

Copyright is owned by the Author of the thesis. Permission is given for a copy to be downloaded by an individual for the purpose of research and private study only. The thesis may not be reproduced elsewhere without the permission of the Author.

The Christchurch Green Belt – Reality or Just a Name?

This dissertation has been submitted in partial fulfilment of the requirements for the
Degree of Master of Resource Planning,
Massey University.

Rhys Chesterman

1999

Abstract

The Green belt concept grew out of the English Garden City movement of the nineteenth century. Although the thoughts and theory were widespread throughout the first half of the twentieth century, it was not until 1959 that green belt policy became legislative reality. The initial result was the London Green Belt: other green belts around major cities followed. The predominant objective of the green belt at that time was to restrict urban sprawl, and the concept was initially well supported by citizens, planners and the British government. The British government attaches great importance to green belts, which have been an essential element of planning policy for some four decades. The purposes of green belt policy and the related development control policies set out in 1955 remain valid today with remarkably little alteration. This sophisticated and comprehensive approach provided a model that many other cities around the world have since followed. Christchurch for example inherited its planning legacy from the British experience. Although first defined in 1954 as a 'non-settlement area', (meaning the same thing) it was not until the 1980's that the term 'green belt' was formally used in New Zealand statutory planning documents. Since then (particularly in the later 1990's) there has been speculation that the green belt philosophy has begun to fade. The green belt containment policy was designed to thwart urban spread but has instead led to piecemeal development. Essentially, this has led to a rethink of the green belt. There is some speculation that the codification of green belt policy that originated in 1955 in London is not applicable to the city of Christchurch. Furthermore, new legislation by the way of the *Resource Management Act* has altered the philosophies of land-use planning and encouraged a new way of thinking. This new thinking is based on sustainable management objectives and has been responsible for much of the green belt's recent decline. No longer can a single land-use tool restrict development in such a large area without considering other potential uses, while simultaneously juggling it with the sustainable management principle. Accordingly it has raised questions as to whether the Christchurch green belt concept is worth keeping, and if not, what other means are available to help continue to promote the green belt objectives that were first introduced many decades ago.

Acknowledgements

I have lived in Christchurch for most of my secondary schooling and university life and have always been aware that a 'green belt' surrounds the City. I have always been familiar with the literal term, however I never really thought about its origins or what its real purpose was for. Having come from a farming background, I guess I thought that cities had to have a definite boundary to protect the agricultural land. It was not until I became interested in planning that I looked at the concept from a different perspective. The most important thing I have learnt from my further study of planning is that there are always two sides to every story. In Christchurch for example, there are conflicts and pressures between using the green belt land for housing a growing population and using the land for its productive use. Often there is no real answer. My supervisors, Derek Williams and Phillip McDermott have strengthened my interest in planning and encouraged me to think further into what might appear simple at face value and question the unquestionable. I thank them for their valuable comments throughout the year. Finally, thank you to my family and friends for their continued support and understanding.

Table of Contents

ABSTRACT	ii
ACKNOWLEDGEMENTS	iii
TABLE OF CONTENTS	iv
CHAPTER 1	5
INTRODUCTION.....	6
METHODOLOGY AND OUTLINE.....	8
CHAPTER 2	10
WHAT IS A GREEN BELT?	11
Ebenezer Howard.....	13
Raymond Unwin.....	15
Patrick Abercrombie.....	16
Review.....	18
CHAPTER 3	21
THE APPLICATION OF GREEN BELTS IN ENGLAND.....	22
The London Metropolitan Green Belt.....	29
CHAPTER 4	33
THE APPLICATION OF GREEN BELTS IN NEW ZEALAND.....	34
<i>The Christchurch Green Belt</i>	35
CHAPTER 5	44
THE CHRISTCHURCH GREEN BELT: HAS IT PASSED ITS USED BY DATE?	45
<i>The 1955 British Government Circular 42/55</i>	46
Reason 1: To check the further growth of the built up area.....	46
Reason 2: To prevent towns from merging into one another.....	52
Reason 3: To preserve the special character of a town.....	55
Review.....	59
THE CHRISTCHURCH GREEN BELT: IS IT A SUSTAINABLE CONCEPT?	61
<i>The Resource Management Act</i>	61
Reason 1: More efficient provision of public services (consolidation).....	64
Reason 2: Protecting the rural (agricultural) resource.....	68
Can the Green Belt be Saved? Options for the Future.....	72
CHAPTER 6	79
GREEN BELT ALTERNATIVES – PRESERVING RURAL LAND IN THE FACE OF URBANISATION.....	80
<i>Individual Will</i>	80
Gifts and Bequests.....	81
Covenants.....	83
<i>Government Intervention</i>	85
Outright Purchase and Acquisition.....	86
Public Purchase of Development Rights.....	87
<i>Economic Instruments</i>	91
Transfer of Development Rights.....	91
Charges and Levies.....	96
Subsidies and Environmental Compensation.....	99
Rate Relief.....	100
<i>Concluding Remarks</i>	101
CHAPTER 7	104
CONCLUSION.....	105
BIBLIOGRAPHY	108

Chapter 1

Introduction

In May 1999 the Christchurch City Council released its decisions on objections to the Proposed City Plan. The most notable of these decisions related to the issues surrounding urban growth. Decisions in the Plan provide residential potential for about 30,000 more people, this being considered enough to cope with the city's expected population growth to almost 320,000 by the year 2011 (Bruce, 1999). Of particular note, 650 hectares of land, much of it from green-belt areas, has been opened up for new residential development. While the pro-development lobby supports the decision to open up large tracts of the City's green belt, other sectors of the community are strongly critical. Despite reference to the term "green belt" in the City Plan, these decisions represent a departure from past planning practice and suggest that the green belt surrounding Christchurch City and its philosophy has begun to fade. This raises questions about the green belt's future.

The urban fringe¹ has always been recognised as a type of landscape with particular characteristics and problems. On the one hand, the areas around towns have traditionally provided the various resources vital to the functioning of the urban area. On the other, it has been the urban areas that have contained most of the potential direct and indirect users of those urban fringe resources. The value accorded to these resources (environmental, recreational, agricultural and infrastructural) may not be easily quantifiable, but their management always involves consideration of their economic as well as physical issues. The amenity spaces around towns are also valued by the users of urban areas for various reasons, including the aesthetic virtues of the countryside and its healthiness and tranquility (Evans & Mabbitt, 1997). Initiatives aimed at improving (or extending) the urban fringe have been traditionally influenced by this idealised Arcadian view of the countryside.

¹ The urban fringe is also known as the urban-rural fringe or peri-urban area. It is defined as the edge of the urban area or where town and country meet. However, in reality there is seldom a sudden change from town to country, and so in this research the term used (either peri-urban, urban-rural fringe or just urban fringe) signifies a zone in transition between the purely rural and purely urban areas.

The green belt has been one of the most enduring and widely supported planning instruments (Munton, 1983). Throughout the first half of this century professional planners and local politicians orchestrated a sustained and successful campaign in favour of a green belt around London, culminating in the 1950's in the first statutory green belt in Britain – the Metropolitan or London Green Belt. Just as this green belt was coming into existence central government published a circular in which it lent its support to the idea of green belts, a support that has not wavered over almost half of a century. The circular encouraged local authorities to include green belt proposals in their development plans, and many did so with alacrity. So why is support so widespread? The most plausible explanation arises from the flexibility of the concept and as a result the differing interpretations held of its purpose. The views of farmers, residents, district planners, councillors and government officials vary markedly and to a point where each group employs quite different measures of green belt performance. However, it can be argued that the ideas in support for green belts have always been imprecise and variable (Munton, 1983).

This is evident in Christchurch whereby the rationales for green belt existence are becoming more difficult to identify. In light of the diversity of views on the reasons for (and against) green belts, and the changing planning paradigms, this thesis examines the application of the concept to Christchurch City – New Zealand. This research aims to determine the rationale for the establishment of green belts by tracing the evolution of practice since its inception in both England and New Zealand. The history of the Christchurch green belt is examined and the application of green belt policy in the contemporary planning context is critically reviewed. On these grounds, this research considers the relevance of the green belt and its potential to continue as an effective planning tool in the 1990's.

Methodology and Outline

The first part of this study will examine the history of both the London and Christchurch Green belts. This will be an historical investigation to discover what initiated their use and how they fit in with today's planning and legislative agenda. In order to accomplish this, literature searches will concentrate on resources available in New Zealand including journal articles, news-releases and web sites. Planning journals and the press will also be important sources of information to help clarify some fact and gain some of the general feelings about the green belt and its value to people. Much of this will be published in the United Kingdom and will provide historical detail of the past and information about recent British thinking. It is also anticipated that the comments obtained from a variety of staff from differing organisations will assist in evaluating and investigating the Christchurch green belt's future.

Whilst browsing through the literature of green belts prior to the commencement of this research, it became apparent (whether right or wrong) that the city of London and the term 'green belt' go 'hand-in-hand.' In a similar context, London is often seen as the 'mother-city' for which other cities around the world have modelled their green belts on. It is therefore no surprise that the Christchurch green belt is, in part derived from the London experience. With some further literature searches, it is made clear that the purpose and reasons for establishing green belts (in England) are defined in a 1955 British Government Circular. Their reasons for the establishment of green belts (in London) are still relevant today.

Chapter 1 has already set the scene, by implying that the green belt philosophy in Christchurch has begun to fade. This fade is thought to be partly due to the ability and or desire of some people to live in the green belt. As a result, houses have been erected in a piecemeal fashion and large tracts of land have been subdivided into smaller lots. Ultimately the consequence is an encroachment onto the green belt land. **Chapter 2** of the study reviews definitions of the term 'green belt' and examines the history and thinking behind them. Various British town planning academics and practitioners have investigated and implemented these ideas over the years, and for this reason **Chapter 3**

places an emphasis on the British experience which determined the original purposes and functions and shows evidence of it working in a practical context. The London Metropolitan Green Belt is considered in some detail to illustrate the evolution of green belts. The history and application of the green belt concept in New Zealand (Christchurch) is then investigated in **Chapter 4** and recent criticisms regarding its effectiveness and relevance is considered in **Chapter 5**. In particular, this chapter compares the city of Christchurch to the 1955 British Government's reasons for establishing green belts. The Christchurch green belt is then applied to the workings of the *Resource Management Act* to determine its relevance and usefulness as a future planning tool. A variety of alternative planning techniques are examined in **Chapter 6**, all of which have similar objectives – that of restricting urban growth, preserving rural (agricultural) land, or both. **Chapter 7** contains the conclusion from the study and discusses their wider implications.

Chapter 2

What is a Green Belt?

The concept of cities having a definite boundary is not a modern one. In many instances it can be traced back to the beginnings of urban history (Parnell, 1988). Although not formally articulated into the concept of a green belt until the nineteenth century, most early cities had a clearly defined limit for building within a rural belt. The theory behind them was generally related to ideal city size, whereby a town would grow to a predetermined and physically constrained size after which expansion would be created in a new settlement on a fresh site (Ratcliffe, 1986). Growth and development outside the urban boundary was largely restricted by reason of health and defence, but it also protected agricultural land (Herrington, 1990; Parnell, 1988). The latter was particularly relevant before modern transport and refrigeration was developed.

The modern green belt (henceforth the green belt), can be viewed as a planning 'tool' or policy 'instrument' and can be defined in terms of purpose and function rather than physical form. It is the importance of these functions that determines the relevance of the green belt (Pullen, 1977). More specifically, it is a special policy backed by specific legislation or regulation, defining an area within which only a highly restrictive schedule of changes constituting development under district (landuse) plans and Acts of Parliament will normally be permitted. Land is kept open by permanent and severe restrictions, particularly on building (McConnell, 1981). In Britain, the *purpose* for which a green belt is defined has been governed by advice in Government Circulars, which dates back as far as 1955. They are, as outlined by Elson (1986) and the Department of the Environment (as cited in Herrington, 1990):

1. To check the further growth and unrestricted sprawl of large built up areas;
2. To prevent neighbouring towns from merging into one another; and
3. To preserve the special character of a town.

Clearly, these purposes are urban orientated. However in more recent times, further emphasis has been placed on safeguarding the surrounding countryside from further encroachment (Herrington, 1990). This suggests that green belt areas may have an added

purpose of preserving open space for means of agriculture, amenity or recreation. However, the intention of green belts (as outlined in that 1955 Government Circular) did not attach an importance to those added purposes, and their subsequent involvement is considered incidental and secondary (Ratcliffe, 1986). Nevertheless, it is clear that no explicit mention is made of nature or natural resource conservation in that original advice regarding green belts. The term 'Green' in this instance does not have that meaning, although it is often wrongly thought to do so and although the actual impact maybe 'green,' green belts were so called long before the word 'green' was attributed to today's environmental issues.

McConnell (1981) provides a different set of criteria for the green belt. He suggests that the purposes have changed and that they have new and added purposes (or functions). With these additional functions, the real purpose of green belts becomes 'cloudy' and more difficult to explain. These secondary aims (which have evolved since the original circular of 1955) focus on the importance of green belts from more of a rural perspective. They include:

1. Protecting agricultural activities within the green belt; and
2. Providing recreational areas to complement urban open space.

While green belts provide recreational areas, open landscape and allow for continued agricultural practices, their main purpose is to contain cities, diverting further growth and preventing cities and towns from merging. Nevertheless, the green belt embodies many concepts important to the public about the importance of rural areas. The modern concept grew out of Ebenezer Howard's 'garden-city' approach to town planning which aimed to provide natural areas for residents of cities. His concepts are a basis for many of the policies for the rural urban fringe around the world.

The concept of green belts has been one of the most important features of British town and country planning since the formative days of the planning movement beginning in the late nineteenth century. The history and background thinking of green belts has been covered by various authors over the years, yet some aspects of its origins and subsequent history as an accepted planning policy are worth emphasising. The first of these concerns

the variety of ideas and concepts that underlie green belt theory. The list of promoters of green belts reads like a who's who of British town planning: Howard, Unwin, and Abercrombie all proposed something called a green belt, although they all had differing views as to its shape and function.

Much of the basic thinking about the form and purpose of green belts occurred during the first half of the twentieth century, stimulated largely by the rapid growth of London. The views of Ebenezer Howard, Raymond Unwin and Patrick Abercrombie were by far the most influential and Howard's writings are known to have had a major impact on Unwin and Abercrombie (Munton, 1983). However, each made substantially different proposals, reflecting different professional objectives and changes in the planning powers of local authorities over the period they span.

Ebenezer Howard

Ebenezer Howard was a British town planning theorist. In 1898 he read Edward Bellamy's utopia '*Looking Backward*', and was inspired by it to advance the idea of the garden city (Moss-Eccardt, 1973). A garden city is typically defined as a town surrounded by countryside and designed to have community land ownership, adequate facilities and recreational space (Isaacs, 1986). However the Garden City Association,² the forerunner of the Town and Country Planning Association, provided a fuller, stricter definition:

“...A garden city is a town designed for healthy living and industry, of a size which makes possible a full measure of social life, but not larger; surrounded by a **rural belt**; the whole of the land being in public ownership or held in trust for the community” (quoted in Macfadyen, 1970:109).

² The Town and Country Planning Association was formed in 1899 to promote the main features that were suggested in Howard's book '*Tomorrow: A Peaceful Path to Real Reform*'.

In the late nineteenth century the garden city concept caught the public imagination because of a reaction to the ugliness of the industrial revolution, which had separated the people from the countryside and had crowded them into drab and teeming cities. To bring the city dweller closer to the country, Ebenezer Howard proposed a series of garden cities, each surrounded by a green belt. Their role was to limit the sprawl of a city and to reduce the slum problem by shifting the population out of the main urban area. This would also provide opportunities for food production and recreation between the satellite cities and the main city. The term *Garden City*, as adopted and defined by Howard, means as much 'a city in a garden' as 'a city of gardens' (Osborn, 1969). This is clear from the nature of Howard's proposals, but he also makes it clear in the passage by arguing that a garden city that builds over its agricultural belt would forfeit its right to the name (Howard, 1946). The truly distinctive elements in Howard's scheme include limiting the spread of towns, and their permanent separation by zones of country land generally immune from building.

Howard's version of the green belt must be seen in the context of his 'cellular' social city. This was evident in his first book published in 1898; *Tomorrow – A Peaceful Path to Real Reform* and republished in 1902 as *Garden Cities of Tomorrow*. He envisaged a series of small towns separated by approximately two miles of open country thus providing a multi-use green background for his towns. Ideally these towns were arranged on a series of concentric circles with radiating boulevards and a central park. The urban cells were to be evenly spaced and surrounded by narrow belts of countryside which would prevent them from growing beyond a maximum desired size while ensuring the preservation of farmland and the provision of open space for outdoor recreational activities. The countryside would blend in with the towns creating a mixed environment that would stand in contrast to the growing separation of town and country represented by the large late-Victorian conurbation (Munton, 1983).

Many people associate Howard with town planning in spite of the fact that the subject is hardly mentioned in his book and that he provides no real plans, but merely sketches and diagrams. Howard, himself declared that the plan in his book was only a diagram and that he would not attempt to build a town anywhere without the best expert advice (Moss-Eccardt, 1973). For this reason he chose Raymond Unwin, who was a planner

already in touch with the garden city movement. This provided Unwin with an opportunity to put into practice the ideas that had also been forming in his mind for sometime previously.

Raymond Unwin

Raymond Unwin saw the green belt concept somewhat differently to Howard. Yet, like Howard, he did have a great interest in the social problems caused by constrained urbanisation, and both shared philosophies based on backgrounds in which the liberal arts were strongly represented (Moss-Eccardt, 1973). Unwin envisaged the 'green belt' as a tool for providing open recreational land on the peripheries of large urban areas to compensate for the lack of such land within city boundaries. In the First Report of the Greater London Regional Plan Committee (1929), Unwin estimated that 156 square miles of open space was required on the edges of London to service the nine million inhabitants of the metropolitan area (Goulding, 1998; Burke, 1971). He later formalised these proposals in the Second Report (1933) and stated that the land should be bought by local authorities to form a 'green girdle' approximately six miles wide around London. Without planning controls the land had to be purchased to ensure its protection. This illustrates the very strong controls that were, and are needed to maintain a green belt. Prior to the 1947 Act, ownership was the only way of providing effectively strong control. Unwin did not expect his 'girdle' idea to provide an obvious break in the residential sprawl of outer London and he never assumed it would contain the growth of the conurbation (Munton, 1983). In this respect and through its emphasis on recreation this particular green belt proposal differed from those of Ebenezer Howard and Patrick Abercrombie.

Unwin put forward two alternatives: first, that a flexible barrier approach should be adopted which could retreat through time with growth, with certain special areas being preserved; second, which he did not recommend, that a fixed permanent open space should be established in which no development should take place (Ratcliffe, 1986). Despite his reservations it was the latter suggestion that survived. As a consequence the 1938 *Green Belt (London and Home Counties) Act* provided for the purchase of a

limited amount of green open space. Land was to be allocated for development when it was ready and recreational space was to be provided by requiring the reservation of suitable open land by builders. In this way, communities would grow outwards slowly, and wasteful sporadic and ribbon development would be prevented.

Unwin did not recommend the permanent protection of open land against building use, however he did propose the planning of building development against a green background. As he saw it, the orderly distribution of urban development in fringe areas would be secured by the “temporary reservation from building use of those lands which are not ripe for planning or for the provision of services” (Mandelker, 1962:30). This concept, with its inception in Howard’s theories, was carried forward in the 1940 Barlow Report on the distribution of the industrial population (Grant, 1982; Manners, 1972). The Royal Commission on the Distribution of Industrial Population was initially set up in Britain after the Great Depression of the 1930’s to address the issue of regional growth differences brought about by changing industrial structure. The report noted the absence of reliable information on optimum town size, and stated that chaotic size rather than size alone was the real problem.

Patrick Abercrombie

The Barlow Report of 1940, which stressed the social, economic and strategic disadvantages of the further growth of London, advanced Abercrombie’s *Greater London Plan* promoting the idea of a permanent green belt several miles wide around the built-up area of London. He treated the green belt as only one element in a strategy aimed at reducing congestion within London and providing the best opportunity for the post-war rehabilitation of the capital. The present London Metropolitan Green Belt is a direct descendent of this suggestion. In a region that was expected to decline rather than to increase in population, one million Londoners were to be dispersed largely to eight new towns and other over-spill centres located beyond a green belt encircling London (Munton, 1983; Mandelker, 1962). For this reason, the Green Belt was characterised as being only half a policy. It was to be complemented by the decentralisation of over-spill

beyond the Green Belt. This relates back to the original theory behind green belts which generally related to ideal city size.

Abercrombie's famous *Greater London Plan 1944* was considered as one of the first attempts of comprehensive planning at a regional level (Puentener, 1993). Abercrombie argued for a 'cordon sanitaire' surrounding the City (approximately 10-12 miles wide), not like Howard's continuous open countryside or Unwin's narrow green girdle, but a wide green belt to separate "the threatened countryside from the threatening town" (Hall, *et al.*, 1973:56). He was primarily motivated by a concern to shape the form of the urban area by control of development. Abercrombie's interpretation of the green belt concept not only provided an acceptable compromise for the rival thoughts of planning theory but also achieved a compromise between the opposing political groups concerned; the highly conservative landowners and the socialistic urban reform lobby (Blowers, 1991; Manners, *et al.* 1972).

Abercrombie's objectives for the Green Belt were threefold. First was to restrict the growth of London; second, to maintain the character and identity of settlements by preventing their coalescence; and thirdly, to safeguard land for agriculture and recreation (Herington, 1990). In drawing on the Scott Committee Report³, Abercrombie assumed that within the Green Belt itself comparatively little would change. As Thomas (1970) explains, in paraphrasing the report, a green belt was:

"Conceived as an ordinary tract of country...where the normal occupations of farming and forestry could be continued so that, as elsewhere in rural areas, the farmer was the custodian of the land. However...it [the green belt] would normally include golf courses and other recreational land for townsman's use" (Thomas, 1970:84).

³ A subsequent report recommended by Barlow: the *Scott Report on Rural Land Use 1942*, reinforced the physical control of urban growth and advised "conserving agricultural land as a priceless national asset" (Hall, *et al.* 1973:106).

However Abercrombie's assumption of a static London population was mistaken. It was argued by some, therefore, that more land should be released for housing, and that some of this should come from the green belt, especially those parts that had demonstrably little recreational value (Munton, 1983; Osborn, 1969; Mandelker, 1962). Along with most of his contemporaries, what Abercrombie also failed to foresee were the pressures that the Metropolitan Green Belt would experience in the post-war period. As a result, he did not question the stewardship role of landowners and farmers in maintaining the character of the countryside, nor did he envisage the possibility of conflict between agricultural and recreational interests (Munton, 1983).

However, the (then) Council for the Preservation of Rural England (formed in 1926 as a strong 'watch-dog' group) supplied this other perspective on the green belt concept. Their lobbying was particularly concerned by the growth of urban areas, which it saw as posing a severe threat to agriculture and the rural landscape. Members saw the green belt as a method of preventing and stifling this threat. They therefore opposed the type of green belt put forward by Howard (and actively pursued by the Town and Country Planning Association) as they felt it would increase pressures on agricultural land rather than affording it strong protection. The views of the Council for the Preservation of Rural England called for a tract of open countryside around towns, primarily to serve the interests of agriculture, but also to provide recreation space for townspeople (Manners, *et al.*, 1972).

