

**AN INVESTIGATION INTO SUSTAINABLE DEVELOPMENT LIMITS FOR  
DENSIFICATION CLOSE TO NATURAL RESOURCES:  
A CASE STUDY OF GIBA GORGE, ETHEKWINI MUNICIPAL AREA**

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Submitted in partial fulfilment of the requirements for the degree of Masters in Town and Regional Planning, in the School of Architecture, Planning and Housing, University of Kwa-Zulu Natal

NOVEMBER 2008

## **DECLARATION**

Submitted in partial fulfilment of the requirements for the degree of Masters of Town and Regional Planning, in the Graduate Programme in the School of Architecture, Planning and Housing, University of KwaZulu-Natal, Durban, South Africa.

I declare that this dissertation is my own unaided work. All citations, references and borrowed ideas have been duly acknowledged. It is being submitted for the degree of Masters of Town and Regional Planning in the Faculty of Humanities, Development and Social Science, University of KwaZulu-Natal, Durban, South Africa. None of the present work has been submitted previously for any degree or examination in any other University.

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## ACKNOWLEDGEMENTS

First and foremost I would like to thank Lord Krishna for giving me the strength and determination to complete the dissertation. I humbly bow down to your lotus feet.

I would like to express my sincere gratitude to a number of people who have supported me throughout this process.

Thank you to my Supervisor, Professor Peter Robinson for your guidance and direction. Thank you professor for your knowledge, expertise and kindness. I am forever indebted to you.

To my dear husband, Ashok, thank you for your patience and support. I could not have done this without your strong belief in my ability. Thank you so much for your encouragement and for being a wonderful husband.

To my precious son, Nikhil, I am sorry to have spent so much of time on the computer and so little time with you in the last few months. Thank you for constantly making sure that I was facing my responsibility as a mum.

To my gorgeous daughter, Sapna, thank you for your cheerfulness that always keeps me going. Thank you for your constant concern for my well-being and I promise to spend more time with you and your brother.

To my sister, Shakila, thank you for your assistance and support with the children during this trying year.

To my late mother, thank you for the good values that you have instilled in me which has helped me reach for a dream. I truly miss you!

Thank you to the Environmental Management Department of the eThekweni Municipality for the use of research material. I have gained much knowledge from having worked with all of you on the Giba Gorge Project. To Mr John Forbes, your wealth of knowledge and your willingness to guide and advise me on issues in the Outer West is appreciated.

Thanks to the residents of Winston Park and the eThekweni Municipal officials who have participated in the research.

To Jeannette Moller and Anneline Chetty, thank you for reading the document.

## **ABSTRACT**

In an effort to protect key environmental assets in the Outer West Region of the eThekweni Municipal area, the Environmental Management Department has embarked on a process to better align environmental concerns into the Consolidated Outer West Town Planning Scheme. The intention is to create sustainable living environments by recognising the importance and value of the environment and its open spaces.

Ultimately the research is attempting to understand the difficulties in implementing sustainable development. Sustainable development has been acknowledged at a policy level in the eThekweni Municipality's Integrated Development Plan; however the translation of sustainable development into implementation is more difficult. Part of the complexity relates to different sectors within the Municipality such as the Environmental Sector and the Economic Sector viewing sustainable development differently.

The research focuses on the rapid densification in the Outer West adjacent to environmental resources by private land owners which highlights the lack of understanding by the public on the importance of the environment. Further, the conflicts between the need for economic development and environmental conservation in the context of the Giba Gorge area, show that historical zoning 'rights' operate against the protection of bio-diversity. This reinforces the need for better alignment between the environmental protection and land use management.

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## **LIST OF ABBREVIATIONS**

COWTPS – Consolidated Outer West Town Planning Scheme

DFA – Development Facilitation Act

EESMP - eThekweni Environmental Services Management Plan

EDU - Economic Development Unit

EMD - Environmental Management Department

EMA – eThekweni Municipal Area

IDP - Integrated Development Plan

KZN - Kwa Zulu Natal

LAPS – Local Area Plans

LUMS - Land Use Management System

OW – Outer West

SANBI – South African National Biodiversity Institution

SR1800 – Special Residential 1800

SR3600 – Special Residential 3600

SDP - Spatial Development Plan

SDF – Spatial Development Framework

UNCED – United Nations Conference on Environmental Development

## **CHAPTER 1: INTRODUCTION AND METHODOLOGY**

### **1.1 INTRODUCTION**

Rapid densification in suburban areas is one of the biggest challenges facing the eThekweni Municipality. The eThekweni Municipality's Integrated Development Plan (IDP) indicates that densification should be concentrated along high priority public transport corridors. Despite this clear directive, unprecedented residential growth and densification have occurred in the Outer West region of the eThekweni Municipal area and in particular in the Western Suburbs (See Figure 1). Densification close to environmentally sensitive areas such as the Giba Gorge has negative impacts on the environmental resources. Better land use and environmental control/management of land uses adjacent to natural areas are needed.

This study is prompted by the challenges facing the eThekweni Municipality. The Municipality is trying to integrate environmental concerns into the Consolidate Outer West Town Planning Scheme (COWTPS) in order to control inappropriate densification. The aim of the dissertation is to examine the work currently being done by the eThekweni Municipality with regard to environmental conservation in an effort to highlight the tensions between economic development and environmental conservation.

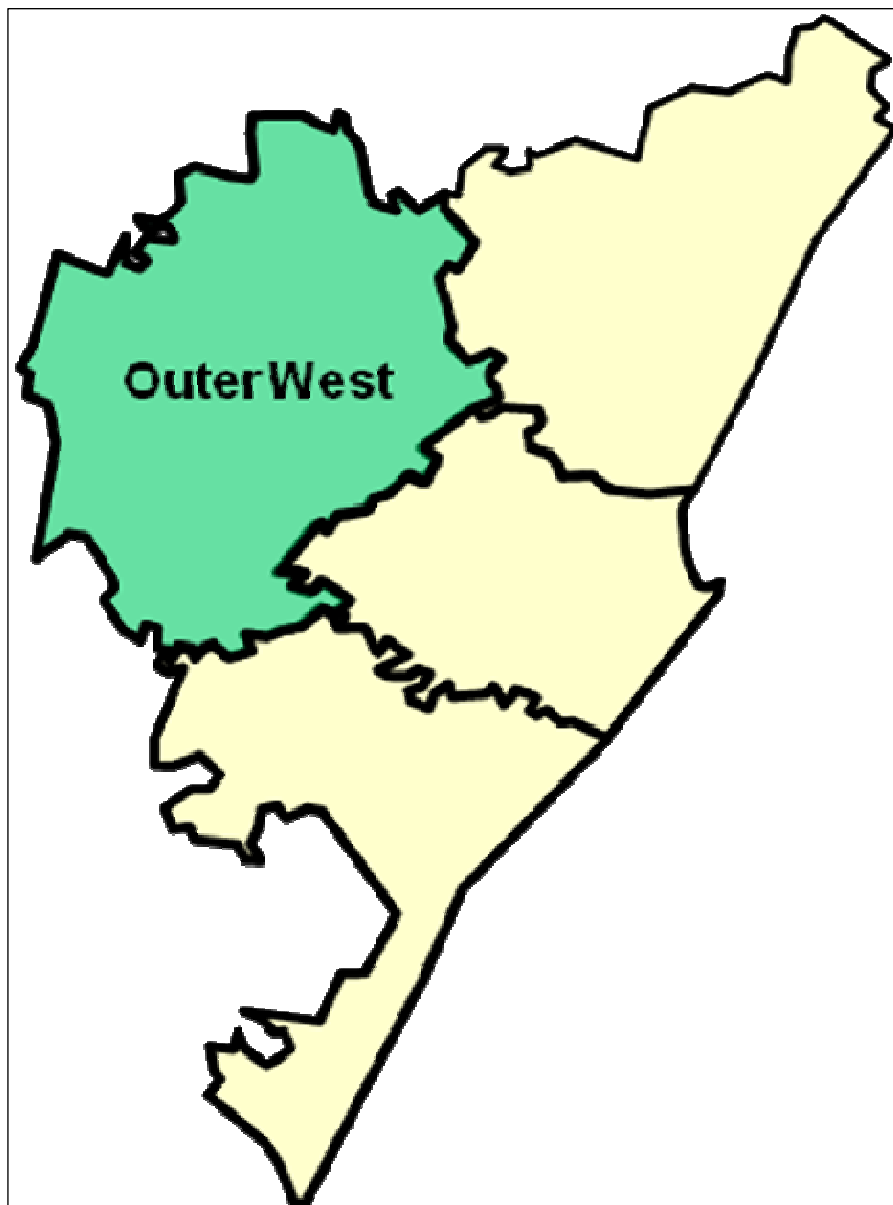
The overall objective of the study is to gain an understanding of how tensions have been played out between the loss of economic benefit in the form of residential densification and concerns for environmental conservation in the Giba Gorge area. To meet this objective requires an understanding of the following:

- The challenges facing the eThekweni Municipality in addressing sustainable development and the role of land use planning in this regard;
- The value of the environmental assets in the Giba Gorge and how these can be protected;
- The residents of Giba Gorge perceptions of environmental conservation and economic development and interventions to bridge the gap.

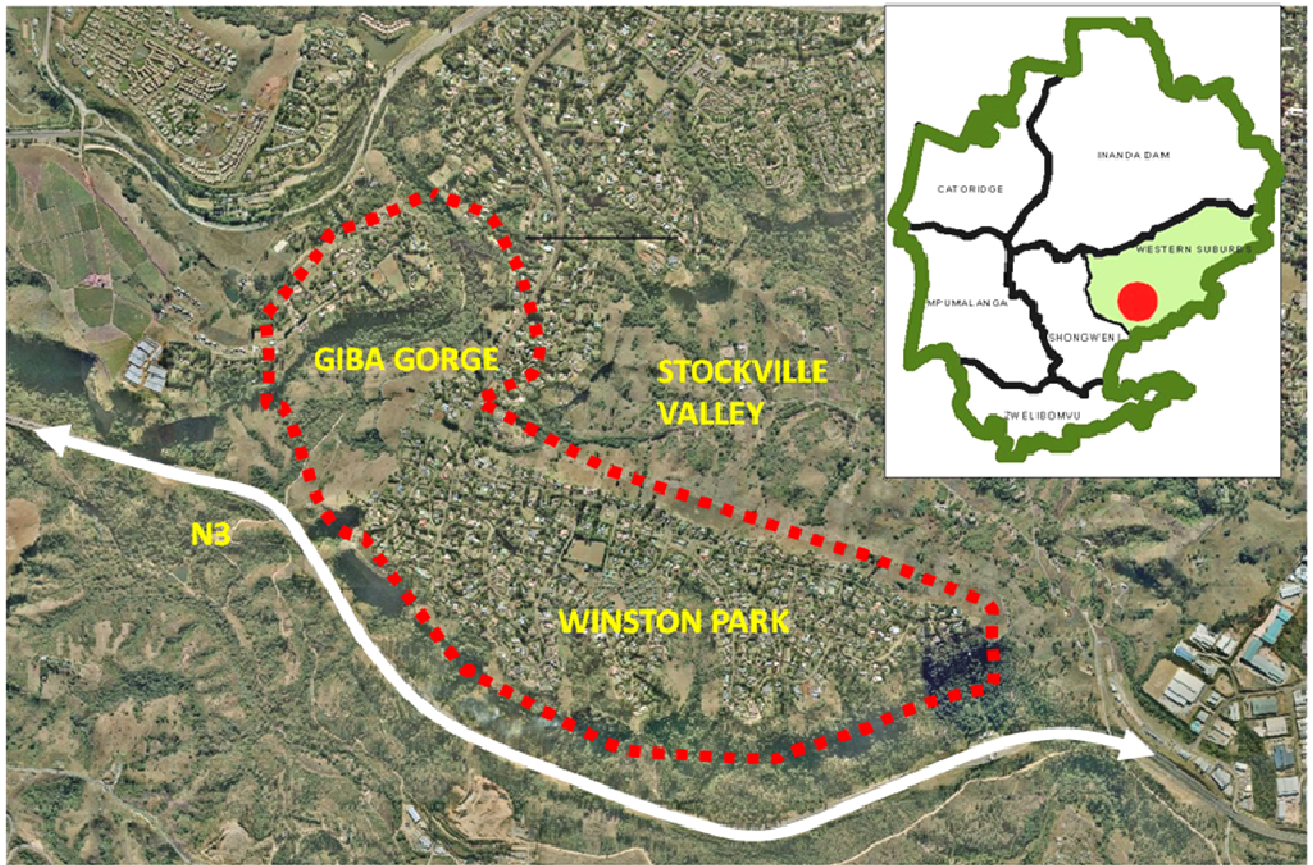
## 1.2 STUDY AREA

The Giba Gorge study area forms part of the Western Suburbs of the Outer West Region of the eThekweni Municipality. Refer to Figures 1 and 2. It is located some 30km from the Central Business District in Winston Park which is a suburb of Gillitts. The study area comprises of discrete environment assets such as the Giba gorge, the Umhaltuzana cliffs and the Stockville Edge. The residents of Winston Park fall mostly in the middle to high income group.

**FIGURE1: OUTER WEST STUDY AREA** (Source: eThekweni Municipality, mapped by the researcher)



**FIGURE 2: LOCAL STUDY AREA – GIBA GORGE** (Source: eThekweni Municipality, mapped by the researcher)



### **1.3 BACKGROUND TO THE RESEARCH PROBLEM**

Recent developments in the Western Suburbs have placed major strain on the existing infrastructure. Inappropriate development is threatening the environmental quality of strategic environmental assets. Residents from Winston Park as well as from other nearby suburbs are applying for sub-divisions and rezoning their properties at a rapid pace. This trend is placing severe strain on the environmental resources. The current zonings and associated controls are inadequate to ensure protection of the natural resources. In general the open space acts as a buffer to the environmentally depleted coastal plain and provides numerous services such as stormwater protection, protection of water supply, estuaries protection, flood attenuation, regional bio-diversity and soil erosion protection. Within Winston Park the landscape character and unique sense of place (equestrian lifestyle) is also threatened by development pressure. In response to the above challenge, the Development and Planning Department prepared a Precinct Plan in 2006 for the Giba Gorge area to guide future development.

Unfortunately, the policies of this plan could not override the existing legal zoning which allows sub-divisions in accordance with the COWTPS. A scheme amendment to the Outer West Consolidated Town Planning Scheme, 2000, in the form of a rezoning, has been proposed by the Development Planning and Management Unit. This is currently resulting in conflict, as affected residents are beginning to question their rights to develop their sites in terms of the current zonings in this area. Alignment of conflict is needed to promote economic growth and also ensure key environmental protection. This dissertation will examine the conflicts between economic development and environmental conservation in the Giba Gorge study area and make recommendations for similar projects in the Outer West region.

#### **1.4 THE RESEARCH PROBLEM AND QUESTION**

The existing town planning zonings in terms of the COWTPS are enabling densification close to environmentally sensitive areas that need to be protected. The value of the environmental assets requires that these are protected, and new zonings are implemented that are more supportive of the environment. In order to protect the environment requires commitment from the public and residents, which is proving difficult to achieve. One of the objectives of this research is to understand the concerns of the residents who are affected by the proposed rezoning in order to guide future initiatives. The key research question that this dissertation seeks to answer is to what extent the conflicts between economic development and environmental conservation can be resolved to ensure sustainable development? In attempting to answer the above question the research is focused on broader sustainable development issues and is not restricted to densification. This is done to ensure a better understanding of the conflicts that do exist with regards to sustainable development.

In order to answer the main research question the following sub-questions will be addressed:

- a) What is the policy environment for sustainable development?
- b) What are the development challenges facing the eThekweni Municipality with regard to sustainable development?
- c) What is the nature and value of the environmental assets located within the Giba Gorge Precinct and how has this been impacted on over the past five years?

- d) What type and scale of residential development has occurred in the Giba Gorge Precinct in the last five years?
- e) What are the local community perceptions of the recent developments and the apparent conflict between the need for further sub-divisions and the need to protect the environment?
- f) What opportunities are there to improve the current land use planning processes to ensure environmental sustainability and economic growth?

The research is focused on two levels: firstly the focus is on the broader issues affecting sustainable development in the Outer West context, and secondly the perceptions of the residents at the local area scale are considered. For the purposes of the dissertation economic growth is defined as ‘monetary benefits’ that residents, and landowners receive from sub-divisions on large plots adjacent to environmentally sensitive assets.

## **1.5 RESEARCH METHODOLOGY**

A qualitative approach was deemed appropriate in dealing with perceptions of key officials and residents. Primary and secondary sources of data were used to inform the dissertation. The main elements of the research process are outlined below.

### **1.5.1 SECONDARY DATA**

The conceptual framework is underpinned by a review of the existing literature on sustainable development to assess its applicability in land use planning, and to understand the key issues confronting the implementation of the concept of sustainable development. An assessment was done on the incorporation of sustainable development in broad policy plans such as the Integrated Development Plans (IDP), as well as an assessment of the role of land use planning in co-ordinating different sector objectives. This provided a basis for assessing the strength of land use planning in resolving the conflicts between environmental management and economic development, as pronounced by the 1987 Brundtland Commission when it introduced the concept of sustainable development. Sustainable urban management approaches were explored to assess whether they can bridge the gap between economic development and environmental conservation.

### 1.5.2 PRIMARY DATA

A sample survey was conducted amongst residents who reside adjacent to environmentally sensitive areas in Winston Park. First, the stratified purposive sampling method was used to determine the three streets adjacent to the environmental area. These streets, namely St. Heliers Road, Van Riebeeck Avenue and Jan Smuts Avenue were selected because many applications for sub-divisions have been received for sites on these roads. Within these roads cluster sampling was applied to enable the broader area to be broken down into smaller manageable clusters which are representative of the population. Refer to Figure 3.

**FIGURE 3: SAMPLE SURVEY – SELECTED STREETS** (Source: eThekweni Municipality, mapped by the researcher)



The purpose of the survey was to gain an understanding of the following:

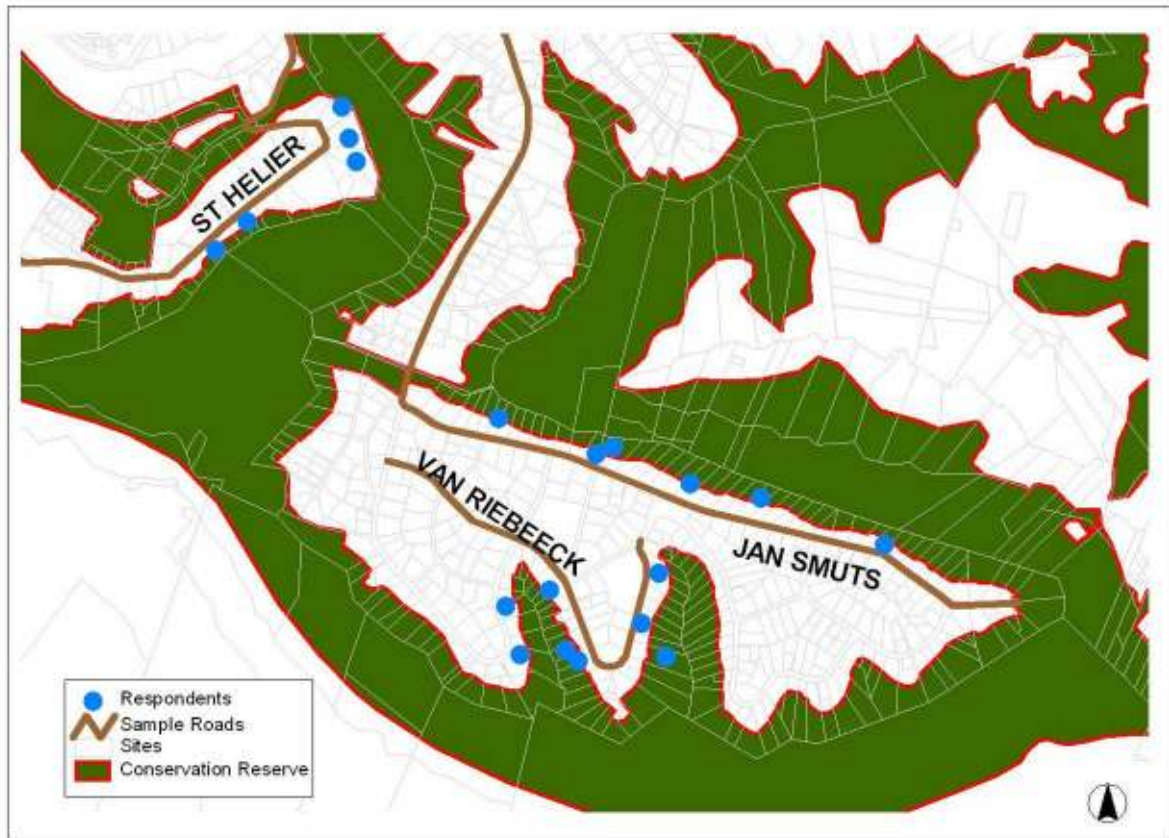
- Resident's understanding of the role of the environment in the Giba Gorge and how it can be protected. The intention was to gain an understanding on whether residents were aware that the study area contained important vegetation types, which are home to many endangered and threatened species.

- Resident's experience of the Winston Park low-density lifestyle of low density, large plots and rural equestrian type of living which was under threat due to rapid development taking place.
- Resident's understanding of the impacts of mini-sub-divisions on the environment in terms of soil erosion, storm water flows, flood attenuation, natural surfaces water regulation, etc.
- Resident's concerns with property values and financial loss associated with restrictions on development rights.

The questionnaire along with a self addressed envelop was delivered to 75 residents in Van Riebeeck Road, Jan Smuts Avenue and St Heliers Road during August 2008. The participants were given the option to either post, email or fax the response back. Despite the researcher placing stickers in the envelopes, as a gift to appeal to the residents to respond, only 19 participants responded via return post or fax. Refer to Figure 4. This method, rather than the 'one on one' interview was adopted due to the high levels of security and difficulty in gaining access to residential homes.

