

## ***Executive Summary***

The Land Use and Development Technical Report provides an analysis of existing land use and development, a comparison with past use and development, and examines current and potential trends to changes in land use and development. It highlights the pressures that result in changes in land use and development, the impact those changes can have, and recommends actions to address those pressures. It also provides an overview of the statutory framework under which changes to use and development occur.

The overarching legislation for use and development of resources in New Zealand is the Resource Management Act 1991 (RMA). It identifies “*the natural character of the coastal environment...and public access to those resources*” as a matter of national importance. The principles of the RMA must be “*recognised and provided for*” in the implementation of the Act.

The RMA provides for the preparation of policy statements and plans. The New Zealand Coastal Policy Statement was released in 1994 and contains policies for use and development including “*avoiding cumulative adverse effects of subdivision, use or development in the coastal environment*” and “*avoiding sprawling or sporadic subdivision, use or development*”.

At a regional level, the Regional Policy Statement has a Coastal Environment Chapter that lists issues, objectives and policies for land use and development. The primary method for implementing the policies is through district plans.

The three districts place different emphasis on the coastal environment in the issues, objectives and policies in their operative district plans. The different controls for land use and development mean the statutory requirements for the same activity differ across the Wairarapa. These differences along with different interpretation and implementation of plans by planners, developers and decision-makers leads to further variability between and within the districts when an assessment is made of a potential change in land use and development. This report recommends that there is a need for

professional and political consistency between policy setting and decision making. Preparation and the implementation of a coastal strategy should help achieve this.

An assessment was made of existing land use and development. Land use was determined using the landcover database which maps the predominant ground cover such as pasture, forestry, indigenous vegetation etc. Residential and rural-residential use was determined and mapped based on the size of lots (less than 2000m<sup>2</sup>, and between 2000m<sup>2</sup> and 15 hectares respectively). The existing land use and infrastructure, including land managed by the Department of Conservation and district councils, and community infrastructure such as shops and schools, was mapped at a scale of 1:50 000. Aerial photos from 1943, 1989 and 2001/02 were used to determine the amount of development on the coast. Dwellings and baches were counted to provide an indication of change of development through time.

The predominant land uses on the Wairarapa coast are pastoral, residential and rural-residential. While the area of residential and rural-residential use is relatively small (approximately 110.5 ha and 275.5 ha respectively), the number of people who own such lots is high relative to the number of pastoral landowners, as much of the agricultural land is in large holdings. There is a small amount of forestry and land based aquaculture and there are areas that commercial and recreational fishermen use to launch and service boats.

The majority of current development is residential dwellings (including baches) with a minor amount of associated infrastructure and commercial/community development. The infrastructure of the smaller settlements is detailed in this report, however the infrastructure for the six larger settlements and the new Flat Point subdivision is discussed in the Infrastructure and Built Environment Technical Report.

The Land use Capability (LUC) class, that is an assessment of the suitability of the land for productive use taking into account the physical limitations of the land, was mapped at a scale of 1:50 000, as was the degree of slope of the land. Both provide an indication of the natural limitations to changes in land use and development. Other limitations include lack of infrastructure and services. These limitations have helped

shape existing trends and changes in land use and development and will have considerable influence on future trends.

The most dominant trend for change in land use is the shift towards residential lots, usually on existing pastoral land. An assessment of coastal subdivisions indicates that a total of 485 new lots have been created over the past ten years.

Associated with the creation of new lots is an increase in residential development. While figures for the number of new dwellings per year were not readily available, by using the aerial photos from 1943, 1989 and 2001/02 it is possible to determine broad changes in development. Since 1989 there has been 322 additional coastal dwellings, approximately a third of which were outside existing settlements. This has resulted in many previously undeveloped areas being developed, dissecting the long stretches of coast that were completely undeveloped.

The rate of development has generally increased, for example, an average of 2.4 houses per year were built between 1943 and 1989, but this has risen to an average of 8.7 houses per year since 1989. Of course development often occurs sporadically rather than gradually but calculating an average rate enables a comparison over time.

The amount and rate of development on the coast has increased, however there has not been a corresponding increase in the permanent population within the districts, in fact both Masterton and South Wairarapa experienced a decline in population between 2000 and 2001. This most likely indicates that the increased development of dwellings is primarily related to holiday or occasional accommodation, rather than for use as a permanent residence.

Another parameter that provides an indication of demand for changes in land use and development is the value of land. By comparing the value of residential lots on the coast to the value of residential lots inland we can see that in 2001 a vacant lot on the coast was, on average, \$20 000 more than a lot in the Masterton Urban Ward. Prices for coastal lots have increased markedly in the past three years and at a much higher rate than lots in Masterton for both vacant and improved lots.

There are pressures for changes in existing land use. Such changes may have positive or negative effects on issues such as landscape, heritage and recreation and access. This report considers how the changes impact on existing and future land use and development, however the potentially wide reaching and interconnected nature of impacts across different fields should be kept in mind.

The activity that exerts the greatest pressure is that of residential and rural-residential subdivision and associated development. This removes land from agricultural production, increases the potential conflict between existing agricultural practices and new residential use, and can increase pressure on existing infrastructure. It can also provide a higher monetary return on marginal land, provide impetus for new infrastructure and services, and if sited and designed properly, can minimise the potential for sprawling subdivisions.

Other pressures affecting land use and development include coastal hazards, lack of infrastructure and insufficient population to support existing services.

Finally, this report provides some recommended responses to address the issues surrounding changes in land use and development. As subdivision currently exerts the greatest pressure many responses relate to this including:

- € identifying appropriate and inappropriate areas for subdivision through the development of structure plans for existing settlements and assessment of areas outside of settlements;
- € developing and implementing best practice guidelines for planning and designing subdivisions on the coast;
- € developing and implementing siting and design guidelines for structures on the coast;
- € where appropriate incorporating such documents into district plans; and
- € encouraging information sharing and training for local professionals and decision makers about the impacts of subdivisions on the coast and techniques to minimise such impacts.

Responses not relating directly to subdivision include:

- € investigating and prioritising where infrastructure upgrading is required;
- € ensuring new developments provide adequate infrastructure; and
- € encourage, through development of and participation in industry groups, appropriate alternative land uses to complement existing agricultural and residential land use.

It is at the district level that there is the greatest potential for the coastal strategy to guide use and development on the coast, and move away from the current situation of an ad hoc and fragmented approach to development. Vital to all of the responses recommended in the report are community and political support for incorporating pertinent strategies, policies and guidelines into district plans and ensuring they are implemented consistently.



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# **Chapter 1**

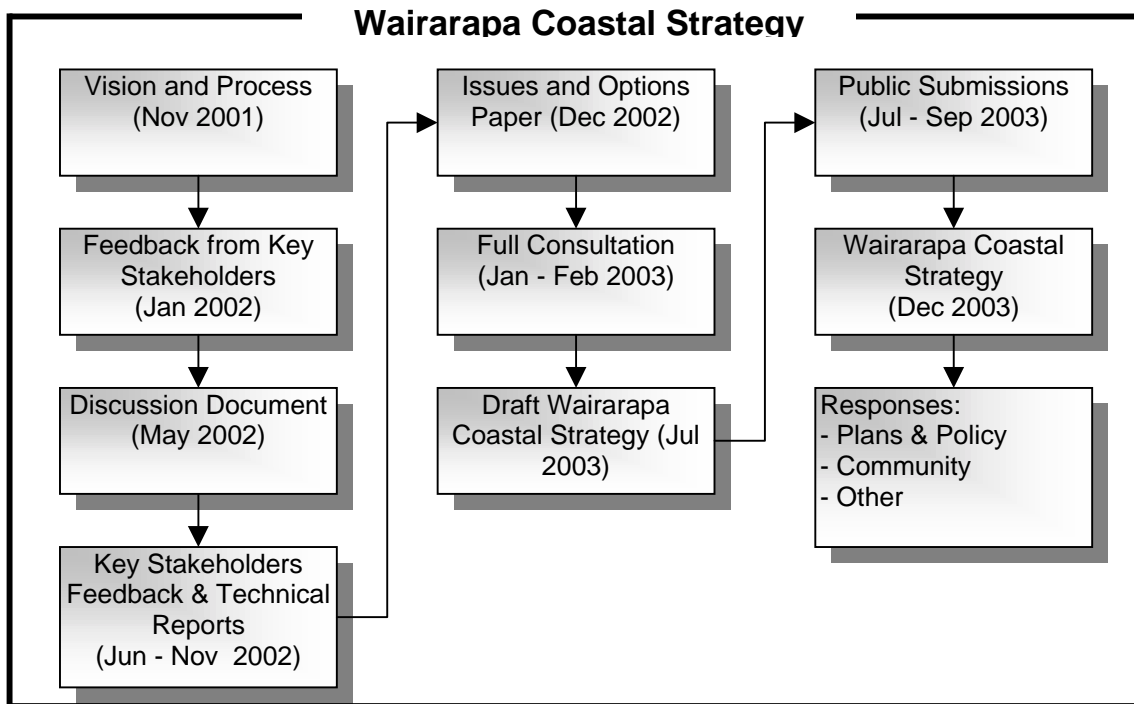
## **Introduction**

The purpose of the Wairarapa Coastal Strategy is to enable the community to establish a long-term integrated strategy to protect, manage and develop the coastal environment. The strategy has a long term planning horizon (looking towards our grandchildren's future), and the recommendations and outcomes of the strategy are intended to go beyond the scope of the Resource Management Act to encompass wider Council and community goals.

It is intended that this technical report will feed into subsequent documents such as the Issues and Options Paper, and the draft and final versions of the Coastal Strategy, as well as assist with various community consultation forums. This report is one of a series aimed at addressing key technical issues for the Strategy. Other technical reports include;

- € Planning Context and Methods
- € Landscape,
- € Natural Environment and Ecology,
- € Heritage,
- € Built Environment and Infrastructure,
- € Access and Recreation,
- € Hazards.

The Coastal Strategy process is being undertaken by the Wairarapa Coastal Strategy Group, comprising the Masterton, Carterton, and South Wairarapa District Councils, the Wellington Regional Council, and local Iwi. This group formed after concerns that development was proceeding along the Wairarapa coast in an ad hoc and fragmented way. The development of the Wairarapa Coastal Strategy will span three calendar years, with most of the work occurring in 2002 and 2003 (refer Figure 1.1).



**Figure 1.1:** Wairarapa Coastal Strategy Process

A key issue for sustainable and integrated management is to minimise potential conflict between land uses and values on the coast such as natural character, landscape, natural ecosystems, cultural heritage and recreation. Likewise coastal land uses and values can be impacted upon by factors such as natural hazards (particularly erosion) and infrastructural constraints.

The purpose of the Land use and Development Technical Report is to detail the existing land use along the Wairarapa coast, provide an overview of changes to land use and development, and highlight existing trends and current and future pressures which are likely to impact on land use and development. It does not provide extensive comment on the impact that the use and development may have on landscape, ecology or heritage as that is addressed in the other technical reports.

## Chapter 2

# Statutory Framework

## 2.1 The Broader Picture

The overarching legislation for use and development of resources in New Zealand is the *Resource Management Act 1991* (RMA). The purpose of the RMA is “*to promote sustainable management of natural and physical resources*”. It sets out the principles of *Matters of National Importance* (Section 6), *Other Matters* (Section 7), and *Treaty of Waitangi* (Section 8). All three sections have implications for land use and development on the coast. In particular “*the natural character of the coastal environment ... and public access to those resources*” is identified as a matter of national importance. These principles must be *recognised and provided for* in the implementation of the Act.