Review

Various groups that have comprised the 'green belt lobby' have visualised green belts in different forms and as fulfilling different aims. Herington (1990) has suggested that green belts have played an important **secondary** role in providing open countryside for recreation and outdoor leisure pursuits. However, these secondary functions are considered only incidental at the outset. The original and **primary** functions were largely focussed on containing urban sprawl. This comment is reinforced by the (British) Department of the Environment (1995) who state that the fundamental aim of green belt policy is to prevent urban sprawl by keeping land permanently open. Since 1955 and up

to the current day, most government officials have perceived green belts as being more favourably suited to city planning rather than rural. This is clearly evidenced through the 1955 British Government Circular (42/55) that spelled out the three reasons for establishing (statutory) green belts. These were clearly 'urban orientated' and placed a strong emphasis on anti-sprawl. Since then, planners have begun to see a much greater role for the green belt and as such it has been justified by a number of auxiliary objectives.

It is possible to identify four main themes in the discussion of green belts. All four are concerned indirectly with containing further urban growth, although pursuing different aims, namely:

- The protection of agricultural land and the rural landscape;
- The dispersal of large concentrations of population into a series of planned self-contained satellite towns;
- The desire to shape (and, in particular, to contain) urban form through the control of development; and
- The provision of countryside recreation space for urban dwellers.

The history of the green belt has been characterised by a series of swings between emphasis on containment, on the one hand, and emphasis on use of the green belt for agriculture, recreation and amenity on the other. These purposes have been served by limiting the expansion of a town, and a continuous belt around it has in the past been seen as the necessary tool to achieve this. To this end, the purposes for which new buildings and changes of use that may be permitted generally include agriculture and forestry, sport and cemeteries, and institutions standing in large grounds, and or other uses that local authorities deem as being appropriate to a rural area (Elson, 1986; McConnell, 1981). Although this implies severe restriction of activities it does not imply zero development. Elson (1993) makes it clear that green belts are not immutable but must be able to take account of changing economic and social circumstances "permanence is not forever but as far ahead as can be foreseen."

There are circumstances in which green belt policies can be overridden for national and urgent regional need, and other considerations. Central government (in Britain) has always assumed that some development would occur in green belts (Munton, 1983). A green belt is a strategic planning instrument that must allow for local circumstances, and some development can be justified as being in the national interest, some as essential in meeting local needs and some as unacceptable in the urban area. For example, consider the decision needed between open space preservation and the urgent need for housing a growing population. There is no correct answer, however the decision to develop green belt land (whether right or wrong) will always be challenging. It is these types of decisions that have encouraged recent green belt rethinks.

Chapter 3

The Application of Green Belts in England

The British have a love-hate relationship with green belts (Hodge, 1997). Even at a time when the prevailing mood favours deregulation and planning control is itself subject to criticism, one of the most restrictive tools of planning, the green belt, attracts much popular support. Part of the reason for the popularity of the green belt concept undoubtedly lies in the very greenness of the metaphor, rather than the image of the 'belt'. The green outlook with its roots derived from the gardening revolution of the seventeenth century and the traditional fondness of the English countryside leisure pursuits, is ingrained in the English character and is of both academic and political interest. Today, political enthusiasm for green politics continues (Hodge, 1997; Buhrs & Bartlett, 1993).

The evolution of the green belt is inextricably linked to that of town and country planning generally in Britain. Mandelker (1962) reinforces this, suggesting that the preservation of the countryside, and the clear demarcation between town and country, is one of the hallmarks of English planning. In this light, the green belt has been the most long-standing policy instrument used by local authorities and central government to shape the patterns of urban development (Elson, 1986). However, it is important in assessing the present scale and operation of green belts to understand their origins in statutory planning. Green belt policy was implicit in the writings of Ebenezer Howard, and in 1919 the Garden Cities and the Town and Country Planning Association openly advocated the imposition of rural belts around urban areas (Ratcliffe, 1986).

Green belts arose as a response to specific social and economic changes and assumptions about the role that could be played by a comprehensive system of land use controls. Ebenezer Howard was not alone in expressing concern over urban conditions around the turn of the century or even in suggesting solutions, but legislative response was meagre and largely ineffective (Munton, 1983). There was little effort to control the spread of cities, as the main problems were perceived to be congestion in the inner city. By the 1920's concern over urban growth had become much more widespread and much of the concern was directed at the rate of suburban development of London. This alarm

contributed to the passage of new legislation, namely the *Town and Country Planning Act 1932*.

The Town and Country Planning Act 1932 did little more than provide a simple system of zoning which local authorities could implement, if they had the ambition and tenacity to do so, although few succeeded in implementing a 'planning scheme' (Cullingworth, 1997). Central government had no responsibilities for their initiation or co-ordination. Responsibilities for planning, such as they were, rested with local authorities, who typically drew up regional and sub-regional plans. However, any attempt to give this local regulatory apparatus any broader conception of planning would have been severely constrained by the 'compensation bogey' and the impossibility of recouping increased land values for the public purpose (Cullingworth, 1997:130). To this end, the Greater London Regional Planning Committee was formed, which was in existence from 1927 to 1936, and is considered historically as being particularly important to the Green Belt (Garbutt, 1989). Its enormous committee, consisting of representatives from 138 separate local authorities and responsible for an area of 4,780 square kilometres within a 40 kilometre radius of London, appointed Raymond Unwin as its technical advisor (Garbutt, 1989).

The first statutory green belt was a direct result of Unwin's work on Greater London and was implemented through *the Green Belt (London and Home Counties) Act* of 1938 (Thomas, 1970). The preamble states the purpose of the Act as the enhancement of the "health and amenities" of the people living near the green belt. This Act empowered the London County Council and the Home Counties authorities to acquire land, with substantial grant aid from Government, on the fringes of the City,

"...to provide a reserve supply of public open spaces and of recreational areas and to establish a green belt or girdle of open space lands, not necessarily continuous, but as readily accessible from the completely urbanised areas of London as practicable..." (Ministry of Housing and Local Government, 1962:2).

The Act's most significant provisions were a presumption against any development on land so purchased, and the proviso that none of the land should be sold or built upon without the consent of the responsible Minister. This legislation is an expression of the belief in top-down planning and public body intervention that prevailed at the time.

However, purchasing the land was an extremely expensive method of ensuring that land remained open, and it was not until the passing of the *Town and Country Planning Act* of 1947, which 'nationalised' the right to develop land, that the widespread use of green belts became feasible (Cullingworth, 1997). This essentially abolished the 'compensation bogey' and primarily gave councils the power to designate land as part of the green belt without having to purchase it. The Act provided much of the institutional framework that Abercrombie was relying on to implement his green belt proposal. In particular, it required local planning authorities to prepare development plans. In addition, it established a development control system to regulate changes in land use, and it instituted compensation and betterment provisions – effectively 'nationalising' development rights (Munton, 1983).

With the introduction of the *Town and Country Planning Act* of 1947, new machinery was established to implement policies for guiding development, preserving the countryside, effecting a 'proper distribution of industry,' and establishing new towns (Cullingworth, 1997). There were also other Acts of Parliament that dealt separately with new towns, agriculture and access to the countryside. If the 1947 Act provided a comprehensive framework for urban and regional development, it did no favours for the countryside (Curry, 1997). Scott and Barlow (1940) had colluded, in shaping the Act to ensure a 'no development ethic' in rural areas. Designating much of the countryside as 'white land' and using the planning system to resist development on the basis that 'every agricultural acre counts' ensured stagnant rural economies dependent upon a single sector – agriculture (or forestry) – and created what a number of writers have termed 'the duality of urban affluence and rural poverty' which is still evident in Britain today (Cullingworth, 1997; Curry, 1997).

Despite the fact that many planning authorities undoubtedly operated '*de facto*' green belts after the 1947 Act, it was not until 1955 that green belts became nationally

recognised as a planning policy. Central Government had remained largely on the sidelines and had not endorsed the idea of green belts or even announced a set of principles upon which it would support green belt proposals. However, in April 1955, the Minister of Housing and Local Government, Duncan Sandys, said in the House of Commons,

“...I am convinced that, for the well-being of our people and for the preservation of the countryside, we have a clear duty to do all we can to prevent the further unrestricted sprawl of the great cities...”
(Hansard, 26 April, 1955).

This statement was followed in August by the issue of a Circular (42/55) entitled *Green belts* which asked planning authorities to consider establishing clearly defined green belts for the following reasons:

1. To check the further growth of a large built-up area;
2. To prevent neighbouring towns from merging into one another; or
3. To preserve the special character of a town (Elson, 1986).

Central Government indicated that it would only endorse green belt proposals if they met these criteria. To assist local authorities maintain green belts through the use of their development control powers the circular (42/55) listed those land uses that were acceptable in green belts. This gave the impression that the ideology of green belts was more concerned with resisting growth *per se* than with the positive use of land thus protected (Cullingworth, 1997). There was no mention of amenity or recreational considerations, and little to suggest the encouragement of agriculture. This provoked criticism from those incensed by what they saw as the omission from the circular of things which they saw as the major functions of green belts. Green belts, according to this Circular largely ignored the ideas from various factions of the green belt lobby which were promoted several decades earlier. Only one requirement was fulfilled - that was the restraint of urban growth. The concept of agriculture and recreation was not considered in this original circular.

In response to this criticism there followed a period of uncertainty in government thinking. At one moment central government appeared to endorse an amenity function for green belts, at least as a secondary objective, and at the next to backtrack (Munton, 1983). In 1957 a further circular (50/57) stated that the amenity value of land could be taken into account in defining the local extent of green belts (Ministry of Housing and Local Government, 1957). However the Minister, Henry Brooke then contradicted this view, when he claimed in 1961 that:

“the very essence of a green belt is that it is a stopper. It may not all be very beautiful and it may not all be very green, but without it the town would never stop, and that is the case for preserving the circles of land around the town” (Heap, 1961, quoted in Munton, 1983:20).

This statement quashed the recreational, amenity and agricultural components that green belts provided, even if they were considered only incidental and second rate to the initial government policy of 1955. Clearly, the primary green belt objective was to restrict the outward growth of the city and little attention was placed on other issues outside of the urban area. During the 1960's it seemed inconceivable, in a period of rapid urban growth and accelerating urban decentralisation, that the apparently static green belt concept would survive (Cullingworth, 1997; Elson, 1986). The latter half of the sixties saw few statements on green belt policy from British Government. However in 1972 Peter Walker, the Minister responsible for green belt implementation, issued a statement that substantial extensions to the green belts were to be approved:

“...To give permanent protection against development to as much green belt land as possible as quickly as possible, while ensuring that adequate scope is given for the preparation of plans which will meet present and future housing needs...” (Department of the Environment, 1972).

This indicated that Government thinking on green belt policy was undergoing a transformation in that it called for a positive planning approach.

“...The land should not simply be left idle and neglected. These areas can enhance the amenities and help in providing opportunities for the townsman for recreation. There needs to be a positive approach to the planning of green belts so that they make a positive contribution to the overall strategy of the local planning authority” (Department of the Environment, 1972).

Increasing leisure time and car ownership in the 1960's and 70's attributed to the increased thoughts and awareness of the other (secondary) green belt functions (Curry, 1997). The period after the 1971 Town and Country Planning Act was the heyday of planning involvement in rural recreation. New structure plans were to provide policies in this regard. However there was also an increasing trend to the larger role for the market, and a change in the character of public policy to regulatory planning. The opportunities which had been seen by the early post-war planners changed into problems of overwhelming difficulty, and positive planning came to be seen as too expensive, problematic and politically unrewarding (Cullingworth, 1997).

In 1984, the House of Commons Environment Committee recommended strong support for sacrosanct green belts. However, it also reaffirmed the case for firm policies to intervene in market processes to shape and channel urban development. At the same time, the central thrust of Government policy was to make the planning system more responsive to these market forces (Herrington, 1990). The thoughts and ideas for more housing development on greenfield sites was taking centre stage, and it was clearly evident that new homes would need to be built in the future to accommodate the demands of an increasing population. While some would argue that the government should have played a bigger role in getting developers to build on inner city brownfield sites, there would inevitably be a greater demand for development to occur in the countryside. Market demand would generally dictate and reinforce this.

In 1991, the British Government decided that a re-examination of the town planning and local government structure was timely (Wilson, 1998; Hodge, 1997). This initiative largely arose as a result of the drive from government to improve quality, efficiency and accountability in local government. Planning legislation defined areas of discretion within

which local authorities could formulate and operate policy (Hodge, 1997). This discretion was narrowed by the supervisory and reserve powers of the Ministry to protect the national interest and secure consistency in policies. Whilst this national interest was ill-defined, the actions of Government stressed three rationales: the need to protect nationally-scarce kinds of land; a wish to avoid putting Government's own economic, social or environmental policies at risk through local political control of land; and a wish to avoid disparities in the nature and quality of development between localities from becoming too extreme (Cullingworth, 1997; Hodge, 1997; Solesbury, 1983).

Central government has now taken on a 'neutral' stance in relation to these issues, with a commitment only to assist in debate. Local authorities thus make their choices between competing claims for development and conservation in a constrained and insecure environment (Hodge, 1998). As elected councillors make most planning decisions, policies must be politically tenable for implementation to occur. At the same time, the process of policy formulation has to take account of powerful influences and pressures from outside the locality in the form of the policies of sectorial agencies such as the Ministry of Agriculture, the Department of Industry, or nationalised industries (Cullingworth, 1997).

Pressures of unanticipated population growth, increasing housing need, regional migration, technological change and a host of other factors has dramatically transformed the planning environment (Curry, 1997). Planning, it has been argued, is thus reduced to performing a number of functional tasks such as supplying land for development by private house-builders, co-ordinating development, and reducing the extent of adverse effects of one use upon another at a local level (Evans & Mabbitt, 1997). Yet planning policies need to be derived through a process which is accountable to local populations, who may want far less development than that proposed by outside interests. (Elson, 1986). Within this potentially combative framework, green belt policies assume particular importance. Little or no other policy has such a strong presumption against development. Once approved in plans, green belts may only be altered in exceptional circumstances. Although Central Government has the final say over what is 'exceptional', convention

and the history of decisions made, suggest that this criterion has been broadly adhered to over the years (Department of the Environment, 1995).

Planning Policy Guidance notes set out the Government policies on different aspects of planning, replacing the advice given in Circulars prior to 1988. These state the intentions of Green Belt policy, including its contribution to sustainable development objectives (Department of the Environment, 1995). They also confirm that green belts must be protected as far as can be seen ahead, and maintain the presumption against inappropriate development. However, the purposes of green belt policy and the related development control policies as set out in the 1955 Circular (45/55) still remain valid with remarkably little alteration. In addition, the fundamental aim of green belt policy (as set out in recent policy guidance notes and Circular 42/55) is still to prevent urban sprawl by keeping land permanently open.

This historical review illustrates the continuing debate on the purpose of green belts. Although Central Government continues to emphasise the overriding importance of the urban restraint function, the differences in view over auxiliary purposes have clouded central-local government relations (Cullingworth, 1997). Arguments continue over what the size and shape of green belts should be, whether they are effective in prohibiting urban development and whether the land within them is being maintained in an acceptable rural use. It is suggested that answers to these questions depend largely on whether a local or regional perspective is adopted and on the particular interest held in the future of green belts by those being questioned (Evans & Mabbitt, 1997).

The London Metropolitan Green Belt

Central government has remained with the view that the pre-eminent purpose of green belts is to contain the growth of urban areas. In London this has meant restricting the outward expansion of the city while endeavouring to accommodate the surplus population and the rest of the region's urban growth in planned over-spill schemes and other preferred locations. Urban containment has always been paramount among the aims of the outer metropolitan authorities. However in the last two decades the

maintenance of local amenity and recreation has also received considerable public support (Hodge, 1997; Herrington, 1990). Since the inception of the London Green Belt, local planners, politicians and academics have assigned other objectives to green belts. These have included the provision of open space for countryside recreation, the protection of agricultural land, the maintenance of amenity in the urban fringe and the creation of a *cordon sanitaire* between the residents of the shire counties and those of the conurbations (Herrington, 1990; Manners, 1972; Mandelker, 1962). The vigour with which the interests outside of government have promoted these separate objectives has varied over the years.

In 1976 the Standing Conference (an advisory body consisting of local body representatives from South-east England) undertook a thorough review of the state of the London Green Belt, publishing its findings in a report entitled *The Improvement of London's Green Belt*. This report included a description of the nature and extent of unsightly and poorly used land and discussed how the appearance of the landscapes in the urban fringe might be improved. The main impact of the report stemmed from its claim that large areas of land in the London Green Belt were visually unattractive and in need of remedial treatment, and that further areas of land would also deteriorate unless remedial measures were taken to prevent it happening. This implied that the green belt had an aesthetic component.

In presenting evidence in support of its case, Standing Conference identified two types of unwanted landscape. These were termed 'damaged' and 'threatened'. Neither was rigorously defined and their definitions contained both descriptive and functional elements (Munton, 1983). Typically, 'damaged' included individual sites of more than one square kilometre, and exhibited serious landscape deterioration that required urgent improvement before it affected other adjoining areas. Such landscapes were observed to be frequently associated with unreclaimed gravel workings, industrial land uses and waste tips. 'Threatened' landscape was described as areas of deteriorating agricultural and woodlands. Typically these were characterised by neglected hedgerows, piggeries and public utility installations.

The extents of these two landscape types were not determined in detail by ground survey, and their mapping was conducted on a broad-brush basis. The data was compiled with the assistance of various planning officers who inevitably held different interpretations of what the terms ‘damaged’ and ‘threatened’ meant. It is almost certain that bias became built into the 1976 study of the improvement of the London Green Belt (Munton, 1983). Its findings impart a clear message that much of the open land in the London Green Belt is in a state that leaves much to be desired. Following the publication of the report, the Standing Conference attempted to raise the issues of appearance and use of land in the London Green Belt with the Department of the Environment. However, no substantive discussion took place. The Department opted to stick to its traditional position that the green belt was a strategic urban restraint policy and that the visual appearance of urban-fringe areas, even if designated as green belt, was a local government matter. Nevertheless, the Secretary of State did observe that:

“...restraint aspects of planning policies in the approved green belt have been dominant in the past and that it is important that positive policies are adopted and implemented to secure the improvement of despoiled and degraded areas as well as the restoration of activity in ‘underused’ areas” (DOE, 1978, quoted in Munton, 1983:28).

However, he did not go on to spell out what he meant by positive policies, how they should relate to restraint, or what he regarded as despoiled or ‘underused’ areas. Were these categories to be equated with Standing Conference’s ‘damaged’ and ‘threatened’ landscapes?

In 1978, Central Government indicated its concern over the decline of London and the growing level of unemployment in the region. It also questioned whether there was much economic growth or mobile industry to divert to other growth centres. Furthermore, it questioned whether it might not be more realistic to relax the severity of restraint in some areas to meet local needs and to permit the creation of jobs wherever these might occur (Munton, 1983). However, the Secretary for the Environment rejected this possibility and advocated for the continued support for London’s Green Belt on the basis of the principles laid down in Circular 45/55 (DOE, 1978 cited in Munton, 1983). The

land around London was to be firmly maintained and was to be of sufficient width to restrain the outward growth of the city.

In light of a growing population, and with the central government's recommended strong support for sacrosanct green belts, concern during the 1980s was raised as to where this growth might be directed (Metcalf & White, 1997). Planning guidance had already provided for up to 1.1 million more sites around London and at the same time the government policy was that these population forecasts and demands should be met (Abrams, 1998). If they were to be built then some would have to go onto greenfield sites. As such these household projections were to become a real threat to the continued role of green belts in the 1980s (Schoon, 1997). This continued into the 1990s and the green belt policy is still under unprecedented strain, yet government policy still confirms that green belts must continue to be protected against urban development.

United Kingdom case law has since advanced the green belt as an instrument of containment rather than of environmental preservation (Waghorn, 1997). The courts supported this by finding that to justify a green belt, development pressures must be sufficiently strong, or the danger of coalescence sufficiently high. Judicial findings were that green belts should not be approved where the need for future development can be foreseen. This would suggest that green belts are not expected to last in perpetuity. The London green belt has forced growth onto the towns beyond the green belt and restricted economic development in places that clearly needed that development (Herrington, 1990). While the success of the London green belt policy can be seen in the high quality countryside environments around much of London, its primary objective still points towards the urban restraint function. Despite government policy reaffirming support for this objective, it is also clear that there is increasing conflict between developers, farmers and planning officials (Waghorn, 1997; Herrington, 1990). This implies that other (secondary) objectives are held in high regard, despite the fact that government policy largely ignores them.

Chapter 4

The Application of Green Belts in New Zealand

Because there were no city developments in New Zealand before nineteenth century colonisation, there was an opportunity to plan urban centres in a way that had not been possible in British cities (Morrison, 1948). Planned urban areas with ample public open space were important in order to attract citizens from overcrowded British cities and the settlement plans of Christchurch reflected these thoughts (Hargreaves, 1981). In particular, Christchurch (which largely inherited its planning legacy from British experience) sought to alleviate some of the British health problems caused by overcrowding, by providing open space, public gardens and recreation areas (Memon & Perkins, 1993). The New Zealand Company gave instructions to surveyors about the provision of such areas. One such directive, for example, said that it was:

“Desirable that the whole outside of the town...be separated from the country sections by a **broad belt** of land...and that no buildings be ever erected upon it” (Ward, 1840 quoted in Hargreaves, 1981:79).

The new town and green belt concepts were not only pioneered in England but also have been applied there on a large scale, and it has been widely assumed in this country that the application has been quite successful (Barber, 1991). In this light, many New Zealand approaches to planning practice have been modelled on the English experience (Memon & Perkins, 1993). In New Zealand, the term green belt is loosely applied to any kind of open space surrounding a city, whereas in England it has a more precise meaning. However this does not suggest that the green belt concept is (or has been) irrelevant in this country. Green belts are not new in New Zealand – most colonial towns had a town belt of some sort – however Christchurch is unique in that it has had a green belt policy for more than 50 years (Barber, 1991).

On comparison to London, Christchurch has had a reverse view of the green belt. While both city's have used the term ‘green belt’ to restrict urban sprawl, both view its use quite differently. In London it was developed as a control to inhibit the spread of settlements in danger of coalescing. In Christchurch, the green belt has been seen as a

food resource that should be preserved and not built upon. It has also been used as a tool to promote the City Council's consolidation policy by assisting in the programming of services. In this light the London green belt is dominated by the thoughts of *what it prevents*, whereas in Christchurch it is dominated by the thoughts of *what it provides*. In this respect it would appear that Christchurch has used a policy equivalent to United Kingdom 'white land' in spite of the green belt name.

The Christchurch Green Belt

The present green belt policy in Christchurch had its roots in planning work undertaken by the Metropolitan Planning Committee in the mid 1940s. In anticipation of the post-war housing boom, some effort was made by the Metropolitan Planning Committee to define an 'outer limit' of urban expansion, mainly to enable economic provision of services. This was never seen as a reason for implementing the London green belt. An urban fence was seen as necessary due to the fact that Christchurch had few natural barriers to contain the urban sprawl that was occurring (Barber, 1991). However the *Christchurch Metropolitan Plan* had no legal basis and lacked the teeth to have any significant effect on urban growth patterns. To this end it had become apparent to central government by the 1950s that the most vital consideration in developing a workable machinery for local government land use planning was to make it politically acceptable. The framers of the *Town and Country Planning Act 1953* recognised this by delegating to local authorities a much greater measure of control over land use planning than had been the case in the earlier *Town Planning Act* of 1926.