The questionnaire was designed using closed ended questions with various options that the residents could use to answer the questions. This method enabled the researcher to tabulate and then analyse the various options using the Excell Spreadsheet Program. Refer to Annexure 1 for the questionnaire. The results have been analysed and provide useful information in understanding some of the research questions.

**FIGURE 4: LOCATION OF RESPONDENTS** (Source: eThekweni Municipality, mapped by the researcher)



While the 25% response is low, there were other options available to the researcher to access information. The researcher was involved in meetings with the residents as part of the broader Municipal Giba Gorge project to rezone sites adjacent to the environmental assets. The researcher played a major role in this project as a member of the core team responsible for the research and proposed rezoning. The intention of the rezoning was to minimise the number of sub-divisions that allowed more development close the environmental area. The purpose of the meetings were to consult with the councillors, ratepayers and the residents on the environmental and planning rationale for the proposed rezoning. The findings from these meetings have been included in this research. The first meetings was with Councillors and ratepayers (20<sup>th</sup> May 2008), the second was a public presentation to the Winston Park community (28<sup>th</sup> May 2008), the third were two public presentations to the Stockville community on the 30<sup>th</sup> July and 18<sup>th</sup> November 2008 respectively. There have been 160 responses to the proposed to the Municipal project. These responses are mostly objections to the proposed rezoning. The responses have also been analysed by the core municipal team which includes the researcher and will inform the research question which will be discussed in Chapter 6.

Structured interviews with key municipal officials within the economic, environmental and land use sectors of the eThekweni Municipality were held to gain an understanding of the challenges facing each sector with regard to sustainable development. Issues such as how sectors are responding to development pressure, what challenges exist and what role land use planning and development plans play in mediating or resolving conflicts between economic/social and environmental conservation were discussed. These provided a basis for synthesising the issues relating to the conflicts between the various sectors which could be used to guide future projects that are aimed at protecting conservation areas. The following participants have participated in the research. Mr Ajiv Maharaj (Manager: LED) from the Economic Development Unit. The researcher did not manage to interview Ms Debra Roberts Deputy Head of Environmental Management Unit as initially anticipated, but did manage to interview Mr Alistair McInnes (Biodiversity). Informal discussions with Mr Richard Boon, Ms Penny Croucamp and Mr John Forbes have occurred throughout the municipal planning project process. From the Development Planning Department the following officials were interviewed, Mr Gavin Benjamin: Deputy Head: Development Planning. Informal discussions were held with Ms Deshnee Sookdeo: Senior Planner, Ms Lekha Allopi: Manager Land Use Management, Mr Rayven Moodly: Regional Co-ordinator: Outer West, Ms Vicky Sim: Senior Planner and Mr Sogen Moodley: Senior Planner (IDP). The informal approach was used as people were not available for scheduled meetings. Telephonic interviews were also held in some cases.

## **1.6 STRUCTURE OF THE REPORT**

This dissertation is divided into seven chapters. The first chapter provides an **Introduction** and background to the research problems, it also provides the methodology used and the outlines the main elements of the research process.

The second chapter provides a **Conceptual Framework** for the study. This includes an outline of the key terms and concepts applicable to the study, as well as an assessment of relevant literature and current approaches for bridging the gap between economic development and environmental conservation.

The third chapter examines the **Policy Environment** for achieving integration between environmental conservation and land use management. Various policies and legislation and their implications were examined here.

The fourth chapter examines the **Challenges facing the Application of Sustainable Development** by various sectors and the issues related to the implementation of sustainable development in terms of economic development, environmental protection and integrated development planning. Conflicts between the Outer West Town Planning Scheme and environmental sustainable objectives are explored as well as the response to development pressure, opportunities to improve systems and the land use planning response will be explored here.

The fifth Chapter provides the findings of the **Case Study Environmental Value** and the development impacts on the environmental assets, as well as a review of the current Municipal project to assess the key issues and reasons for some of the challenges encountered.

The sixth Chapter provides the findings of the **Case Study Residents Perceptions** and the conflicts between environmental conservation and economic development.

The seventh chapter presents the **Conclusion** and highlights the existing conflicts and presents recommendations how future projects could be conceptualised and implemented.

## **CHAPTER 2: CONCEPTUAL FRAMEWORK**

This chapter will establish the conceptual framework for understanding the conflicts between economic development and environmental conservation which co-exist uneasily. In order to answer the research question there is a need for a clear understanding of key concepts of sustainable development and how it has evolved over the years. Section 2.1 examines sustainable development related concepts, section 2.2 examines the role of land use planning in sustainable development, section 2.3 examines some of the policy versus practice issues affecting sustainable development and section 2.4 attempts to bridge the gap between economic and environmental conservation are examined through the use of resource and ecological economics. This approach argues that economic activity must conform to physical and ecological environmental limits, which if destroyed or compromised is very expensive and difficult to replace. Much of the arguments by Owens et al, 2002 show that it is unrealistic to burden land use planning with the role of mediator or co-ordinator of sustainable development in resolving the conflicts between economic developments, social development and environmental protection. At very best land use planning reveals contradictions between these sectors but does not resolve them. In understanding the contradictions between various sectors the researcher will also draw on practical knowledge gained from working as the Co-ordinator of the Outer West Spatial Development Plan, Researcher on the Giba Gorge Rezoning Project and IDP Plan representative for ‘Sustaining the Built Environment’ Programme.

### **2.1 KEY CONCEPTS**

#### **2.1.1 SUSTAINABLE DEVELOPMENT**

The concept of sustainable development came to the fore in the 1990s where it was defined by the 1987 Bruntland Report as “development that meets the needs of the present generation without compromising the ability of future generations to meet their own needs” (WCED, 1987:40 in Owens et al, 2002: 13). This laid the foundation for the 1992 United Nations Conference on Environment and Development (UNCED) in Brazil, which reinforced the interrelated problems of the environment and development in that there was a need for the production and implementation of strategies and plans for sustainable development. In 2002 the Earth Summit on Sustainable Development put forward the Local Agenda 21 policy that

provided the global agenda for local authorities to ensure social, economic and environmental sustainability.

### **2.1.2 EVOLUTIONABILITY**

There has been a suggestion by Keiner et al, (2005), that if the concept of sustainable development is so difficult to deliver or implement, perhaps there is a need for a reworking of the concept. They argue that based on the idea of ‘good heritage, the concept of evolutionability can be introduced which refers to development that meets the needs of the present generation and enhances the ability of future generations to achieve well-being by meeting their needs as free as possible of inherited burdens. Evolutionability is not meant to replace sustainability but rather to guide sustainable development in a desired direction that focuses on improvement and betterment and not just non-compromise’ (Keiner et al, 2005:230).

According to Keiner et al, 2005, ‘this concept emphasises a reworking of the vision for a society that recognises and values its means of existence and therefore neither wastes nor destroys its means of existence. Of importance is that the demand placed on natural systems and resources must be aligned to the carrying capacity of the ecosystem or natural system and should not go beyond its carrying capacity. This will enable future generations to live well and access a reasonably intact environment with enough resources to meet their needs’. This means that people in the future would be able to live the same or better than the present generation. Keiner further argues that whilst the above would be ideal, the concept is still in an embryonic stage and requires to be expanded and its theoretical base needs to be explored and worked out with concrete examples for implementation. (Keiner et al, 2005)

The incorporation of ‘evolutionability’ can be seen in much of the work that is currently being done by the eThekweni Municipality’s Environmental Management Department (EMD) which emphasises that development must be based on the carrying capacity of the natural environment. This leads us to the field of study called resource economics which is concerned with valuing natural resources which will be discussed later in this chapter.

### **2.1.3 DENSIFICATION**

According to eThekweni Municipality's Integrated Development Plan (IDP), 2008, densification refers to the intensification of development and increasing of population densities within existing urban environment. It can take two forms. It can occur through 'infill' which refers to the development of greenfield areas within designated urban areas or within brownfields (existing urban areas) sites within existing urban areas. It can also occur through 'compaction', which refers to redevelopment of existing properties to higher densities and may include sub-division and development of large properties within urban areas (eThekweni Municipality 2008(a). A compact city model is one of the defining features of the eThekweni Municipality's IDP which is aimed at achieving sustainable development (eThekweni Municipality, 2008a: 10)

The definition above implies that densification only occurs in urban areas. The reality is that suburban and rural areas have experienced densification in areas such as Outer West region over the last few years. Suburban areas are defined as areas beyond the urban services edge, but where service limitations and challenges exist, but it is not cost effective to provide addition services. Rural areas are defined as a mixture of traditional land tenure interlaced with subsistence and commercial agriculture and supported by basic infrastructure (eThekweni Municipality, 2008a: 10).

### **2.1.4. BIODIVERSITY**

According to the Environmental Management Department the term 'biodiversity' refers to all forms of life on earth. The definition by the Department of Environmental Affairs and Tourism refers to biodiversity as ' the variability among living organism from all sources which includes, terrestrial, marine and other aquatic ecosystems and the ecological complexes of which they are part and also includes diversity within species, between species, and of ecosystems'. (eThekweni Municipality, 2007a :19). To protect local biodiversity, EMD is in partnership with Ezemvelo KZN Wildlife which is the agency in the Province to ensure that biodiversity in the province is protected. The agency has prepared a 'systematic conservation plan' which sets targets that need to be achieved to in order to protect biodiversity. There is optimism that the systematic conservation plan will be adopted as a bioregional plan. Ezemvelo KZN Wildlife is working with the EMD to prepare a municipal

scale conservation plan. When this plan is fully developed it will begin to show fine grain conservation details, which when incorporated into town planning schemes may be able to provide the legal instrument for protecting the environment.

## **2.2 THE ROLE OF LAND USE PLANNING IN SUSTAINABLE DEVELOPMENT.**

According to the state of the Environment Report, 2003/4, Durban was the first city in South Africa to accept the Local Agenda 21 mandate, which emerged from the World Summit in 2002. In response the Durban City's IDPs incorporated the concept of sustainability, and the IDP prepared in 2007 provides the vision for achieving long-term sustainability.

The City's vision, as outlined in the current IDP, is that 'by 2020, eThekweni Municipality will be Africa's most caring and liveable city' The Municipality has made 'six hard choices' which will create the conditions necessary to achieve the vision. Two of the choices are aimed specifically at ensuring protection of the environment as part of sustainable development. Choice five, is to promote 'ecological and related tourism' and recognises the need to keep people active and healthy, and retain natural assets and benefit from the natural environment. Choice six, is 'ecological integrity' and recognises the need to balance the social, economic and environmental needs of Durban and to ensure that development occurs within the carrying capacity of the natural environment. The current IDP also puts forward a specific programme to ensure the long-term sustainability of the natural resource base. Implicit in this is the recognition that natural resources are enjoyed by all, but are being overexploited and that urgent attention is required at all levels to ensure that the overexploitation of natural resources such as Giba Gorge is stopped. (eThekweni Municipality 2007c). The review of the current IDP has begun and it is expected that a new emphasis will be placed on the environment due to all the new research that is now available by the Environmental Management Department. At the highest policy level in local government, it appears that sustainable development limits to development is being advocated by the IDP in order to protect the environmental and the numerous services it provides. However the inputs into the IDP are done individually on a sector basis. The researcher is aware that the tight timeframes for reviewing IDPs also does not allow much time for engagement between sectors and therefore it is very likely that sectors are not aware of each others objectives and priorities. It appears that integration between sectors is almost

impossible to achieve. The IDP process needs to acknowledge this and find other solutions for integration.

The achievement of sustainable urban development could begin by ensuring that different sectors all view sustainable development in the same way. Due to sector objectives and pressures being different, various sectors view sustainable urban development quite differently. This could explain why integration across sectors is quite problematic.

Jenkins et al, 2007 , highlights how sectors view sustainable development.

- The Environmentalist View

‘Development and nature must be linked, and sustainable development can be achieved through regenerative settlements, renewed resources and recycling’.

- The Economist View

‘Decision making should combine environment and economics, achieving sustainable development through market system (using principles such as polluter pays)’.

- The Political Economy View

‘The root of environmental problems lays in capitalism, through consumerism, the pursuit of profit and the generation on inequality in wealth distribution.’ (Jenkins et al, 2007:184).

It is further argued that conflicts arise over the priority given to each agenda. For example in the quest for ‘ecological sustainability commonly referred to as the green agenda and in the context of rapidly urbanising world, would argue that city based consumption would impact on rural resources and eco-systems. The commonly used term called the brown agenda would be concerned with and raise questions on the priorities and needs of the poor as it relates to environmental health’ (Jenkins et al, 2007:184).

### **2.3 SUSTAINABLE DEVELOPMENT: POLICY VERSUS PRACTICE**

According to Owens et al, (2002), sustainable development was a popular theme at the start of 1990s. The complexities and difficulties associated with implementing sustainable development became apparent later on. They argue that it is simplistic to expect land use planning to be the main instrument that will deliver sustainable development. This is partly

due to the over-simplification of the concept of sustainable development and its easy incorporation into broad policies more as rhetoric rather than a firm deliverable. Given the contradictory nature of issues as it relates to various sectors it is an over-burden on planning systems. For a long time land use planning was seen as the instrument that would integrate social, environmental and economic interests and objectives. Owens et al, (2002), argues further that the integrative role was an over optimistic expectation of land use planning systems in the first place, and that land use planning cannot ‘resolve the conflicts, but merely reveal contradictions between various interests’ (Owens et al, 2002: 17).

The main thrust of this research is the conflicts between economic and environmental sectors over the use and development of land. Since land use is very significant for sustainable development, then planning and management of land use becomes very important. One of the more accepted roles of planning, according to Owens et al, 2002, has always been to integrate and co-ordinate sectors such as economics, environmental and social sectors. The researcher agrees with the above view in terms of her involvement in the Outer West Spatial Development Plan. At the Spatial Development Plan level this is the accepted role of land use planning in the context of the eThekweni Municipality. Lessons learnt from the spatial development planning process indicate that this is rather a difficult role to perform. This will be discussed later in this chapter.

Owens et al, 2002 states that international experience shows that development plans in the UK and the Netherlands share similar experiences in trying to integrate economic, social and environmental concerns in development planning. Land use planning is seen to have a co-ordinating role and spatial plans are the basis of integration of sector policies that have land use implications. However it is argued that this is only effective up to a point. In these plans whilst social and environmental issues have been given greater consideration in plans, the integration of diverse objectives simultaneously is very difficult. They further state that ‘it becomes clear that conflict is therefore unavoidable and therefore it becomes difficult to see what integration means in practice beyond the inclusion in plans of mutually incompatible goals’ (Owen et al, 2002: 67).

It appears to the researcher that within the UK and Netherlands planning systems, the main objective in regional planning is economic development. Sustainable development is used as rhetoric in policies where principles give support for sustainable development. In these cases

the local authorities are also unwilling to eliminate growth-orientated planning policies even when they are in conflict with the environmental objectives.

Owen et al, 2002 argues that the problem lies and perhaps begins with the fact that different sectors view the natural environment in different ways. 'Economic development coalitions' or institutions are unlikely to accept sustainability as challenge to economic development. For them integration means taking better account of the environment in order to encourage investment. 'Environmental coalitions put forward stronger conceptions of sustainable development in which the environment is regarded as the foundation'. This would mean that economic development would need to be directly modified to take into account environmental constraints not just consider them and proceed with business as usual (Owen et al, 2002: 67). In the local context, the draft Outer West Spatial Development Plan faces similar conflicts. In Cato Ridge area in the Outer West, there is about 1400ha of available zoned industrial land for development that could address the shortage of industrial manufacturing space facing the city. The economic benefits associated with industrial development are significant, if the correct industries are promoted within this area, particularly since there are large numbers of unemployed people living nearby. From an environmental sustainability perspective the land falls within the upper river catchments, which if over developed, could cause flooding in the coastal plain. More importantly, the land falls within the Umgeni river catchment which contains the Inanda Dam, from which the city derives its drinking water. If there is contamination of the dam or any risk from industrial development at Cato Ridge, the cost of rehabilitation could in fact be much higher than the economic benefits that will be derived from the industrial development. The draft Outer West Spatial Development Plan, while clearly acknowledging the impacts onto the natural system, has given priority to economic development due to extreme pressure for this. The argument for this approach is that better account of the environment will be taken by putting mitigation measures in place.

In order to develop Cato Ridge as an industrial hub would require massive infrastructure investment. There is no waste water treatment facility to deal with industrial effluent hence a new waste water treatment plant will have to be built. Risk management policies would have to be developed to mitigate any risk. A new interchange and direct link to the industrial land will need to be developed to deal with the traffic that will be generated by the 1400 hectares of industrial land. The impacts on the N3 will be high and options such as the use of rail will

have to be considered. The researcher is aware, through her involvement in the Outer West SDP, that different sectors and Municipal departments view the proposed development differently. The Waste Water Department, Water Pollution Branch, eThekweni Traffic Authority and Environment Management Department are opposed to the proposed development. Economic Development Unit considers Cato Ridge a major priority and there is strong political support for it. Metro Housing Unit is in the process of upgrading the existing informal settlements that are bordering the industrial area.

Furthermore the proposed industrial development will be accompanied by densification in other areas such as the existing rural Camperdown/Georgedale, which is already under pressure for change in anticipation of industrial growth. It is the researcher's view that this is a clear example of the conflicts between environmental conservation and economic development and the need for social development and where the 'goods and services' argument is not fully understood by key role-players (See 2.4.2 below). It is felt that whilst the environment is acknowledged at policy level, at implementation stage more priority is given to economic development. The environment is seen as a bi-product for economic development. In this case the spatial development plan merely acts as a mediator between two very different objectives and where contradictions are revealed but not resolved. Whilst this is not the final decision, the Municipality will have to make a decision soon. All indications are that Cato Ridge will get the green light as the next big industrial hub.

Managing urban development beyond the urban edge or urban services edge is not unique to the eThekweni Municipality. Cape Town has shared similar experiences with regards to managing growth and development adjacent to urban areas. In an attempt to address this challenge a guidelines manual was produced in 2004 called the 'Urban Edge Guidelines Manual for the City of Capetown'. The purpose of the manual was to assist land use planners in assessing development applications by asking key and pertinent questions that would help evaluate the appropriateness of the development. The questions allow the planner to interrogate various issues related to the proposed development such as:

- Is the development desirable from a public benefit perspective?
- Will the development add costs to the Municipality and society?
- Does the public support the development?
- Do other departments support the development?

- To what extent is the site visually exposed?
- Does the site contribute to sustaining ecological corridors?

Cited from, City of Cape Town, 2004, Urban Edge Guidelines Manual for the City of Cape Town by MLH Architects and Planners in association with Piet Louw Architects, Urban Designer, Planner.

The guidelines manual is very useful in assisting the planner in ensuring that all important aspects are assessed. The application of such a manual in the eThekweni Municipal context will also be very useful, particularly in an area such as the Giba Gorge. Using pertinent questions to assess applications will allow the planner to make the correct decision by covering all the important issues relating to the environment that the planner may not always be familiar with. In the Cato Ridge area, such a manual would be essential to assess development applications thereby securing investment and approving development that the city needs and the community will benefit from.

## **2.4 SUSTAINABLE DEVELOPMENT APPROACHES**

### **2.4.1 ECOLOGICAL OR RESOURCE ECONOMICS**

It is the researcher's view that in the context of South Africa as a developing country it is imperative that economic growth and environmental sustainability are not viewed as two separate competing interests. Natural and environmental assets are essential for economic activity and social well-being. Implicit in this is that 'environmental management that takes into consideration ecological and social realities, have become a prerequisite for sustaining economic development that is the creation of economic welfare' (Blignaut et al 2004: 5) Environmental literature uses different concepts which describe the carrying capacity of the natural resource base in relation to the amount of development it can sustain without getting depleted. The one concept is called ecological economics. This stipulates that that human economic activity must limited by the environment's carrying capacity. (Blignaut et al, 2004). The second concept called environmental economics is the study of economic choice, including the functioning of the environment to satisfy human wants. This is an applied field of neo-classical economic theory. This approach provides ways of bridging the gap between ecological and economic systems. A simple rule that this approach puts forward is that

natural resources and their renewal cannot be easily substituted and that the environment has a value that is irreplaceable ( Blignaut et al, 2004).

According to Pearce and Barbier in the Sustainable Urban Reader (2004), most environmental problems are the result of the economic system not taking into account the valuable services that the environment has to offer. They argue that ‘natural capital is similar to capital assets such as machinery and roads; they include renewable resources such as forests and non-renewable resources such as oil and coal. Their most important value lies in the service that they provide’.

According to the Environmental Management Department and the Environmental Management Services Plan 2002, people benefit from a range of the environment goods and services that are delivered by the open spaces and the plants and animals that they contain. These benefits which are cited from (eThekweni Municipality 2002a:8), include:

- ‘Direct benefits – i.e. the direct consumption or use of resources e.g. water for consumption and plants for fuel and food.
- Indirect benefits – i.e. the indirect or non-consumptive use of resources to provide a cost saving or benefit to urban residents, e.g. wetlands reduce flooding and trees provide shelter.
- Option benefits – some resources can be protected for future use. For example, an attractive coastline can be used to ensure tourism growth in the future or a plant may yield a medicinal remedy
- Existence benefits, the existence of unspoilt land scapes may give people a feeling of well being, identity, and sense of place and improve their overall quality of life’.

