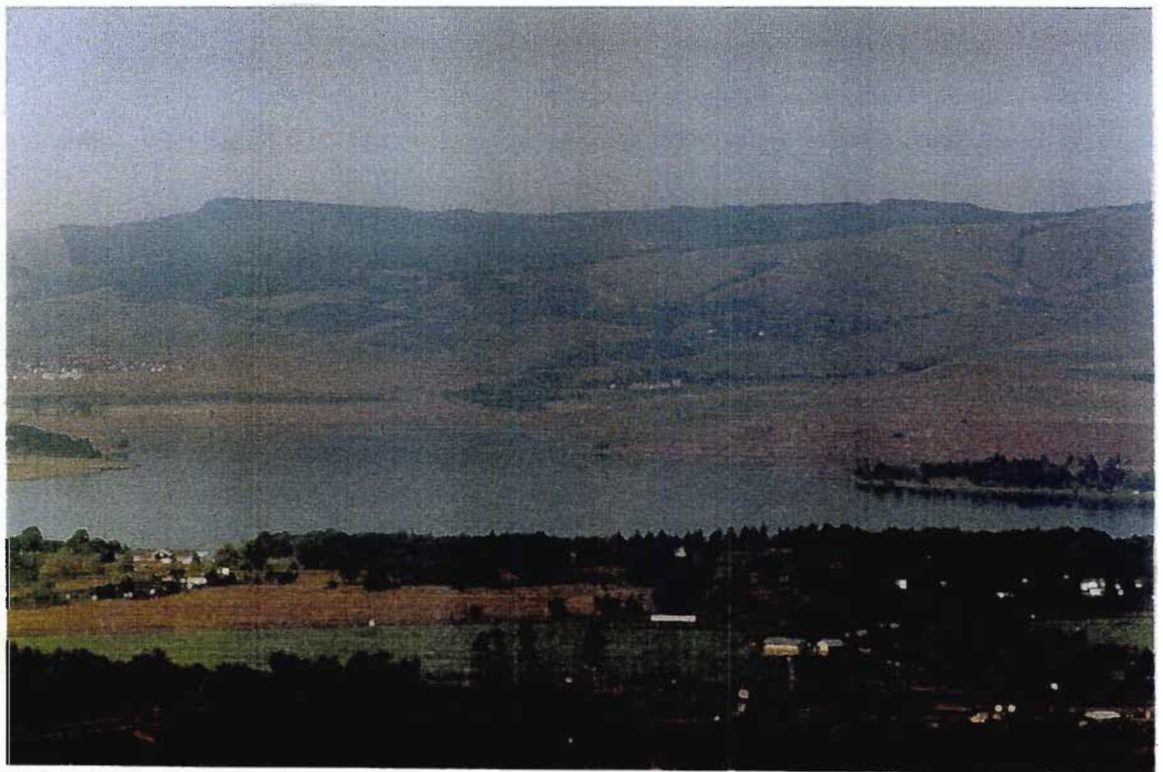


**TRANSFER OF DEVELOPMENT RIGHTS (TDR) AS A  
MECHANISM FOR ENVIRONMENTAL CONSERVATION**

**FEASIBILITY STUDY TO DETERMINE THE SUITABILITY OR  
OTHERWISE OF THE MIDMAR AREA OF CONTROLLED  
SUBDIVISION AS A PILOT AREA FOR THE APPLICATION OF A TDR  
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PROGRAMME IN KWAZULU-NATAL**

**JULY 2001**

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**SUBMITTED AS THE DISSERTATION COMPONENT (WHICH ACCOUNTS FOR  
50% OF THE DEGREE) IN PARTIAL FULFILMENT OF THE REQUIREMENTS  
FOR THE MASTERS DEGREE IN ENVIRONMENT AND DEVELOPMENT IN THE  
CENTRE FOR ENVIRONMENT AND DEVELOPMENT  
UNIVERSITY OF NATAL (PIETERMARITZBURG)**



## DECLARATION

The work described in this thesis was carried out in the Centre for Environment and Development, University of Natal, Pietermaritzburg, from July 1999 to July 2001, under the supervision of Professor R Fincham (Centre for Environment and Development).

This thesis represents original work by the author and has not otherwise been submitted in any form for any degree or diploma to any other University. Where use has been made of the work of others it is duly acknowledged in the text.

*Thoufheer*

10-5-2002

## ABSTRACT

The application of a transfer of development rights (TDR) programme is a concept which has been used, both formally and informally, by regulators of development, as a mechanism to protect areas of historical, cultural, ecological, agricultural and environmental importance. The application of a TDR programme requires definition of a TDR boundary and the identification of sites within such area which are capable of sustaining development (**receiving sites**) and sites that are not suited to development (**sending sites**). A TDR programme serves to protect the natural environment; preserve historical and cultural diversity; and, strives to achieve an equitable spread of development opportunities amongst property owners in a given area.

There are those involved with current development planning policy within KwaZulu-Natal who propose that the planning legislation should formally incorporate TDR regulations into the KwaZulu-Natal Planning and Development Act (Act 5 of 1988). TDR programmes in KwaZulu-Natal have been applied in a limited sense and in an informal manner. To date, no area in KwaZulu-Natal has been formally designated as a TDR area and the formal implementation and the feasibility of instituting a TDR programme has not been tested.

It is suggested that within an area where environmental, agricultural, historical or cultural significance has been identified an opportunity for the application of a TDR programme exists. The planning and implementation of a TDR programme within a designated area provides an opportunity for integrated and sustainable development to occur. Within a defined TDR area the parameters for development capacities are agreed to upfront through negotiation between property owners, approving authorities and interested and affected parties. Consequently the possibilities of over or inappropriate development levels within the defined special area are significantly reduced. It must be noted that TDR programmes are area

specific and therefore should only be applicable in areas which are of significant agricultural, environmental, historical, cultural and ecological value.

This thesis identifies a possible area where a TDR programme could be applied. It was thought appropriate that the pilot area should be one which is environmentally sensitive and where only limited development has been permitted. The Midmar Area of Controlled Subdivision, situated north of Pietermaritzburg in the KwaZulu-Natal Midlands provides an ideal opportunity where a TDR model could be examined and developed.

In essence, this thesis defines TDR programmes and includes a brief investigation into international application of TDR programmes. In particular, it examines the application of a TDR programme at Lake Tahoe in the United States to illustrate the possible levels of sophistication that such a programme may achieve. It outlines the legislative framework in terms of which a TDR programme may be implemented for the study area. An overview of the current situation of the Midmar Area of Controlled Subdivision is presented which includes a summary of the attributes of the area; the current development pressures it faces; and, planning initiatives impacting on the Midmar Dam and its surrounds, all of which inform the study.

The thesis also examines how and whether the implementation of a TDR programme could be successfully achieved. The study concludes that the Midmar Area of Controlled Subdivision would form an ideal foil on which to test the application of TDR programmes in KwaZulu-Natal. A set of recommendations which would form the basis for the implementation of a TDR programme in the Midmar Area of Controlled Subdivision is provided.

The thesis does not attempt to identify each individual parcel of land which should be ascribed receiving or sending site status as this would require further in-depth study by various specialists.

## **ACKNOWLEDGEMENTS**

I would like to acknowledge the work of the Institute of Natural Resources, Scott Wilson Development and Planning Consultants, Ninham Shand Consulting Engineers and Attorneys Venn, Nemeth and Hart which formed the basis of this study. I would also like to extend my thanks to the Secretary of the Town and Regional Planning Commission who ensured that I participated in the Commission's investigative study in respect of incorporating Transfer of Development Rights into the Provincial Planning and Development Act for KwaZulu-Natal.

The University supervisor is thanked for his guidance and constructive criticism. My husband, Lawrence van Heerden is thanked for providing much valued suggestions in respect of this project; for editing and for assisting in the preparation and modification of the maps contained herein.

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## TABLE OF CONTENTS

DECLARATION .....	-i-
ABSTRACT .....	-ii-
ACKNOWLEDGEMENTS .....	-iv-
TABLE OF CONTENTS .....	-v-
LIST OF FIGURES .....	-ix-
LIST OF ABBREVIATIONS .....	-x-
CHAPTER ONE: INTRODUCTION .....	-1-
1.1 Introduction .....	-1-
1.2 Sustainable Development and the concept of Transfer of Development Rights .....	-1-
1.3 Aims and objectives .....	-6-
1.4 Methods .....	-7-
1.5 Limitations of thesis .....	-8-
1.6 Structure of the thesis .....	-9-
CHAPTER TWO: A REVIEW OF THE CONCEPT OF TRANSFER OF DEVELOPMENT RIGHTS .....	-12-
2.1 Introduction .....	-12-
2.2 International experience of TDR programmes .....	-12-
2.3 Principles and issues which underpin TDR programmes .....	-14-
2.3.1 Components of a TDR programme .....	-14-
2.3.2 Voluntary/Mandatory TDR and State/Free market TDR programmes .....	-15-
2.3.3 Planning, regulation and administration of TDR programmes .....	-17-
2.3.4 The Lake Tahoe case study .....	-18-

2.4	TDR programmes in the Province of KwaZulu-Natal	-23-
2.5	Conclusion	-26-

### CHAPTER THREE: THE CURRENT REALITY IN SA AND THE LEGISLATIVE FRAMEWORK FOR TRANSFER OF DEVELOPMENT RIGHTS (TDR) PROGRAMMES IN KWAZULU-NATAL -27-

3.1	Introduction	-27-
3.2	Current reality in South Africa	-27-
3.3	The Constitution of South Africa (Act 108 of 1996)	-29-
3.4	Ownership, Rights and the Deeds Registries Act (Act 47 of 1937)	-29-
3.5	The KwaZulu-Natal Planning and Development Act	-31-
3.5.1	Purpose and Principles of the KwaZulu-Natal Planning and Development Act (PDA)	-31-
3.5.2	Development plans in terms of the PDA	-32-
3.5.3	Special Case Areas in terms of the PDA	-33-
3.5.4	Compensation in terms of the PDA	-34-
3.6	Current Status of KwaZulu-Natal Planning and Development Act and associated regulations	-35-
3.7	Conclusion	-36-

### CHAPTER FOUR: THE ORIGINS OF MIDMAR AREA OF CONTROLLED SUBDIVISION - THE STUDY AREA -37-

4.1	Introduction	-37-
4.2	Selection of the study area	-37-
4.3	Location of the study area	-39-
4.4	Historical context	-39-
4.5	The 1970 Review of the Midmar Area of Controlled Subdivision	-43-



4.6	Current and proposed institutional arrangements for the Midmar Area of Controlled Subdivision . . . . .	-46-
4.7	Conclusion . . . . .	-47-

CHAPTER FIVE: CURRENT PLANNING INITIATIVES WHICH AFFECT THE  
MIDMAR AREA OF CONTROLLED SUBDIVISION . . . . . -49-

5.1	Introduction . . . . .	-49-
5.2	Broader planning initiatives . . . . .	-49-
5.3	The Midmar Integrated Planning Initiative . . . . .	-50-
5.4	Analysis of the Structure Plan and Land Use Controls . . . . .	-51-
	5.4.1 The structure plan and land use controls . . . . .	-51-
	5.4.2 Carrying capacity/calculation of density . . . . .	-52-
	5.4.3 The Midmar Area of Controlled Subdivision : Development Zones and their relationship to calculation of carrying capacity . . . . .	-53-
5.5	Institutional arrangements . . . . .	-56-
5.6	Conclusion . . . . .	-56-

CHAPTER SIX: APPLICATION OF TRANSFER OF DEVELOPMENT RIGHTS  
(TDR) PROGRAMME TO THE STUDY AREA . . . . . -58-

6.1	Introduction . . . . .	-58-
6.2	Development pressures within the Area of Controlled Subdivision . . . . .	-58-
6.3	Public interest and response to planning initiatives . . . . .	-59-
6.4	The Structure Plan and Land Use Control Document and its status . . . . .	-61-
6.5	Could a TDR programme meet the development and environmental needs? . . . . .	-62-

6.6	Outcomes of applying and testing a TDR programme in the Midmar Area of Controlled Subdivision . . . . .	-65-
6.7	Conclusion . . . . .	-66-

CHAPTER SEVEN: RECOMMENDATIONS AND GUIDELINES : TOWARDS THE IMPLEMENTATION OF A TRANSFER OF DEVELOPMENT RIGHTS PROGRAMME IN THE MIDMAR AREA OF CONTROLLED SUBDIVISION . . . . .	-68-
--	------

7.1	Introduction . . . . .	-68-
7.2	Recommendations and Guidelines . . . . .	-68-
7.3	Conclusion . . . . .	-71-

REFERENCES . . . . .	-74-
----------------------	------

## LIST OF FIGURES

Figure 1 : Illustration of the concept of a TDR programme	Page 4
Figure 2 : Locality Map : Midmar Dam and Surrounds	Page 40
Figure 3 : Midmar : Area of Controlled Subdivision (Tracing Number 2859)	Page 44
Figure 4 : Midmar : Administrative Areas of Jurisdiction	Page 48
Figure 5 : Midmar Development Zones	Page 54

## **LIST OF ABBREVIATIONS**

DAP	The Drakensberg Approaches Policy
INR	Institute of Natural Resources
KZN	KwaZulu-Natal
PDA	Planning and Development Act
TPO	Town Planning Ordinance
TRPC	Town and Regional Planning Commission
TDR	Transfer of Development Rights

# **CHAPTER ONE**

## **INTRODUCTION**

### **1.1 Introduction**

This introductory chapter focusses on the concept of sustainable development and its linkages to the land use management tool known as transfer of development rights (TDR). This also sets out the study aims, methods, and limitations of the study.

### **1.2 Sustainable Development and the concept of Transfer of Development Rights**

The exploration of alternative mechanisms for conserving resources both natural and physical is underpinned by the principle of sustainable development. The concept of sustainable development has many definitions, one of the most well-known being development which “meets the needs of the present without compromising the ability of future generations to meet their own needs” (WCED, 1987). Land use planning is one tool which strives towards sustainable development.

For the purposes of this thesis the concept of sustainable development is concerned with appropriate development densities; the conservation of environmentally sensitive areas, historic and cultural sites or buildings; and, how this places pressure on approving authorities (government) to limit the development rights of land owners and developers. Phrased alternatively, sustainable development is simply the application of appropriate levels of development and resource utilisation on or of a particular property or properties in a given area (author’s definition).

For the purposes of this report, development rights, alternatively known as development credits, may be described as the authorisation or approval of development rights to build a unit(s) either for residential, holiday, or commercial purposes on a particular property.

Based on the assumption that interested and affected parties strive towards the common goal of sustainable development, alternative mechanisms to reduce conflict between opposing parties in the development arena need to be introduced and tested. The arguments for and against development proposals are often underpinned by the concept of sustainable development. This becomes evident if one examines the practical application of the concept of sustainable development within the Province of KwaZulu-Natal.

