

# ***Executive Summary***

This report collates existing information on the urban environment and infrastructure of the larger settlements; Castlepoint, Riversdale Beach, Ngawi, Lake Ferry, Whatarangi and Whangaimoana and the new settlement at Flat Point. As well as providing an overview of each settlement, the report identifies current threats to infrastructure and the impact that the absence of infrastructure has on the potential for settlement expansion, the environment, and the viability of settlements. Responses to address such issues are also presented.

The Wairarapa coastal settlements have a combination of urban and rural style infrastructure systems. In all settlements other than Whangaimoana, the roads are sealed with limited kerb, channelling and footpaths. The road to some settlements is at risk from coastal erosion. As there are often no alternative land-based routes, emergency and other services to some settlements may become threatened. The cost of maintaining such access and the cost to upgrade roads as traffic usage grows with increasing coastal development are also an issues.

None of the settlements have reticulated water supply. Water for domestic supply is either from the collection of rainwater or by extracting ground water. In some areas the groundwater has become contaminated. This presents a health risk to residents and can place severe limitations on the availability of water. Lack of water can limit settlement expansion and can also become a fire risk issue if there is inadequate water available for fire fighting.

The only settlement to have a community sewage disposal system is Castlepoint. While this has not yet reached capacity, it is expected that it will do so within 5 to 10 years. If a larger treatment and disposal system can not be accommodated, this will limit the expansion of Castlepoint.

The lack of a community sewage disposal system also limits the density and expansion of settlements. On-site disposal systems require disposal fields, reserve and buffer areas all to be contained within the lot boundaries. This limits the amount of land on the lot available for houses, sheds and driveways and may preclude infill development.

Another issue associated with on-site wastewater disposal is that of the impact on the environment and the health risk of failing on site disposal systems which are contaminating groundwater. Groundwater contamination has been identified at Riversdale Beach, Whatarangi and Lake Ferry. There have been no studies undertaken at Ngawi and Whangaimoana, however contamination is suspected. Masterton and South Wairarapa District Councils are working respectively with the Riversdale Beach and Lake Ferry communities with the view to installing a community system in each settlement.

For the new greenfield development Flat Point, the installation, operation, maintenance and monitoring of wastewater systems are requirements of the subdivision consent.

There are three issues identified in relation to electricity and telecommunication services. They are the impact of infrastructure development on visual amenity, the existing availability of services, and the future provision of services. All settlements are well serviced by electricity, however the poles and overhead lines can be visually intrusive and there is the issue of who pays for existing services to be undergrounded. Due to the isolated nature of the settlements, the issue of whether electricity will continue to be supplied by conventional systems has also been identified.

Cell phone coverage is poor in all settlements other than Riversdale and Lake Ferry.

All communities rely on Volunteer Rural Fire Services. Appliances are stationed at Castlepoint, Riversdale Beach, Lake Ferry and Ngawi. The other settlements rely on Volunteer Rural Fire Forces from other rural communities, which is an issue in terms of response times.

Other than a limited system at Castlepoint, the settlements do not have community stormwater systems. With an increase in development comes an associated increase in the amount of impermeable surfaces, which leads to a higher volume of runoff. The runoff can become contaminated by sediment, residue on roads such as engine oil, and other sources. If there is inadequate retention and treatment of this high volume of

stormwater runoff, this can have effects on slope stability and erosion; contamination of natural watercourses; and increased risk of localised flooding.

Along with the issues listed above, the report also identifies refuse disposal, signage, coastal erosion and loss of social infrastructure (such as community and commercial services) as significant issues.

To address the infrastructure issues identified above a suite of responses have been recommended including:

- € Identify appropriate and inappropriate areas for subdivision, through development of structure plans for existing settlements and assessment of areas outside of settlements. Such plans should identify how much expansion is appropriate and limitations to expansion. They should present solutions to existing problems and ensure that the need for and the provision of infrastructure and the possible re-zoning of land is adequately addressed.
- € Ensure district plans allow for infill development provided infrastructure, environmental and hazard constraints are adequately addressed.
- € When assessing subdivision applications, consider the implications of increasing the size of settlements where access is threatened.
- € Determine areas under increasing pressure for car and boat parking and develop a parking strategy to ensure impacts on residents and the environment are minimised and safety is addressed.
- € Through consultation with Rural Fire Forces and Environmental Health Officers develop minimum recommendations for on-site water supply.
- € Investigate and prioritise where communal sewerage system infrastructure is required. Ensure that the infrastructure response is appropriate for each settlement and considers future expansion.

- € Implement a “warrant of fitness” approach to ensure waste water systems function adequately. Follow up with appropriate action where discharges do not comply with local authority and regional rules.
- € Encourage settlements to consider alternative energy sources, such as wind power to ensure that they will have adequate electricity provision into the future.
- € For proposed subdivisions in high fire risk areas, request comment from the New Zealand Fire Service.
- € Identify and prioritise which settlements require the installation or upgrade of a community stormwater system to minimise erosion, flooding, or the contamination of waterbodies.
- € Require developers to provide an impact report on the effects of their development on overland flows; natural watercourses; flooding; and land stability.
- € In determining whether an individual development will impact on or require stormwater infrastructure, give consideration to the potential for future expansion and development of the settlement.
- € Work with public land managers to develop a set of signage guidelines to ensure signs are consistent, effective and adequately maintained.
- € Encourage new greenfield developments to provide for future commercial and community services through design of lot size and not insisting that every lot is covenanted to restrict it to residential development.

## ***Acknowledgements***

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# **Chapter 1**

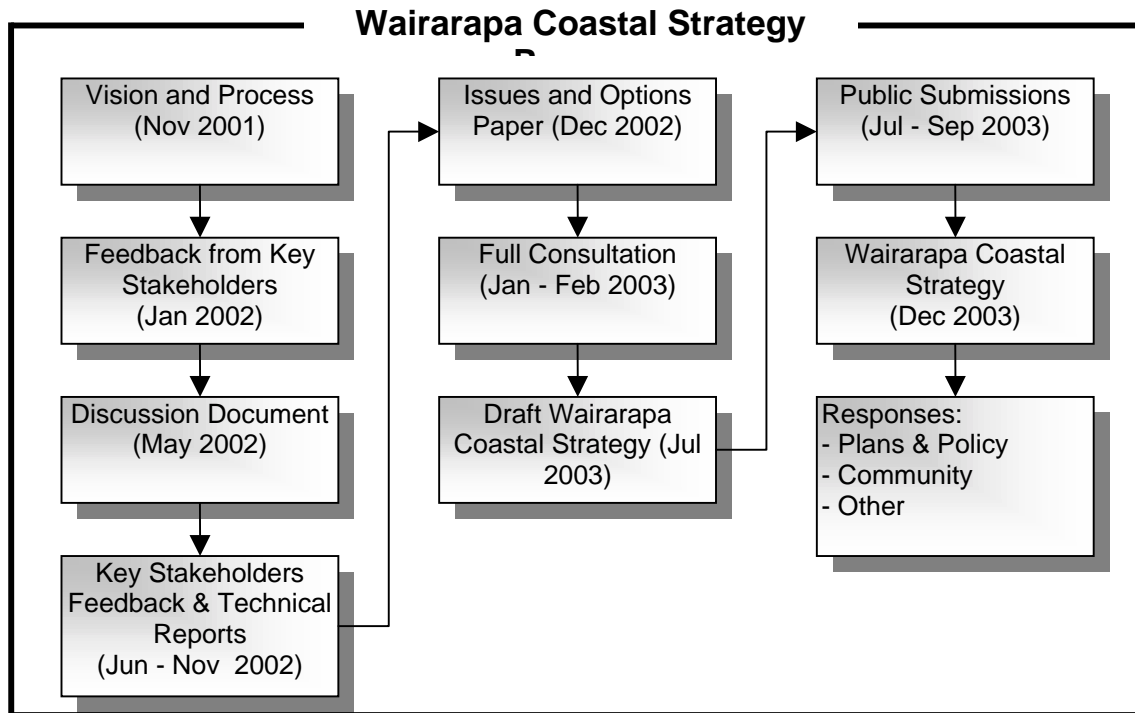
## **Introduction**

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 1991 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;
- € Hazards;
- € Land Use and Development; and
- € Access and Recreation.

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 this technical report is to collate existing information on the urban environment and infrastructure values of the Wairarapa coastline, in particular Castlepoint, Riversdale Beach, Flat Point, Ngawi, Lake Ferry, Whatarangi and Whangaimoana (for locations see Appendix 1). These settlements were chosen based on a method which included assessment of number and size of lots and existing infrastructure and is outlined in Section 3.1- Scope of Study.

The report identifies current and future threats to the built environment and infrastructure, makes recommendations on responses to minimise such impacts and provides an overview of statutory provisions and requirements relating to coastal infrastructure.

## Chapter 2

# Statutory Framework

## 2.1 Resource Management Act 1991

The Planning Context and Methods Technical Report provides an overview of the Purpose and Principles of the Resource Management Act 1991 (RMA). The following sections relate to the built environment and infrastructure on the coast.

### Section 5

- (1) *The purpose of this Act is to promote the sustainable management of natural and physical resources.*
- (2) *In this Act, “sustainable management” means managing the use, development, and protection of natural and physical resources in a way, or at a rate, which enables people and communities to provide for their social, economic, and cultural wellbeing and for their health and safety while—*
  - (a) *Sustaining the potential of natural and physical resources (excluding minerals) to meet the reasonably foreseeable needs of future generations; and*
  - (b) *Safeguarding the life-supporting capacity of air, water, soil, and ecosystems; and*
  - (c) *Avoiding, remedying, or mitigating any adverse effects of activities on the environment.*

### Section 6

- (a) *The preservation of the natural character of the coastal environment (including the coastal marine area), wetlands, and lakes and rivers and their margins, and the protection of them from inappropriate subdivision, use, and development:*
- (b) *The protection of outstanding natural features and landscapes from inappropriate subdivision, use, and development:*

### Section 7

- (c) *The maintenance and enhancement of amenity values:*
- (f) *Maintenance and enhancement of the quality of the environment:*

## 2.2 New Zealand Coastal Policy Statement

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. Much of the built environment on the Wairarapa coast is residential development and as such policies relating to residential use and development are particularly applicable to this report.

The following sections in the NZCPS relate to infrastructure and the built environment.