Supply of environmental goods and services refers to, for example, rivers that supply water and grasslands that supply grazing. Examples of demand for services would be the daily need for drinking water, water for industrial processes, agriculture and building, fishing and recreation. Different activities create a continual demand and place pressure on the environment which contains important eco-systems that provide environmental services. If these are not managed well they can destroy or damage these services. Hence

the need for more environmental and land use management in areas such as the Giba Gorge

#### **2.4.2 THE GOODS AND SERVICES APPROACH**

According to the Environmental Services Management Plan (2002), the goods and services described above cannot be easily valued in monetary terms. People therefore have a lack of understanding of the importance of the open space system. People continue to benefit from the city's natural resource base and the services it provides without incurring any monetary costs. According to this report, international research has made significant progress in estimating the replacement cost of the goods and services supplied by different ecosystems.

The report states that if the open space had to be conceptualised as a piece of 'green infrastructure containing ecosystems that deliver a service much like the municipal water system, city road system, then it becomes possible to value the open space system in terms of its replacement cost as a city asset. In other words what would it cost to build a canal to prevent residential flooding following the destruction of a wetland which performs a natural flood attenuation function'. The report further states that that 'estimated total replacement value of the environmental goods and services supplied by the 2002 open space system is R3.1 billion per annum. In 2006 this value was estimated to have increased to R4 billion per annum. It is important to note that this does not include the value of the role of the open space in the tourism industry of Durban which itself was estimated to be worth R3.3 billion in 2001' (eThekweni Municipality, 2002,10).

However, according to the Beatley in the Sustainable Urban Development Reader (2004) 'protection of bio-diversity and endangered species conflicts with demands for housing, economic development and social development and in light of having to deal with more pressing poverty issues why should biodiversity be important. The following are good reasons put forth for protecting the environment. Nature in the form of trees and plants can provide medicinal benefits which can help treat diseases such as cancer. Commercial benefits can be derived from the discovery of disease resistant crops that require very little water and may adjust better to climatic changes'. (Wheeler et al, 2004:117)

## 2.5 ENVIRONMENTAL URBAN MANAGEMENT

Jenkins et al, 2007,146 argues that environmental problems are caused by urban development and the rich and the poor contribute to environmental problems. Due to environmental awareness in the 1980s, there has been a focus on environmental management in urban areas. Environmental problems are created by the wealthy and the poor alike. The excessive use of private vehicles by the wealthy add to pollution. In addition to this the wealthy increase solid waste production. The poor affect the environment differently. Some of the ways they impact on the environment, cited from Jenkins et al, 2007:146, include:

- Pollution of underground water supplies
- Residential occupation of unsuitable land, eg steep slopes, drainage zones and ecologically fragile areas
- Destruction of vegetation and forests for solid fuel and development, increasing flooding and erosion as well as decreasing natural bio-diversity
- Increasing atmospheric pollution through solid fuel burning
- Uncontrolled dumping of solid waste.

Jenkins et al 2007, argue that the recipients of this environmental degradation are the poorest urban residents, but the broader urban area also feels the impact of the environmental problem. While there may be political motivation for environmental management there are few mechanisms (legislation and institutions) to implement it. In the case of the Giba Gorge, the urban poor and the urban rich are inappropriately settled close to environmental areas and are affecting the environment negatively. For the rich it is by choice, and the demand for development rights to remain to ensure development, and for the poor it is due to historical reasons. This has resulted in the lack of suitable land for housing the poor and hence the inappropriate location on steep slopes. Given the researchers involvement in the Outer West SDP, the researcher is aware that in the case of the eThekweni Municipality, a large part of the population is poor and problems described above are experienced due to lack of adequate services, infrastructure and appropriately located vacant land. Environmental management is therefore an urgent need.

An environmental asset such as the Giba Gorge provides services that benefit not only the people adjacent to the asset, but the entire river catchment within which it is located, as well

the broader region and metropolitan area. Once the environmental asset is impacted on the effects and the stress are felt at a regional scale. In some cases development has intensified close to environmental areas and few people e.g. land owners and developers have benefited financially from the development. When the negative impacts of such developments are more widely spread it is referred to as 'urban affluence shifting environmental burdens' (McGranahan and Jacobi, 2001:15).

In the case of Giba Gorge and the broader Hillcrest area this is clearly evident where there has been much stress placed on the environment and the infrastructure systems by the large scale developments that benefit few people. These environmental burdens are affecting those that have not benefited economically from these developments. Hence there has been a shifting of environmental burdens by the urban affluence. Furthermore it is argued by McGranahan and Jacobi, 2001, that there are different environment burdens caused by urban affluence and the urban poor. In the case of the poor, urban poverty primarily affect the poor living in the immediate locality e.g. through flooding due to poor storm water control. Environmental burdens of affluence can effect both rich and poor around the globe e.g. through climate change. Thus environmental burdens reinforce existing inequalities.

It appears to be difficult to integrate environmental issues into overall urban management and land use management. To exacerbate the problem, the limitation of regulation acts as an attraction for investment which wishes to avoid environmental costs. This reveals the direct conflicts between different sectors wanting to have environmental regulation on the one hand and promotion of economic development on the other. (Jenkins et al, 2007:146)

## **2.6 SUMMARY**

The concept of sustainable development has been prevalent for decades but there is very little evidence of practical implementation. There is a need for the reworking of the concept that recognises a society that does not waste or destroy its natural resources but preserves it to ensure the survival and betterment of future generations.

Densification in the central core of the eThekweni Municipal area is seen as a sustainable development strategy in the IDP, but densification is also occurring in the peripheral areas

such as the Outer West Region. This contradicts the principles advocated in the IDP. The IDP is therefore viewed as a policy that is difficult to implement.

International experience in the UK share similar experiences to South Africa in trying to integrate economic, social and environmental concerns in development planning. This is evident in the Outer West Region which has large open spaces with key bio-diversity significance which are under pressure for development. Balancing the needs for social and economic development as well as protecting the natural environment is difficult to achieve.

In achieving sustainable development ecological and resource economics advocates that economic development must be limited by the environments carry capacity. Economic development and environmental conservation should not be seen as two separate competing interests, as both are equally important and depend on each other in achieving sustainable development. Understanding the value of the goods and services that the environment provides will begin to inform its value in financial terms. In promoting economic development, the replacement cost for natural goods and services must be clearly understood before assumed economic gain from economic activities such as new industrial development is sought.

## **CHAPTER 3: POLICY CONTEXT**

The conceptual framework in the previous chapter shows that planning is still seen as the arena to co-ordinate the social, economic and environmental agendas. There is very little evidence to show that planning is succeeding in this regard. This chapter will examine the policy environment for environmental management, development planning and economic development, with the aim of showing the legislative direction for each sector in terms of sustainable development. The chapter will attempt to assess whether alignment does occur at policy levels. Sections 3.1 to 3.3 will focus on environmental legislation. Sections 3.4 to 3.5 will focus on the planning legislation and sections 3.6 will focus on economic legislation. Section 3.7 will provide an assessment of the policy environment.

### **3.1 ENVIRONMENTAL LEGISLATION**

The Environment Conservation Act of 1989 has been the key legislation directing environmental planning in South Africa. Recently there has been new Acts that provide more direct impetus for the protection of the environment. These include the National Environmental Management Biodiversity Act (Act 10 of 2004), the National Environmental Management: Protected Areas Act (Act 57 OF 2003) and the Coastal Zone and Estuaries Management Bill in progress.

In response to the need for more direct protection of the environment, the Biodiversity Report was prepared in 2007 by the EMD in conjunction with Local Action for Biodiversity. One of the purposes of the report was to describe Durban's biodiversity and its value. The National Environmental Management Bio-diversity Act 10 of 2004, calls for IDPs to incorporate bioregional plans into the IDP and show how these would be implemented. The City, in partnership with Ezemvelo KZN Wildlife is working towards the development of a 'systematic conservation plan' that will show the City's biodiversity areas in detail.

According to EMD with the expansion of the Municipal boundary by 69% through the demarcations in 2000 the open space plan has also been extended which resulted in the formulation of the eThekweni Environmental Services Management Plan (EESMP) in 2002. The purpose of the (EESMP) is to contribute towards the IDP goal of 'sustaining our built and natural environment'. This plan was approved in 2003 and has been incorporated into

the Spatial Development Framework for the City as well as the Spatial Development Plans for the North, South, Central and Western regions.

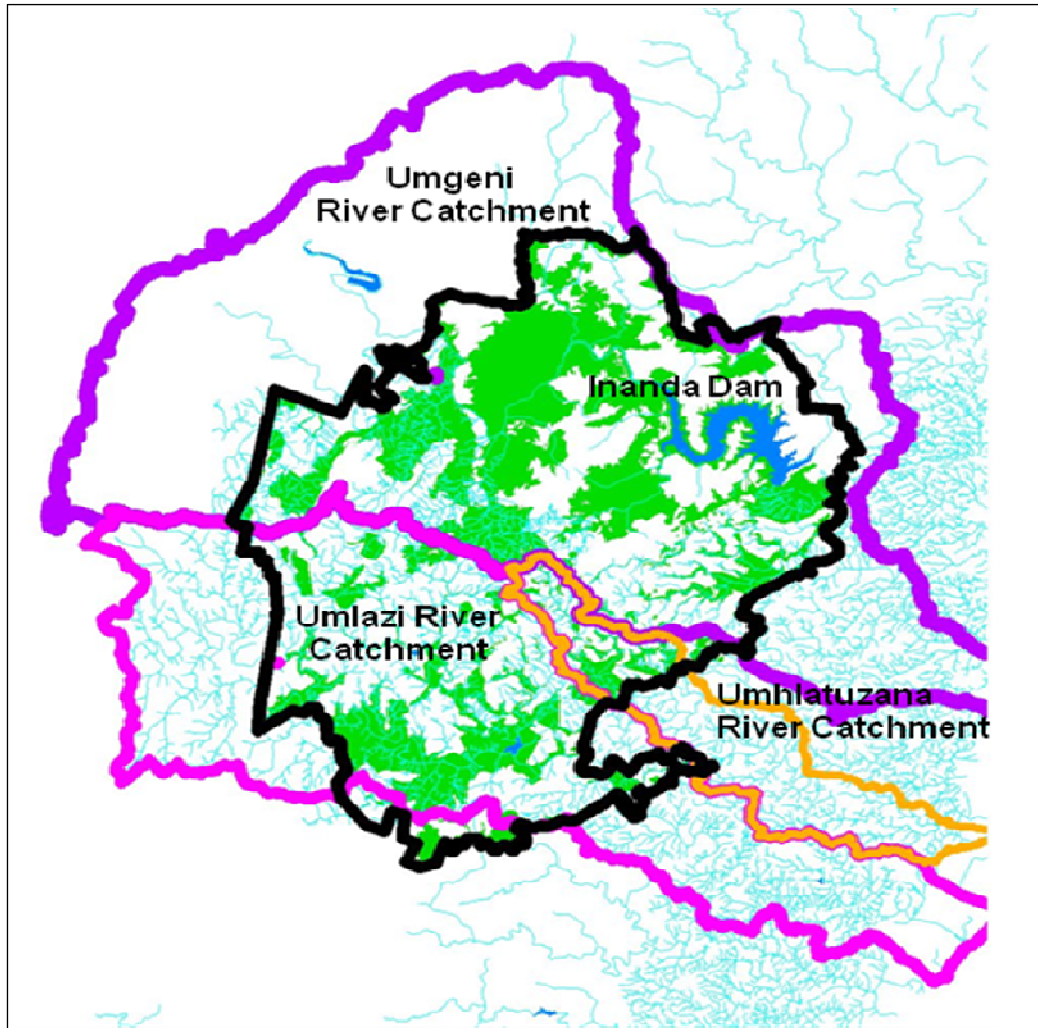
According to EDM local authorities have to conduct their activities within the framework set by the principles listed in the National Environmental Management Act 'NEMA' (Act 107 of 1998). Principle 3 states that 'development must be socially, environmentally and economically sustainable'. Principle 4(a) explains that sustainable development requires consideration of issues such as disturbance to the ecosystem, exploitation of non-renewable resources, jeopardising of environmental integrity and that negatives impacts and risks must be prevented or minimised. A key criticism of the NEMA guidelines by planning officials is its focus on the local context or project and its inability to guide decisions on accumulative impacts on the environment.

## **3.2 CATCHMENT BASED PLANNING**

According to the Environmental Services Management Plan (2002) the Catchments Management Water Act 1998, provide for the establishment of Catchment Management Agencies by the Minister of the Department of Water Affairs and Forestry. Whilst the National Water Act deal specifically with water resources, the catchment management approach has direct application in the planning and management of open spaces, land use planning, as well as planning and operational activities of municipal departments such as Waste Water Management and Drainage and Coastal Engineering.

### **3.2.1 THE CATCHMENT CONCEPT**

The concept is based on river catchments forming strategic planning units. The reason for this approach is that environmental impacts from development are felt in river systems. Extensive development in the upper catchments can cause severe flooding in the coastal areas. Pollution from rivers and settlements can cause health problems for people downstream. If development is based on the carrying capacity of the river catchment then many impacts can be minimised. The Outer West forms part of the upper catchments of three important rivers, namely the Umgeni River, the Umlazi River and the Umhlatuzana River in which the Study area is located. Refer to Figure 5.



**FIGURE 5: RIVER CATCHMENTS IN THE OUTER WEST** (Source: eThekweni Municipality, mapped by the researcher)

### 3.2.2 STRATEGIC CATCHMENT ASSESSMENT

The eThekweni Catchment Study (2002) provide a strategic assessment of each river catchment to inform spatial planning of the limits for further development within the catchments. There were two reasons for this study. The first was based on the need to guide land use planners toward environmental sustainable development. The second was related to there being little environmental information to inform planning decisions. According to this study there are status quo indicators such a ‘green’ showing catchment areas that are in good conditions, ‘orange’ indicate catchments in moderate conditions and ‘red’ show catchments that are in poor condition. The assessment was done in terms of assessing the environmental status of rivers e.g. by using the following indicators: air quality, water quality, water quantity, flooding risk, sediment/erosion, and loss of biodiversity, agriculture production, and

recreation uses. Whilst the focus has been on the environmental assessment, tools to assess social and economic development within catchments are still needed (eThekweni Municipality, 2002a).

There are 18 River Catchments in Durban. The Outer West Region forms part of the upper catchments of three river catchments. These are the Umgeni, Umlazi and Umhlatuzana catchments. The study area forms part of the Umhlatuzana River Catchment. According to the strategic environmental assessment the Umlazi catchment has the poorest environmental status followed by the Umgeni river catchment. The fourth worst rated catchment, in terms of environmental quality is the Umhlatuzana catchment in which the study area is located.

Catchment based planning underpins the preparation of the City's four Spatial Development Plans, namely for the Northern, Southern, Central and Western Regions, as previously mentioned. The SDPs view catchments are important in planning for the following reasons:

- Understanding the direct physical links between urban development and its impacts on the adjacent natural environment
- Describing and understanding the spatial links and 'causes and effects' between activities upstream and their impacts downstream.
- Provision of a logical and interconnected physical systems that are useful for integrating spatial planning, development and management of both urban development and natural assets.

### **3.2.3 UMHLATUZANA CATCHMENT**

According to eThekweni Municipality, 2007 (d), the environmental indicators mentioned above provide evidence that the Umhlatuzana river catchment within which the study area falls, is under stress and has some level of poor environmental quality in the lower part of the catchment. The catchment is fairly urbanised and comprised of urban and informal settlements, industry, infrastructure and agriculture. Negative aspects include moderate air quality in the lower parts of the catchment, diminished water flow and poor water quality. Moderate flood risks, high erosion risks, high sedimentation rates, diminished bio-diversity and diminishing agricultural potential are also evident. Environmental resources are limited to steep slopes and riverine areas and to large open spaces such as the Giba Gorge, which is now under threat. The catchment still has moderate environmental aspects and therefore

needs to be protected. It offers recreational opportunity and cultural and aesthetic value. Refer to Figure 10.

### **3.3 CLIMATE CHANGE**

The need for climate change strategies are recognised by the South African Government in the National Climate Change Strategy (EMD, 2007), which identifies adjustments that need to be made in sectors ranging from disaster management and healthcare services to agriculture and irrigation and development planning. The Environmental Management Department has produced a policy entitled 'Climate Change - What does it mean for the Municipality' in 2007. The report states that 'global climate change is on the increase, that there will be changes in local climate patterns and that sea levels will rise worldwide. Importantly it states that climate change poses serious challenges to sustainable development and biodiversity preservation'. The impacts for eThekweni Municipality are:

- Increased health problems due to heat stress
- Decreased water availability due to decreased recharge of dams
- Decreased agriculture production
- Increased problems of erosion and flooding due to more intense rainfall
- Loss of bio-diversity and ecosystems due to loss of climate sensitive indigenous species
- Damage to infrastructure, industry, residences in low lying areas due to sea level rise.

Whilst the Climate Change policy indicates how important it is and the likely impacts it will have, it appears that other sectors within the municipality have not yet digested what the implications for each sector are. In the SDPs for example, it has been incorporated at a very superficial level, and there is no clear direction on what the land use measures are for climate protection with regards to residential development and built form. Climate change implications for food security and their relation to the conversion of agricultural land to non-agricultural uses still continue, and there are no clear mandates on the protection of agricultural land. Climate protection is acknowledged in the IDP, while in the new revised IDP it will feature as a programme on its own. In order to address climate protection challenges, EMD intends to establish a co-ordinating mechanism, such as Climate Change Office, to ensure that climate change predictions are accounted for in all sectors of municipal

planning. The policy directive will call for adaptive measures such as the town planning scheme must be amended to prevent new development in potentially hazardous areas by rezoning them. The Economic Development Unit will need to assess vulnerability of key industries to climate changes (sugar cane, tourism, refineries etc) and promote efficiency in these sectors. In assessing the rapid densification in the Western Suburbs and the Giba Gorge, the impacts of climate change must also be considered if large tracts of open areas are to be sub-divided and developed for residential purposes.

### **3.4 DEVELOPMENT FACILITATION ACT**

The Development Facilitation Act of 1995 (DFA) was the first piece of planning legislation enacted by the new government. Its objective was to put in place extra-ordinary measures to speed up land development and remove obstacles from past planning legislation. Its purpose was to remove the spatial distortion created by apartheid and ensure restructuring of the city quickly. The following are the general principles cited from the Development Facilitation Act, for land development that have been incorporated into subsequent development planning legislation.

1. Policy, administrative practice and laws should provide for urban and rural land development and should facilitate the development of formal and informal, existing and new settlement.
2. Policy, administrative practice and laws should discourage the illegal occupation of land with due recognition of informal land development processes.
3. Policy, administrative practice and laws should promote efficient and integrated land development., in that they
  - a. Promote the integration of the social, economic, institutional and physical aspects of land develop
  - b. Promote integrated land development in rural and urban areas in support of each other
  - c. Promote the availability of residential and employment opportunities in close proximity to or integrated with each other
  - d. Optimise the use of existing resources including such resources relating to agriculture, land, minerals, bulk infrastructure, roads, transportation and social facilities

- e. Promote a diverse combination of land uses, also at the level of individual erven or sub-divisions of land
  - f. Discourage the phenomenon of ‘urban sprawl’ in urban areas and contribute to the development of more compact towns and cities
  - g. Contribute to the correction of the historically distorted spatial patterns of settlements in the Republic and to the optimum use of existing infrastructure in excess of current needs, and
  - h. Encourage environmentally sustainable land development practice and processes
4. Members of communities affected by land development should actively participate in the process of land development
  5. The skills and capabilities of disadvantaged person involved in land development should be developed.

Despite the good intentions of the DFA, its application to all land developments has been manipulated and it is used for reasons other than what it was intended for. The DFA has therefore impacted on municipal planning decisions quite strongly. In instances where developers do not agree with the municipality’s position on certain development applications, the DFA is used as a tool to gain an external favourable decision. In many instances developers threaten the use of the DFA to elicit the approval they are seeking.

Looking specifically at higher density development in the Outer West, the Phezulu Game Park and the extension of the Lake District residential complex have been the result of DFA decisions. The Lake District site is zoned for residential purposes and the rights to extend the existing complex which were erected in 1995 were purchased by the applicant in 1996. Lake District in particular which is part of the broader study area has encouraged others to also develop close to key environmental area. In was in the context of such applications being submitted to the municipality that the Giba Gorge precinct planning began, and DMOSS was extended in order to protect key untransformed environmental areas and protect the integrity of the Giba Gorge system. The picture below (See Figure 6) shows the Lake District site developed close to the environmental asset.

***FIGURE 6: EXISTING LAKE DISTRICT DEVELOPMENT***



In order to extend the above development, the DFA process was used by the applicant. The extension of the conservation reserve as part of the FutureWorks! study was conveyed to the applicant. Due to the plan being in a draft form, and as a result of an email indicating the status of the project as being not yet approved, the judge ruled in favour of the applicant, based on the fact that the extension of DMOSS was not approved therefore not legal. The judge in this case further approved the use of a package plant treatment works as a mitigatory measure to mitigate against any harm to the sensitive wetland area. The argument was that the municipality failed to point out the disadvantages of the proposal's effluent disposal system. This specific issue on the lack of research on privately treated waste water plants on the receiving water body, still remains a huge challenge for the eThekweni Municipality which is trying to ensure that inappropriate densification does not occur. This is a clear example of where sustainable development at policy level gets overlooked or its importance minimised and the outdated Consolidated Outer West Town Planning Scheme in its current form operates against the environment. It also highlights that the DFA commissioners are not well informed on the importance the environment and the impacts of the adjacent uses on it. The picture below indicates the Lake District development extension in progress where conservation areas are being transformed. Refer to Figure 7.

