Resort, the potential future extension of the area to the north, south and west, the integration and linkage to Oakford, the provision of improved access the potential future integration of adjacent tribal communities into its activities. The Plan supports the establishment of an environmental and open space system including all rivers and their tributaries within the area, the inclusion of the Hazelmere resort into this system..."

- The suggestion of this area as a tourism node in the Plan is focussed towards local, national and international visitors.
- Two key features of the suggestions in this study is the protection of the natural environment in an open space system and the inclusion of the local communities in the tourism sector.
- The study also suggests the upgrading of access to the dam.

Implications for tourism at Hazelmere Dam

The local development plan puts forward a number of suggestions regarding tourism development in the Hazelmere area. Had the proposed activities been implemented as per this plan, the dam might have been a significantly more important local tourism attraction in Durban.

Implications for this study

It is important to note that the suggestions in this study were made without tourism market research. Rather, potentials were explored on a spatial and visual basis. The development plan is now 9 years old and could well be out of date. However, these suggestions need to be revisited in the current Tourism Feasibility study through market analysis.

In particular, the following should be examined;

- Expansion of the resort
- Development of Oakford Priory and improved linkages with Hazelmere Dam
- Linking of the dam to the DMOSS system in the West
- Take advantage of the topography in the east by creating linkages with tribal areas

3.3. RAISING OF HAZELMERE DAM FEASIBILITY STUDY (2003)

Purpose of the Study

As indicated in Section1 - Hazelmere Dam was built in 1976 and its design was such that it would accommodate the raising of the dam wall by 7 metres should the need arise. With increasing water demands for water in the North Coast, DWAF has now embarked on a programme to raise the wall by the planned 7 metres.

The overall aim of this study was to determine whether the raising of the dam wall was a feasible option to increase the water supply to the north coast area. This is an extensive study which has numerous facets, all focussing on the raising of the Hazelmere Dam Wall. The key study used for this purpose is the Environmental Impact Assessment completed in 2002, and the general feasibility assessment completed in September 2003.

The objectives of these studies are wide and it is not within the scope of this feasibility assessment to examine all aspects of the study. This review therefore concentrates on those aspects which have a potential impact on tourism and the feasibility of tourism projects in the study area.

One of the key outcomes of the raising of the dam wall will be the changing of the water line of the dam itself and a large part of the feasibility assessment and EIA was focussed towards the impact that this would have on the areas bordering on the current dam.

Methodology

The environmental assessment was conducted looking at social and natural aspects and involved extensive public participation forums, interviews and research. A key outcome is the changed water edge of Hazelmere Dam as indicated by Figure 3 below.

Figure 2: Map showing expected water line of dam following wall raising



Source: DWAF

Key finding

- Oakford Priory:

The new dam water line will have an extensive impact on the Oakford Priory. In particular, the study found that there would be partial inundation of the priory cemetery and other infrastructure such as septic tanks, workers accommodation, laundry, prayer cabins etc. The study suggests negotiations with the priory regarding expropriation, compensation and replanning.

- Current Recreational Facilities: Msinsi Reserve

The development will result in significant inundation of the reserve, making continued existence of such a reserve unfeasible due to the small amount of land that will be available once the development has taken place. The report suggests that new land should be made available and zoned accordingly to allow for continued use of the dam for recreational uses.

- The Game Reserve

The raising on the dam wall and consequent altering of the water edge was found to have a potential negative impact on the game in the area due to potential reduction in grazing land.

Implications for tourism at Hazelmere Dam

- Oakford Priory:

As the Oakford priory has been identified in other studies as having tourism potential, this development could have a negative impact on this potential due to the raising of the wall.

- Current Recreational Facilities: Msinsi Reserve

Use of the current facilities for recreational purposes will no longer be able to take place in the current area once the dam wall has been raised. This will have a significant impact on the tourism attractions at the dam unless alternative arrangements are made.

- The Game Reserve

Should the grazing land of the game be effected at the game reserve to the point where animal numbers need to be reduced, a current tourism attraction in the area might be lost.

Implications for this study

The most significant implication for this study is that the dam water edge is going to be changed in the near future. While the dam wall raising project has a long process to follow before construction can begin, it appears as if this development will in fact take place.

The current study will therefore be premised on the assumption that the dam wall raising will in fact take place and all feasibility and recommended projects will be based on this new projected water edge.

- Oakford Priory:

The concept of the Oakford priory being utilised for tourism purposes needs to be examined in the light of the raising of the dam, and the effect that this is going to have on the extent of the land available within the priory boundaries.

- Current Recreational Facilities: Msinsi Reserve

The raising of the dam wall will have a major impact on tourism products and services at the dam due to the fact that the current Msinsi Reserve will largely disappear. Therefore, the tourism analysis must be conducted with an appreciation that tourism supply will diminish in the area in the near future. However, this presents new opportunities for the development of an alternative reserve in the Hazelmere Dam area and such opportunities must be considered in this project.

- The Game Reserve

As the game reserve is one of the tourist attractions in the area, this study will need to consider the overall feasibility of tourism attractions and products in the area in light of potential game number decreases.

"The new, larger dam should, however, make purchase of new land for development of new facilities possible" (DWAF Raising of Hazelmere Dam Feasibility Study, 2003)"

Conclusion:

The increase in the height of the dam wall is going to have numerous impacts on the water edge and the areas surrounding the dam. There is a likely impact on the current tourism products or areas highlighted as potential tourism products. It is important therefore for the purpose of this study to take into account how this development will effect current tourist supply, potential tourism supply but importantly, to examine to what extent these can be mitigated and the development used to increase tourism potential and feasibility in the area.

3.4. ETHEKWINI RURAL DEVELOPMENT FRAMEWORK (2003)

Purpose of the study

This study establishes a guiding framework for the implementation of identified development strategies and frameworks for developing rural areas within the eThekweni Municipality. This report includes development strategies that identifies, promotes and supports the establishment of tourism opportunities within the study area. The report also puts forward ways to develop tourism linkages with other metropolitan tourism areas. This report also summarises relevant previous development strategies and frameworks, providing the background for the suggested development process described in this report.