Under the guidance of the *Town and Country Planning Act 1953*, the task of administering town and country planning functions was delegated to local government. With the passage of this Act and the formation of the Christchurch Regional Planning Authority in 1954, a statutory framework was set up for the creation of an effective policy. Territorial local authorities were given the mandatory responsibility for preparing and approving planning schemes. In that Scheme the green belt concept was administered as a "non settlement area" (or zone). However, the comments made at a 1955 conference regarding the growth of Christchurch would reinforce and support the

idea of 'non settlement areas' on the basis of the concern over urban sprawl and the rural land that was thus lost to production (Puentener, 1993; Weststrate, 1955). In London around the same time there was also concern over urban sprawl, however there was more anxiety about that sprawl reaching other towns rather than the sprawl encroaching agricultural land. There is a certain irony in Britain regarding rural land. Prime agricultural land, once strenuously protected so it could provide produce for nearby markets, is now left fallow as farmers are paid not to grow crops in a glutted international market. However, green belt land continues to be zealously preserved against 'non-rural' activities.

The first regional scheme, the *Christchurch Regional Planning Scheme Section One – Rural Zone*, came into operation in 1959. Philosophically, the Authority took the position that the principal planning problem facing Christchurch at that time was urban sprawl. This Scheme defined a rural zone surrounding the main Christchurch urban area. By containing the outward spread of Christchurch, the Scheme sought to avoid the loss of rural resources, limit traffic congestion and encourage greater efficiency in the provision of public services. This would appear to contribute more favourably to sustainable management objectives rather than the strict 'blanket' type controls of restricting urban sprawl which were promoted in London. It was intended at the time that this scheme section would be complemented by a second section relating to the urban area (Barber, 1991). In the event, that second section was never prepared. Section One therefore provided the basis for the definitions of urban and rural areas in district schemes in the ensuing ten years.

The first review of the Regional Scheme was completed in 1971. This comprised two sections: Section One: Rural Area, and Section Two: Communications. Section One related to a slightly larger planning region (including Kaiapoi) and distinguished between various categories of rural areas according to the type of restraint on urban use, special industrial and deferred urban areas. In this review, the main policy was for the containment of urban Christchurch. This was to be achieved by a two means. These included urban consolidation – so as to encourage greater efficiency and economic provision of public services, and the promotion of a green belt – so as to restrict urban development and avoid the loss of rural resources. It was clear that this purpose of

containing Christchurch was not to prevent other towns coalescing, as was the case in London. In this light, the Christchurch green belt was not compatible to the London green belt because there was not a real threat of other towns merging. The Christchurch green belt was primarily enacted to prevent urban activities occurring in rural areas. This scheme section foreshadowed the encouragement of urban development at locations outside the (then) Christchurch Region, but was unable to plan for that development.

In 1973, an amendment to the *Town and Country Planning Act 1953* added Matters of National Importance and addressed some of the concerns of urban sprawl. Section 3 specifically referred to the need to protect “*land having a high actual or potential value for the production of food*” and for the need to protect rural areas generally from “*sporadic subdivision and urban development.*” Subsequently, in a major review of the Act in 1977, this mandatory consideration of matters to be recognised and provided for in all planning activity at a sub-national level was expanded and given added emphasis (De Luca, 1991). With the passing of the *Town and Country Planning Act 1977* a more effective statutory framework for green belt implementation was provided (Memon, 1993). The purpose was the “*wise use and management of resources*” and it included and added to the Matters of National Importance amendment of 1973. In relation to the idea of protecting a green belt, a further matter was added – “*The avoidance of unnecessary expansion of urban areas in or adjoining cities.*” These provided an effective basis and framework for the protection of urban fringe areas. It also strengthened local government’s ability to implement a green belt successfully.

The second review of the Canterbury Regional Planning Scheme was initiated in the late 1970’s and related to the wider Canterbury Region (between the Ashley and Rakaia Rivers). The planning region was extended further north to the Conway River when the responsibility for regional planning was passed to the Canterbury United Council in 1980. Section One contained the overall objectives for all parts of the Scheme and also the specific objectives and policies for settlement distribution. While this Scheme Section inherited the policies for the protection of a non-settlement area around Christchurch (referred to as a “Green Belt Area”), the scheme adopted a different position to that of its predecessors by identifying and promoting a positive settlement strategy for the region.

In Christchurch there is no small confusion as to what the green belt has been, or what it has been intended to do. In terms of the Regional Scheme, a “Green Belt Area” was established for the principal purposes of containing urban Christchurch “within clearly defined boundaries,” and protecting what was then thought to be “land having a high actual and potential value for the production of food” (Christchurch Planning Bar Association, 1995). While the framers of that Scheme acknowledged that the population of Christchurch would continue to grow, the accommodation of that increase was left largely to the (then) five urban councils. Each was expected to operate within a strategy which provided a boundary to urban Christchurch and identified Rangiora (to the north) and Rolleston (to the south) as centres for major growth. At this time these centres were considered to be part of a positive settlement strategy (*The Christchurch Press*, 7 April 1999).

Although the pressure for subdivision in the 1980s was held under reasonably effective control within the Green Belt Area, the last decade has seen a significant increase in the number of applications for subdivision and rural dwellings within the Rural Area (Nixon, 1997a Thomson, 1997b). The main purpose of the green belt was to contain the city, which was achieved through the protection of agricultural land (or land with food production potential). The Christchurch Green Belt was considered a successful achievement in the 1980s (Barber, 1991). By having ventured so much, Christchurch secured choices that other cities have squandered. Many options were still open and they were in a position of being able to entertain second thoughts about the green belt. The point is that they were having second thoughts. This is evidenced through recent and increasing housing developments, greater subdivision and council rezoning of green belt land. The green belt containment policy was, in part, designed to protect agricultural land, but has instead led to piecemeal development (Price, 1997). Developers, through public demand have been more attracted to ‘greenfield’ sites as opposed to ‘brownfield’ sites despite evidence that the test of sustainability is more satisfied by urban regeneration than countryside development (CPEO, 1998; Mathias, 1996).

On 1 October 1991, the *Resource Management Act* became the governing legislation for nearly all resources in New Zealand. Even though sustainable management was the

guiding principle of the Act, its ambit was limited chiefly to empowering district and regional councils to mitigate undesirable effects of human activities on the environment. A key feature of the newly established legal regime was the focus placed upon *effects* of activities rather than upon the activities themselves. District (landuse) Plans, drafted with reference to the Act, could still 'zone' or 'classify' areas not on the basis of 'activities' but of 'effects.' In this light, it made green belt zoning more difficult to justify. Christchurch City Councillor Garry Moore (now the Mayor) even questioned the relevance of the green belt concept under the *Resource Management Act* and asked for further debate (*The Christchurch Press*, 18 June 1996).

The District Schemes that were operational prior to the introduction of the *Resource Management Act* were deemed to be Transitional District Plans and would consequently be discarded when the new mandatory district plan became operational. The Christchurch City Council developed its planning policies for the new District (City) Plan after extensive consultation with the community. The overwhelming response was that people do not want the city to keep spreading outwards (Thomson, 1996). Very early on, in preparing a growth strategy for Christchurch, the Council considered whether it needed to intervene in the location of urban growth. Or alternatively, could the purpose of the *Resource Management Act* be met through non-regulatory methods such as the use of economic instruments, incentives, rates relief, or other market mechanisms (Thomson, 1997b). The Environment Court has had the opportunity to examine this process. It was argued that the process of urbanisation, and more particularly urban growth, had to be managed through some intervention in the location of urban development.

Plans to cater for the growth of the city are being held up by the statutory process, which is not working fast enough to keep up with the demand Christchurch is experiencing (Thomson, 1997a). The *Resource Management Act* has come under attack, particularly from community groups that see it as being an open chequebook for developers, and developers who see it as too restrictive. Nevertheless, various sections of the Act can be interpreted in several ways, which has created opportunity for interested groups to oppose developments for all sorts of reasons, and for developers to push through development. The process of approvals and plan preparation has been drawn out through

objections and appeals. Objections mean it could be up to five years before the land is approved. There is little the Council can do until legal processes have taken their course. This would suggest that it is better to take time and avoid mistakes.

Still, the question remains, where is the increased population going to go? One possible answer to that question is further intensification of residential development within Christchurch, to be achieved through a combination of urban infill and renewal practices. However, opponents of this course have recently become both vocal and organised, also basing their opposition on the purpose and principles of the *Resource Management Act*. They argue that more intensive development of their neighbourhoods will destroy an environment which they value, and they point to a variety of 'unneighbourly' development that has occurred over the past few years. However, it appears that the City Council has not put much emphasis on the renewal of 'brownfield' sites. If these derelict sites were put to use again, some of the new housing needs in local communities could be covered, therefore reducing some of the development pressures of green belt land.

The most important indicators of the effectiveness of the green belt policy is whether it has actually contained the outward spread of Christchurch, preserved the agricultural land, and enabled a greater economic provision of services. In terms of performance indicators developed for the green belt section of the 1980s Regional Scheme, the policies have been successful relative to the likely situation had there been no policy control (Barber 1991). Now, because of better knowledge on the relationships between land use and natural resource systems, and because resource management reform has forced greater attention on the *effects* of land use change, new measures may have to be adopted. With the transition from the *Town and Country Planning Act* to the *Resource Management Act* in 1991, it was inevitable that the regional and district plans developed to deal with settlement and agricultural issues would contain some quite different measures.

The Christchurch City Plan (its preparation, a requirement of the *Resource Management Act*) is now the principle document that controls land use management in and directly around Christchurch City. It is the first plan prepared for the City under the Act and replaces all or parts of the six district planning schemes prepared by the previous *Town*

and Country Planning Act before the present city came into being in November 1989. The previous district schemes covered the old Christchurch City, Waimairi District, Riccarton Borough, Heathcote County, Paparua County (part), and Eyre County (part). The Christchurch City Council released the Proposed City Plan in June 1995 and it is almost completed – it is awaiting appeals to the Environment Court on their final decisions. Once operative, it will apply for ten years before being due for review again.

The Plan is prepared around a framework of sustainable management and has essentially changed the landuse philosophies by eliminating prescriptive the zoning schemes that directed the spatial pattern of rural and urban land uses (Memon & Gleeson, 1995). This ultimately will have a major impact on the green belt concept. Under the *Resource Management Act* (section 32), the Council is required to place weight on the need to justify restrictions on the use of private property – that is, the onus of justifying intervention is on the regulating authority (*City Plan*, 1995:2). Over the past 30 years, the outer expansion of the urban City has been contained by regional “green belt” policies (*City Plan*, 1995:3/19). Some of these policies may be able to be justified, but the restrictive zoning concept of all the rural land outside of the urban fence may prove to be more difficult (van Beynen, 1996). The statutory obligation on local authorities to create opportunities for development in a controlled way has been removed, and replaced by a requirement to promote sustainable management of natural and physical resources. This will undoubtedly have major implications to the green belt concept.

Current land use is however still influenced by past planning schemes (Barber, 1991). The Regional Scheme aimed to control the physical size of the urban area and retain the high quality land for agricultural purposes (*City Plan*, 1995). Excess population growth would be directed to Kaiapoi, Rangiora or Rolleston. This regional objective has been put into effect by the establishment of a “green belt” extending from the City’s urban boundary for a distance of approximately 20 kilometres to the north and 10 kilometres to the west and south (*City Plan*, 1995:3/34). The current land use pattern is dominated by two major elements, urban and rural, with some 16,300 hectares in urban use and 30,000

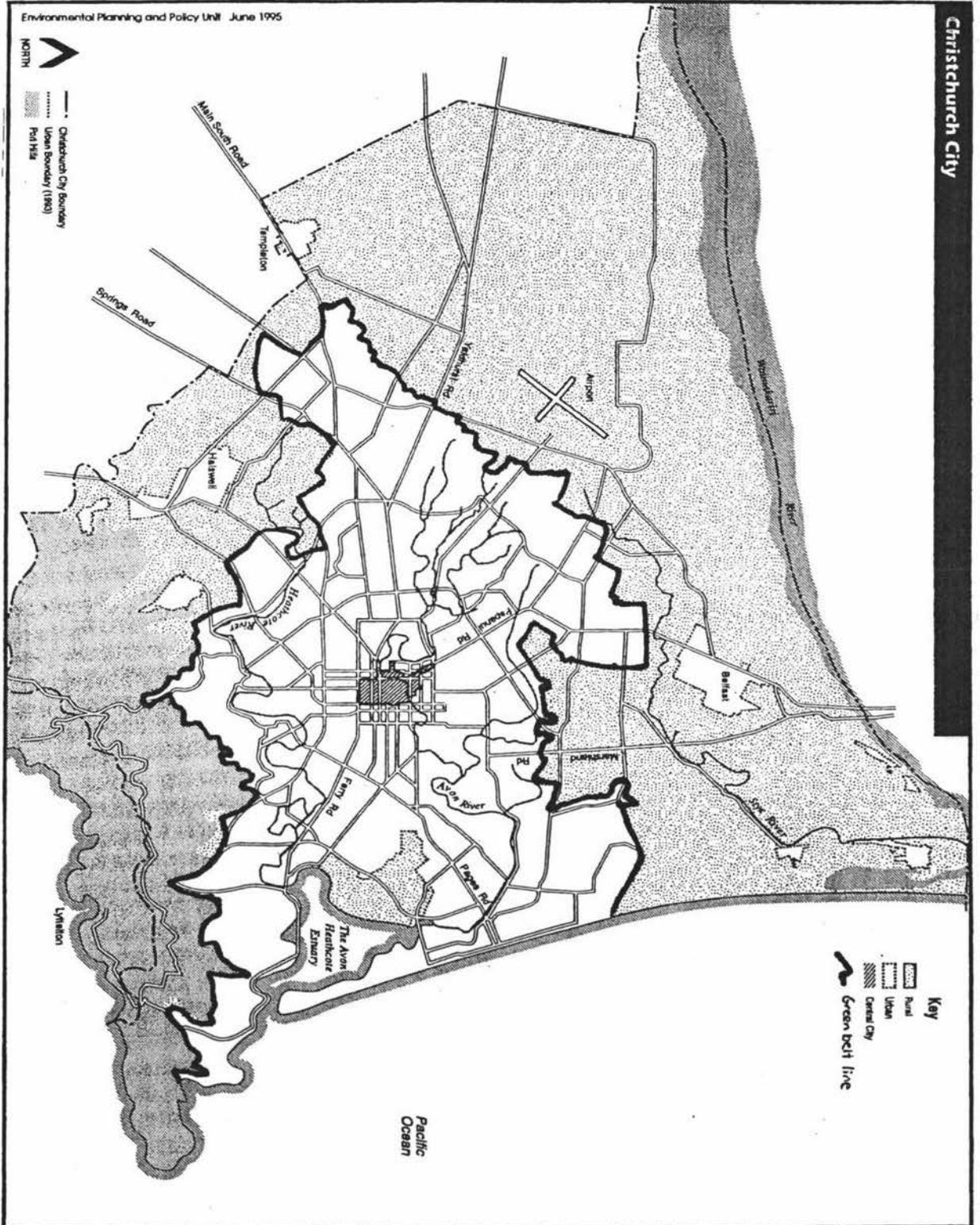
hectares in rural use⁴ (refer diagram on the following page). However, the Christchurch City Plan uses the term 'green belt' only three times in the entire Plan – mainly to describe the past. In a strict literal sense, there is no zoned green belt anymore, however the City Plan does show a clearly visible urban fence line. The whole of the rural component within the Christchurch City Council boundaries lies within this former green belt. However, despite the fact that planning documentation does not specifically use the literal term any more, the term 'green belt' is still commonly used to define this rural component.

The use of an urban fence line satisfies the City Council's objective of accommodating urban growth through consolidation of the existing urban area. Studies undertaken by the Council point to urban consolidation being the most sustainable urban growth option (Christchurch City Council, 1995). These studies concluded that consolidation is more energy efficient and has the least adverse effects on natural resource values, such as water quality, versatile soils and outstanding landscape values, through selective restraint on peripheral development. Compared with other options urban consolidation is also the most cost-effective means of servicing future urban growth. However, this does not necessarily entail containment of the city within its present boundaries, and the Plan has accepted that some provision will be made to provide "housing choice" which may be on greenfield sites. It is also important to note that there is also no mandate for the Council to protect the whole green belt as an agriculture resource because of its food production potential. Back in 1991, Max Barber stated that the City Plan would deal with green belt issues in a very different way from the Scheme it replaced. He further added that: "whether it will be successful in dealing with 'new' and inherited issues is not so much an open question but a challenge for the future". Eight years later, we are now in a position to see what effect these challenges have had.

⁴ Christchurch City includes some 30,000 hectares of land zoned rural, of which 27,000 hectares are farmed in some way. Only three percent of the City's population lives in rural zoned areas (Christchurch City Council, 1999).

The Christchurch Green Belt

The rural component of Christchurch City is still referred to as the "Green Belt"



Chapter 5

The Christchurch Green Belt: Has it passed its used by date?

The London green belt can be described as national policy because it has the support of central government behind it. In Christchurch, green belt policy is not supported at that level. This is one of the fundamental differences between the Christchurch approach and the London approach. When legislation or ideas have changed in Britain, 'green belts' have continued to be recognised and protected as far as can be seen ahead. In New Zealand, green belt policy was implemented at a local level and legislative change at the national level (namely the *Resource Management Act*) has not considered the impact that the changes might have on green belt policy. While both systems operate in different planning environments their existence and reasons for existence is still worth exploring.

The term 'green belt' has come to mean different things to different people. The following definition given by the *Oxford Dictionary* (1988:352): "an area of open and low-density land use surrounding existing major settlements where further urban expansion is restricted" aptly describes the Christchurch green belt. Frederic Osborne (1969:182) states that a green belt has been used as a synonym for *country belt*, *agriculture belt* or *rural belt* – all of which were terms used by Ebenezer Howard. They all describe a stretch of countryside around and between towns, which is usually in permanent farmland use. The wide Christchurch rural-urban fringe, which is reminiscent of Howard's agricultural belt has in the past been labelled a green belt area, however there is now some speculation that the concept (as it applies to Christchurch) may have passed its 'used by date.'

Today the term is still used to describe the rural component of Christchurch City, however there is some speculation that it is only the name that has been adopted and not the associated policies and reasons for the establishment of a true green belt. Of course Raymond Unwin originally used the actual 'green belt' phrase in England in the early twentieth century. As such, this research will attempt to clarify this speculation. In considering the appraisal of the green belt, there are two aspects that will be used to determine the green belt's worthiness and ability to continue as a useful planning tool in a Christchurch context:

1. The 1955 British Government Circular 42/55.
2. The Resource Management Act.

The 1955 British Government Circular 42/55

The main impetus for green belts as we know them today came in 1955 from Duncan Sandy's Ministry of Housing and Local Government Circular 42/55, which asked local planning authorities to consider submitting sketch plans for green belts for the following three reasons:

- To check the further growth of a large built up area;
- To prevent neighbouring towns from merging into one another;
- To preserve the special character of a town.

In London, these three reasons remain valid today with little alteration since their inception. As such, these reasons will be compared to the city of Christchurch to help determine the relevance of the true 'green belt' term.

Reason 1: To check the further growth of the built up area

In London, the reasons for establishing green belts are well documented. Most of the literature is very explicit to the urban restraint function, and it can not be denied that the green belt was implemented for the main purpose of restricting urban sprawl of the city in question. In this respect there has been a strong commitment by the local authorities to check the further growth of the built up area. This has largely been achieved by the implementation of containment policies, which have to be able to withstand factors such as the pressures of actual or potential changes in population. In London, the central government has said that green belts must be protected as far as can be seen ahead. This has not occurred in Christchurch.

The Christchurch City Council developed its most recent planning policies after extensive consultation with the community (Thomson, 1996). The overwhelming response was

that people did not want the city to keep spreading outwards and like London, Christchurch has continued to affirm that containment principle. However this statement does not accurately reflect what is happening in real life because it is clear that new buildings dominate the smaller open tracts of land at the urban periphery. Nevertheless, the City Council is promoting urban containment. The urban development options facing Christchurch have been well canvassed in various forms over the years and the sum of current policies gives rise to a *de facto* strategy of 'containment' – limiting development to within planned settlements. The Christchurch City Council continues to advocate for policies that achieve continued residential development within the urban fence.

The objectives and policies in the Christchurch City Plan (chapter 6) form part of an urban growth strategy that encourages urban containment. As a requirement of the *Resource Management Act* (namely section 32), all future development options must be seen to have been formally considered and evaluated. To this end the Christchurch City Council has commissioned a number of independent reports to determine the direction of future growth. These reports have reinforced the Christchurch City Council's thinking about urban containment and they have concluded that a general tendency towards urban consolidation has advantages over other forms of urban development because:

- Consolidation is likely to be cheaper to finance compared to other options.
- It will assist in managing the city's air pollution by reducing vehicle trip and trip lengths.
- There will be less pressure on soil and water resources, landscape, rural amenity, and the rural environment generally.

It would therefore appear on this evidence that the containment of Christchurch City is favoured for the reasons of the cheaper costs of economic servicing and of general environmental protection. It would also appear that the consolidation concept would still exist whether a green belt was present or not. In this instance, a 'green line' (or urban fence) would appear to be sufficient rather than a wide green belt. Like sustainability, urban consolidation is a process of urbanisation and not an end state in itself. It can include the process by which urban areas make more use of existing opportunities to develop within their current urban boundaries by for example using existing vacant land,

redeveloping some housing areas at higher densities, and revitalising older residential and industrial areas. This contrasts with other options such as extensive fringe development, satellite towns, or sporadic growth, all of which push urban areas further out into the rural area.

The traditional basis for urban expansion has been for cities to move outward (Lee & McDermott, 1998). Based on this statement, McDermott Miller Group (1992) in preparing an Urban Growth Strategy for the Christchurch City Council clearly stated that there were opportunities for fringe expansion into greenfield sites, particularly west and northwest of the urban fence. It appears that the City Council has seriously considered this issue and have consequently accepted that there may be some instances where greenfield sites are suitable for urban development. In reading the background information on the Urban Growth Strategy of Christchurch (1997) it is clear that the City Council's 'urban consolidation' policy does not preclude some expansion at the edge of the urban area. Urban fringe development is acceptable, providing that the tendency over the plan period is towards achieving a compact city form, and the purpose and principles of the *Resource Management Act* are promoted. There is no suggestion that all existing vacant land must be used up before new areas at the urban edge are rezoned. However, there is a presumption that the rate at which urban land is provided should be managed on the basis that unrestricted growth will not promote consolidation and will have an adverse effect on natural and physical resources (Heremaia, pers. comm., 1999).

Have these urban containment policies worked? In Barber's (1991) view, and prior to the introduction of the *Resource Management Act*, he suggests that these have worked superbly. However, over the last decade, and measured against its primary purpose, the green belt has failed. It has not halted the outward growth of Christchurch, and development has encroached on to the green belt and the competing pressures have become intense. The rate at which vacant land in greenfield sites has been transformed into urban use has averaged approximately 40 hectares per annum since 1992 (Christchurch City Council, 1999). Prior to 1991 this take up of rural land was much less. Whether this figure represents the actual demand over that period is a moot point given the stricter containment policies that were in place.

The population growth rate of Christchurch is over two percent per year, and this is consequently putting pressure on the available residential land and services within the urban area (Yeoman, 1998). The Christchurch City Council has undertaken a thorough assessment of growth options using the *Resource Management Act's* section 32 process. However, since 1994, by which time most of the section 32 work had been completed, several important changes have occurred that have effected both the demand for land resources and the nature of the resource constraints around Christchurch that are limiting its potential growth. These changes fall into three categories:

- The statutory framework within which the City Plan is operating.
- Increases in the demand for resources brought about by sustained levels of population growth.
- New information on the capacity of the infrastructure to absorb growth.