**FIGURE 7: EXTENSION OF LAKE DISTRICT DEVELOPMENT**



### **3.5 INTEGRATED DEVELOPMENT PLANNING**

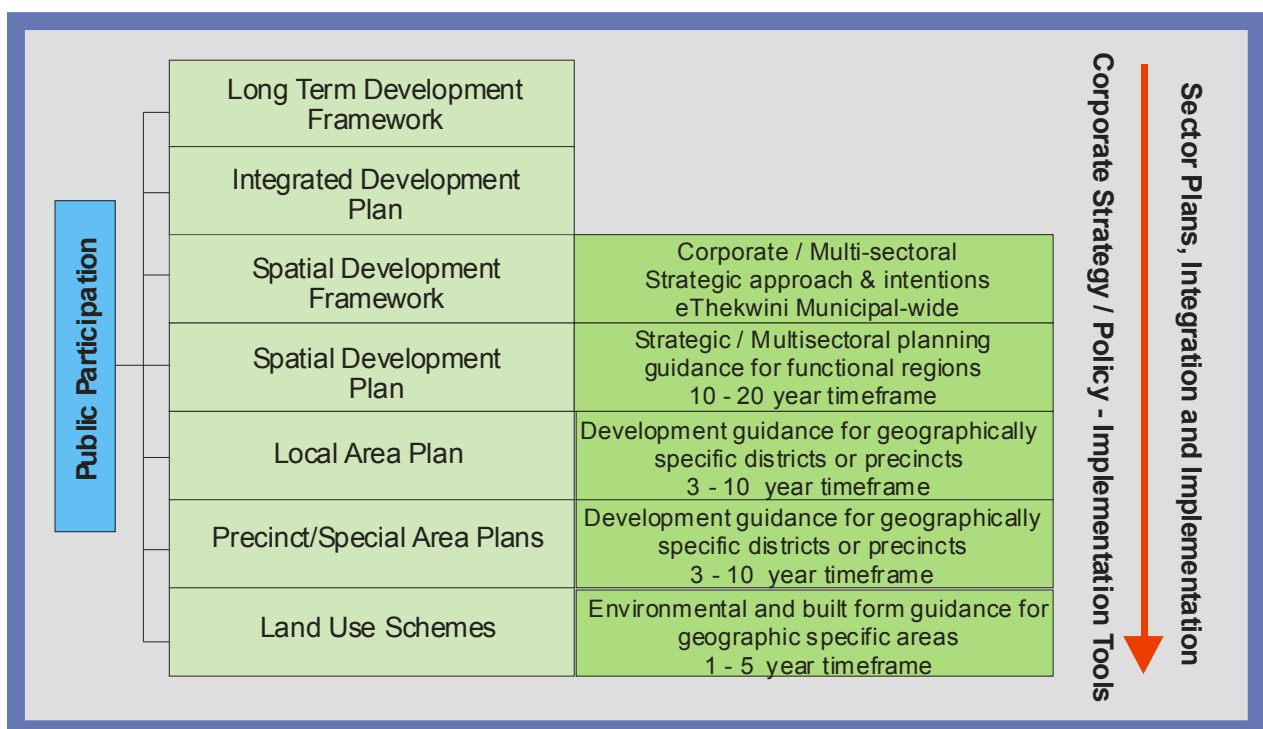
Development Planning takes direction from the Municipal Systems Act 32 of 2000 which calls for the development of Integrated Development Plans. The Framework Planning Branch in the Development Planning Department is focused on strategic Planning. The Branch takes direction from the IDP and will deliver the hierarchy of plans in terms of the integrated system of planning.

Essentially integrated development plans are five year business plans for all municipalities and serve as the primary strategic management tool. In line with National Department of Provincial and Local Government (DPLG) and Municipal Systems Act (MSA), the IDP approach has to conform to a specific methodology. It is required to reflect needs, priorities and identify resources to deliver on key objectives. The plan must be strategic and well informed and implementation focused. It must inform budgets and land use management decisions. It must be developed through a consultative process.

The IDP is the primary strategic plan for the City that guides all other planning. The IDP is organized into eight separate but related plans. The first of these plans is ‘Sustaining the Natural and Built Environment’. The goal of this plan is to direct and manage the use of the built and natural environment to ensure sustainable and integrated growth and development of the city. There are 7 programmes in the plan, and Programme 1 aims at establishing and implementing a sustainable and integrated spatial planning system. The Development Planning Department seeks to integrate various sector objectives via the implementation of the integrated spatial planning system. The Development Planning Department is responsible for Plan 1 and the goal for this plan is ‘direct and manage the use of the built and natural environment to ensure sustainable and integrated growth and development of our city’ (IDP,2008, 2). This further entrenches the role of land use planning as the integrator and co-ordinator of sustainable development.

### 3.5.1 INTEGRATED SPATIAL PLANNING SYSTEM

At a policy level it is clearly acknowledged that the environmental imperatives will be addressed throughout the hierarchy of plans. Refer to Figure 9 below.



**FIGURE8: HIERARCHY OF PLANS Source: eThekwini Municipality, IDP 2007**

According to the latest eThekweni IDP (2008/2009 Review,2), the Spatial Development Framework (SDF) is the point of integration of strategic municipal spatial strategies in the arena of economics, transport, environment and society. The Spatial Development Plans (SDPs) cover the municipal area at a greater level of detail than the SDF. These SDPs provide guidance as to the nature and intensity of development that can potentially be sustained on the land for the four functional districts. It is based on the philosophy is that the carrying capacity of land and natural systems ought not to be exceeded as a result of development. The SDPs are also river catchment-based in order to align with sustainable objectives.

The SDPs will need to be translated into a number of Local Area Plans (LAPs). The LAP is a specific plan for a local area but carries through the intention of the SDP for a particular area. At a LAP stage detailed planning is done to guide the alignment of local movement systems, the identification of local economic and housing opportunities, as well as environmental areas.

Precinct plans are detailed plans which are focused on smaller geographical areas e.g. a Town Centre or a node. These plans show detailed planning such as architectural designs, landscaping, and street furniture. SDPs, LAPs and Precinct Plans must have a supportive Land Use Management System (LUMS). Aspects related to a LUMS including land use schemes, rating policies and endowment policies that would require significant changes to realise a particular need and vision for an LAP and Precinct area.

The land use scheme is an important component of the integrated spatial planning system and deals with zoning and built form controls. The intention of each plan within the package of spatial plans must be translated into the most appropriate zones and controls within the land use schemes. Currently a single land use scheme system for the whole of eThekweni Municipal area is being developed. This will include areas previously not covered by a scheme such as the Tribal Authority areas. (eThekweni Municipality, 2007, 3)

### **3.5.2 DENSIFICATION IN THE CONTEXT OF THE IDP**

The eThekweni IDP has made six ‘hard choices’ to ensure sustainable development. Choice two is to increase densities and reduce sprawl which will ensure more effective use of facilities and infrastructure and also ensure that people live closer to amenities and work opportunities. The IDP states that this will entail reorganisation to improve access and circulation and it will require more efficient and effective use of vacant and / or underdeveloped land. It will entail the integration of areas with surrounding urban and rural areas through improved linkages with the main metropolitan movement routes and opportunities. According to the draft Outer West SDP, there will be a need to upgrade poorly-serviced and poor quality residential environments to provide essential services and social infrastructure so as to support communities, promote vitality and a sense of place in these settlements.

Choice 4 focuses on the need for a good public transport system that will reduce the need to increase road networks, provide a platform of connectivity between people and reduce pollution by minimizing vehicle usage. The Outer West draft SDP has responded to this by ensuring that densification and nodal development are aligned with public transport infrastructure.

### **3.6 ECONOMIC POLICIES AND LEGISLATION**

The Economic Development Unit takes direction from the section of the IDP which focused on economic development and job creation (Plan 2). The goal of this plan is to develop the economic wealth of the eThekweni region for the material well-being of all its citizens to ensure strong economic growth, sustainable job creation and poverty alleviation.

According to eThekweni Municipality, 2008(d), economic development can be defined as ‘a set of activities undertaken to improve the economic well-being and quality of life for a society. It encompasses the will to create and/or retain jobs and supporting or growing incomes and the tax base. It is about improving the economic wealth base of countries, or region for the well-being of their inhabitants’ (eThekweni Municipality 2008d: 3)

The Economic Development Strategy is aligned with global, African, regional SADC (South African Development Community), National ASGISA (Accelerated Shared Growth Initiative for South Africa) and Provincial imperatives (PDGS) Provincial Development and Growth Strategy and Millennium Development goals.

The Strategy recognises that the EMA plays a major role in the South African Economy. The economy grew at an average annual rate of 3.65% over the period from 1995 to 2005. This compares well with the rest of the Kwa Zulu Natal which grew at a rate of 2.3% over the period 1995 to 2004 (eThekweni Municipality 2008d:3). The single largest contributor to GDP in EMA is manufacturing which contributes approximately a quarter of total GDP in the EMA.

The challenges facing local, provincial and national government are as follows:

- Reducing high levels of extreme poverty by providing access to job opportunities
- Enhancing the effectiveness of the educational and training systems
- Enhancing the global competitiveness of the EMA business environment.
- Enhancing government capacity and public-private institutions to build capacity

The key objective for economic development is to half unemployment by 2014. In order to do this requires municipal procedure and regulations to be fast tracked. This will include reducing red tape, creating special purpose vehicles to drive economic development in specialised areas, creating an incentivised strategic environment, creating and strengthening partnerships and creating spin-off through event-led development (eThekweni Municipality 2008d). According to Economic Development officials industrial development is the biggest job creator and therefore more land will need to be opened up for industrial development. The biggest impediment to industrial development is the lack readily available serviced land.

### **3.7 ASSESSMENT OF POLICIES**

Clearly environmental conservation and economic development are two sectors that have serious challenges and clear mandates for deliverables. The assessment of the policy environment is done on two levels. The first looks at the policy focus and the second looks at

incorporation of other sector needs within policies. Environmental policy is focused on protecting the environment and has new legislation in place that provides a strong foundation for achieving success. Clearly what is lacking are environmental management tools and mechanisms to ensure that goods and services and biodiversity of the open space system are protected. Policies on climate change and river catchments are attempting to provide more guidance for planning and have acknowledged that the economic development must conform to carrying capacity of the environment.

Economic policies create many tough imperatives to work towards with creating wealth through an enabling environment for job opportunities being the driving force. There is very little recognition of the value of the environment and the impacts of economic development on the environment. In fact, the economic policies calls for the cutting down of regulation to fast track economic development. This will further entrench the current conflict between the two sectors as the new environmental legislation will place more restrictions on development to ensure that ‘goods and services’ are not destroyed. The economic legislation will place pressure for more land to be opened up for industrial development. It will also call for regulations and administrative procedures to be reduced in order to fast track development. Unless the environmental and economic sectors begin to support each other and work towards the same goals, the environment is going to be seen as a negative restraint on economic development. If alignment does not occur economic development will most likely get more political support and key environmental areas may be under threat.

The planning policy has clear mandates to deliver on a series of plans in order to deliver the three main strategies. The IDP appears to be the platform in which integration is happening. However, the IDP timeframes do not allow much time for engagement between sectors and programmes are put together in isolation. This reaffirms the position that integration of sustainable development is a rhetoric and the implementation of sustainability as indicated in the IDP is not happening. In order for planning to respond to the economic and environmental concerns, requires that at broad policy level for economic and environment sectors to begin align. Currently it appears that economic policy does not consider the value of the environmental goods and services. Its focus is rather on mitigation and reducing impacts on the environment. This could be related to policies being quite old and not reviewed quickly enough to incorporate current environmental challenges. New legislation in the

environmental sector is evident, but will be of no use if it does not filter into all levels of planning within different sectors.

The policy environment for development planning is challenging in that strategic plans such as the Spatial Development Plans, which are reviewed more regularly, do not have the same 'teeth' as the Town Planning scheme and until this is rectified this could remain a problem in the future. Where critical environmental areas need to be protected the current legislative environment, particularly the DFA, would bias the process in favour of economic benefit for a few at the expense of environmental benefits for many.

## **CHAPTER 4: OBSTACLES TO ACHIEVEMENT OF SUSTAINABLE DEVELOPEMENT IN THE OUTER WEST**

This chapter will focus on the challenges facing the Municipality in its efforts to achieve sustainable development in the Outer West. Specifically it will address, the housing and densification challenges, economic development challenges, environmental protection challenges and the land use management and monitoring challenges.

### **4.1 SUSTAINABLE DEVELOPMENT**

From the interviews with key officials in the Municipality there appear to be very few guidelines on how sustainable development can be implemented. There is no policy in the Municipality that defines sustainable development, or shows how one can achieve sustainable development. There is no database of best practice that provides indicators of sustainable development. The first plan of the IDP (Plan 1) is to sustain the natural and built environment. Both the Development Planning Department and the Environmental Management Department respond to this plan, but do not see themselves as the drivers for sustainable development. It appears though, that the environmental sector is leading the way for sustainable development with new research with a focus on the natural environment only. This becomes a problem when social and economic sustainable development are viewed separately. The following sections outline the challenges facing the sectors in addressing sustainable development.

### **4.2 HOUSING AND DENSIFICATION CHALLENGES**

The Outer West occupies 34% of the total land mass of the Ethekwini Municipality. It is home to 16.5% of the Metropolitan population of 3.5 million people. (Census Data, 2007). Almost 50% of the land falls under Traditional leadership where the population is the highest. Densification takes place in two ways in the Outer West. The first occurs through the rapidly growing informal settlements that are located on steep slopes in peripheral locations in rural areas. These rural areas are where the largest open space assets are found. These areas are being consolidated and upgraded by the Metro Housing Unit because of the lack of suitable vacant land for relocation. According to Metro Housing officials, due to tribal and community dynamics it is difficult to relocate people into other tribal areas which may be better located for housing. Clustering of housing and housing typologies that support

densification such as walk-ups, are not welcomed by community members. People want to own a piece of land.

The second occurs through middle to high income housing densification in the Outer West is dependent on private car usage. There is very little infill opportunities in well located areas along activity corridors for affordable housing which can be linked to public transport in Hillcrest. Furthermore, middle to high income housing has occurred on agricultural land that is considered unviable from a financial point of view. The rapid transformation of agricultural land will impact on future food security. In the absence of a clear agriculture protection strategy for the Outer West, it is difficult to protect agricultural land. Furthermore agricultural land valuations from been increased, which forces land owners to sell land or develot it for residential purposes. Land owners such as Tongaat Hulett who own substantial sugar cane land are also property developers. They have indicated the intention to develop their land for housing purposes as sugar is unviable due to long haulage to the sugar mill. Perceptions and reality of crime have also lead to new ways of living and fuelling the rise of the ‘gated communities’ on the urban periphery. According to EDU officials , middle and high income housing makes a significant contribution to the construction industry and resultant jobs. The bulk of bonded housing markets are in this segment so it is very significant to the banking industry (financial services are a big employment sector). This housing is also a major contributor to rates and accounts for a major portion of a city’s income, making it possible for the city to intervene in poorer areas and provide housing & social facilities. It is also important in attracting and keeping middle income people in the city who contribute significantly to spending in the area and hence viability of business as well as skilled labour.

#### **4.3 ECONOMIC DEVELOPMENT CHALLENGES**

The economy of the Outer West is small relative to its population. It constitutes 6.6% of the Municipality’s GDP. GDP per capita indicates severe poverty and high unemployment in rural areas. The role of the Outer West from an economic perspective is that of strategic industrial expansion and limited retail and commercial expansion. According to Economic Development officials, in order to stimulate the economy implies that new land must be opened up for industrial development. The industrial sector is the biggest job creating sector. A key challenge for economic development is that environmental policies seek to restrict development. Due to the Outer West being outside of the urban services or water borne

services edge, most applications for developments are subject to environmental impact assessment. Environmental controls pose significant costs for development in terms of time delays such as holding costs for capital and land etc. Cato Ridge in the Outer West has comparative advantage for industrial development being located close to the N3. This node cannot be packaged and opened up for development because of the lack of waste water services for industrial effluent. Waste Water Department is opposed to industrial development, and is therefore reluctant to service the area due to it being located in the Umgeni River catchment, in which the Inanda Dam is located. The current mercury found in the Inanda Dam has been linked to Thor Chemicals which is located in Cato Ridge. According to EDU, the issue of concern is the lack of monitoring and management of industrial activity that leads to environmental degradation. Industrial development can operate well if services are provided and mitigation and monitoring measures are in place in the Outer West.

It will be more economically sustainable to have brownfields redevelopment in the central region than greenfield industrial development in the Outer West. Redevelopment is however more complex, involves many landowners and more costly to do than greenfields developments. Incentives for redevelopment are therefore critical for industrial development. Where conflicts between economic development and the environment do exist, these are being resolved through regulation requirements e.g. the use EIAs, through consultation with sector departments and use of internal policies such as DMOSS. In many instance tradeoffs are negotiated.

A further constraint on development is that the Municipality does not control industrial land and only provides the zoning rights. Zoned land does not mean that it is available for development. ‘Major land owners leverage their land sales to their advantage by providing a trickle of industrial land onto the market in order to create premium land values on their landholdings’(eThekweni Municipality, 2008).

#### **4.4 ENVIRONMENTAL CHALLENGES**

Through the Outer West Spatial Planning process and the Municipal Giba Gorge project, the researcher believes that the lack of awareness on the value of the environment both in within the Municipality and the public in general is quite daunting. Political drive for low cost

housing close to and in environmentally sensitive areas is especially problematic. This implies that there is an urgent need for more education for management officials and leadership in the Municipality on the value of the environment.

Landowners have a significant contribution to make in protecting the environment and landowner consultation is therefore critical for environmental sustainability. According to EMD officials, partnerships between municipal departments such as Treasury, Leisure and Cemeteries have looked into the possibility of establishing a 'green special rating area' for the Giba Gorge. In terms of the property rates Act this would allow the Municipality to levy an additional rate on property for the purposes of raising funds to improve and upgrade an area. However, there is debate about the legality of such step and no decision has been taken to date.

Whilst DMOSS is not zoning it does indicate land that is deemed environmentally sensitive. Strategic plans such as the SDPs must be accompanied by a land use management schemes for it to be effective. Lack of conservation management is a challenge for the Municipality, as it does not have the resources to currently undertake this function. A further challenge is the lack of local government decision making powers. Environmental impact regulations are part of the National Environmental Act which aims to restrict developments from destroying ecosystems by ensuring that impacts are assessed and mitigated. All applications that require environmental impact assessments are made to the Provincial Department of Agriculture and Environmental Affairs with comments from the municipality only. In many instance favourably decisions have been granted for development that was not supported by the local authority.

#### **4.5 LAND USE AND ENVIRONMENTAL MANAGEMENT CHALLENGES**

The development of a sophisticated land use and environmental management system is critical for sustainable development. The private sector does take advantage of the lack of monitoring and management of activities in terms of land use and environmental control. To avoid this, land use planning must be proactive to identify and plan for areas before development starts to happen. The next section will explore the challenges facing the town planning scheme as well as issues affecting the integration of environmental concerns into the Town Planning Scheme.

#### **4.5.1 TOWN PLANNING SCHEMES**

The Town Planning Schemes that apply to the eThekweni Municipality are very old as they were created via the 1949 Town Planning Ordinance. The regulations associated with it are therefore outdated. The Spatial Development Plan for the Outer West which was prepared in 2005 has not been translated into a town planning scheme. This poses challenges particularly in traditional areas where large tracts of open spaces exist. Adjacent to these are large low income communities that rely on the environment for survival. There appears to be difficulty in the translation of SDPs into town planning schemes given the broad nature of the SDPs.

In terms of economic development, the Consolidated Outer West Town Planning Scheme as well as other town planning schemes in the eThekweni Municipality are quite explicit on the types of industry that would be permitted in the area, but they do not preclude inappropriate uses. For example zones for noxious industry can be taken over by light manufacturing industry as it has in most industrial townships. Noxious industry thus gets forced out. Currently the City is running out of heavy manufacturing space due to the industrial zonings being taken up by light manufacturing uses. Cato Ridge is therefore now under pressure heavy manufacturing industrial space. (eThekweni Municipality 2008c)

In terms of the integrated system of planning, local area plans are more translatable to a scheme. There has been some reluctance from the Land Use Management Branch to translate even detailed precinct plans to town planning schemes. This is related to the disagreement on the use and terminology of strategic plans that do not fit neatly into land use management criteria. This is perhaps an indication that the land use management system is being created outside of strategic planning debates and is therefore not able to be easily amended. Currently Framework Planning is responsible for preparing SDPs. LAPs and Precinct Plans and the Land Use Management Branch is responsible for translating these into town planning schemes. The key concern is that the development of a sophisticated land use management system cannot occur in isolation from key development debates on densities and nodal developments etc, as it is currently happening. According to planning officials, this problem is further exacerbated by the refusal of regional co-ordinators of town planning schemes to get involved in environmental conservation debates.

#### **4.5.2 INTEGRATING ENVIRONMENTAL CONCERNS INTO THE TOWN PLANNING SCHEME**

Appropriate environmental controls must be part of the town planning schemes to ensure protection of the environment. The eThekweni Municipality and its incorporation of various local authorities have simultaneously inherited various Town Planning Schemes that were relevant to its particular locality and its narrow interest. According to the Land Use Management officials these various schemes have not been consolidated or rationalised. In terms of environmental zonings and controls not all schemes have the same zonings and some schemes do not have some zones or environmental designations. In order to address this problem, EMD has prepared a report to introduce a conservation reservation and zone into existing town planning schemes to ensure that the environmental rationale is better reflected. There are a myriad of different environmental zonings that need to be consolidated and made relevant. According to the report there are various zoning designations that have some sort of environmental or conservation purpose that now need to be changed to 'environmental conservation reserve' or 'conservation zone'. These include: Public Open Space, Conservation Reserve, Nature Reserve, River Reserve, Amenity Reserve, and Indigenous Bush Reserve. The intention is to replace the current conservation reserve and nature reserve with Environmental Conservation Reserve where the protection of the natural environment is most important. Where land is not in Council ownership it must be acquired within a period of five years. The Conservation Zone is intended to replace Conservation Reserve and River Reserve where the protection of the environment is of primary importance but ownership lies with the private sector with limited rights by approval of the Municipality. This applies in cases where there are split zoning. (eThekweni Municipality, 2008b: 16)

The above proposal received Council approval in October 2008 and is a step towards integrating environmental conservation into Town Planning Schemes in a better way. The Consolidated Outer West Town Planning Scheme, which has a range of conservation zonings, would have to be amended to align with the above.