Methodology

Reviewed previous studies and these were updated to meet current and projected development needs. Implementation framework was developed for the specific development strategies of the framework.

Key findings

The report identified sector specific deficiencies, needs and opportunities and significant emphasis was placed on ensuring that development actions relate to each other across sector boundaries and that development in overall terms is appropriate to the needs and opportunities of the area and of the communities affected. Another key finding in this report was that all strategies and frameworks must support and contribute to improving the living and development conditions of the area whilst maintaining the unique attributes of the rural periphery and further developing the relevant specific aspects.

Implications for tourism at Hazelmere Dam

The eThekweni Rural Development Framework has a spin off implication for Hazelmere Dam as it has a tourism development sub programme to promote development in the specified rural areas.

Implications for this study

The eThekweni Rural Development Framework has no direct implication on the Hazelmere Dam development. However, the tourism development strategies and programmes to provide economic development to rural areas needs to be considered in this project.

3.5. KWASOMUBI FRAMEWORK PLAN (2004)

KwaSomubi is an old settlement n the East of the study area, situated along the P100. It lies a short distance away from the dam at its current water edge, but of importance is that the settlement will be closer to the water edge following the raising of the dam wall.

Purpose of the Study

The purpose of this study was to develop a conceptual urban design plan for the KwaSomubi Nodal area

Key Findings:

The plan suggests realignment of the access points into the settlement, the development of a junction which will allow consolidation of facilities and a corridor of activity leading into the junction.

Implications for tourism at Hazelmere Dam

None

Implications for this study

None expected

3.6. COMMUNITY BASED TOURISM AT HAZELMERE DAM FEASIBILITY STUDY (2004)**Purpose of the Study**

This study was conducted for the eThekweni Municipality to ascertain the feasibility of community based tourism for the area. Furthermore, it was the objective of the study to develop a business plans and implementation plans for tourism projects as highlighted in the feasibility assessment with a key objective to attract investment and access funding for suggested projects. Importantly, a key focus of the study was on community based tourism.

Methodology

The feasibility study was conducted using extensive market research to determine potential projects for the study area. This tourism analysis included an examination of the following;

An analysis of both foreign and domestic tourism in South Africa

An examination of foreign and domestic tourism in KZN looking at;

- Main destinations and attraction utilised
- Purpose of visit
- Length of stay
- Key locations visited
- Expenditure

An analysis of tourism in Hazelmere and the eThekweni area looking at;

- Market size and value
- Attractions visited
- Product and tourist requirements

Using the market research highlighted above, priority target markets were identified with specific products and experiences to be explored further. These potential products were tested in the market through a number of interviews with key tourism stakeholders in the area.

Importantly, the methodology employed for this project was the use of viability gates; this means that the study had each process had a "gate" that if each step could not go through the "gate" the project was not feasible. In this case, an examination of whether or not there was a potential product that the market would "buy" was found to not pass the viability gate. Consequently, the project was found to be not feasible and the study did not move to the project planning level.

The project then examined key issues that need to be resolved for future tourism development such as land and legal issues. However, the study did then identify a number of areas for future development for tourism,

Key finding

One of the key findings of the 2004 Feasibility Study was that Hazelmere Dam had limited tourism potential especially in the foreign market. Furthermore, it found that this potential was limited by the close proximity of attractions such as beaches, wildlife and cultural attractions, products in high demand by foreign tourists. Consequently the study found that potential was limited to tourism products that suited day and weekend visitors, mostly targeted towards the local market.

The following products and activities were recommended for Hazelmere Dam;

- Residential and office space
- A family resort
- Game viewing by boat, river cruises and other water based activities
- Eco-tourism, hiking, biking etc in the vicinity of the dam
- Picnic and braai facilities

The study also found that recreational and day visitor tourism targeting was largely supported by local communities, planning initiatives, Msinsi, and the private sector. However, importantly for this study, the assessment pointed to possible future potential to develop such tourism products further for office and housing developments related to the Dube Trade Port Development.

In summary, the 2004 study suggested that;

“potential development around Hazelmere Dam should focus on the provision of recreational and day facilities such as a family resort with self-catering day visitor facilities, offering an array of water and nature based activities such as hiking, 4x4 routes, water-skiing etc”

Because feasibility was not determined in the 2004 study, much of the study focussed on the analysis of legal and land issues, environmental considerations, socio-economic considerations, and infrastructural issues that would need to be addressed for tourism development in the area.

The study did however identify a number of measures that could be included to increase the attractiveness of the area and these include the following;

- Gate entrance corridor; this proposal focuses on the use of private properties participating in planning trees and rezoning of the properties leading to the resort gate
- Oakford Node: tourism suggestions for this node were include in the Hazelmere Local Development Plan and focus on the use of these facilities both for community services and tourism development.
- Hazelmere Node: the suggestion here is general land use development, with very little tourism focus.
- Resort extension; suggests the upgrading of the resort currently at Hazelmere Dam with supporting services and amenities for such development as put forward in the LDP.
- The LDP further suggests upgrading of the existing resort and this is taken forward in the 2004 study.

Implications for tourism at Hazelmere Dam

Due to the viability gates methodology employed in this study, it was not taken past the feasibility stage and no tourism developments were put forward as having potential to be developed into the business planning stage of the project. Consequently, no new tourism developments originated from this study in the Hazelmere Dam area. Key concept developments suggested in the report were around the gate entrance corridor, the Oakford and Hazelmere Node developments and the extension of the report south of the dam. Some of these concepts originated in the Local Development Plan. None of these suggestions were expected to have a large impact on tourism, but to merely increase the attractiveness of the area. Furthermore, these suggestions were not developed further in the report and appear not to have been taken further into a planning level.