The RMA also provides for the preparation of Policy Statements and Plans. In accordance with Section 57 of the RMA, the New Zealand Coastal Policy Statement (NZCPS) has been developed. The NZCPS was released in 1994 and contains policies for use and development including:

- Policy 1.1.1 Impact of subdivision, use and development on the natural character of the coastal environment
- Policies 3.1.1 through 3.5.4 Activities involving the subdivision, use or development of areas of the coastal environment

The NZCPS provides good direction for decisions relating to land use and development on the coast in particular it lists as a national priority “*avoiding sprawling or sporadic subdivision*” and “*avoiding cumulative adverse effects of subdivision, use or development*”. However the NZCPS policies have not been strongly translated into working documents such as district or regional plans. The NZCPS is to be reviewed in 2003.

## 2.2 Regional Provisions

The RMA requires regional councils to prepare a regional policy statement (Section 60, RMA 1991). The purpose of the Regional Policy Statement (RPS) is to “*achieve the purpose of the Act by providing an overview of the resource management issues of the region and policies and methods to achieve integrated management of the natural and physical resources of the whole region.*” The RPS for the Wellington Region was adopted in May 1995. It addresses resource management issues that are important to the Wellington Region but is not prescriptive in the way issues should be dealt with.

The RPS lists issues, objectives, policies and methods for achieving objectives. The Coastal Environment (Chapter 7) lists issues that should be given due consideration when making decisions on subdivision, land use and development. Some of the issues also relate to urban development and impacts on ecology and landscape, and should be read in conjunction with The Built Environment and Transportation (Chapter 14), Landscape and Heritage (Chapter 10) Natural Hazards (Chapter 11).

Appendix 1 lists the RPS Coastal Environment issues, objectives and policies for land use and development. The first issue recognises the potential for individual developments to cause significant adverse effects and also the potential for the cumulative effects of developments to lead to significant adverse effects. The RPS aims to address this issue by managing subdivision, use and development and the allocation of resources of the coastal environment in such a way to ensure adverse effects are avoided, remedied or mitigated.

The RPS also lists methods to achieve the objectives. The primary method recommended to implement the Coastal Environmental Policies (1-7) is through the district plans. Other methods include liaison with the territorial authorities, iwi and Department of Conservation; for the territorial authorities to develop and implement management and other non-statutory plans; and the preparation of a Regional Coastal Plan.

The Regional Coastal Plan for the Wellington Region was adopted in March 2000. The plan is operative within the coastal marine area, with the landward boundary as the line of mean high water springs (MHWS). It has issues, objectives, policies and rules relating to use and development that generally relate to the seaward side of the coast. Objective 4.1.20, however, recognises the need for integration of “*management of land, water and air, both within the coastal marine area, and across the line of mean high water springs*”.

There is other legislation that has varying levels of control over use and development such as the *Building Act 1991*, *Forests Act 1994*, and *Crown Minerals Act 1991*.

## 2.3 District Provisions

While all activities on the coast fall within the broader statutory framework described above, it is at the District level that most people will have dealings when wanting to undertake a use or development. It is also at this level that there is the greatest potential for guiding use and development and implementing regional and national policies.

Issues, objectives and policies for use and development on the coast are incorporated in the Masterton, Carterton and South Wairarapa Operative District Plans. A summary of these is presented in Appendix 2. South Wairarapa is alone in specifically identifying “*management of the coastal area*” as an issue, though Masterton does identify “*the natural character of the coast*” as an issue. Loss of amenity or potential land use conflict can be associated with changes in land use and development and all three districts identify “*amenity values*” as an issue, though not specifically for the coast.

The South Wairarapa Plan has several objectives relating to coastal management including “*sustainable management of the natural and physical resources of the coastal environment*”. The Carterton Plan has objectives to “*maintain and enhance the character and amenity of the rural area*” and to ensure “*subdivision and any development meet(s) environmental standards*”. The Masterton Plan objectives

include “*the preservation of the natural character of the coastal environment, with the avoidance of inappropriate subdivision, use and development*”.

The three plans list quite different policies. South Wairarapa has a policy to “*restrict residential development in coastal areas to settlements (identified in the Plan) and limit the settlement expansions to land...identified for this purpose*”. This is a clear policy on where development should and shouldn’t occur on the coast.

Carterton focuses more on “*managing the density of developments to deal with adverse effects on rural amenity*”, and ensuring “*no subdivision, use or development of land compromises the values of identified natural area and features ... (or)...will be subject to erosion, subsidence, slippage or inundation*”. This policy relies heavily on being able to measure what amenity is and how density of developments will impact on existing amenity, and on identifying important natural areas and features.

Masterton seeks “*to provide for activities that would not adversely affect the natural character of the coastal environment*” and provide for “*...those activities and development that may adversely affect the natural character of the coastal environment...within areas that have already been developed*”. This policy relies on being able to define ‘natural character’ and limiting use and development that may adversely affect natural character to areas already developed. While this policy is less clear than the South Wairarapa policy on containing development, it may be interpreted to be working towards the same outcome.

The districts also differ in the designation of management zones, policy areas (see Table 2.1) and accompanying rules (see Table 2.2). Consequently the statutory requirements for the same activity may differ across the Wairarapa.



**Table 2.1** Operative District Plan Zones, Environments, and General and Policy Management Areas, for coastal areas of South Wairarapa, Carterton and Masterton Districts (SWDP, CDP and MDP respectively).

<b>SWDP</b>	<b>CDP</b>	<b>MDP</b>
<b>Zones</b>	<b>Environments</b>	<b>General Management Areas</b>
<ul style="list-style-type: none"> <li>∅ Rural</li> </ul>	<ul style="list-style-type: none"> <li>∅ Rural</li> </ul>	<ul style="list-style-type: none"> <li>∅ Rural</li> <li>∅ Urban</li> <li>- Castlepoint</li> <li>- Riversdale Beach</li> </ul>
<b>Policy Areas</b>	<b>Management Areas</b>	<b>Special Management Areas</b>
<ul style="list-style-type: none"> <li>∅ Coastal Protection Policy Area</li> <li>- extends inland to approximately the top of the first ridge</li> <li>- excludes Settlements and the Wharekauhau Tourist Village</li> <li>∅ Wharekauhau Tourist Village</li> <li>∅ Settlements</li> <li>- Lake Ferry</li> <li>- Whangaimoana</li> <li>- Whatarangi</li> <li>- Ngawi</li> <li>- Mangatoetoe</li> </ul>	<ul style="list-style-type: none"> <li>∅ Coastal Management Area</li> <li>- extends 60m inland from mean high water springs</li> <li>- is primarily a response to manage coastal hazards</li> </ul>	<ul style="list-style-type: none"> <li>∅ Coastal Management Area</li> <li>- extends approximately 1km inland but is defined along property boundaries</li> <li>- excludes Castlepoint and Riversdale Beach</li> <li>∅ Coastal Hazard Zone</li> <li>- extends 30 m inland at Castlepoint</li> <li>- is site specific at Riversdale Beach</li> </ul>

Table 2.2 (below) illustrates that for many activities in coastal areas there is some level of resource consent application required, but whether an activity is permitted, controlled, or discretionary, varies from district to district.

In the Carterton and Masterton Districts resource consent is generally required for subdivision but not for construction of a dwelling. In areas where a dwelling is a

permitted activity, the impact of a change in development from, for example an open paddock to residential buildings, needs to be considered at subdivision stage.

As well as having different issues, objectives, policies and rules, the interpretation and implementation of plans by planners, developers, and decision-makers leads to further variability between and within the districts in assessing changes in land use and development. As discussed later in Section 3.5- Trends, there is may also be a misunderstanding among the community that application for resource consent is a process they must undergo but that consent will always be granted.

While the District Plans have the potential to manage land use and development and ensure the implementation of national and regional policies, there remains a need for professional and political consistency between decision making and policy setting and implementation. It is envisioned that the development of an overarching coastal strategy for the Wairarapa will help to provide the framework for this to be achieved.

**Table 2.2** A summary of Operative District Plan resource consent requirements for activities in South Wairarapa, Carterton and Masterton (SWDP, CDP, and MDP respectively). Continued on next page.

*Note: all activities are required to meet certain performance standards for each level of control. If these standards are not met, the activity will be considered under a stricter level of control.*

SWDP	CDP	MDP
<p><b>Permitted</b></p> <ul style="list-style-type: none"> <li>- <u>dwelling</u> in the residential sections of settlement areas</li> </ul> <p><b>Controlled</b></p> <ul style="list-style-type: none"> <li>- one dwelling per residential lot in the Wharekauhau Tourist Village</li> <li>- subdivisions in the Wharekauhau Tourist Area, and subdivision where no additional saleable allotments area created</li> </ul> <p><b>Discretionary</b></p> <ul style="list-style-type: none"> <li>- <u>dwelling</u> in the Coastal Protection Area</li> <li>- <u>subdivisions</u> (other than above)</li> </ul>	<p><b>Permitted</b></p> <ul style="list-style-type: none"> <li>- <u>residential activities</u>, primary production activities</li> <li>- boundary adjustment where no additional building lots are created</li> </ul> <p><b>Controlled</b></p> <ul style="list-style-type: none"> <li>- <u>Subdivision</u>- lot size must be a minimum of 3 ha</li> </ul> <p><b>Limited Discretionary</b></p> <ul style="list-style-type: none"> <li>- any structure or building on a hilltop or ridgeline</li> </ul> <p><b>Discretionary</b></p> <ul style="list-style-type: none"> <li>- any activity that does not meet standards for permitted, controlled or limited discretionary activities, eg <u>subdivision with lots of less than 3 ha</u></li> <li>- <u>in the Coastal Management Area</u>: all activities other than minor conservation and land maintenance activities</li> </ul>	<p><b>Permitted</b></p> <ul style="list-style-type: none"> <li>- <u>1 dwelling per lot</u>, community amenity facilities, farming, forestry, reserves and associated facilities,</li> </ul> <p><b>Controlled</b></p> <ul style="list-style-type: none"> <li>- some subdivisions, generally where there are existing buildings</li> </ul> <p><b>Discretionary</b></p> <ul style="list-style-type: none"> <li>- <u>subdivision</u> (other than as above)</li> </ul>



## **Chapter 3**

# **Resource Inventory**

## **3.1 Methodology**

The existing land use and development along the Wairarapa coast was mapped using the GIS software Arc View and the Wellington Regional Council database for groundcover and from aerial photos taken in 1943, 1989 and 2001/02. Topographic and cadastral information used to prepare this report is copyrighted to LINZ. A list of databases is detailed in Appendix 3.

A definitive inland boundary has not been determined for this study other than through the visual assessment of uses and developments. Where a use or development was on or near the coast it has been documented. The community infrastructure such as halls and schools has also been include for the inland settlements of Tinui, Whareama, Te Wharau, Tukurumuri, and Pirinoa as they provide a service for people in the coastal settlements.

An assessment was made of the areas along the coast where dwellings or residential lots were grouped together. These areas are referred to throughout this report as **settlements**. Data such as area of land occupied by residential lots and number of dwellings was collected for all settlements. Based on the number of lots, lot size, configuration, and the presence/absence of infrastructure it was decided that the six larger settlements and the recently approved subdivision at Flat Point, should also be described in more detail in the Built Environment and Infrastructure Technical Report. Infrastructure information for the smaller settlements is presented in this report. The table below (Table 3.1) identifies the settlements. See Appendix 4, Figure 1 for locations.