The use of environmental conservation servitude is a tool that can be used to protect the environment. A servitude can be registered on a site during the development planning process to ensure that no development can occur beyond the line. According to the Environmental Management Department an environmental servitude is a condition for approval which is cost

effective and a relatively easy means of securing land identified as part of the EESMP spatial plan. Environmental servitudes are registered against the title deed of the property and are shown in the Surveyor General Diagrams. The service line remains in the ownership of the land owner and can be used for passive recreation purposes that do not conflict with protecting the natural environment. These areas cannot be developed on and compensation in the form of a rates relief may be available. A challenge to this is that it is costly for the owner to register servitudes and perhaps the municipality should explore ways of registering bulk servitudes, on land that is required to be protected such as Giba Gorge.

#### **4.6 SUMMARY**

The above section shows that each sector is clearly faced with challenges which cannot be resolved in isolation from each other. Inappropriate middle to high income densification close to natural area and the growing informal settlements of the periphery will hinder the achievement of sustainable development in the Outer West.

Economic development in the Outer West will be extremely costly and difficult to finance and these, if not managed, monitored and mitigated will impact on environmental assets such as the Inanda Dam. The lack of infrastructure affects the environmental as well the economic sectors negatively. Without proper infrastructure the economy cannot grow

As the eThekweni Municipality does not own much land, land owners and traditional leaders and their involvement in land development are critical for the success of sustainable development. Property rates should align with environmental imperatives to protect key areas from inappropriate residential developments.

The Land Use Management System certainly has the potential to be the framework that would embody a range of rules and guidelines to ensure protection of key areas. This is only possible though if the land uses management system is ready and robust enough to incorporate new information and research easily. There must be a strategic component to LUMS which keeps abreast of current debates and challenges and is able to continually update the LUMS to incorporate strategic plans such as the SDPs, LAPs as well as the updated DMOSS. The Spatial Development Plans lack authority in directing development. Currently SDPs that are in course of preparation have no legal status.

## **CHAPTER 5: GIBA GORGE CASE STUDY, NATURE AND VALUE OF ENVIRONMENTAL ASSETS**

This chapter examines the environmental value of the study area and how it has been impacted on in recent years. It will specifically address two questions:

- 1) What is the nature and value of the environmental assets located within the Giba Gorge Precinct and the broader Outer West and how has development impacted on the environment over the last five years?
- 2) What type and scale of residential development has occurred in the Giba Gorge Precinct in the last five years?

This chapter is mostly informed by secondary data, including current work that is being done by the Development Planning and Environmental Management Unit. The next chapter will focus on the primary research component with a specific focus on public and stakeholder perceptions.

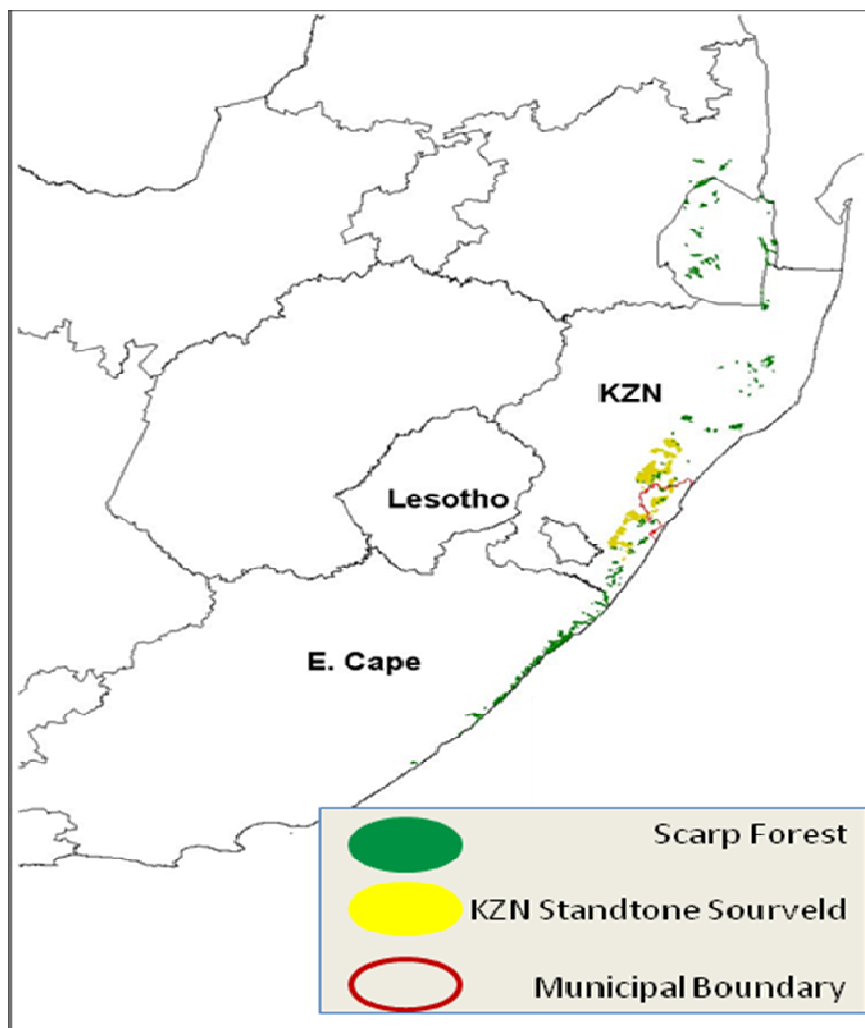
### **5.1 GIBA GORGE ENVIRONMENTAL ASSETS**

The Outer West region is a vital component of the eThekweni's open space system and contains 50% of the total system within its boundary. In terms of biodiversity the area contains two important vegetation types, namely Kwa Zulu Sandstone Sourveld Grassland and Scarp Forest. (eThekweni Municipality, 2007 cited from Mcina et al, 2006).

- a) KwaZulu-Natal Sandstone Sourveld Grassland** – ‘This vegetation type is endemic (restricted to) to coastal KZN and has been classified as ‘Endangered’ by the South African National Biodiversity Institute (SANBI)<sub>1</sub>. It has been estimated that, in South Africa, 68% of this habitat has been transformed and only 0.2% of this vegetation type's extent is statutorily protected. The proposed precinct area incorporates a substantial portion of this habitat in the eThekweni Municipal Area (EMA) and is therefore of significant importance to the EMD’. (eThekweni Municipality, 2007 cited from Mcina et al, 2006).

**b) Scarp Forest** – ‘These ancient forests are home to many endemic and threatened species. Only a small portion (20%) of this habitat is currently statutorily protected in South Africa with those unprotected portions under increasing threat, mostly due to over-exploitation (See Figure 9). There are four noticeable concentrations of this habitat in the EMA: around Nanda mountain; Krantzkloof NR (the only statutorily protected scarp forest in the EMA); a small patch downstream of Nungwane Falls; and a discontinuous stretch situated in and around Giba Gorge. The latter site has been under considerable threat of late mostly due to commercial harvesting of ‘muthi’ products. Large portions of this site are incorporated in the proposed precinct area and are therefore of significant importance to the EMD’. (eThekweni Municipality, 2007 cited from Mcina et al, 2006).

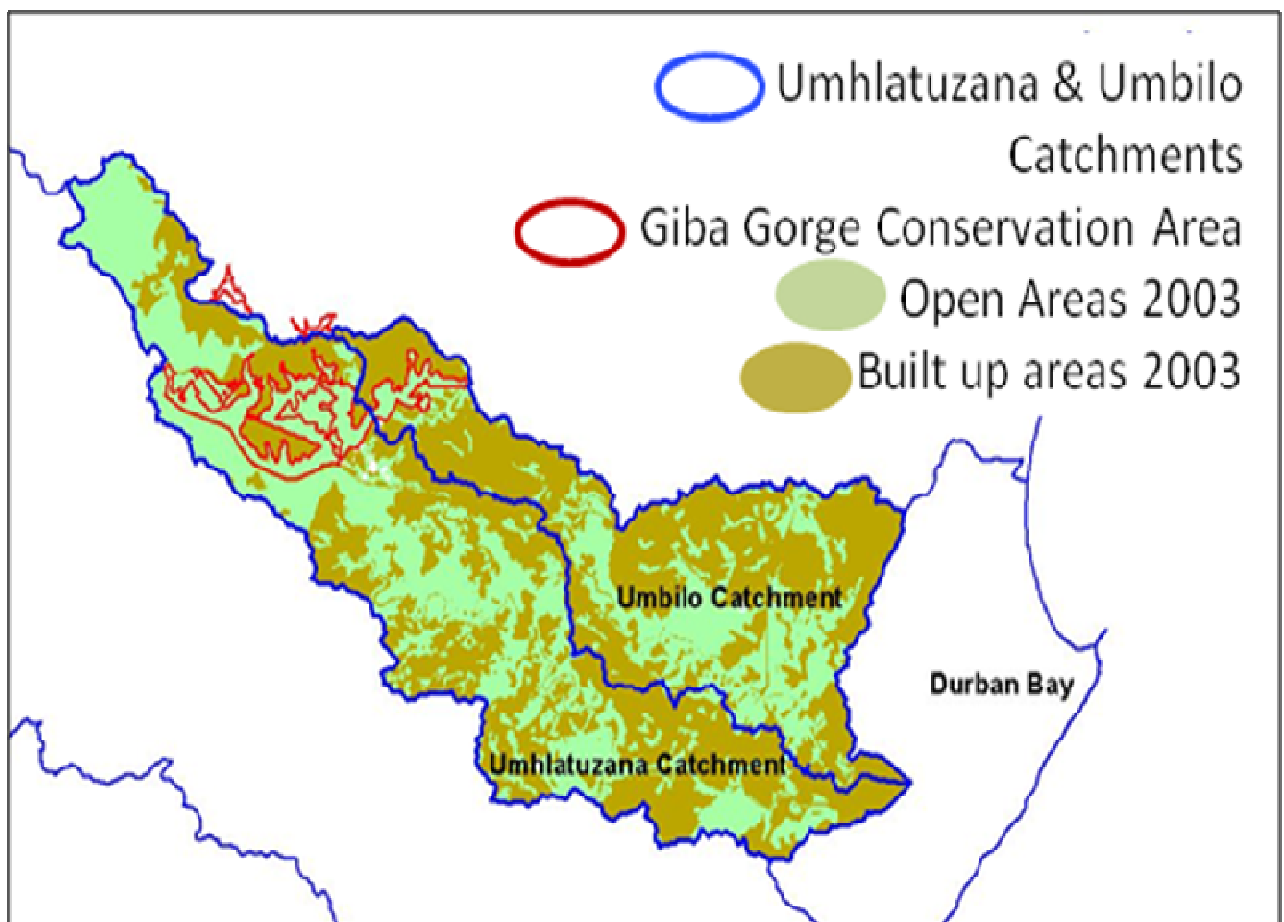
**FIGURE 9: SCARP FOREST AND STANDSTONE SOURVELD2006** (Source: Ethekewini Municipality, Environmental Management Department)



## 5.2 ENVIRONMENTAL GOODS AND SERVICES

The study area is equally important in terms of the goods and services it provides. The Umbilo and Umhlatuzana catchments comprise two of only four catchments that have their entire catchment areas within the EMA boundary. The picture below (see Figure 10) shows the land use coverage of the built area in relation to the Giba Gorge Precinct in 2003. The built area has been more developed since then. According to EMD the Umbilo and Umhlatuzana catchments have the highest proportion of hard surfaces of all the catchments in the EMA these typically concentrated in their lower reaches. As one moves up the catchments there is more open space relative to built up areas, especially in the vicinity of the proposed precinct area. This situation will not last long into the future unless measures are established to regulate land uses in this area.

**FIGURE 10: UMHLATUZANA CATCHMENT BUILT UP AREA COVERAGE 2006**  
(Source: Ethekewini Municipality, Environmental Management Department)



There are a large number of people living in this area as well as lower down in the catchment that benefit from the catchment. The environmental goods and services are those that are directly associated with maintaining the natural state of the upper catchments and include:

- Disturbance of regulation by maintaining 'soft' surfaces.
- Water regulation – natural surfaces (as opposed to hardened surfaces) act as regulators of water flow to users downstream.
- Soil erosion prevention – through the maintenance of natural surfaces.
- Waste treatment and water purification – purification of pollutants (including toxins) through natural filtration processes. There are a large number of poor residents who utilize water directly from the Umhlatuzana River just downstream from the precinct area. (eThekweni Municipality , 2007d)

There are other environmental goods and services, apart from those directly associated with the two catchments, in the precinct area. These include, but are not limited to:

- Climate regulation – the prevention of high temperatures associated with urban heat islands.
- Gas regulation – regulation of the chemical composition of the atmosphere.
- Soil formation processes.
- Nutrient cycling – e.g. nitrogen cycling through food chains.
- Pollination – facilitation of plant reproduction (for e.g. agriculture).
- Biological control – regulation of animal and plant pests
- Food production – e.g. farming on fertile floodplains that derive their fertility from processes upstream.
- Natural products – e.g. production of grasses for thatching.
- Genetic resources – genes for medicines, ornamental plant species etc.
- Recreational – there are currently a number of recreational activities in the precinct area that are directly associated with the aesthetically pleasing nature of the surrounds, e.g. hiking, bird watching, mountain biking, horse riding etc.
- Cultural – the landscape character of the precinct area provides a unique sense of place to both the residents and visitors to the area. The precinct also provides

opportunities for environmental education activities which were a prominent activity in the past and which still have the potential to continue.

- Research – the unique locality of this area in terms of its biodiversity value (discussed above) provides good opportunities for biological research into various aspects. The EMA has a number of tertiary education institutions with biology-related faculties that could utilize this area for research projects. (EtheKwini Municipality, 2007d,)

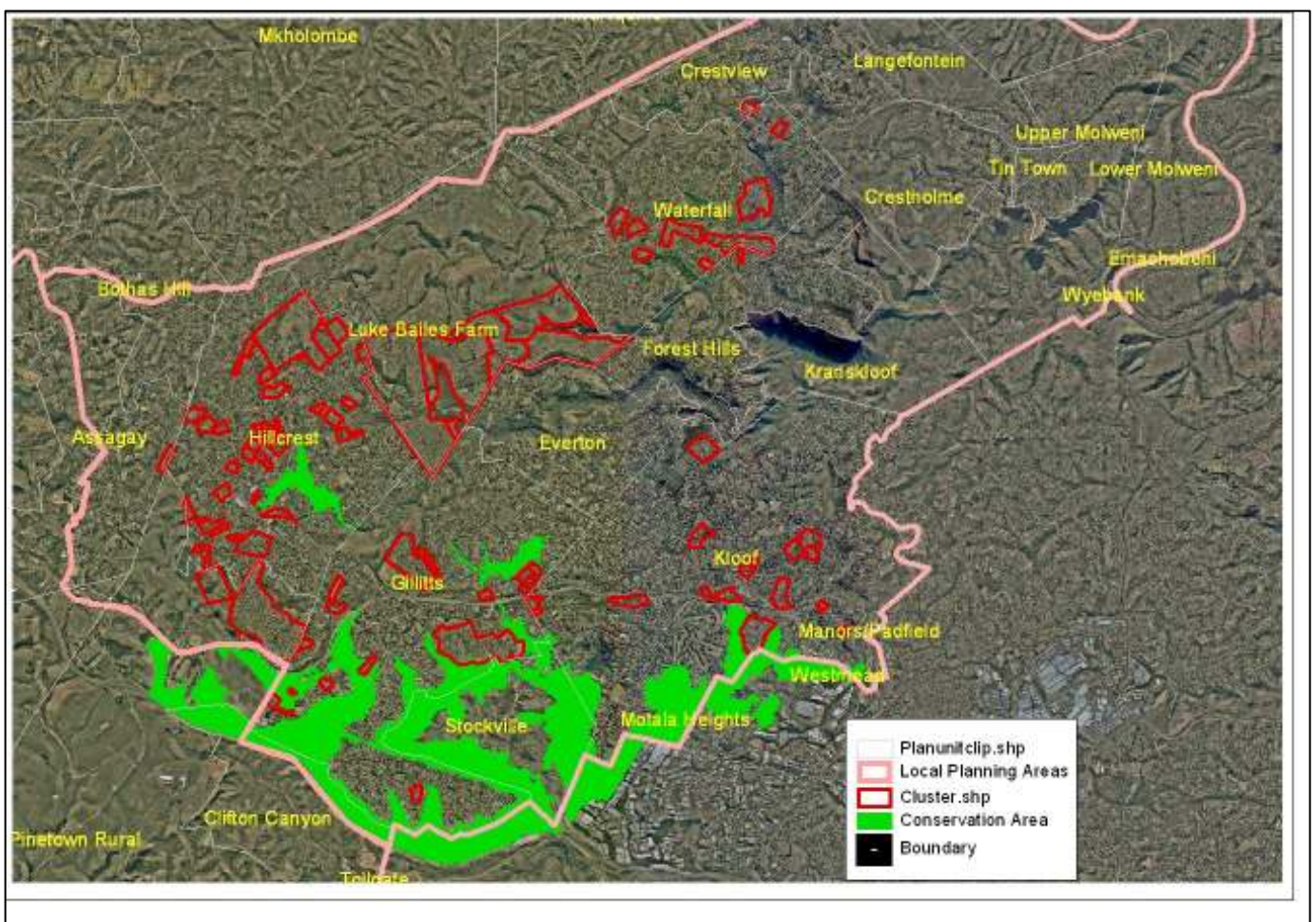
### **5.3 TYPE AND SCALE OF RESIDENTIAL DEVELOPMENT**

The Outer West Region is located beyond the urban services edge which means that beyond a certain point or line it becomes very difficult for the eThekweni Municipality to provide bulk services in the form of wastewater infrastructure, roads and electricity etc. Beyond this line there is an expectation that the lifestyle would be different and would exhibit a more low density and rural character that is supportive of an on-site sanitation. In the Western Suburbs though, specific zonings have been created called intermediate residential and planned unit developments that allow densities that range from 10 units per hectare to 20 units per hectare. This type of housing therefore requires a different form of waste disposal due to smaller site sizes. There has been a trend for privately owned treatment plants which have raised much debate on the sustainability of this approach. Essentially there is very little research on the impact on the receiving water body to guide this practice. Despite this concern the private sector continually push for the use of privately treated package plants for new housing development where the infrastructure does not exist.

Accompanied with the residential growth has been the interest and demand by the private sector for more shopping centres and office development, particularly on Old Main Road and Inanda Road. According to Municipal official the current wastewater treatment works to service the Hillcrest Activity Corridor has reached capacity. Despite this, applications for more developments such as the new Platinum shopping centre is continuing and the Municipality is under pressure to manage this. The private sector is of the opinion that the use of privately owned treatment plants are a viable alternative to water borne sewerage. The Waste Water Department and the Development Planning Department are of the view that the proliferation of package plants across the city is an unsustainable practice, which will place public health at risk if it is not monitored and maintained properly.

The difficulty in trying to extend the environmental conservation reserve is directly related to the large scale of development that has already occurred in the broader Hillcrest area over the last few years. The picture below (see Figure 11) shows the extent of middle to high income cluster housing in the Western Suburbs, indicated in the red outline. The pink line indicates the Western Suburbs local planning area boundary. The photographs on the following pages show developments on the edge of the Giba Gorge (See Figure 12)

**FIGURE 11: EXTENT OF DENSIFICATION IN WESTERN SUBURBS** (Source: *eThekweni Municipality, mapped by the researcher*)



**FIGURE 12: DEVELOPMENT ON THE EDGE OF THE ENVIRONMENTAL ASSETS**

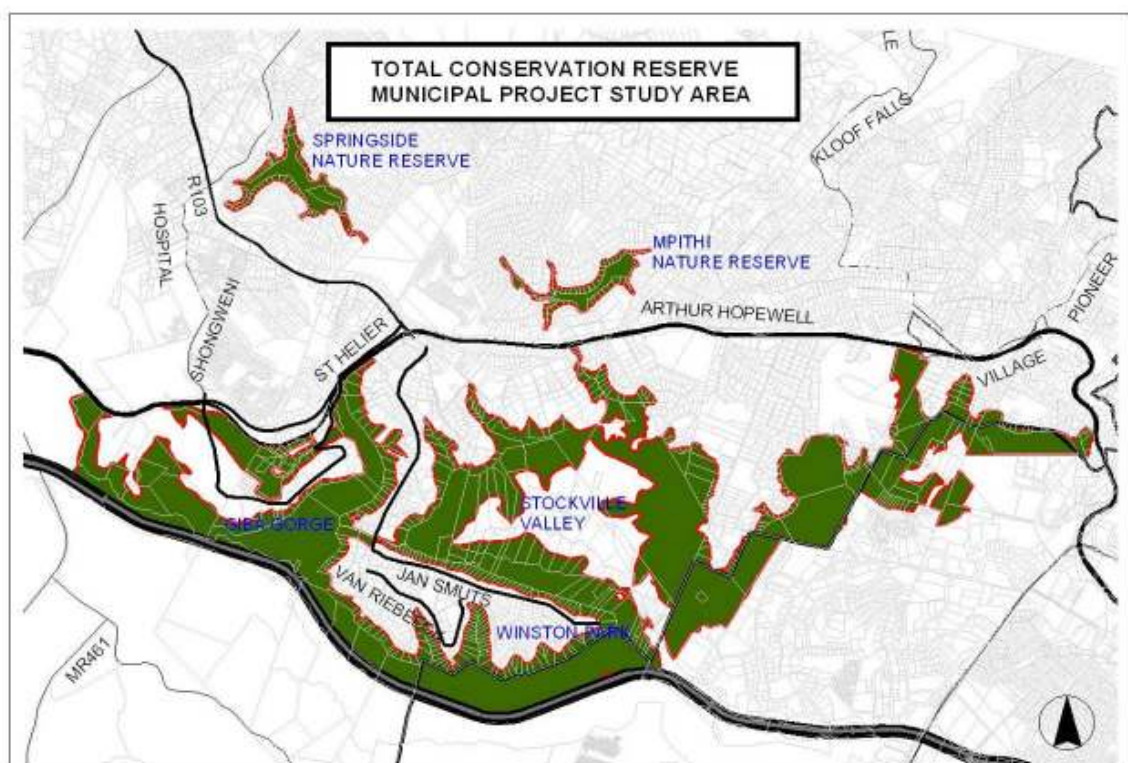


In the Western Suburbs this type of residential development could be attributed to many factors, one of which is that suburban areas are considered attractive locations for middle to high income people who are looking for safe environments to live in. The proliferation of gated estates in the Western Suburbs of the Outer West Region is an indication of this. Over the last five years there have been approximately 100 gated estates that have been developed in the western part of the Outer West which has yielded about 9000 new housing units. (Source eThekweni Municipality). These are found mostly in Hillcrest, Gillitts, Kloof, Waterfall. People in Winston Park whose sites are being rezoned to restrict development view this as ‘complete discrimination’ by the eThekweni Municipality.