<i><b>Policies</b></i>	
<i><b>1.1.1</b></i>	<i>It is a national priority to preserve the natural character of the coastal environment by:</i>
	<i>(a) encouraging appropriate subdivision, use or development in areas where the natural character has already been compromised and avoiding sprawling or sporadic subdivision, use or development in the coastal environment;</i>
	<i>(b) taking into account the potential effects of subdivision, use, or development on the values relating to the natural character of the coastal environment, both within and outside the immediate location; and</i>
	<i>(c) avoiding cumulative adverse effects of subdivision, use and development in the coastal environment.</i>

### **3.1 Maintenance and Enhancement of Amenity Values**

<i><b>Policies</b></i>	
<i><b>3.1.1</b></i>	<i>Use of the coast by the public should not be allowed to have significant adverse effects on the coastal environment, amenity values, nor on the safety of the public nor on the enjoyment of the coast by the public.</i>
<i><b>3.1.2</b></i>	<i>Policy statements and plans should identify (in the coastal environment) those scenic, recreational and historic areas, areas of spiritual or cultural significance, and those scientific and landscape features, which are important to the region or district and which should therefore be given special protection; and that policy statements and plans should give them appropriate protection.</i>
<i><b>3.1.3</b></i>	<i>Policy statements and plans should recognise the contribution that open space makes to the amenity values</i>

	<i>found in the coastal environment, and should seek to maintain and enhance those values by giving appropriate protection to areas of open space.</i>
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**Section 3.2 Providing for the Appropriate Subdivision, Use and Development of the Coastal Environment**

<b>Policies</b>	
<b>3.2.1</b>	<i>Policy statements and plans should define what form of subdivision, use and development would be appropriate in the coastal environment, and where it would be appropriate.</i>
<b>3.2.2</b>	<i>Adverse effects of subdivision, use or development in the coastal environment should as far as practicable be avoided. Where complete avoidance is not practicable, the adverse effects should be mitigated and provision made for remedying those effects, to the extent practicable.</i>
<b>3.2.3</b>	<i>Policy statements and plans should recognise the powers conferred by Section 108 to obtain environmental benefits which will (to a degree) offset environmental damage, by specifying purposes in their plans for which ‘financial contributions’ can be sought, in cases where there will be unavoidable adverse effects from subdivision, use or development in the coastal environment.</i>
<b>3.2.4</b>	<i>Provision should be made to ensure that the cumulative effects of activities, collectively, in the coastal environment are not adverse to a significant degree.</i>
<b>3.2.5</b>	<i>Subdivision, use and development in the coastal environment should be conditional on the provision of adequate services (particularly the disposal of wastes), and the adverse effects of providing those services should be taken into account when preparing policy statements and plans and when considering applications for resource consents.</i>
<b>3.2.6</b>	<i>Policy statements and plans should make provision for papakainga housing and marae developments in appropriate places in the coastal environment. ‘Papakainga housing’ means residential occupancy on any ancestral land owned by Maori.</i>
<b>3.2.7</b>	<i>Policy statements and plans should identify any practicable ways whereby the quality of water in the coastal environment can be improved by altered land management practices, and should encourage the adoption of those practices.</i>
<b>3.2.8</b>	<i>Provision should be made for the protection of the habitats (in the coastal marine area) of species which are important for commercial, recreational, traditional or cultural purposes.</i>
<b>3.2.9</b>	<i>Policy statements and plans should contain a requirement</i>

	<i>that the Maritime Safety Authority and the Hydrographic Office of the Royal New Zealand Navy are to be notified of new structures and works in the coastal marine area at the time permission is given for their construction.</i>
<b>3.2.10</b>	<i>Policy statements and plans should indicate that when restoration plantings are carried out, preference should be given to the use of indigenous species, with a further preference for the use of local genetic stock.</i>

### **3.4 Recognition of Natural Hazards and Provision for Avoiding or Mitigating their Effects**

<b>Policies</b>	
<b>3.4.4</b>	<i>In relation to future subdivision, use and development, policy statements and plans should recognise that some natural features may migrate inland as the result of dynamic coastal processes (including sea level rise).</i>
<b>3.4.5</b>	<i>New subdivision, use and development should be so located and designed that the need for hazard protection works is avoided.</i>

The NZCPS provides good direction for decisions relating to development on the coast in particular it list 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.

## **2.3 Regional Policy Statement for the Wellington Region**

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.

Section 7, The Coastal Environment, sets out the issues, objectives and policies for managing the coastal environment.

**Objective 1**

*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.*

<b><i>Policies</i></b>	
2	<p><i>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:</i></p> <ul style="list-style-type: none"> <li>(1) <i>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;</i></li> <li>(2) <i>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;</i></li> <li>(3) <i>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;</i></li> <li>(4) <i>The potential impact of projected sea level rise;</i></li> <li>(6) <i>The adequacy of provision of infrastructure services (particularly for the disposal of waste).</i></li> </ul>
5	<p><i>To maintain or improve the quality of coastal water by:</i></p> <ul style="list-style-type: none"> <li>(1) <i>Improving, where necessary, the quality of fresh water entering the coastal marine area;</i></li> <li>(2) <i>Avoiding, remedying or mitigating the effects of activities in the coastal environment that can degrade coastal water; and</i></li> <li>(3) <i>Avoiding, remedying or mitigating the effects of point discharges that directly enter the coastal marine area so the effects do not render any water in the coastal marine area unsuitable for any purpose specified in a Regional Coastal Plan for the Wellington Region.</i></li> </ul>

Section 14 of the RPS, The Built Environment and Transportation sets out objectives and policies for development of structures, facilities and other built resources. Note policies 3 and 4 relate only to transport systems and corridors and have been omitted.

**Objective 1**

*Urban areas, the built environment and transportation systems are developed so that they, and their associated activities, use resources efficiently and demand for the use of finite resources is moderated.*

**Objective 2**

*The adverse environmental effects that result from the use of urban areas, transportation systems and infrastructure are avoided, remedied or mitigated and, in particular, any effects that result from the concentration and scale of activities in urban areas are recognised and provided for.*

**Objective 3**

*The environmental quality of urban areas is maintained and enhanced.*

<b><i>Policies</i></b>	
<i>1</i>	<i>To improve understanding of sustainable management in relation to urban areas and the built environment, and to develop means by which it can be implemented.</i>
<i>2</i>	<i>To use natural and physical resources efficiently in the development of urban areas and in use of the built environment by:</i> <ul style="list-style-type: none"> <li><i>(1) Encouraging forms of urban development that reflect efficient use of resources; and</i></li> <li><i>(2) Avoiding, where practicable, the use of new resources, particularly non-renewable resources.</i></li> </ul>
<i>5</i>	<i>To recognise that the services provided by network utility operations and infrastructure make an important contribution to the social and economic well-being of the Region.</i>
<i>6</i>	<i>To promote the provision and efficient use of infrastructure in the Region, and the reduction of adverse environmental effects from its use.</i>
<i>7</i>	<i>To take account of regionally significant effects on the environment of any new use or development, the size, function or location of which is likely to give rise to those effects.</i>
<i>8</i>	<i>To promote a high level of environmental quality in urban areas by:</i> <ul style="list-style-type: none"> <li><i>(1) Encouraging good urban design;</i></li> <li><i>(2) Enhancing and protecting amenity values; and</i></li> <li><i>(3) Maintaining and enhancing natural areas and protecting those places, features or buildings with significant heritage, ecological, cultural or landscape values.</i></li> </ul>



## 2.4 Regional Plans

Along with a Regional Policy Statement, regional councils are able to prepare Regional Plans to address specific issues, uses and developments. The Wellington Regional Plans are listed below along with a short description of the purpose of the plans. The Plans have controls (rules) which help to achieve that purpose and may impact on development and infrastructure. In particular there are controls for discharges to land and water which are relevant to the provision of individual or community wastewater disposal.

### (1) Regional Coastal Plan (RCP)

This plan is operative within the Coastal Marine Area of the Wellington Region. ‘Coastal Marine Area’ is defined in the RCP as “*the foreshore, seabed and coastal water, and the air space above the water*”. The seaward boundary is the outer limits of the territorial sea and the landward boundary is generally the line of mean high water springs.

### (2) Regional Soil Plan

This plan controls soil and vegetation disturbance activities on “erosion prone land” and addresses how any potential adverse effects may be avoided, remedied or mitigated. The presumption is that any use of land is allowed as of right unless it is specifically restricted by a district rule or a regional rule.

### (3) Regional Plan for Discharges to Land

This plan contains rules for the safe discharge of contaminants to land. The discharge of effluent from septic tanks in the rural area is a permitted activity provided that the conditions set out in the applicable rules of that plan can be met and that there is compliance with the Building Act 1991.

### (4) Regional Fresh Water Plan

This plan contains rules for taking, using, damming or diverting freshwater. It also sets out methods and standards to provide for the relationship of tangata whenua with

fresh water; the protection of the natural character of wetlands, lakes and rivers and their margins; the safeguarding of the life-supporting capacity of water; and the protection of the amenity and recreational values of wetlands, lakes and rivers. It also promotes the avoidance and mitigation of the adverse effects associated with flooding.

## **(5) Regional Air Quality Management Plan**

The Regional Air Quality Management Plan applies to all types of discharges to air. Discharges covered by the plan include (among other things): agrichemical spray and powder application; fumigation; on-farm and factory farming processes; processing of animal and plant matter; coating processes (including spray painting); abrasive blasting processes; burn-offs and burning; landfilling and composting; and sewage and trade waste conveyance and treatment processes.

## **2.5 District Plans**

The Wairarapa Coastal Strategy area covers three territorial local authority boundaries. Masterton District lies between the Mataikona River in the north to the Kaiwhata River to the south; Carterton District, lies between the Kaiwhata River in the north to Honeycomb Rock in the south; and South Wairarapa District is the southern most district lying between Honeycomb Rock in the north to the western end of Palliser Bay (Windy Point) in Cook Strait (see Appendix 1, Map Index). In accordance with the RMA, each district has developed a District Plan which lists issues, objectives, policies and methods for managing use, development and infrastructure.

**Table 2.1** *Operative District Plans*

<b>District Plan</b>	<b>Operative Date</b>
Masterton	June 1997
Carterton	March 2000
South Wairarapa	November 1998

## (1) Masterton District Plan

The Masterton District Plan contains several sections of relevance to coastal residential development and infrastructure. A planning strategy for the district, encourages residential development within existing infrastructure limits.

Castlepoint and Riversdale Beach are identified as residential management areas and managed under the urban rules of the Plan. The Coastal Management Area extends approximately 1 km inland but varies as it follows title boundaries. Both Riversdale Beach and Castlepoint are excluded from the Coastal Management Area. A coastal hazard zone of 30 metres is imposed at Castlepoint. At Riversdale the coastal hazard zone has been specifically defined and varies in width. Management areas and zones have associated with them different standards, rules and controls for development. For example development in the coastal hazard zone is controlled as a discretionary activity.

Table 2.2 lists Significant Resource Issues identified in the Masterton District Plan.