Implications for this study

The 2004 study considered the development of tourism in the Hazelmere Dam area in relation to the Dube Trade Port development merely in terms of related housing and office space development. The study does not examine the impact on tourism demand that can be generated from increased visitors through the development of the King Shaka International Airport. This study needs to analyse this impact as it could have a significant impact on tourism demand and therefore on the feasibility of tourism development.

Furthermore, this study was conducted 3 years ago. It is possible that demand could have changed since then which would impact on tourism development feasibility in the area. The current study therefore needs to examine current tourism market trends to assess to what extent this has changed and the impact that this will have on a feasibility assessment in the study area. This market research needs to be conducted along similar lines to the previous study, looking at the same categories to determine market changes which could have a changed impact on feasibility.

The 2004 study focussed largely on issues that would need to be resolved should development of tourism products take place in the area. While these issues need to be examined in the context of any proposed development, it is not within the scope of this study to examine these issues. Firstly, these will be examined in the context of the RMP being developed in line with this study. Secondly, it is not expected that significant changes have occurred in such requirements since the 2004 study, and these requirements therefore still stand as considerations that need to be taken into account.

The suggested concepts (Gate entrance corridor, Hazelmere and Oakford Nodes, dam extension) as per the 2004 study need to be investigated as part of the current study in the light of updated market information and new developments in and around the immediate dam area. The focus of the 2004 study was on community based tourism. The feasibility assessment currently being conducted is not limited to community based tourism, which has a potential impact on the feasibility of tourism development in the Hazelmere Dam area.

Conclusion

In conclusion, studies in the area have for the past 9 years highlighted the potential of tourism developments for Hazelmere Dam. However none of these studies included any tourism market research to determine their conclusions. The 2004 study however, the only one to include a tourism market research component, found that tourism opportunities at the dam were limited to the local market.

The area is undergoing a change in circumstances such as the Dube Trade Port Development, the raising of the dam wall, and other local developments. Furthermore, 3 years have passed since the feasibility assessment was conducted. In light of this, proposed tourism projects need to be revisited to assess feasibility with new developments considered. This study seeks to do just this. Before this feasibility study can be done however, a greater understanding of the area is needed as well as a better understanding of the tourism market. The following two sections of this report do this.

3.7. ETHEKWINI IDP REVIEW 2005/ 2006

Purpose of Study

The purpose of the IDP review is to translate the city's vision into action in an integrated manner which includes all the key components such as economic, environmental, political and social, and identify strategic measures to implement change and achieve the desired results for the city whilst promoting sustainability. This review report outlines how the government intends to translate our city's vision into a workable plan that has budgets, timeframes and monitoring mechanisms in order to achieve our city's 5-year 2010 targets.

Methodology

This report follows a balanced scorecard approach. This means that each project identified within the eight-plan action is scored on a matrix project table and the municipality follows this methodology to achieve the set out goals.

Key Findings

This reports key findings were that many of the city's residents were in a state of poverty. It also identified that the city has valuable natural assets to offer to its people and tourists that there were underutilized due to poor marketing and management systems thus inhibiting economic growth within the city. The report highlighted the need for sustainable and integrated social, economic and environmental land use management.

Implications for tourism at Hazelmere Dam

There were tourism projects recommended within this report under programme 9 that will have a potential impact on Hazelmere Dam, the most important of which being the Dube Trade Port. This will impact on the Hazelmere Dam because the port is in close proximity to the Dam and presents new opportunities to the area.

Implications for this study

This report highlights the need to promote tourism development in programme particularly related to the upcoming 2010 FIFA World Cup and in terms of general tourism development. The review highlights the need to develop and promote tourism within the city by utilising the natural assets that the city has to offer.

3.8. RURAL ABM TOURISM STRATEGY (2006)

Purpose of the Study

The purpose of the Rural ABM Tourism Strategy is to develop tourism strategies for the rural areas of the eThekweni Municipality. These interventions suggested in this report aim to facilitate and enhance economic livelihoods and improve systems of governance in the rural areas. The Rural ABM covers a variety of areas outside the eThekweni's urban edge, which includes the Hazelmere Dam and is therefore an important study for our current purposes.

Methodology

The study first examined the socio economic status of the rural ABM and proceeded to examine current tourism policies and identified relevant local existing tourism products. It proceeded to suggest key strategies for dealing with the identified challenges for specified projects. Finally the report concluded with work plans and review mechanisms.

Key Finding

The Rural ABM identified that there is a wide variety of tourism and recreation opportunities, which are severely underutilized. It suggested that many of these opportunities identified have limited success and remain as isolated events. It is important to recognise that the opportunities in the rural periphery be integrated into a wider metropolitan tourism system adding on a new component to the attraction of the Metro, whilst also providing expertise and income to the rural areas. This report also recognised and highlighted the significance of local tourism and recreational development because of the economic upliftment it will bring. The report furthermore identifies that in order for any local tourism development to be successful it will require local public partnerships with the relevant rural communities.

Implications for tourism at Hazelmere Dam

The Rural ABM Tourism Strategy identified specific opportunities that include the Hazelmere Dam and its potential linkage to Oakford Priory providing an additional dimension to the present tourism and recreational activities in the area. The key focus of this study for Hazelmere Dam therefore is to develop more tourism products and services for its tourist. The suggested interventions of the dam and the Oakford priory need to be taken into account in this current study due to the extensive economic advantages that it will bring to the areas as shown in this Rural Tourism Strategy.

4. PHYSICAL ENVIRONMENT

The physical and spatial analysis of the Hazelmere dam area as it exist toady is best illustrated by the set of maps attached overleaf. These maps were extracted from available Geographic Information System data and is presented here as base information. A more detailed narrative will follow towards the end to the project after interragation and interactions of this information.

The current map set includes information regarding:

- Satellite Imagery
- Elevation mapping
- Vegetation
- Land Cover and
- Land Use

Apart from existing GIS data, physical observations of activities and facilities around the dam area also assist in identifying the key development issues related to the dam. A summary of some of these observations is presented by photos as attached.