The principle changes have concerned the Regional Policy Statement and the Waimakariri Flood Plain Management Regional Plan, both of which had an impact on the location and the amount of new land rezoned in the proposed City Plan – first released in 1995 (Maw, pers. comm., 1999). Two significant events have happened. Firstly, recent case law appears to have reduced the extent to which the City Council has to have regard to the presence of versatile soils within its boundaries. This case law is strongly suggesting that versatile soils have the same importance as other resource values such as outstanding landscape or habitat and does not have the primacy that it enjoyed under the former *Town and Country Planning Act*. This provides the Council with more scope to extend the urban area onto versatile soils than was the case when the plan was publicly notified.

The second significant event has been the withdrawal of the proposed Waimakariri Flood Plain Management Regional Plan. This Plan put restrictions on urban development in certain parts of the Waimakariri Flood Plain and was an important factor when considering the future location of urban development. Of course the withdrawal of this Plan does not necessarily mean that the potential flood hazard disappears with it. The Council still has a statutory obligation as part of its functions to avoid or mitigate the effects of hazards and in fact the City Plan contains a policy to that effect, as does the

Regional Policy Statement. However, it potentially opens up development options that did not exist when the Regional Plan was in effect (Heremaia, pers. comm., 1999; Maw, pers. comm., 1999).

Population forecasts have also exceeded what was originally thought of as the Draft City Plan was being drawn up (Thomson, 1997b). The City Plan has however taken into account the possibility of sustained growth with a population exceeding 350,000, by diverting some growth to other centres as well as expansion and redevelopment within Christchurch. In 1992 it was calculated through a fairly simple method under medium projections that rezoning 460-500 hectares would provide an adequate amount of land to meet the housing needs for the next 20 years, while avoiding adverse effects (Christchurch City Council, 1997). This would suggest the need for a robust strategy to assist in developing the necessary infrastructure for a steadily increasing population. Christchurch's population grew at around two percent over the past five years, similar to the rate experienced in the 1960s and well above rates during the 1980s and early 1990's (Statistics New Zealand, 1999). Official projections by the Department of Statistics (1991) indicated that Christchurch's population would increase from its 1991 census figure of 288,249 to 322,600 by 2016. Revised population projections prepared since the proposed City Plan was notified are significantly above those the Council were using in 1994. The new medium scenario is over 30,000 more than the earlier projections (Christchurch City Council, 1997).

Although the Christchurch City Council believes that the pressure for subdivision within the green belt in the last 30 years has been held under reasonably effective control, the last decade has seen an increase in the number of applications for subdivision and rural dwellings within the rural area (Nixon, 1997a Thomson, 1996). The number of building consents issued in the rural area has increased by nearly four percent each year since 1992 (Christchurch City Council, 1998). This represents a figure almost twice that of the annual population increase. This would suggest that there is a strong desire for many to live in the rural area and because resource consents and building consents are being approved, it would suggest that they are meeting sustainability criteria and are thus considered acceptable. Whilst this trend reflects the less regulative requirements of the *Resource Management Act*, it is more likely to be a result of personal desires and

sustainable management taking their course. If this were the case it would suggest that a resource management decision has been made in favour of the resource being used for housing rather than its productive use.

The population growth is fuelling the demand for houses and the land for development. Some sections of the community insist that no further development should be allowed in the Green Belt, while others are trying to prevent infill. Developers and those who provide housing have different agendas – all of which tend to be well organised and vocal. Generally speaking, each of the defenders accepts that an increasing population must be accommodated, however they identify a different place in which that should occur. Some parts of the Green Belt have already been rezoned, however the Council claims that they have tried hard to enable development to occur without causing significant adverse effects on the environment or compromising the city's distinctive character (Thomson, 1996). By no means has the City Council restricted all development at the urban fringe. Brian Burke, an environmental lawyer in Christchurch has said that “so long as the development standards meet the criteria set out in the *Resource Management Act* (and the City Plan), and that the cumulative effect of all new building developments is compact (and not random or sporadic) and easy to service – then there is little reason to suggest why it should not be allowed” (Burke, pers. comm., 1999).

So rather than the Council giving a blanket ‘yes’ or ‘no’ to development, they are trying to get interested parties to reach a consensus on the aspects of a site that need to be protected or maintained, and designing a way around them. The aim should be to achieve a ‘win-win’ outcome, with developers encouraged to design around the environment, not destroying it. However, residential development continues to encroach the green belt in the face of council policy, and it has become apparent that ‘strict’ containment is not working (Price, 1997). In terms of Circular 42/55, it would suggest that the growth of the urban area is in check, however in terms of monitoring that growth for the purposes of preserving the entire green belt and restraining urban sprawl, it would appear that it is not in check. In all fairness, this reason only considers the built up area and completely ignores the fact that the Christchurch green belt was also implemented to protect the agricultural land. This issue was not mentioned in British government green belt advice. Nevertheless, this reason – *to check the further growth of the built up area* – is not

particularly helpful in supporting a green belt in Christchurch, and it is even more difficult to see this statement preserving the green belt in the future. If it is containment that the City Council is promoting, it would appear that the current urban-rural fence line is sufficient by itself and there is no need for a “chunky” green belt (Burke, pers. comm., 1999).

Reason 2: To prevent towns from merging into one another

It appears that the future growth options of Christchurch City will not be without its problems. If the city expands in area it will encroach on what some people term versatile soils, the Waimakariri floodplain or the fine backdrop of the Port Hills. If it does not expand in area, the alternative options point towards satellite town development or other containment policies. In London, the outward spread has been limited to a certain extent, however it has forced development to ‘leap-frog’ over the green belt. While, in some instances green belt critics consider this to be a negative effect of green belts, the District Councils adjacent Christchurch City are strongly promoting urban growth in what could be termed satellite towns to the larger Christchurch City. The Christchurch City Council considers satellite town promotion as a possibility, but only if the population exceeds the carrying capacity of levels of land supplied through various containment policies.

More than 20 years ago, the site of Rolleston (south of Christchurch) was earmarked as a potential satellite city for Christchurch – only now is it coming of age (*The Christchurch Press*, 2 April 1999). In November 1973, Norman Kirk (Labour Prime Minister) announced plans that the government was to buy over 400 hectares of land in Rolleston and develop a satellite city of 80,000. The new city was to cater for the overflow of growth from Christchurch and halt the population drift north. However a change of government in 1975 brought a stop to work on the new town on the basis that they claimed the city was ill-conceived and inappropriate to the development needs of Christchurch (Nixon, 1997a). The town remained dormant until 1990 when the Selwyn District Council followed up a Canterbury United Council report outlining an extension of the residential area. Scheme 10 as it is known was implemented in September 1994 and about 220 new dwellings have since been built (Schulz, pers. comm., 1999).

New development sites within the former Christchurch regional green belt (but within the jurisdiction of other district councils) are continuing to be promoted, usually based on the reasons of consolidating urban residents for the purpose of cheaper economic servicing (Johnson, pers. comm., 1999). Like the Christchurch City Council, the other surrounding District Councils (Waimakariri, Selwyn and Banks Peninsula) appear to be supporting containment practices on the grounds that they are also more sustainable. The Waimakariri District Council for example make it clear in their District Plan that they prefer urban development to occur in the townships of Rangiora and Kaiapoi. Like Christchurch, this is mainly because the costs of infrastructure servicing are lower per rateable property in urban areas than scattered or random properties isolated from more communal areas (Harrison, pers. comm., 1999). However, at the same time they do not reject the desires of people wanting to live in the rural area. Instead they anticipate the use of financial contributions (under section 108 of the *Resource Management Act*) to recoup the costs of infrastructure to service new subdivisions.

The latest proposal is for a new 338 hectare urban site near Woodend, north of Christchurch City and in the Waimakariri District. At the same time, Rolleston (in the Selwyn District Council) is actively promoted for the same purposes. It is difficult to confirm what the Selwyn District Council's long term goals are because their first plan attempt was withdrawn, and their new Proposed District Plan is yet to be released. However it is obvious that Rolleston is being actively promoted and it is poised to become the heart of the Selwyn District (*The Christchurch Press*, 15 July 1999). The Canterbury Regional Council approved an application for New Zealand's first privately funded sewage plant and as a consequence a further 330 residential lots have been created (Schulz, pers. comm., 1999). Today it has a population over 2000 and the infrastructure to support a further 3000 (*The Christchurch Press*, 2 September 1999). However, it is probably fair to say that this new town is not being promoted as a means to cater for the excess or dispersed population from Christchurch City. It is being promoted as an alternative place to live – a rural lifestyle in close proximity to a bigger city. The ultimate intention is to increase the rating base of the Selwyn District Council.

The satellite towns around Christchurch have not been created because of a direct result of past green belt policies. While the population of Christchurch is increasing, the City

has not been confronted with the major issues of development leap-frogging from the larger city to the smaller satellite towns, as the case has been in London. In Britain, the smaller local authorities around London have a mandate that spells out the need to prevent their towns merging with the bigger (London) City. In Christchurch the population pressure is not at the same scale and the smaller satellite towns are generally prepared to expand at their periphery so long as that development is compact and meets with the local authority's containment policies. Therefore, in terms of the smaller local authorities and their towns, the green belt concept is largely ignored. They, like most smaller local authorities, want to promote growth in their district, and if they can do this in a way that is sustainable and cheap to service there is no reason to suggest why they should not be allowed to do so.

Nixon (1997a) strongly depicts satellite towns as being urban sprawl relocated to another place. While he has taken a negative view of the satellite town concept in a Christchurch context, it must be made clear that in London this has been considered a good way of addressing the problem of a growing population. Nixon (1997a) further states that 65 percent of the working population living in the satellite towns of Kaiapoi, Rangiora and Rolleston have jobs within Christchurch. Unless there is some way of compelling people who live in a particular place to also work there, it is unlikely that even providing a 'balance' between employment and population (assuming such a socially prescriptive strategy is possible under the *Resource Management Act*) would even work. Some would suggest that rail transport between outlying satellite towns and the city would be a means of overcoming transport problems. However in the Christchurch context, no work has ever been done on the financial or operational realities of such an option; it just sounds like a good idea (Woods, pers. comm., 1999). Such an option can at best be a partial solution, and only when the size of satellite towns reaches a very large critical mass needed to make it work. Under section 32 of the *Resource Management Act* it would appear that the implications of promoting rigid urban containment and satellite towns has to be justified first; rather than not regulating, and leaving it to others to work out the details like transport later (Nixon, 1997a).

Where land has been purchased for public recreation or other use, there is little danger of encroachment. Where it has not been, which is to say in most of the green belt, the

pressures for conversion to other uses are becoming increasingly difficult to stave off. The problem is not the easy one of commercial blight verses open space. Competition comes from other uses, particularly housing, and in a clash of causes the tangible has a strong edge over the intangible. This shows the vulnerability of the containment philosophy. "When you put a green belt athwart the path of development, your defences have to be impregnable" (Whyte, 1968:158). In choosing land for containment, the open space outside of the urban fence or boundary immediately appeals to sectors of the community who want to live in an open space environment as opposed to consolidated and dense living. As time goes on and the pressure for more housing grows, the need for an off setting function becomes crucial. The abstract case for open space is no longer sufficient. What is it to be, as the question is so often put: people or space?

In many respects Christchurch is significantly different from London. The most obvious difference between the two cities is the population to land ratio. Christchurch, with its relatively low population (by international standards) and its relatively large land-mass is not faced with the pressures felt in London. A result of the population pressure in London is the tendency for leap-frogging across the green belt to other satellite towns. This has not been a major problem in the Christchurch context. In terms of Circular 42/55, the Christchurch Green Belt is not particularly relevant in preventing neighbouring towns merging. The population of Christchurch City, while it is increasing, it is not a significant threat to its satellite towns, and there is no real danger of them joining through urban development in the foreseeable future. Even if they did, it would not be such a bad thing. Some would argue that this 'ribbon development' would be a sustainable option and would mould nicely with the Christchurch City Plan's urban development policies of efficient provision of public services (McDermott, pers. comm., 1999).

Reason 3: To preserve the special character of a town

"Christchurch, the Garden City, the City that Shines: Christchurch's slogan reflects the city's character and its confidence. Its natural features and the built environment combine to form an attractive city that clearly appeals to residents and visitors" (Thomson, 1996:9).

The character of Christchurch City is often expressed through its 'garden city' image – a term originally derived from the workings of Ebenezer Howard. The name garden city has been adopted by many cities around the world. Christchurch has long been called New Zealand's 'garden city,' and in the inaugural *Nations of Bloom*⁵ competition held in Madrid in 1997, Christchurch was voted the top garden city in the world. The winning was reflected through the amount of open space in and around the city, the large amount of tree plantings, and the population density and large section size that allow this to happen (Christchurch City Council, 1999) Many people believe that this is a major contributor of the character of Christchurch (Heremaia, pers. comm., 1999). The Christchurch City Council actively promotes this concept and this is evidenced on their web page and other brochures that are used to promote the city. If the open space around Christchurch contributes to this 'garden city' image, is the special character of the city diminished if the green belt is taken for further residential development? Thomson (1997b) and Nixon (1997a) have both suggested that the urban amenity is declining. If this urban amenity contributes to the character of the city then it should also be noted that the green belt land is slowly being taken for residential development. This may imply that the current green belt (and the encroaching residential development that is occurring on it) is not preserving the special character of the city. Of course, these are subjective statements and are always going to be difficult to prove.

The Christchurch City Council Residents Survey 1999 showed that 86 percent of those polled were satisfied with Christchurch as a place to live, work or spend time. While the credibility and bias of this survey is somewhat unknown (they suggest a margin of error of four percent), it does have the advantage in that it has been carried out in a similar format over a number of years. On comparing the previous years residents surveys to the most recent it is clear that there has been a slight downward trend of residents satisfaction, albeit only minimal. Three years ago the same survey was as high as 93 percent. At that time Ivan Thomson (1996) said that if Christchurch was to remain an attractive city to live in and visit, a long term strategy would be needed urgently. Since then the Council have continued down the track of promoting the containment principle,

although it has not been enforced as rigorously as was done in the past. This may raise another subjective question as to whether the containment policies are spoiling the special character of Christchurch City?

Some parts of the green belt have been rezoned and the City Council have attempted to enable development to occur without causing significant adverse effects on the environment or compromising the city's distinctive character (Thomson, 1997b). Almost 650 hectares of land, much of it from green belt areas has been opened up for new residential development (Bruce & Clausen, 1999). The City Council claim that this opening of new residential land was necessary so as to cope with the city's expected population growth to almost 320,000 by 2011 (Bruce, 1999). This raises the questions of whether the containment policies (which the City Council so actively promote) are flexible enough to cope with the increasing population, and whether the increasing population is going to affect the character of the city? No matter what way you look at this latter question, accommodating an increasing population, whether it be on greenfield or brownfield sites or through more consolidation and denser living arrangements, it is always going to change the city character in someone's opinion. Of course this character could be for the better or for the worse.

It is often suggested that one way of accommodating urban growth is to promote infill housing, which is often based on the perceptions of people who have visited densely populated European cities. In the past, the scarcity of peripheral urban land for development has encouraged a thriving infill housing market in Christchurch, which has provided up to 60 percent of the land for new units in recent years (Nixon, 1997b). On the contrary, it has also generated widespread hostility, with two forms of infill being deemed particularly offensive by existing residents. The first is the 'garage on the front lawn and the unit behind the house' type of infill, and the second is high-density town house development (Nixon, 1997b). This is not to say that infill development is necessarily bad, and indeed much of it is desirable, however some forms of infill development have resulted in a decline in the quality of urban amenity values – at least arguably an adverse effect relevant under section 5(2)(c) of the *Resource Management*

⁵ Developed by the International Federation of Parks and Recreation Administration.

Act (Thomson, 1997a). Some commentaries further add that this is degrading the 'garden city' character of Christchurch (Nixon, 1997b; Thomson, 1997a).

Infill housing, as part of a consolidation policy might alleviate the transport problem, and given that this is becoming an increasing concern among transport planners it seems to be a logical solution. Nevertheless, the objections to this are the questions of whether denser living is affecting the character of the city, and whether this is an issue that is strongly supported by its citizens. Round (1996) makes the comment that green spacious suburbs maybe ruined when new houses smother back gardens and front lawns. Essentially this becomes a balancing act that is difficult to find a solution to because the disadvantages seem to equalled with advantages and alternatives. There appears to be an interesting paradox in that the more freedom we have, the more controls we seem to need to police that freedom (Thomson, 1997a).

The term 'garden city' is used on many occasions to describe the character of Christchurch City. It has also been suggested in this research that the Christchurch green belt is reminiscent of Ebenezer Howard's green belt. If this is true, then it should also be noted that Howard made it clear in his proposals that a garden city that builds over its agricultural (green) belt would forfeit its right to the name (Howard, 1946). The Christchurch City Council have recently opened up 650 hectares of green belt land for urban development. Does this then mean that Christchurch should forfeit it right to use the 'garden city' name? It would appear that the Christchurch City Council has no desire to forfeit the name. "Why would the Council want to lose such a term that is known and liked by so many? (Heremaia, pers. comm., 1999). The 'garden city' name is likely to continue as long as its citizens continue to support the term. There was no better example of this when a new Christchurch City slogan was put forward earlier this year to change it to 'Fresh Each Day,' whereby much anguish was heavily expressed through the media.

In terms of Circular 42/55, it would appear that this reason for establishing a green belt – *to preserve the special character of a town* – is not entirely applicable or appropriate to Christchurch. If development is restricted in the green belt area, and the population continues to grow and the demand for more houses continues, it will ultimately

encourage more infill housing or encourage people to move to other areas. If infill housing is actively promoted, and denser urban living is encouraged, it may be more efficient in terms of economic servicing, however the trade off maybe a decline in urban amenity or character. However, at the same time it may mean that development in the urban fringe is slowed or put on hold. However, if the increasing population is seeking new housing, and if urban containment policies are affecting the urban amenity and special character, then the ultimate trade-off will probably be a take up of green belt land. This too may affect the city character. As such it is difficult to see how this reason – *to preserve the special character of town* – can be used effectively to establish or continue the green belt concept in Christchurch, particularly since 650 hectares of green belt land has just been opened up for residential development and that containment policies are being promoted at the same time. This would suggest that the special character is changing. Whether this is good or bad is irrelevant, however if it were changing, it would suggest that it is not being preserved.

Review

It is obvious that the reasons for establishing a green belt (as defined in England in 1955) are not appropriate to the city of Christchurch. Furthermore, it is difficult to see these reasons by themselves as being useful or effective means to justify the green belt's existence in a Christchurch context. It would also appear that the use of the term as it has been applied to the city of Christchurch is substantially different to that of London. This is based on a number of factors – the single largest fact being that London is faced with population growth and density that is far superior to Christchurch. There is also a clear mandate given from British central government to the English local authorities to prevent neighbouring cities merging with London. In Christchurch this is not a big issue. However, there are not many reasons to suggest why a green belt can not be used as a tool (or moreover a line on a map) to define the urban fence for the purposes of promoting containment policies. However the term 'green belt' implies no development, and the City Council has indicated that the current urban fence line is not a hard and fixed line. This would suggest that the 'green belt' term is not the right one. The Christchurch City Plan does not use the term, perhaps this is because the *Resource Management Act* has changed the way we have to think and act. This legislation now

takes centre stage and clearly takes precedence over past legislation and severely limits any chances of having a true Christchurch green belt.

The Christchurch Green Belt: Is it a Sustainable Concept?

Central to the environmental debate is the issue of sustainability. The concept of sustainable development rose to prominence in the 1980s in response to a growing awareness of the need for action on global issues such as environmental degradation, resource depletion, and socio-economic inequities (Milne, 1996). In some respects the notion of the Christchurch green belt reflects that of sustainability because the needs of future generations are considered alongside the requirements of the present. As Herrington (1990) points out, greenbelts can help sustain cities, however where green belts are not modified to suit changing circumstances, problems can occur. There is some speculation that the Christchurch green belt has passed its 'used by date' and this is partly attributed to the concept not being modified to suit the changing circumstances.

New Zealand has implemented a number of initiatives intended to integrate sustainable development into policy-making processes. The major initiative in this country has been the passing of the *Resource Management Act* in 1991, which has a purpose "to promote the sustainable management of natural and physical resources." The concept of sustainable management demands an integrated approach to planning. In other words there needs to be a balance between the needs of continuing production and the need to house a growing population. Sustainable management of cities is seen internationally as one of the keys to achieving sustainable development (*City Plan*, 1995). However, under the Act, social and economic goals should be applied in a manner that ensures their attainment in relation to the purpose of the Act. Effectively, this means considering urban sustainability initially from the biophysical/ecological perspective. Having done that, it should be possible to consider social and economic objectives within that framework. This research will now explore the link between the Christchurch green belt and the *Resource Management Act*.

The Resource Management Act

On 1 October 1991, the *Resource Management Act* became the governing legislation for nearly all resources in New Zealand. Many of the concerns about environmental planning

in New Zealand were addressed in this statute (Memon 1993). It repealed over 50 Acts of Parliament and amended more than 150 others and in doing so transformed the legal mosaic into a more integrated regime for the management of New Zealand's land, air and water (Williams, 1997; Milne, 1996). Despite the continuation of many key concepts, the *Resource Management Act* was largely a response to the perceived inadequacies of the legislation that had preceded it and which had grown over the years without a clear and consistent guiding philosophy (Memon, 1993). Even though sustainable management was the guiding principle of the new (and current) Act, its ambit was limited chiefly to empowering district and regional councils to mitigate undesirable effects of human activities on the physical environment. Councils were essentially asked to justify policies and encourage problem solving rather than making rules.

It is therefore essential to understand what the Regional and District Councils are seeking to achieve by implementing green belt policy, for they are largely responsible for putting forward green belt proposals as well as putting green belt restraint into effect. In particular, most of these decisions (in a Christchurch context) are governed by the Christchurch City Council, as they control most of the green belt land in question. Nevertheless, it is clear that a number of cross-boundary issues exist with the use of green belts. For example, the physical consequences of a green belt strategy can increase the pressure on surrounding rural settlements, particularly through a 'leap-frogging' effect where development or excess population is directed to the other side of the green belt. While the costs of growth might in this manner be 'externalised' by Christchurch City; the strategy could well come under fire from other municipalities if it threatens to significantly increase their costs.

In London, the purpose of green belts is still geared towards the separation from surrounding settlements. This raises a fundamental and under researched issue, namely: is there a particular size beyond which a city ought not to grow? In the Christchurch City Plan it is suggested that the current infrastructure can cope with a population up to 350,000. At that point the excess population would be encouraged to divert to Rangiora, Kaiapoi and Rolleston. This questions whether the sustainable limit of Christchurch is 350,000. The City Council do not accept this as a finite point, however they do suggest that this figure is within the limits of the current plan and within the current urban growth

policies (Heremaia, pers. comm., 1999). The Christchurch City Council has a containment policy, yet applications for developments seem to be slipping through, and this is evidenced through the increased number of resource consents for subdivision and building in the green belt area since 1992. In the past, green belt policy has been generally successful in stopping development, however there has been continuing pressure from developers for land within this green belt. Equally there is those sectors of the community that are actively against such potential development. Price (1997) has suggested that residential development has encroached the green belt in the face of Council policy and that it has become clear that strict containment has not worked. In this light, it would appear that the green belt philosophy is not working. Part of this reason can be attributed to the new philosophies inherent in the *Resource Management Act*.