**Table 3.1** Settlements on the Wairarapa coast. All are discussed in this report and the six larger settlements are also discussed in the Built Environment and Infrastructure Technical Report. See Appendix 4 Figure 1 for locations.

<b>Only in Land Use and Development Technical Report</b>	<b>Also in Built Environment and Infrastructure Report</b>
Te Kopi	Lake Ferry
Mangatoetoe	Whangaimoana
Orui	Whatarangi
Whakataki	Ngawi
Okau	Flat Point
Mt Percy	Riversdale Beach
Mataikona	Castlepoint

Not including smaller settlements in the *Infrastructure and Built Environment Technical Report*, should not be taken as an indication of a measure of the significance or otherwise of those settlements, nor does it reflect zones or management areas as designated in the District Plans.

## **(1) Determining Land use**

### **(a) Residential and Rural-Residential**

For the purpose of this report lots were defined and mapped as **residential** land use if they were less than 2000m<sup>2</sup> and/or were in settlements, and as **rural-residential** land use if they were between 2000m<sup>2</sup> and 15 hectares. Not all residential or rural-residential lots are developed with a dwelling, however they provide the potential for such development to occur. While this classification system is a useful way to designate most of the residential land use there are a few exceptions.

Many of the lots at Homewood/Okautete are larger than 15 hectares and as such do not actually fall within the rural-residential classification, however it is felt the rural-residential category best represents the existing land use. The land has several houses clustered together and some community infrastructure such as a hall and two

churches. Designating the land as pastoral would not properly reflect the current use.

Many of the dwellings at Te Kopi settlement are on a single large title and as such would not meet the 'lot-size' criteria as designated for residential land use. This category has been used however as it best reflects the existing land use.

The baches at Ocean Beach have not been designated as a residential land use as they are dwellings existing on public land. In the time since the baches were built there has been a change in policy and public perception in regards to the occupation of public land. Where possible the baches at Ocean Beach have been discussed separately as they do not represent a typical residential land use.

### ***(b) Other Land use***

Other land use was determined from a landcover database. The database maps dominant landcover such as pasture, planted forest, and bare ground. A full list of categories in the landcover database is listed in Table 3.2. Due to the high number of categories, these were amalgamated to create: three *landcover* categories, **bare ground**, **indigenous forest and scrub**, and **inland water and wetlands**; two *land use* categories, **pastoral** and **forestry**; and the *land management* category of **district council land**.

Land used for extensive grazing and other farming has been designated as **pastoral** and throughout the report the term '**agriculture**' and 'pastoral land use' is used interchangeably. Land used for plantations has been designated as **forestry**.

Ownership details, surveyed boundaries and the land/sea boundary determined from topographic and 2001/02 aerial photo were used to map land owned or managed by district councils (district council land),

and **untitled land**. A database for Department of Conservation managed land (**DoC managed land and reserves**) has also been overlaid on the land use maps. The landowner/manager information is included on the land use map as it provides an indication of where public land is, highlights potential for enhanced access, and because management techniques may be different for public and private land.

**Table 3.2** Categories from the landcover database (WRC 2000) and associated land use and landcover categories used for this report.

<b>Landcover database categories</b>	<b>Associated landcover and land use categories</b>
primarily pastoral	pastoral
planted forest	forestry
urban	residential
indigenous forest	indigenous forest and scrub
gorse manuka	indigenous forest and scrub
intermediate shrub	indigenous forest and scrub
rank grass	indigenous forest and scrub
tussock	indigenous forest and scrub
bare ground	bare ground
coastal sands	bare ground
coastal wetlands	inland water and wetlands
inland water	inland water and wetlands
inland wetlands	inland water and wetlands
urban open space	district council reserves
mines and dumps	none in study area
primarily horticultural	none in study area

## **(2) Determining Development**

Aerial photos from 1943, 1989 and 2001/2002 were used to determine the presence and location of dwellings. The scale of the photos was different for the different years and ranged from 1:6000 to 1:10000. Due to resource constraints, the full aerial photo data set from 1943 and 1989 has not been scanned/digitised, which would have enabled a more detailed comparison. While every attempt has been made to accurately represent the data available, limitations such as the scale of photos mean the data should be considered a fair representation, rather than an absolute answer.



Depending on scale and image clarity it is not always easy to determine from aerial photos whether a building is being used as a dwelling or not. The size and shape of the building, the presence/absence of tracks to the buildings and location of other buildings and shelter belts was used to help classify whether a building was likely to be used as a dwelling. Baches were included as dwellings as they represent a 'residential' development though not necessarily full time.

## 3.2 Existing Land Use

Map sheets 1 to 12 (Appendix 4) illustrate land use, landcover and land manager.

The predominant land use along the Wairarapa coast is pastoral, residential and rural-residential. As there is no defined inland boundary for this study, the total area of pastoral land use has not been calculated. Once an inland boundary is defined in consultation with the public, it will be relatively simple to calculate the total area for all land uses and include the information as an addendum to this report.

A visual assessment however clearly shows that, based on extent of area, agriculture is the most widespread land use. Residential and rural-residential lots cover a smaller area, approximately 110.5 ha and 275.5 ha respectively. While the area of residential use is relatively small, the number of people who own residential or rural-residential lots on the coast is high relative to pastoral landowners as much of the agricultural land is in large holdings.

What was not able to be determined from this study was how much of the residential land was used on a permanent basis, and how much was used for holiday/occasional use. The Masterton District Council undertook a survey of Riversdale Beach landowners in 2001. Results from that survey indicated that more than 60 percent of respondents did not have their primary place of residence in Riversdale Beach. While different settlements will have varying proportions of permanent and holiday use, it is

reasonable to say that much of the residential land is not being used on a permanent basis.

There is a small amount of forestry on the coast and there has been an increase in the amount of naturally regenerated vegetation since vast areas were cleared pre-1943. Environmental factors and economic viability has limited the amount of land used for forestry as discussed below in 'Limitations to Changes in Land use'.

Other mapped land uses include airstrips, pubs/hotels, public halls and public reserves. There are also areas that are commonly used for boat launching and commercial fishing bases. All of these uses have been marked on Maps 1 to 12 (Appendix 4). Recreation use and reserves are discussed in more detail in the Access and Recreation Technical Report.

### **3.3 Existing Development**

The majority of development of the Wairarapa coast is residential dwellings, with a minor amount of other infrastructure and development servicing residential areas.

#### **(1) Dwellings**

Table 3.3 details the number of dwellings present in 2001/02. As could be expected the majority of dwellings (71.0%) in 2001/02 are within defined settlements. Of this the two largest settlements, Riversdale Beach and Castlepoint combined constitute 47.2% of dwellings *within* settlements, and 35.5% of the *total* number of dwellings.

Twenty nine percent of dwellings are outside of settlements. Seventeen percent of those dwellings are the baches at Ocean Beach, which equates to 4.2% of the *total* number of dwellings.

**Table 3.3** Number of coastal dwellings in 2001/02.

<b>Location</b>	<b>2001/02</b>	<b>Percentage of total</b>
Lake Ferry	49	4.9
Whangaimoana	34	3.4
Te Kopi	17	1.7
Whatarangi	46	4.6
Ngawi	89	8.9
Mangatoetoe	21	2.1
Riversdale Beach	235	23.6
Orui	22	2.2
Castlepoint	99	9.9
Whakataki	23	2.3
Okau	34	3.4
Mt Percy	11	1.1
Mataikona	28	2.8
<b>Total in settlements</b>	<b>708</b>	<b>71.0</b>
Ocean Beach baches	42	4.2
Other	247	24.8
<b>Total outside of settlements</b>	<b>289</b>	<b>29.0</b>
<b>GRAND TOTAL</b>	<b>997</b>	<b>100</b>

## (2) Other Development

Other development is limited to a small number of commercial and community buildings, and buildings associated with pastoral land use and land based aquaculture (sheds). There is also infrastructure development such as public roads, electricity lines, and coastal protection works. Table 3.4 details the existing infrastructure in the smaller settlements. The larger settlements are discussed in the Built Environment and Infrastructure Technical Report.

**Table 3.4** Existing infrastructure in the smaller Wairarapa coastal settlements.

Settlement	Electricity Supply	Community Sewerage System	Road	Reticulated Water Supply	Other
Te Kopi	⌚	.	Sealed	.	Coastal protection works
Mangatoetoe	⌚	.	Sealed	.	
Orui	⌚	.	Unsealed	.	
Whakataki	⌚	.	Unsealed	.	
Okau	⌚	.	Unsealed	.	
Mt Percy	⌚	.	Unsealed	.	
Mataikona	⌚	.	Unsealed	.	

As this table indicates, all of the settlements are well serviced by electricity but none have communal water supply or wastewater disposal systems. This lack of infrastructure provides limitations to further expansion of the settlements and can also lead to adverse effects on the environment if dwellings are connected to poorly maintained or inadequate wastewater disposal systems.

## 3.4 Land Use Capability

### (1) Land use Capability Class

New Zealand soils have been assessed by the Water And Soil Division, Ministry of Works and Development (1978) for land use capability (LUC), that is, the suitability of the land for productive use taking into account any physical limitations the land may have. For the purpose of this technical report the land use capability **class** is presented. This is the broadest degree of classification and is sufficient for discussion on general trends and limitations. More detailed information is available as LUC **subclasses** and LUC **units**,

which detail the dominant limitation, and groups land with similar land use potential. Table 3.5 provides a description of Land use Capability classes.

**Table 3.5.** Description of Land Use Capability Classes. *Note 'arable use' refers to cultivated crops*

	<b>Description</b>	<b>Common Limitations</b>
<b>Class I</b>	Most versatile multiple-use land with virtually no limitations to arable use	
<b>Class II</b>	Very good land with slight limitations to arable use	Wetness, slight textural problems, shallow soils
<b>Class III</b>	Land with moderate limitations to arable use	Moderate erosion risk when cultivated and on shallow and stony soils
<b>Class IV</b>	Severe limitations to arable use but well suited to pastoral and forestry use	Erosion, shallow, stony and/or low fertility soils, altitude, climate
<b>Class V</b>	High producing land with limitations which make it unsuitable for cropping but which has only slight limitations to pastoral or forestry use	Slope, the presence of boulders and rock outcrops, excessive wetness
<b>Class VI</b>	Non arable land with moderate limitation and hazards under perennial vegetation cover	Erosion, soil limitations
<b>Class VII</b>	Unsuitable for arable use and has severe limitations or hazards under perennial vegetation can only support extensive grazing or erosion control forestry	Severe erosion, soil, wetness and climatic limitation
<b>Class VIII</b>	Very severe to extreme limitations or hazards which make it unsuitable for arable, pastoral or production forestry	Extreme actual or potential erosion, severe climatic limitations

Classes I to IV comprise land suitable for cropping, Class V to VII land is unsuitable for cropping but is suitable for pastoral or forestry use, and Class VIII land is suitable only for watershed protection purposes (Water and Soil Division, 1979).

Map sheets 13-24 (Appendix 4) indicate the LUC class for the Wairarapa. As the maps indicate, much of the land is class VI, VII and VIII hill country and steep land with moderate to severe limitations to agricultural use. There is a lengthy strip of class IV soils north of White Rock (see Map Sheet 18) and a smaller section south of Flat Point (see Map Sheet 20). The rocky nature of these coastal flats limits agriculture. Class II cropping land is limited to the

Homewood areas, with areas of less productive Class II land located at Wharekauhau, Pirinoa and Homewood.