5. THE WAY FORWARD

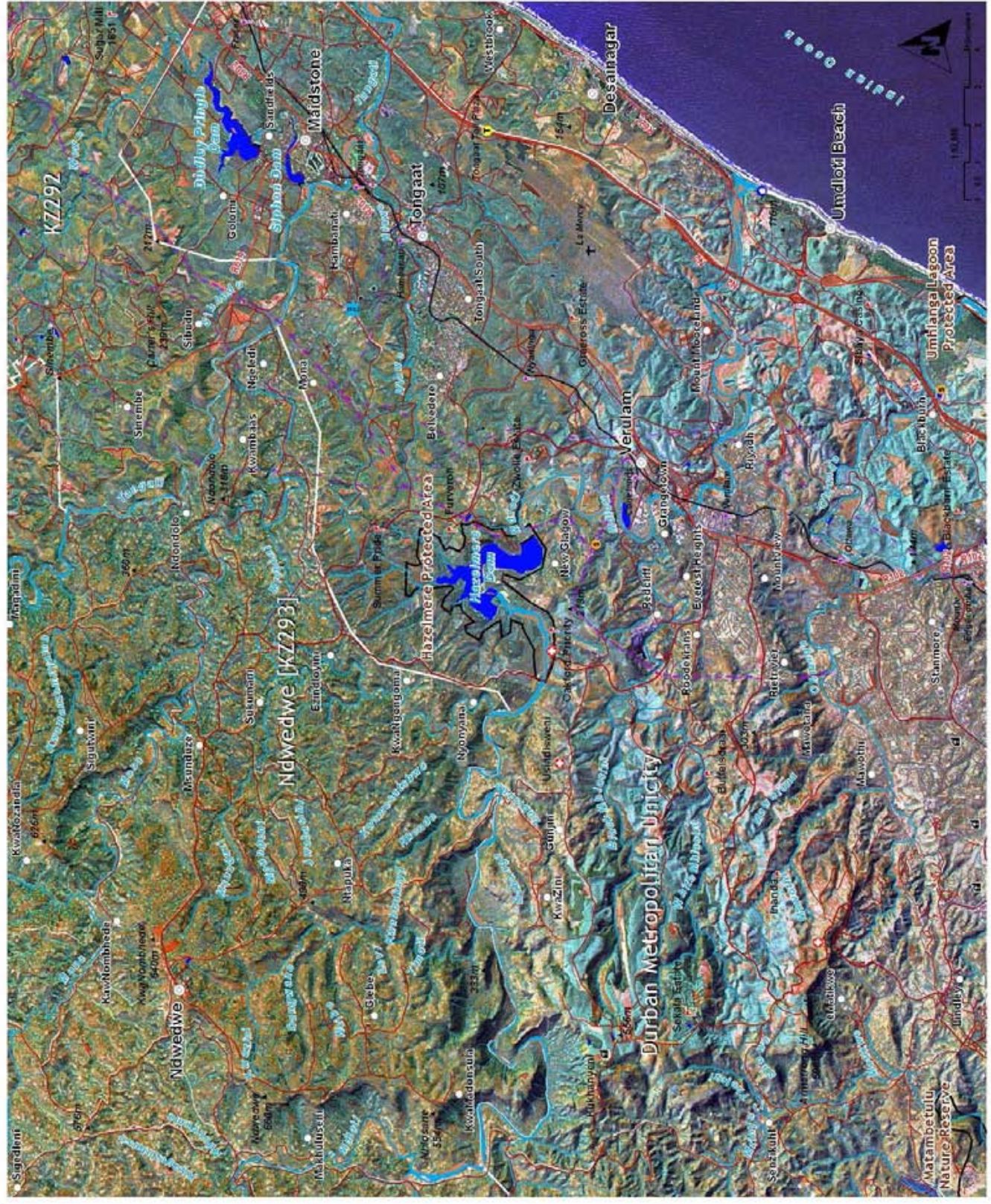
This brief background information document serves a as starting point for engagements with various public and private roleplayers and aims to stimulate discussion around issues affecting sustainable utilisation and development around the Hazelmere dam area. This information does not represent the full volume of information available for this study area and will be constantly updated and expanded during the process to be published within the resulting development strategy.

All interested and affected parties are invited to peruse this information and assist in “ground truthing” it as well as participating in scheduled and advertised interaction sessions toward the joint formulation of a Precinct and Resource Management Plan for the Hazelmere dam.

Hazelmere Dam

Locality - Satellite -

- Town
- Settlement
- Mission
- Sewage
- Hospital/Clinic
- Mine
- Bridge
- Airstrip
- Station
- Accommodation
- Toll Plaza
- Lookout tower
- Spotlight
- Place of interest
- Dam wall
- Railway line
- National
- Main
- Secondary
- Other
- Street
- Powerline
- Dam
- Flood bank
- Water body
- Protected areas
- Municipal boundaries



Hazelmere Dam

Satellite

- Town
- Settlement
- Mission
- Sewage
- Hospital/Clinic
- Mine
- Bridge
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- Main
- Secondary
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- Street
- Powerline
- Dam
- Flood bank
- Water body