#### 5.4 GIBA GORGE AND OTHER ENVIRONMENT ASSETS

The primary research for this project has focused on the Giba Gorge, however other environmental areas within the broader Hillcrest area including the Springside Nature Reserve, Mpithi Nature Reserve, and Stockville Valley will be explored in order to gain a fuller understanding of densification issues affecting the environmental conservation areas. Refer to Figure 13. The green indicates the extended environmental conservation reserve area.

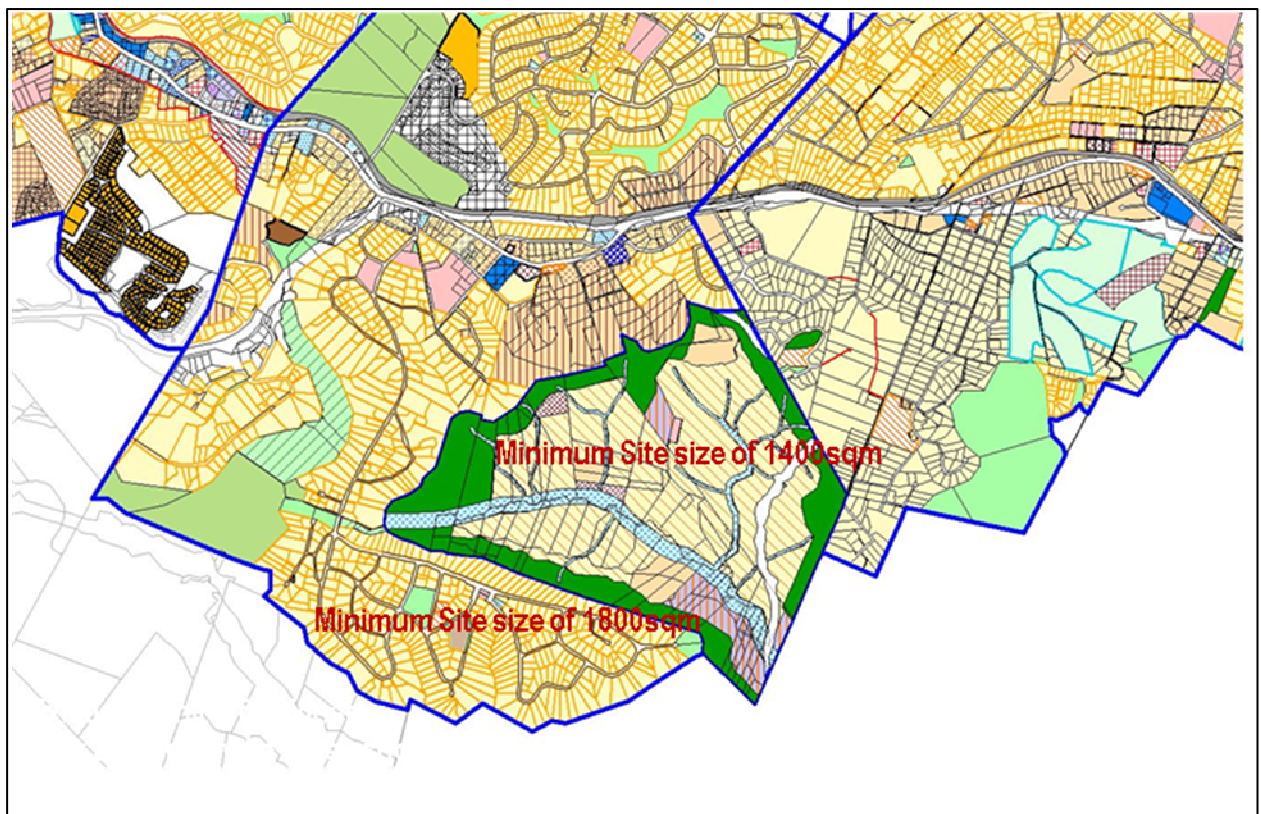
**FIGURE 13: MUNICIPAL PROJECT AREA** (Source eThekweni Municipality, Development Planning Department)



### 5.4.1 GIBA GORGE

The Giba Gorge is a deeply incised gorge in Winston Park near Hillcrest in the west of the eThekweni Municipal area. The gorge is part of the catchment of the Giba River and is flanked by sandstone cliffs and steep land supporting forests and grasslands. The eThekweni Municipality owns 45ha of land in the middle of the gorge which was purchased for eventual inclusion into the open space system.

Within this area there are about 330 residential sites bordering the open space area, which have different zoning designations. The predominant zoning is Special Residential 1800 which allows only residential developments with minimum site sizes of 1800sqm to be developed. Four sites have a public open space zoning. Refer to Figure 14 for the existing zoning and Figure 15 for the extended environmental conservation reserve highlighted in green with red dot boundary.



**FIGURE 14: EXISTING ZONING – GIBA GORGE, WINSTON PARK AND STOCKVILLE VALLEY SHOWING LIMITED CONSERVATION AREA (Source: eThekweni Municipality, mapped by the researcher)**

**FIGURE 15: WINSTON PARK** (Source: eThekweni Municipality, mapped by the researcher)



### **Lifestyle**

Winston Park has unique characteristics that offer people a quiet sub-urban lifestyle choice (See Figure 16). With the proliferation of new housing developments taking place in and around Winston Park, mostly in the form of gated communities, this area is now under pressure to change from a low density rural equestrian lifestyle to a medium density urban lifestyle.

***FIGURE 16: WINSTON PARK UNIQUE LIFESTYLE***



The change in residential density will impact on the strategic open space assets located here. Sites which are adjacent to the natural areas are mainly long and irregular in shape and largely have existing residential development on the flatter portions. Refer to Figure 17. The undeveloped portions are mostly steep and are partly covered by the officially acknowledged but non statutory DMOSS. A few sites have already been sub-divided or developed with multi-unit cluster housing as currently permitted by the Town Planning Scheme on the edge of the environmentally sensitive areas. Other threats to the natural system are the over-exploitation of medicinal plant species. EMD are investigating the possibility of establishing this area as a green special rating area.

**FIGURE 17: ELONGATED SITES WITH CONSERVATION RESERVE (Source: eThekweni Municipality, mapped by the researcher)**



## 5.4.2 SPRINGSIDE NATURE RESERVE

The Springside Nature Reserve is located within the Hillcrest Park area and surrounded by developed middle to high income residential developments. There are 82 sites adjacent to the nature reserve that poses a development challenge. These sites also have the SR1800 zoning and the conservation areas have a public open space designation. Currently all sites are large enough to be further sub-divided according to the existing SR1800 zoning. Should this happen then the nature reserve, which is comprised of coastal scarp forest, primary grasslands and riverine forest will be negatively impacted on. Higher density residential developments close to the nature reserve are outlined in orange. Refer to Figure 18, the blue outline indicates the some of the retail and commercial developments on Old Main Road.

**FIGURE 18: SPRINGSIDE NATURE RESERVE** Source: (eThekweni Municipality, mapped by the researcher)



### 5.4.3 MPHITI NATURE RESERVE

The Mpithi Nature Reserve is located within the Chelmsford area of the Gillitts district, north of the M13, and is also surrounded by middle-upper middle income owned residences. There are 72 sites adjacent to the nature reserve that pose a development challenge. The current zoning is similar to the above namely SR1800 and public open space. Currently all sites are large enough to be further sub-divided according to their existing SR1800 zoning which will negatively impact on this nature reserve. Refer to Figure 19, higher intensity residential development is outlined in orange.

**FIGURE 19: MPITHI NATURE RESERVE**



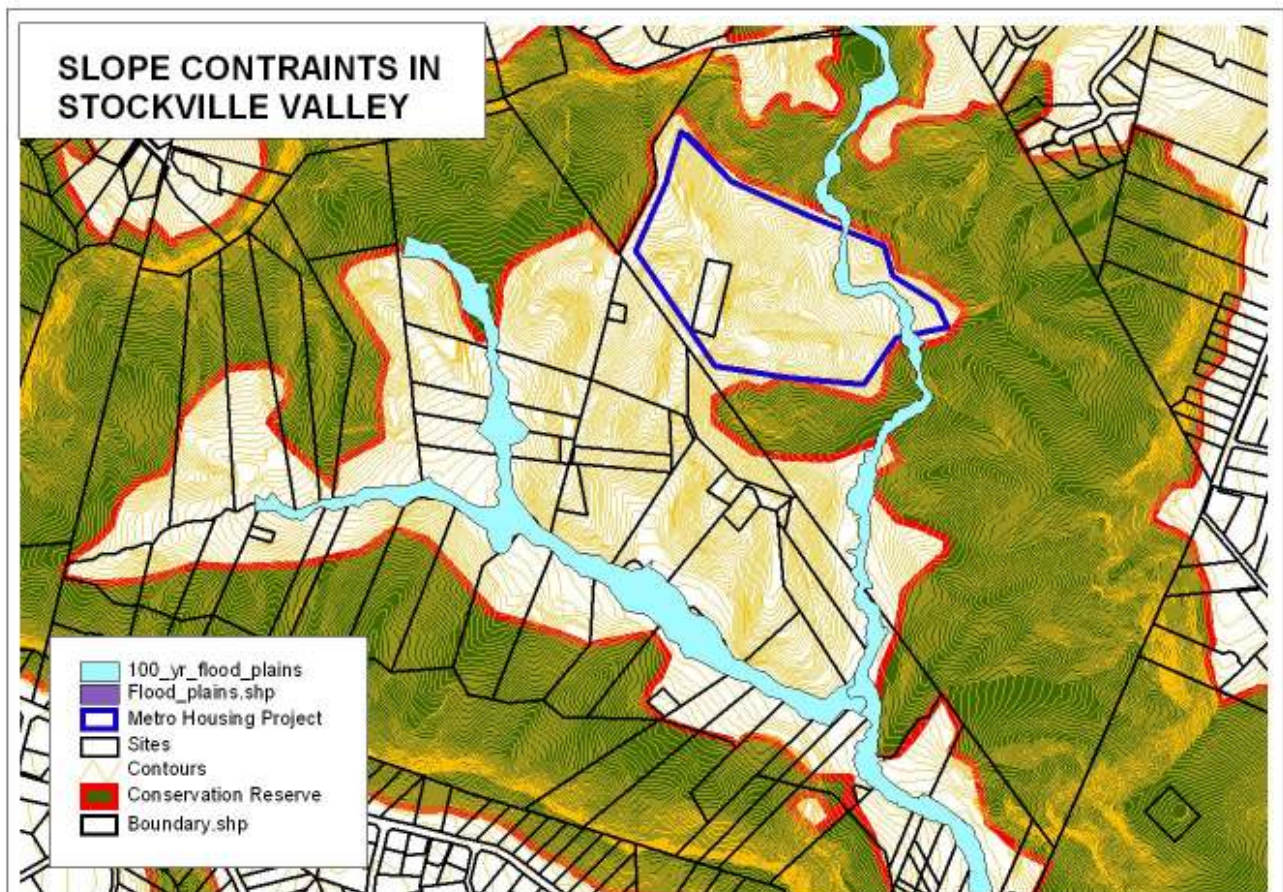
### 5.2.4 STOCKVILLE VALLEY

Stockville Valley borders the Gillitts area and is a predominantly low income area. Most of the sites are owned by Indian farmers and are used for market gardening. Stockville

originally had an agriculture zoning on 4 hectare sites. In 1999 a town planning scheme was produced in close collaboration with land owners, to allow sites to be sub-divided to pass onto family members for inheritance purposes. The current zonings include low impact and medium impact residential and mixed uses. A small edge on the top of the cliff was designated as an environmental management area.

Mr Naik's land has been informally settled and it appears that Mr Naik has been shack farming his land. Metro Housing Unit has identified this land for a housing project (Refer to Figure 20). The location of this housing project on steep land will have a negative impact on the environment. This project has raised much debate at the Municipality in terms of environmental protection versus an urgent social need and there has been much conflict generated. The proposed housing project also completely contradicts the principles of environmental conservation that is being advocated in this area by the Municipality. The Development and Planning Department has indicated non-support for the project due to its inappropriate location. The project is being politically driven.

**FIGURE 20: SLOPE CONSTRAINTS IN STOCKVILLE VALLEY (Source: eThekweni Municipality, mapped by the researcher)**



## **5.5 DENSIFICATION RELATED PROBLEMS**

According to the Giba Gorge Precinct Plan (FutureWork!,2005) the following problems arise from densification:

- Poor water quality due to cumulative pollution of water resources throughout the affected catchments
- High rates of soil erosion and siltation of rivers
- Increased flood peaks and stormwater runoff due to hard surfacing in urban areas and due to the reduction in plot size and increase in coverage.
- Increased runoff into streams and rivers with little or no space for mitigation in poorly located low cost housing projects. This can lead to flooding within other residential areas in the minor catchment area. Increased stormwater runoff from agriculture land due poor vegetative cover eg sugar cane
- Decreasing agricultural productivity, linked to rezoning of agricultural land or natural assets to allow more residential and other developments.
- Reduced biodiversity due to land conversion
- Loss of key biodiversity, recreation; education priority area, upstream valleys St. Hilliers Dam and Upper Giba Valley which need to maximize functionality for storm water attenuation, sediment regulation and water quality regulation.
- Land ownership scenarios, lot shapes threaten integrity of edge as gardens, buildings and sanitation encroaches towards the edge
- Threat to the integrity of the natural asset and its recreation value.
- Need for management investment into natural assets: alien plant control, soil erosion control, fire management

## **5.6 SUMMARY**

The above chapter provides evidence that the study area has important environmental value for the EMA that need to be protected. One can assume that rapid development in the Western Suburbs has encouraged residents to pursue development in Winston Park. Densification in suburban areas and inappropriately located housing projects without appropriate infrastructure causes significant negative impacts on the environment.

## **CHAPTER 6: RESIDENT AND STAKEHOLDER PERCEPTIONS**

This chapter will examine further the way in which the conflicts between environmental conservation and economic development have been played out in the Giba Gorge area. In particular it addresses the following question:

- What is the community's perception of environmental conservation and its importance in relation to the need for further sub-divisions?

The chapter will show that people who have chosen to live close to natural areas do not necessarily want to protect the environment if it impedes their right to develop on their site. It will also show that development rights in terms of the Consolidated Outer West Town Planning scheme allows people to believe that private property rights are more important than environmental conservation for the broader good. The chapter is based on primary research namely:

- Survey of Residents along streets
- Councillors and Ratepayers Meetings
- Winston Park and Stockville Public Meetings
- 160 responses received.

### **6.1 SURVEY OF RESIDENTS IN GIBA GORGE**

As mentioned in chapter one, questionnaires were administered to residents who reside adjacent to environmentally sensitive areas in Winston Park. Three streets were selected namely, St. Heliers Road, Van Riebeeck Avenue and Jan Smuts Avenue are selected because many applications for sub-divisions have been received for sites on these roads. Refer to Figure 3.

## **6.2 SAMPLE SURVEY RESULTS**

The results of the survey have been tabulated and the following findings are presented.

### **a) Length of Residence**

57% of the participants have resided in Winston Park for 10 years and longer. 27% of the participants have purchased sites in the area in the last five years. Whilst the trend is not very clear, there appears to be an indication that people have generally moved out of Winston Park. Given the change in character of the broader Winston Park area, this could be attributed to people relocating in search of other rural settings or due to people emigrating. Many houses along Jan Smuts Avenue have 'for sale' signs displayed.

### **b) Attraction of Winston Park**

Over 68% of the participants indicated that they live, or have purchased property in Winston Park due to it providing a rural country lifestyle. Half were also attracted to being close to natural assets, while 20% of the participants viewed their purchase as an economic investment and purchased due to proximity to services such as schools, shops etc.

### **c) Support for Conservation on Private Land**

61% of all participants felt that the environmental conservation area that existed on the private property should be preserved and protected. 11% were not in support of preserving the environment and 28% were uncertain.

### **d) Role of Conservation Area on Private Property**

When asked about the role the natural environment played on each property, most participants noted firstly that it provided great views, secondly it served as a sanctuary for birds and animals and thirdly it served as a recreation area for walking, hiking etc. That the conservation area provided environmental services such as water regulation, flood protection, soil erosion, were either not understood or was not a priority for the participants.

#### **e) Maintenance of the Conservation**

52% of participants indicated that they did maintain the conservation area. The issue that was most daunting for the 48% of the participants was the maintenance of the conservation areas and the removal alien vegetation. It appeared to be an endless task and people felt they were not trained on how to maintain the conservation area. Training on the planting of indigenous vegetation was also requested. Some participants were members of a Community Trust that was established to maintain the Giba Gorge.

#### **f) Future Intention to develop on the Conservation Area**

53% of the participants indicated that they had no intention to develop on the conservation area, 21% clearly indicated that they intended to develop and 26% indicated that they were not sure about the future intentions to develop.

#### **g) Public Expectations**

68% of the participants expected a rates reduction for the conservation area that they could not develop, 47% felt that the Municipality should acquire the conservation area and pay compensation for the land, 26% felt that the Municipality should fence and maintain the conservation area to make it more secure. Only one participant expected more development rights on the developable part of the property.

### **6.3 ISSUES OF CONCERN**

One of the main concerns that emanated out of the survey was financial loss due to loss of land to conservation. Residents are unwilling to protect the environment without receiving some form of financial gain, either through a rates rebate or through compensation. There is economic benefit associated with private property and development rights which enable people to further develop on their sites. When development associated with economic gain is restricted, conflicts do arise.

The challenge in resolving the conflicts is further complicated by the large extent of development that already has occurred in the broader area. Residents believe that there will be more impacts on the environment from other developments along Old Main Road, rather than from the residential sub-divisions in Giba Gorge area.

The residents are concerned about the lack of conservation management by the Municipality. Conservation Management was costly and thus far the community had been managing the conservation areas on respective properties. The Municipality's intention to 'sterilise' large tracks of land for conservation, without a conservation management plan in place was unacceptable. Associated with conservation management was the need for more education on the methods for the removal of alien invasive and the planting of indigenous vegetation.

Another concern was that the Municipality needed to make the conservation areas safe and secure for residents and people using it for recreation purposes, by keeping squatters out. It was felt that squatter removal will also assist with reducing veld fires. Linked to this was the concern that the extended conservation area, if not managed and patrolled would result in squatter settlements. Residents were very concerned about how their individual property and security would be ensured.

The above show that communities are supportive of environmental conservation as long as it does not affect their rights to develop or use the conservation area as they choose. Large properties in Winston Park were essentially bought as future investments. The intention was that these properties were to be later subdivided to allow one of more family members to reside on the property. The influence of the large scale developments in the broader Hillcrest has no doubt influenced communities who believe that they that should be allowed to develop as well. It appears that the economic benefit associated with residential sub-divisions is an important focus for residents and for some it is more important than environmental conservation.

#### **6.4 ASSESSMENT OF THE MUNICIPAL PROJECT GIBA GORGE PRECINCT PLAN, 2005**

The Municipality's intention to rezone the broader Winston Park area emanated out of research that was done in 2005. The research was useful in highlighting the importance of conservation in the area and had attempted to provide various management options and scenarios. The plan could not be implemented for a number of reasons, the main reason being the lack of public involvement in its formulation. It therefore did not get Council approval.

The lesson from this is that public consultation is essential, and if it is lacking it has the ability to halt a process.

In attempting to resolve the issue of lack of community participation the Municipality, on taking the project forward, embarked on a public participation process. In order to approach the public, there needed to be some firm proposals that could be discussed. Through various analysis, discussion and debate, it was agreed by the core Municipal planning team that land use intervention that was required for Giba Gorge, Mpithi and Springside Nature Reserves was to rezone the adjacent properties to Special Residential 3600 with a split zoning of environmental conservation reserve. This environmental zoning would replace the existing public open space zoning and special residential 1800 zoning. The intention to increase the minimum site size to 3600sqm was to reduce the number of sites that would qualify for further subdivisions thereby reducing the development impact.

In Stockville Valley the intention was to retain the minimum site size of 1400sqm and apply the split zoning of environmental conservation reserve. The intention to maintain the Special Residential 1400 zoning was based the fact that Stockville Valley could connect to the water-borne sewerage as the nearest connection point was at the neighbouring Mahogany Ridge Industrial area. The current mixed use zoning was to be rezoned to residential.

The following sections identify the key issues raised at the public meetings which clearly indicate that there is conflict between economic development and environmental conservation that is going to be very difficult for the Municipality to resolve. The issues were assessed in terms of concerns for economic development and concerns for environmental conservation.