The location of existing residential and rural-residential lots has been overlaid on the LUC map. Most of the settlement areas are on Class VI and VII soils although the rural-residential developments at Wharekauhau Tourist Village, Homewood and Whakataki are on Class III soils.

## **(2) Degree of Slope**

Degree of slope and slope instability is one of the most significant physical limitations to development and as such an inventory of land based on slope provides an indication of land available for development. The Wairarapa coast is largely characterised by relatively narrow areas of flat land bordered on one side by the sea and on the other by steep slopes. The exceptions are the terraces at Wharekauhau, Whangaimoana and Riversdale and the flat land at Homewood. Map Sheets 25-36 (Appendix 4) illustrate the degree of slope. There is a finite amount of flat available for development and it is often bordered by steep rather than gradual slopes. The implication of slope on potential land use change is discussed in Section 3.5 as one of the 'Limitations to changes in land use'.

## **3.5 Trends**

The above data has been collated to help determine trends for land use and development on the Wairarapa coastline.

### **(1) Land use**

While there has been some change in land use from agriculture to forestry and land based aquaculture, the greatest land use change has been the shift from agriculture to residential use.

Over the past ten years there has been a marked increase in the number of residential and rural-residential lots on the Wairarapa coast. Table 3.6 indicates the number of coastal subdivision applications referred to the Wellington Regional Council over the past 10 years and the number of lots created. The District Councils all have different databases and filing systems and there is some difficulty in obtaining the number of subdivision applications for the coastal areas. Instead the database for coastal subdivisions referred to WRC has been used. This shows trends in subdivision activity and was considered the most expedient way to collate the data for the three District Councils.

The subdivision applications listed do not include minor subdivision applications such as creation of a right of way, minor boundary adjustments, or where an application for subdivision was made and then *withdrawn*. The number of lots include a 'residual' farm lot for most subdivisions, however there are some subdivisions which create a number of similarly sized lots and do not result in a residual lot.

**Table 3.6** Summary of number of coastal subdivision applications **(1)** and proposed lots **(2)** received by the Wellington Regional Council from South Wairarapa, Carterton and Masterton District Councils (SWDC, CDC, and MDC respectively) in the period 1 January 1991 to 31 August 2002.

		91/92	93/94	95/96	97/98	99/00	01/02	Total
SWDC	(1)	1	0	2	9	5	3	20
	(2)	2	0	5	41	22	29	99
CDC	(1)	0	0	0	2	2	1	5
	(2)	0	0	0	5	46	2	53
MDC	(1)	5	2	7	15	6	5	53
	(2)	65	4	89	109	27	39	333
Wairarapa (total)	(1)	6	2	9	26	13	9	65
	(2)	67	4	94	155	95	70	485
Cumulative # of lots		67	71	165	320	415	485	

The total number of applications received for comment by the Regional Council between 1 January 1991 and the end of August 2002 was 65, resulting in 485 lots. At the time of writing this report, there are also pre-application discussions for 2 new subdivisions that would result in approximately 50 further new lots. These potential new subdivisions are ‘greenfield’ subdivisions, that is they are not adjoining or within existing settlements. There is also an application to be decided, for 20 new lots adjoining Riversdale Beach.

Of the 65 applications referred to the Regional Council since 1991 only one has been refused. This in itself is a trend of sorts and may result in some people wrongly assuming that applying for a resource consent is merely a process before consent *is* granted. It may also indicate that the policies in the District Plans and Regional and National Policy Statement are not being fully considered and implemented.

## **(2) Development**

Developments on the Wairarapa Coast are predominantly residential dwellings. A count was made of dwellings at three different periods (1943, 1989, 2001/02) and this data has been analysed to provide ‘development’ trends.

In determining development trends it is important to consider not only the absolute change in numbers of developments, but also the rate of change. Ideally, to calculate such trends a full data set would include the number of new developments each year over a considerable period plus an indication of other trends such as average income of the population, which can impact on the amount of development. The limited data collected for this report enables a discussion of broad rather than specific development trends.

Between 1989 and 2001/02, *within* all settlements other than Te Kopi there was an increase in the number of dwellings. Te Kopi experienced a decrease in the number of dwellings as a result of coastal erosion. There was also an



increase in dwellings *outside* of settlements, except for at Ocean Beach where there has been no increase since 1943. Both Te Kopi and Ocean Beach are settlements that occurred either prior to or without proper planning approval. Table 3.7 details the number of dwellings within and outside of settlements for 1943, 1989 and 2001/02.

**Table 3.7** Number of dwellings in 1943, 1989 and 2001/02

<b>Location</b>	<b>1943</b>	<b>1989</b>	<b>2001/02</b>
Lake Ferry	16	27	49
Whangaimoana	0	20	34
Te Kopi	0	20	17
Whatarangi	0	22	46
Ngawi	0	55	89
Mangatoetoe	0	6	21
Riversdale Beach	1	206	235
Orui	4	5	22
Castlepoint	35	84	99
Whakataki	0	8	23
Okau	0	10	34
Mt Percy	0	5	11
Mataikona	6	22	28
<b>Total in settlements</b>	<b>62</b>	<b>490</b>	<b>708</b>
Ocean Beach baches	0	42	42
Other	76	143	247
<b>Total outside of settlements</b>	<b>76</b>	<b>185</b>	<b>289</b>
<b>GRAND TOTAL</b>	<b>138</b>	<b>675</b>	<b>997</b>

The absolute increase in number of developments since 1943 is summarised in Table 3.8. The data includes farm dwellings as well as baches. There has not been a large increase in the number of farms on the coast and the number of farm dwellings has remained relatively stable. This indicates that a large majority of the new dwellings outside of settlements are baches.

**Table 3.8** Number of new dwellings for the periods 1943-1989 and 1989-2001/02

	<b>1943-1989</b>	<b>1989-01/02</b>	<b>Total</b>
Within settlements (including Te Kopi)	428	218	<b>646</b>
Outside of settlements	109	104	<b>213</b>
<b>Total</b>	<b>537</b>	<b>322</b>	<b>859</b>

Tables 3.7 and 3.8 illustrate there has been considerable development within settlements since 1943. Whether most dwellings are within or outside of a settlement gives an indication of the type of residential development (contained or dispersed) and may also indicate pressures on existing infrastructure or where infrastructure may be needed. The percentage of dwellings within settlements increased markedly from 44.9% in 1943 to 72.6% in 1989, but has since remained relatively stable representing 71.0% of dwellings in 2001/02.

While there has been twice as much development within rather than outside settlements between 1989 and 2001/02, the significance of 104 new dwellings outside of settlements is worth mentioning. A dwelling within a settlement may have a minimal impact on amenity and will not result in a change in land use. A dwelling outside of a settlement will cause a change in land use (usually from agricultural to residential) and may have a significant impact on the amenity of the area. While there were vast tracts of undeveloped coast in 1943, the addition of a total of 213 dwellings outside of settlements since that time has seen much of the coast become developed, even if only to a relatively minor extent.

While the two tables above represent the absolute increase in dwellings, due to the difference in time periods, they do not indicate the rate of development. One way to represent the rate of developmental change is through calculating the average increase in number of houses per year for a given period. This is provided in Table 3.9 below. Of course much residential development occurs

sporadically rather than gradually, however, given the limitations of the data this was seen as the way to best represent the changes in trends.

**Table 3.9** Rate of development measured in average number of new house per year for the period 1943-1989 and 1989-2001

	<b>1943-1989</b>	<b>1989-2001</b>
<b>Location</b>	<b>houses/year</b>	<b>houses/year</b>
Lake Ferry	0.24	1.83
Whangaimoana	0.43	2.67
Te Kopi	0.43	-0.25
Whatarangi	0.47	2.00
Ngawi	1.20	2.83
Mangatoetoe	0.13	1.25
Riversdale Beach	4.46	2.42
Orui	0.02	1.42
Castlepoint	1.07	1.25
Whakataki	0.17	1.25
Okau	0.22	2.00
Mt Percy	0.11	0.50
Mataikona	0.35	0.50
<b>Total above</b>	<b>9.30</b>	<b>18.17</b>
Ocean Beach baches	0	0
Other outside of settlements	1.46	8.67
<b>Total other</b>	<b>2.37</b>	<b>8.67</b>
<b>GRAND TOTAL</b>	<b>11.67</b>	<b>26.83</b>

Nearly all settlements experienced an increase in the rate of development. Te Kopi experienced a loss in the number of dwellings in the 1989-2001/02 period resulting in a negative rate of development.

Riversdale Beach is the only settlement that has seen a slowing of development for the period 1989-2001/02 compared with the earlier period. This is largely to do with the rapid development that occurred at Riversdale Beach in the late 1950s. The rate then began to drop as the settlement began reaching capacity, that is most sites had been developed and there were few vacant lots remaining. There are now very few vacant lots remaining in Riversdale Beach and development is moving to the hills behind the existing settlement.

Comparing the two time periods illustrates that there has been approximately a two-fold increase in the rate of development within settlements and a more than three-fold increase in the rate of development outside of settlements. This increased rate of development outside of settlements may indicate that some settlements are reaching capacity. Availability of vacant lots and lack of infrastructure may limit development within settlements. Lack of suitable land may limit subdivision and development within and around settlements and result in increased development outside of settlements (see ‘Limitations to Changes in Land use’, below).

In June 2002 the Wellington Regional Council released “In Focus: A snapshot of the Wellington Region 2002”. This report provides statistics on population, health, service provision and other socio-economic and environmental indicators for the Region and districts within the Region. While this data is not specific to the coastal areas of the Wairarapa, it highlights some emerging trends and can be used in conjunction with data collected to help determine development trends.

“In Focus” provides a table of the number of building consents approved for residential dwellings in each District in the Region in 2001 and this has been collated with data from the District Councils on the number of dwelling consents issued for coastal areas.

**Table 3.10** Total number of residential dwellings and dwellings on the coast for 2001 for the Wairarapa District Councils.

District Council	New Residential Dwellings	Dwellings on the coast	%
South Wairarapa	61	16	26.2
Carterton	31	2	6.5
Masterton	106	13	12.3
<b>Total</b>	<b>198</b>	<b>31</b>	<b>15.7</b>

This indicates that for the South Wairarapa District a significant proportion of development is on the coast, while for Masterton District (which contains the

two largest settlements of Riversdale Beach and Castlepoint) there has been less development on the coast relative to development inland. For the 2001 period, Carterton district only issued two building consents for coastal dwellings. This year (2002), due to the new subdivision at Flat Point there have already been four building consents issued for the Carterton coast and it is expected that the number of coastal building consents issued will increase again next year.

While there has been an increase in the number of dwellings (both inland and on the coast), there has not been a corresponding increase in the resident population of the Districts. Both Masterton and South Wairarapa experienced a decline in resident population, and while Carterton showed an increase it was by only 0.5% (a total of 36 people). While factors such as decreasing number of people per household may contribute to this, it is most likely that the demand for development on the Wairarapa coast is linked less to resident population demands and more to a demand for holiday houses.

As already discussed in Section 3.2- Existing Land use, a survey of Riversdale Beach landowners indicated that more than 60 percent of respondents used their dwelling primarily for holiday purposes. As well as going some way to explaining a decreasing population along with an increase in dwelling development, information on resident versus holiday population would also help to identify potential pressures on and need for infrastructure and services. An appropriate time to undertake such research would be in the development of structure plans for coastal settlements.