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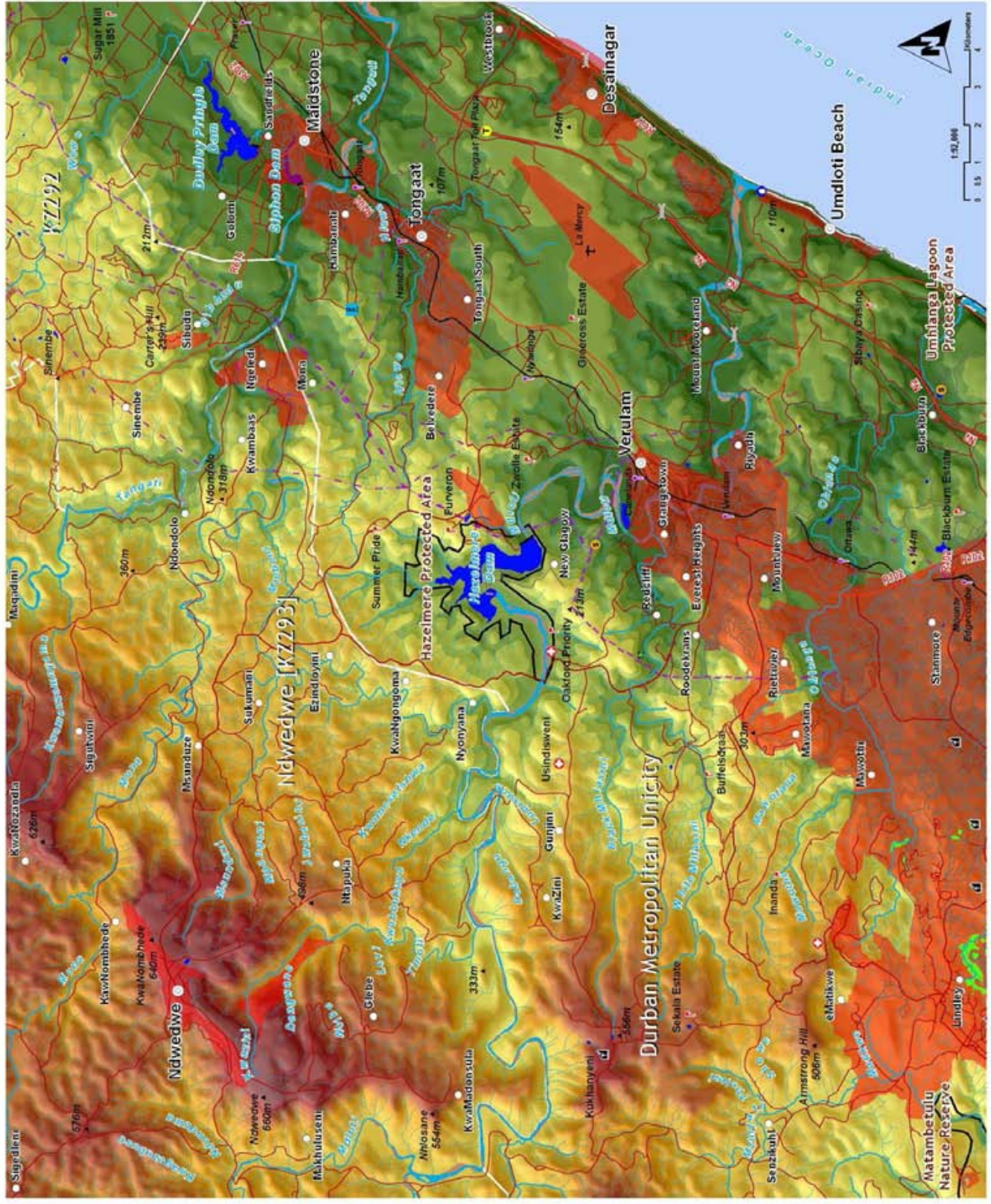


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Hazelmere Dam

Locality - Elevation -

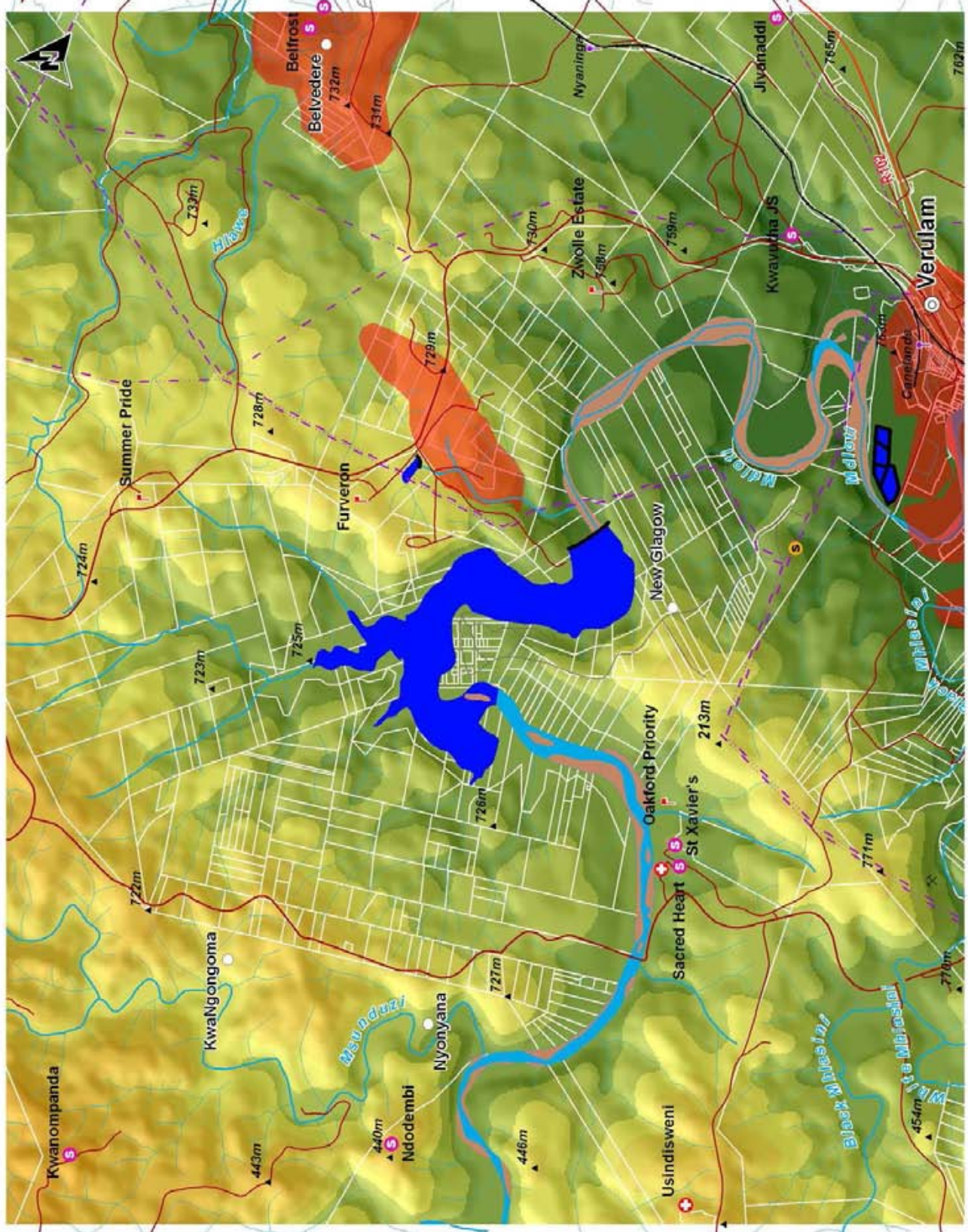
- Town
- Settlement
- Mission
- Sewage
- Hospital/Clinic
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Hazelmere Dam