**Table 2.2** Significant District Issues for the Masterton District Council

<b>Land Resources</b>	<i>The preservation of the district's land resources to maintain the widest variety of options for future generations.</i>
<b>Recognition of Resources of value to Maori</b>	<i>The recognition and provision for the relationship of Maori and their culture and traditions with their ancestral lands, water, sites, waahi tapu and other taonga. The coast has a significant repository of natural values.</i>
<b>Recognition of Kaitiakitanga</b>	<i>The recognition of the Kaitiakitanga of districts' iwi in managing the natural and physical resources of Masterton.</i>
<b>Energy Production and Use</b>	<i>The promotion of the efficient production and use of energy within the district.</i>
<b>Infrastructure</b>	<i>The promotion of an efficient infrastructure, including transportation and communication systems.</i>
<b>Efficient Development</b>	<i>The promotion of the efficient development of the district's natural and physical resources.</i>
<b>Waste Management</b>	<i>The promotion of the minimization of waste production, and environmentally safe disposal of waste.</i>
<b>Access to Areas of Significant Community value</b>	<i>The adequate provision of public access to areas of significant value to the community at large.</i>
<b>The Natural Character of the Coast</b>	<i>The preservation of the natural character of the coastal environment, and its protection from inappropriate subdivision, use and development.</i>

<b>Important Landscapes</b>	<i>The protection of the outstanding natural features and landscapes within the district.</i>
<b>Heritage Resources</b>	<i>The protection and enhancement of resources with significant heritage value.</i>
<b>Significant Natural Resources</b>	<i>The protection of significant flora and fauna within the district, including the protection of habitats of significant fauna.</i>
<b>Environmental Pollution</b>	<i>The protection of the life-supporting capacity of ecosystems from irreparable change caused by contamination.</i>
<b>Natural Hazards</b>	<i>The minimization of the risks to the community and the environment from natural hazards.</i>
<b>Hazardous Activities</b>	<i>The minimization of the risks to human communities and to the environment from the manufacture, use, transport, storage and disposal of hazardous substances.</i>
<b>Amenity Values</b>	<i>The maintenance and enhancement of the district's amenity values (those natural and physical qualities and characteristics that contribute to people's appreciation of an area's pleasantness, aesthetic coherence, and cultural and recreational attributes).</i>
<b>Environmental Health</b>	<i>To manage those features or characteristics of the district's environment that contribute to people's health.</i>

Within the Masterton District Plan there are a number of general objectives and policies, which relate to the built environment and infrastructure.

### **1. Land Resources**

#### ***Objective 1***

*To sustain the productive potential of the district's soils, particularly within areas containing highly versatile soils.*

<b>Policies</b>	
1.1	<i>To provide maximum opportunities for productive, land-based activities, subject to environmental standards.</i>
1.2	<i>To minimise the loss of productive land.</i>
1.3	<i>To promote responsible land use practices in order to avoid, remedy or mitigate land degradation and erosion.</i>
1.4	<i>To manage subdivision in order to protect the productive potential of the land.</i>
1.5	<i>To encourage a range of lot sizes to maximise the diversity of land use activities.</i>

### **2. Water Resources**

#### ***Objective 2***

*The protection of the quality and quantity of the district’s freshwater resources and the recognition of their high value to the community.*

<b><i>Policies</i></b>	
2.1	<i>To avoid, remedy or mitigate the adverse effects of land activities on the quality and quantity of water resources.</i>

### **3. Kaitiakitanga and Resources of Value to Maori**

#### ***Objective 3***

*The integration of the concept of Kaitiakitanga, as held by local iwi, into the sustainable management of the district’s natural and physical resources, and the protection of resources of value to iwi.*

<b><i>Policies</i></b>	
3.1	<i>To recognise and provide for the relationship of local iwi and their culture and tradition with their ancestral lands, water, sites, waahi tapu, and other taonga.</i>
3.2	<i>To facilitate the establishment of papakainga and marae.</i>

### **4. Principles of the Treaty of Waitangi**

#### ***Objective 4***

*The recognition and implementation of the principles of the Treaty of Waitangi in the management of the district’s natural and physical environment.*

<b><i>Policies</i></b>	
4.1	<i>To promote awareness of the Treaty of Waitangi amongst those responsible for resource management in the district and within the community generally.</i>
4.2	<i>To recognise the principle of partnership in the decision-making process on the use, development and protection of the district’s natural and physical resources.</i>

### **6. Infrastructure**

#### ***Objective 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.*

<b><i>Policies</i></b>	
6.1	<i>To provide for transportation, communication and public services infrastructure that meet environmental standards.</i>
6.2	<i>To promote the provision of a sustainably based infrastructure by requiring the assessment of alternatives for proposals with large-scale implications for resource use and potential adverse environmental effects.</i>
6.3	<i>To promote an efficient use of infrastructure by optimising the use of the capacity of existing infrastructure before new infrastructure is established.</i>
6.4	<i>To promote the consolidation of the serviced urban areas of Masterton and Castlepoint within existing infrastructural limits.</i>
6.5	<i>To promote the appropriate co-siting of compatible infrastructural facilities.</i>

## **7. Efficient Development**

### ***Objective 7***

*An environmentally efficient pattern of development promoted by the integration of sustainable management principles into the resource use decision making process.*

<b><i>Policies</i></b>	
7.1	<i>To promote an efficient pattern of subdivision that protects environmental values and systems, and the potential of resources.</i>
7.2	<i>To promote the efficient development of resources by requiring an assessment of alternative methods and sites for proposed developments with significant implications for resource use or adverse environmental effects.</i>
7.3	<i>To minimise the use of undeveloped natural and physical resources by promoting the efficient use of existing resources.</i>

## **8. Waste Management**

### ***Objective 8***

*The production of waste will be minimised and the adverse effects of waste will be reduced through responsible management and sound disposal practices.*

<b><i>Policies</i></b>	
8.1	<i>To encourage adoption of the following hierarchy in waste management practices:</i> <i>€ reducing,</i> <i>€ reusing,</i>

	<ul style="list-style-type: none"> <li>€ recycling,</li> <li>€ recovering and</li> <li>€ disposal of residue.</li> </ul>
8.2	<i>To ensure that landfills and other waste management facilities are appropriately sited and managed in a way that protects amenities and avoids, remedies or mitigates adverse environmental effects.</i>
8.3	<i>To ensure disposal sites no longer in use are appropriately rehabilitated.</i>
8.4	<i>To encourage the generators of waste to take responsibility for the by-products of their activities by providing incentives for and information on efficient resource use.</i>
8.5	<i>To ensure adequate consultation is undertaken with both local iwi and other interested parties on matters relating to the management and disposal of waste.</i>

## **10. Natural Character of the Coast**

### ***Objective 10***

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

<b><i>Policies</i></b>	
10.1	<i>To provide for activities that would not adversely affect the natural character of the coastal environment, subject to environmental standards.</i>
10.2	<i>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.</i>
10.3	<i>To make provision for iwi input into the decision-making process regarding the management of the coastal environment in regard to proposals affecting coastal resources of importance to iwi.</i>
10.4	<i>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.</i>
10.5	<i>To adopt a precautionary approach in making decisions that affect the natural character of the coastal environment.</i>

### 17 Amenity Values - Objective 17

*The identification and maintenance of amenity values that the community wishes to protect.*

<b><i>Policies</i></b>	
17.1	<i>To establish environmental standards for activities to avoid, remedy or mitigate potential effects on amenity values.</i>
17.2	<i>To provide sufficient recreational, local purpose and other reserves to meet the requirements of the district.</i>
17.3	<i>To avoid, remedy or mitigate the detrimental effects of signs on amenity values.</i>
17.4	<i>To control noise emissions at levels acceptable to the community.</i>

## **(2) Carterton District Plan**

In order to promote sustainable management in the Carterton coastal environment, the Carterton District Plan contains sections on coastal residential development and infrastructure issues.

Although a 39-lot subdivision has been approved and development has commenced at Flat Point (see Map 3 in Appendix 1) the Plan does not identify any residential management areas at the coast. Instead Flat Point falls within the Rural Environment of the Carterton District Plan (CDP). A coastal management area, primarily to address the issue of coastal hazards extends 60 metres inland. In the Coastal Management area subdivision and development is controlled as a discretionary activity.

Table 2.3 lists the Significant Issues identified in the CDP



**Table 2.3** Significant coastal and infrastructure issues identified in the Carterton District Plan

(a)	<i>The need to manage the effects of land use and activities within the rural environment to maintain the quality of the rural resources to meet the reasonably foreseeable needs of future generations.</i>
(b)	<i>The need to accommodate ongoing change within the urban and rural areas while maintaining and enhancing the quality of the present environment.</i>
(c)	<i>The need to protect those elements of the natural environment of importance to the District; for example; the coast, parks and reserves.</i>
(d)	<i>The need to protect and maintain heritage elements of importance to the District.</i>
(e)	<i>Minimise the risks posed by inappropriate development in natural hazard areas and the use, storage and transportation of hazardous substances.</i>
(f)	<i>Minimise waste generation and reduce the adverse effects of waste disposal.</i>

Within the District Plan there are a number of general objectives and policies, which will be relevant to expansion at Flat Point or new settlement and development.

## **2 Rural Environment**

### **2.3 Objective**

2.3.1 *Maintain and enhance the character and amenity of the rural area.*

<b>2.4 Policies</b>	
2.4.1	<i>Manage the density of development to deal with adverse effects on the open rural amenity.</i>
2.4.2	<i>Manage the adverse effects of activities to limit their impact on the quality of the rural environment.</i>

## **7 Water Margins**

### **7.2 Objective**

7.2.1 *The natural character of significant water margins is preserved.*

7.2.2 *Maintain and enhance public access to and along significant water margins.*

<b>7.3 Policies</b>	
7.3.2	<i>Promote access to and the protection of water margins through the provision of esplanade reserves, esplanade strips, access strips and voluntary mechanisms.</i>
7.3.3	<i>In establishing land acknowledge the rights of private land owners.</i>

## **9 Subdivision and Development**

### **9.2 Objective**

9.2.1 *Ensure the act of subdivision and any development meet minimum environmental standards.*

<b>9.3 Policies</b>	
9.3.2	<i>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.</i>
9.3.4	<i>Ensure any subdivision and development protects any identified heritage feature or natural environment feature as identified in Appendix 12A or 13A (of the District Plan).</i>

## **13 Natural Environment**

### **13.2 Objective**

13.2.1 *Recognition and protection of important natural areas and features.*

<b>13.3 Policies</b>	
13.3.2	<i>Ensure no subdivision, use or development of land compromises the values of natural areas and features identified in Appendix 13A (of the District Plan).</i>
13.3.3	<i>Encourage an awareness of the need to protect natural features and areas amongst the local community.</i>
13.3.6	<i>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.</i>
13.3.9	<i>Avoid the adverse effects of indigenous vegetation clearance.</i>
13.3.10	<i>Avoid, remedy or mitigate the adverse effects of subdivision and development within significant natural areas or features.</i>

### (3) South Wairarapa District Plan

The South Wairarapa District Plan sets out the resource management objectives and policies of the Council and the methods, which are to be used to implement them.