Applications for development rights submitted to the authorities by developers are required to be motivated in terms of the **need** for a particular development and the **desirability** of the proposed development on a particular site. It is incumbent upon the developer to prove that the development proposal is both necessary and desirable in the public interest. The issue of whether or not the proposed development is sustainable both in terms of environmental impact and in terms of socio-economic viability is addressed. On the other hand, those that object or contest the development proposal tend to raise issues such as inappropriate carrying capacity where the subject property cannot sustain the scale of development proposed; environmental degradation; and, other negative impacts such as increased traffic, noise pollution and diminished aesthetics. Together, these issues render the development proposal "unsustainable" in the view of the objector. The approving authority (government) is left to mediate between these opposing views.

Development proposals tend to be considered on an ad hoc basis as and when submitted for authorisation. It is clear that this approach is flawed in so

far as it is difficult to define the cumulative impacts of development on the environment without an appropriate planning mechanism in place. Whilst it is acknowledged that it is not always possible to address cumulative impact of development, in instances where an area has been clearly demarcated as being worthy of special attention due to ecological or environmental sensitivities, additional guidelines or mechanisms which may contribute towards attaining the goal of sustainable development need to be investigated. A TDR programme is one such mechanism.

One of the keys to the success of conservation of resources is to offer meaningful incentives to property owners or developers which may entice them to conserve and protect a property's natural and physical assets. In this way, the concerns of developer or property owner, conservation interest groups, and that of the approving authority may be accommodated. A transfer of development rights programme (TDR) is a concept which could be applied in certain instances to assist in ensuring sustainable development and engendering closer co-operation between individual land owners or developers; conservation organisations and approving authorities.

In simple terms TDR's are a zoning tool used to control land usage (Miller, 1999). New York statutes define transfer of development rights as "the process by which development rights are transferred from one lot, parcel, or area of land in a sending district to another lot, parcel, or area of land in one or more receiving districts" (Pace University School of Law, 1997).

A TDR programme is effected by the local authority identifying certain sites (or districts), within a defined area, as sites (districts) suitable for development densification which are known as **receiving sites** and those where land conservation is sought as **sending sites** (districts).

In order for a transfer of development rights programme to be implemented all sites are allocated certain development rights, which, if taken up would result in an increase of density of development on each property. These development rights are generally reflected as the number of units which may be developed on each site which is determined by the zoning of the property and the size of the property. What is of paramount importance in a TDR programme is the fact that the development rights are “regarded as severable from the land ownership and transferable by their owners” (Pace University School of Law, 1997).

The concept of TDR in diagrammatic form is reflected in Figure 1.

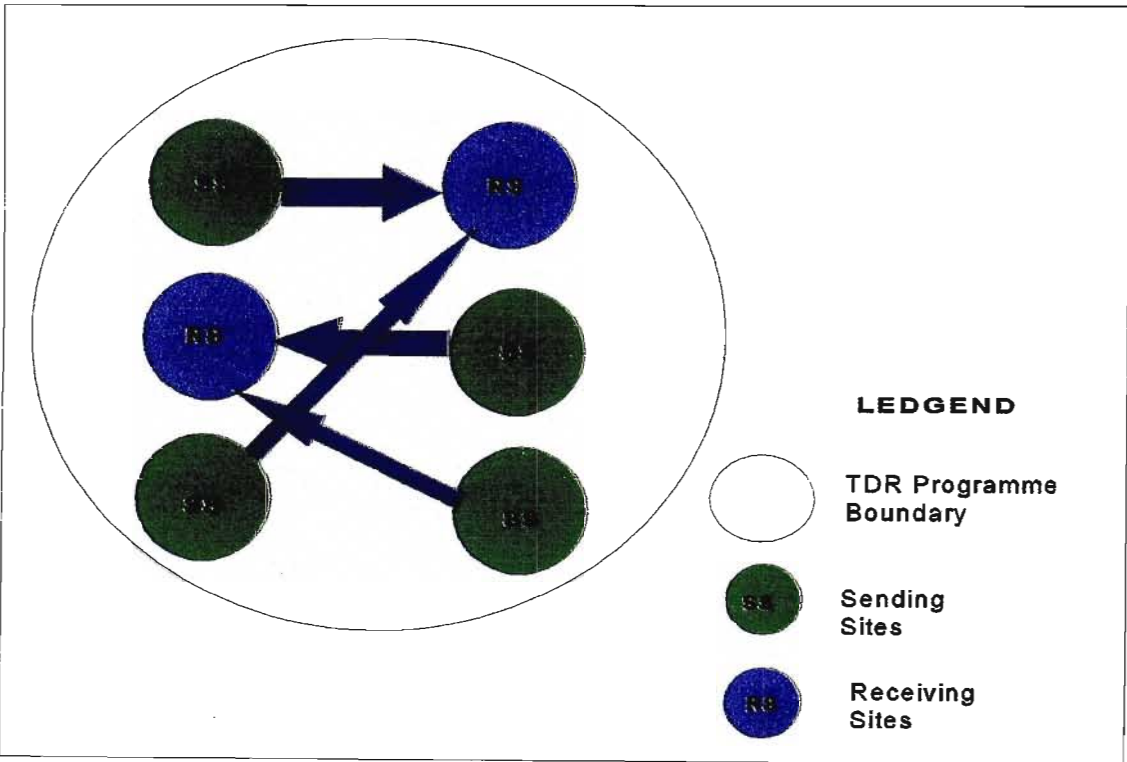


Figure 1 : Illustration of the concept of a TDR Programme

The outer circle defines the boundary of the area to which a TDR programme applies. The green circles reflect properties which are not suitable for development (**sending sites**), whereas the blue circles reflect sites which are



suited for development (**receiving sites**). The arrows illustrate the “movement” of development rights away from the sending sites to those sites more suited for development, the receiving sites.

Whilst development rights may be ascribed to **sending sites** they may not be taken up (developed) on the particular sites due to certain factors. These factors are generally linked to the potential loss of an environmentally or ecological sensitive habitat or ecosystem, or, a loss of high potential agricultural land if the land use was to change. It is recognised that those landowners whose properties are earmarked as sending sites should be compensated for the restriction placed on their properties. Such compensation is brought about by the fact that the development rights have a market value and may be sold to developers or owners who wish to increase development on the **receiving sites**. The aim of a TDR programme is therefore twofold: it is concerned with the preservation and conservation of resources and, simultaneously strives to achieve an equitable spread of development opportunities (either physically or financial) amongst property owners in a given area.

According to the New York Statute, the purpose of a TDR programme is “to protect the natural, scenic or agricultural qualities of open lands, to enhance sites and areas of special character or special cultural, aesthetic or economic interest or value and to enable and encourage flexibility of design and careful management of land in recognition of land as a basic and valuable natural resource” (Pace University School of Law, 1997). Phrased alternatively, TDR is a method of compensating land owners for the restrictions placed on the use of their land (Venn, Nemeth and Hart, 1998). The restrictions placed on such use may apply to the entire property or to portion(s) thereof.

The application of a transfer of development rights (TDR) programme is a mechanism which, if applied diligently, could offer the necessary

opportunities to approving authorities, property owners and the broader community alike to achieve environmental conservation. This is brought about by directing development in an appropriate manner without compromising the financial or economic returns aspired to by the property owners or developers.

### 1.3 Aims and objectives

The aim of this study is to:

- i) establish the feasibility or otherwise of applying the concept of TDR to an identified study area within the confines of the current **legislative framework** applicable to the Province of KwaZulu-Natal, South Africa and,
- ii) determine whether or not the identified study area would be **suitable as a pilot area** to test the application of a TDR programme.

More specifically, the objects of the study are to:

- i) Review of existing information and literature which describe the advantages and disadvantages of TDR programmes. This includes a detailed description of a TDR programme which has been implemented for Lake Tahoe and its surrounds in the United States.
- ii) Examine of the current legislative framework which impacts on the application of TDR in KwaZulu-Natal.
- iii) Identify a suitable study area within the province of KwaZulu-Natal which could be appropriate for the testing of a TDR programme.
- iv) Undertake an analysis of the identified study area, including planning and development issues which impact on it and its suitability or otherwise for the application of a TDR programme.

- v) Advance recommendations in respect of the application of a TDR model to the study area.

In essence the focus of the study was to integrate the concept of a TDR programme, which emerged out of the *Transfer of Development Rights Project* (Venn, Nemeth and Hart, 1998) with that of the *Midmar Integrated Planning Initiative* (Ninham Shand, 1998) in so far as it relates to the land use management and control of the Midmar Area of Controlled Subdivision (the study area).

## **1.4 Methods**

The method employed in this thesis was primarily a desk-top investigation. It included a literature review of publications and draft reports on the topic of transfer of development rights from an academic perspective. This review included both international and local (South African) experience of the application of TDR programmes. An in-depth review of Lake Tahoe as a case study was used to illustrate the level of sophistication which may be achieved through the implementation of a TDR programme.

The current practices and processes employed by local authorities and local government planning authorities and their assessment of development proposals were analysed in order to determine whether the application of TDR programmes would be a useful tool to assist in an integrated development planning process. This analysis also included an in-depth interrogation of the legislative framework required for the application of TDR. The legislative framework, particularly the status of the KwaZulu-Natal Planning and Development Act (Act 5 of 1988), was monitored throughout the duration of the project.

A review of several planning reports which deal with the KwaZulu-Natal Midlands resulted in the identification and confirmation of the Midmar Area of Controlled Subdivision as a suitable pilot study area within which the concept of TDR could be tested.

Where necessary, the views of certain respected individuals, within the development planning and legal fields were solicited through telephonic interviews. The focussed interviews were restricted to individuals who have had exposure to the concept of TDR and who have been involved in the Provincial debate on TDR programmes.

This included the Deputy Chairman of the Town and Regional Planning Commission, Mr D M Taylor, who was a member of the Steering Committee for the development of the KwaZulu-Natal Planning and Development Act. Mr Taylor also served on the Steering Committee for the Midmar Integrated Planning Initiative and has served on the former Cathkin Park Standing Committee where the concept of TDR has been applied in a limited and informal manner. Mrs E Donaldson, an official of the Umsikele Support Services and advisor to Cathkin Park local authority has had practical experience in the transfer of developments rights within the Cathkin Park Town Planning Scheme. Professor I Konyin, a member of the Town and Regional Planning Commission, and Mr L Sanders, Secretary to the Town and Regional Planning Commission, oversaw the work undertaken by Venn, Nemeth and Hart in respect of TDR and provided valuable source material.

## **1.5 Limitations of thesis**

The thesis did not determine each property's development constraints or potentials within the study area. Accordingly, it was beyond the scope of this study to ascribe sending or receiving site status to any property within the study area. For the development potentials and environmental constraints to

be identified for each of the approximately sixty registered properties within the study area, a separate study would be required. Further, such study would require the services of specialists which would include agriculturalists, economists, landscape; urban and rural development planners and aesthetic architects, and environmental specialists.

The thesis has been conducted in a changing political environment, particularly in so far as local government structures and legislation are concerned. This is particularly relevant in respect of which authority should take the lead for the implementation of a TDR programme within the study area, and, which authorities should be party to these institutional arrangements.

In terms of the literature review, whilst resource material was available, it was rather limited in respect of its applicability to this thesis. The focus of the study was to integrate the concept of a TDR programme, with the land use management and controls for the Midmar Area of Controlled Subdivision (the study area). In respect of Chapter Four, in which the origins of the chosen study area is discussed, it proved extremely difficult to attempt to access the KwaZulu-Natal Provincial records dating back some thirty years, most of which are archived. A summary document prepared by Little (1995) was invaluable in this regard.

## **1.6 Structure of the thesis**

The thesis comprises seven chapters, inclusive of this chapter. Chapter One, the Introductory Chapter, focuses on the concept of sustainable development and the forward planning mechanism of TDR. It contains a detailed explanation of what a TDR programme entails. Chapter One also set out the study aims, methods, and limitations of the study.

Chapter Two reviews the literature of TDR programmes. It focuses on international experience of TDR programmes, in particular the United States of America and Australia. The chapter contains a discussion on the principles which underpin TDR programmes such as voluntary versus mandatory TDR and state versus free market TDR programmes. The value of transferrable development rights and the planning and administration of TDR programmes is discussed. A case study of the application of a TDR programme to Lake Tahoe in the United States is drawn upon to illustrate the levels of sophistication that a TDR programme may achieve. A short overview of the application of TDR programmes in KwaZulu-Natal is included in this chapter.

Chapter Three touches on the broader socio-economic and environmental challenges facing South Africa. This discussion leads into the relevant legislative frameworks through which TDR programmes may be implemented within the Province of KwaZulu-Natal. This section contains a brief reference to the Constitution of South Africa (Act 108 of 1996); legal definition of ownership; the concept of the separation of rights; the Deeds Registries Act (Act 47 of 1937) in so far as registration of rights against a title deed are concerned. The KwaZulu-Natal Planning and Development Act (Act 5 of 1998) is discussed in some detail as this Act was designed to become the prime piece of legislation in terms of which development within the Province of KwaZulu-Natal will be managed. Certain sections of this Act reflect the opportunity to incorporate mechanisms of development management such as TDR.

Chapters Four and Five contain a thorough overview of the study area selected for this investigation. Chapter Four places the study area in historical context and sets the background against which further planning initiatives for the Midmar Area of Controlled Subdivision and its surrounds have been undertaken. Chapter Five deals with the broader regional, sub-

regional, and local planning initiatives which have been commissioned by the Provincial Government, and which serve to guide and direct development in and around Midmar Dam. Chapter Five also includes an analysis of the shortcomings, in particular, of the approach to development densities adopted in the *Midmar Integrated Planning Initiative* (Ninham Shand, 1998) in terms of which development is to be managed within the Midmar Area of Controlled Subdivision. It is from this critical analysis that the mechanism of TDR is looked to as an alternative approach for appropriate land use management (sustainable development) within the study area.

In Chapters Six and Seven the information presented in the previous chapters is reviewed and the advantages of applying and testing a TDR programme within the study area is discussed. It includes a detailed account of the Development Zones ascribed to the study area which arose out of the *Midmar Integrated Planning Initiative* and, most importantly, it includes an interrogation of the carrying capacity or calculation of density which was recommended for the study area.

Chapter Seven outlines key steps which would be required to implement a TDR programme within the study area. This includes a discussion of the process which would have to be undertaken towards attaining the application of a TDR programme to the study area. Recommendations as to which responsible government authority or para-statal could take the lead for such course of action are included. The chapter concludes with remarks which confirm that this work forms the platform upon which the implementation of a TDR programme for the Midmar Area of Controlled Subdivision could be successfully achieved.

## **CHAPTER TWO**

### **A REVIEW OF THE CONCEPT OF TRANSFER OF DEVELOPMENT RIGHTS**

#### **2.1 Introduction**

This chapter sketches a brief historical overview of the concept of TDR programmes. It contains reference to certain countries which have applied TDR and includes discussion on the advantages and disadvantages of such programmes. The issues of the market value of transferrable development rights; voluntary versus mandatory TDR programmes and the concept of state versus free market TDR programmes are explored. This section also includes some key lessons learnt in respect of the administration of TDR programmes.