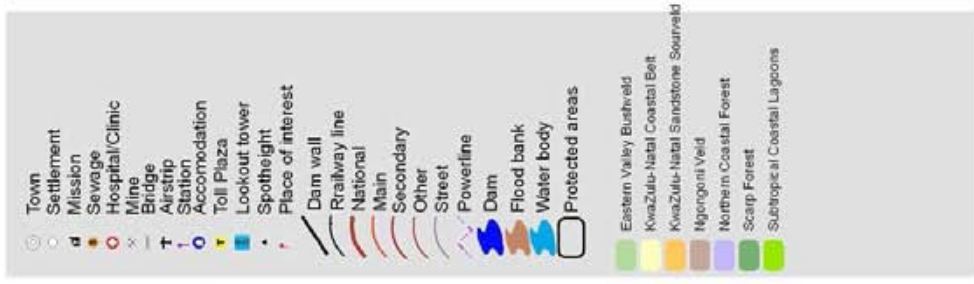
Elevation

- Town
- Settlement
- Mission
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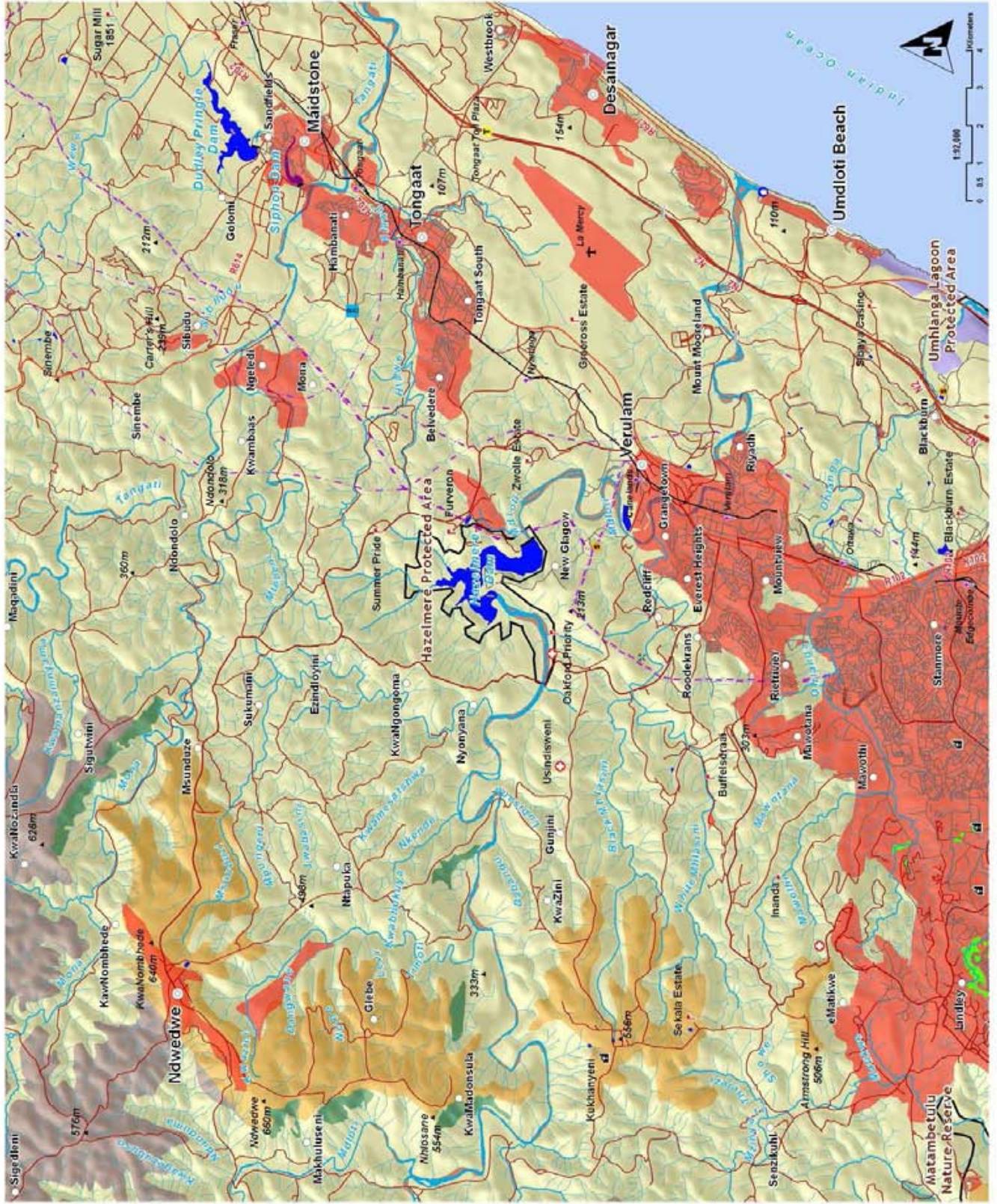