There are a number of rural settlements in this District that have existing infrastructure and community facilities. Ngawi, Whatarangi, Whangaimoana, Lake Ferry (see Appendix 1) are zoned rural, however they are covered by the settlement policy area.

Table 2.4 lists the significant resource issues identified in the South Wairarapa District Plan.

**Table 2.4** Significant Resource Issues in the South Wairarapa District Plan

<p><i>Management of the coastal area and the margins of lakes and rivers</i></p> <p><i>Treaty of Waitangi and the Tangata Whenua</i></p> <p><i>Management of urban growth and the urban environment</i></p> <p><i>Management of activities near urban areas</i></p> <p><i>Management of rural activities</i></p> <p><i>Waste management</i></p> <p><i>Protection of the natural environment</i></p> <p><i>Maintenance and enhancement of amenity values</i></p> <p><i>Management of natural and other hazards</i></p> <p><i>Management of the land transport network</i></p>
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Within the District Plan there are a number of general objectives and policies, of relevance to this technical report.

#### **5.4 Settlements**

##### **5.4.1 Objectives**

*To provide for the continuation and consolidation of the District's existing rural settlements and marae.*

<b><i>Policies</i></b>	
5.4.2	<p>(1) <i>To recognize the distinctive character of each of the existing rural settlements and their particular function when making land use decisions.</i></p> <p>(2) <i>To recognize and maintain the existing land use patterns of rural settlement</i></p>

## 5.5 Coastal Management

### 5.5.1 Objectives

- (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.

<b>5.5.2 Policies</b>	
4	<i>To restrict residential development in coastal areas to the settlements of Whangaimoana, Lake Ferry, Whatarangi and Ngawi and to limit settlement expansion to land already identified for this purpose.</i>
6	<i>To ensure that 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.</i>
7	<i>To provide for the establishment of appropriate commercial facilities, community services and tourism opportunities subject to appropriate planning control and where these developments do not adversely affect the natural character of the coastal environment.</i>
8	<i>To restrict industrial development to that necessary to service the fishing industry and the harvesting of marine resources generally.</i>

## (4) District Plan provisions

The District Plans provide a range of permitted, controlled, limited discretionary, discretionary, and prohibited activities. For all activities prescribed conditions must be met otherwise a stricter level of control applies.

**Table 2.5** List of activities and district plan controls for Masterton, Carterton and South Wairarapa.

<b>Activity</b>	<b>Masterton</b>	<b>Carterton</b>	<b>South Wairarapa</b>
	Residential Management Area	Rural Environment	Settlement Policy Area
Residential	Permitted	Permitted	Permitted
Papakainga housing	Permitted	Permitted	Discretionary
Residential business	Permitted	Permitted	Discretionary
Corner shops, dairies etc	Permitted		Discretionary
Reserves and associated facilities	Permitted	Permitted	Permitted
Healthcare facilities	Permitted	Permitted	Discretionary
Community amenity facilities	Permitted	Permitted	Permitted
Relocated dwellings and principal buildings	Controlled	Controlled	Controlled
Network utilities	Permitted	Permitted	Permitted
Subdivision	Discretionary	Controlled	Discretionary
Temporary activities	Permitted	Permitted	Discretionary
Signs	Permitted	Permitted	Permitted
Veterinary clinics		Permitted	Discretionary
Farming		Permitted	Permitted
All other activities	Discretionary	Discretionary	Discretionary

## 2.6. Other Legislation

A number of other statutes will have local impact upon coastal residential development and infrastructure including:

- ∄ Building Act 1991 - construction in areas subject to erosion, avulsion, falling debris, subsidence, inundation, or slippage and standards for all building development including utility service provision, mitigation of hazards and requirements for minimum health and safety measures.
- ∄ Historic Places Act 1993 - protection of heritage sites and areas
- ∄ Conservation Act 1987 - protection of natural areas and habitat conservation.
- ∄ Te Ture Whenua Maori Act 1993 - access over and development on Maori ancestral land.

- ∄ Local Government Act 1974 - duties, functions and structures of local government including works and services.
- ∄ Public Works Act 1981 - statutory provision and control of public works projects including provision for land acquisition and works on private property.
- ∄ Reserves Act 1977 – to provide for and ensure the use, enjoyment, maintenance, protection and preservation of reserves for the purpose for which it was classified.

## Chapter 3

# Resource Inventory

## 3.1 Scope of Study

An assessment was made of the areas along the coast where dwellings or residential lots were grouped together. Based on the number of lots, lot size, configuration, and the presence/absence of infrastructure it was decided that the six larger settlements (Castlepoint, Riversdale, Ngawi, Whatarangi, Whangaimoana, Lake Ferry and the recently approved subdivision at Flat Point) should be described in detail in this Technical Report. Maps showing the subject areas can be found in Appendix 1. Infrastructure information for the smaller settlements is presented in the *Land Use and Development Technical Report*. Table 3.1 lists the settlements and which technical report they are discussed in.

**Table 3.1** Settlements on the Wairarapa coast and which technical report they are discussed in.

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

The exclusion of smaller settlements from this technical report, should in no way be considered a measure of the importance or otherwise of those settlements, nor does it reflect different zones or management areas as designated in the District Plans.

## 3.2 Description of Settlements

### (1) Castlepoint

Castlepoint is situated 68 km from Masterton. It was named in 1770 by Captain Cook, who was struck by the similarities of Castle Rock to the battlements of a castle.

The community is well serviced with two toilet blocks, one known as the northern toilet block and the other as the Basin toilets. Administered by the Masterton District Council, they are open 24 hours a day, 7 days a week and serviced daily. A refuse collection is provided twice weekly from 25<sup>th</sup> December to 31<sup>st</sup> January and once a week the remainder of the year. A recycling centre and transfer station is available approximately 2 km north of Castlepoint. There is a hall at Whakataki that is used and administered by the local community.

There are no developed pedestrian walkways, however one was set-aside in the



**Figure 3.1:** Castlepoint Playground

Balfour subdivision (Deliverance Cove), Balfour Crescent. An undeveloped reserve is located behind the fire station. A children's playground is sited on road reserve (Jetty Road) opposite the northern toilet block (figure 3.1). The Department of Conservation owns the Scenic Reserve at the southern end of Castlepoint. The reserve covers some 61 hectares and encompasses the lighthouse,

Basin, reef and Castle Rock. The lighthouse is owned by the Maritime Safety Authority and is operational.

Vehicles can be parked along roadsides and in the general vicinity of the church (St Peter by the Sea) near the Department of Conservation Scenic Reserve at the Basin.

A privately owned camping ground of approximately 120 sites (including cabins) is situated on the coast, to the north of the urban area. A private cemetery is located at the northern end of Castlepoint, and is maintained by the Council.



There is some commercial activity at Castlepoint, a store with petrol services and a liquor on and off licence. A golf course and hotel is located approximately 4.7 km north of Castlepoint at Whakataki. There are no other commercial or any healthcare facilities at Castlepoint. A district health nurse is based at Tinui and visits Castlepoint when required. The school closed at the end of 1999.

## **(2) Riversdale Beach**

Riversdale Beach is approximately 55 km from Masterton, and was established in 1954 by Basil Bodle.

This settlement has a weekly refuse collection which increases to twice weekly between 25<sup>th</sup> December and 31<sup>st</sup> January. A recycling and transfer station centre is available 2 km from the Riversdale Beach Store.

There are two recreational reserves; one reserve lies to the south of Riversdale Beach, one to the north on Pinedale Crescent. An esplanade reserve runs along the foreshore. The reserves are discussed further in the Access & Recreation Technical Report.

A privately owned camping ground is located to the north of Riversdale beach with approximately 150 sites. Subdivision consent was granted in 2000 to create four additional titles and one is to be vested in Council as a local purpose reserve. A new private holiday park has been established to the north-west of Riversdale Beach settlement in the Coastal Management Area of the Masterton District Plan. Live 'n' Learn Ministries own and operate a camping facility on Pinedale Crescent. The operation includes several dormitory blocks and is often used by church and school groups.

The Council owns a toilet block at the southern end of Riversdale and one adjacent to the Surf Lifesaving Club rooms on Bodle Drive. The toilet block adjacent to the Surf Lifesaving Club is open 24 hours per day, 7 days a week and is serviced daily. The southern toilet is a composting facility and is serviced daily.

Saint Joseph's Church, originally located at Woodhurst, Tinui was moved to Riversdale Beach in 1983. The closest hall is at Homewood 16.5 km from Riversdale.

The settlement is serviced by a store on Blue Pacific Parade, which has an off license and provides meals. A fish and chip shop is located on Riversdale Road. The fish and chip shop opens when the owner considers it warranted. A Masterton vet stores supplies onsite to avoid having to return to Masterton to collect supplies.

Riversdale Beach has a golf course and club-house and from time to time the community uses the golf club facilities for meetings and functions.

There are no other commercial or any healthcare facilities at Riversdale Beach. The district health nurse is based at Whareama and visits Riversdale Beach when required.

### **(3) Flat Point**

Flat Point is sited approximately 40 km from Carterton. An airstrip and golf course form part of the development. A grassed area for public car parking has been set-aside at the intersection of Beach road, and the public pedestrian walkway to the beach. The Flat Point subdivision developers were required to provide public toilet facilities within two years of the consent approval. All weather pedestrian access is provided from Flat Point Road along Nunu Drive and Puk Lane to the coast. A solid waste transfer facility is to be established nearby and is to provide recycling containers for aluminium, glass and plastic and a suitable container for bagged solid waste. This facility is to be the responsibility of the body corporate.

Being a new subdivision in its early stages of its development social infrastructure has not yet evolved. Provision has not been made for commercial or health care facilities to date and may need Council consent to be established.

### **(4) Ngawi**

Ngawi was subdivided in 1966 into 97 lots ranging between 700m<sup>2</sup> and 1000m<sup>2</sup>. By 1990 nearly all the sections were built on – 50 being holiday homes and 30 permanent

dwellings. The settlement is the main fishing village in the South Wairarapa, and is 69 km from Martinborough. It is accessed from Cape Palliser Road and has a compact structure.

A small children’s playground is located at Ngawi. The esplanade reserve has been significantly planted. Public toilets are located alongside the fire station. A transfer station has been provided for the residents and holiday-makers towards the southern end of Ngawi and is serviced by agents contracted to South Wairarapa District Council.



The local fire station doubles as the fishing club which has a liquor and provides the venue for local events (figure 3.2).