The chapter also includes an in-depth explanation of the TDR programme which applies to Lake Tahoe situated in the United States. It serves as a practical example of how the demands for sustainable development (or preservation of a natural resource) may be met, without penalising those who own property within a sensitive area.

The limited application of TDR programmes within the Province of KwaZulu-Natal is discussed in the concluding comments within this chapter.

#### **2.2 International experience of TDR programmes**

TDRs have been used, primarily internationally, as a mechanism to protect areas of historical, ecological, agricultural, and environmental importance. The application of TDR began in the United States of America, and as a concept "has been extended and applied in other countries, for example,



Australia and New Zealand and although not by name, to a limited extent in South Africa" (Venn, Nemeth and Hart, 1998, p 11).

In the United States, the forerunner to TDR programmes was found primarily in the rural areas where large tracts of land were subjected to density distribution plans which allowed density in one area to be higher than the norm, provided the adjacent area was kept correspondingly low.

Development was therefore clustered and environmentally sensitive areas protected (Venn, Nemeth and Hart, 1998).

Another example of TDR application in the United States centred on preserving landmarks such as buildings of historical or architectural importance in New York in the late 1960's. Because the restrictions on the permitted uses of the building were onerous, the owner was compensated by being "...granted the right to exceed zoning limitations on other specific parcels of land" (Venn, Nemeth and Hart, 1998, p 12).

Clearly the concept of transfer of development rights is not a new concept in the United States. More than twenty states have enacted or amended statutes which refer to the TDR concept and seven states have TDR statutes specific to farmland protection (Lawrence, 1998).

In Australia, particularly in Sydney, TDR programmes have been used with success. Certain of the advantages and disadvantages of TDR programmes as identified in the Sydney experience, summarised by Venn, Nemeth and Hart (1998), are outlined below:

- ▶ TDR reduces the possibility of property owners being denied the right to maximise development potential
- ▶ TDR is a compromise between conservation and development pressure and is politically acceptable

- ▶ TDR encourages historic preservation in a positive manner permitting compensation to owners of historic, cultural or landmark sites
- ▶ TDR's can be a self-supporting process provided an adequate market exists for the sale of rights - costs are therefore minimal
- ▶ TDR participants (owners) know what their development rights are from the outset
- ▶ TDR's are a flexible mechanism which may be used to protect any resource which is threatened
- ▶ TDR's cannot always ensure that the sale price of the development rights will be in line with their ultimate value to transfer to property owners who will use them more profitably than are available to non-participating landowners in the area.

## **2.3 Principles and issues which underpin TDR programmes**

### **2.3.1 Components of a TDR programme**

In terms of international experience, there are four key requirements which must be in place in a successful TDR programme: there must be a designated preservation zone (district or sites) which is the sending area; there must be a designated growth area which is the receiving area; there must be a pool of development rights that are legally severable from the land, and there must be a procedure whereby development rights are transferred from one property to another (Lawrence, 1998). Without these elements landowners will encounter difficulties in finding a buyer for their development rights. As is evident from these elements TDR programmes are complex, can be difficult to manage and are appropriate only in limited areas and circumstances (Lawrence, 1998).

### **2.3.2 Voluntary/Mandatory TDR and State/Free market TDR programmes**

In a voluntary TDR programme the property owner may elect whether or not to participate with the TDR programme in either the sending or receiving areas or both. Where property owners elect not to participate they may still be permitted to develop their land to the extent of the development rights (Venn, Nemeth and Hart, 1998). Under a voluntary TDR programme, where certain of the four elements discussed in 2.3.1 are absent, the lack of a receiving area would result in development occurring in the sending area with little land being protected (Lawrence, 1998).

In a mandatory TDR programme, the owners of sending sites have their development rights limited by planning regulations and owners of receiving sites can only increase their development densities if they acquire development rights from the sending area. The owners of sending sites are not permitted to exercise their development rights on their property but must sell it to gain compensation for their reduced rights (Venn, Nemeth and Hart, 1998).

The mandatory TDR approach is not optional and is strongly regulated. This approach has been found to have greater chances of success as all property owners within a given area are compelled to participate in the TDR programme (Venn, Nemeth and Hart, 1998). This approach is strongly advocated for the study area and is elaborated upon in Chapter Seven. Similarly, experience has shown that the most successful TDR programmes have been the ones with least governmental involvement, where development rights are sold on the free market. Whilst least governmental involvement is viewed as a critical factor for success, there must be strong commitment to the TDR programme by the political (state) leadership of the community (Lawrence, 1998).

A state-controlled TDR programme however, requires developers to purchase rights from a state or government agency for use in the receiving area, the financial transaction permits the proceeds to be used to compensate landowners in the sending area (Venn, Nemeth and Hart, 1998). An example of where the state is involved in assisting the property owner is in the King County Transfer of Development Rights Programme. In this TDR programme a sending site's development credits (rights) may be purchased by the Transfer of Development Credits (rights) Bank if the site is considered a top priority for preservation by the King County (Department of Natural Resources, 2000).

Market value is important for the success of a TDR programme. The rights ascribed to sites must be of real value otherwise there will be little incentive for owners to transfer or sell their rights. When a landowner chooses not to take up a development right allocated to his/her property but rather to sell the rights, financial compensation for conserving his/her property at market rate occurs, and the development right may be transferred to a more appropriate area (Venn, Nemeth and Hart, 1998). It follows that the value of TDR's will fluctuate in accordance with market value which can be established on a willing seller willing buyer basis.

The development rights transferrable from sending properties should be directly related to the cost of preserving a particular building or site and not merely on the basis of the permitted but unbuilt development rights of the site (Venn, Nemeth and Hart, 1998). Landowners therefore receive financial benefit from selling development rights without having to develop or sell the land itself.

In terms of the social benefit provided by TDR, land is permanently preserved through conservation without cost to taxpayers or added regulations to landowners (Department of Natural Resources, 2000). Phrased alternatively,

TDR is a means to purchase and sell residential (or other) development credits from lands that provide a public benefit, which includes agricultural, wildlife habitat and greenbelts (Department of Natural Resources, 2000).

The free market approach is advocated in the study area and the discussion is expanded upon in Chapter Seven.

### **2.3.3 Planning, regulation and administration of TDR programmes**

Considerable thought and assessment of the implementation of a TDR programme is fundamental to its success. Transfers of development rights must be fully integrated into the local authority's planning and zoning controls in order to prevent over development in the receiving areas. The authority must therefore have a very clear idea of what the development needs and projections for population growth and the associated densities will be within the area identified for a TDR programme (author's emphasis) (Venn, Nemeth and Hart, 1998). Similarly, the planning or approving authority must be in possession of reliable data which describes the environmental constraints to development within the defined TDR programme area. In short, the authority must be aware of the implications of its approvals for the transfer of TDR. This aspect was discussed under the Introductory Chapter wherein the issue of cumulative impacts of development was highlighted.

It is important to bear in mind that TDR's are regulatory tools designed to facilitate land-use planning. However, unlike most spatial and development plans, the TDR requires more certainty of where development should happen. "TDR programmes do more than preserve farmland, natural resources, and open space; they change the way development occurs in a community. However, TDR programmes cannot be established in the absence of a comprehensive plan. Implementation of a TDR in the absence of true comprehensive planning represents a failure to recognize that

development credit values depend on a stable and predictable real estate environment” (Lawrence, 1998).

What is of utmost importance is that the TDR programme is designed to spread both the benefits and burdens of conservation of a particular area amongst property owners or broader community. The approving authority must therefore ensure that the burden is spread equitably without one or two members of the community having to bear the costs of preservation. Hence the exercise of such authority must be in the interests of good town planning and based on sound conservation ethics (Venn, Nemeth and Hart, 1998).

It is essential that a well-trained planning staff carefully manage the programme (Lawrence, 1998). Staff should be skilled in the fundamentals of planning and public relations in order to explain the programme to landowners, developers and the public. Attention to detail and meticulous record keeping is required to ensure all development right transactions are accurately reflected.

#### **2.3.4 The Lake Tahoe case study**

A key example of the application of TDR in the international arena and which deserves special mention is that which was applied at Lake Tahoe situated across the states of California and Nevada in the United States. Whilst it is acknowledged that there are fundamental differences between Lake Tahoe and its surrounding land area and that of the Area of Controlled Subdivision around Midmar Dam (the study area for this thesis), the Lake Tahoe case provides an interesting departure point for this particular study. Certain similarities both in terms of institutional arrangements and impacts of development on a sensitive environment can be drawn from the Lake Tahoe case and that of the study area. These aspects and their linkages to the

study area are discussed individually in greater depth in Chapters Three to Seven.

The information sourced for this component of the report was drawn from the *Suitum Brief, 1997*, <http://www.ceres.ca.gov/trpa>.

2.3.4.1 Lake Tahoe lies between the Sierra Nevada mountains in the west and the Carson Range in the east. It is the largest alpine lake in the world based on all its physical dimensions which include depth and volume of water. It is 12 miles (19,3 km) wide and 22 miles (35,4 km) long. This natural Lake has very low nutrient levels which lowers algal productivity, due, in part, to a relatively small land surface area surrounding the Lake from which nutrient-contaminated runoff can flow into the Lake. The other reason is that the riparian biologic communities in the area known as "stream environment zones"(SEZ's) naturally absorb and reduce the amount of sediment, nutrients and other contaminants in the surface runoff into the Lake. The weather, terrain and vegetation together with the highly erodible soils create within the Lake basin a fragile environment. Disturbance of the natural surface soils and vegetation and the addition of impervious materials such as concrete, paving, and brick associated with physical construction in the Lake basin have had immediate and sizeable adverse impacts on the water quality of the Lake (*Suitum Brief, 1997*).

2.3.4.2 The need for coordinated, carefully planned and regulated development of the properties around the Lake basin and the Lake was recognised in the late 1960's and early 1970's. Until that date the basin had been subjected to unchecked residential development which also included, mining, forestry and tourism activities.

The Lake falls under the jurisdiction of two government agencies. These two bodies, the Tahoe Regional Planning Agency and the

Tahoe Regional Planning Compact: Nevada and California, entered into the Tahoe Regional Planning Compact. This permitted the creation of a single bi-state agency, the Tahoe Regional Planning Agency (TRPA), similar to a municipality, which was empowered, to devise a unified development plan for the area. The regional plan, which placed greater restrictions on development on certain land parcels (including SEZ's) was adopted in 1972. However, environmental conditions continued to worsen and development in the SEZ's was identified as the chief cause. An environmental agency suggested the enforcement of "environmental thresholds" to limit growth in the SEZ's.

- 2.3.4.3 By 1980 the water quality in the Lake was declining and Congress found that the "waters of Lake Tahoe ...are threatened with deterioration or degeneration; which endangers the natural beauty and economic productivity of the region" (*Suitum Brief*, 1977, p 9). Congress increased the powers of the TRPA and required it to enact a plan which prevented development that did not comply with the specific "environmental threshold carrying capacities". In 1982 the TRPA adopted environmental threshold carrying capacities for the Tahoe Region.
- 2.3.4.4 The new 1987 plan which emerged was the culmination of years of consensus building workshops in which conservation and property rights interests and other government, business and community interests identified common ground. One of the central themes of the regional plan in preserving the Lake's water quality is through restricting existing and future residential, commercial and tourist accommodation development in the Lake's Basin. The plan concentrates on three areas and restricts:



- ▶ the total amount of residential development that may occur in the Basin.
- ▶ the pace of development by limiting the number of building permits issued each year.
- ▶ the amount of impervious coverage resulting from permitted development.

2.3.4.5 The TDR programme applied affects all property owners in the Basin and all parcels of land are subjected to the same development restrictions. The differences between development restrictions are not arbitrary. Whether or not a property is eligible for future development depends on an assessment of the physical suitability of the site for such development. In order to build a residential unit the “property owner has three rights: a “residential development right”, a “residential allocation”, and “land coverage” (*Suitum Brief*, 1977, p 10). The “residential right” represents the right to have a residential unit on a particular parcel of land, whilst the “residential allocation” is required to construct a residence in a defined calendar year. “Land coverage” is the maximum amount of the site which may be covered by impervious material, expressed as a percentage of the area of the site.

2.3.4.6 In terms of the Fifth Amendment of the United States Constitution it is stated that “.....nor shall private property be taken for public use, without just compensation”. In terms of the operation and application of a TDR programme at Lake Tahoe and its surrounds this principle had to be adhered to. It is stated that the application of a TDR programme in fact promotes the “Fifth Amendment’s justice and fairness goals by creating new private property rights that accomplish a more equitable sharing of the economic burdens and benefits that flow from protecting fragile natural resources upon which existing private property rights depend” (*Suitum Brief* , 1997, p 24).

In order to ensure that property owner's rights are not infringed, each owner within the Basin is automatically accorded one "residential development right", entitlement to a "residential allocation" and "land coverage" is directly related to a site's suitability for development. Through the application of a system known as Individual Parcel Evaluation System (IPES) each site is assessed and a numeric score is assigned to that parcel which reflects the predicted effects of that parcel's development on the water quality of the Lake. This value also determines the "land coverage" applicable to each parcel. The IPES score is also relevant to the parcel's eligibility for receiving a "residential allocation" in a particular year. Three hundred residential allocations are available each calendar year and only land parcels with set minimum score are eligible for development in a year.

- 2.3.4.7 This plan combines development restrictions with enhanced property rights which strives to "achieve a more equitable sharing of the burdens and benefits resulting from the restrictions and to steer residential development to the most physically suitable locations" (*Suitum Brief*, 1997, p 11). All property owners are permitted to sell their TDR's (residential rights, allocation right and land coverage right) to other property owners of other eligible properties. The **seller** is required to record the sale of the development right against his or her property as a (title) deed restriction.

Properties which fall within the SEZ's receive a score of zero and are not permitted any development at any time. However, the owners of SEZ's properties may also sell the rights ascribed to their property including land coverage, allocation and residential rights. In addition to the one residential right to which each owner of vacant residential property is entitled, the owner of a SEZ property may earn up to three additional residential bonus units. The owner earns and is given these

bonus units upon TRPA approval of the sale or transfer of the initial development right. The bonus units provide compensation for the onerous development restrictions applicable to the land parcel. Furthermore, the owner of a SEZ property also receives land coverage rights equal to one percent of this land. The low land coverage percentage reflects the environmentally sensitive character of the land upon which the percentage is based. The SEZ owner can apply for a residential allocation in any year, and if awarded it, sell it to an eligible property in the Basin. The TRPA approval is valid for three years enabling the property owner to mull over his final decision to sell or not.

- 2.3.4.8 An interesting aspect of the TDR programme is that it permits landowners who demolish existing development the option/right to obtain another form of TDR's including units and coverage which may be sold and applied to other properties. Whilst this TDR programme may appear sophisticated it has worked well with SEZ property owners obtaining and selling bonus units. Although this programme has been challenged in court, the court found that the application of a TDR programme did not impinge on an individual's right to development as the owner is permitted to "use" the property by severing the various rights to develop from the property and by selling or otherwise transferring them for application to a different parcel (*Suitum Brief* 1997).