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Hazelmere Dam Vegetation



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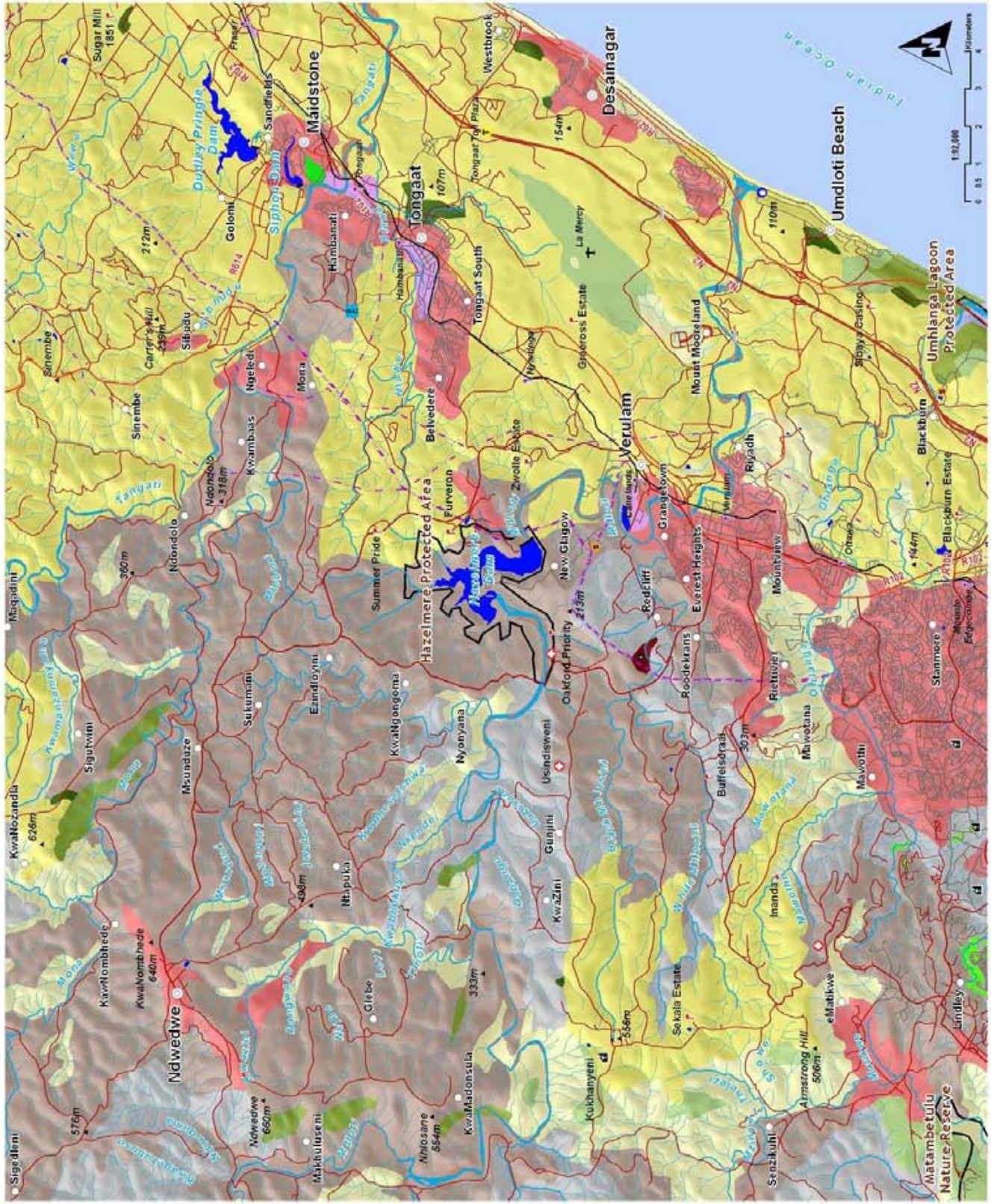


Hazelmere Dam Land Cover - 1999

	Town		Built-up: commercial
	Settlement		Built-up: residential
	Mission		Cultivated grass
	Sewage		Cultivated: subsistence
	Hospital/Clinic		Cultivated: sugarcane
	Mine		Degraded: thicket and bushland
	Bridge		Exotic plantations
	Airstrip		Grassland
	Station		Indigenous forest
	Accommodation		Mines and quarries
	Toll Plaza		Thicket and bushland
	Lookout tower		Waterbody
	Spotheight		Welland
	Place of interest		
	Dam wall		Protected areas
	Railway line		
	National Main		
	Secondary Other		
	Street		
	Powerline		
	Dam		
	Flood bank		
	Water body		