### **(3) Land Value**

Another trend that provides an indication of the pressure for changes in land use and development is the market value of residential land. People will not create residential subdivisions if it is not profitable or if the land is more valuable for a different land use. By comparing the average sale price of lots over time and between the coast and inland we can determine broad trends in land value.

The yearly average sale price for vacant and improved lots was collated by Dave Bulman of Bulman Valuation, for lots ranging in size from 10m<sup>2</sup> to 10000m<sup>2</sup> (1 ha) for both coastal properties and for the former Masterton Borough, now the Urban Ward of Masterton District. There was not an adequate data set available for coastal and other properties across the whole of New Zealand, however empirical information supplied by Bulman Valuations indicates there has been an increased demand for and value of coastal properties across New Zealand.

The figures used in this report do not include sales where the price paid was less than 75 percent of the valuation price as these sales are most likely to be within a family unit and not reflect market rates. The lots within the Masterton Urban Ward only include vacant residential properties and single dwelling houses and not commercial, industrial or multi-unit properties.

The Consumer Price Index (CPI) was used to provide an indication of economic activity in case property sale prices were as a result of high inflation or some other external 'cost of living' factor. The average sale prices and the CPI (adjusted to an appropriate scale) were plotted for vacant and improved lots (see Figure 3.1).

The graphs illustrate a marked increase in the price of vacant and improved lots on the coast compared with inland, particularly since 1998. Also of interest is the absolute cost of lots on the coast compared with inland. In 2001, a vacant lot on the coast was, on average, \$20 000 more than a lot in the former Borough of Masterton. As Castlepoint is the only coastal settlement with a community sewerage facility, in all other locations there will also be substantial set up costs for the installation of a septic system.

The rate of increase for average sale prices was also considerably higher than the rate of increase for the CPI indicating a large increase in coastal land value compared to other economic factors.

The trend of increasing ‘land value’ for residential coastal lots creates further pressure for a move towards residential use and development. To provide the greatest public benefit and ensure the minimum adverse impact on the broader community a strategic approach to subdivision and development is the best approach. It is often difficult however to argue for a strategic approach to achieve the greatest public benefit, against the immediate financial benefit to a landholder through the subdivision and sale of land.

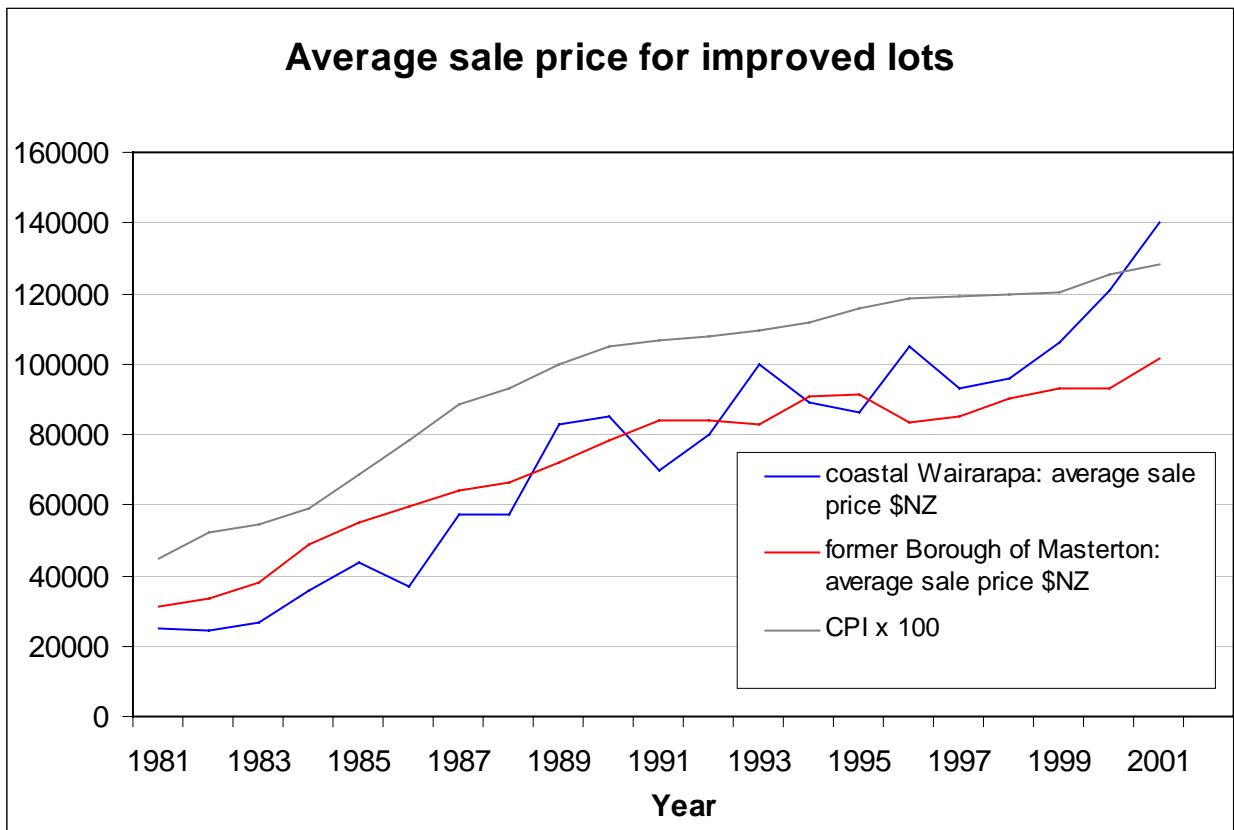
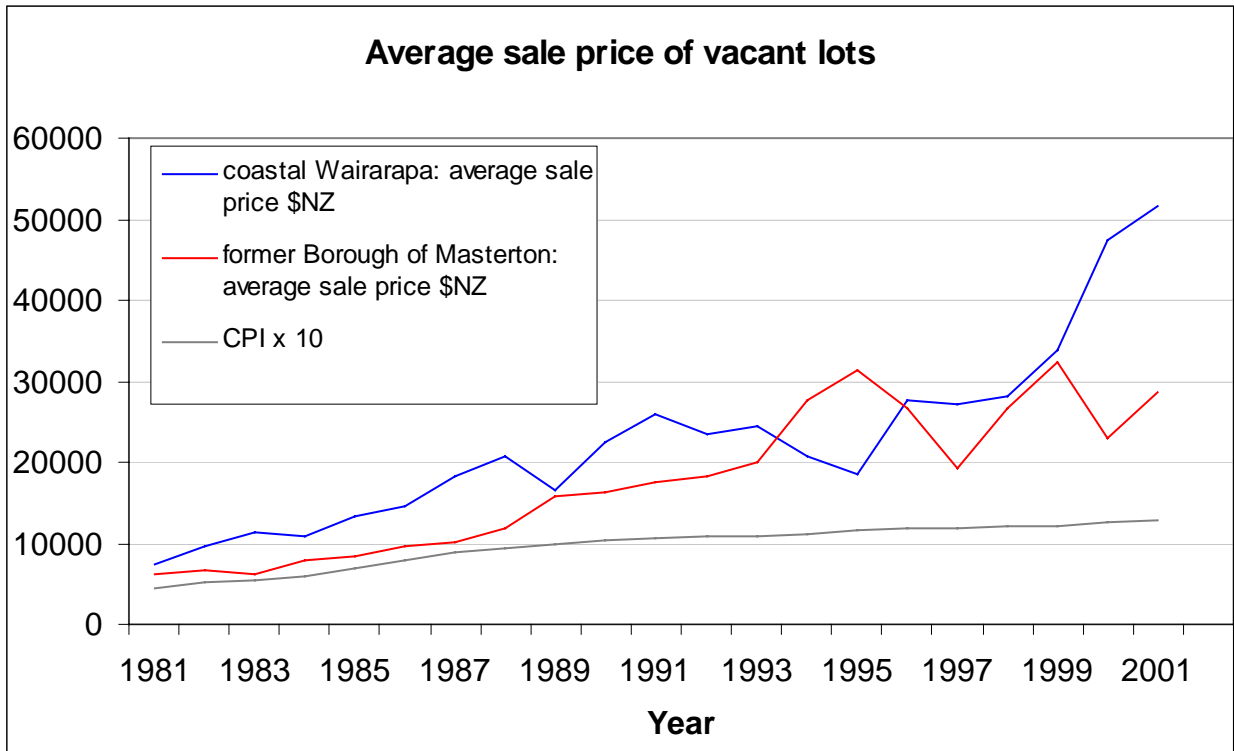


Figure 3.1 Average sale price for vacant and improved lots on the Wairarapa coast and former Borough of Masterton for the period 1981 to 2001. Prices are in New Zealand dollars. Consumer Price Index (CPI) has been adjusted to an appropriate scale.



## 3.6 Limitations to Changes in Land Use

As discussed earlier there has been a strong trend for a change in land use from agricultural to residential. There has also been some change in use to forestry and land based aquaculture facilities. Along with market forces, existing limitations to changes in land use have helped create past trends and are likely to, in part, determine future trends.

Expansion of the forestry industry on the coast is largely limited by environmental factors such as wind blown salt causing stunted tree growth and limiting return on the investment. The establishment costs, such as a considerable capital investment and taking relatively large amounts of pastoral land out of agricultural production may make a shift in land use too expensive. A lack of infrastructure such as roads, the distance from timber mills and the expense of harvesting on more difficult terrain may also limit forestry as a viable option for many coastal landowners.

Inadequate infrastructure, lack of commercial/industry support, and lack of experience or trials may also limit other uses such as land based aquaculture. In some cases public pressure to limit the use and its associated development may also affect expansion of the industry.

The topography of the area provides one of the most dominant limitations to changes in land use and development on the Wairarapa coast. As illustrated by Maps 25-36 (Appendix 4), flat land on the Wairarapa coast is a finite resource. Subdivisions and the resulting new developments are most likely to occur on relatively flat land. This is related to the instability of the slopes and engineering expenses associated with developments on steep slopes. The physical limitations of the land may result in growth in and around settlements occurring in a 'strip-development' fashion, as settlements are unable to expand to the steep slopes behind.

Recently there has been considerable interest in developing isolated 'new' subdivisions, for example the new Flat Point subdivision plus two other subdivisions at pre-application stage. This may be due to limited availability of flat land

surrounding existing settlements and results in subdivision occurring in a sporadic fashion.

The type of subdivisions (sprawling or compact) can be limited by the absence of infrastructure. For example, the lack of a community wastewater disposal facility often necessitates low-density development and the creation of larger lots that are able to treat and retain all wastewater on site. This will limit the number of lots able to be created in a new subdivision, and limits further subdivision of existing lots.

Lack of infrastructure can also lead to adverse impacts on the environment, an associated loss of amenity, and potentially reduce the desirability of living in a particular area. This, together with the potential cost of having to provide new infrastructure, may reduce the supply of, or demand for subdivision of the coast.

Finally, legislative and environmental considerations have the potential to influence trends and changes in land use and development and act as a 'limitation'. Full effect is not currently being given to national, regional and district policies to adequately guide changes in use and development on the coast particularly in regards to "*sprawling and sporadic subdivision and development*". These issues are perhaps best described as 'unheeded limitations' until such time as they are fully considered.