**Figure 3.2:** Ngawi Fishing Club, Fire Station, Community Hall and Toilet Block

The settlement is also serviced by a tearoom/dairy.

The District nurse has a post towards the southern end of Ngawi and visits Whatarangi, Whangaimoana and Lake Ferry as required.

## (5) Whatarangi

Whatarangi is located on Whatarangi Road approximately 58 km from Martinborough. It provides holiday/recreational residential facilities. Whatarangi settlement is divided into two parts. The northern part sited on the coastal side of the road is at severe risk of erosion. The road is sealed with no kerb and channel. The southern part of Whatarangi is accessed from a cul-de-sac – Te Miha Crescent (figure 3.3). Here the road is sealed with a concrete edge kerb.



**Figure 3.3:** Te Miha Crescent

## (6) Whangaimoana

Whangaimoana is located on Whangaimoana Road approximately 34 km from Martinborough. It provides holiday/recreation residential facilities. Whangaimoana settlement is divided into two separate areas. The northern area (figure 3.4) consists of some 26 residential lots in varying sizes sited on either side of Whangaimoana Road. The southern section consists



**Figure 3.4:** Northern Whangaimoana

of 22 residential lots sited on the eastern side of the road. The lots are smaller than those at the northern end of the settlement.

There is no evidence of any public or social infrastructure at this settlement.

## (7) Lake Ferry

Lake Ferry is located on the shores of Lake Onoke in Palliser Bay. It was thought to have been first subdivided in the early 1900s. The settlement consists of mainly holiday homes. It is accessed from Lake Ferry Road, 34km from Martinborough. A large area of the settlement is recreation reserve, with larger lots at the northern end and lineal lot configuration on the eastern side of Lake Ferry Road towards the south.

The Council administers the Department of Conservation owned camping ground, and leases it to another party (figure 3.5). Some caravans are stored on site. The community boasts a children's playground. Two sets of public toilets are available. One toilet block is sited adjacent to the children's playground and the other (soil privy) is sited towards the beach from the Lake Ferry Hotel. As in a number of small communities, the centre of the community is the hotel.



**Figure 3.5:** Lake Ferry Camping Ground

### 3.3 Dwellings

Table 3.1 shows the number of dwellings in 1943, 1989 and 2001/02.

**Table 3.1** Numbers of dwellings 1943, 1989 and 2001/02

Location	1943	1989	2001/02
Castlepoint	35	84	99
Riversdale Beach	1	206	235
Flat Point	NA	NA	NA
Ngawi	0	55	89
Whatarangi	0	22	46
Whangaimoana	0	20	34
Lake Ferry	16	27	49

### 3.4 Peak Populations

The following figures (table 3.2) are based on ratepayer surveys undertaken at Riversdale Beach in December 2000 and Castlepoint in January 2002. Each respondent was required to detail the number of days spent at the property (either at Castlepoint or Riversdale Beach) and the number of persons staying at the property at that time. The top line of figures refers to the number of people and the bottom line refers to the average number of days; eg at Castlepoint in January 137 people stayed for an average of 15.3 days. This information is only available for Castlepoint and Riversdale Beach.

**Table 3.2** Peak Populations Castlepoint and Riversdale Beach. Top line refers to number of people and bottom line refers to average length of stay.

Total numbers of people /average no. days	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Castlepoint	137 15.3	124 7.4	127 6.0	117 6.7	99 4.8	105 4.4	102 4.7	98 4.4	110 5.1	122 5.4	110 6.1	131 9.0
Riversdale Beach	141 15.8	131 7.4	119 6.6	131 6.9	103 5.5	110 4.9	100 5.5	104 5.4	118 5.6	139 6.0	124 6.2	138 9.1

### 3.5 Demographics

Due to the methods of collection, it is not possible to determine the demographics of coastal settlements via census data. The ratepayer surveys undertaken at Riversdale

Beach in December 2000 and Castlepoint in January 2002 indicated that 12.2% of the respondents lived at Castlepoint and 15% at Riversdale. The response rates were 52% and 62% respectively.

### 3.6 Summary of existing infrastructure

Table 3.3 provides a summary of the existing infrastructure in the settlements and the details are expanded upon in the following sections. The implications of the presence/absence of infrastructure is discussed in Chapter 4- Vulnerabilities.

**Table 3.3** A summary of existing infrastructure in Wairarapa coastal settlements.

	<b>Castle point</b>	<b>Riversdale Beach</b>	<b>Flat Point</b>	<b>Ngawi</b>	<b>Whatarangi</b>	<b>Whang-aimoana</b>	<b>Lake Ferry</b>
<b>Sealed Roads</b>	U	U	U	U	U		U
<b>Kerb</b>	Some	Some	.	.	Some	.	.
<b>Channel (concrete)</b>	Some	Some	.	.	Some	.	.
<b>Channel open</b>	U	U	U	U	U	U	U
<b>On-Site Water Supply</b>	U	U	U	U	U	U	U
<b>Community Sewerage Scheme</b>	U	.	.	.	.	.	.
<b>Electricity supply</b>	U	U	U	U	U	U	U
<b>Landline phone</b>	U	U	U	U	U	U	U
<b>Cell Phone</b>	.	U	.	.	.	.	U
<b>Fire Service</b>	U	U	.	U	.	.	U
<b>On-site Stormwater</b>		U	U	U	U	U	U

## 3.7 Roothing Network

### (1) Castlepoint

Castlepoint is accessed from the Masterton-Castlepoint Road, which becomes Jetty Road at Castlepoint. Castlepoint's roading network is sealed, portions of which are kerbed and channelled with some footpaths. New roads, for example Balfour Crescent (figure 3.6) and the extension to Guthrie Crescent have been formed to the urban standard set out in NZS



**Figure 3.6** Balfour Crescent

4404 i.e. with kerb, channel and footpath. Guthrie Crescent has kerb and channel from approximately 180 metres from the intersection with Jetty Road to the end of Guthrie Crescent. Some judder bars have been installed on Jetty Road to reduce traffic speed.

### (2) Riversdale Beach

The settlement is accessed from Riversdale Road, which is sealed, and divides into Pinedale Crescent and Blue Pacific Parade. Other than Karaka Avenue, all roads are formed and sealed. Bodle Drive, Blue Pacific Parade, Harapaki Road, Palm Parade, Sunrise Way and Tamarisk Drive have kerb and channel. Blue Pacific Parade has a concrete footpath, Riversdale Road a lime path and Bodle Drive a hot mix path.

Several judder bars have been installed to reduce traffic speed within the settlement.

### (3) Flat Point

Flat Point Road is unsealed for its total length. The road reserves within the Flat Point subdivision are 10 metres wide with 5.0 – 5.5 metre wide sealed carriageways. Pedestrian accessways allow access to the coast from the roading network. There is no access from any lot to Flat Point Road.

## **(4) Ngawi**

Cape Palliser Road is intermittently sealed and unsealed from Whatarangi to Ngawi. Cape Palliser Road is threatened by severe erosion but has been designated a special purpose road and receives government funding to ensure that the road is kept open. The roads within the settlement are sealed but do not have kerb and channel or footpaths.

## **(5) Whatarangi**

Whatarangi is accessed from Whatarangi Road which is sealed for its length through the northern portion of the settlement. The southern portion of the settlement is accessed off Te Miha Crescent. Te Miha Crescent is sealed with a flush edge kerb along both sides of the road.

## **(6) Whangaimoana**

Whangaimoana settlement starts on the corner of Whangaimoana Road (figure 3.7) and Whatarangi Road. Whangaimoana Road, is unsealed from its intersection with Whatarangi Road. The road does not have kerb and channel nor does it have a footpath.



**Figure 3.7** Whangaimoana Road

## **(7) Lake Ferry**

The Lake Ferry settlement is sited at the end of Lake Ferry Road. Lake Ferry Road is sealed, but does not have kerb and channel nor does it have a footpath.

Table 3.4 provides a summary of road infrastructure for the settlements.



**Table 3.4** Summary of road infrastructure for the Wairarapa coastal settlements

Settlement	Kerb	Concrete Channel	Footpath	Road
Castlepoint	Some	Some	Some	Sealed
Riversdale Beach	Some	Some	Some	Sealed
Flat Point				Sealed
Ngawi	No	No	No	Sealed
Whatarangi	Some	No	No	Sealed
Whangaimoana	No	No	No	Un-sealed
Lake Ferry	No	No	No	Sealed

## 3.8 Water Reticulation

### (1) Castlepoint

Residents generally collect rainwater, which is stored in tanks for domestic supply (figure 3.8). Some residents purchase water during dry seasons. There is no reticulated water supply other than some minor private reticulation sourced from a spring sited in the Ngaumu Forest. This spring supplies Castlepoint Station and at times, the motels and camping ground (sanitary fittings only) facilities.



**Figure 3.8:** Water Storage Tanks

The public toilets are serviced from a water bore sited near the northern toilet block and water is available from Castlepoint Station when required.

### (2) Riversdale Beach

Most residents use rainwater (roof collection) as their main source of potable water supply, while some use bore water. Recent surveys/analysis at Riversdale Beach has identified some contamination of groundwater supplies.

The water for the public toilets is sourced from a bore. Water supply for the camping ground is rainwater supplemented with a bore. The holiday park sources water from a spring on a neighbouring farm.

### **(3) Flat Point**

Residents in this new settlement collect roof water, which will be stored in partly buried water tanks. The possibility of a communal water supply was investigated at the time of subdivision but rejected because there was no economically viable source.

### **(4) Ngawi**

The main source of potable water at Ngawi is rainwater collected from roofs. A number of residences have shallow bores for non-potable use. Some dwellings are connected to a supplementary spring supply at the edge of the settlement. It may be that ground water may be contaminated from sewerage disposal systems however no investigations have been undertaken.

### **(5) Whatarangi**

Water supply for the residences is from rainwater. The “South Wairarapa District Council – Coastal Sewage Report” (1995) indicates that there are no bores in the area and surface springs present throughout the subdivision have been drained and are unavailable for use.

### **(6) Whangaimoana**

Residents collect rainwater from roofs to use as their water supply.

### **(7) Lake Ferry**

In the main, most residents rely on rainwater systems for water supply. There is a confined aquifer used for individual potable water supplies. As in other parts of the lower valley the chemical quality of the deeper bores can be variable ie being hard and having a high iron, manganese and therefore may need treatment. There is also a shallow unconfined aquifer and water from this source is known to be

contaminated with bacteria. This water is used for non-potable use. The community has also developed an ad hoc system using a spring; several of the residents use this as a supplementary supply.

## **3.9 Sewerage Systems**

### **(1) Castlepoint**

This settlement has a reticulated sewerage system, which currently services 148 units. The system has a maximum capacity of 200 units after which an upgrade of the treatment plant will be required. Sewage is pumped to the Castlepoint Wastewater Treatment Plant that consists of an oxidation pond, three evaporation basins and a small wetland. The treated effluent from the plant is discharged into the Castlepoint Stream, which discharges to the sea.