## **2.4 TDR programmes in the Province of KwaZulu-Natal : South Africa**

It has generally been the practice in South Africa, and in KwaZulu-Natal in particular, that the development of land has been controlled in an application based manner for those areas which fall outside a conventional town planning scheme area. The realm of planning has, more recently shifted

towards an integrated development planning approach with all sectors being involved from the outset of a planning initiative.

From the discussion in 2.2 TDR programmes in the United States are implemented on a regional or district level and, in terms of zoning ordinances, development rights or densities are ascribed to all properties. In contrast, TDR in South Africa and KwaZulu-Natal appear to have application at a micro-scale hence the preferred use of the term sites (property) rather than district.

To the author's knowledge, TDR has been practised on a limited basis in KwaZulu-Natal, with little formalisation and without defined legal processes. Examples of a form of TDR are evident in the Durban and Pietermaritzburg Town Planning Schemes where increased development rights have been offered to property owners and developers who preserve buildings of historical significance. This example may be likened to the New York experience previously discussed under 2.2.

The KwaZulu-Natal Drakensberg has been and still is the subject of much contestation in respect of development rights being granted at the expense of the conservation of what is accepted as a world renowned area of natural beauty. The trading of development rights (the right to build residential units) between properties has occurred within the Cathkin Park Town Planning Scheme area, albeit not in a formalised manner, and not formally endorsed by the Provincial authorities. The trading in development rights occurs in the following manner. Developers who wish to obtain greater development rights on a property may be directed to approach adjacent property owners whose development rights have not been exercised. The purchased development rights may be taken up on the property more suited to development. The premise upon which development rights may be taken up is subject to the

consolidation of the subject properties or via notarial tie which prohibits the properties being disposed of (sold) independently of each other (E Donaldson, Umsikele Municipal Support Services, advisor to Cathkin Park, pers. comm. 1999).

Other work which focussed on the Natal Drakensberg reflected the following in respect of TDR as a mechanism for environmental protection: "TDRs can reduce substantially the value shifts and economic inequities of restrictive zoning. For example, it can allow the market to compensate owners whose land cannot be developed because of its environmental, scenic, or historic significance. By selling development rights, a landowner can receive profit from property appreciation without developing the parcel...Most importantly, TDR, unfortunately, requires a high level of staff expertise to design and administer. The novelty of the TDR concept and the sophistication required to make it work properly thus frequently reduces its attractiveness and political acceptance in many communities. This might prove to be a stumbling block in KwaZulu-Natal. It must not override the fact that internationally, TDR programmes are successfully advancing conservation and increasing numbers of communities are implementing TDR programmes" (Hansen, 1994, p 48).

At the time of writing the author is aware of a proposal by the Town and Regional Planning Commission (a statutory advisory and policy body to the KwaZulu-Natal Provincial government on matters of Development Planning) to embark upon a pilot TDR programme within the Province, although the pilot area has yet to be selected. Interestingly, it is noted that there is general consensus within the development planning fraternity whose views were canvassed in the Phase 11, Transfer of Development Rights project, that "TDR in the urban context is totally wrong in principle for a number of reasons...." (Shepstone and Wylie, 2001, p 17). This view is endorsed by the author and is expanded upon in Chapter Six where the advantages of

applying and testing a TDR programme in an area which has not previously been ascribed development rights is discussed.

## **2.5 Conclusion**

Clearly the idea of TDR is not a new phenomenon within the development planning field, particularly in the international arena. International experience has shown that there are certain key requirements which contribute to the success of a TDR programme: a defined sending area; a defined receiving area; a pool of development rights severable from the land; and, a well administered procedure whereby development rights are transferred from one property to another.

The Lake Tahoe case study provides a detailed account of the process by which a fully fledged TDR programme has been developed. It is important to note that the TDR programme at Lake Tahoe has been tested in court. This case study provides an excellent basis on which a TDR programme within the KwaZulu-Natal Province could be developed.

Whilst the concept has been explored within the Province of KwaZulu-Natal the identification of a suitable area on which to test the feasibility of a TDR programme has not occurred. It is the author's view that until an area has been selected and subjected to a TDR programme, no further progress will be made in testing the usefulness or otherwise of TDR as a mechanism for environmental conservation. It is only once a TDR programme has been applied and implemented in a defined area that key lessons can be taken forward in order to refine the TDR mechanism with a view to replicating the mechanism in other areas worthy of similar protection measures.

## **CHAPTER THREE**

### **THE CURRENT REALITY IN SA AND THE LEGISLATIVE FRAMEWORK FOR TRANSFER OF DEVELOPMENT RIGHTS (TDR) PROGRAMMES IN KWAZULU- NATAL**

#### **3.1 Introduction**

This chapter comprises a brief discussion on whether or not TDR programmes are an appropriate mechanism for conservation in the South African context. The chapter briefly addresses the concept of ownership and associated rights and includes an in-depth look at the legislative framework in KwaZulu-Natal in terms of which the application of TDR programmes could be achieved.

#### **3.2 Current reality in South Africa**

The question that arises is whether or not formalised TDR programmes are both appropriate and applicable in the South African context. Simplistically put it is accepted that South Africa is a developing country which needs to exploit its natural resources in order to achieve global competitiveness and to satisfy its large unemployed population. At the same time environmental awareness in this country and in KwaZulu-Natal is increasing. This is borne out by initiatives which have seen certain of the Province's natural assets gaining World Heritage Status. The balancing of development with the associated impacts on ecological, economic, social and cultural well-being for the broader community it affects, is a delicate one. It is suggested that one of the key areas where South Africa can begin to manage these competing forces is to attempt to utilize its land resources in a more efficient and appropriate way.

It is the author's view that at a national scale this is difficult to achieve and that it is at the local level that small successes will pave the way for overall sustainable development. It is acknowledged that the already under resourced provincial and local authorities responsible for land use control and management are under extreme development pressure from the electorate, developers and property owners. On the other hand, heightened environmental awareness and responsibility brought about by the requirements of the Environmental Conservation Act, Act 73 of 1987 and associated regulations and the National Environmental Management Act, Act 107 of 1998 require those authorising development to be cautious in their approach given the demands of accountability prevalent in these Acts.

It is suggested that in areas of environmental significance, particularly where development has not been permitted, but where it is recognised that the freeing up of opportunities is required that TDR programmes may provide the mechanism towards ensuring a better balance between competing economic, social and environmental interests.

In the current situation the emerging local authorities and district councils generally do not have the necessary financial nor technical expertise to implement what may be regarded as a sophisticated planning tool. However, the implementation of a TDR programme, in an appropriate area may provide an opportunity for the relevant authority to plan pro-actively, by conserving part of its resource and at the same time permitting development, rather than denying developers and property owners development rights and investment opportunities.

The benefits of a successful TDR programme in the South African context would reflect a gain for the planning authority as it would serve to encourage economic development and simultaneously allay the fears of conservationists.



### **3.3 The Constitution of South Africa (Act 108 of 1996)**

The Constitution of South Africa is particularly relevant in this thesis in so far as it deals with the aspects of individual and community rights and payment of compensation in respect of loss of certain rights. The Constitution has provided a fundamental shift away from the rights of individuals in respect of property rights towards a social democratic perspective of property which places the interests of the rights of the broader community at the forefront (Venn, Nemeth and Hart, 1998).

It may be argued that the preservation of a natural resource or asset in the interests of the broader community takes precedence over an individual's right to develop his or her property. However, payment of compensation for financial loss arising from changes in use (development) rights must reflect the fundamental norms and principles embodied in Section 25 of the Constitution. This principle is not dissimilar from the concept of compensation in terms of the Fifth Amendment of the Constitution of the United States which was discussed previously in Chapter 2 in respect of the TDR programme of Lake Tahoe. It is clear that a TDR programme addresses both fundamental issues namely; the interests of the broader community (public) and the compensation payable in respect of loss of development rights.

### **3.4 Ownership, Rights and the Deeds Registries Act (Act 47 of 1937)**

In order to understand the meaning of ownership and rights associated with ownership, the discussion provided by Venn, Nemeth and Hart (1998) is useful. In terms of legal definition "ownership" may be described as a bundle of rights which gives an individual a right to use, enjoy, alienate or sell an object. A development right is that part of an ownership right which entitles one to build on one's property and is almost without exception viewed

as the owner's most valuable asset. The development right is controlled, ascribed by law and is defined by a state body (provincial planning authority for example). Certain rights may be separated from the bundle of rights for example, through lease. So too is it possible to transfer development rights to another individual/property.

"In general one can say that the right to build and develop immovable property is one of the entitlements of use, and as such part of rather than an independent right in property. However, as soon as a legal system allows landowners to separate and dispose of the right to build and develop apart from ownership itself, the question might arise whether this right should not be recognised as a separate right in property" (Prof. A.J van der Walt cited in Venn, Nemeth and Hart, 1998, p 3). This means that as soon as a TDR is defined in law as a right capable of transfer to another site it becomes a right that may be separated from the bundle of rights.

It should be noted that government entities have the right to constrain, to a certain extent, a property owner's use of their property and thus the economic value that the property owner can derive from the property. The most commonly used restraint has been that of zoning (Lawrence, 1998). Whilst a TDR programme may further constrain development on certain properties, the fact that the development rights have financial value, permits the landowner to recoup the "loss" incurred by the development constraint.

An important issue that arises in the implementation of a TDR programme is in respect of the valuation of financial security of a sending property which has been mortgaged. It is proposed that TDR's will be registerable in terms of the *Deeds Registries Act* No. 47 of 1937 which would resolve this particular aspect (Venn, Nemeth and Hart, 1998). The Registrar of Deeds is compelled in terms of this Act to register any real rights which would therefore include rights ascribed in terms of a TDR programme. Further, the

Act permits the transfer of real rights from one person to another. It is further confirmed that development rights would have to be transferred via Notarial Deed and would therefore require endorsement on the particular title deed (Venn, Nemeth and Hart, 1998). It is the author's view that in the event of a TDR programme being embarked upon in a given area, all title deeds pertaining to properties within the area should be endorsed on the front cover of each title deed. This would ensure that fundamental endorsements of this nature would not disappear within the "text" of the property deed.

A final point on the broader legislative framework which confirms that TDR programmes are workable and legal is evident in the following statement: "There is no constitutional, jurisprudential or practical reason in law why South Africa cannot follow trends and adapt current zoning and planning policies to incorporate the principle of transferrable development rights" (Cohen, S cited in Venn, Nemeth and Hart, 1998 p 18).

### **3.5 The KwaZulu-Natal Planning and Development Act (Act 5 of 1988)**

#### **3.5.1 Purpose and Principles of the KwaZulu-Natal Planning and Development Act (PDA)**

The current tool which defines or ascribes development rights in KwaZulu-Natal is the Town Planning Scheme (prepared in terms of the *Natal Town Planning Ordinance* (the Ordinance) No.27 of 1949) approved by the Provincial Authorities and the KwaZulu-Natal Development and Planning Commission (the Commission). Simply put, this comprises a zoning map and associated document or manual which together prescribe the type and extent of development permitted on each property.

The newly enacted *KwaZulu-Natal Planning and Development Act* (PDA),

Act 5 of 1998 is intended to replace the aforementioned Ordinance. The PDA proposes to “facilitate development in the province in an orderly way so as to ensure the rational development of the province and of the utilisation of its resources .. and generally to put in place systems and structures which will ensure effective, participative and sustainable development, and to provide for matters ancillary thereto” (Act 5 of 1998, preamble).

Certain principles underpin the Act. Principles 14 and 15 are of particular relevance to the application of TDR programmes. Principle 14 advocates an environmental ethic of sustainable use which is to be promoted through policies and plans and which must seek to create and maintain environments which promote health and well-being of inhabitants. Principle 15 stipulates that there should be mechanisms of compensation for affected rights holders to ensure that sensitive environments, including those of ecological, cultural, or historical significance are protected (author’s emphasis). It is the author’s view that this refers to the possibility of the implementation of TDR programmes or similar forward planning mechanisms.

### **3.5.2 Development plans in terms of the PDA**

Chapter IV of the Act provides for the formulation of Development Plans and for the identification and proclamation of Special Case Areas. The general purpose of a development plan is to provide “a co–ordinated, harmonious and sustainable development of the areas to which it relates, in such a way as will most effectively tend to promote health, safety, order, amenity, convenience and general welfare, as well as efficiency, economy and participation in the planning and development process” (Act 5 of 1998, Chapter IV, section 22).

A development plan may be prepared at a provincial, regional, metropolitan or local (community) level and comprises a land use management and control

component and an environmental management component. It is intended that the responsibility for the preparation, implementation and administration of such planning initiative could be undertaken by the lowest appropriate authority level. Existing town planning schemes may also be converted to development plans subject to certain modification if required. This section of the Act gives the broader public scope to plan, develop and manage their own affairs within a defined framework and subject to the necessary approval at Provincial Government level. It is therefor suggested that the community within the Midmar Area of Controlled Subdivision, the study area, would be within its rights to embark upon such process should no other appropriate body take on this function. It is further suggested that a TDR programme could form part of a development plan.

### **3.5.3 Special Case Areas in terms of the PDA**

In terms of Section 31 of the PDA the Minister, may at her/his insistence or on the application of any person, prescribe areas or features as a Special Case Area (SCA). Linked to such proclamation the Minister may prescribe "activities which in his or her opinion will have a detrimental effect on the environment, in those areas or on the features, or on certain portions thereof..... and may prescribe "any special procedures which will have to be followed either in place of or in addition to existing procedures for approval of developments affecting those areas or feature or for the carrying on of the prescribed activities" (Act 5 of 1998, Chapter IV, section 31 (2) and (3)).

The inference is that the special procedures referred to could include amongst other procedures, TDR programmes. Furthermore, Section 31 also stipulates that the Minister may identify which authority is responsible for granting approval for development/activities in a Special Case Area. Specific development plans may be drawn up for SCA's known as Special Case Area Plans.

It is understood that the KwaZulu-Natal Town and Regional Planning Commission's view was that the implementation of TDR programmes should be limited to those areas declared as Special Case Areas by the Provincial Minister. The proclamation of SCA's is intended to identify and to protect areas of high conservation value such as the Natal Drakensberg, the Greater St. Lucia Wetland Park area and portions of the coastal zone. Such proclamation would be the first step towards instituting a TDR programme. It is argued that the Midmar Area of Controlled Subdivision, the study area, could fall within the ambit of Section 31 of the PDA and be considered a Special Case Area.

The focus for Special Case Areas has been on the Drakensberg and on the Coastal Zone, however the declaration of SCA's should not be limited to these areas. It is suggested that "potential SCA's should be identified through planning processes undertaken by different spheres of government" (Metroplan 2000, p 14). It follows therefore that any integrated planning exercises undertaken by district, or local municipalities, should include investigation into the identification of potential SCA's. The mandatory preparation of Integrated Development Plans (IDP's) in terms of the Municipal Systems Act, would therefore include reference to the identification of SCA's within each local and municipal district.