## **6.5 MEETING WITH COUNCILLORS AND RATEPAYERS ASSOCIATION**

The public meetings that were held as part of the Municipal Planning project were minuted by the core planning team, which the researcher was part of. The information was analysed in terms of picking up the key issues that related to public concerns, land use planning and environmental management/conservation. The public first meeting was with some of the Councillors and members of the Ratepayers Association of the affected area. The Councillors from the Western Suburbs were supportive of the project to ensure environmental conservation in the area. The extension of the environmental conservation reserve was

welcomed by the Winston Park Ratepayer Association as well. The concern about the lack of conservation management by the municipality was raised. The Councillors were genuinely concerned that the impact of rapid development in the broader Hillcrest area was transforming the area and that rural low density lifestyle was being eroded. More interventions were required to protect the current lifestyle.

In terms of financial loss, a key concern was that there was no firm proposal for compensation for land affected by the conservation reserve. There was also concern that the residents of Winston Park had recently received property rates hikes as part of the Municipality market related revaluation. It was therefore no longer financially viable for property owners to retain large properties.

The Stockville Ratepayers were dissatisfied with the rezoning proposal as much of the farming land in Stockville Valley was now been incorporated into the conservation reserve. Most of this land was very steep and difficult to develop, but this point seemed unimportant to the ratepayer members. The Municipality was requested to provide options for each Stockville landowners for future development on their land.

Emanating out of the above meeting it was clear that environmental conservation by itself and the value it provides, was not likely to be supported if it was not accompanied by some sort of financial remuneration. This first meeting was an indication that the Municipality was going to be expected to motivate, justify, and provide evidence on the importance of the environment.

## **6.6 PUBLIC MEETING: WINSTON PARK**

The public meeting was held a week after the meeting with the Councillors and was very well attended by about 200 residents. There was strong objection by the public to the proposal to rezone. The issues have been assessed in terms of public process, environmental conservation concerns and economic development concerns.

### **a) Environmental Conservation**

In terms of environmental conservation the following issues were raised

Residents were currently maintaining the conservation area without assistance from the Municipality. This however was not the case on all sites as some residents had already subdivided and transformed the conservation area. Most residents indicated that it was the Municipality's responsibility to maintain the conservation area, which it was not doing. Residents were anxious that with the extension of the conservation reserve the Municipality would fence off their land and create a nature reserve. This would allow the general public onto the land would affect residents sense of security. Whilst environmental conservation was good, it should not be restricted to Giba Gorge and applied to other areas in the eThekweni Municipal area. Residents viewed Winston Park and Stockville as being targeted.

The proposed housing project on Mr Naik's land was viewed by the Winston Park residents as a 'complete contradiction' to what the conservation project was trying to achieve, and that it would distort the relevance for the project. Residents viewed this project as discrimination in Municipal policy. Winston Park and Stockville residents did want to be located close to low cost housing for security reasons. The residents were very sceptical about the Municipality's position on this issue.

#### **b) Economic Development**

In terms of economic development residents felt that if development was allowed in the Hillcrest Corridor then Winston Park should be allowed to have residential densification as well. The fact that residents here were located adjacent to key environmental assets which was different to other parts of the Outer West seemed irrelevant. Densification would entail the use of septic tanks and there was scepticism expressed on the negative effects that septic tanks and its evapo-transpiration areas were having on the conservation area.

Residents felt that their property rights were being unfairly reduced. Residents who had reached retirement age now wanted to sub-divide large plots for financial gain, while others were concerned about the high property rates that they were paying and whether there would be rates reduction accompanying the extension of the conservation reserve. Some residents suggested that the Municipality acquires the conservation area at market related prices. This was despite the fact that these areas were steep and undevelopable. There was further anxiety expressed on the Municipality's intention to apply a special rating tax in the area for environmental conservation.

### **c) Public Process**

The general feeling was the public process that the Municipality adopted was flawed and non-transparent. The Councillor, who did not attend the previous Councillors meeting, berated the Council officials for not being transparent despite the fact that letters and adverts had been sent informing people of the proposed project. In hindsight, the researcher is aware that the Land Use Management Branch's resistance to the project from inception did contribute the inefficient handling of due processes.

## **6.7 PUBLIC MEETING: STOCKVILLE**

The initial Stockville Meeting with land owners was invaded by informal settlers whom the Councillor invited to the meeting. The Councillor called for the meeting to be cancelled. The Environmental Management Department thereafter met separately with the Councillor and the Metro Housing Unit. At this meeting it was decided to exclude Mr Naik's land from the rezoning process as the political drive for the project was not going to be halted by a mere conservation project. A further meeting with Stockville landowners was held on 18 November 2008. The issues raised at the meeting are discussed below.

### **a) Environmental Conservation**

The exclusion of Mr Naik's land was seen as unfair to other residents and would completely undermine the intention by the Municipality for environmental conservation. Residents wanted the conservation area to be substantially reduced as large parts of their sites were included into the conservation reserve. The residents were concerned that the Municipality was sterilising large parts of land for environmental conservation without a plan on how it would be managed. It appeared to the residents that the Municipality did not trust the Stockville residents to take care of the conservation area that belonged to them.

### **b) Economic Development**

Large parts of farming land that was used as a livelihood was now included into the conservation reserve which was unacceptable. The Municipality should expropriate the land and justly pay people for their land. The Municipality's non-commitment to compensation was unacceptable. The potential rates reduction that would accompany the rezoning was viewed as insufficient. It was strongly felt that the Municipality was strong on environmental conservation but was providing no matching solutions for landowners in terms of more

development rights on the developable part of the land. In Stockville this would be difficult as the bottom of the valley is a flood plain.

**c) Public Process**

Despite this being the fourth engagement with the public, and there being many advertisements and public notices on the rezoning, the general feeling was that the public process was flawed and non-transparent. The residents and more especially the Councillors felt that the Municipality should engage individually with every resident and find a solution for each land owner. From this meeting it appeared that the Municipality was at the mercy of land owners to try and protect the environment. Development rights appeared to be the main objective in resident's minds.

**6.8 ASSESSMENT OF RESPONSES RECEIVED**

Subsequent to the public meetings there have been 160 responses from the public on the proposed rezoning. (See Annexure 2). Twenty two of the responses have been in support of the conservation reserve. Many of the Winston Park residents did seek legal advice and had submitted their objections via attorneys and other legal advisers. The responses were analysed by the researcher and the core Municipal team and the following were the main concerns raised:

- a) Financial loss**
- b) Loss of sub-division potential**
- c) Loss of development potential**

The main concern for most of the residents was the financial loss. This could be due to loss of further sub-division on the land or through loss of development potential, which can be achieved through the current zoning. Residents expected more development rights on the developable portions of their land. The concern is that septic tanks requires an evapo-transpiration area and therefore stipulates a minimum site size of 1800sqm. Residents still wanted to have their evapo-transpiration areas in the conservation area, despite this being an environmentally unfriendly practice. Curbing of densities was also viewed as contrary to National policy for densification.

#### **d) Lack of Compensation**

The biggest concern for almost all residents was the lack of compensation for land proposed as environmental conservation reserve. Most residents were willing to discuss compensation with the Municipality especially if it was accompanied by a rates deduction. The Municipality's non-assurance of compensation was viewed as illegal and was equated to indirect expropriation of their land. The Municipality currently does not have the finances to compensate land owners for the land proposed as conservation reserve, however a zero rating can be applied to the conservation area. This means that the residents will not have to pay property rates on that part of their land. A complication with this option is that if the land is too steep and non-developable, then it does not warrant a rates rebate as steep land is supposed to be excluded in the rating process.

#### **e) Lack of conservation Management**

#### **f) Responsibility for the Conservation Reserve**

A major issue for residents was the lack of conservation management by the Municipality in Giba Gorge and in other areas in the Municipality as well. The residents felt that the Municipality was currently providing no such service and therefore should not be attempting to extend the conservation area which it cannot manage. Furthermore, they felt that the future responsibility for conservation reserve was with the Municipality. If the Municipality expected residents to manage the conservation area then there should be financial support to do this. The Environmental Management Department recognises that conservation management is a huge problem, but it does not have the resources to handle this function at present. Solutions in this regard need to be found.

#### **g) Inadequate Public Process**

The process for the rezoning was viewed as legally challenged as no written notices were received by residents. Press adverts were viewed as inadequate as individual properties were not identified. The Municipality was accused of having pre-judged an approval in principle. The Land Use Management Branch which is responsible for the rezoning process was very reluctant to be involved in the process, and it has been a struggle to keep them on board.

There is no doubt that lack of commitment by Municipal officials did undermine this particular project.

## **6.9 SUMMARY**

The above case study shows that there are definite challenges facing environmental conservation. Despite sustainable development as a concept being prevalent for decades, the implementation of sustainable development is still very vague in the minds of people and political leaders. Economic development and economic benefits associated with land development is still the dominant sector when compared to environmental sustainability. The two sectors are still very much at odds with each other.

There are perceived development rights that land owners believe they are entitled to. Outdated Town Planning Schemes that have not responded to sustainable development challenges should not have statutory power to the extent that it currently has. Clearly mechanisms need to be put into place that can override town planning schemes that are in conflict with current research, policy and strategies.

Urgent education on environmental conservation is required for the public, municipal departments and politicians. Metro Housing policy and imperatives must be aligned with the carrying capacity of the environment to ensure that residential developments are sustainable and based on the carrying capacity of the environmental resource.

Land is a sensitive issue that requires sensitive solutions. If the Municipality approaches land issues in an insensitive manner it would yield negative results. However, the impacts of environmental degradation in the form of climate change are evident. The environment cannot be exploited any further and inappropriate densification close to environmental areas cannot continue. Landowners who have key environmental assets on their properties have a responsibility to conserve the environment. Landowners must therefore acknowledge its importance beyond the point of what it can provide for them in terms of financial gain.

## **CHAPTER 7: CONCLUSION AND RECOMMENDATIONS**

The aim of this chapter is to draw on the key points mentioned earlier in an attempt to highlight the tensions between economic development and environmental conservation, and the role of land use planning in mediating these tensions in the quest for sustainable development. The overall objective of the study was to gain an understanding of how tensions have been played out between the loss of economic benefit in the form of residential densification, and concerns for environmental conservation in the Giba Gorge area. To meet this objective required an understanding of the following:

- The challenges facing the eThekweni Municipality in addressing sustainable residential development and how these can be resolved;
- The value of the environmental assets in the Giba Gorge and how these can be protected;
- Giba Gorge resident's perceptions of environmental conservation and economic development in the form of densification and interventions to bridge the gap.

### **7.1 SUSTAINABLE DEVELOPMENT**

The conceptual framework provided evidence that sustainable development as a concept has been embraced at broad policy level and continues to be a central deliverable of modern day planning. However, there has not been much evidence to show that sustainable development can be easily implemented. This is due to the fact that policies have embraced the concept without really understanding what it means. It is accepted as rhetoric in policies which provide few or no guidelines for its implementation. Research in the UK shows it is unrealistic to expect land use planning alone to achieve sustainable development, due to different sector objectives that need to be co-ordinated. A major criticism of the eThekweni Municipality's IDP is its inability to integrate sectors. Planning cannot achieve co-ordination if high level policies and legislation do not achieve integration first. When sector objectives are so different, all land use planning can do is to incorporate various objectives together. When conflicts arise, the value of land use planning as the co-ordinator of social, economic and environmental preservation gets reduced and weakened. A key recommendation for resolving conflicts between economic development and environmental conservation requires that the IDP become more useful in guiding implementation. Whilst policy may be preaching sustainable development, programmes and projects must also be aligned and not be sector

focused. Sectors must begin to interpret sustainable development in the same way. This requires regular meetings, co-operation and debates between sectors to ensure alignment. This would enable land use planning to integrate economic, social and environmental concerns with the expectation that where conflicts will arise that sectors will understand the planning rationale for them. At a local level the IDP clearly advocates a sustainable development path, where city restructuring to address past imbalances promotes economic and social development is based on the capacity of the natural resource base. There is much pressure for Plan 1 of the IDP to deliver this. Perhaps this is where change should begin. Whilst sustainable development cuts across sectors there is a need for stronger institutional focus on sustainable development.

## **7.2 VALUE OF THE NATURAL ENVIRONMENT**

In terms of policy development there has been much evidence to show that the environment has a value and provides services that are essential for the overall social and economic well being of people. There has been very recent environmental legislation created to ensure that the environment is protected. It is also evident that land use planning legislation has remained quite static and old legislation such as the Development Facilitation Act has undermined sustainable planning decisions. Given the high rates of unemployment in the Municipal region, economic policy is heavily focused on delivery aimed at ensuring that unemployment is reduced. In order for the achievement of sustainable development, national and provincial legislation needs to take greater cognisance of economic, social and environmental sectors simultaneously. A key recommendation is that the goods and services approach provides evidence to show that the natural environment has a value that is irreplaceable or very costly to replace. If this is endorsed by the economic and social sectors, as well as the public and the politicians, the goods and service framework could begin to resolve existing conflicts.

## **7.3 DENSIFICATION**

Densification poses challenges for the eThekweni Municipality. The absence of a densification policy does complicate matters. Projects to ensure alignment between the environment and residential development such as the proposed rezoning are essential. Co-operation from land owners in the Outer West is critical for success of environmental conservation. The public in general are more concerned with financial loss due to loss of development rights. The recommendation is that the Municipality should explore the transfer

of development rights option to resolve the problem in the Giba Gorge. For example, if developers want to densify areas in the western region of the Municipality in accordance with planning, then developers should buy development rights from land owners in Winston Park. The Municipality does not have funds to pay market related compensation, however the private sector could contribute toward conserving the environment in this way. Whilst there is no policy in place to direct this, the Municipality should investigate this option.

#### **7.4 PUBLIC PERCEPTIONS**

Clearly there is a need for a change in attitude of the public and other stakeholders with regard to environmental conservation. Organised communities, such as in Winston Park, have access to legal advice to defend their rights, whereas poor communities do not have such access and rely on the municipality to find the best solution. Despite much resistance to the proposed rezoning, the residents of Winston Park have located here due to lifestyle choice. As such communities become more environmentally aware, there will be increased pressure to protect, conserve and manage environmental assets across all sectors. This will result in the tightening of restrictions relating to the development of areas that either contains important environmental service generating open spaces and assets, or that are adjacent to such areas. It is therefore important for more education on environmental conservation. Development rights cannot and should not be allowed to compromise environmental protection.

It is not only the assets within the open space footprint that are important, the functioning of the system is intrinsically linked to adjacent land uses to the open space assets. Political support for environmental conservation is essential. The case study clearly indicates that currently there is very little support for this in the study area. Whilst natural resource base provide a survival cushion for lower income communities as they are a source of survival products i.e. food, firewood, building material etc, the broader significance of the environment must be appreciated by politicians.

#### **7.5 LAND USE MANAGEMENT**

The updated DMOSS and systematic conservation plan will place pressure on the Consolidated Outer West Town Planning Scheme to respond to environmental imperatives in order to limit development impacts. As more environmental research becomes available,

more areas will be identified for environmental conservation. A robust land use management system would need to be developed. In the absence of this, the private sector will continue to target pieces of land that are cheaper to acquire and development will continue in terms of the existing zoning in the Consolidated Outer West Town Planning Scheme.

Recommendations are that the Framework Planning Branch must co-operate and work better with the LUMS Branch to ensure that there is understanding of the strategic plans. More training on the interpretation of strategic plans is required. Furthermore SDPs, LAPs and Precinct Plans must refrain from using planning jargon that other sectors, the public and business do not understand. This will ensure the easier translation of plans into town planning schemes. Non co-operation and territorial protection in the Municipality is still a huge problem.

All sectors rely on land use planning and therefore its role in sustainable development must be harnessed and improved. The value of land use planning will be evident once sectors start to work together. Land Use planning is a real need and a priority for sustainable development. During times of rapid development pressure its usefulness begins to be questioned. A well developed land use management system is an important framework for instituting appropriate rules. It can play an important role in site protection. In the eThekweni Municipality it can be the platform to implement environmental conservation measures thereby reducing conflicts that exist between economic development and environmental conservation. In conclusion, as land is a scarce resource, densification in high valued environmental areas which have negative impacts on the environment is unacceptable. Re-development and densification in the central core of the eThekweni Municipal area is essential for sustainable development.

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## **RESEARCH PARTICIPANTS:**

### **OFFICIALS INTERVIEWED:**

Mr Ajiv Maharaj (Manager: Local Economic Development with the Economic Development Unit)

Mr Alistair McInnes (Ecologist/Conservation Biologist with Environmental Management Department)

Mr Gavin Benjamin: Deputy Head: Development Planning.

### **INFORMAL DISCUSSIONS:**

Mr Richard Boon (Manager: Bio-diversity Planning)

Ms Penny Croucamp (Manager: Environmental Management)

Mr John Forbes (Project Executive)

Ms Deshnee Soodeo: Senior Planner,

Ms Lekha Allopi: Manager (Land Use Management)

Mr Rayven Moodly: (Regional Co-ordinator: Outer West)

Ms Vicky Sim: Senior Planner

Mr Sogen Moodely: Senior Planner (IDP).

### **QUESTIONNAIRES PARTICIPANTS**

Stockville Ratepayers and residents

Winston Park residents.

## ANNEXURE 1

### WINSTON PARK RESIDENTS SURVEY

#### CONTACT DETAILS (OPTIONAL)

Name	
Address	
Telephone	
Email address	

Please fill in the required information or tick the box that most represents your answer.

#### 1. How did you acquire your property?

a) purchase	<input type="checkbox"/>	d) other (please specify)
b) rent	<input type="checkbox"/>	
c) inherited	<input type="checkbox"/>	

#### 2. How long have you been residing on this property?

Number of Years/months	<input type="text"/>
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#### 3. What attracted you to settle in this area?

a) rural country lifestyle	<input type="checkbox"/>	d) other (please specify)
b) close to natural environment	<input type="checkbox"/>	
c) retirement investment	<input type="checkbox"/>	

4. Do you agree that the conservation area (as defined by the eThekweni Municipality ) that forms part of your property should be preserved?

a) Yes		b) No		c) not sure	
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5. What function does the conservation area serve on your property currently? Number these in order of importance

a) Planting and farming opportunity		f) other (please specify)
b) Provides views and adds attractiveness		
c) Sanctuary for birds and animals		
d) environmental service such as water regulation, flood protection, soil erosion protection.		
e) Contain important and rare vegetation		
f) Recreation such as walking trails		
g) Already developed for residential purposes		

6. Do you currently maintain the conservation area?

a) No	
b) Yes (Explain how)	

7. Do you have any intention to develop on the conservation reserve?

a) yes	
b) no	
c) not sure	

**8) Should the eThekweni Municipality impose restrictions on your property regarding preserving conservation areas, what do you expect from the Municipality?**

a) compensation for loss of development right		e) other (please specify)
b) reduction in rates		
c) Council acquires the land and compensates for the land		
d) more development rights on areas outside of the conservation reserve		

**9) What suggestions do you have regarding environmental conservation and development in the broader Winston Park, St Heliers area.**

1)
2)
3)
4)
5)

**RESPONSES TO THE PROPOSED REZONING**

**ANNEXURE 2**

<b>Ref no.</b>	<b>Street no.</b>	<b>Street</b>	<b>Objection/ representation</b>	<b>Comment</b>
1	63	Montgomery Drive	Encroached up to existing house, reduced property by half, building plan amendments rejected unless NUCS registered, infringed constitutional rights	
2			Loss of development potential, compensation required	
3	33	Springside Rd	Financial loss, no compensation, unclear proposal, other reasons responsible degradation	
4	144	Jan Smuts Ave	Financial loss, loss of development potential, no compensation, lack of conservation management, excessive rates	standard letter
5			Financial loss, loss of development potential, no compensation, lack of conservation management, excessive rates	standard letter, no address or property description given
6	66	Jan Smuts Ave	Financial loss, loss of development potential, no compensation, lack of conservation management, excessive rates	standard letter
7	66A	Jan Smuts Ave	Financial loss, loss of development potential, no compensation, lack of conservation management, excessive rates	standard letter
8			Strongly supported	support for rezoning and suggest extension to M13
9	98	Jan Smuts Ave	Financial loss, loss of development potential, no compensation, lack of conservation management, excessive rates	standard letter
10	104	Jan Smuts Ave	Financial loss, loss of development potential, no compensation, lack of conservation management, excessive rates	standard letter
11	92	Jan Smuts Ave	Financial loss, loss of development potential, no compensation, lack of conservation management, excessive rates	standard letter
12	70B	Jan Smuts Ave	Financial loss, loss of development potential, no compensation, lack of conservation management, excessive rates	standard letter
13	70A	Jan Smuts Ave	Financial loss, loss of development potential, no compensation, lack of conservation management, excessive rates	standard letter
14	68A	Jan Smuts Ave	Financial loss, loss of development potential, no compensation, lack of conservation management, excessive rates	standard letter
15	134	Jan Smuts Ave	Financial loss, loss of development potential, no compensation, lack of conservation management, excessive rates	standard letter
16	132	Jan Smuts Ave	Financial loss, loss of development potential, no compensation, lack of conservation management	
17	72	Jan Smuts Ave	Financial loss, loss of development potential, no compensation, lack of conservation management, excessive rates	standard letter
18			Financial loss, loss of development potential, no compensation, lack of conservation management, excessive rates	standard letter
19	110	Jan Smuts Ave	Financial loss, loss of development potential, no compensation, lack of conservation management, excessive rates	standard letter
20	116	Jan Smuts Ave	Financial loss, loss of development potential, no compensation, lack of conservation management, excessive rates	standard letter
21	11 & 13	Churchill Rd	Financial loss, loss of development potential, no compensation, lack of conservation management, excessive rates	standard letter
22	43	Van Riebeck Rd	Support in principle, financial loss, compensation needed, excessive rates.	
23	68	Jan Smuts Ave	Financial loss, loss of development potential, no compensation, lack of conservation management, excessive rates	standard letter
24				
25	96	Jan Smuts Ave	Financial loss, loss of development potential, no compensation, lack of conservation management, excessive rates, safety issues regarding trails in nature reserves.	standard letter
26	122	Jan Smuts Ave	Financial loss, loss of development potential, no compensation, lack of conservation management, excessive rates	standard letter