### **(2) Riversdale Beach**

Residents use septic tanks of varying standards many of which are failing. The Masterton District Council is undertaking a study that will identify all practical sewerage upgrading options. These options were refined to three for presentation to the Riversdale Sewage Steering Group in September 2002. Input from the group will then assist with the confirmation of the desired option.

### **(3) Flat Point**

The subdivision consent specifies detailed criteria for the installation, operation, maintenance, and monitoring of effluent disposal systems, environmental monitoring and the review of consent conditions.

### **(4) Ngawi**

Details of sewage disposal are sketchy. It is assumed but not confirmed that by 1970 septic tanks with soak pits replaced most of the previous drainage systems (long drops and primitive septic tank systems using 2 x 44 gallon drums joined together). The settlement of Ngawi was investigated and monitored over a period of 12 months (1995-1996) to determine the performance of existing on-site sewage disposal

systems. Little surface water was available to monitor, however, those samples that were tested showed minor surface water contamination. Bore water contamination was significant and in one case extreme.

## **(5) Whatarangi**

As with Ngawi, the performance of on-site sewage disposal was monitored. A significant localised level of surface water contamination was found. One bore was monitored and contamination was found to be significant. Sewage disposal in general is by conventional septic tank and soak pit. At the end of 1990 all building consent applications were put on hold pending a full site investigation. This issue has not been progressed.

## **(6) Whangaimoana**

The only form of sewage disposal is on-site. No information is available on the adequacy of the disposal systems in this area.

## **(7) Lake Ferry**

Many of the existing on-site treatment facilities at Lake Ferry properties are of inadequate design and condition to prevent the contamination of ground and surface waters. Sewage disposal has been an ongoing concern and the South Wairarapa District Council is looking towards a community sewerage system for this area.

# **3.10 Electrical Supply**

## **(1) Castlepoint**

Reticulated power is available at Castlepoint. The supply is all underground. Street lights are located around the settlement.

## **(2) Riversdale Beach**

The settlement is reticulated with overhead power all new subdivisions will be undergrounded. Street lights are distributed around the settlement.

### **(3) Flat Point**

All power is underground with single-phase electricity reticulated to each lot. Street lights are provided.

### **(4) Ngawi**

Power is overhead. Street lights have recently been installed at dark spots.

### **(5) Whatarangi**

All power is underground. Street lights have been installed at dark spots.

### **(6) Whangaimoana**

All power is overhead with electricity reticulated to each lot. Street lights have been installed in dark spots.

### **(7) Lake Ferry**

All power is underground with electricity reticulated to each lot. Street lights have been installed in dark spots.

## **3.11 Communication Services**

### **(1) Castlepoint**

The community has landline telephone services only. Cell phone reception is limited to areas south and seaward of Castlepoint. Telephone cables are underground. A public telephone box is sited near the children's play area on Jetty Road.

### **(2) Riversdale Beach**

Riversdale Beach is also serviced with landline telephone with cables being overhead. Cell phone coverage is adequate with coverage extending seaward for some distance. A public telephone is located on the wall of the shop.

### **(3) Flat Point**

The telephone service is all underground. There is poor cell phone coverage if any at Flat Point.

### **(4) Ngawi**

The community is serviced with an overhead landline, and very poor cell phone coverage. A public telephone box is located adjacent to the fire station.

### **(5) Whatarangi**

The Whatarangi community is serviced with a landline, and has very limited cell phone coverage.

### **(6) Whangaimoana**

Whangaimoana has landline telephone services with limited cell phone coverage.

### **(7) Lake Ferry**

Lake Ferry is well serviced with telephone facilities for both landline and cell phone.

## **3.12 Fire Services**

The following table (3.5) summarises the voluntary fire fighting services in the settlements.

**Table 3.5** Summary of rural fire fighting services for coastal Wairarapa settlements. Voluntary Rural Fire Force (VRFF)

Settlement	Voluntary Rural Fire Force	Comment
Castlepoint	}	One appliance, back up from Tinui VRFF and Masterton Fire Service
Riversdale Beach	}	One appliance
Flat Point	.	To be serviced by Wainuioru VRFF
Ngawi	}	Back up from Martinborough and Lake Ferry VRFF
Whatarangi	.	Serviced from Lake Ferry, Ngawi and Martinborough VRFF
Whangaimoana	.	Serviced from Lake Ferry, Ngawi and Martinborough VRFF
Lake Ferry	}	One appliance

### 3.13 Stormwater

In all the settlements, stormwater run-off from dwellings is generally collected for domestic water supplies or discharged to soak pits.

In Castlepoint and Riversdale water that is not collected for domestic use is directed to the existing piped system or ducted to the kerb and channel. The stormwater is then discharged to the sea via natural watercourses. Overland stormwater also flows into the same natural watercourses.

At Flat point excess stormwater will be collected by roadside swales and either piped to an outfall in the small wetlands area or discharged to natural soakage.

At Ngawi and Whangaimoana road run-off is directed to roadside drains, and in Whatarangi road run-off is diverted to sumps and discharged to the sea.





## **Chapter 4**

# **Vulnerabilities and Issues**

As highlighted in Chapter 3 there is limited infrastructure in the coastal settlements. Lack of built infrastructure can lead to adverse impacts on the environment, an associated loss of amenity, and potentially reduce the desirability of living in a particular area. Initial lack of services or an inadequate population base to support existing services can lead to the loss of ‘social’ infrastructure such as provision of schools, health care and other commercial and community services.

This Chapter discusses some of the issues surrounding lack of built infrastructure and indicates the threats to existing infrastructure. Generally it addresses each issue in order as it appeared in Chapter 3 - Inventory, rather than in order of most to least significant issue or vice versa. Recommended responses to tackle the issues are outlined in Chapter 5 - Responses.

## **4.1 Existing Settlement Boundaries and Potential for Expansion**

There is increasing demand for subdivision and associated development on the coast (for evidence see Land Use and Development Technical Report). Along with the constraints posed by the need for adequate sewage disposal each settlement has other factors which constrain their expansion. If we are to accommodate further development on the coast the issue arises as to where and how much development can and should occur. How do we decide on the extent of, and then manage the expansion of settlements and infrastructure?

The following section describes the existing settlement boundaries and where settlements have the potential to expand. It should be kept in mind that large landholdings may provide the opportunity for settlement expansion depending on the willingness of the landowner to subdivide.

There may be current limitations to settlement expansion in the district plans in terms of zoning and management areas, but this too can change. For a discussion on the physical limitations to settlement expansion see the Land Use and Development Technical Report.

## **(1) Castlepoint**

The urban area is defined by a section boundary line, generally the boundary with Castlepoint Station, although some of the Station land falls in the Residential Urban Management Area. The camping ground falls outside of the urban area. Some land within the urban area is unstable and subject to restrictive controls, other areas, also affected by instability could be developed with appropriate controls. Infill subdivision is an option at Castlepoint, but in practice, may prove difficult due to access and size of building sites and stability issues. The maximum density for new subdivisions in Castlepoint is one dwelling per 300m<sup>2</sup> and an average of 350m<sup>2</sup> for 3 lots or more.

## **(2) Riversdale Beach**

The residential area of Riversdale Beach stretches between the Motuwaireka Stream at the north and the Riversdale Reserve at the south. The area immediately behind Riversdale Beach is zoned rural and falls within the Coastal Management Area. This land is owned by a farming company called East Leigh Ltd and recently 11 lots were subdivided off the farm on Riversdale Road. A further 6 lots have consent and comprise of lots of approximately 2 ha. An application for consent for an additional 20 lots ranging in size from 4000m<sup>2</sup> to 2.6 ha was lodged in July 2002. The only substantial area available for subdivision within the urban area is the golf course. Without a sewerage scheme, infill development at Riversdale Beach is limited to lots that can provide a minimum resultant size of 500m<sup>2</sup> with an average of 1000m<sup>2</sup> for 3 lots or more.

### **(3) Flat Point**

Flat Point could expand onto surrounding land. Resource consent will be required as the land is not managed as urban/residential.

### **(4) Ngawi**

The only area in which Ngawi can expand is along the coast into the adjoining Coastal Protection Policy Area. The District Plan seeks to limit settlement expansion to land already identified for residential expansion and as such expansion of Ngawi is largely constrained by existing policy.

### **(5) Whatarangi**

The Coastal Protection Policy Area bounds Whatarangi, again limiting the area for expansion. There is land to the south managed as residential however there are restrictions on the development of this area due to the issue of coastal erosion.

### **(6) Whangaimoana**

There is limited land available for expansion of Whangaimoana in the northern part of the settlement.

### **(7) Lake Ferry**

As with the other coastal settlements there is limited area to subdivide in the northern portion of Lake Ferry. No infill developments are permitted unless they can illustrate that there is adequate room available for effluent disposal.

## **4.2 Road Networks and Parking**

Settlements on the Wairarapa coast are generally isolated and accessible often from only one road. It is vital for the existence of the settlements that these roads be accessible and adequately maintained. At Ngawi high rainfall events wash out the existing culvert and road and it needs to be replaced. The precarious state of Cape Palliser Road has the potential to limit emergency response and access by utility

operators. School buses take precautionary action when passing over sections of the road. The vulnerability of the road may also limit access to the popular visitor attractions of the seal colony and lighthouse at Cape Palliser.

Expansion of existing settlements and the creation of new settlements increases the amount of traffic using the roads. This of course places considerable financial pressures on district councils, particularly if there is increased pressure to upgrade a road from, for example, unsealed to sealed. While the cost of upgrading roads within new subdivisions is directly borne by the developer, roads outside of the subdivision are not.

Related to increased traffic counts and visitors to the coast is the need to provide parking. At Castlepoint locals have expressed concern over boats and trailers being parked in the Basin (within the Scenic Reserve). Concerns include the lack of lighting on some vessels and trailers; the speed of vehicles, and the refuelling boats on the beach in this area. These are matters that the Department of Conservation will need to address in the Reserve Management Plan for the Scenic Reserve. Other concerns have been expressed about the boats and trailers being parked on roads during a southerly swell. The carriageway is narrow and the vessels large, causing partial blockage of the road.

## **4.3 Water Supply**

An adequate water supply is required for the function of septic disposal systems, domestic requirements and fire fighting. The lack of a reticulated water supply not only limits the expansion of settlements but may also impact on the health of residents if water is not of a high enough quality. In coastal areas, runoff collected from roofs may have a higher amount of dissolved salts making it distasteful. A limited water supply also hampers the ability to control and put out a fire in a residential area once it starts.