#### **3.5.4 Compensation in terms of the PDA**

Chapter VII, Section 51 sub-section (1) makes provision for the payment of compensation for any property owner who suffers financial loss if such a loss arises as a result of the coming into operation of a development plan whereby his/her property rights are expropriated. Such provision is in accordance with the requirements of the Constitution as previously mentioned. The PDA therefore recognises the need for creative mechanisms, such as TDR programmes, for development management and

sets up the legislative framework for the implementation (through the promulgation of regulations) to give effect to such mechanisms.

### **3.6 Current Status of KwaZulu-Natal Planning and Development Act and associated regulations**

The KwaZulu-Natal Town Planning Commission oversaw the formulation of the PDA on behalf of the Provincial Minister for Local Government. The Commission thought it prudent to include in the legislative framework an opportunity for the implementation of TDR programmes. The current programme for the promulgation of the PDA Regulations remains unknown as new legislative frameworks and requirements on development planning appear to have superseded this event. It therefore is unclear as to whether or not the draft TDR regulations as prepared by Venn, Nemeth, and Hart, (1998) will be included. A member of the Commission confirmed that whilst the Provincial Portfolio Committee for Planning was amenable to the concept of TDR, it had reservations with respect to the practicability and implementation of such programme (Professor Konyin pers. comm. 1999). It was further confirmed that the Commission is in the process of commissioning research into an as yet unidentified area(s), possibly a portion of the KwaZulu-Natal Drakensberg, where a TDR programme could be tested. Once such feasibility has been concretely tested, review of the proposed TDR regulations is envisaged.

Whilst the status of the inclusion of TDR in the PDA Regulations is uncertain at present, it is believed that there is nothing to prevent an authority or community on embarking on the implementation of a TDR programme in a pilot area, albeit if the regulatory framework is not yet legislated. It is the author's belief that a TDR programme may be instituted using the current legislative framework and through specific incorporation of the TDR mechanism into the existing land use and planning control proposals which

have already been prepared for the Midmar Area of Controlled Subdivision (the study area) and through the Integrated Development Plans.

### **3.7 Conclusion**

It is clear that it is the intent of the Provincial authorities to seek alternative mechanisms to protect areas of environmental significance without compromising economic opportunities. The TDR is one mechanism which has been investigated and the findings confirm that TDR would be an acceptable, legally sound concept which could be applied in the South African context as an alternative form of development control. However, the formal incorporation of the TDR mechanism into the current legislative framework within the KwaZulu-Natal Province has yet to be realised.

It is the author's view that, despite the fact that formal incorporation of the TDR mechanism into the current legislative framework has not occurred, there is nothing to prohibit the implementation of TDR as a mechanism of planning control. This is possible through the inclusion of the TDR mechanism into existing town planning schemes or any other form of development plan through which a local authority currently manages its land use matters.



## CHAPTER FOUR

### THE ORIGINS OF MIDMAR AREA OF CONTROLLED SUBDIVISION - THE STUDY AREA

#### 4.1 Introduction

This chapter provides the reasoning behind the selection of the Midmar Area of Controlled Subdivision as the study area. The chapter provides details on the location of the Midmar Area of Controlled Subdivision as well as a brief history of the reasons behind the proclamation of the area as one of significant environmental importance. The primary source of the historical context was gleaned from the files of the KwaZulu-Natal Provincial Department of Local Government and relies heavily upon a summary document prepared by A M Little, Institute of Natural Resources (1995). A short section which centres on the *Review of the 1970 Midmar Policy* is incorporated together with a more lengthy discussion of *The Midmar Integrated Planning Initiative*.

#### 4.2 Selection of the study area

The selection of the Midmar Area of Controlled Subdivision as the study area was largely due to the author's personal work experience. As part of the execution of the author's duties as an officer of the Provincial Department of Local Government, assessment of development proposals within the KwaZulu-Natal Midlands was required. Interest in the KwaZulu-Natal Midlands and the development pressures facing this area were further fuelled by the author's close involvement in the *Howick to Mooi Corridor Study* facilitated by Professor J McCarthy (McCarthy, 1996), commissioned by the KwaZulu-Natal Provincial Department of Local Government and the *Midmar Integrated Planning Initiative* authored by Ninham Shand in Association with

Scott Wilson and SA Farm Consultants, (Ninham Shand, 1998), commissioned by the KwaZulu-Natal Town and Regional Planning Commission (TRPC)).

Whilst the author had been exposed in a limited sense to the concept of TDR, it was as a result of serving as a member of the Steering Committee for the *Transfer of Development Rights Project* commissioned by the KwaZulu-Natal Town and Regional Planning Commission (TRPC) undertaken by Venn, Nemeth and Hart in 1998 that a link between the concept of TDR as a mechanism to manage future development within the Midmar Area of Controlled Subdivision was made.

Through the TDR Project and literature review process it became clear that it would be infinitely desirable, in the author's opinion, to apply a TDR programme to an area where property owners have had little or no development rights ascribed to their properties. An area which is, in the main, undeveloped, provides a blank canvass on which a concept like TDR could be developed and tested with greater ease and, with a corresponding greater chance of success. Once again work experience played an important factor in the determination of a suitable site (study area) on which the theoretical appropriateness of the application of a TDR programme could be tested.

For these reasons the study area selected was that of the Midmar Area of Controlled Subdivision surrounding Midmar Dam (Figure 3). As part of the supporting documentation supplied for the *Transfer of Development Rights Project*, a *Suitum Brief* in respect of a TDR programme for Lake Tahoe in the United States was made available. This further reinforced the selection of Midmar Dam as an appropriate study area. For the purposes of this report the Midmar Area of Controlled Subdivision is simply referred to as the study area.

### **4.3 Location of the study area**

The Midmar Area of Controlled Subdivision is situated north of Pietermaritzburg and west of the town of Howick (Figure 2). Three roads, the N3, R103 and MR617 provide access to the study area. The total area of the Midmar Area of Controlled Subdivision is some 10 754ha. This includes the surface area of the dam and adjacent tracts of land, primarily under agriculture. Of the 10 754ha, 2 925ha is situated within the Midmar Resort Zone under the custodianship of Ezemvelo KwaZulu-Natal Wildlife (managed on behalf of the Department of Public Works). In terms of local government jurisdiction the study area is situated within District Council 22 and Local Council KZ222.

### **4.4 Historical context**

It was in the 1950's that government authorities recognised the need for a reliable water supply to cater for the population and industrial growth in the Pietermaritzburg-Durban region. Midmar Dam, the first of several storage reservoirs on the Mgeni River was constructed. Despite objections to the construction of the dam, based primarily on the ...."permanent inundation of land with a high potential for productive agriculture and the disruption of farms and farming systems", the construction proceeded and the dam began filling in 1963 (Little, 1995, p 1).

Another motivation behind the construction of the dam was to maximise the maintenance of high quality water while providing the Province with a valuable open air recreation facility. In 1964 in an effort to meet these requirements the Province's then Executive Committee instructed the KwaZulu-Natal Town and Regional Planning Commission to prepare a town planning scheme for Midmar and its surrounds and to administer it (Little, 1995).



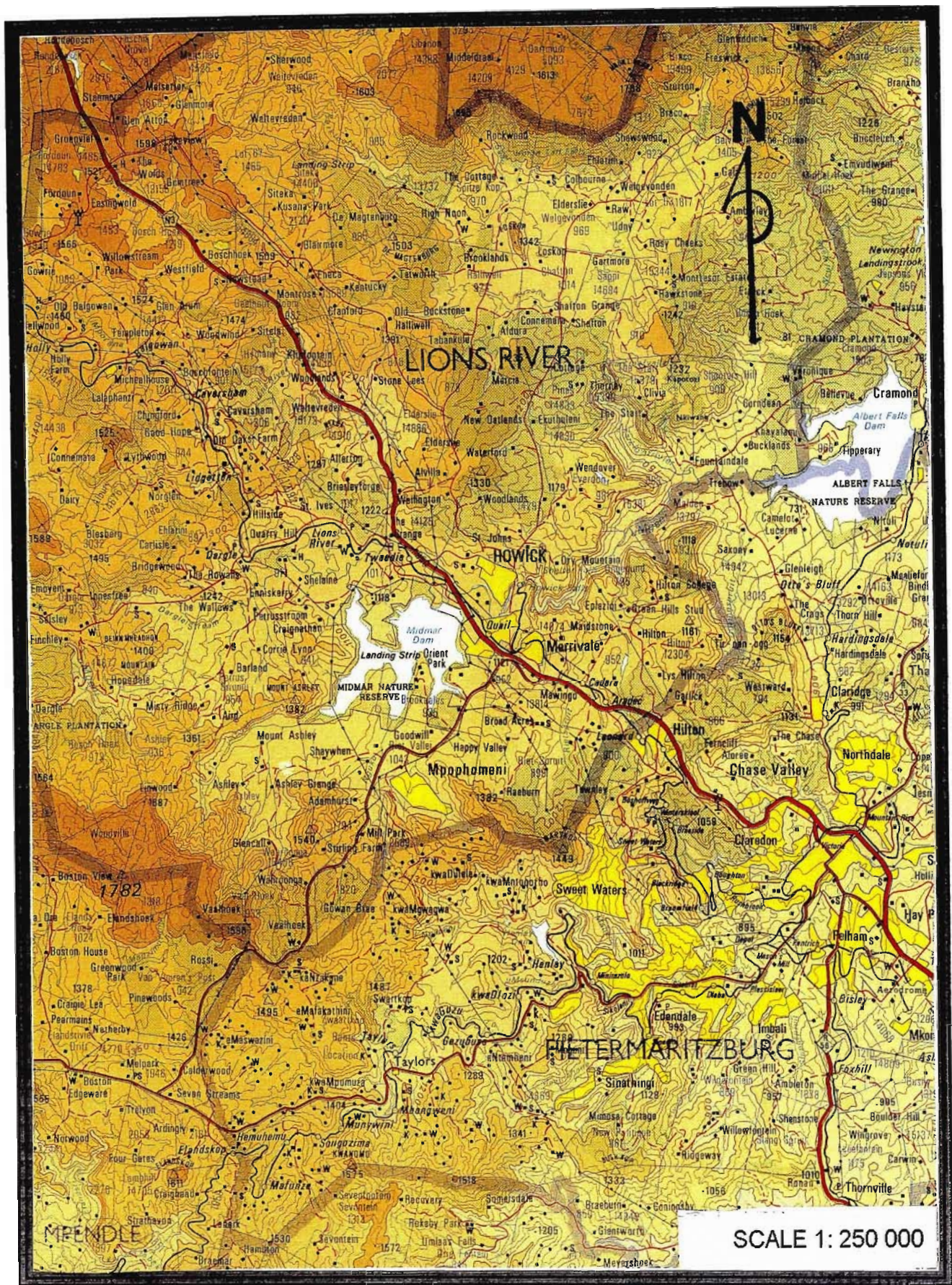


FIGURE 2: LOCALITY MAP: MIDMAR DAM AND SURROUNDS



The formulation of the town planning scheme was to include the following objectives:

- ▶ “to plan and control areas near the water’s edge and development within those areas;
- ▶ to plan and control access to a recreational resort where intrusion to the peace and quiet with the many open-air recreation activities could be avoided;
- ▶ to plan the development of the surrounding countryside to maintain the setting of Midmar; to encourage farming and the use of farm land and buildings so as to add interest to the country side and landscape characteristics which the public could enjoy; and,
- ▶ to control speculative development of land for any purpose other than agriculture “ (author’s emphasis) (Little, 1995, p 1).

During the same year, 1964, Midmar and its surroundings was constituted as a Regulated Area, thereby placing local authority responsibility with the Local Health Commission. This body, later known as the Development and Services Board, now Umsikele Municipal Support Services, (a service delivery para statal) retained jurisdiction over the Regulated Area until the advent of the demarcation process in 2000. To the author’s knowledge, as a result of this change in institutional arrangements, the town planning scheme as proposed did not materialise.

In 1968 the dam and immediate surrounds was proclaimed a Nature Reserve and placed under the control of the Natal Parks Board (now Ezemvelo KwaZulu-Natal Wildlife). Simultaneously in 1968 a decision was taken by central government to establish the Mpophomeni Township close to Midmar, a decision to which the then Administrator objected to on the basis of potential danger of pollution, arising from surface runoff (Little, 1995).

During the next two years several applications for the subdivision of farms and a proposal to establish holiday or residential development near Midmar were received by the relevant planning authorities, both local and provincial. As a consequence of these applications a decision was taken by then Natal Provincial Administration which prevented subdivision unless the proposed subdivision and remainder were economically viable agricultural units. If not, such proposals for subdivision would be refused as it would be "contrary to the planning policy of not introducing non-agricultural enterprises into the surroundings of Midmar Lake" (Little, 1995, p 2).

It is the author's supposition that this decision was underpinned by an effort to curb the potential loss of prime agricultural land and to stem the tide of speculative development proposals (in accordance with the principles which were to have been included in a town planning scheme for the area).

In 1970 the then Provincial Executive Committee reaffirmed that it was the policy of that committee that no land within the area shown on tracing number 2859 (Figure 3) could be subdivided except where the portions of land could be proved to be economic agricultural units. Such policy remains to this day (author's emphasis), (Little, 1995).

In 1990 the former Natal Parks Board (now Ezemvelo KwaZulu-Natal Wildlife), amid increasing pressures for holiday development and subdivision of land adjacent to Midmar, invited proposals for the construction of an hotel and conference centre at Midmar (within the area demarcated on tracing plan 2859) with the aim of generating income to assist with the running of the Midmar Resort. Following this, the former Minister of Local Government instructed that the 1970 policy be reviewed.

## **4.5 The 1970 Review of the Midmar Area of Controlled Subdivision**

The 1970 Review co-ordinated by the Institute of Natural Resources (INR) used a series of analytical reports prepared by various experts as a basis for discussion at workshops attended by various stakeholders and interested and affected parties. These analytical reports focussed on the following elements of Midmar Area and its potential:

- ◆ Natural Resources and Agricultural Aspects
- ◆ Ecology
- ◆ Economics
- ◆ Sociology
- ◆ Tourism
- ◆ Institutions
- ◆ Policy Formulation
- ◆ Water, and Catchment Management Aspects (INR, 1996).

The key findings of the 1970 Review which are of particular relevance to the application of a TDR programme in the Midmar Area of Controlled Subdivision are summarised below (INR, 1996).

- 4.5.1 The Review recommended a departure from the 1970 Policy and suggested that a new policy for the study area be developed. “The new Midmar Policy will need to balance social and economic pressures with the use of environmental resources so that both may be sustained” (INR, 1996, p 54). It was suggested that the new Policy should have the flexibility to consider new opportunities in the region that would contribute to sustainable economic growth. This would mean a move away from the narrow focus of agricultural opportunities towards diversification of opportunities for landowners within the study area. The opportunities for significant tourism enterprises in the vicinity of the dam, with the associated increase in employment opportunities would be a positive step towards sustainable economic development for local inhabitants.