The existing trends can be expected to continue until limitations such as lack of infrastructure, cost of development or lack of suitable land make current land use changes unviable, or there is a clear strategic direction and policy implementation that addresses land use and development on the coast.

## Chapter 4

# Vulnerabilities

## 4.1 Issues

The inventory of existing land use and development and current trends in changing land use and development identified in Chapter 3 can be used to determine which activities are providing the greatest pressure for change in land use. Chapter 4 identifies these pressures, explores the relevant impacts of land use and development change, and lists the threats and opportunities of such changes.

Impacts from a change in land use and development can be many and varied. In some instances a single change in land use or development will have a large impact. For example a single house in an otherwise completely undeveloped area will have a larger visual impact than that same development in an existing settlement. A single development may also have a large impact if it sets a precedent for further development. Once a change of use or development is established it is often difficult to argue that further development should not be allowed.

Often a single use or development may have an almost indiscernible impact on its own but the cumulative effect of many similar developments is large. For example a small number may not have a major impact but the development over time of many houses and associated infrastructure results in a wholesale change in the land use and a large visual impact.

Whether or not a change in land use is of particular concern to the *wider community* is largely related to public perception and values, community expectations and accepted environmental and social standards. Of course whether or not a change in land use is of particular concern to an *individual*, will depend on whether that person is a landowner, developer, holiday or part-time resident.

For example, putting aside landscape, ecology and other issues not covered in this report, whether an increase in development on the coast is ‘good’ or ‘bad’ depends on what people want from the coast. If a person simply wanted a view of the coast, then they would support the creation of any number of sections along the coast that they could purchase and build a dwelling on. However, if they also wanted seclusion they would support the creation of a lot for themselves but discourage any further subdivision as an increase in population would detract from the initial appeal of the coast.

It is reasonable to expect that people will have values different from each other. It is the differences in values, along with other issues such as landscape, ecology, and heritage that require that changes in land use and development to be properly managed to ensure what people value on the coast is not permanently compromised.

The number of new lots created in the past ten years indicates the trend towards residential land use. Subsequently there has been an increase in development on the coast, mostly residential dwellings. The development pressure is not spread evenly along the coast and limitations such as capability of the land to support other use such as agricultural or forestry, together with topography and presence/absence of infrastructure can influence when and where development occurs.

The change in land use from agricultural to residential is not unique to the Wairarapa coast. Many areas on the fringe of settlement, towns and cities throughout New Zealand and other countries are experiencing unprecedented pressure for a change in land use from agricultural to residential use (see list of websites for references).

There is some concern that an ad hoc approach to such subdivision and land use change will result in the loss of high quality agricultural land and may reduce the viability of the agricultural industry and community. Based on the LUC information, it is evident that most of the land on the Wairarapa coast is not of high agricultural value, and as such, loss of production is not likely to be the primary concern when considering land use change. However a small amount of Class III soils removed from production on the Wairarapa coast, may have a larger impact, in terms of agricultural

viability of the area, than removal of a similar amount of Class III soils somewhere where there are extensive areas of higher class soils.

As well as considering agricultural viability, rural land use may also contribute to the amenity of an area by providing large areas of open (undeveloped) space. A change in use and resulting increase in development may have an adverse effect on the amenity of the area. In this respect, amenity is largely tied to landscape and natural character of the coast (see Landscape Technical Report).

Developments *within* settlements may provide the potential to increase infrastructure and may minimise land use conflicts, while a dispersed pattern of development, particularly strip or ribbon development may not. However with increased density of development there may be a loss of amenity for existing residents.

‘Greenfield’ subdivisions and development may provide the opportunity to minimise strip development along the coast, however it results in new settlements on what was previously open agricultural land. Due to the limited availability of flat land and issues of land ownership such new subdivisions are likely to be located and developed sporadically rather than strategically. Dave Bulman of Bulman Valuation who has over 25 years of experience echoes the concerns regarding ad hoc subdivision. He notes that it is important to acknowledge existing market demands and to plan strategically for such changes taking into consideration existing limitations and the potential effects of such development, rather than operating at either extremes of trying to prevent all development, or allowing a complete free reign for developments.

The environmental impact of a change in use and development can be significant. While many of the impacts relate directly to ecology (See Natural Environment and Ecology Technical Report) it is worth noting that limitations such as lack of infrastructure or poorly designed and maintain wastewater disposal systems can lead to contamination of surface and ground waters and discharges to the sea. This poses a risk not only to ecological systems but also to the health and safety of residents and visitors. When considering changes in use and development this must be recognised.

This report focuses primarily on how changes in land use and development impact on existing land use and development. It does not include how land use changes impact on landscape, ecology, heritage or recreation and access, as this is detailed in the other technical reports. The potentially wide reaching and interconnected nature of impacts across different fields should be kept in mind when reading this report.

Table 4.1 summarises:

- € **existing land use**- how the land is currently being used
- € **pressure**- activities that will cause a change in existing land use and development
- € **resulting changes in land use and development**- from a particular pressure
- € **threats**- possible negative impacts from those changes
- € **opportunities**- possible positive impacts from those changes

How to address the current trends and pressures for land use change and development is addressed in Chapter 5 - Responses.

**Table 4.1** Existing land use, the pressures for change in land use and impacts associated with that change.

<b>Land use</b>	<b>Pressure</b>	<b>Resulting change in land use and development</b>	<b>Threat</b>	<b>Opportunity</b>
<b>Pastoral</b>	Residential and rural residential subdivision	<p>Development of dwellings and increase in resident and/or temporary (holiday) population</p> <p>Possible increase in infrastructure</p>	<p>Land removed from agricultural production</p> <p>Increase in number of people and possible conflicts between existing agricultural practices conflicting and new residential use (often termed reverse sensitivity)</p> <p>Increase in community costs to build and maintain infrastructure</p>	<p>“One off” higher return for marginal or other farming land</p> <p>Well designed and strategic approach to subdivision may minimise loss of agricultural land compared with an ad hoc/incremental approach</p> <p>An increase in permanent residents provides impetus for an increase in infrastructure such as community sewerage facility and commercial opportunities such as shops</p>

<b>Land use</b>	<b>Pressure</b>	<b>Resulting change in land use and development</b>	<b>Threat</b>	<b>Opportunity</b>
<b>Pastoral</b> (continued)	Forestry	Increase in number of forestry lots and associated transport	Large areas of land removed from agricultural production  Potential increase in the frequency and ferocity of wild fire	May result in better soil conservation and management  Better return and more sustainable use for marginal land  Diversification of on-farm income
	Coastal hazards including erosion	Loss of land, stock, farming assets, fences	Increase pressure for protective infrastructure  Cost to landowner	If given due consideration in siting of developments, may discourage residential and commercial development
	Land based aquaculture facilities	Development of buildings and associated infrastructure	Small areas of flat land removed from agricultural production	Diversification of income and product  Employment



Land use	Pressure	Resulting change in land use and development	Threat	Opportunity
<p style="text-align: center;"><b>Pastoral</b> (continued)</p>	<p>Increased public access</p>	<p>Increased number of people on/near farms</p>	<p>Disruption to farming practices eg. lambing Potential increase in theft, litter, property damage</p>	<p>Diversification into tourism opportunities such as farmstays and/or coastal walks</p>
	<p>Fire</p>	<p>Loss of pasture, livestock and vegetation Loss of farm buildings and equipment</p>	<p>Loss of production Increase in soil erosion Loss of regenerating native plants</p>	

Land use	Pressure	Resulting change in land use and development	Threat	Opportunity
<p style="text-align: center;"><b>Pastoral</b> (continued)</p>	<p>Possible future pressures</p> <ul style="list-style-type: none"> <li>€ Onshore mining</li> </ul>	<p>Removal of land</p>	<p>Loss of agricultural production</p> <p>Land use conflict between existing agricultural use and mining related use, including problems of dust and contamination</p>	<p>Diversification of income</p> <p>May encourage upgrading of infrastructure eg roads</p>
	<ul style="list-style-type: none"> <li>€ Off shore mining</li> </ul>	<p>Land based support facilities for off shore mining</p>	<p>Land use conflict between existing agricultural use and mining related use, including problems of dust and contamination</p>	<p>Diversification of income</p> <p>May encourage upgrading of infrastructure eg roads</p>

Land use	Pressure	Resulting change in land use and development	Threat	Opportunity
<p style="text-align: center;"><b>Rural-Residential</b></p>	<p>Residential subdivision</p>	<p>Increased density of dwellings</p>	<p>Loss of 'rural' feel to lots and loss of amenity</p> <p>Increased pressures on infrastructure and services creating issues for effluent and rubbish disposal</p> <p>Development of extra services and increased costs to existing residents</p>	<p>Well planned subdivision may minimise the loss of rural-residential land</p> <p>An increase in permanent residents provides impetus for an increase in infrastructure such as community sewerage facility and commercial opportunities such as shops</p>
	<p>Coastal hazards</p>	<p>Loss of land, infrastructure and development</p>	<p>Increased pressure for protective infrastructure</p> <p><i>Note: due to large lot sizes, rural-residential lots may be able to accommodate a relatively large loss of land compared with more intensive subdivision</i></p> <p>May minimise development on the coast</p>	<p>If given due consideration in siting of developments, may discourage development on the coast</p> <p>Creation of buffer zones provides increased opportunity for recreation and access to the coast</p>

Land use	Pressure	Resulting change in land use and development	Threat	Opportunity
<p style="text-align: center;"><b>Residential</b></p>	<p>Lack of infrastructure and services</p>	<p>Lots unable to be developed due to constraints such as water supply and effluent disposal</p>	<p>Limits the growth potential of settlement thereby limiting future spending on infrastructure</p> <p>Poor environmental quality and loss of amenity</p> <p>Increased cost to service providers for services such as rubbish disposal</p>	<p>Limits growth of settlements and helps existing settlements retain remote and 'small' feel</p>
	<p>Coastal hazards</p>	<p>Loss of land, infrastructure and developments</p>	<p>If given due consideration in siting of developments, may discourage development on the coast</p> <p>Increases pressure for protection measures such as seawalls for existing developments/infrastructure</p>	

<b>Land use</b>	<b>Pressure</b>	<b>Resulting change in land use and development</b>	<b>Threat</b>	<b>Opportunity</b>
<b>Commercial/ Community Infrastructure and Services</b>	Insufficient population to support existing infrastructure and services	Closing/Removal of infrastructure and services	Loss of sense of community Deterioration of assets such as public buildings Further reduction in resident population and difficulty in justifying spending on community infrastructure Deterioration of environment, contamination of ground and surface water and discharge to the sea	Amalgamation of some services, decreased cost to service provider
<b>Aquaculture</b>	Perceived land use conflict	Objections to aquaculture proposals	Disincentive to enter into aquaculture industry	Maintains existing land use



## **Chapter 5**

# **Responses**

There are a variety of tools that can be used to help guide land use and development on the coast. Which statutory or non-statutory tools are suitable, and who implements them will heavily depend on the community's vision for the coast and the strategic direction set by the coastal strategy.

## **5.1 Existing Responses**

The existing responses to changes in land use and development on the Wairarapa coast are primarily the district plans, as summarised in Chapter 2 - Statutory Framework. The district plans list management issues, objectives, policies and methods to achieve the objectives. The methods to control land use change and impact are predominately district plan rules and controls through the resource consent process. While the district plans also mention liaison, advocacy, education and consultation, there is currently little or no non-statutory response to the issue of change in land use and development.