While it is not necessary that every settlement has a reticulated water supply, it is important to recognise that a limited water supply can impact on the potential of

settlements. A co-ordinated approach may be necessary to ensure that each property has adequate water supply for domestic and fire fighting purposes and that it is treated to a standard to minimise health risks. This can in part be achieved by implementing a ‘minimum water supply’ standard for new dwellings as discussed in Chapter 5 - Recommendations.

## **4.4 Sewage Disposal**

There are three main infrastructure issues associated with the disposal of sewage, they are capacity of existing communal systems, poorly maintained individual septic systems, and the limits placed on settlement expansion by lack of community sewerage systems.

### **(1) Capacity of existing communal systems**

Castlepoint is the only coastal settlement that has an existing community sewerage facility. The Castlepoint sewerage system was initially designed for a capacity of 150 standard connections with the ability to expand envisaged for the future. Through alteration to their discharge consent, the Wellington Regional Council has allowed Masterton District Council to increase the number of connections to 200.

Problems occurred during the winter of 1996 with exceptionally high rainfall and high ground water levels. To remedy the problem a wetland was developed to ensure that any discharge to the stream was of such quality so as not to cause major environmental pollution to the stream. The present scheme has been handling the current loadings satisfactorily. The Regional Council consent requires a stringent monitoring regime to be carried out by the Masterton District Council to ensure compliance with the consent. The number of units is limited to 200. Approximately 150 units have been taken up.

While the system does not currently limit expansion of the settlement, once the number of connections reaches 200 the system will be operating to full capacity and it may be necessary to seek new resource consent to expand the system. This could

become a limitation to further settlement expansion if a larger treatment and disposal system can not be accommodated. Based on the current level of take up, is estimated that the additional work will be required in 5 to 10 years time if not sooner.

## **(2) Limitations to on site disposal**

The lack of a community wastewater infrastructure can limit development within settlements and determine the nature of settlement expansion.

Many settlements consists of sites up to 1000m<sup>2</sup>, designed at a time when conventional septic tank and soakage trench systems were considered appropriate for on-site wastewater servicing. However as noted, in order to meet current environmental standards many existing systems may be required to be upgraded. This can result in the use of a larger portion of the site than currently allowed for. This is particularly a problem where there are existing developments such as dwellings, sheds, and driveways that may limit the amount of room available to expand.

On smaller undeveloped lots a large proportion of the lot may be required for the waste water disposal area, together with reserve and buffer areas. On difficult sites this may restrict the size of the dwelling in order to reduce waste water flow to an appropriate quantity, or wastewater flows may need to be managed via consent procedures administered by the Wellington Regional Council.

Both of these situations can limit the amount of development in a settlement. Requiring large areas for effluent disposal precludes infill development and may also limit the size of new developments within existing lots.

The lack of a community sewerage system can also impact on the type of settlement expansion. Larger lots, which result in lower density development may be required for new subdivisions in order that all effluent can be adequately treated and retained on site.

Whether a community sewerage facility is appropriate, and the type of system to be used will be specific for each settlement. Communal systems can range from effluent

only collection through to fully serviced. Simpler systems can involve disposal to purpose made wetlands.

### **(3) Environmental impact of existing on site systems**

Poorly designed and maintained 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. The environmental impact of inadequate septic systems has been investigated at several settlements.

At Riversdale Beach the large concentration of baches each disposing their effluent into excessively draining coastal sands (as soak holes) has resulted in the contamination of the ground water in certain areas. A reticulated sewerage system is being investigated and is a possibility for the community in the future.

At Whatarangi problems have arisen on the lower reaches of the settlement where a combination of poor drainage, small allotments, and inappropriate effluent disposal methods have resulted in contamination problems.

In his 1999 *Lake Ferry Community Sewage Treatment – Further information report* (22/1/99) Stu Clarke reports, as an estimate only 10 out of 40 sites would comply with the requirements for adequate on-site treatment and disposal. South Wairarapa District Council is investigating the possibility of a community sewerage system.

No detailed investigations have been undertaken for Whangaimoana or Ngawi although the *South Wairarapa District Council – Coastal Sewage Report (June 1995)* reports that at Ngawi “*there have been no known outbreaks of waterborne diseases in the past 10 years.*” However, the problems that have arisen in other coastal settlements could be occurring here.

Flat Point is currently being developed with the possibility of 39 houses being erected. No issues have been identified and the installation, operation, maintenance, and monitoring of wastewater systems is a requirement of the subdivision consent.

## **4.5 Electricity and Communications**

There are three issues in relation to the provision of electricity and communications infrastructure and services. They are the impact of infrastructure development on visual amenity, the existing availability of services, and the future provision of services.

### **(1) Impact on Visual Amenity**

The development of pole and overhead wire infrastructure for telecommunications and electricity can impact on the visual amenity of an area. The NZ Standard – 4404 Urban Subdivision states that cabling shall generally be made by means of an underground system. It is generally a requirement of the subdivision consent and can be controlled through district plan provisions. While new connections and works are generally paid for by the developer of a subdivision, whether or not districts move to underground existing services is an issue as it raises the question of who should bear the cost.

### **(2) Existing Availability of Services**

While there is good provision of electricity throughout coastal Wairarapa, the limited availability of cell phone coverage is becoming an issue, as more and more people rely on cell phones to reduce the cost of maintaining a landline at holiday homes. Cell phone reception would be improved with the installation of cell towers and their provision depends on the service provider or local communities interest in funding these.

Some areas also find internet services unreliable and this is becoming an issue with rural communities as it limits their ability to work from home.



### **(3) Future Provision of Services**

Under the Electricity Act 1992 electricity line companies are not obligated to maintain supply to consumers beyond 2013. Powerco, the power distributor for the Wairarapa was contacted and their response follows:

*“Powerco is in the electricity distribution business and would be intending to maintain supply where this is economic. The economics of maintaining supply in the future will be dependant on the government and electricity governance board's direction on pricing policy, technological advances in alternative forms of distribution generation and the serviceability of the sunk distribution assets at that time. Powerco see one of the key issues being not so much the maintenance of electricity supply, but more the form that that supply may take given changes in technology, and at this time Powerco sees itself in the long term business of supplying electricity distribution services to consumers.”*

Richard Krough, Powerco, 2002

## **4.6 Fire**

The coastal settlements are vulnerable to fire. While fire fighting apparatus is available in or near settlements, they, in the main, rely on limited volunteer personnel who may be some distance away. The inadequate water supply, longer fire fighting response times and lack of permanent residents to raise the alarm can result in total loss of property.

## **4.7 Stormwater**

With increased development of an area comes an increase in the amount of impermeable surfaces. Where rainwater had previously seeped through the soil it is now intercepted by roofs and roads and requires either on or off site disposal. The collection of this runoff results in much greater peak flows as more water runs off the impermeable surfaces. The water is also delivered more quickly to natural watercourses as it runs through channels and pipes where it would have normally moved through natural systems, percolated through the soil and was evaporated or evapotranspired by vegetation.

There are three main issues associated with the disposal of stormwater and the associated infrastructure. They are effects on slope stability and erosion; contamination of natural water courses; and increased risk of localised flooding.

## **(1) Effect on Slope Stability and Erosion**

Stormwater disposal is a significant issue at Castlepoint where the erodable nature of the land means uncontrolled discharges have the potential to saturate the upper soils and cause slippage of the soils covering the harder strata underneath. This in turn has the potential to undermine foundations of dwellings, accessory buildings, pipe networks and roads.

The ability of existing stormwater infrastructure to cope with increased loads may also lead to erosion. Inadequate sized soakpits, culverts and drains can result in stormwater banking up or flowing around existing infrastructure which causes surrounding soil to be eroded, increasing maintenance and replacement costs.

## **(2) Contamination of natural watercourses**

In many settlements stormwater is directed to natural watercourses. Stormwater has the potential to pick up contaminants such as chemical spray, engine oil, grass clippings, litter and sediment as it flows off and across the built environment. If untreated this stormwater can contaminate natural watercourses and the sea. As well as the detrimental impact on ecological systems, such contamination can also impact on public health and enjoyment of the coast.

The quality of stormwater and the importance of adequate infrastructure (such as the creation of artificial wetlands or the installation of litter traps) are issues that may require further investigation.

### (3) Increased Risk of Localised Flooding

As mentioned earlier increased development of an area leads to an increase in the volume and speed at which water is delivered off a site. While some sites have adequate stormwater retention and storage capacity, in some areas a build-up of stormwater can result in localised flooding. This is particularly of concern for ‘down stream’ sites which may have previously been able to manage the amount of stormwater on their property but with increased development upstream find themselves underwater after a storm event. Such flooding may also occur around natural watercourses if they begin to receive larger peak flows than they are able to handle.

Other than the issue of damage to property itself, there is another issue surrounding the potential for flooding by stormwater and that is that the stormwater impacts are often cumulative. An individual development may not have a significant impact on stormwater volumes but together several developments will. This becomes an issue as councils try to plan for overall adequate stormwater mitigation controls but are usually presented only with ‘piece by piece’ subdivision applications. One way to respond to this is through the development of structure plans as discussed in Section 5 - Responses.

## 4.8 Refuse



**Figure 4.1:** Visitor Waste Disposal  
Whangaimoana

A number of survey respondents at Castlepoint and Riversdale Beach and submitters on the Discussion Document sited refuse disposal as an issue. Due to the remoteness of some areas of the coast, littering is difficult to police as people contravening the bylaws have moved on prior to an officer of council arriving on-site.

The cost of providing bins (figure 4.1) and a rubbish service is also an issue.

While people generally rely on weekly gate collections there are other ways in which to deal with refuse disposal. Residents, weekenders and day trippers can be encouraged to take responsibility for their own waste disposal by either taking it to the appropriate land fill or transfer station or taking the rubbish home with them. Neither the provision or absence of bins provides the ultimate solution as on one hand if rubbish receptacles are provided, they may be over used and refuse will blow around the place and on the other if there are no receptacles visitors may dump rubbish.

## 4.9 Signage

Each community has an assortment of signs, including signs for Council, Department of Conservation and private signs. These are all in various stages of disrepair and are ad hoc in their design and location at present (figure 4.2).



**Figure 4.2:** Signage at Lake Ferry

## 4.10 Coastal Erosion

Natural processes along the coast have caused erosion, in some cases severe where dwellings have fallen into the sea. While it is important that the foreshore is protected in some settlements it is also desirable that coastal protection does not become visually obtrusive or prevent access to the foreshore or beach. Coastal protection works have occurred in some areas and are planned for in others. The need for coastal protection is an issue not only because of the cost associated with such works but also because existing infrastructure such as roads can be lost to erosion.

This issue of coastal hazards, including erosion is discussed in the Hazards Technical Report.