27	7	Churchill Rd	Financial loss, loss of development potential, no compensation	
28	23	Churchill Rd	Financial loss, loss of development potential, no compensation, lack of conservation management, excessive rates	standard letter
29			Financial loss, loss of development potential, no compensation, lack of conservation management, excessive rates	standard letter
29			Financial loss, loss of development potential, no compensation, lack of conservation management, excessive rates	standard letter
30			Financial loss, loss of development potential, no compensation, lack of conservation management, excessive rates	standard letter
31			Financial loss, loss of development potential, no compensation, lack of conservation management, excessive rates	standard letter
32	62	Jan Smuts Ave	Financial loss, loss of development potential, no compensation, lack of conservation management, excessive rates	standard letter
33	72A	Jan Smuts Ave	Financial loss, loss of development potential, no compensation, lack of conservation management, excessive rates	standard letter
34	63	Montgomery Drive	Objects to arbitrary line, transformed area, unable to develop second dwelling, willing to negotiate extent of conservation reserve line, process flawed, applied for removal restrictive conditions previously	Examine detail regarding line on gis
35	13	Forest View Drive		site unaffected by proposal
36	56	Jan Smuts Ave	Financial loss, loss of development potential, no compensation, lack of conservation management, excessive rates	standard letter
37	17	Churchill Rd	Financial loss, loss of development potential, no compensation, lack of conservation management, excessive rates, line needs to be re-assessed.	standard letter, examine detail regarding line on gis
38	60	Jan Smuts Ave	Financial loss, loss of development potential, no compensation, lack of conservation management, excessive rates	standard letter
39	29	Springside Rd		no details given
40			Inappropriate notice, requires opportunity to view and lodge objections	subsequent follow up enquiries
41	11	St Helier Rd	expropriation of conservation zone, process unconstitutional and unlawful (not notified, not on val roll), loss of development potential	registered as 9 St Helier Rd on parcels.shp
42	7A	Mountbatten Place	excessive rates, loss of subdivision potential.	
43	22	Edward Dr	Loss of development potential	
44	45	Springside Rd	Financial loss, loss of development potential, compensation required, excessive rates	
45	34	Blue Gum Crescent	Financial loss, no rates reduction promised, lack of conservation management, main road 360, expropriation of conservation zone	
46	30	Montgomery Drive	proximity of line to buildings & vegetable patch, zero rates on conservation zone, support subject to above comments	
47	7	Churchill Rd	Ditto – legal letter	Common objection, attorneys
47	9	Churchill Rd	Ditto – legal letter	Common objection, attorneys
47	11	Churchill Rd	Ditto – legal letter	Common objection, attorneys
47	17	Churchill Rd	Ditto – legal letter	Common objection, attorneys
47	56	Jan Smuts Ave	ditto– legal letter	Common objection, attorneys
47	64	Jan Smuts Ave	ditto– legal letter	Common objection, attorneys
47	23A	Churchill Rd	ditto– legal letter	Common objection, attorneys
47	9A	Churchill Rd	ditto– legal letter	Common objection, attorneys

47			process falls short of legal requirements, no written notices received, press advertisement 30May inadequate: properties not identified in advertisement, precise affected portions not identified, councilors earlier 'pre-judged' approval in principal, rezoning done on blanket basis, indirect expropriation without compensation, reduced development potential, discrimination in plot size, futerworks study not made available to public, need and desirability of proposal not demonstrated, retention of ownership and/or management not clear, road infrastructure capacity not proven to warrant need for de-zoning, curbing housing densification contrary to national policy, compensation and rates relief, enhanced rights desirable on developable portion, individual assessment with property owners desirable	
47			ditto	Common objection, attorneys
47			ditto	Common objection, attorneys
47			ditto	Common objection, attorneys
48			process falls short of legal requirements, no written notices received, press advertisement 30May inadequate: properties not identified in advertisement, precise affected portions not identified, councilors earlier 'pre-judged' approval in principal, rezoning done on blanket basis, indirect expropriation without compensation, reduced development potential, discrimination in plot size, futerworks study not made available to public, need and desirability of proposal not demonstrated, retention of ownership and/or management not clear, road infrastructure capacity not proven to warrant need for de-zoning, curbing housing densification contrary to national policy, compensation and rates relief, enhanced rights desirable on developable portion, individual assessment with property owners desirable, conservation line through garden which precludes development of pool	Exmaine detail regarding line on gis
49			process falls short of legal requirements, no written notices received, press advertisement 30May inadequate: properties not identified in advertisement, precise affected portions not identified, councilors earlier 'pre-judged' approval in principal, rezoning done on blanket basis, indirect expropriation without compensation, reduced development potential, discrimination in plot size, futerworks study not made available to public, need and desirability of proposal not demonstrated, retention of ownership and/or management not clear, road infrastructure capacity not proven to warrant need for de-zoning, curbing housing densification contrary to national policy, compensation and rates relief, enhanced rights desirable on developable portion, individual assessment with property owners desirable, approved development plan for multi-units including conservation servitude	Exmaine detail regarding line on gis, refer to Enviro report: G Nicholson
50			process falls short of legal requirements, no written notices received, press advertisement 30May inadequate: properties not identified in advertisement, precise affected portions not identified, councilors earlier 'pre-judged' approval in principal, rezoning done on blanket basis, indirect expropriation without compensation, reduced development potential, discrimination in plot size, futerworks study not made available to public, need and desirability of proposal not demonstrated, retention of ownership and/or management not clear, road infrastructure capacity not proven to warrant need for de-zoning, curbing housing densification contrary to national policy, compensation and rates relief, enhanced rights desirable on developable portion, individual assessment with property owners desirable	

50			process falls short of legal requirements, no written notices received, press advertisement 30May inadequate: properties not identified in advertisement, precise affected portions not identified, councilors earlier 'pre-judged' approval in principal, rezoning done on blanket basis, indirect expropriation without compensation, reduced development potential, discrimination in plot size, futerworks study not made available to public, need and desirability of proposal not demonstrated, retention of ownership and/or management not clear, road infrastructure capacity not proven to warrant need for de-zoning, curbing housing densification contrary to national policy, compensation and rates relief, enhanced rights desirable on developable portion, individual assessment with property owners desirable	
51			process falls short of legal requirements, no written notices received, press advertisement 30May inadequate: properties not identified in advertisement, precise affected portions not identified, councilors earlier 'pre-judged' approval in principal, rezoning done on blanket basis, indirect expropriation without compensation, reduced development potential, discrimination in plot size, futerworks study not made available to public, need and desirability of proposal not demonstrated, retention of ownership and/or management not clear, road infrastructure capacity not proven to warrant need for de-zoning, curbing housing densification contrary to national policy, compensation and rates relief, enhanced rights desirable on developable portion, individual assessment with property owners desirable	Not included in rezoning proposal, but forms part of possible phase 2.
52	62	St Helier Rd	section 25 of constitution, indirect expropriation without compensation, will withdraw objection if full development potential is exercisable on reduced portion	
53			process falls short of legal requirements, no written notices received, press advertisement 30May inadequate: properties not identified in advertisement, precise affected portions not identified, councilors earlier 'pre-judged' approval in principal, rezoning done on blanket basis, indirect expropriation without compensation, reduced development potential, discrimination in plot size, futerworks study not made available to public, need and desirability of proposal not demonstrated, retention of ownership and/or management not clear, road infrastructure capacity not proven to warrant need for de-zoning, compensation and rates relief, enhanced rights desirable on developable portion, individual assessment with property owners desirable, maintenance responsibility of conservation zone, amendment of line to exclude balcony and lawn desirable	Examine detail regarding line on gis
54	7A	Cliff Rd	Adjacent Springside NR. Reserve right to amplify objection.	
55	120	Jan Smuts Ave	Fire hazard and loss of security in conservation zone, loss of use of conservation area, line in close proximity to structure	Examine detail regarding line on gis
56			Support in principle, planning advanced for second unit, conservation line needs to be further assessed.	Examine detail regarding line on gis, refer to Enviro report, J Bodenstien
57	32	Jan Smuts Ave	Conservation line needs to be further assessed, loss of development potential, lack environmental enforcement on adjacent properties, object to blanket re-zoning	Examine detail regarding line on gis
58	51	Edward Drive	Not notified in writing, subdivision completed some time ago, requires smaller property for security reason and subdivision for pension, happy to withdraw objection if able to use conservation area for evapo area.	Verify subdivisional status
59	54	Haygarth Rd	No detail on proposal for property available to her.	Send details
60	27	Edward Drive	Incorporating nature reserve into private property, should expropriate not just take	
61			Financial loss, expropriation without compensation contrary to constitution, lack of conservation management, excessive rates	

62	17	Rooseveltdt Rd	Financial loss, cost related to owning large properties: selling, maintenance, higher rates; suggest purchase of conservation area, reduction in rates desirable, one-off compensation payment, congratulate team on communication with affected owners.	
63	35A	Van Riebeck Rd	Personal use of conservation zone, loss of development potential, payment made for expropriation of agreed portion of conservation zone desirable, who will be responsible for conservation management	
64	3	Edward Drive	80% of property affected, residual less than 1800m2 & proposed 3600, no clarity on future ownership, is financial compensation proposed, do not object to principle of conservation purposes, conservation line needs to be re-assessed	Examine detail regarding line on gis, refer to drawing attached to objection
65			Financial loss, subdivision re-submitted in 2005, subsequent rejection of sub-division prior to proposal being approved - questionable legality, unfair and inconsistent policy, process untransparent and and unconsultative, tantamount to expropriation, inadequate advertising, lack of compensation will infringe constitutional rights, requires arbitration	
66	31	Jan Smuts Ave	Proposal laudible in principle, insufficient consultation, no mention of compensation, no plans for management of conservation areas, line arbitrarily drawn, consultation to re-draw line welcomed	Examine detail regarding line on gis
67	11	Abbots Gate Rd	Financial loss, loss of subdivision potential, excessive rates	
68		Fraser Rd	Financial loss, equivalent to expropriation, Sect 25 subject 1/8: compensation, loss of development potential, line precludes any further development	Examine detail regarding line on gis
69	74	Haygarth Rd	Financial loss, taking of 75% of land, loss of development potential, advise on course of action	
70	26A	Jan Smuts Ave	Conservation line should allow for a sub-division of 3600, process flawed, removes 78% of property, lack of conservation and stormwater management, compensation required, line needs to be re-assessed, already restricted by pipeline servitude, no objection in principle, lack of notification, other development more detrimental to environment	Examine detail regarding line on gis
71	21	Homestead Avenue	33% of site taken up, loss of development potential, financial loss, line needs re-assessment compared to lines next door regarding fence	Examine detail regarding line on gis, especially regarding fence, possible acquisition
72	5	Park Close	Owner objects - no reasons	
73	14	Ashley Drive	Owner objects - no specific details	
74	5	Homestead Avenue	Support in principle, disallowing development without compensation, no use of conservation area, discriminatory to properties abutting reserves. conservation management assistance needed, lack of proper consultation	
75	40	Shortlands Avenue	Loss of development rights, either initiated or sub-divisional plan approved	
76			Possible acquisition, support in principle for conservation area, compensation required, research required to acquire and develop area for conservation, education and tourism, provisions for tenant farmers needs to be considered, willing to participate in subsequent committees.	Amount for acquisition - R1.6 m or R150 000 per acre
77			Financial loss, loss of development potential, consider reduction in reserve extent for residential as large portion is flat	Examine detail regarding line on gis
78	123	Jan Smuts Ave	100% area conservation zone, potential acquisition, line needs to be re-assessed	Examine detail regarding line on gis
79	7	Homestead Avenue	Lack of conservation management, financial loss, loss of development potential, compensation required or possible acquisition of reserve area, subdivision previously refused?	
80	31	Springside Rd	Discrimination against properties adjacent nature reserves, lack of evidence for impacts from adjacent densification, loss of development potential, financial loss due to subdivision restriction, possible acquisition	

81	7	Sheila Place	Loss of development potential, against planting of exotics in conservation zone, increased exposure to crime with removal of fences, rates on conservation zone unfair, financial loss	
82	13	Homestead Avenue	Clarity on consequences of zones, financial loss, compensation required, possible acquisition, rates adjustment necessary, no rates on conservation zone, line needs re-assessment	Examine detail regarding line on gis, request line be moved 10m toward Springside NR
83	33	St Helier Rd	Expropriation of conservation zone, financial loss, maintenance landowners responsibility, 80% demarcated for conservation, line drawn with intent of preventing development in developable area near cliff, discrimination with regard to line, propose more equitable demarcation line, mutually agreeable plot size required, municipality must maintain conservation reserve until property is sold.	
84			Expropriation of conservation area, rates and responsibility for conservation area, no financial compensation for conservation area, lack of conservation management, fire hazard and influence on insurance premiums, criminal haven, possible acquisition of conservation zone, excessive rates	
85	1	Abbots Gate Rd	Support in principle, line needs to be re-assessed - cuts off developable portion	Examine detail regarding line on gis, refer to drawing and requested line
86	13B	Reservoir Rd	80% in conservation reserve, area transformed, rehabilitation not possible, require line to be moved	Examine detail regarding line on gis
87	27	Springside Rd	Loss of development potential related to subdivision, financial loss, disputes impact of dwelling on conservation area, compensation required	
88	92	Jan Smuts Ave	Process flawed, vall roll not updated, lack of conservation management, possible acquisition, discrimination of properties adjacent nature reserves, lack of management on adjacent public land, fenceline in conservation reserve necessary for conservation and security reasons, arbitrary conservation line	Examine detail regarding line on gis
89	92	Haygarth Rd	Difference between conservation reserve and moss unclear, changes to fencing to be at EM expense, rates reduction required.	
90	37	St Helier Rd	Financial loss, loss of subdivision and development potential, excessive rates make it difficult to maintain large area, who will manage conservation reserve, security problems in conservation area, discrimination against those with large properties, individual assessments needed, line drawn through existing building, current subdivision application pending.	Examine detail regarding line on gis
91	142	Haygarth Rd	Support in principle, line needs to be re-assessed, wants 6 subdivisions.	Examine detail regarding line on gis, refer to diagram
92	3	Cliff Rd	Financial loss, loss of subdivision potential, no compensation, discrimination due to passed poor planning, poor conservation management, process flawed, discrimination in allocation of development rights.	
93	10	Elizabeth Drive	loss of development potential for retirement, lack of conservation management, responsibility for management, concern over informal settlements occupying conservation reserve, rates adjustment needed, support in priciple subject to adjustments	
94	7	Homestead Avenue	Lack of conservation management, financial loss, process flawed, compensation required, loss of building and subdivision potential.	
95	68	Haygarth Rd	Support in principle, compensation required,	Not presently in precinct, mailing address: 4 Hurlstone, 68 Haygarth Rd, Kloof
96	27A	Alexander Drive	80% in conservaion reserve, legal basis for rezoning doubtful, loss of sub-division potential, financial loss.	

97	33	Homestead Avenue	Discrimination concerning approved adjacent subdivisions, loss of subdivision potential, financial loss.	
98	24A	Jan Smuts Ave	Financial loss, discrimination against properties adjacent conservation reserve, compensation required, responsibility of conservation management.	
99	42	Shortlands Avenue	Financial loss, discrimination concerning development in other areas.	
100	5	Montgomery Drive	Support in principle, conservation reserve must not exceed moss June 2008, rates clarification needed, conservation management plan needed, security concerns, loss of subdivision potential, financial loss, rates adjustments needed.	
101	17A	Springside Rd	Loss of development potential, financial loss.	
102	11B	Springside Rd	Object - no details, unable to inspect in person.	
103	1	Spring Close	Financial loss, loss of subdivision potential, lack of scientific evidence to support densification adjacent conservation reserve, constitutional rights infringed, compensation required, independent valuation required, rates adjustment not sufficient compensation.	
104	69A	Montgomery Drive	Process flawed, compensation and rates concerns, lack of conservation management, implications of difference between moss and conservation reserve unclear.	
105	31	Jan Smuts Ave	Process flawed, compensation required, responsibility for conservation management, line arbitrarily drawn without consultation, welcome opportunity to engage.	Examine detail regarding line on gis
106	23	St Helier Rd	Support in principle, line needs to be moved 15m down, property affected by electric servitude.	Examine detail regarding line on gis, 15m down.
107	25A	St Helier Rd	Support in principle, line needs to be moved 15m down.	Examine detail regarding line on gis, 15m down.
108	33	Edward Drive	Financial loss, loss of subdivision potential, loss of development potential, possible acquisition of conservation reserve, discrimination concerning properties affected.	
109	35	Springside Rd	Subdivision approved in 2006, conservation zone prevents development in this sub, loss of development potential, line needs adjustment, financial loss	Examine detail regarding line on gis, refer to approved subdivision
110	94	Haygarth Rd	Line encroaches into fence-line, rates relief on conservation reserve needed, no development in conservation area, no informal settlements must be allowed.	Examine detail regarding line on gis
111			Loss of development potential, financial loss, excessive rates.	
112	20	Blue Gum Crescent	Objection to follow	
113	6	Retief Rd	No objection, willing to subdivide and transfer portion to 382 for non-development.	
114	23	Homestead Avenue	Compensation needed, line needs to be re-assessed to allow further subdivision, rates reduction not satisfactory option.	
115	2	Fraser Place	Compensation needed, lack of conservation management.	
116	29	St Helier Rd	Compensation needed, loss of development potential.	
117	6	Shortlands Avenue	Re-assess line, only small portion in.	Examine detail regarding line on gis
118	3A	Fraser Place	Re-assess line in relation to adjacent precedent.	Examine detail regarding line on gis
119	96	Haygarth Rd	Process flawed, inadequate explanation.	
120	15	Northern Cliff	Financial loss, compensation needed.	
121	31	St Helier Rd	Re-assess line, no place for development.	Examine detail regarding line on gis
122	15	Edward Drive	Financial loss, loss of subdivision potential, responsibility for conservation management.	
123	17	York Rd	Compensation required, responsibility for conservation management, loss of development potential.	
124	29A	Homestead Avenue	Support in principle, lack of conservation management, specifically fences.	

125	4	Clifton Rd	Evapo area in conservation reserve, rates rebate required, re-assess line to accommodate pool.	Examine detail regarding line on gis, servitude already in place?
126	8	Shortlands Avenue	Possible acquisition, security issues, loss of subdivision potential, responsibility for conservation management.	
127	121A	Jan Smuts Ave	Approved subdivision in conservation reserve, reassess line.	Examine detail regarding line on gis
128	37	Alexander Drive	Support in principle subject to rates rebate, conservation management required.	
129	23	Montgomery Drive	Financial loss, loss of subdivision potential.	
130	19	St Helier Rd	Support in principle, loss of development potential, need use of conservation area for evapo area, rates rebate required.	
131	7	Abbots Gate Rd	Compensation required, rates reduction required.	
132	35A	Alexander Drive	Loss of building potential, reassess line for wall, no intention to subdivide.	Examine detail regarding line on gis, refer to sketch.
133	65	Montgomery Drive	Rates rebate, request information to register servitude, no intention to subdivide, reassess line regarding wall.	Examine detail regarding line on gis, refer to sketch.
134		St Helier Rd	Existing subdivision not reflected.	
135	43	Homestead Avenue	Support conservation effort.	
136	3A	Park Close	Re-assess line regarding platform	Examine detail regarding line on gis, refer to sketch.
137	17A	Rooseveltdt Rd	Support conservation effort.	
138	29A	Montgomery Drive	Support conservation effort.	
139	18	Edward Drive	Line needs to be re-assessed.	Examine detail regarding line on gis, refer to sketch.
140	69	Montgomery Drive	Insufficient information provided, process flawed.	
141	27	St Helier Rd	Loss of subdivision potential, information on rates rebates needed.	
142	29	Van Riebeck Rd	Re-assess line, rates reduction, prevent informal settlements, loss of development potential.	Examine detail regarding line on gis.
143	1	Fraser Place	Re-assess line, intersects building.	Examine detail regarding line on gis.
144	58	Jan Smuts Ave	Entire site is powerline servitude, public open space?	Examine detail regarding line on gis, entire site needs to be included in CR.
145	32	Blue Gum Crescent	Support in principle, responsibility of conservation management.	
146	15A	Alexander Drive	Need clarity on influence on rates.	
147	35A	Montgomery Drive	Rates implications, no intention to develop, uncertainty in future of conservation area, financial loss.	
148	47	Van Riebeck Rd	Support conservation effort.	
149	37	Homestead Avenue	Support in principle, rates rebate on conservation reserve	
150	3A	Mountbatten Place	Flawed process, loss of development potential, responsibility of conservation management, clarity on rates reduction, guidance needed regarding donation.	
151	3	Mountbatten Place	Flawed process, loss of development potential, responsibility of conservation management, clarity on rates reduction, guidance needed regarding donation.	
152	1A	Mountbatten Place	Flawed process, loss of development potential, responsibility of conservation management, clarity on rates reduction, guidance needed regarding donation.	

153	18	Elizabeth Drive	Support conservation effort, municipality commitment to conservation management required.	
154	17	Homestead Avenue	Expropriation should be at market value, reassess line as it cuts through pool etc.	Examine detail regarding line on gis, refer to sketch.
155	19	Van Riebeck Rd	Financial loss, compensation needed, loss of subdivision potential, rates reduction needed, security issues.	
156	1B	Mountbatten Place	Clarity on rates issue needed.	
157	31A	Homestead Avenue	Support conservation effort.	
158	19	Homestead Avenue	Reimbursement needed for expropriation.	
159	5A	Halstead Rd	Support in principle subject to details.	
160	138	Jan Smuts Ave	More information needed.	

Source: Development Planning and Environmental Management Department:

Note: The above information is part of the Municipal Rezoning/Conservation Project.