## **5.2 Recommended Responses**

There is currently no document that provides adequate strategic direction for land use and development on the coast. The development *and* implementation of such a strategy would go a long way to responding to existing issues of changes in land use and development and provide a proactive mechanism to manage future changes.

Listed below are some recommended responses to manage the pressures identified in Chapter 4 - Vulnerabilities. The greatest pressure to change in land use and development is that of subdivision and, accordingly many of the responses listed below are suggested to address the impacts of subdivision and subsequent residential development.

**Table 5.1** Recommended responses to issues surrounding changes in land use and development

<b>Issue</b>	<b>Response</b>	<b>Desired outcome</b>
<p style="text-align: center;"><b>Subdivision</b></p>	<p>Develop and implement a Coastal Strategy that provides a clear indication of the issues surrounding land use and development on the coast and incorporates professional and public opinion about the ways to address such issues</p>	<p>Clear strategic direction in regards to land use and development on the Wairarapa coast</p> <p>Minimise land use conflict</p> <p>Provide a level of certainty and consistency in regard to land use and development</p>
	<p>Develop and implement best practice guidelines for subdivisions on the coast and incorporate into the District Plans</p>	<p>Quality applications are received which identify and address issues and consider options to mitigate effects</p> <p>Provide consistency in assessment of subdivision applications</p> <p>Quality subdivisions achieved</p> <p>Minimise loss of production, problems with infrastructure, and land use conflict</p>



<b>Issue</b>	<b>Response</b>	<b>Desired outcome</b>
<p style="text-align: center;"><b>Subdivision</b> (Continued)</p>	<p>Develop and implement Siting and Design Guidelines for structures on the coast and incorporate into the District Plans.</p>	<p>Minimise impact of developments through appropriate siting and design</p> <p>Help provide information and education to allow people to better understand the impacts of developments on the coast</p>
	<p>Identify appropriate and inappropriate areas for subdivision, through development of structure plans for existing settlements and assessment of areas outside of settlements</p>	<p>Provide strategic approach to changes in land use and development to allow the process to become proactive rather than reactive</p> <p>Provide consistency in assessment of subdivision applications</p> <p>Minimise land use conflict</p>
	<p>Encourage information sharing and training for local professionals and decision makers about the impacts of subdivisions on the coast and techniques to minimise such impacts</p>	<p>People are able to make better informed decisions</p> <p>Quality subdivisions are achieved</p>

<b>Issue</b>	<b>Response</b>	<b>Desired outcome</b>
<p style="text-align: center;"><b>Lack of infrastructure</b></p>	<p>Investigate and prioritise where infrastructure upgrading is required</p> <p>Ensure new developments provide adequate infrastructure</p>	<p>Infrastructure upgrading happens where it is needed most</p> <p>The cost of new infrastructure is borne by developers and not the wider community</p> <p>Constraints to further developments are removed</p> <p>Ensure that discharges to ground and surface water and the sea do not pose a risk to human health and safety</p>
<p style="text-align: center;"><b>Land use diversification</b></p>	<p>Encourage, through the development of and participation in industry groups, appropriate alternative land uses to complement existing agricultural land use</p>	<p>Diversification of land use</p> <p>Reduced pressure to subdivide land</p>

## 5.3 Conclusion

There is pressure to move towards residential use and development on the Wairarapa coast as indicated by the number of subdivision applications in the last ten years. Associated with this is an increased amount and rate of development. These changes may result in positive and/or negative effects.

The current responses to these pressures for change are largely statutory. The regional and district plans have varying levels of policy and rules relating to land use and development on the coast and the New Zealand Coastal Policy Statement (1994) discourages “*sprawling and sporadic subdivision*”. While policies exist at the national, regional and district level, there is considerable variability in the way these policies are implemented.

In the past ten years almost no coastal subdivision applications have been refused. While not advocating that Councils become obstructive, the existing ‘can do’ approach, if not in keeping with national, regional and district policies, may reinforce the idea held by some members of the community that a resource consent will always be granted.

The need to have a strategic approach to changes in land use and development has been recognised by Councils and the community and the development of a Coastal Strategy is well underway. The strategy should provide a clear indication of the issues surrounding land use and development on the coast and incorporate professional and public opinion about the ways to address such issues

Alongside the strategy there is also a need for more detailed guidelines and assessment of appropriate places for changes in land use and development. This can be achieved through the development of structure plans for existing settlements and an assessment of limitations to development for other land. The development of structure plans should have considerable community input and should address the issues of development density, provision of infrastructure and identify potential areas for growth (if any).

Assessment of land outside of settlements for limitations to, and impact from potential development, taking into account the issues raised in this and the other Technical Report will also help reduce the current situation of sporadic subdivision.

Vital to all of the responses recommended in this report, are community and political support for incorporating strategies, policies and guidelines into the District Plans and ensuring they are implemented consistently.

# References

## References:

*In Focus: A Snapshot of the Wellington Region 2002*, Centre for Research, Evaluation and Social Assessment.

*Our Land Resources 1979*, Water and Soil Division, Ministry of Works, Wellington, New Zealand.

*Riversdale Beach Resort Survey of Residents, Property Owners and Camp Leaseholders*, December 2000, Masterton District Council.

## Statutory Documents:

*New Zealand Coastal Policy Statement 1994*, Department of Conservation, Wellington, New Zealand

Regional Policy Statement for the Wellington Region, May 1995

Regional Coastal Plan for the Wellington Region, June 2000

Carterton District Council Operative Plan, March 2000

Masterton District Council Operative Plan, June 1997

South Wairarapa District Council Operative Plan, November 1998

## Legislation:

The Resource Management Act 1991

## Websites:

<http://www.stats.govt.nz>

<http://www.maf.govt.nz/mafnet/rural-nz/profitability-and-economics/performance/west-bop-productivity/httoc.htm>

<http://www.soil-water.org.au/pmp/proceedings/subdivision.htm>

<http://www.nrm.qld.gov.au/factsheets/pdf/land/LM48w.pdf>

<http://www.kentcounty.com/gov/planzone/agdist.htm>

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## ***Appendices***

### **Appendix 1- Regional Policy Statement**

Summary of Coastal Environment issues, objectives and policies for land use and development in the Regional Policy Statement for the Wellington Region.





Issue	Objective	Policy
<p><b>7.2</b></p> <p><b>1.</b> ∅ Potential for individual developments to cause significant adverse effects</p> <p>∅ Potential for the cumulative effects of otherwise insignificant developments or uses to lead to significant adverse effects</p> <p>The effects may arise from:</p> <ul style="list-style-type: none"> <li>- demands for expansion of existing urban areas along coastal margins</li> <li>- demands to subdivide isolated rural coastal properties as a consequence of downturn in the rural economy</li> <li>- development pressures for specific facilities that need to be located in the coastal environment</li> <li>- pressures from activities which can cause adverse effects</li> </ul>	<p><b>7.3</b></p> <p><b>1.</b> ∅ The natural character of the coastal environment is preserved through:</p> <p>(4) The management of subdivision, use and development and the allocation of resources in the coastal environment so that adverse effects are avoided, remedied or mitigated</p>	<p><b>7.4</b></p> <p><b>1.</b> ∅ To give effect to the following matters when planning for and making decisions on subdivision, use and development in the coastal environment:</p> <p>(1) Protection of areas of nationally of regionally significant indigenous vegetation and fauna habitat</p> <p>(2) Protection of values associated with nationally or regionally outstanding landscapes, seascapes, landforms, sand dunes and beach systems and sites of historical or cultural significance</p> <p>(3) Protection of sensitive, rare or unusual natural and physical resources, habitats, amenity values and ecosystems which are unique to the coastal environment</p> <p>(4) Protection of the integrity, functioning and resilience of the coastal environment</p>

Issue	Objective	Policy
		<p><b>2.</b> To consider, where relevant and to the appropriate extent, the following matters when planning for and making decisions about subdivision, use or development in the coastal environment:</p> <p>(1) The degree to which the proposed activity will impose effects additional to those resulting from existing subdivision, use and development, and the extent to which such cumulative adverse effects on natural character may be avoided, remedied or mitigated</p> <p>(2) The extent to which natural character has already been compromised in an area and the need to avoid sprawling or sporadic subdivision, use or development</p> <p>(3) the efficient use of finite resources in the coastal environment and the viability of alternative sites outside the coastal marine area and outside of the coastal environment for the proposed activity</p> <p>(4) The potential impact of projected sea level rise</p>

Issue	Objective	Policy
<p>2. ☐ Conflict from the need to maintain and enhance public access and the need to protect certain areas or rights</p>	<p>2. ☐ Existing provisions for public access to and along the coastal marine area remain and appropriate opportunities are taken to enhance public access</p>	<p>(5) The actual or potential adverse effects of subdivision, use or development on areas of cultural or spiritual significance, heritage resources and on scenic, scientific, recreation, open space or amenity values</p> <p>(6) The adequacy of provision of infrastructure services (particularly for the disposal of waste)</p> <p>3. ☐ To restore and rehabilitate the natural character of the coastal environment where appropriate</p>
<p>2. ☐</p>	<p>2. ☐</p>	<p>4. ☐ To ensure, in planning for or making decisions about new subdivision, use or development, that there is no reduction in the quality of existing legal access to and along the coastal marine area; and that opportunities are taken, other than in exceptional circumstances, to enhance the amount and variety of public access to and along the coastal marine area</p>

Issue	Objective	Policy
<p><b>4.</b> ∅ Human activities causing degradation of coastal water quality, contamination of sediments and biota, and disruption to natural processes</p>	<p><b>1.</b> ∅ The natural character of the coastal environment is preserved through: (4) The management of subdivision, use and development and the allocation of resources in the coastal environment so that adverse effects are avoided, remedied or mitigated</p> <p><b>3.</b> ∅ Coastal water is of a high standard</p>	<p><b>5.</b> To maintain or improve the quality of coastal water by: (2) Avoiding, remedying or mitigating the effects of activities in the coastal environment that can degrade coastal water</p>
<p><b>5.</b> ∅ Limited knowledge of the nature and functioning of coastal ecosystems and coastal processes which leads to difficulties when local authorities need to make decisions about the potential effects of subdivision, use and the environment</p>	<p><b>1.</b> ∅ The natural character of the coastal environment is preserved through: (4) The management of subdivision, use and development and the allocation of resources in the coastal environment so that adverse effects are avoided, remedied or mitigated</p>	<p><b>6.</b> ∅ To adopt a precautionary approach to the evaluation of risk in making decisions that affect the coastal environment</p>

# Appendix 2- District Plans

Summary of District Plan provisions for Masterton District Plan (MDP), South Wairarapa District Plan (SWDP) and Carterton District Plan (CDP)

Numbers correspond to numbering in the District Plans.