## 4.11 Social Infrastructure

The settlements on the Wairarapa coast are small and have limited community and commercial services available. Due to their isolated nature, they have almost no opportunity to develop as larger service centres for surrounding areas. The settlements

are vulnerable to continued loss of ‘social infrastructure’, that is, services such as schooling, health care, shops, and employment opportunities which help to create a sense of community. Also the high percentage of non-permanent residents may make it unviable to provide many such services and, with deregulation, it may be that they are cut back or withdrawn.

While the need for public open space is recognised, new developments, such as greenfield subdivisions often do not provide for social infrastructure. New suburbs/settlements are being created with covenants which restrict the land to residential use only thereby preventing the creation of commercial buildings and a variety of commercial lots sizes even if the settlements have a population large enough to support such services.



## **Chapter 5**

# **Responses**

As explained in Chapter 2- Statutory Framework, development and provision of infrastructure is controlled largely by the Resource Management Act 1991 (RMA) and Regional and District Plans developed in accordance with the RMA. There are however, other mechanisms that are currently or can be used to ensure adequate provision of infrastructure and services. Existing statutory and non-statutory responses are highlighted in this chapter and key recommended responses to address the issues raised in Chapter 4- Vulnerabilities are provided.

## **5.1 Existing Responses**

### **(1) Regulatory**

The purpose and principles of the Resource Management Act 1991 are set out in Part II of that Act. In particular Section 5 prescribes the purpose of the Act. Section 5 of the RMA is detailed in Chapter 2, Statutory Framework.

The most appropriate way to achieve the purpose of the Act is through a Regional Policy Statement or Regional Plans or District Plan. The preparation of a district plan is mandatory and must not be inconsistent with national policy statement, coastal policy statement, or any regional policy statements and plans. District plans may include rules, which allow, control or prohibit specific activities. When making rules, Councils must have regard to the effects of activities. All three district plans and the five regional plans include rules. The rules therefore form a legislative response to activities.

Studies undertaken prior to the preparation of any plan and the consultation phase through the proposed stage of a plan determines what the community deems to be of importance in the area. The plans provide rules to meet the environmental outcomes set out in those plans.

When there is no rule in a plan, Section 17 of the Resource Management Act; provides a duty to avoid, remedy, or mitigate adverse effects provides that:

- (1) *Every person has a duty to avoid, remedy, or mitigate any adverse effect on the environment arising from an activity carried on by or on behalf of that person, whether or not the activity is in accordance with a rule in a plan, a resource consent, section 10, section 10A, or section 20.*

Section 35 of the RMA requires councils to collect information, and to monitor the operation of the RMA in their region or district. Currently little monitoring is undertaken in the Wairarapa. The three territorial authorities have joined with Opus with a view to producing a guideline for State of the Environment monitoring for small authorities. When this document is produced, the council's will be in a position to effectively monitor the environment.

Enforcement orders are issued by the Environment Court on application by any person. Abatement Notices may be served on any person by an enforcement officer. Both enforcement orders and abatement notices require a person to do something that in the opinion of the court or officer, is necessary to ensure compliance of the RMA, regulation, rules in plans, proposed plan or resource consent. While available for use, Councils only use abatement notices in extreme cases, preferring to work through issues with those not complying.

Council bylaws cover activities not provided for in plans and include activities such as the keeping of animals, public places including trading; licensing of hotels; signage; control of dogs and littering.

The New Zealand Building Code and Approved Documents were prepared and are maintained by the Building Industry Authority (BIA), which is a statutory body established by the Building Act 1991. The Approved Documents were prepared by the BIA to offer a method of complying with the specific performance criteria of the Building Code. The Approved Documents include a large number of New Zealand Standards. The Building Code sets down performance criteria for buildings and covers issues such as connection to an approved sewage system and design criteria for



buildings in high wind areas. Section 36 of the Building Act allows Councils to grant building consent for structures on land, which is subject to erosion, avulsion, falling debris, subsidence, inundation, or slippage (note earthquake is not included). Building consents granted for such land must be registered with the District Land Registrar, (on Certificate of Title) after which the Council is under no civil liability resulting from having issued a building permit for land subject to erosion etc.

Other Acts require documents to be produced, which include reserve management plans, the purpose of which is to ‘provide for and ensure the use, enjoyment, maintenance, protection and preservation ... of the reserve for the purposes for which it was classified’.

The Local Government Act requires local authorities to prepare an Annual Plan and Budget. Annual plans set out how a Council proposes to spend its income. These plans are open for public submission and may change after hearing those submissions. The public has an input into the way and areas councils expend money, a significant amount of which is spent on environmental issues. Thus creating opportunities for coastal communities to request Council input into such things as management plans

The goal of asset management plans is to meet the required levels of service in the most cost effective way. Asset Management Plans apply management, financial, engineering and other practices to physical assets in an attempt to optimise life cycle costs.

## **(2) Non-regulatory**

Non-regulatory methods of responses to the built environment and infrastructure include guidelines, signage, education, publicity, wardens etc. Very few of these methods are currently used. There are a number of signs on the coast warning of hazards and advising of by-laws. Minimal education is provided; some schools have been involved in planting programmes for dune restoration and public meetings held to educate about the risks of tsunami.

There are five wardens at Riversdale with limited powers and a ranger who visits the South Wairarapa settlements over the holiday periods. The wardens are empowered under the Litter Act and Reserves Act, which include asking persons to remove dogs, vehicles and firearms from reserves, but they have limited powers and need to report back to Council for action to take place.

Education programmes are planned for waste management to encourage the re-use of products, more recycling and an overall reduction in waste.

## **5.2 Recommended Responses**

The following responses are recommended to address the issues raised in Chapter 4 - Vulnerabilities. Again issues are addressed in the order they were raised in the previous chapter and their order should not be taken as an indication of importance or otherwise.

### **(1) Settlement Expansion**

- 1.1** Identify appropriate and inappropriate areas for subdivision, through development of structure plans for existing settlements and assessment of areas outside of settlements. Such plans should identify how much expansion is appropriate and limitations to expansion. They should present solutions to existing problems and ensure that the need for and the provision of infrastructure and the possible re-zoning of land is adequately addressed.
- 1.2** At Castlepoint redefine the urban boundary to include the Castlepoint holiday park.
- 1.3** Ensure district plans allow for infill development provided infrastructure, environmental and hazard constraints are adequately addressed.

## **(2) Roads and Parking**

- 2.1** In emergency planning responses consider the availability of alternative methods of transport, such as helicopters as some settlements may not be able to be accessed by road.
- 2.2** When assessing subdivision applications, consider the implications of increasing the size of settlements where access is threatened.
- 2.3** Secure adequate contributions from developers to cover the costs of upgrading and maintaining roads required as the result of increased use.
- 2.4** Consider the issue of increased pressure on existing off-site parking and/or the need for new off-site parking when assessing of new subdivisions and developments.
- 2.5** Determine areas under increasing pressure for car and boat parking and develop a parking strategy to ensure impacts on residents and the environment are minimised and safety is addressed.
- 2.6** Provide input to the Department of Conservation Scenic Reserve Management Plan at Castlepoint to ensure it adequately addresses existing parking problems in the Reserve.

## **(3) Water Supply**

- 3.1** Through consultation with Rural Fire Forces and Environmental Health Officers develop minimum recommendations for on-site water supply.

## **(4) Sewerage**

- 4.1 At Castlepoint evaluate options and plan for an extended community wastewater scheme sized to accommodate residential intensification and possible long-term expansion of the residential zone in this locality.
- 4.2 Investigate and prioritise where communal sewerage system infrastructure is required. Ensure that the infrastructure response is appropriate for each settlement and considers future expansion.
- 4.3 Develop an education campaign to ensure that residents and wastewater professionals are aware of the importance of monitoring, maintaining and (where necessary) upgrading existing systems.
- 4.4 Implement a “warrant of fitness” approach to ensure waste water systems function adequately. Follow up with appropriate action where discharges do not comply with local authority and regional rules.
- 4.5 Encourage the uptake of alternative wastewater technologies that minimise the environmental impact of wastewater disposal.

## **(5) Electricity and Communication Services**

- 5.1 Require all developments to install all services underground.
- 5.2 Encourage new developments to include landline telephone connection, or where this is not possible, consider liasing with the relevant services providers to enhance cell phone services in poor reception areas.
- 5.3 Identify, prioritise and provide for in the annual plan, areas where existing services are to undergrounded.

- 5.4 Encourage settlements to consider alternative energy sources, such as wind power to ensure that they will have adequate electricity provision into the future.

## **(6) Fire**

- 6.1 Continue to provide ongoing volunteer training and encourage more participation.
- 6.2 Provide educational programmes and enforcement of fire ban to minimise the risk of fire and ensure people are aware about the limitations of existing services.
- 6.3 Through consultation with Rural Fire Forces and Environmental Health Officers develop minimum recommendations for on-site water supply.
- 6.4 For proposed subdivisions in high fire risk areas, request comment from the relevant fire service.

## **(7) Stormwater**

- 7.1 Evaluate through monitoring the impact of stormwater to the surrounding environment and, if significant effects are found, investigate alternative stormwater control.
- 7.2 Identify and prioritise which settlements require the installation or upgrade of a community stormwater system to minimise erosion, flooding, or the contamination of waterbodies.
- 7.3 Require developers to provide an impact report on the effects of their development on overland flows; natural watercourses; flooding; and land stability.

- 7.4 In determining whether an individual development will impact on or require stormwater infrastructure, give consideration to the potential for future expansion and development of the settlement.
- 7.5 Implement a public education campaign to increase awareness of how residential and other activities can impact on stormwater quantity and quality.
- 7.6 Encourage best practice in the design of stormwater systems such as the installation of litter and sediment traps, or the use of grass swales to increase infiltration and reduce stormwater contamination.

## **(8) Refuse**

- 8.1 Evaluate and adjust as necessary existing service provisions.
- 8.2 Work with Waste Management Wairarapa (WMW) to provide education on waste minimisation and recycling.
- 8.3 Encourage day-trippers to remove refuse and dispose of at own residence.

## **(9) Signage**

- 9.1 Investigate the effectiveness of existing signs and alternative methods to provide public information on site.
- 9.2 Work with public land managers to develop a set of signage guidelines to ensure signs are consistent, effective and adequately maintained.

## **(10) Coastal Erosion**

- 10.1 Identify and prioritise where coastal protection works are needed.
- 10.2 Consider alternative approaches to ‘hard’ coastal protection works, such as dune planting

## **(11) Social Infrastructure**

- 11.1 Encourage developers to provide for future commercial and community services through, design of lots, and, not insisting that every lot is covenanted to restrict it to residential development.





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## **Legislation:**

The Resource Management Act 1991

## **Websites:**

[www.telecom.co.nz](http://www.telecom.co.nz)

# ***Appendices***

## **Appendix 1**

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