As population and urban growth expand on the city's periphery, there is concern about encroaching development and how it will affect the integrity of the Green Belt. There has been some subdivision in the rural zones, sometimes without any need for dwellings but usually with a requirement for a house. There is also an increasing demand for small blocks of rural land for lifestyle purposes and for small agricultural holdings of various descriptions. Research has indicated that subdivision as such, may not cause a decline in production compared to the original larger unit (*City Plan*, Chapter 3.12). This would suggest that the sustainability criterion inherent in the *Resource Management Act* is being utilised. However, it is increasingly difficult to generalise because of the wide variety of land uses and changes to land uses on these small units. Subdivision of these larger farms has led to changing settlement patterns, with part-time farms, or what are in essence rural lifestyle blocks, becoming a feature. This raises the question as to whether the real issue is the need to sustain production, or the need to sustain resources.

In Christchurch, there is no small confusion as to what the green belt has been and what it has supposed to achieve. Firstly, it was to contain urban Christchurch within clearly defined boundaries for the purpose of encouraging greater efficiency in the provision of public services. This has generally led the Christchurch City Council in the direction of promoting consolidation policies. Secondly, it was to be seen as a mechanism to avoid the loss of rural resources surrounding the city, particularly the versatile soils for

agricultural use. With the introduction of the *Resource Management Act*, it has provided a starting point for planners and decision-makers to assess potential development, and sets out a framework for sustainable management. As such, these two issues will be applied to the workings of this legislation to see if the green belt's application has changed in Christchurch.

Reason 1: More efficient provision of public services (consolidation)

Studies undertaken by the Christchurch City Council point to urban consolidation being the most sustainable urban growth option. Compared to other options, urban consolidation is the most cost-effective means of servicing future urban growth (*City Plan*, 1995). Consolidation does not necessarily entail containment of the City within its present boundaries, but it does emphasise a compact pattern of development in contrast to isolated and dispersed patterns of urban growth into what are currently rural areas. Thomson (1996) suggests that it is feasible to accommodate virtually all projected growth within the current urban boundary, however the constraints this would place on economic development and housing choice are likely to be prohibitive, and encounter market resistance. This is one reason why the City Council has not totally restricted all green-field development.

The 'urban boundary' policy in the *City Plan* (1995:6/8) sums up the City Council's philosophy nicely. The intention is to ensure that peripheral urban growth does not occur in a form detached from current urban boundaries, or which promotes a dispersed and uncoordinated pattern of development. This policy favours development in locations where existing capacity in terms of roading, sewerage, stormwater and water is sufficient to accommodate additional growth, or if not, where the developer can meet the cost of such provision. Dispersed development has a strong potential to create a situation where services have to be provided subsequent to development at the community's cost, to catch up with the consequences of previous urban growth (Vabulis, pers. comm., 1999). This is a major reason why peripheral urban growth (where appropriate), is favoured adjacent to the existing urban edge of the City, rather than creating isolated pockets of development, which subsequently provide a pretext for infilling of adjoining or intervening land (Nixon, 1997b; Thomson, 1996).

The Christchurch City Council (1997) states that maintenance of a compact urban form, with the associated benefits of protection of rural resources, energy conservation and the cost-effective provision of services, is best achieved by modest growth at the urban boundary. This promotes better utilisation of existing infrastructure and services, and assists in the forward planning and staging of utility provision. However, as already indicated in the objective on urban consolidation, some provision for peripheral growth must be allowed as a component of total growth, to provide housing choice and to avoid excessive intensification of development with subsequent loss of amenity in suburban areas.

Any such peripheral urban growth has to be assessed in terms of the range of policies accompanying that objective. This will often entail a balancing exercise between different factors, for example the merits of a particular location in terms of servicing costs, or enhancement of a compact urban form. The *Resource Management Act* contains no inherent weighting of the value of particular natural or physical resources, such as land, soil, water, air or infrastructure. The weighting given to any one of these resources will therefore be assessed according to the circumstances of each locality, and a balancing of the matters outlined in the City Plan policies.

In order to retain a compact city form, and provide a choice of housing locations and environments, it is preferable to have a distribution of growth options. Major extensions confined to particular sectors may exacerbate problems with the cost and staging of services, while limiting choice. The City Council recognises that not all choices can be accommodated (Heremaia, pers. comm., 1999; Vabulis, pers. comm., 1999). There are also distinct limits to growth in some sectors, including the International Airport and the Waimakariri floodplain. As such, the *City Plan* (1995:6/10) has a policy which promotes smaller incremental extensions to the urban area which are distributed over a number of peripheral locations. Nixon (1998) has also stated that small, incremental extensions can reduce the additional demand on facilities and services in any particular area, such as demand associated with added traffic.

This clearly suggests that urban sprawl is not such a bad thing, so long as the general consolidation concept is pursued. Amongst other things, the anticipated result will be the more efficient use of the physical infrastructure (Christchurch City Council, 1999). However in saying this, it clearly emphasises the fact that the green belt boundary is not fixed. This stands against most definitions of green belts, which generally state a function of permanence (Waghorn, 1997; Herrington, 1990; McConnell, 1981; Pullen, 1977). In England for example, they must be protected as far as can be seen ahead. In Christchurch, the situation appears to have followed Elson's (1993) comments that green belts are not immutable but must be able to take account of changing economic and social circumstances. This suggests that the green belt is not a fixed line and that permanence is not forever but as far ahead as can be foreseen.

This would suggest that the 'green belt' has never been fixed and that it is never likely to be. Does the green belt concept therefore imply urban areas have, at some stage, an appropriate limit to their physical spread? Over time a gradually increasing number of settlements and subdivisions in the green belt will reach their long-term limits of development. These factors would suggest that the green belt has acted as a land release device. The rate of release of land for peripheral growth is a key component of consolidation, because if the rate of land release is such that it exceeds the rate at which land is 'consumed' for greenfield development, urban consolidation and the efficient use of the existing infrastructure will be compromised. As such, the Christchurch City Council (1997) has suggested that any additional release of land for peripheral urban development will be assessed against the objective of urban consolidation and the other policies relating to peripheral urban growth.

The *City Plan* (1995:6/10) has a policy which indicates the need for boundaries of urban extensions, however in the same context it favours peripheral development. Nevertheless it does go on to say that peripheral development must be contained, at least in part, by a well-defined barrier. This 'barrier' for at least part of the boundary, could take the form of a natural or physical feature, such as arterial road, reserve or waterway (Heremaia, pers. comm., 1999). It is also appropriate that where such a 'barrier' is lacking, a physical boundary be created upon development, such as through reserve linkages or buffers on the interface with the rural area. This would suggest that the intention is to

establish a clear outer edge to the urban area that discourages 'unnecessary' urban sprawl.

The idea of urban consolidation being promoted as the predominant urban growth goal can be supported by the *Resource Management Act*. Section 7(b) states that there must be particular regard given to "*the efficient use of natural and physical resources.*" This is an important concept when considering the effects of the city on the urban-rural fringe. 'Natural and physical' resources include land, water, air, soil, mineral, plants, animals and structures. The term 'structure' is further defined in the Act as anything made by people. This includes all buildings, roads and other infrastructure that is fixed to the land. Generally, the most efficient way to maintain and service these structures is to consolidate the population. Invariably, it is more difficult to service structures (homes) that are detached from current urban boundaries. These comments are reinforced, albeit indirectly, through the *City Plan* (1995:6/4) policy on population density, which has the intention to achieve a gradual increase in the overall population density. This would suggest that the benefits of urban consolidation, in particular the efficient use of existing infrastructure, cannot be achieved if population densities are lowered over the urban area as a whole.

In creating a sustainable city one must be aware of the physical resources (buildings and infrastructure) of the city as well as the natural resources of the city and surrounding areas. Development that is compact and builds on existing infrastructure (roads, sewage, water supply) rather than creating its own minimises the land area used and thereby the impact on the surrounding natural areas. It is understandable that the Christchurch City Council favours urban consolidation as opposed to detached and/or dispersed and uncoordinated development on the grounds that it is (theoretically) less expensive, more efficient and more sustainable. The Christchurch City Council continues to stand behind this statement, however this does not mean that development is restricted in all green belt areas. The Christchurch City Plan clearly states that urban sprawl is acceptable as long as that growth does not occur in a form that is detached from current urban boundaries. This clearly points out that the green belt is not a fixed line of non-development.

Reason 2: Protecting the rural (agricultural) resource

Versatile soils are seen as a major factor in terms of urban growth, particularly in the Christchurch area. These concerns are often expressed by the Canterbury Regional Council who see a vital need for sustainable management of the high quality soils surrounding Christchurch City (McCullum, pers. comm., 1998). They argue that the green belt contains large tracts of class I and II soils,⁶ which allow maximum agricultural and horticultural production with the minimum input of energy. This can be reinforced by section 5(2)(b) of the *Resource Management Act* that requires the “*protection of the life-supporting capacity of soil.*” In addition, section 7(b) (Other Matters) promotes the “*efficient use and development of natural and physical resources.*” These clauses should clearly emphasise the need for the protection of quality soils (Maw, pers. comm., 1999). In this light it makes sense that the ability of these soils is not compromised by increased urbanisation. The process of urbanisation is largely irreversible and it effectively precludes future options for using the land for rural purposes.

Approximately five percent of the 290,000 hectares of versatile soils in the Canterbury region are used for intensive farming (Nixon, 1997a). The majority of these soils are used for pastoral farming that can be carried out on poorer quality land. Consequently, there is immense scope to utilise versatile soils to a much greater degree than is currently the case. The stock of versatile soils within the boundaries of Christchurch City comprises less than three percent of this regional total of 290,000 hectares (Maw, pers. comm., 1999). Even if every square metre of versatile soils within Christchurch were utilised for urban purposes, this would make only a very minor difference to potential productivity within the region as a whole and even less nationally (McCullum, pers. comm., 1998). It would enable another 200,000 people to be housed at current (low) densities (Yeoman, 1998; Nixon, 1997a). Housing 200,000 people on this land may better achieve the purposes of the *Resource Management Act* than ‘allocating’ them for agricultural production. However, the likelihood of the entire City’s versatile soils actually being used for urbanisation is remote, because in many cases they are also protected by other

⁶ Soils have been defined as Class I or II under the LUC system devised in the early 1970’s

factors. Some are on land in close proximity to the airport; some are on flood plains; and some are on land unable to be economically serviced.

In 1996, when there were plans to rezone up to 650 hectares of rural land in the Christchurch green belt, it was suggested that the outcome would become a crucial test case for the future protection of the green belt (Mathias, 1996). It was thought that the significance of this case would raise the issue of the weight given under the *Resource Management Act* to the protection of versatile soils. There was already some speculation that the green belt was a concept only, not a hard line. This speculation was brought about by the new City Plan, which did not use the term green belt. Instead the Plan emphasised a consolidated city on the one hand, and the protection of natural resources on the other. As such the versatile soils were seen as the natural resource. At that time, Councillor Garry Moore (now Mayor) questioned the relevance of the green belt (*The Christchurch Press*, 18 June 1996). He questioned whether the green belt was relevant under the *Resource Management Act* and in hindsight, his questioning has been answered in part by judicial review.

Two decisions of the Environment Court relating to rezoning of land in the green belt area have clearly signalled that protection of productive soils is only one of a number of factors to be taken into account. The first case was *Becmead Investments Ltd and Others v Christchurch City Council*⁷ (*Becmead case*), which concerned the rezoning of some outer-suburban blocks of land. The second was *Canterbury Regional Council v Selwyn District Council*⁸ (*Tucker case*) which involved the rezoning of Mr. Tucker's rural land into residential. The Canterbury Regional Council because of the residential expansion on to productive soils opposed this. The provisions referred to in the *Town and Country Planning Amendment Act 1973* (including *the avoidance of encroachment of urban development on land having a high, actual or potential value for the production of food*), were the catalyst for the Regional Council to argue strongly against any suggestion of development onto productive soils (Sweeney, 1998; Nixon, 1997a).

⁷ Decision No. A88/96

⁸ Decision No. W142/96

The Minister for the Environment has continually expounded the view that nowhere in the *Resource Management Act 1991* is there reproduced any of the matters of national importance relating specifically to avoidance of encroachment of urban development on, or the protection of, productive soils. Although section 5 (2)(b) requires the “*protection of life-supporting capacity of soil*,” this clause has not been as strong enough by itself to protect the so-called ‘quality’ soils (Maw, pers. comm., 1999). Green Belt Protection Society Secretary Tony Day has also expressed his disappointment in this matter and suggests that the Act “does not have the teeth to save fertile land near cities from development” (Day, pers. comm., 1998). Counsel for the Minister for the Environment presented submissions in the *Becmead case* promoting the Minister’s view and by definition, criticising the approach of the ‘green belt’ proponents under the *Resource Management Act* regime. Judge Bollard commented:

“As we understood the thrust of the submission, one should not suppose that the *Resource Management Act’s* purpose will be automatically promoted by first identifying good quality soil land in rural or semi-rural areas, and then proceeding to plan on the basis that the land in question must be protected from activities that might run counter to maintenance of the land’s potential to produce food. If reference is intended to an inflexible predetermined strategy in this context, we would respectfully concur.”

The green belt philosophy of the Canterbury Regional Council was also roundly criticised by Judge Treadwell in the *Tucker case* when he noted that the Selwyn District Council, in its publicly notified New Plan (since withdrawn), had rezoned Mr. Tucker’s land for residential purposes, to which the Regional Council objected. The Judge noted that the Proposed District Plan at the time did not provide for the expansion of townships and the protection of land of high versatility in an integrated manner, apart from the recognition of Rolleston. Judge Treadwell went on to say:

“The Regional Council has consistently opposed the extension of any of the townships surrounding Christchurch City and the expansion of Christchurch City itself in circumstances where the Regional Council

has formed the opinion that expansion would be onto land of high versatility.”

These comments lead to the conclusion that land of high agricultural quality is no longer a matter of national importance that is to be accorded any elevated status in arriving at a decision regarding the rezoning of rural land for residential purposes. The protection of productive soils concentrates on the resource itself and is contrary to the purpose of the *Resource Management Act*, which is to promote the sustainable management of resources. The emphasis is not on the resources themselves but the demands that are placed on these resources by human consumption or activity. Those charged with promoting sustainable management of resources must balance the needs of humanity (present generation) against the long term good of humanity (future generations) but this does not permit the protection of productive soils to assume any paramount position.

The *Resource Management Act* demands that land and soils be sustainably managed. Ann Callaghan, a legal consultant has suggested that soils should not solely be seen in terms of their capacity to produce food. Future generations need shelter as well as food and there is no rational basis for favouring one of those needs against the other (Callaghan, pers. comm., 1999). Hugh Pavletich, a Christchurch property developer adds fuel to the fire, suggesting that using land for houses does not stop future generations from providing food for themselves (Pavletich, pers. comm., 1999). He further adds that land, for a variety of reasons can be much less-suited to food production than its soils might indicate, and technological innovations are steadily expanding the value and versatility of soils. If this is true, it suggests that a green belt does not need to be seen as an immovable fence.

There are some significant areas of versatile soils within the rural area of the Christchurch City Council, although these form only a small part of the stock of such soils in the region (Nixon, 1997a). The *City Plan* (1995) recognises that the urbanisation of rural soils is virtually an irreversible process, which removes any realistic prospect of restoring their productive potential. Accordingly, the City Council has a policy on versatile soils, which states the need to avoid urban growth on highly versatile soils. However, the emphasis on this is severely reduced by the following sentence that states:

“unless the need for protection is clearly outweighed by the efficient use, development or protection of other natural or physical resources” (City Plan, 1995:6/8). This would suggest that the versatile soils do not have the primacy that was evident under the previous legislation, namely the *Town and Country Planning Act*.

Legal opinion and recent case law now appears to have reduced the extent to which the City Council has to have with regard to the presence of versatile soils within its boundaries (Burke, pers. comm., 1999; Callaghan, pers. comm., 1999). Soils can be sustained for a variety of purposes, which can include urban development and rural production. The Council has performed a broad, exhaustive evaluation of the housing needs in the city, and as such, supports the recent City Plan’s decision to rezone 650 hectares of green belt land (Vabulis, pers. comm., 1999). While the soils did have a certain capacity for productive, agricultural use, the soils must also be looked at as a valuable resource for housing people. This would suggest that the continued use of the land for sole agricultural purposes is in a no-win situation. This is largely based on the fact that the process of urbanisation is irreversible.

Can the Green Belt be Saved? Options for the Future

One option for implementing the green belt is to define the green belt itself as a physical resource that needs protecting and safeguarding for future generations. Natural and physical resources are defined in section 2 of the *Resource Management Act* as,

“land, water, soil, minerals and energy, all forms of plants and animals (whether natives to New Zealand or introduced), and all structures” (RMA, section 2).

Under this definition the green belt contains many separate resources: the land, groundwater, soil, plants, animals, and buildings. However, the limited meaning that the definition assigns to natural and physical resources calls into question whether the green belt could be defined as a separate resource in its own right. If this approach were adopted, the reasons for and against the green belt policy would have to be justified under section 32 of the *Resource Management Act* as the most appropriate policy and

necessary to achieve the purpose of the Act. This will ultimately be a very difficult task to do. Legal opinion from both Ann Callaghan and Brian Burke suggest that this would be a difficult to justify in a court of law. In terms of sustaining natural and physical resources, the *Resource Management Act* can be better seen as a tool that deals with individual parcels (or blocks) of land within the green belt. Using the same 'sustainable management' criteria, it would be more difficult to justify a (green belt) area that encompasses the entire rural component of Christchurch City (Burke, pers. comm., 1999; Callaghan, pers. comm., 1999). Not all land in the green belt is worthy of protection from urbanisation and it is difficult to see the 'green belt' being classified as a physical resource in its own right.

Another possible approach identified for implementing the green belt concept is to use it as a tool to manage the resources and planning issues within the urban-rural fringe. If this method was implemented it could be possible to establish a number of performance standards relating to the rationale behind the Act. The green belt would be an area where appropriate performance standards could be imposed. They could relate to the protection of the Port Hills, of versatile soils, groundwater recharge zones, amenity and special character areas, and the establishment of an airport noise zone. This would mound nicely with the City Plan's "rural-urban interface" policy, which suggests establishing a boundary or obvious transition from rural to urban (*City Plan*, 1995:6/11). However this approach would also fail in certain aspects of assessment under section 32, as the resources needing protection are not all geographically congruent. For example, it would not be possible to justify the protection of some of the poorer quality soils, that do not fall within the airport or ground water recharge zones and are not visually appealing but which lie within the current green belt. On the other hand, these areas could be used to provide for other rural uses that do not need high quality soils, for example factory farming, grape growing or horse breeding. Smallholdings could also be provided for in areas of poorer quality soils.

It has also been argued that to try and protect a green belt as a single zone under the *Resource Management Act* would result in a piecemeal approach (Puentener, 1993). In a sense, planners would seem guilty of protecting the green belt more for its own sake, without being honest about the reasons why they want to save it. Furthermore, the issues

of soil and groundwater quality could be dealt with under the sustainable management goal of the *Resource Management Act*, all without using the green belt concept. The use of the green belt as a mechanism for planning is therefore problematic.

Water is an important issue in the urban-rural fringe. The groundwater resource to the north and north-west of Christchurch City is held in unconfined aquifers, and does not have a natural protective layer covering it, thus making it susceptible to contamination (McCullum, pers. comm., 1998). This area is also the major recharge zone for the aquifers that supply Christchurch's water. The expansion of the city in this area could pose a threat to the quality of water, as would increased rural settlement leading to the use of more septic tanks (Canterbury Regional Council, 1997). Section 5(2)(a) and (b) include sustaining natural resources for future generations and also safeguarding the life-supporting capacity of water. If the water resource is compromised by possible contamination the duty imposed by the *Resource Management Act* to sustainably manage natural resources will not be fulfilled.

Section 6(b) and (c) of the *Resource Management Act* lists, as Matters of National Importance, "*the protection of outstanding natural features and landscapes from inappropriate subdivision and development*" and also "*protection of areas of significant indigenous vegetation*". The Port Hills (part of the Christchurch green belt) have been identified as a 'regionally outstanding natural feature' (Canterbury Regional Council, 1993). Partly attributing to this is that they contain some areas of indigenous vegetation, which has been set aside as reserves. Does this mean that the entire green belt component of the Port Hills should be set aside as zero-development zones? It is unlikely that these individual clauses in the *Resource Management Act* are going to be enough to protect the entire green belt area. At the most, they apply only to site-specific areas. Therefore they are not particularly helpful in protecting the entire green belt.

However section 7(c) provides the strongest basis for the protection of the Port Hills and this relates to the "*maintenance and enhancement of amenity values.*" The *Resource Management Act* defines amenity values as:

“those natural or physical qualities and characteristics of an area that contribute to peoples appreciation of its pleasantness, aesthetic coherence, and cultural and recreational attributes” (Section 2(1)).

Although this definition is subjective, the *Resource Management Act* does provide some scope for value-laden aspects. Much of these values arise from the ambiguous terminology, which is visible throughout the first sections of the Act (Milne, 1996). Unquestionably the natural and physical qualities contribute to some people's enjoyment of the Port Hills not only for their recreational attributes but also for their cultural and visual characteristics. Other areas of the urban-rural fringe (excluding the Port Hills) also add to the identity and amenity values of the city and the region. It could therefore be argued that the character of those rural areas reflects low density of settlement, a dominance of open space over the built environment, high levels of privacy, quietness and trees in more densely settled areas. It is therefore inevitable that the continued expansion of the city into these areas will undermine some of the values that are placed on this area by the public.

The concern for preservation of the green belt therefore appears to relate not just to the physical benefits it confers (the arguments that are most often put forward), but also to what it represents to the public symbolically. There is a strong indication that the Christchurch green belt is significant to its residents in terms of its open space and amenity values (Puentener, 1993). Furthermore, it could be argued that the green belt also contributes to the unique character and identity of Christchurch (Day, pers. comm., 1998). Therefore, a further option for saving the green belt under the *Resource Management Act* is the possibility of defining the green belt as a cultural resource, upon which land use change may impact. Some people value the concept of the green belt and its meaning beyond the practical issues of protection of soil and water. In this sense, the green belt could be compared to the feelings that people have of National Parks in New Zealand – even if people do not directly use it or see it everyday, their mere existence does have value (Puentener, 1993).

Although the physical planning issues could potentially be managed through separate performance standards without a green belt *per se*, the issue of the provision of a green

belt to emphasise cultural value may need to be provided for. The *Resource Management Act* does not provide a definition or any protection for a cultural resource. However “Cultural Wellbeing” is provided for in section 5(2). Whether this statement provides a strong enough justification for the green belt as a cultural resource is questionable. It does provide a basis for recognising cultural values, however this may only be justified for specific areas of major cultural importance. It is therefore unlikely that the green belt could be justified as being worthy of protection based on its value to the cultural wellbeing of the community.