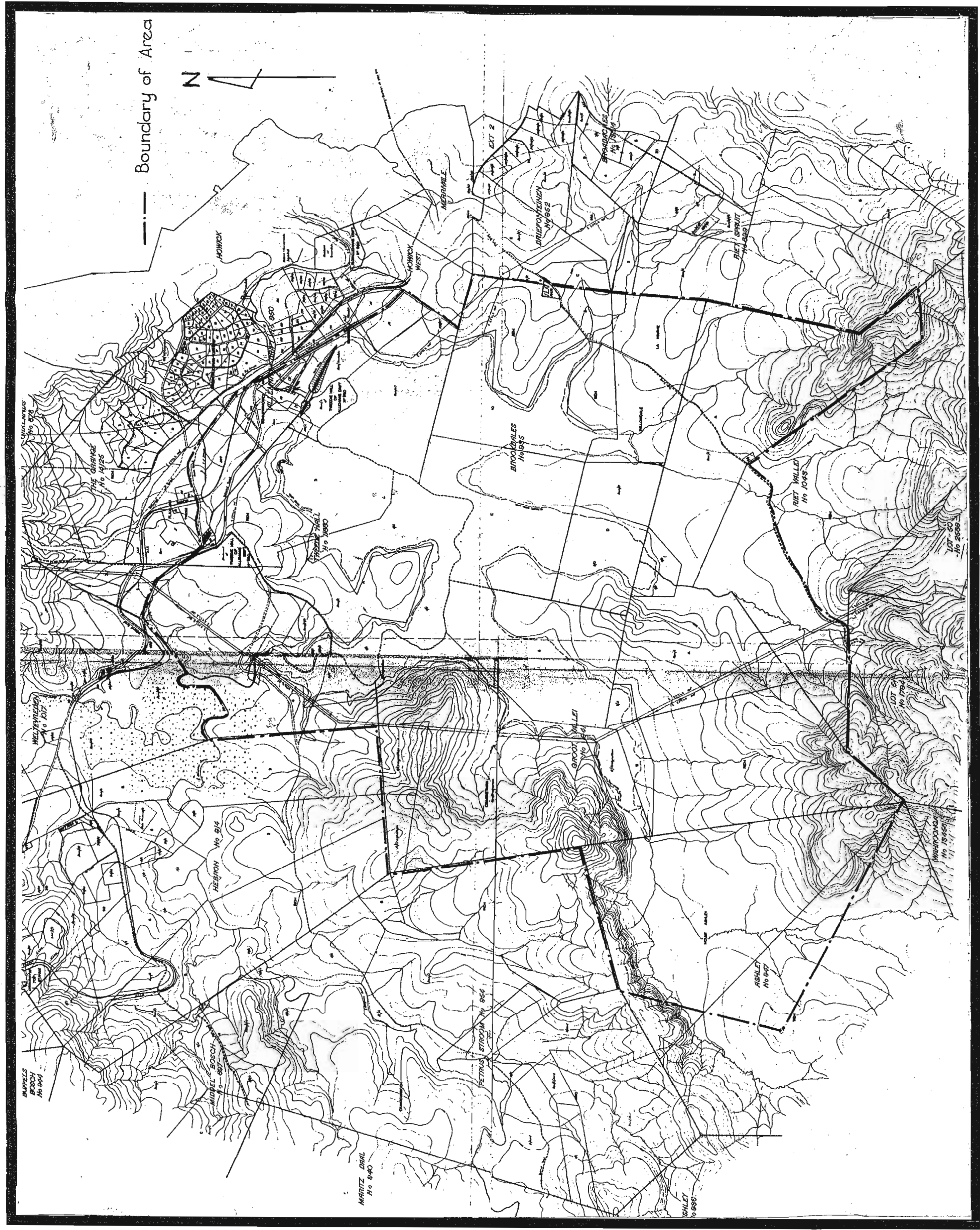


FIGURE 3: MIDMAR AREA OF CONTROLLED SUBDIVISION  
(Tracing N° 2859)(Source: Development Planning Directorate - KZNPA)



4.5.2 Whilst the need for change was recognised, so too was the importance of the utilisation of the resource on which such opportunities would rest. In this regard the need to preserve the water quality of the dam and the qualities of the landscape in the Midmar Area of Controlled Subdivision was highlighted. It was suggested that the creation of further small holdings (via subdivision) could lead to further fragmentation of wild habitats and indigenous vegetation. The report went so far as to propose that all high agricultural potential land should be mapped and used in decision making in respect of other proposed uses. This point is particularly relevant in the proposed application of a TDR programme within the Midmar Area of Controlled Subdivision as a detailed analysis (mapping) of each property would be required in order to determine development capabilities, and in turn, sending or receiving site status.

4.5.3 The review of the 1970 Policy concluded that the new policy should be development orientated and must be directly concerned with people, resource use and management. Further, it should incorporate environmental principles to provide sustainable use and protection of sensitive ecological, cultural, and historical environments. In order to generate this new policy it should be an interactive process with public participation; it must be dynamic and flexible; overlapping planning and administrative functions should be rationalised and the implementation frameworks must enable communities and landowners to participate in a beneficial development path and provision should be made for compensation in costs of injurious affection (author's emphasis) (INR, 1996, p 30).

These recommendations included in the INR document set the tone for the work undertaken by Ninham Shand which followed in 1997/1998. It is worth noting that the approach suggested for the implementation of TDR within the study area carries forward the same fundamental requirements of a consultative process resulting in a common and mutually beneficial development framework.

#### **4.6 Current and proposed institutional arrangements for the Midmar Area of Controlled Subdivision**

The local authority administration of the study area is somewhat confusing. The Midmar Area of Controlled Subdivision falls under the new District Council DC22 and Local council KZ222. The portion demarcated as the Midmar Regulated Area and which was previously administered by Umsikele Municipal Support Services remains distinct and has not been incorporated into either the District or Local Council plans, although this will take place during the preparation of the Integrated Development Plans. The Department of Public Works has assigned responsibility for the management of the resort zone to the Ezemvelo KwaZulu-Natal Wildlife. Whilst development applications are submitted to the Provincial Department of Local Government for approval (Figure 4), some may follow the route offered by the Development Facilitation Act and are submitted to the Provincial Development Planning Tribunal. This scenario is most unsatisfactory and was recognised in the INR report of 1996.

Clearly, a refinement of the institutional arrangements is imperative for the successful application of a TDR programme within the study area. On this point a key recommendation of the 1970 Review was that a Midmar Co-ordinating Committee should be appointed and chaired by the Provincial authorities to ensure that the actions of the various departments and parastatals fit in with each other. It was recommended that the custodian of the Midmar policy should rest with the Department of Traditional and Local Government Affairs. Further, it was recommended that an Advisory Committee be established comprising elected representation from industry, business, tourism, conservation, farmers, non-governmental interest groups, ratepayers associations to formulate opinion on the operation of the policy to feed into the Midmar Co-ordinating Committee (INR, 1996, p 53 - 54).

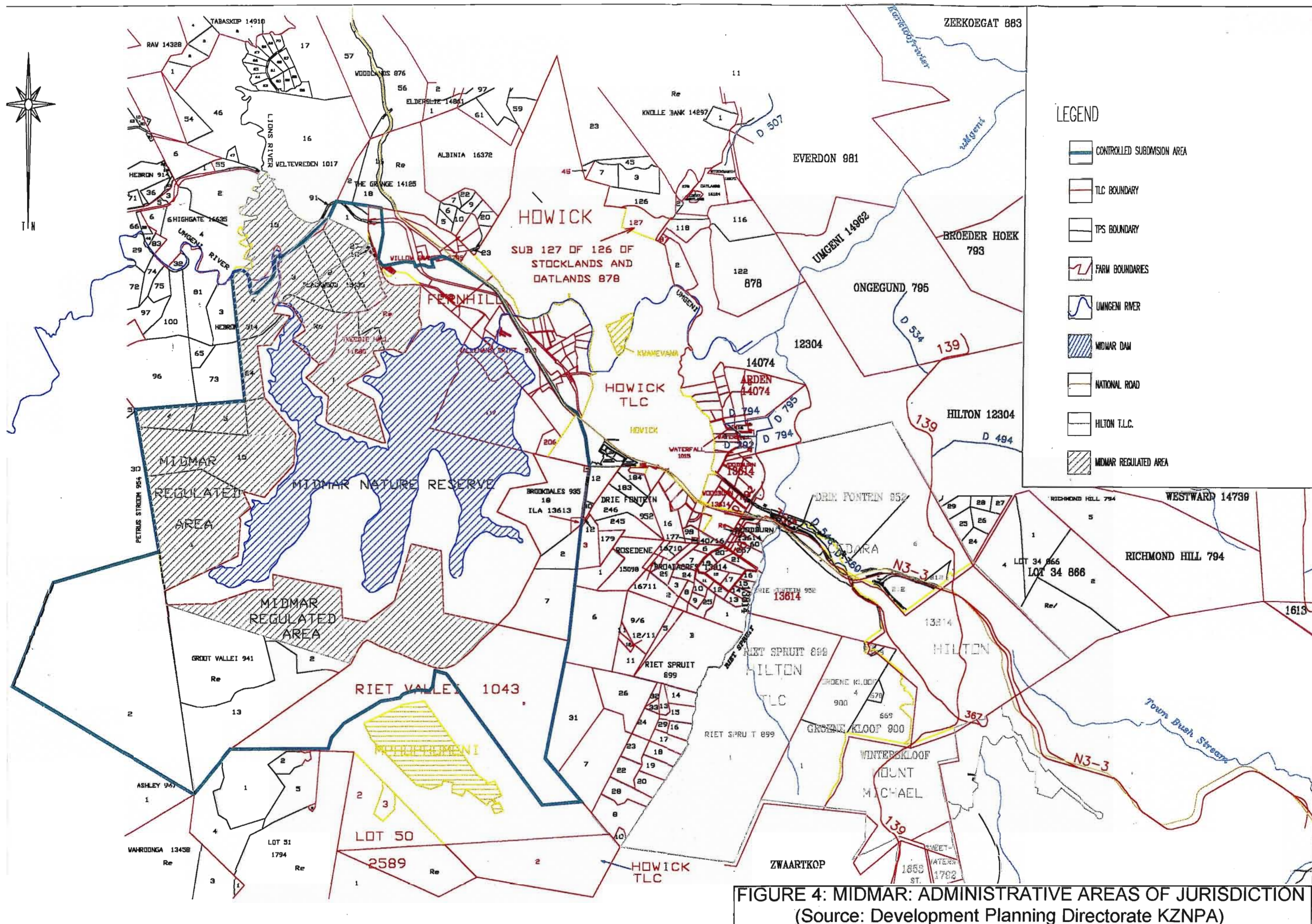
The issue of the institutional arrangements is critical to ensure an effective management system. This aspect was carried forward in the work undertaken by Ninham Shand, 1998 and is reflected in the subsequent chapter. In terms of the implementation of a TDR programme for a designated area, strong, clear administration is required. The need for unambiguous roles and responsibilities within a defined management system is fundamental to the success of the programme. Chapter Six, "Towards the implementation of a TDR programme in the Midmar Area of Controlled Subdivision" also deals specifically with this issue.

#### **4.7 Conclusion**

This chapter confirms the importance of the Midmar Area of Controlled Subdivision as an area worthy of special attention. The importance of the area was first recognised in the 1950's when the area was identified as a suitable site for a regional water storage facility. The dam was completed and filled during the mid 1960's. The area was then subjected to the 1970 policy which prohibited development and subdivision in an effort to: protect the water source; ensure that the agricultural potential was maximised; and, safeguard the environmental integrity of the area.

Increasing development pressure within the area and the fragmented nature of the institutional arrangements resulted in a review of the 1970 policy. The 1970 review recommended a move away from the restrictive 1970 policy towards an integrated and balanced approach to development and resource management within the study area. This recommendation formed the basis of future work and current policy in the study area and is discussed in detail in Chapter Five.







## CHAPTER FIVE

### CURRENT PLANNING INITIATIVES WHICH AFFECT THE MIDMAR AREA OF CONTROLLED SUBDIVISION

#### 5.1 Introduction

From 1996, the year in which the INR Review of the 1970 Policy relating to the Controlled Area of Midmar was conducted, other strategic and developmental planning reports relating to the study area and its surrounds have emerged. These serve to confirm the relevance and importance of the Midmar Area and the sub-region within which it is situated. Certain of these studies which demonstrate the strategic and environmental importance of the study area are discussed briefly below.

#### 5.2 Broader planning initiatives

At the broader regional level, a report prepared in 1997 for the former iNdlovu Regional Council (now encompassing DC 22) entitled *Outline Strategies for the Growth and Development of the iNdlovu Region*, (Scott, Wilson, Kirkpatrick, 1997), recommended that there was a need “to promote the development of small towns and their rural hinterlands” and “to support integrated environmental management processes with a particular emphasis upon identifying areas for restoration and/or protection”. This statement emphasised the need to promote development but not at the expense of the environment. This principle is one which can be wholly ascribed to the study area.

The reports, *Land Evaluation and Planning the Ashburton-Howick Corridor* and the *Howick to Mooi-River Corridor Study* (McCarthy, 1996; 1997) found that the study area of Midmar, particularly the band of land surrounding the dam, was one of the top priority areas for conservation. The 1997 study also

confirmed that Midmar Dam is classified as a landscape of major interest and that in terms of the development/conservation value ascribed in the study, the majority of the study area is classified as conservation priority 1 or 2. The agricultural potential of the land within the study area was classified as "intermediate" in the south and high in the north and west. Furthermore, the Midmar Dam and its surrounds was recognised as a special feature which provides good tourism opportunities which remain untapped.

Certain key points, which have particular reference to this study were made by SWK in 1997 in respect of the area of Midmar in the Howick Integrated Development Framework Plan : Strategy Report. These included the need to identify land use opportunities for tourism on land situated adjacent to the entry points to the Dam area. The report touched on the fact that the nature of potential land use opportunities is likely to be determined by the carrying capacity of the land which will depend upon its environmental sensitivity (author's emphasis). It was also noted that there would be a demand for more intensive use of the waterfront on the northern side of the lake to generate economic and social facilities and a demand to integrate mixed activity developments into the complex, such as golf course and residential complexes (SWK, 1997, p 22).

### **5.3 The Midmar Integrated Planning Initiative**

*The Midmar Integrated Planning Initiative*, 1998 (Ninham Shand in association with Scott Wilson and SA Farm Consultants) was commissioned in response to the Review of the 1970 Policy, by the Provincial Department of Local Government and Housing. The Midmar Dam Area of Controlled Subdivision boundary was expanded to include the entire Midmar Catchment. The completed work comprises an Integrated Policy, a Spatial Development Strategy and a Catchment Management Framework for the Midmar Catchment. Of particular relevance to this study is the Structure Plan and Land Use Controls prepared specifically for the Midmar Area of

Controlled Subdivision and which provided the basis upon which the TDR programme model was developed for this thesis.