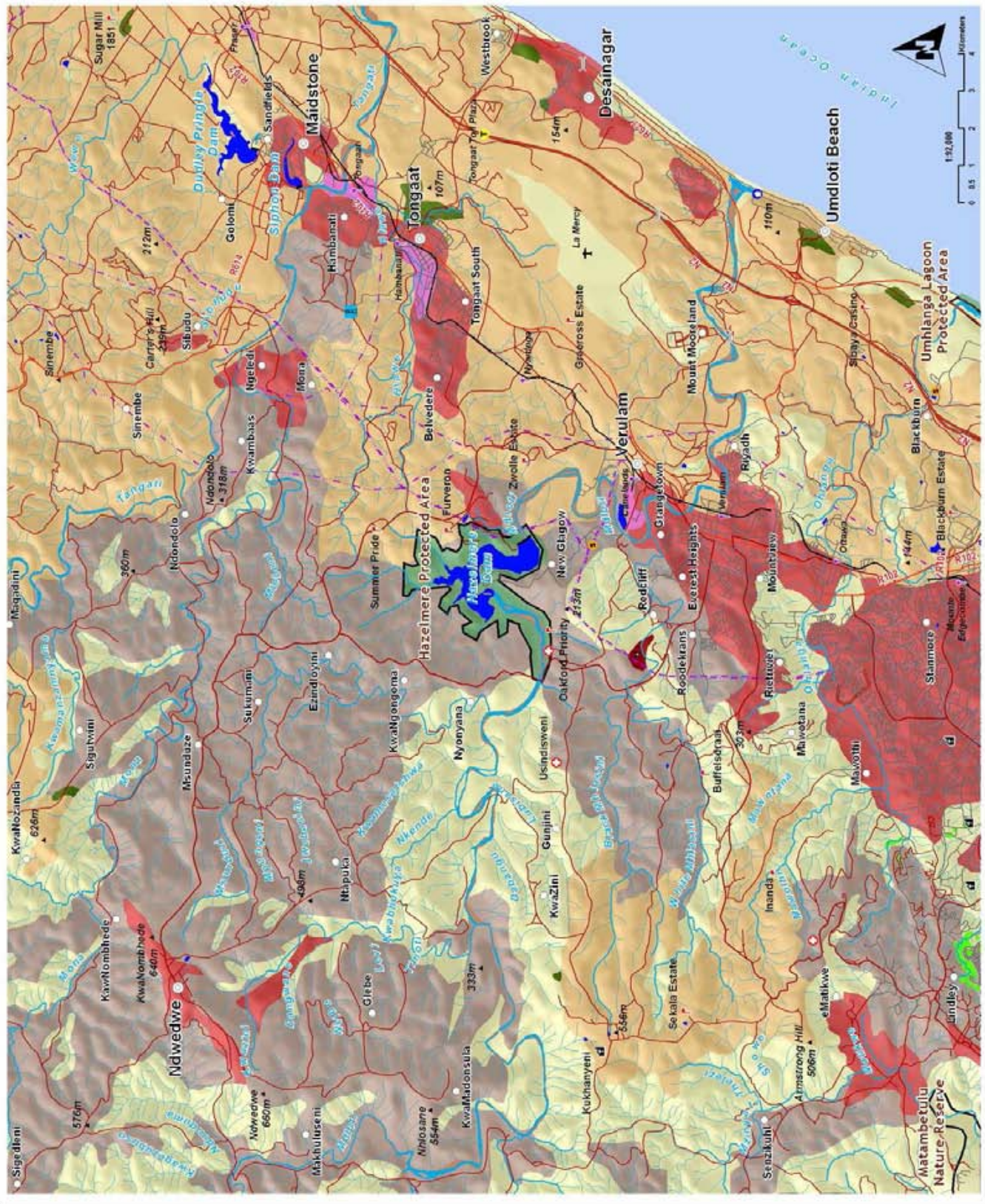


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Hazelmere Dam Land Use - 1996 -

<ul style="list-style-type: none"> ○ Town ○ Settlement ○ Mission ○ Sewage ○ Hospital/Clinic ○ Mine ○ Bridge ○ Airstrip ○ Station ○ Accommodation ○ Toll Plaza ○ Lookout tower ○ Spotlight ○ Place of interest — Dam wall — Railway line — National — Main — Secondary — Other — Street — Powerline — Dam — Flood bank — Water body □ Protected areas 	<ul style="list-style-type: none"> ■ Commercial/industrial ■ Conservation ■ Cultivated land ■ Forestry ■ Mining ■ Residential ■ Subsistence farming ■ Vacant/Unspecified
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SUMMARY OF PHOTOGRAPHIC OBSERVATIONS

FACILITIES



CRAFT STORAGE FACILITIES



RUDAMENTARY LAUNCHING

FACILITIES



PICNIC FACILITIES

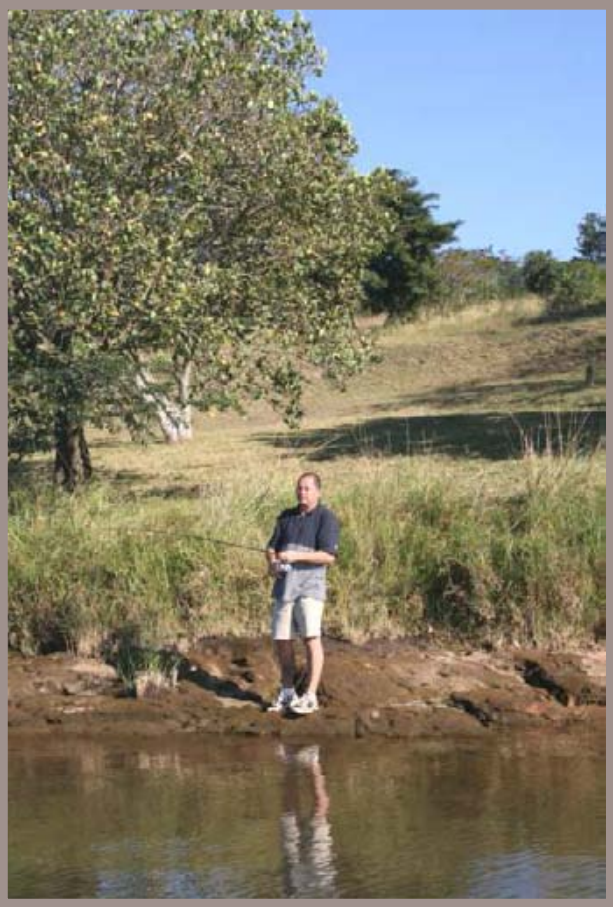


ABLUTION FACILITIES

RECREATIONAL USE



FAMILY PICNICS



FISHING

CONSERVATION NEEDS



ALIEN THICKET ALONG THE SHORELINE



SAND WINNING OPERATIONS