It would be a difficult task to protect the entire Christchurch green belt by means of the *Resource Management Act*. This is mainly because the area in question has a large and diverse range of issues. While District Plans could still zone a green belt area, that decision would need to be justified as being the most sustainable option – and that would be difficult to achieve. The introduction of the *Resource Management Act* brought with it a new regime of ‘effects’ based planning. This was in contrast to previous legislation that was ‘activities’ based, and that is partly where the problem lies. Under the *Resource Management Act*, activities must be based wholly on a defensible assessment of effects rather than on any proactive focus on green belt degradation (Buhrs & Bartlett, 1993). Green belts are not necessarily an effects-based approach, as encouraged by the *Resource Management Act* (Waghorn, 1997). The best example was evident in the *Town and Country Planning Act*, which disallowed the expansion of urban areas in or adjoining cities. This was considered an issue of national importance and provided an effective basis and framework for the protection of urban fringe areas. It also strengthened local government’s ability to implement a green belt successfully. While the green belt land could still be ‘zoned’ as requiring protection under the *Resource Management Act* it would fail to be justified under section 32 as the most appropriate policy to achieve the purpose of the Act. The trouble with a generalised green belt approach is that it asks for too much land without justifying it.

The zoning provisions and matters of national importance under the *Town and Country Planning Act* had provided a strong basis for implementing the green belt, however, under the *Resource Management Act* this basis is no longer explicit. For example, Matters of National Importance no longer include the protection of agricultural land

from urban uses, or prevention of sporadic subdivision in rural areas. In addition the Act itself does not have a strong emphasis on regulatory control of activities. There is no longer the same provision for the strict blanket type control of a non-settlement area (or green belt), as there was under the *Town and Country Planning Act*. This leads to the suggestion that the green belt, as it has been implemented in the past, is no longer an appropriate policy to use under the *Resource Management Act*. At the bare minimum, the Christchurch concept of the green belt needs modifying in a way that will bring it up to date.

The continuing challenges to the green belt mean that there needs to be compelling reasons for the green belt's existence if the policy is not to be undermined. This is especially true in Christchurch, where all policies need to be justified in relation to the sustainability criteria of the *Resource Management Act*. Despite what legislation says there is still a strong public favour enjoyed by green belts. This may be based partly on idealised images of rural life and landscape, and it is the green belt that has been seen as a defence for these threatened values. It is therefore difficult for politicians to ignore these values.

If the green belt is not an essential part of New Zealand culture and identity as it is in Britain, why then does any threat to the Christchurch green belt meet with such passionate opposition? It would appear obvious that the Christchurch green belt has become part of a 'culture.' The formation of the Green Belt Action Group (now the Green Belt Protection Society Incorporated) in 1991, and the fact that the retention of the green belt was a major local body election issue in 1992 in all four of the district councils affected by it (Waimakariri, Selwyn, Banks Peninsula, Christchurch City), show that there is a strong public feeling surrounding the green belt concept. Similarly, there has been an enormous response to recent proposals to rezone land from (green belt) rural to residential, as well as strong support for the green belt in the media through editorials and letters to the editor. This concern, which largely comes from throughout the city seems to indicate that the green belt is significant to the people of Christchurch.

It is clear that the green belt concept has become more than a simple planning policy for the Christchurch community. This leads to the key questions from politicians of what it is

that the urban community needs, wants, likes or demands from a green belt policy? If the arguments are strong enough there maybe some added justification of more political or government intervention. Although there is a fear that the green belt will be lost under the new planning scheme, it is possible that it will only be the term that is lost, rather than what the green belt embodies. At present there does not appear to be any new terms for the green belt concept surfacing, thus paving the way for more technical methods of encapsulating some of the functions that the green belt has provided.

Chapter 6

Green Belt Alternatives – Preserving Rural land in the Face of Urbanisation

The green belt alternatives listed in this chapter are not intended to provide the exact same outcomes that are associated with operational green belts, nor is it a comprehensive list that displays all of the alternative techniques. Instead they should be seen as tools that promote similar outcomes. The primary purpose that is portrayed from each of the ‘alternatives’ stems from the idea of preserving the natural resources and the rural area. In doing this, they have the potential to restrict urban development onto that land. The consequences of implementing these ‘alternatives’ (assuming that they will work in practice) still have the potential to restrict the outward sprawl at the urban periphery, providing that they are applied to the area immediately adjacent the built-up area (or immediately outside of the current urban fence).

Alternative green belt tools considered in this research:

1. Gifts and Bequests		Individual Will
2. Covenants		
3. Outright Purchase/Acquisition		Government Intervention
4. Public Purchase of Development Rights		
5. Transfer of Development Rights		Economic Instruments
6. Charges and Levies		
7. Subsidies and Environmental Compensation		
8. Rate Relief		

Individual Will

Milne (1996) suggests that private landowners in New Zealand are fortunate that there are a number of ways of protecting private land, and a wide range of purposes for which this can be done. For those land owners who want long term protection of their property, they can use a variety of voluntary methods to achieve their desired outcome. Perhaps the primary question is whether there is a wish to retain ownership or wish to sell or gift the land. In reality, the land in question will generally only apply to significant or

outstanding landscape areas and/or to areas that are not conducive to agriculture or to potential or foreseeable development practices. Although it can not be expected that much land will be protected in this way, they are considered acceptable amongst the greater community (Gregory, pers. comm., 1999).

Gifts and Bequests

The *Reserves Act 1977* offers a possibility for landowners to gift land to the Crown. The *Reserves Act* is administered by the Department of Conservation, however all protection of private land under the Act depends on the willingness of the landowner to have the land protected. However, in terms of being able to continue normal agricultural practices, it would be difficult, if not impossible to farm within a reserve, as depicted under the *Reserves Act*. Firstly, the legislation states that it must be protected for a particular purpose, and 'agriculture' is not listed as a purpose worthy of protection. If, for example, the whole farm could be protected for the purpose of recreation, science, or nature and if this were in the public interest then it could be awarded 'reserve' status, however that status would mean that all plants, animals and landscapes would have to be protected. Inevitably this could prove difficult on a traditional farm. Although most farmers consider themselves to be good land stewards, they may get tangled in the restrictive use of words as outlined in the legislation (Petrey, pers. comm., 1998).

In some instances the Department of Conservation approaches the landowner on behalf of the Crown with a request to consider a gift. However it is difficult for the Department to interest landowners into the concept of gifting, particularly when it means removing land from freehold title (Undorf-Lay, pers. comm., 1999). It is important to recognise that freehold land has a value and that it is not always financially possible or desirable to simply gift. This is particularly so, given the opportunities that the *Resource Management Act* offers to provide economic incentives in district and regional plans (Gregory, pers. comm., 1999). It talking to some landowners it is also clear that some landowners are also reluctant to gift land which will come under the Department of Conservation's care as they do not consider that they have the resources to adequately care for the land (Grigg, pers. comm., 1999; Little, pers. comm., 1998).

The *Queen Elizabeth the Second National Trust Act 1977* established a Trust as an independent conservation body. It is funded principally by central government but obtains additional funding from the Forest Heritage Fund and private sources, such as trust memberships and legacies. The Act (section 22) provides for "open space covenants." The name is misleading as the Act defines an open space to be virtually any landscape from wetland to dunes to forests to mountains so long as the landscape has aesthetic, cultural, recreational, scenic, scientific or social value. The landowner and the Trust agree between themselves on the terms of the covenant, and they are normally registered against the title, thereby binding future owners. Bill Garland, a representative on the Trust has stated that "the option we offer the farmer is that we are an independent body and can provide long term protection for certain values on private land, while the farmer retains ownership and management of the property" (Garland, pers. comm., 1999). While the QEII Trust provides an alternative to gifting, the Department of Conservation, who has in the recent past publicly spoken against them, does not often promote it. They suggest that they do not offer sufficient protection (Undorf-Lay, pers. comm., 1999). Bill Garland's response to the Department of Conservation is that they do not have a trusting relationship with farmers, who in his mind, are generally good land stewards and can manage the land better than a government department with an inadequate amount of funding (Garland, pers. comm., 1999).

A landowner can gift all of their land if they wish. If it were the case, it would clearly have the potential to limit urban expansion onto that land. Where this has happened, it is usually only smaller blocks of land. However, for farmers to do the same thing to their entire farm is unlikely, especially if they want to continue to farm it in the normal way. What is more likely (and more common), is for a farmer to gift a portion of the land (Garland, pers. comm., 1999). This would usually come about because of an individual's willingness to preserve some of the special values, such as patches of native bush or other scenic or natural aspects for future generations. This way the remainder of the farm (which has not been gifted) can be farmed in a similar way that has always been, without the blanket type restrictions that would be placed on it if it were classified as a reserve. It is therefore obvious that this method is only going to protect those special and significant values, not the entire rural land. However, in terms of using covenants, the landowner

(upon agreement with the local authority or trust) can determine their own rules for acceptable land use.

Covenants

Fundamental to the idea of property ownership is the concept of fee simple title, where the landowner is vested with all necessary rights to treat land as a fully marketable commodity. Any of these rights may be separated and legally conveyed in the market place. Permanent and definite environmental protection is the principal reason for using covenants (Lemire & Hoose, 1980 cited in Wright, 1994). Many landowners for example, have landscape features or areas of open space on their properties that they do not wish to see destroyed by clearing, buildings, power-lines, subdivision, or thoughtless land use (Garland, pers. comm., 1999). It is possible to sell or donate land to the Crown or to a local authority as a reserve, however many landowners want to protect their land and continue to own it while ensuring that it remains for future generations to enjoy (QEII Trust, 1998).

A covenant is a legal agreement to protect land with important values and is a common form of private land protection (DOC, 1998). When someone owns land, they own a "bundle of rights" such as the right to build structures or to develop it. When a covenant is placed over a property (or portion of property), some of those rights are permanently given up. Once the landowner and the local authority (or trust) agree upon the terms of the covenant and the rights and responsibilities of each party is outlined, they are recorded and registered against the title. They can also be registered solely to the current owner, however they are normally in perpetuity which binds all future owners. By accepting a covenant, the local authority (or trust) takes on the legal responsibility to monitor and enforce it. If a future owner or someone else violates the covenant, perhaps by erecting a building that the covenant does not allow, the local authority (or trust) should work to have the violation corrected.

A covenant is therefore usually seen as an agreement between a landowner and the local authority or trust. Landowners voluntarily restrict the type and amount of development that may take place on their property without giving up ownership of the land. They may

sell their land or leave it to their heirs, however future owners will also be bound by the covenant terms. They can be used to preserve wildlife, open space or agricultural land, or the features or consequences of building, while allowing the landowners to continue owning, using and managing the property. However the likelihood of a landowner (or farmer) placing a covenant on 'common' agricultural land is unrealistic and highly unlikely. Nevertheless, unlike regulations, covenants can be a permanent mechanism of land use control, which eliminates the need to address repetitive issues of development on the same parcel in the future (Grigg, pers. comm., 1999).

A covenant is tailored to the particular property through the interests of the owner who initiates it. For example, a covenant could prohibit development of any kind, or might allow for continued farming and even the building of agricultural structures. In some cases a covenant might apply to a portion of the property, leaving the option of development open for the remaining part. The covenant provides a practical, legally effective means for a private landowner to protect forever the significant features of a property, or a portion of a property, while retaining private ownership. By defining and removing particular rights from the ownership of a parcel of land, the covenant creates permanent safeguards against uses of the land that could damage or destroy its ecological, scenic, recreational or resource values (Johnson, pers. comm., 1998).

Conservation covenants have been used in the United States over the last decade to protect over one million acres (400,000 hectares) of ecologically and scientifically important privately owned land from development (Land Trust Alliance, 1991 cited in Wright, 1994). While the Canterbury Regional Council supports the peri-urban area for its soil quality, it could be argued that there is little land in Canterbury with significant ecological or natural resource qualities, let alone scientific worth (Undorf-Lay, pers. comm., 1999; Nixon, 1997b). This is based on the fact that most of the land over the years has been radically modified, mainly for the purpose of supporting agricultural interests. Nevertheless, the concept of a covenant (while accepting that it is not going to protect a high percentage of the green belt) still has potential, in that the voluntary nature of the device renders it politically acceptable and effective. Agricultural advocates would also suggest that it is sustainable resource use (Doak, pers. comm., 1998).

A covenant usually provides permanent restriction on land. For this reason, landowners should be fully aware of all implications before donating or drawing up a covenant. The condition of the property at the time the document is given must be documented using maps, photographs and biological inventories (Grigg, pers. comm., 1999). This documentation can help avoid future disagreements or uncertainties that may arise after the land changes ownership. It also provides a baseline for future monitoring. If a violation is identified, the landowner is promptly notified, in accord with the procedures outlined in the covenant, and steps must be taken to repair any damage. The covenant also defines the process to be followed to resolve disputes regarding an alleged violation. If necessary, legal action can be taken to fulfil the covenant obligations. What must also be remembered is that covenants are not easily amended or terminated. From the local authority's point of view, covenants are essentially lower or no cost alternatives to purchasing development rights.

The primary benefit of a covenant is the thought of knowing that land will remain unspoiled forever, therefore benefiting future generations. In terms of its advantages, the voluntary nature of this instrument stands out as being the most important aspect. Voluntary methods tend to work better and are more favoured amongst landowners than the imposition of outside regulations. Covenants will however, only be initiated by those landowners that value the permanent protection of certain resources on their properties. Not all landowners share these values: many take the attitude that their land can be adequately protected and maintained without a rule attached to their land title. While this is an accepted and common practice amongst many landowners, it does not always provide the assurances that the public may demand. Therefore, covenants can not be expected to secure a high percentage of green belt land. Their voluntary nature contributes highly to this fact.

Government Intervention

This chapter has so far focused on voluntary methods of retaining rural land. As a further alternative for protecting the green belt, a local authority could purchase the land or the development rights on behalf of the community so as to keep the land in a determined or

desired state. Providing that the land was purchased for the purpose of conservation or continued agricultural use, this would assumedly restrict any potential urban development onto that land. This can be seen as being compensatory towards the owner and it is likely to provide a secure mechanism of retaining the rural land in its current and desired use (this assumedly being what the wider community wants). Although this is likely to come at a high cost, it can also favourably address the wider community's concerns of betterment. The community can know for sure that the land will not be affected by future urban development.

Outright Purchase and Acquisition

According to Pullen (1977), the most certain way to ensure the protection of green-field space is to nationalise it. Although this is an extreme view, it would potentially then have the legal status analogous to that of National Parks, and would be seen as a community asset held in equal trust for the equal benefit of all citizens. As a way to make gains for green belt conservation, deals could be struck which allow landowners limited rezoning for development in exchange for large areas of land, which are covenanted or sold to the local authority. Ultimately these land-swaps would achieve a finite line of development. Christchurch City Councillor Charles Manning, has publicly stated that the only certainty of being able to stop redevelopment in the urban periphery is by ownership of the land (Freeman, 1998). These comments are reinforced by many of the opinions read in the local press. If the Council does not own it, the likelihood of other private landowners applying for further future rezoning is inevitable and without a finite point, incremental development will never stop. Chris Freeman (1998), from the Christchurch City Council Parks Unit, also reinforces this key point bluntly. He suggests that the only way of preserving the rural land surrounding Christchurch is to own it. To the extent that local authorities can afford to buy this land (and maintain it) for public use, outright acquisition is clearly the best option.

Valerie Campbell, a Canterbury Regional Councillor believes attempts should be made to purchase privately owned land (pers. comm., 1998). Moves are already underway in Christchurch to secure more land in public ownership, however in reality and with the best will in the world, not all of the remaining land there can be snapped up by the

councils. More specifically, ratepayers need to ask themselves the hard question: what, if any, extra rates am I prepared to pay to ensure that the rural land is protected? Given the diversity of views about this land and the strength at which it is held, the answers to that question are likely to vary in both direction and intensity. It is therefore imperative to realise that unless money is made available from sources outside of the council, the green belt area will never be publicly acquired. The rural land will never be secure in public hands until this problem of sharing the financial burden is resolved.

Public Purchase of Development Rights

As an alternative to the public purchase of the land, the purchase of development rights (PDR) of the land could adequately protect some of the green belt land. In simple terms, the existing owners would be given a sum of money or some rating concession, as compensation for the loss of their development rights. They would retain the freehold title to the land, and would be able to use it, dispose of it, and mortgage it if they wished. However they would not have the right to develop it for a use higher than its current permitted use (Lane, 1998). The ultimate goal of purchasing development rights is to preserve a critical mass of rural land whilst assuring the landowner and the public that urban or residential development will not be encroaching in the near future (Daniels, 1991). The process would involve identifying the development value of the land in question, which is then sold to a willing buyer. The land then stays in its original use, or if it were a farm, it would stay in production, but the owner would receive some compensation for the development rights that they have forgone.

Purchasing development rights, while usually only voluntary in nature is a method that may have some potential for areas of regional or local significance in terms of landscape or environmental values. However world-wide experience has proven that this has been a very costly exercise (Miller, 1998). The purchase of development rights is by no means a panacea. The main strength of this type of scheme is that it scores high in fairness to existing landowners and provides permanence in rural land and farmland preservation (Coughlin & Keene, 1981, cited in Daniels, 1991). The landowner is compensated for development restrictions, and the land can not be developed to a higher use. At the same time the public (who have assumedly valued the land in the first instance) are assured

that the land will not be developed in the future. The sale of development rights can be especially useful for young farmers who need capital and to farmers nearing retirement who want to pass the farm along to the next generation (Dalley, pers. comm., 1999).

The use of public money to purchase development rights to privately held land in the United States has become increasingly popular in recent years as a way to preserve agricultural land and other natural resources in the rural area (Lane, 1998). Although these programmes are likely to remain controversial because of the sizeable costs involved; they do offer permanent protection of the resource in question. In turn they also provide landowners with compensation in return for restrictions on development. However rate payers and elected officials will need to continue to fund these programmes if the promise of open space around the city is to have a chance of success. One problem is that there is never enough funding to support all of the goals of a PDR programme. Some groups also believe that these programmes are negative because they decrease a landowner's equity for credit and later sale (Foyel & Houston, 1992). The sale value is, of course given to the landowner at the time the development rights are sold.

Public purchase of the entire green belt would be neither feasible nor desirable. However critical areas within the green belt could be identified and arranged in order of priority. If the protection of these by other means can not be assured, then public authorities could progressively buy them as funds become available (Pullen 1977). The voluntary element means that many farmland owners may choose not to participate in a PDR programme, undermining the accumulation of a critical mass of farmland to support the agricultural infrastructure (Daniels, 1991). This can result in the creation of isolated islands of preserved land, which could invite development because of the permanent open space.

A scheme for the public purchase of development rights has at first glance a certain appeal, because it purports to solve once and for all the question of who owns the development rights to land, and because it appears to provide a neat solution to the compensation and betterment problem (Undorf-Lay, pers. comm., 1998). However, international experience points out several problems of using this type of programme. Firstly, it is a less stable solution than public purchase of freehold land, because it could

be relatively easy for some future government to restore the development rights free of charge to private owners. By comparison and in all fairness to promoting the PDR programme, it is also unlikely that public opinion would permit a government to give away large tracts of green belt land.

Secondly, the intangible nature of development rights makes it probable that there will be a considerable misunderstanding of the scheme. Our society is not accustomed to the idea of separating and trading development rights. Those whose development rights are bought by the local authority may not realise that the transaction is intended to apply in perpetuity (Lane, 1998). In future years, when they become aware of how much money they could make through development, they will regret the loss of development rights, and will think that the compensation they had received was inadequate. They may then begin to exert political pressure for more compensation, or for the return of the development rights.

Thirdly, subsequent owners may have only an imperfect knowledge that the land they bought has no development rights. Also, they will argue that it was the former owner who received the compensation for not developing, and that they should not be prejudiced by the decisions of the former owner. However in this instance *caveat emptor* (let the buyer beware) prevails – the buyer must be cautious as the risk is theirs, not the seller. Presumably the price would be discounted to allow for loss of development rights anyway.

Fourthly, in future years, landowners could argue that land, which had little or no development value when the development rights were purchased, had come to acquire a development value. They could claim that the money paid originally was compensation for the loss of development value that existed at that time, but that it would be unfair expropriation to take away without compensation the development value that arose subsequently. However, if the community has created development value, why should they pay for it as well? Looking at it from another point of view, perhaps the landowner should compensate the community?

Fifthly, the success of the scheme for the public purchase of development rights will depend on the public attitude to certain fundamental questions. Does the right of private property ownership include the right to develop land for higher uses? If so, does the right attach to the property or to the owner? Can one owner dispose of that right for all time, or is the right renewed with each subsequent owner as one of their bundles of personal rights? It is difficult to see how these perceived development rights can be taken away for all time by one single act of compensation.

Sixthly, advocates of schemes for the purchase of development rights base their case on the assumption that there will be a significant difference between the price to be paid for the purchase of development rights and the price paid for the purchase of freehold. In some cases the difference could be considerable. For example, in an area remote from urban development where the planning authorities wish to conserve in its natural state an escarpment which is of no commercial value to the farmer. However in other cases, for example, agricultural (green belt) land that lies on the fringe of a city and is ripe for urban development, the current-use value of the land could be negligible (because of the difficulty of farming close to urban areas), and the value of development rights could be almost as great as the value of the freehold.

Since much of the green belt that is being pursued for protection has a high development value, there seems little to be gained from the introduction of a scheme for the public purchase of development rights as a general measure for green belt protection. However, in particular locations, where development values are not so high or where farmers prefer to carry on farming rather than realise their development value, and therefore do not ask too much for their development rights, the scheme could be usefully applied (Little, pers. comm., 1998). The great advantage of the scheme is that the property remains in private ownership and the owner has the usual profit motive to maintain it in good condition, thus releasing the council from the obligation to finance its maintenance. This reason alone would make it worthwhile for the authorities to explore every possibility of implementing the scheme. However, again the issue of perpetuity is raised: it would be difficult to take away these rights for all time by one single act of compensation.

Economic Instruments

As the growth in concern for preserving the open space in the urban-rural fringe continues so to does the interest in economic instruments and other land use planning techniques as alternatives to regulation. Economic instruments can be defined as instruments that affect costs and benefits of alternative actions open to economic agents, with the effect of influencing behaviour in a way that is favourable to the environment. The beauty of using economic instruments is that they can be designed so that people automatically incorporate the adverse effects on others and the environment into their decision making. They do so, not because they have a caring or altruistic attitude, but because it is in their own economic interest to do so.

The reasons why economic instruments are preferred to pure command and control type regulations are ones of efficiency of compliance, flexibility and revenue gathering (Stewart, 1993). Economic instruments provide incentives for resource users to comply. They typically involve a financial transfer between resource users and the community. The *Resource Management Act* (section 24(h)) states that one of the functions of the Minister for the Environment is the consideration and investigation of the use of economic instruments to achieve the purpose of the Act. The OECD has also been actively encouraging the use of economic instruments in environmental policy for a long time (OECD, 1997). However, in a New Zealand context the mention of the term 'economic instrument' in the *Resource Management Act* has caused some confusion in the minds of those involved in resource planning and environmental management as to what these new tools really are, what they could or could not do, and how relevant they might be to the New Zealand situation.

Transfer of Development Rights

The transfer of a development right refers to a land use zoning technique used to preserve public resources, such as open space, farmland, historical landmarks, and environmentally sensitive lands (Lane, 1998; Daniels and Bowers 1997). Under such a scheme, a person who owns property which is sought to be preserved can sell their development right to a developer who, by purchasing this right will then be permitted to

develop above the density currently permitted in an area more suited for growth. This transfer of rights has the potential to benefit three parties. First, the public benefits because the resource is protected from any damaging future development. The seller profits from the compensation received from the sale. Finally, the buyer gains by developing above permitted density, thereby saving on costs that would have been incurred had there been a force to purchase developable property (Pizor, 1986).