## **5.4 Analysis of the Structure Plan and Land Use Controls**

### **5.4.1 The structure plan and land use controls**

The Structure Plan sets a spatial framework for how the land within this area should be used to meet present and future demands in a sustainable manner. The plan guides decisions in respect of evaluation of applications for development. In determining the parameters of the structure plan, regional planning issues such as tourism, water supply, catchment management, agricultural production were taken into consideration. Similarly, consideration was given to socio-economic issues such as population growth and demographic characteristics. A key determinant of the structure plan framework included the identification of “user need issues” which are defined as the functions of the Midmar Area of Controlled Subdivision. The primary functions identified were as follows:

- ▶ a regional recreation and tourism facility based around the attractions of the dam and the farming countryside;
- ▶ an area of unique aesthetic quality due to the farming countryside and natural environment;
- ▶ an area of importance in terms of agricultural production in the Lions River district;
- ▶ a regional water storage facility;
- ▶ an area of ecological conservation related to the Midmar Reserve and nearby conservancies;
- ▶ a generator of economic linkages with the tourism and agricultural sectors (Ninham Shand, 1998, p 71).

Concomitant design guidelines were developed to meet certain principal needs which were identified, namely to sustain and preserve natural conditions, to provide for human access to nature; to generate sustainable economic and social benefits and to retain economic benefits within the local community (Ninham Shand, 1998, p 75). These, together with the identification of opportunities and constraints within the Area of Controlled Subdivision provided the Structure Plan framework and set the parameters for the detailed planning proposals.

The rationale behind the theoretical and conceptual framework in the development of the Structure Plan for the Midmar Area of Controlled Subdivision is not in dispute. Neither, it must be said, are the proposed land uses which may, in future, be permitted within the Area of Controlled Subdivision. The land use controls proposed for the area focus on agriculture, recreation, tourist facilities associated with the Midlands Meander and holiday accommodation.

What is of concern, however, is the methodology employed in determining, the proposed carrying capacity/density for the parcels of land within the Midmar Area of Controlled Subdivision.

#### **5.4.2 Carrying capacity/calculation of density**

In respect of determining accommodation capacity (density of development), the approach advocated by Martin (1970) in *The Drakensberg Approaches Policy* (DAP), has been adopted by Ninham Shand et al (1998). Simply put the DAP advocates the identification of nodes of development (where greater density of people (recreators or tourists) per hectare) is permitted. Outside the identified nodes of development density is calculated on the basis of 1 recreator per 4 hectares. In order to translate this into a holiday accommodation unit, the premise is that 1 holiday accommodation unit could



be occupied by 5 recreators. Properties upon which development (usually a holiday unit) may occur must also be larger than 20ha in extent.

Hence a site of 20ha could yield 5 recreators or 1 holiday unit. The calculation of permissible number of recreators or units is usually dependant on the net developable site area, with land steeper than 1:3 being excluded from the developable site area as well as areas subject to flooding or areas which are ecologically sensitive. A maximum limit of 60 recreators for a single registered subdivision is prescribed in terms of the DAP (a yield of 12 units on a farm of 240ha).

#### **5.4.3 The Midmar Area of Controlled Subdivision : Development Zones and their relationship to calculation of carrying capacity**

From the aforementioned conceptual and theoretical framework outlined in 5.4.1, five land use development zones within the Midmar Area of Controlled Subdivision were developed in terms of *The Midmar Integrated Planning Initiative*. Each zone was ascribed certain development uses and density parameters, in terms of the density calculations explained in 5.4.2. above.

The five zones (Figure 5) and their associated land uses and densities are set out below. When considering such density proposals, it should be borne in mind that the current permanent population of the study area was estimated at 3 700 in 1998 (Ninham Shand, 1998).

**The Midmar Resort Zone:** The focus is on recreation and leisure based activity related to the dam. Within this zone there are three sub-zones, high, medium and low intensity development zones. The report suggests that the development intensity levels should taper downwards to medium and low intensity in the water frontage area. A density increase to 4 700 people

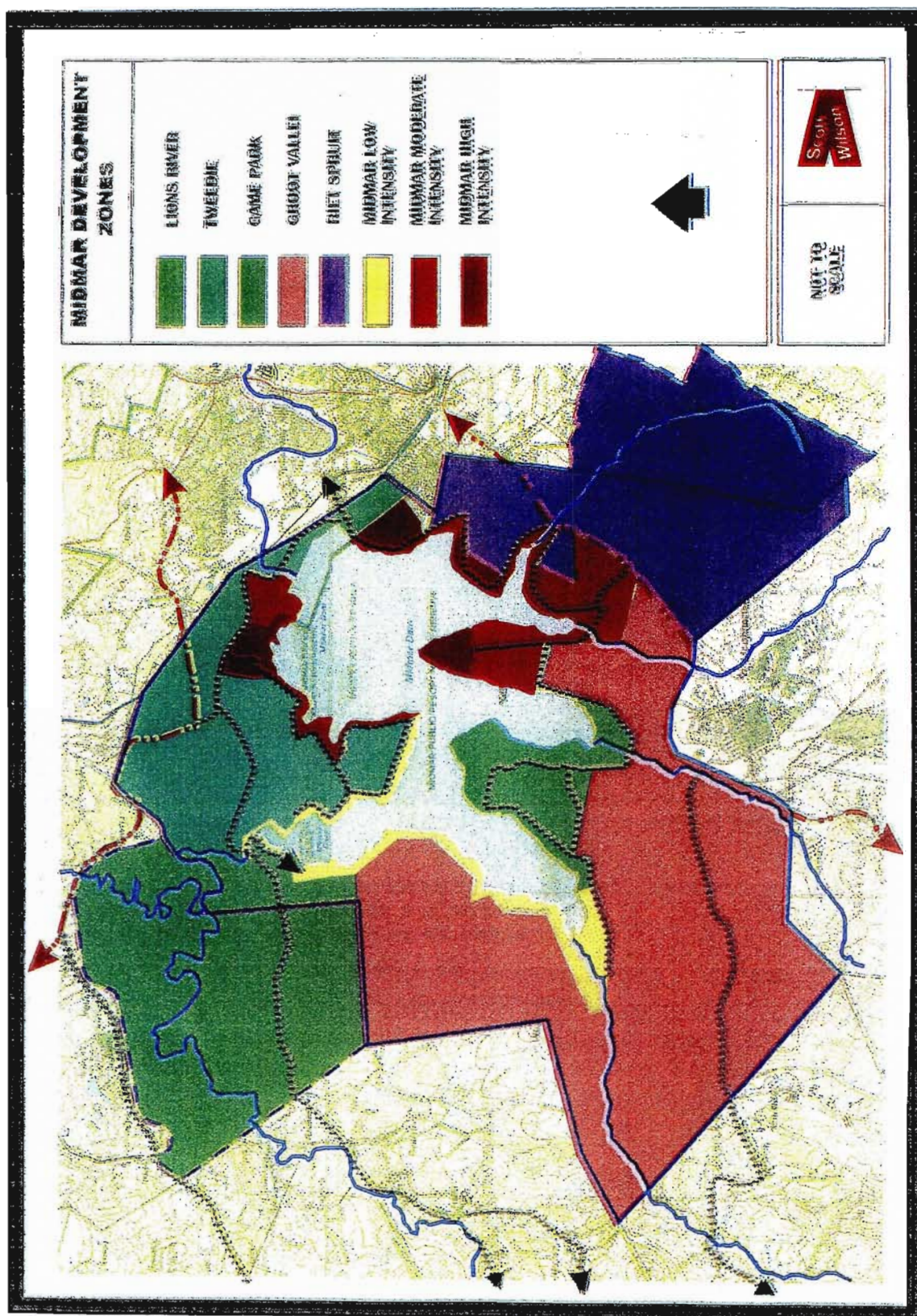


FIGURE 5: MIDMAR DEVELOPMENT ZONES  
(Source: Ninham Shand/Scott Wilson: 1998)

which represents a 285% on the existing holiday accommodation which caters for 1 684 people (based on the assumption of 5 people per holiday accommodation unit, chalet or campsite). In terms of number of holiday accommodation units, this scenario represented an increase from 299 units to 942 units (Ninham Shand, 1998, p 92).

**The Lions River Zone** is primarily agricultural and contains the Lions River Wetland. It is proposed that this zone remain agricultural with limited holiday accommodation at a density of one recreator per four hectares.

**The Tweedie Zone** is bisected by the R103 and is primarily agricultural in nature. The zone lends itself to limited tourism, holiday accommodation and leisure-based activities. Again the density of one recreator per four hectares applies.

**The Grootvallei/Mount Ashley Zone** is primarily agricultural in nature and it is proposed it should remain as such with limited holiday accommodation. The additional holiday accommodation is similarly restricted to one recreator per four hectares.

**The Rietvallei/Rietspruit Zone** is bisected by the MR617 and lies in the area between Howick/Merrivale and Mpophomeni. It is suggested that this zone remain primarily agricultural with limited holiday accommodation (one recreator per four hectares).

The total proposed potential increases for the four zones listed above is set at a maximum of 1 500 recreators (holiday guests) which translates into a net yield of 307 accommodation units (Ninham Shand, 1998, p 93).

What is advocated in the Land Use Control document for the Midmar Area of Controlled Subdivision is that greater density of development (holiday units/recreators) may be permitted within the Midmar Resort Zone as

opposed to the other four zones where density will be based on 1 recreator per 4ha's of land.

Whilst it is accepted that the focus of development and activity should be drawn into the Midmar Resort Area where existing facilities exist and can be properly managed and expanded upon, the blanket application of the DAP density provisions to those properties which fall in the remainder of the Area of Controlled Subdivision is questionable and forms a key consideration to the application of a TDR programme. This is discussed further in Chapter Six.

## **5.5 Institutional arrangements**

In terms of the institutional arrangements for the management of the Midmar Area of Controlled Subdivision, a Statutory Planning Committee is proposed in the Ninham Shand report. This Committee would have representation from the Town and Regional Planning Commission, the Local and District Council, Ezemvelo KwaZulu-Natal Wildlife and the Department of Water Affairs and Forestry with other organisations for example, the Department of Agriculture co-opted with observer status (Ninham Shand, 1998, p 36). The aspect of institutional arrangements is discussed further in Chapters Six and Seven.

A more recent study confirms that the main "constraint to the full development of the tourism potential around Midmar Dam is the confusing array of legislative management bodies controlling the area" (Scott Wilson, 2000, p 49).

## **5.6 Conclusion**

As is evident from this discussion, a significant amount of thought has been given to the proposed future land use and management arrangements for the Midmar Area of Controlled Subdivision. The principles of the future

development and resource management cannot be faulted. However, the determination of increased development opportunities, for the majority of the study area, based on the blanket application of the 1970 Drakensberg Approaches Policy is questionable and somewhat shortsighted.

It is suggested that there is an opportunity within the study area to test an alternative method of determining appropriate development densities. The TDR mechanism, in implementation, takes into account the unique characteristics of each site. These detailed site investigations should result in firmer determinations of the carrying capacity of each site and provides a more balanced and holistic approach to integrated development planning.



## **CHAPTER SIX**

### **APPLICATION OF TRANSFER OF DEVELOPMENT RIGHTS (TDR) PROGRAMME TO THE STUDY AREA**

#### **6.1 Introduction**

The preceding chapters covered in some detail the following themes: the essence of TDR programmes; the legislative framework within which a TDR programme could occur; a detailed case study of Lake Tahoe as an illustration of the level of sophistication that one may achieve with a TDR programme; and, a history of the study area together with recent planning initiatives which strongly advocate the need for the freeing up of economic opportunity balanced with the need for environmental conservation. The aforementioned material provides the reasoning and rationale behind the suggestion that the Midmar Area of Controlled Subdivision provides a perfect opportunity for the application of a TDR programme to be implemented and tested.

This chapter contains a brief reference to current development pressures within the Midmar Area of Controlled Subdivision; the present status of the Structure Plan and Land Use Controls which were prepared for the study area; and, the possible effects the application of a TDR programme may have towards meeting the development and environmental imperatives within the study area. The concluding remarks in this chapter focus on the outcomes of applying and testing a TDR programme in the Midmar Area of Controlled Subdivision.

#### **6.2 Development pressures within the Area of Controlled Subdivision**

Increasingly, the Area of Controlled Subdivision has come under greater pressure for development. This has taken many forms and includes:

responses to an invitation by the former Natal Parks Board in respect of development proposals for the Midmar resort area in 1990; applications to the Provincial authorities for the subdivision of properties within the area by farmers under financial pressure and wishing to dispose of portions of their farms; applications from property owners for the establishment of Bed and Breakfast facilities wishing to diversify their source of income; and, from investment opportunities identified by outside private parties, such as the former proposed Midmar Casino initiative and the more recent shopping, hotel and residential complex proposal.

The Casino application, whilst having withdrawn from the contest for the Casino in the KwaZulu-Natal Midlands, highlights the attractiveness of Midmar Dam as a key site for development. It is the author's opinion that the Casino application further fuelled current speculative interest shown in the Midmar/Midlands Meander Areas. The proposed scale of the casino development was significant. It comprised *inter alia* a casino catering for 2 500 clients per day, an 80 room hotel, 5 cinemas, shopping, restaurant and conference facilities. Clearly, investors view Midmar as a prime location for extensive development opportunities.

The importance of Midmar Dam in terms of its location to the N3 and to the Midlands Meander, and in terms water supply cannot be underestimated. McCarthy (1997) refers to the opportunities of an agro-tourism corridor between the N3 and R103. The Midmar Integrated Planning Initiative and the two McCarthy Corridor Studies have raised both public and private investor interest in the Midmar Catchment/Midlands Meander Area as a whole.

### **6.3 Public interest and response to planning initiatives**

During the Midmar Integrated Planning process, it is documented that private land owners within the Midmar Area of Controlled Subdivision began to raise objections to the manner in which development rights (in respect of density)

were ascribed to the different zones within the Midmar Area of Controlled Subdivision. The author, and the Ninham Shand consortium were the recipient of certain vehement objections. For example, certain property owners with the proposed Grootvallei and Tweedie Zones, whose properties abut the existing Caravan Park and Power Boat Club within the Midmar Resort Zone, commented that their properties are so strategically well located that they should benefit from any change in policy in respect of broadening of the tourism opportunities in the study area. The basis of the objection was that the proposed development rights (one recreator per four hectares) to be accorded to properties within these zones are insignificant and provide no meaningful opportunity for development or economic gain. Further, it was questioned why the publicly owned areas of the Midmar Resort Zone would be set to benefit greatly from the proposed increase in density, even though certain properties outside that Zone may be well suited to development of a significant scale.

These objections, together with the fact that a 1970 Policy prepared for development control in the Drakensberg has been applied to an area where development has not been permitted for thirty years, bring into question the appropriateness of the proposed method of allocation of development rights, advocated by Ninham Shand (1998), with in the study area.

The need for development has been articulated and, in a struggling economic climate, development opportunities should not be unduly stifled. The interest and possible opportunities for development within the Midmar Area of Controlled Subdivision needs to be investigated further and formalised as the property owners within and abutting the study area remain uncertain about options open to them. It is suggested therefore that, provided development occurs in a responsible and integrated manner, property owners situated within the Area of Controlled Subdivision should not be denied access to such opportunities.