	<b>SWDP</b>	<b>CDP</b>	<b>MDP</b>
<b>Issues</b>	<p>4.2 Management of the coastal area</p> <p>4.4 Management of urban growth</p> <p>4.5 Management of activities near urban areas</p> <p>4.6 Managing Rural Activities</p> <p>4.8 Protection of the Natural Environment</p> <p>4.10 Maintenance and Enhancement of Amenity Values</p>	<p>2.2 The effects of development on rural amenity</p> <p>9.1 Subdivision and development</p> <ul style="list-style-type: none"> <li>- suitability</li> <li>- natural feature and heritage matters</li> <li>- different situations where subdivision occurs</li> <li>- impact on infrastructure</li> </ul> <p>13.1 Recognising and protecting important natural areas and features within the District</p>	<p>1. Land resources</p> <p>5. Energy production and use</p> <p>6. Infrastructure</p> <p>7. Efficient Development</p> <p>8. Access to resources of significant value</p> <p>9. Natural character of the coast</p> <p>11. Important landscapes</p> <p>13. Significant natural resources</p> <p>17. Amenity values</p>

	<b>SWDP</b>	<b>CDP</b>	<b>MDP</b>
<b>Objectives</b>	<p><b>5.1.1 General</b></p> <p>(2) To provide for sustainable management of the District's natural and physical resources</p> <p>(4) To recognise and provide for the needs of the urban and rural areas</p> <p><b>5.3 Rural</b></p> <p>(1) Maintain the productive potential of the land and soil resource of the rural area</p> <p>(2) Protect the significant natural and cultural resources from the adverse effects of rural activities</p> <p>(3) Recognise and develop the recreation potential of the rural area</p> <p>(4) Provide for the sustainable management of the district's rural settlements</p> <p>(5) Provide for the sustainable management of natural and physical resources within the rural area</p>	<p><b>2.3 Rural Environment</b></p> <p>2.3.1 Maintain and enhance the character and amenity of the rural area</p> <p>2.3.2 Protect significant features from the adverse effects of development</p> <p><b>9.2 Subdivision and Development</b></p> <p>9.2.1 Ensure the act of subdivision and any development meet minimum environmental standards</p> <p><b>13.2 Natural Environment</b></p> <p>13.2.1 Recognition and protection of important natural areas and features</p>	<p><b>1. Land Resource</b></p> <p>1. To sustain the productive potential of the district's soils, particularly within areas containing highly versatile soils.</p> <p><b>5. Energy production and use</b></p> <p>5. The promotion of the efficient production and use of energy within the district.</p> <p><b>6. Infrastructure</b></p> <p>6. An efficient sustainable infrastructure that can meet the needs of today's community and the reasonably foreseeable needs of the district's future generations.</p> <p><b>7. Efficient development</b></p> <p>7. An environmentally efficient pattern of development promoted by the integration of sustainable management principles into the resource use decision making process.</p>



	<b>SWDP</b>	<b>CDP</b>	<b>MDP</b>
<p><b>Objectives</b> (continued)</p>	<p><b>5.4.1 Settlements</b> (1) To provide for the continuation and consolidation of the District's existing rural settlements and marae</p> <p><b>5.5.1 Coastal Management</b> (1) Sustainable management of the natural and physical resources of the coastal environment (2) The protection of the values and natural character of the coastal environment (3) Recognition of areas and values significant to tangata whenua (4) Better public access to and along the coast where appropriate (5) Mitigation of coastal hazards</p>		<p><b>9. Access to resources of significant value</b> 9. The provision of public access to natural and physical resources of significant value to the community in a manner appropriate to the value and circumstances.</p> <p><b>10. Natural character of the coast</b> 10. Preservation of the natural character of the coastal environment, with the avoidance of inappropriate subdivision, use and development.</p> <p><b>11. Important landscapes</b> 11. The district's outstanding natural features and landscape will be protected and enhanced.</p> <p><b>13. Significant natural resources</b> 13. The identification and protection of important natural resources.</p>

	SWDP	CDP	MDP
<b>Objectives</b> (continued)			<p><b>17 Amenity Value</b></p> <p>17. Identification and maintenance of amenity values that the community wishes to protect</p>
<b>Policies</b>	<p><b>5.1.2 General</b></p> <p>(1) To adopt measures to prevent or reduce the risk of unacceptable effects on the environment and remedy or mitigate adverse affects where they do occur</p> <p>(3) To broadly differentiate between urban and rural activities in a way that reinforces the existing land use patterns and promotes more sustainable management of existing resources</p> <p><b>5.3.2 Rural</b></p> <p>(1) To impose such controls on subdivision and building as are necessary to: protect highly productive land; avoid sporadic subdivision and development that causes demand for provision of services; and avoid the effects of natural hazards.</p>	<p><b>2.4 Rural Environment</b></p> <p>2.4.1 Manage the density of development to deal with adverse effects on the open rural amenity</p> <p>2.4.2 Manage the adverse effects of activities to limit their impact on the quality of the rural environment</p> <p>2.4.3 Any activity utilising the land resource should be managed in a sustainable manner so as to avoid soil loss</p>	<p><b>1. Land Resource</b></p> <p>1.1 To provide maximum opportunities for productive, land-based activities, subject to environmental standards.</p> <p>1.2 To minimise the irreversible loss of productive land.</p> <p>1.3 To promote responsible land use practices in order to avoid, remedy or mitigate land degradation and erosion.</p> <p>1.4 To manage subdivision in order to protect the productive potential of the land.</p> <p>1.5 To encourage a range of lot sizes to maximise the diversity of land use activities.</p>

	<b>SWDP</b>	<b>CDP</b>	<b>MDP</b>
<p><b>Policies</b> (continued)</p>	<p>(4) To identify “Policy” areas within the rural zone having special environmental values and deal with them in a way that protects and enhances their special value and avoids adverse affects from activities.</p> <p>(5) To identify Settlement Policy Areas in order to manage existing communities within the rural area.</p> <p>(6) To recognise that rural land on the fringe of urban areas needs to be protected from urban encroachment to protect the use and potential use of land for primary production activities.</p> <p>(8) Encourage the adoption of sustainable land management techniques through promotion, provision of information, economic incentives and regulation where appropriate</p>	<p><b>9.3 Subdivision and Development</b></p> <p>9.3.2 Ensure servicing is provided as appropriate in rural situations at the time of subdivision and development which avoids, remedies or mitigates adverse environmental effects and protects public health.</p> <p>9.3.3 Particular regard to be given to subdivision and development within areas subject to natural hazards to avoid adverse effects.</p> <p>9.3.4 Ensure any subdivision and development protects any identified ... natural environment features.</p> <p>9.3.5 Ensure any subdivision and development does not adversely impact upon the safety and efficiency of existing infrastructure.</p>	<p>1.6 To provide for the extraction of land resources in a manner which will not result in significant long term adverse effects.</p> <p><b>5. Energy production and use</b></p> <p>5.4 To promote energy conservation in subdivision, and in the siting, construction, alteration and operation of activities, roads, infrastructure and buildings.</p> <p><b>6. Infrastructure</b></p> <p>6.3 To promote an efficient use of infrastructure by optimising the use of the capacity of existing infrastructure before new infrastructure is established.</p> <p><b>7. Efficient development</b></p> <p>7.1 To promote an efficient pattern of subdivision that protects environmental values and systems, and the potential of resources.</p>

	<b>SWDP</b>	<b>CDP</b>	<b>MDP</b>
<p><b>Policies</b> (continued)</p>	<p><b>5.4.2 Settlements</b></p> <p>(1) To recognise the distinctive character of each of the existing rural settlements when making land use decisions.</p> <p>(2) To recognise and maintain the existing land use patterns of rural settlement</p> <p><b>5.5.2 Coastal Management</b></p> <p>(1) Ensure that the Council carries out its functions with regard to its responsibilities pursuant to Part II of the Resource Management Act 1991</p> <p>(4) To restrict residential developments in coastal areas to the settlements of Whangaimoana, Lake Ferry, Whatarangi, Ngawi and Mangatoetoe and Wharekauhau and to limit settlement expansions to land already identified for this purpose</p>	<p><b>10.3 Natural Hazards</b></p> <p>10.3.1 To reduce the potential risk posed by natural hazard events by ensuring that all new structures and activities are located and constructed so as to minimise material damage from natural hazards.</p> <p><b>13.3 Natural Environment</b></p> <p>13.3.1 Identify the important natural areas and features of value by developing and maintaining a schedule of these resources in the Plan.</p> <p>13.3.2 Ensure no subdivision, use or development of land compromises the values of identified natural areas and features.</p>	<p>7.2 To minimise the use of undeveloped natural and physical resources by promoting the efficient use of existing resources.</p> <p><b>9. Access to resources of significant value</b></p> <p>9.1 To prioritise the needs for public access to areas of significant value.</p> <p><b>10. Natural character of the coast</b></p> <p>10.1 To provide for activities that would not adversely affect the natural character of the coastal environment, subject to environmental standards.</p> <p>10.2 The provision for those activities and development that may adversely affect the natural character of the coastal environment, subject to environmental standards, within areas that have already been developed.</p>

	<b>SWDP</b>	<b>CDP</b>	<b>MDP</b>
<p><b>Policies</b> (continued)</p>	<p>(5) To control shingle and sand removal from beaches and river mouths</p> <p>(6) To ensure development does not take place in coastal areas presently subject to erosion, or in sensitive areas where development could contribute to, or be affected by, erosion, subsidence or inundation</p> <p>(7) To provide for the establishment of appropriate commercial facilities, community service and tourism opportunities subject to appropriate planning control and where these developments do not adversely affect the natural character of the coastal environment</p> <p>(8) To restrict industrial development to that necessary to service the fishing industry and the harvesting or marine resources generally</p> <p>(2) To establish in conjunction with other relevant bodies a complete public easement along the landward margin of the coastal marine area with appropriate public access points</p>	<p>13.3.3 Encourage an awareness of the need to protect natural features and areas amongst the local community.</p> <p>13.3.5 Seek to protect natural areas and features by working with other agencies to expand the extent of the areas and features held in public ownership.</p> <p>13.3.6 Ensure that subdivision and development along the coast will not be subject to erosion, subsidence, slippage or inundation from any source while maintaining and enhancing public access and protecting important natural areas and features.</p> <p>13.3.10 Avoid, remedy or mitigate the adverse effects of subdivision and development within significant natural areas or features</p>	<p>10.4 To promote the restoration, rehabilitation and enhancement of the natural character of the coastal environment where development or activities have had an unacceptable adverse impact.</p> <p>10.5 To adopt a precautionary approach in making decisions that affect the natural character of the coastal environment.</p> <p><b>11. Important landscapes</b></p> <p>11.1 To identify important natural features and landscapes within the district, and the values associated with them.</p> <p>11.2 To protect or enhance outstanding landscapes, areas and significant views from the adverse environmental effects of activities.</p> <p><b>13. Significant natural resources</b></p> <p>13.1 To identify and protect important natural resources within the district, and their associated values.</p>

	<b>SWDP</b>	<b>CDP</b>	<b>MDP</b>
<p><b>Policies</b> (continued)</p>	<p>(3) To encourage landowners to enter into voluntary agreements for the protection of private land and the provision of public access to and along the coast, with a particular emphasis on those areas which have been identified as having significant natural features or heritage value</p>		<p>13.2 To ensure a comprehensive management system is developed to protect the district's significant natural resources.</p> <p><b>17. Amenity values</b></p> <p>17.1 To establish environmental standards for activities to avoid, remedy or mitigate potential effects on amenity values.</p>

# Appendix 3- Databases

List of databases used to compile the Land Use and Development Technical Report.





Database	Date
landcover (lcdb)	2000
dcd	2001
airstrips	2000
reserves	2001
NZMS 260 (topo)	2000
colour photos	2001/02
DoC reserves	2002
nzlr	1997



# Appendix 4- Maps

**Figure 1:** Map Index and Settlement Locations.

**Map Sheets 1- 12:** Existing Land use and Development.

**Map Sheets 13-24:** Land use Capability Class.

**Map Sheets 25-36:** Slope of Land.

Please refer to the Map Folder bound separately.