The allure of the model of Transferring Development Rights (TDR) is its seemingly simple ability to accomplish in one transaction two complementary goals: rural land preservation and compact, centred development. However, the promise of this becoming a successful and widespread tool has been stalled by a variety of political, economic and administrative obstacles (Lane, 1998). Among the obstacles of establishing a TDR programme is the ability to create a programme that is simple enough to understand and administer, but complex enough to be fair. For this reason, local government should allow for great flexibility when designing a TDR programme. For example, they should establish conditions that they deem as being “necessary and appropriate” to achieve the purposes of the TDR programme (Daniels & Bowers, 1987). To implement a TDR programme, local legislature needs to identify a “sending district” where land conservation is sought, and a “receiving district” where development of property is desired and can be serviced properly (Daniels, 1991).

In many TDR programmes, the zoning provisions applicable to the sending district are amended to reduce the density at which land can be developed. While losing their right to develop their properties at the formerly permitted densities, property owners in the sending district are awarded development rights. These development rights are regarded as severable from the land ownership and transferable by their owners. TDR programmes usually establish some method of valuing the development rights that are to be transferred from the sending to the receiving district. Some communities establish development rights “banks” which purchase development rights from land owners in sending districts and sell them to land owners in receiving districts (Daniels, 1991). While approaches to this technique can vary, most systems endow rural land with specific development rights which can be sold either to allow more intense development in another rural area or more controversially to allow higher density urban development.

This allows the creation of an asset, which in turn encourages continued farming and/or protection of the land while providing a capital injection (Lane, 1998).

The technique of transferring development rights has been used internationally for a number of years, particularly in the United States, and with admittedly variable success. These have predominantly been used to preserve rural character and productivity (Miller, 1998). As defined by Daniels & Blowers (1997), the purpose of a TDR programme is to protect the natural, scenic or agricultural qualities of rural lands in order to enhance areas of special character or special historical, cultural, aesthetic or economic value. The TDR system has several advantages. Firstly, it could operate through the free market without government intervention, once the plan of development is decided. Secondly, the land from which the development rights had been transferred would, in theory, remain in its existing use for all time and could continue to be managed for that purpose by its present owner without the government having to incur maintenance costs. Thirdly, if the government wished to purchase the land it could, at less than full market price, because the land would no longer have development potential (Gregory, pers. comm., 1999).

However those advantages are offset by a number of disadvantages which cast doubt on the usefulness of the TDR system as a general mechanism for green belt protection. Firstly, there is the difficulty of determining the standard development rights for a parcel of land. Moreover, if the standard of development rights is set at a level which conforms to the desired character of the area, then the transferee who develops at a higher intensity will presumably be developing in a way that is inconsistent with the character of the area. To offset this, the authorities would have to set the permissible standard at a level lower than the intensity they really prefer. However, the landowners, realising this, would argue that the standard had been set too low, and would exert pressure for it to be raised. This would appear to be a very unsatisfactory way of arriving at a green belt protection policy.

A second difficulty is that the TDR system will work only if there is a market for development rights. Only if the supply of development rights and the demand for development rights reach equilibrium at a price that the suppliers are willing to accept as fair and reasonable. The criteria of what is fair and reasonable will depend on such things

as their profit expectations based on the evidence of earlier developments in the area, and on the estimations of the profits to be made by the transferees (Callaghan, pers. comm., 1999). In order to ensure that this 'fair and reasonable' price is attained, and assuming that the demand factors are beyond their control, (depending as they do on macroeconomic factors such as the supply of money for housing, interest rates, growth of national income) the planning authorities will aim to manipulate the supply by keeping it restricted (Zeiger, 1995). This in turn means that they will be restricted in the amount of land that they can designate as land for lower-use development. This contradiction that is intrinsic to the TDR system suggests that the amount of green belt that could be obtained by this method will be very limited. The greater the area of land designated as green belt, the greater will be the supply of development rights coming into the market, the lower will be the price of the rights, and the less willing the owners will be to participate in the TDR system. In other words, the success of the TDR system as a method of green belt protection will be an inverse ratio to the amount of green belt to be protected.

Thirdly, the TDR system suffers from some of the same disadvantages of the system of public acquisition of development rights. Will the owner who has transferred their development rights regret their decision in years to come, and begin to apply political pressure to have them restored? Will future owners of the land feel bound by the initial transfer, or will they in turn seek to develop or to transfer the rights? While the goal of transferring density away from preservation areas into growth areas are being accomplished, the programmes are not effective in influencing the design and character of development in receiving areas, although the City Plan could control this. The unfortunate result is that the increased density is as likely to be used for a suburban strip development as for compact, centred development, thus creating localised sprawl within the receiving area. The idea of transferring development rights can therefore be perceived as a knee-jerk reaction against higher density.

Pizor (1986) suggests that an example of an ineffective programme is one that chooses to implement a voluntary rather than a mandatory programme. Voluntary programmes provide landowners the option of transferring development rights or of developing their land. Many choose to develop, resulting in a low number of credits being sold.

Ultimately, this undermines the purpose of the programme which is to preserve a resource by limiting its development. Mandatory programmes require developers to purchase rights in order to develop over the low base density. These programmes also restrict landowners in the sending area from developing on their land. Since the base density is low in the receiving area, developers need to purchase rights in order to develop efficiently. They have another incentive to do so because purchasing additional developable land is more expensive than purchasing rights.

How do you measure the success of a TDR programme? By the amount of open space preserved? The number of hectares kept in farming? The number of transactions? The quality of development in receiving areas? And over what time period? Lane (1998) has gone so far as to say that a TDR programme may be considered a success even if no transactions take place. This could arise because, in the context of a larger land use plan, the TDR programme can make a preservation programme more palatable by providing the landowner with additional options.

It has become clear that the perceived success or failure of TDR programmes is coloured by excessive expectations. The notion that a TDR programme, by itself could, protect open space, preserve activities such as farming, help create appealing urban centres, and to do all of this by offering a mechanism for moving development around is simply not realistic. Why should a TDR programme be expected to accomplish more than any other single land use tool, such as zoning? (Callaghan, pers. comm., 1999). This question reflects the most fundamental conclusion: TDR programmes (like most other policies) will work only when they are part of a larger, long-term land use plan that has the commitment and political will of the community behind it. This commitment to the larger goals of the plan and to the particular resource being protected is the real answer to legal and other challenges. A comprehensive plan is more likely to accommodate multiple avenues of relief for landowners who feel unfairly treated (Tripp & Dudek, 1989). TDR programmes that are created within the context of a comprehensive plan are much more likely to be tailored to the specific political, economic and geographical circumstances of their location.



infrastructure or service.⁹ This would suggest that subdivision or development has already occurred, and that the charge is a mitigation measure. However the linkage between the revenue raised and the environmental objectives pursued is not always direct. Meister and Sharp (1993) suggest that with many applications there is not a connection between actual damage caused and the level of the charge. When individual development is mitigated through the use of a charge, it can be seen to have some regulatory side effect. The alternative to revenue raising charges are regulatory charges, which are similar, however revenue raising is not of primary importance, rather the regulatory effect is. For that reason, the charge rate is set at such a level that prevention is made financially attractive (Delafons, 1991). This would have the effect of avoiding the subdivision or development rather than mitigating it. The distinction between the two approaches is not always clear and charges, solely put in place for revenue raising purposes, can also have a regulatory effect. Therefore for both approaches, the destination of these revenues is of some importance and will have an influence on the success of this policy instrument.

Alternatively, an 'impact fee' concept could be implemented (Goodchild *et al.*, 1996). The distinctiveness of an impact fee system is to provide a more structured means of assessing the financial contributions of developers. In an impact fee system, planning authorities draw up a schedule of charges that are related to the likely impact of a proposal for relevant headings of infrastructure expenditure and other associated public expenditure. An impact fee is therefore distinct from the concept of planning gain, as the latter is more concerned with a local community capturing the maximum economic benefits of a development. However, in an impact fee system it is likely that the scope of the relevant expenditure headings be subjected to considerable debate (Goodchild, *et al.*, 1996). However as a simple starting point, an impact fee may be understood as covering the provision of any service or facility that is either necessary for the development to go ahead or that is consistent with good standards development. An impact fee could

⁹ In New Zealand, the *Resource Management Act 1991* can impose **Financial Contributions** on resource consents through Section 108. The Act provides detailed guidance as to the types of conditions which may be imposed. As with other conditions, any such financial contribution must be fair and reasonable in terms of a resource management purpose and the relevant plan provisions, rather than a revenue gathering exercise (Williams, 1997). – The terms' "development charges", "impact fees" and "financial contributions" are sometimes used interchangeably.

therefore be levied for infrastructure such as sewers and roads and community facilities such as parks and other open space. An impact fee may also be levied for associated environmental works that alleviate or reduce the impact of a development. In contrast, the scope of an impact fee would not normally extend to measures that seek to compensate a local community for an environmental loss (Goodchild, *et al.*, 1996).

Impact fees privatise the financing of public infrastructure. However at the same time the advantages of impact fees need to be qualified. They increase the responsibility of private developers for infrastructure provision and are, as a result, consistent with the assumptions of liberal or conservative free-market political philosophies (Goodchild, *et al.*, 1996). However what must be recognised is that the rationale for impact fees (and other charges and levies) are mostly about the costs of development, not about the principle of whether development should go ahead at all. For this reason, they should not be seen as a substitutes for conventional forms of planning control that attempt to protect green belts or other sensitive areas or otherwise seek to control the location of urban development.

The idea of a regulatory charge, where a charge is set at a level that makes development potential financially difficult will be difficult to justify. These charges would probably be imposed upon the process of land subdivision. This is not so much because the subdivision *per se* gives rise to a need for a charge (or contribution), but rather that it is the framework for many subsequent land uses that will establish. In other cases, the development of land may in itself demand provision of services unrelated to subdivision. Nevertheless, the City Plan has clearly stated that the justification for a charge (or financial contribution) can only be related to a direct relationship between the development, and the costs it imposes on the community, and can not be used as a tax on development. This makes it difficult to impose an 'overly' high charge on a potential subdivision or developable area solely for the sake of protecting the area without justifying it.

Subsidies and Environmental Compensation

Subsidies are another form of economic instrument. They generally involve paying users of environmental resources to reduce their demands and/or reduce adverse effects as a means of achieving a more desirable outcome. In essence their purpose is to make environmentally friendly activities cheaper. This is in contrast to most other economic instruments, which make environmentally damaging activities more expensive. Subsidies can be effective when they are given in proportion to the reduction in environmental damage (Meister & Sharp, 1993).

However the fact that the financial problems of one landowner can be attributed to the actions of another is little consolation to the afflicted one. They must now follow suit; and although they give up their land (or family farm), they do very well in the process. The only real loser is the community whose countryside has slipped even further away. It is by no surprise that these instruments have received much criticism (Meister & Sharp, 1993). The whole concept flies in the face of the 'polluter-pays' principle. Amongst the list of disadvantages, defined by Meister & Sharp (1993) is:

- They can provide payments to people to do things they would have done anyway.
- Once established, subsidy policies are extremely difficult to reverse or abandon.
- All subsidy programmes have the problem of defining a baseline against which future performance is measured.
- A subsidy programme can have unintended effects that negate some or all benefits. These unintended effects have plagued agricultural programmes in the past.
- They have to be financed from other sources.

By and large, these comments would suggest that subsidies are not an effective tool. However subsidies do not have to be presented as being totally negative. The idea of a subsidy could be seen as a mechanism of incentive. The Christchurch City Council (1995) believes that incentives can encourage and influence the decisions taken by people and organisations. This could include landowners. However they also state that they may be financial or non-financial. Financial means would normally involve a monetary transfer

– in other words it could be called a subsidy. The City Council was unable to give any examples of non-financial means for protecting rural land.

In some circumstance, development proposals may be sited on land, parts of which have significant open space or natural values. The Christchurch City Council (1999) has said that the ability to acquire or protect such land in exchange for development opportunities is an option that the Council will explore in appropriate circumstances, and as such compensation will be taken into account in assessing proposals. This may not offer a cost-effective means to the community of achieving environmental benefits. This may ultimately result in development in locations which may not meet all other policy criteria, but any such arrangements must still require permitted development to be sustainable and environmentally acceptable. Again, it is difficult to see how compensation could be applied to all of the green belt area. Compensation or subsidies (if they were ever to be paid) would only be applied to significant natural areas. It is extremely difficult to see why it would be applied to common agricultural land.

Rate Relief

When rural land is assessed for its annual rates, the money collected is predominantly used to pay for urban services and education mostly benefiting urban residents (Forkenbrock and Fisher, 1983 cited in Nelson, 1992). In this light rural property owners bear more than their equitable burden of rates and they are pushed into developing their land prematurely (Billings, pers. comm., 1999). Property rate relief programmes can help reduce the amount that rural land owners would have to pay. With the passing of the *New Zealand Rating Powers Amendment Act 1992* there is now more positive legislative support for rating relief for covenanted private land. The Queen Elizabeth II Trust (1998) has long supported the two major elements of the amendments: first is that rating relief should be voluntary; and secondly, due recognition can be given to landowners who benefit the local, and wider community by their action in placing a covenant on their land.

As a policy tool it is similar to a taxation deduction and can be subject to similar comments: its cost is not easily calculated, its impact will vary and it may not be subject

to scrutiny on a regular basis (Taylor, 1986). Depending on one's point of view, these characteristics can be viewed in a positive or negative way. Questions as to the location of costs and benefits also arise. While conservation may have national benefits, the immediate benefits are more readily observable on a local level, therefore the cost should be borne there.

The ability of local authorities to offer rating relief varies, and the funding potential may not coincide with areas of need, no matter how this is defined. Should New Zealand be initiating more positive action to encourage the retention of native vegetation and thus implicitly a segment of the landscape that is unique to New Zealand? If the answer is yes, then the next question must be what is the most efficient and equitable way of accomplishing this? It has been shown that there is no easy answer: negative incentives by way of a penalty tax may be a solution; alternatively it may be that the elimination of taxation incentives for farm development will achieve the desired result without fiscal cost; positive inducements, if they are considered desirable should be readily identifiable, cost effective and subject to review. Rating relief as a policy tool does not entirely satisfy these criteria.

Rate relief is therefore not going to protect the green belt in its entirety. The voluntary nature of implementing such a tool confirms this. However, like reserve contributions on new subdivisions, it does help protect some of the (green belt) land that is still in existence.

Concluding Remarks

Although there is fear that the green belt will be lost under the current planning and legislative regime, it is likely that it will only be the term itself that is lost, rather than what the green belt embodies. If there is to be any chance that the green belt will be protected in Christchurch, there would have to be a radical change of attitude to the concept and importance of the green belt from government officials, planners and the public. This is very unlikely. The city and its surrounding countryside have always been seen as distinct entities. However, in reality they complement each other. Some of the

countryside may be recognised as having special merit, but much of it is regarded merely as a reservoir of potential building land or urban land in a state of gestation. Because of this low-grade image and because of the green belt restraint prior to 1991, there has often been very little opposition from the general public for plans to develop the green belt in a piecemeal fashion. However, in recent years this attitude has begun to change as people have become more aware of the cumulative effects of urban growth into the rural area. Instead of one house appearing in the green belt, the city is faced with applications for ten or a hundred at a time (Vabulis, pers. comm., 1999). This is also compounded by the greater awareness of environmental and ecological matters.

When we speak of a city's green belt the term should not indicate an area of land adjacent to urban development, but an area of land that is an essential component of the city and which in some sense belongs to the city (Johnson, pers. comm., 1998). One implication of this attitude to green belts is that it should not belong absolutely to those who happen to live there, any more than the city belongs exclusively to those who live there. It may not be true in a strictly legal sense, nevertheless it is true in a very real sense that the green belt belongs also to the urban people who enjoy it and need it. Another implication of this city-green belt synthesis is that the financial responsibility for preserving the essential character of the green belt does not rest entirely, or even mainly, on those who live there, but must be shared to a large extent by the urban residents who use and enjoy it.

An important concept that must be weighed up is the fact that our cities are continuously growing, and that people need somewhere to live. In Christchurch for example, the options include further infill, which many argue is destroying the garden city nature (Thomson, 1996). Satellite town development is a further option, however this is often described as merely transferring the problem elsewhere (Nixon, 1997a). The final option is to expand at the periphery, which will impinge green belt land. The Christchurch City Council considers this as a serious option, and they realise that it must be implemented with care and precision. It also makes sense that a combination of other options are explored. For this reason they are attempting to create an effective balance between urban periphery development, satellite town development and infill housing (Thomson, 1997a). The Christchurch City Plan supposedly reflects this balance.

It is obvious that many of the alternatives presented in this research have definite advantages. However it is difficult (if not impossible) to suggest a best alternative for the green belt. However, what is clear, is that in reality no one alternative will protect the green belt in its entirety. If the primary goal, from both planners and the public alike, is to preserve the rural land around cities then a variety of alternatives will have to be used concurrently. Even then it is still difficult to see how much of the land could be preserved. Land at the urban periphery will, in most circumstances, always have high development potential, and unless it has some outstanding values on that land (for example – native bush, or wildlife) then it is unlikely that the land will remain in its rural use forever. If there are outstanding values on that property, there is an obvious tangible reason for wanting to protect it. If it does not have those values, then planners in particular would seem guilty of protecting the land for its own sake without being honest about the reasons why they want to save it.

The challenges to the rural (green belt) land mean that there needs to be compelling reasons for a green belt's existence. This is especially true in Christchurch, where all policies need to be justified in relation to the sustainability criteria of the *Resource Management Act*. Although it is likely that most of the agricultural land will stay in its current use for a long time yet, there is no alternative to the green belt that can assure that the rural land will be kept in its productive state and that urban development will not be encroaching in the near future. If this is such an important goal, it would suggest that the green belt of yesteryear is the best tool and that it should be reintroduced. That would not be acceptable, and going back to the Town and Country Planning Act era would not fit in with today's thinking about sustainable management. In summary, although the term is still used, the green belt concept has disappeared and if the rural land is to be protected from urban development, it will have to be done through individual landowner will, or through other means, and only in site-specific ways. There is no one tool that stands out as being able to protect the rural land in a 'blanket-like' fashion.

Chapter 7

Conclusion

Many countries have modelled their planning philosophies on the British town and country planning system, and this is clearly evident in Christchurch. In the 1950's, the Christchurch green belt (as it was to become known) was defined as a "non-settlement area" and surrounded the city, yet it was not until 1980 that it was officially referred to as a green belt area in planning documents. The purposes for implementing a green belt area around Christchurch were to preserve the agricultural land and to provide an urban boundary so as to contain the city for reasons of economic servicing and efficiency. These purposes are substantially different when compared to the London green belt. The purpose and reasons for establishing 'true' green belts (as they were defined initially in England) are best outlined in Britain's first green belt Circular of 1955. These remain valid today, however, in a Christchurch context they do not encourage or justify the green belts existence or continuance. Their application in Christchurch has little relevance, largely due to the different issues (and the scale of those issues) that affect both cities.

The London green belt can be described as national policy because it has the support of central government behind it. In Christchurch, green belt policy is not supported at that level. This is one of the fundamental differences between the Christchurch approach and the London approach. When legislation or ideas have changed in Britain, 'green belts' have continued to be recognised and protected as far as can be seen ahead. In New Zealand, green belt policy was implemented at a local level and legislative change at the national level (namely the *Resource Management Act*) has not considered the impact that the changes might have on green belt policy. Accordingly, this change has contributed to the demise of the green belt. The original philosophy behind the Christchurch green belt has faded to the point where it can now be considered a redundant concept. It is now difficult (if not impossible) to protect the entire green belt using the *Resource Management Act* regime. The main problem being, that it asks for too much land without justifying it.

The green belt has essentially been a planning zone and with this regulatory 'blanket-type' approach, there are some areas within the green belt that can not be justified as being worthy of protection. The Act provides an environmentally conscious framework within which people can make their own decisions. It focuses on the *effects* of activities rather than activities themselves, and demands that all methods developed under the Act are justified in terms of the environmental effects they seek to address. All concerns are primarily dealt with specifically as issues of sustainability of natural and physical resources. The challenges to the green belt mean that there needs to be compelling reasons for the green belt's existence if the policy is not to be undermined. All policies now need to be justified in relation to the sustainability criteria of the *Resource Management Act*.

The most important indicators of the effectiveness of the green belt policy is whether it has actually contained the outward spread of Christchurch and preserved the agricultural land. The City has continued to grow at the urban periphery – partly because the City Plan allows urban sprawl (as long as it is consistent with consolidated form). As a consequence, agricultural land has been lost in the process. This is not necessarily such a bad thing because it has been assessed against the sustainability criteria and re-cast in a manner which is readily defensible under the *Resource Management Act*. While the soils around Christchurch City have a certain capacity for productive agricultural use, the soils must also be looked at as a valuable resource for housing people.

The Christchurch City Council has recently made a decision to cater for the need of a growing population by rezoning 650 hectares of green belt land from rural to urban. The trade-off is the loss of rural land. The same situation is occurring in London, where there is currently an urgent need for a further 100,000 homes to meet identified needs and the most likely option is to encroach on the green belt for this development (LPAC, 1998). In addition, new facilities are needed to serve the increasing population, and the green belt provides the open space for this development to occur. The issues of organising and co-ordinating development, protecting agricultural land, retaining valued scenic resources, and providing for leisure use simultaneously, within a locally publicly-accountable framework have not gone away. Planning has been 'an attempt to reconcile the irreconcilable' and the green belt was one of the most successful all-purpose tools

invented and tried. Unfortunately the green belt can no longer protect all of the agricultural land around Christchurch.

Despite the fact that urban peripheral land is being taken for development, there is still a strong public favour enjoyed by green belts. Over the years the Christchurch public has become firmly attached to the green belt concept. The sometimes high political profile and strong public favour enjoyed by the green belt is based partly on idealised images of rural life and landscape. The green belt is seen as a defence for these threatened values, and this has come to be regarded by some as its primary purpose. However, this is not a sufficient argument under the *Resource Management Act*. If a block of land can be proven to be more sustainable for its urban use rather than leaving it in its productive use, there is little that can be done to stop that development proceeding. There are other ways to secure the land from urban encroachment, however no single tool will protect the rural (green belt) land in its entirety.

The Christchurch green belt was once a reality. Now, despite the fact that the term is still used to define the rural component that surrounds the City, it is just a name.

Bibliography

Bibliography

- Abrams, F (1998, January 22) "Green belt development may produce too many houses" in *The Independent*. London; England.
- American Farmland Trust (1993, August) "Agricultural and Farmland Protection for New York" in *Agricultural Preservation*. Solloway, C & Nolon, S., USA.
- Barber, M. (1991) "Green Belts – Outmoded Concept or Challenge for the Future" in *Planning Quarterly*, June, No.102, pp.3-7.
- Blowers, A. (1980) *The Limits of Power: The Politics of Planning Policy*. Pergamon, Oxford; England.
- Bruce, M & Clausen, V. (1999, May 10) "Trust Slams Invasion of Green Belt" in *The Christchurch Press*. Page 1.
- Bruce, M. (1999, May 13) "Developer Backs Council Housing" in *The Christchurch Press*. Page 4.
- Buhrs, T & Bartlett, R.V. (1993) *Environmental Policy in New Zealand: The Politics of Clean and Green*. Oxford University Press. Auckland; New Zealand.
- Burke, G. (1971) *Towns in the Making*. Edward Arnold Ltd. London; England.
- Campbell, V. (1998) of the Canterbury Regional Council. Comments from Bruce, M. (1998 June 27) "Fate of Montgomery Spur in Balance" in *The Christchurch Press*. Page 24.
- Canterbury Regional Council (1997) *Groundwater: Christchurch West Melton*. Report 97(12) Canterbury Regional Council; New Zealand.
- Canterbury Regional Council (1993) *Canterbury Regional Landscape Study Volume 1*. Prepared by Boffa Miskell Limited and Lucas Associates; Christchurch; New Zealand.
- Canterbury United Council (1987) *Annual Monitoring Report*.
- Canterbury United Council (1988) *Annual Monitoring Report*.
- Chinitz, B. (1990, Winter) "Growth Management: Good for the Town, Bad for the Nation?" in *Journal of the American Planning Association*. Winter, 1990, Vol.56, No. 1.
- Christchurch City Council (1999) [Web Home page] www.ccc.govt.nz.
- Christchurch City Council (1999, April) 'Vacant Land Register.' Prepared by the Environmental Policy and Planning Unit, Christchurch City Council.