#### **6.4 The Structure Plan and Land Use Control Document and its status**

The need for development restrictions in the Midmar Study Area stems from the unusual value and fragility of the Dam's ecosystem (and the broader catchment) and the interdependence of land uses within the catchment and study area. This is not in dispute. However, what has become clear is that the time is ripe for the freeing up of development opportunity within the Midmar Area of Controlled Subdivision. Substantial research has established the nature of such potential development opportunities and how these should be channelled.

The implementation of the Structure Plan and Land Use Controls for the Midmar Area of Controlled Subdivision is dependant upon the resolution of the establishment of an authority to give effect to such plan and controls. It is a statutory requirement that prior to the adoption of any structure plan, town planning scheme, or local development plan, public advertisement in the press occurs. Objections and/or representations made in response to such plan have to be adjudicated. The public advertisement of the proposed Land Use Controls and Structure Plan for the Midmar Area of Controlled Subdivision, in terms of either the Town Planning Ordinance or the KwaZulu-Natal Planning and Development Act (when the necessary regulations have been promulgated), has yet to take place.

It was confirmed that it is incumbent upon the Town and Regional Planning Commission to facilitate the formation of the Joint Planning Committee and that establishment of such Committee would take between three to four months to bring into being (Mr Michael Taylor, Deputy Chairman TRPC, pers. comm. 1999). Confirmation of the establishment of such committee in terms of Section 43(1) of the Ordinance No. 27 of 1949 and recommendations regarding its members have been made (Barnard, 1999).

In the event of the Natal Town Planning Ordinance being repealed, as is proposed, the Commission would not be a position to take on this facilitatory role as the PDA does not make provision for the establishment of planning committee's such as that envisaged by the Ordinance. It appears that the PDA will now possibly only come into effect sometime during 2002, if at all. It may be argued, however, that the other local authority bodies that currently have administrative powers within the study area, together with the land owners within the Midmar Area of Controlled Subdivision, could apply to have the area proclaimed as a Special Case Area by the relevant provincial Minister. The local authority (body) could then incorporate the Special Case Area into its planning controls for the area and have the Special Case area and associated controls endorsed by the Commission as set out in Chapter Three of this document.

## **6.5 Could a TDR programme meet the development and environmental needs?**

The broad brush application of the Drakensberg Approach Policy (DAP) density calculations (1 recreator per 4ha's) applied to an area where development has been severely restricted for almost thirty years is considered inappropriate. Certain property owners within the study area can look forward to being ascribed certain development rights, subject to approval of the relevant planning authority, in terms of the proposed land use controls. Those with sites less than 20ha will not be permitted any additional development (other than the regulatory one dwelling per lot and usual agricultural outbuildings) in terms of the proposed land use controls. However, upon individual site assessment, a property less than 20ha may be found to lend itself perfectly to the establishment of an additional cottage for tourists or a small tourist related trade. A site of 240ha is, in terms of the proposed controls accorded development rights for 60 recreators (guests) or 12 units of accommodation, whilst the site may not lend itself to such

opportunity, either in view of location, aesthetics, visibility or environmental considerations.

The aforementioned scenario is certainly not in the interests of equity and fairness and is bound to raise the ire of affected property owners.

The land use control document has identified the possible maximum number of additional recreators within the Area of Controlled Subdivision. However, the document acknowledged that to establish the appropriate carrying capacity of the area would entail a more thorough analysis and individual property assessment. Knowing the keen interest in the possible economic opportunities which may be freed up within the Midmar Area of Controlled Subdivision, it would not be unreasonable to speculate that there may be a “run” for securing development rights. This may occur on the basis that development rights are approved on a first come first served basis, until the market for such rights in the area become saturated, or at some point the approving authority would have to question whether any further development rights should be granted.

The Midmar Area of Controlled Subdivision has untapped economic opportunities, primarily related to agro-tourism and its scenic and ecological areas of importance. What this area requires is an innovative and creative mechanism which encourages growth and at the same time encourages conservation. It is submitted that the application of a TDR programme could be a proactive mechanism which could achieve a balance between development and resource management. On a more individual level, a TDR programme requires those who ascribe to it, the recognition of public interest over their own, but also the entitlement to compensation in the form of sale of development rights which may not be taken up on certain properties.

An integrated and holistic approach may even serve to improve the aesthetics of future development of the area by assisting in reducing the visual impact “more of the same”.

The Land Use Control document contains a well defined theoretical framework, however further refinement of the application of land use density provisions is required to ensure a more progressive approach to the development versus conservation debate. A thorough assessment of each individual registered property within the subject area would establish, with a greater degree of certainty, the carrying capacity of each site and thus of the area as a whole.

The discussion in Chapter Two confirmed that the maximum permissible density is a prerequisite for the success of a TDR programme. The density/carrying capacity would be based on development potential as assessed against developmental constraints, or alternatively phrased, environmental limitations.

Given the attention that TDR programmes have received recently in the Province and, in view of the various planning initiatives launched in the vicinity of the study area, it would be logical to attempt to marry the two. This could be achieved by incorporating the TDR mechanism into the Land Use controls proposed for the study area and testing these by designating Midmar as a pilot TDR area.

A TDR programme is a strategic planning tool which can be used to good effect in the Midmar Area of Controlled Subdivision. TDR programmes require sound, responsible planning and, strong monitoring and decision-making. For this reason it is preferable that the programme be kept at a small scale at the outset. Incremental expansion and application of the TDR programme to adjacent or other areas, could then be replicated and adjusted in accordance with the particular circumstances and in view of experience gained.

## **6.6 Outcomes of applying and testing a TDR programme in the Midmar Area of Controlled Subdivision**

At present the development potential of the Area of Controlled Subdivision remains unrealised. Whilst development pressures are increasing the moratorium on development and subdivision within the area has not been lifted and the responsible authorities have done little towards implementing the recommendations of the *Midmar Integrated Planning Initiative*. Similarly the application and testing of TDR programmes within the Province have not materialised. The Midmar Area of Controlled Subdivision provides an opportunity to take the recommendations of the *Midmar Integrated Planning Initiative* forward and, simultaneously, provides the opportunity to apply the concept of TDR.

There are several advantages of testing TDR in the Midmar Area of Controlled Subdivision. Firstly, little or no development has occurred within the study area in the past thirty years and, as such, one would be working with a blank canvass. Secondly, the boundary of the TDR Area is already defined, although some minor amendments in respect of incorporation or exclusion of certain properties may be required.

A third advantage is that of scale. The scale of a proposed TDR programme in terms of land area, and number of registered properties (approximately 60) is manageable. This would allow the process of individual property assessment to be concluded within a relatively short space of time. This aspect would involve employing the services of professional and technical experts which would result in financial expenditure. However, in this regard two points should be borne in mind, namely: a significant data base for the area has already been established and, the technical expertise of various government departments may be drawn upon during, and after, the site assessments. This would reduce costs significantly, and, given that thorough site assessments would be carried, property owners wishing to

embark on development projects in the future may not necessarily have to incur costs for individual Environmental Scoping Reports or Impact Assessments. It is suggested that the costs for site assessments could be jointly borne by the relevant government departments such as: the Departments of Water Affairs and Forestry; Agriculture; Environmental Affairs; Economic Affairs and Tourism; Public Works; Local Government; the district and local council; the Town and Regional Planning Commission; Ezemvelo KwaZulu-Natal Wildlife and, Umgeni Water.

A fourth, and very important point, centres on the fact that the property owners within the study area are a relatively small and homogenous group which would assist in the joint determination of meeting the TDR programme objectives through consensus workshops.

Fifthly, the legal and administrative framework is already in place to initiate, implement, administer and monitor the TDR consensus process. The Town and Regional Planning Commission, the local and district council, and Umsikele as administrative bodies responsible for the Midmar Area of Controlled Subdivision are anxious to bring the Structure Plan and Land Use Controls into being.

It is submitted that such initiative would serve the interests of public and private interest alike and could serve as an example of a TDR programme which could be replicated elsewhere and also would reflect a practical application of co-operative governance.

## **6.7 Conclusion**

This chapter has illustrated the suitability of the Midmar Area of Controlled Subdivision as a pilot area within which to test TDR. This is founded on following factors: the area has been subjected to restricted development in the past thirty years; its boundary is well defined and it is not significant in

terms of geographic extent; and, there is confirmed interest expressed in the possible economic opportunities which the area could offer and benefit from.

All of these factors, together with the added advantage that there is a wealth of existing information for the study area, which would reduce costs during the assessment process, contribute to the identification of the Midmar Area of Controlled Subdivision as an area worthy of testing a TDR programme. It would be unfortunate if this opportunity were to be missed.

## **CHAPTER SEVEN**

### **RECOMMENDATIONS AND GUIDELINES : TOWARDS THE IMPLEMENTATION OF A TRANSFER OF DEVELOPMENT RIGHTS PROGRAMME IN THE MIDMAR AREA OF CONTROLLED SUBDIVISION**

#### **7.1 Introduction**

In this chapter practical steps towards the implementation of a Transfer of Development Rights Programme (TDR) for the Midmar Area of Controlled Subdivision are outlined. These recommendations are by no means exhaustive but serve as key components that the implementing authority should consider if the decision to apply a TDR programme to the study area is accepted.

#### **7.2 Recommendations and Guidelines**

- i) As discussed in previous chapters, a TDR programme needs to be well regulated with clearly defined development rights. Three components are required to meet this imperative: the TDR programme must be mandatory for all sites within the study area; a strong administrative structure must be in place; and a clearly documented, prescribed mechanism for the application of a TDR programme together with an accepted plan which identifies sending and receiving sites as well as the maximum density per site must be agreed to by all affected parties.
- ii) The administrative structure (a body such as the Joint Planning Committee as previously discussed in Chapter Six) could fulfill the role of initiator, implementor, adjudicator, and monitor of a TDR programme. Given the Commission's involvement in the planning processes in respect of Midmar and TDR programmes it is suggested that the Commission could fulfil the role of lead agent for the



implementation of a TDR programme at Midmar. Should the Commission not take on this role, any other responsible authority as defined by the Planning and Development Act, for example the new municipal councils, Local Council KZ 222 or District Council 22, may take on this role.

- iii) Assuming the Commission (or any other responsible authority) was in agreement that the Midmar Area of Controlled Subdivision could benefit from the application of a TDR programme, its first task would be to co-ordinate the formation of the Joint Planning Committee to oversee such process.
- iv) As set out in Chapter Three, it is argued that the Midmar Area of Controlled Subdivision could be an area worthy of declaration as a Special Case Area in terms of Section 31 of the KwaZulu-Natal Planning and Development Act (PDA). Alternatively, if the PDA regulations have not been promulgated there would be nothing to prevent the responsible authority from incorporating the TDR mechanism into the existing Structure Plan and Land Use Controls already prepared for the Midmar Area of Controlled Subdivision which could be duly advertised and approved in terms of the Ordinance. A third alternative could be to incorporate the TDR programme proposal into the Integrated Development Planning process, in terms of the Municipal Systems Act.
- v) A key responsibility of the Joint Planning Committee would be to draw together the various interested and affected stakeholders, which would include foremostly the affected property owners within the study area to discuss the current Land Use Controls and to open discussions in respect of the advantages and options that a TDR programme may provide, together with any possible limitations.

- vi) Provided the concept of TDR for the study area is endorsed by the interested and affected parties, the Joint Planning Committee under the Chairmanship of the Commission could facilitate the necessary individual site assessments which would be similar to the Individual Parcel Evaluation System adopted in the case of Lake Tahoe.
- vii) Following individual site assessments, an in depth series of consensus workshops between all the property owners and other relevant stakeholders would need to be held. These would be required to reach common acceptance on the proposed sending and receiving sites with their associated development capabilities (density/carrying capacity) and agreement that the application of a TDR programme would be mandatory for all properties within the study area.

It is strongly advocated that a mandatory programme for the study area should be adopted provided property owners are in agreement. Similarly, the free market approach is recommended and development rights would be traded at market value. This approach would also limit state intervention and would allow market forces to dictate development initiatives. However, the opinion of the land owners within the study area would inform the manner in which the TDR programme should occur.

It is accepted that each site must have a maximum level of development to avoid one developer purchasing all of the development rights which may be available. Furthermore it should be a requirement that a development rights purchaser must have already taken up (built) at least 70%, for example, of the rights ascribed to his/her receiving property to ensure that some management of the rate of development, and its impact, can be measured. The market forces would also determine the rate at which development occurs.

- viii) The concomitant preparation of additional controls to the current proposed Land Use document which details the mechanism of the TDR programme and an associated density plan would need to be prepared. The density plan which would reflect the sending and receiving status together with the maximum development limit would be completely integrated into existing Structure Plan. The TDR mechanism itself would have to include how application to purchase development rights should be made, including the possibility of public notification of the proposed development transactions.
- ix) In the interests of the broader community any development rights transfer should be available for public scrutiny. To this end it is suggested that the administrative body ensure that a proper record of such transactions are reflected in a register. This record should also reflect confirmation from the Deeds Registrar that the title deeds of the properties concerned have had the necessary endorsements to reflect the changes in development status. It is strongly recommended that each property affected by the TDR programme contains such endorsement on the front cover of each title deed. This would ensure that fundamental endorsements of this nature would not disappear within the "text" of the property deed.

### **7.3 Conclusion**

Through this research it has been established that the necessary theoretical, administrative and legislative frameworks exist for the initiation and implementation of TDR programmes within KwaZulu-Natal. Further, it has been demonstrated that the Midmar Area of Controlled Subdivision provides a suitable area within which the application of a TDR programme could be implemented and tested.

A TDR programme for the Midmar Area of Controlled Subdivision would ensure the application of an innovative mechanism for the appropriate use and management of property development rights within an ecologically sensitive area. Through the application of a TDR programme, appropriate development levels would be achieved through joint agreement of property owners and other key stakeholders. In this way the study area would benefit from best management practices, which in turn would protect the shared natural resources within the study area.

The current interest in the possibilities that TDR programmes, together with the planning initiatives for the Midmar Area of Controlled Subdivision, provide an opportunity to further refine the implementation of TDR's. The lessons learnt through such process could be replicated in other areas.

International experience in TDR, as outlined in Chapter Two, document the key requirements for successful programmes. These key requirements provide the parameters for those interested in initiating a pilot TDR programme within the Midmar Area of Controlled Subdivision. The experience gained from the Lake Tahoe case study, in particular, provides invaluable, detailed information which should be consulted in the implementation of a TDR programme within the study area.

This report deals only with the theoretical aspects of the implementation of a TDR programme for the Midmar Area of Controlled Subdivision. Only through a detailed analysis of site specific constraints and opportunities by various professional and technical experts would one be in a position to effect a TDR programme. Such analysis was beyond the scope of this report, however the recommendations included in the previous chapter set the basis upon which further detailed implementation could occur. As part of the aforementioned detailed assessments, it would be necessary to ascertain the views of individual property owners and other key stakeholders.

What is clear is that it is people who impact on the environment. It is only through the management of people and development process that the continuation of defined environment may be sustained. The TDR programme epitomises the management of people and development process to ensure the protection and appropriate utilisation of natural resources within a defined area and its usefulness, in special circumstances should not be disregarded.

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