- Christchurch City Council (1998, August) '*Christchurch City Council Building Permit Records.*' Prepared by the Environmental Policy and planning Unit, Christchurch City Council.
- Christchurch City Council (1997, July 24) *Urban Growth Strategy*. Ivan Thomson – Officer Reporting.
- Christchurch City Council (1995) *City of Christchurch – City Plan: A Guide to the Proposed City Plan*. Christchurch City Council.
- Christchurch City Council (1995-1999) *Christchurch City - Residents Survey*. Prepared and conducted by National Research Bureau Limited for the Christchurch City Council.
- Christchurch City Council (1991) *Planning for Christchurch City: A Discussion of Development and Resource Issues and Policy Options*. Planning Policy Unit; Christchurch City Council.
- Christchurch Planning Bar Association (1995, October 9) 'Green Belt Battle With Urban Growth' in *The Christchurch Press*. Page 26.
- City Plan* (1995, June 24) Formally known as '*The Proposed District Plan for the City of Christchurch*' Published by Christchurch City Council.
- Coughlin, R.E. (1991, Spring) 'Formulating and Evaluating Agricultural Zoning Programmes' in *Journal of the American Planning Association*. Vol.57 No.2.
- CPEO (1998, 17 April) Center for Public Environmental Oversight <cpeo@igc.apc.org> *United Kingdom: Brownfields Vs Greenfield Development*.
- Cullingworth, B. (1997, May) 'Fifty Years of the 1947 Act' in *Town and Country PLANning*. Vol.66. No. 2.
- Cullingworth, J.B. (1994, Spring) 'Alternate Planning Systems: Is There Anything to Learn From Abroad?' in *Journal of the American Planning Association*. Spring 1994, Vol.60, No.2.
- Curry, N. (1994, Spring) 'Enjoyment of the Countryside' in *Town and Country PLANning*. Vol. 60, No. 2. Pages 131-132.
- Daniels, T.L. (1991) 'The Purchase of Development Rights: Preserving Agricultural Land and Open Space' in *Journal of the American Planning Association*, Autumn, Page 421-431.
- Daniels, T., Bowers, D. (1997) *Holding Our Ground: Protecting America's Farms and Farmland*. Island Press Ltd. USA.
- Daniels, T.L., Keller, J.W., Lapping, M.B. (1988) *The Small Town Planning Handbook*. APA Planners Press, Washington D.C. USA.

- Delafons, J. (1991, June) 'Planning in the USA: Paying for Development' in *The Planner*. Page 8-9.
- De Luca, R. (1991) 'Rural Subdivision Controls – Where to Now?' in *Planning Quarterly*, June, No.102, pp.8-10.
- Densem, G. (1973) *Proposals for a Suburban Subdivision in Christchurch, New Zealand*. Dissertation for a Dip.L.A. Lincoln College, Canterbury; New Zealand.
- Department of Conservation (DOC) (1998) 'Voluntary Protection of Nature on Private Property: Your land, Your Choices.' An information pack published in conjunction with the QEII Trust, Federated Farmers of New Zealand, Royal Forest and Bird Protection Society & New Zealand Landcare Trust.
- Department of Statistics New Zealand (1991) [now Statistics New Zealand] *Census of Population and Dwellings*.
- Department of the Environment (1995) *Green Belts: Planning Policy Guidance* in <http://www.gn.apc.org/pmhp/dc/planning/ppg2.htm>. Revised January 1995, downloaded December 26 1998.
- Department of the Environment (1972) *Press Release*, 27 September 1972.
- Diamond, D.R., McLoughlin, J.B. (eds) (1981) *Progressive Planning*. Pergamon Press Ltd. Great Britain.
- Eldred-Grigg, S. (1982) *The History of Canterbury*. John McIndoe Limited. Dunedin; New Zealand.
- Ellis, C. (1998) 'History of Planning and City Planning' from webmaster@arch.buffalo.edu.
- Elson, M.J. (1986) *Green Belts: Conflict Mediation in the Urban Fringe*. Heinemann, London; England.
- Elson (1993) *Green Belts*. Heinemann, London; England.
- Evans, S. & Mabbitt, R. (1997, February) 'Redefining the Urban Fringe' in *Town and Country PLANNing*. Vol.66 No.2.
- Federated Farmers of New Zealand Incorporated/Occupational Safety and Health Service (1995) *Farm Health and Safety*. A package put together by Federated Farmers in conjunction with the Occupational Safety and Health Service. Wellington; New Zealand.
- Foyel, J. & Houston, P. (1992, March) 'Planning in the Rural-Urban Fringe: Perceived Development Rights and of Land Use Systems.' In *Australian Planner*.

- Freeman, C. (1998) of the Christchurch City Council. Comments made in *The Christchurch Press* Editorial "Building on the Port Hills" March 4.
- Garbutt, J.H. (1989, March) *Green Belt Re-Negotiation in the Outer Metropolitan Area*. Working Paper No.114. Oxford Polytechnic School of Planning; England.
- Grant, M. (1982) *Urban Planning Law*. Street and Maxwell, London; England
- Goodchild, B., Booth, C. & Henneberry, J. (1996, April) 'Impact Fees: A Review of Alternatives and Their Implications for Planning Practice in Britain' in *Town Planning Review*. Liverpool University Press. Vol.67 No.2.
- Goulding, J (1998) *The Contribution to Urban Planning and Design Made By Ebenezer Howard* in <http://www.geocities.com/Heartland/6897/gardencity.html>. Downloaded 23 January 1999.
- Hall, P., Gracey, H., Drewett, R., & Thomas, R. (1973) *The Containment of Urban England*. George Allen and Unwin, London; England.
- Hansard*, 26 April 1955. Great Britain.
- Hargreaves, R.P. (1981) 'Urban Open Spaces in Victorian New Zealand' in *Man, Environment and Planning: Essays in Honour of Ronald Lister*. Heenan L.D.B., Kearsley, G.W. (eds.) Department. of Geography, University of Otago; New Zealand.
- Haslam, M. (1990, August) 'Green Belts and the Future – A View from the Districts' in *The Planner*. Vol 76. No. 4. Page 14-16.
- Herrington, J. (1990) *Beyond Green Belts: Managing Urban Growth in the 21st Century*. Jessica Kingsley Publishers Ltd. London; England
- Hodge, I. (1997, May) 'The Conservation of the Countryside' in *Town and Country PLANning*. Vol.66. No.2.
- Howard, E. (1946) *Garden Cities of To-Morrow*. F.J. Osborn (ed.) Faber and Faber; London; England.
- Isaacs, A. (ed.) (1986) *The Macmillan Encyclopedia*. Macmillan London Ltd, London; England.
- Keene, H. (1998, June 14) 'Land Plans Anger Halswell People: Owners Want Green Belt Area for 2000 Section' in *The Christchurch Press* 14 June 1998, page 1.
- Keene, H. (1996, November 19) 'Groups Urge Protection for Versatile Soils' in *The Christchurch Press*. Page 4.

- Landis, J.D. (1992, Autumn) 'Do Growth Controls Work? A New Assessment' in *Journal of the American Planning Association*. Vol. 58, No. 4.
- Lane, R (1998, March) 'Transfer of Development Rights for Balanced Development' in *Land Lines*. Lincoln Institute of Land Policy. New York; USA.
- Lee, Richard & McDermott, Philip (1998) 'The Diversification of Urbanisation: New Challenges for New Zealand Planning', *Urban Policy and Research*. Volume 16, Number 2, Pages 95-105.
- LPAC. (1998) "Planning for Greater London: A Guide to LPAC's Strategic Policies" in [URL:http://www.lpac.gov.uk/guide.html](http://www.lpac.gov.uk/guide.html). Updated 27 May 1998.
- Macfadyen, D. (1970) *Sir Ebenezer Howard and the Town Planning Movement*. Manchester University Press, Manchester; England
- Macmillan, S. (1999, June 29) 'Fighting Sprawl' in *Straight Furrow*, page 7.
- Mandelker, D.R. (1962) *Green Belts and Urban Growth: English Town and Country Planning in Action*. University of Wisconsin Press, Wisconsin.
- Manners, G., Keeble, D., Rodgers, B., Warren, K. (1972) *Regional Development in Britain*. John Wiley and Sons, London; England
- Mathias, P. (1996, February 13) 'Rezoning Appeal a Landmark Case' in *The Christchurch Press*. Page 4.
- McDermott Miller Group (1992, September) *Christchurch Urban Growth Strategy: A Framework for Economic Evaluation*. Prepared for the Christchurch City Council.
- Meister, A. & Sharp, B. (1993, August) *Current and Potential Uses of Economic Approaches to Environmental Management*. Discussion Paper in Natural Resource Economics No.17. Department of Agricultural Economics and Business School of Applied and International Economics. Massey University; New Zealand.
- Memon, P.A. (1993) *Keeping New Zealand Green: Recent Environmental Reforms*. University of Otago Press; Dunedin; New Zealand.
- Memon, P.A. (1991) 'Shaking off a Colonial Legacy? Town and Country Planning in New Zealand, 1880's – 1980's' in *Planning Perspectives*, Vol.6: 19-32.
- Memon, P.A. & Gleeson, G.A. (1995) 'Towards a New Planning Paradigm? Reflections on New Zealand's Resource Management Act' in *Environment and Planning B: Planning and Design*, Vol.22: pp.109-124.
- Memon, P.A. & Perkins, H.C. (1993) *Environmental Planning in New Zealand*. The Dunmore Press, Palmerston North; New Zealand.

- Metcalf, J. & White, C. (1997, October 18) "Green belt housing" in *The Independent*. London; England.
- McConnell, S. (1981) *Theories for Planning*. Heinmann. London; England.
- McDermott Miller Group Ltd. (1992, September) *Christchurch Urban Growth Strategy: A Framework for Economic Evaluation*, prepared for the Christchurch City Council.
- McShane, O. (1998, April) *Land Use Control Under the Resource Management Act*. A "Think Piece" commissioned by the Minister for the Environment, Simon Upton.
- Miller, C. (1998) *Alternative Methods: A Practical Approach*. Proceedings from a Workshop organised by the Central North Island Branch of the New Zealand Planning Institute, Palmerston North, 27 March 1998.
- Miller, C (1998, December 1) 'Improvements or Change for Change's Sake?' in *Newsletter – School of Resource and Environmental Planning*. Massey University; New Zealand. Volume 2, Number 1, December 1
- Milne, C. (ed.) (1996) *Handbook of Environmental Law*. Royal Forest and Bird Protection Society Inc. Wellington; New Zealand.
- Ministry for the Environment (MfE) (1992, June) *Resource Management: Sustainable Management*. Published by Ministry for the Environment; New Zealand.
- Ministry of Housing and Local Government (MHLG) (1957) *Green belts*. Circular 50/57. HMSO, London; England.
- Ministry of Housing and Local Government (MHLG) (1962) *The Green Belts*. HMSO, London; England.
- Morrison, J.P. (1948) *The Evolution of a City*. Christchurch City Council; Christchurch; New Zealand.
- Moss-Eccardt, J. (1973) *Ebenezer Howard: An Illustrated Life of Sir Ebenezer Howard*. Shire Publications Limited, Bucks, England.
- Munton, R. (1983) *London's green Belt: Containment in Practice*. George Allen & Unwin Publishers Ltd. Hemel Hempstead, England.
- Nelson, A.C. (1992, Autumn) 'Preserving Prime Farmland in the Face of Urbanisation: Lessons From Oregon' in *Journal of the American Planning Association*. Vol.58 No. 4.
- News Advertiser*, Christchurch (no author) (24 March 1997) 'Park sale row.'

- Nixon, R.C. (1997a) "Peripheral Urban Growth" in *Planning Quarterly*, June, no.124, pp.20-24.
- Nixon, R. (1997b, August 13) "Attempting the Impossible – to Please Everyone with City Plan" in *The Christchurch Press*, page 11.
- Nixon, R. (1998, April) "The Extent to Which Regulatory Control of Land Use and Subdivision is Justified Under the Resource Management Act: Comments on a Paper by Owen McShane" in *Land Use Control under the Resource Management Act: A Think Piece by Owen McShane*. A report commissioned by the Minister for the Environment. New Zealand.
- OECD (Organisation for Economic Co-Operation and Development) (1997) *Evaluating Economic Instruments for Environmental Policy*. OECD. Paris; France.
- Osborn, F.J. (1969) *Green-Belt Cities*. Evelyn, Adams & Mackay, London; England.
- Oxford Dictionary* (1988) Hawkins, J.M. (ed.) Oxford University Press, Oxford; England.
- Parnell, B.K. (1988) *Urban Fringe and Green Belt: Countryside Planning in Practice: The Scottish Experience*. Stirling University Press; Scotland.
- Pizor, P.J. (1986) 'Making TDR Work: A Study of Program Implementation' in *Planners Notebook*. No. 203, 1986. USA
- Price, A (1997, November 17) 'City's Green Belt Nonsense' in *The Christchurch Mail*.
- Puentener, R.E. (1993) *The Christchurch Green Belt: A Cultural Icon – Acknowledging Intangible Values in Resource Management Decision Making*. [Unpublished Thesis] Centre for Resource Management. Lincoln University; New Zealand.
- Pullen, J.M. (1977) *Greenspace and the Cities*. Australian Institute of Urban Studies. Publication No. 67. Canberra; Australia.
- Queen Elizabeth II (QEII) National Trust (1998) *Open Space Covenants*. [pamphlet]
- Ratcliffe, J. (1986) *An Introduction to Town and Country Planning*. (2nd Edition), Hutchinson Education, London; England..
- Roddewigg, R.J., Inghram, C.A. (1987, May) 'Transferable Development Rights Programmes: TDRs and the Real Estate Market Place' in *American Planning Association Advisory Service Report*. No. 401, May 1987. Chicago; USA.
- Round, D. (1996, November 15) 'Time for a bigger Christchurch to look at its civilised urban option' in *The Christchurch Press*.

- Russell, G.W. (1919) 'Opening Address' *Official Volume of Proceedings of the First New Zealand Town Planning Conference and Exhibition*. Government Printer; Wellington; New Zealand.
- Schoon, N. (1997, October 16) "Historic challenge to the nations green belt" in *The Independent*. London; England.
- Scott & Barlow (1940) *Report of the Committee of Land Utilisation in Rural Areas* (Scott Report), HMSO, London. *Report of the Royal Commission on the Distribution of the Industrial Population* (Barlow Report), HMSO, London.
- Solesbury, W. (1983) 'Defining and Defending the National Interest in Land Use', A paper given at Conference *Land Policy: Problems and Alternatives*. Oxford Polytechnic, Oxford; England.
- State of California, Office of Planning and Research, (1987) *General Plan Guidelines*.
- Statistics New Zealand (1999) [web site] www.stats.govt.nz.
- Statistics New Zealand (1997) *Agriculture*. Statistics New Zealand. Wellington; New Zealand.
- Statistics New Zealand (1997) *New Zealand Official year Book. 100th Edition*. Statistics New Zealand, GP Publications. Wellington; New Zealand.
- Stewart, F. (1993, January 26) 'Economic Instruments and their Application in Achieving the Council's Resource Management Objectives.' Canterbury Regional Council; New Zealand.
- Sweeney, M. (1998, Autumn) 'Who's that knocking the green belt?' in *Canterbury's Digest*, published by ASG Ltd., Christchurch; New Zealand.
- The Christchurch Press* (1999, September 2) "Rolleston: Town of the Future" An insert supplement to *The Christchurch Press*.
- The Christchurch Press* (1999, April 7) No author. "The Kirk Legacy – A City of Dreams" in *The Christchurch Press*. Page 7.
- The Christchurch Press* (1998, July 15) "Rolleston Matures into Attractive Town" in *The Christchurch Press*. Page 38.
- The Christchurch Press* (1996, June 18) "Call for further debate on green belt in Christchurch" in *The Christchurch Press*. Page 4.
- The Christchurch Press* (1996, March 1) 'Regional Council Against Zone Change' in *The Christchurch Press* Page 4.
- The Christchurch Press* (1996, February 27) 'Proposal to Rezone land Threat to Green Belt' in *The Christchurch Press* page 4.

- Thomas, D. (1970) *London's Green Belt*. Faber and Faber. London; England.
- Thomson, I. (1996, October 18) 'Christchurch: a city all dressed up but with nowhere to grow' in *The Christchurch Press*. Page 9
- Thomson, I. (1997a, July 24) "Urban Growth Strategy" in *Hearing of Submissions on the Proposed City Plan*. Report No.12. Christchurch City Council.
- Thomson, I. (1997b, July 11) 'Urban planning and resource management – a balancing act' in *The Christchurch Press*. Page 11.
- Tietenberg, T. (1994) *Environmental Economics and Policy*. Harper Collens College Publishers. New York; USA.
- Tripp, J. & Dudek, D.J. (1989, Summer) 'Institutional Guidelines for Designing Successful Transferable Rights Programme' in *Yale Journal on Regulation*. USA.
- Underwood, J. (1981) 'Development Control: A Review of Research and Current Issues' in *Progress in Planning*. Pergamon Press Ltd. Great Britain.
- Van Beynen, M. (1996, February 21) 'Council Supports Harewood Zoning' in *The Christchurch Press*. Page 4.
- Waghorn, B. (Growth Management Techniques Group Co-ordinator) (1997) *Regional Growth Forum: Growth Management – A Tool Box of Techniques*. Auckland; New Zealand.
- Waimakariri District Plan*. More specifically known as "The Proposed Waimakariri District Plan." Published by the Waimakariri District Council.
- Wheeler, Dr. B. (1994, February) 'Using Economic Instruments as an Alternative to Regulation.' A paper presented at AIC Resource Management Conference - February 1994. Auckland; New Zealand.
- Wellington City Council (1995, January) *Wellington Town Belt Management Plan: Part One, General Provisions*. Culture and Recreation Division. Wellington, New Zealand.
- Westrate, C. (ed.) (1955) *Conference on the Growth on Greater Christchurch Proceedings*. Department of Economics, Canterbury University College; New Zealand.
- Wheeler, Dr. B. (1994, February) *Using Economic Instruments as an Alternative to Regulation*. Paper presented at 3rd Annual AIC Resource Management Conference, February 1994. Auckland; New Zealand.

- Whitehand, J.W.R. (1992) *The Making of the Urban Landscape*. Basil Blackwell Ltd. Oxford, United Kingdom.
- Whyte, W.H. (1968) *The Last Landscape*. Doubleday and Company Inc. New York, USA.
- Wilson, W. (1998) at structure.plan@surreycc.gov.uk. Surrey County Council; England.
- Williams, D.A.R. (ed.) (1997) *Environmental & Resource Management Law*. 2nd Edition. Butterworths, Wellington; New Zealand.
- Wright, J.B. (1993, Autumn) 'Designing and Applying Conservation Easements' in *Journal of the American Planning Association*. Vol.59, No.4, Pages 487-493.
- Yeoman, M (1997, March 26) 'Housing units spring up to combat space shortages', in *The Christchurch Press*.
- Yeoman, P. (1998, Autumn) 'Christchurch Port Hills – Where to?' in *Canterbury's Digest*, published by ASG Ltd., Christchurch; New Zealand.
- Ziegler, E.H. (1995) 'The Transfer of Development Rights (Part 1)' in *Zoning and Planning Law Report*. Vol.18, No.8, 1995.

Personal Communications

- Billings, Nigel (1999) Federated Farmers of New Zealand (Inc.) Local Government Policy Analyst. Several conversations.
- Burke, Brian (1999) Harman & Co. – Solicitor. Several conversations.
- Callaghan, Ann (3 November 1999) Simpson Grierson Public Law Group. Consultant, Barrister and Solicitor. Conversation.
- Campbell, Valerie (19 November 1998) Canterbury Regional Councillor. Conversation.
- Day, Tony (27 March 1998) Green Belt Protection Society – Secretary. Telephone conversation.
- Doak, Murray (18 December 1998) Ministry of Agriculture and Forestry – MAF Policy Agricultural Economist. Conversation.
- Fussell, Colin (4 October 1998) Green Belt Protection Society Chairperson. Telephone conversation.
- Garland, William (Bill) (9 September 1999) QEII Trust Representative and Farmer – Hamilton. Conversation.

- Garland, Mike (1999) Robson Garland Limited – Resource Management Consultant. Several conversations.
- Gregory, David (21 August 1999) Canterbury Regional Council – Senior Resource Management Planner. Conversation and written correspondence.
- Grigg, Kit (27 January 1999) Hickory Bay Farmer – Banks Peninsula. Conversation.
- Hamilton, Jane (1998) Canterbury Employers Chamber of Commerce – Advisor. Several telephone conversations.
- Harrison, Nick (1999) Waimakariri District Council – Resource Management Planner. Several conversations.
- Heremaia, Christine (1999) Christchurch City Council – Landscape Architect. Several conversations.
- Johnson, Richard (7 August 1999) Waimakariri District Council – Senior Planner. Conversation.
- Johnson, Richard (20 November 1998) Canterbury Regional Councillor – Chairperson. Conversation.
- Little, Ross (December 1998) Canterbury Regional Councillor – Land Portfolio and North Canterbury Farmer. Several conversations.
- Maw, Raymond (1999) Canterbury Regional Council – Senior Resource Management Planner. Several conversations.
- McCullum, Laurie (30 September 1998) Canterbury Regional Council – Natural Resource Planning Manager. Telephone conversation.
- McDermott, Professor Phillip (1999) Massey University – Head of School of Resource and Environmental Planning. Several conversations.
- McMullan, Toni (1998) Canterbury Regional Council – Advisory Officer. Several conversations.
- Mitchell, Rhonda (1998) Ministry for the Environment – Policy Analyst. Several conversations.
- Pavletich, Hugh (3 November 1999) Pavletich Properties Limited. Conversation.
- Petrey, Catherine (1998) Federated Farmers of New Zealand (Inc.) Executive Director of Policy. Several conversations.
- Schulz, Robin (17 July 1999) Helpet Investment Limited – Director. Telephone conversation.

- Townsend, Peter (15 October 1999) CEO Canterbury Employers Chamber of Commerce. Conversation
- Undorf-Lay, Alison (1998) Federated Farmers of New Zealand (Inc.) Policy Analyst – Canterbury Region. Several conversations.
- Vabulis, Vilnis (1999) Christchurch City Council - Subdivisions Manager. Several conversations.
- Williams, Derek (1999) Senior Lecturer and Head of Department - School of Resource and Environmental Planning – Massey University. Several conversations and written correspondence.
- Woods, Stuart (1999, October 22) Christchurch City Council – City streets Unit – Senior Transport Planner. Telephone conversation.
- Yeoman, Peter (19 November 1998) Canterbury Regional Councillor. Conversation.