

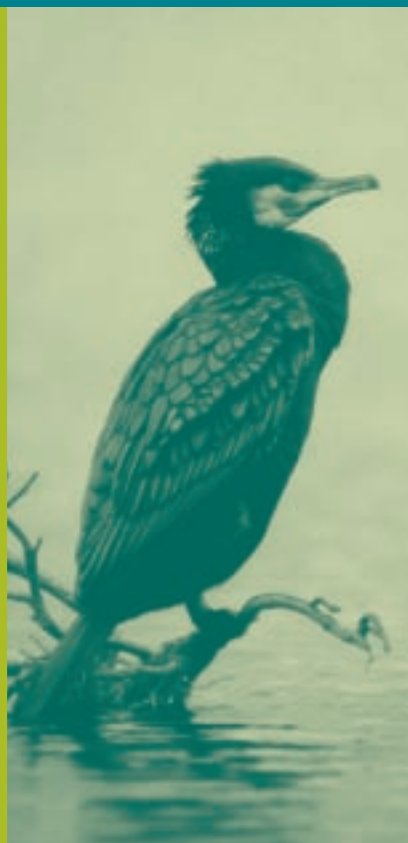
# Our region – their future

A discussion document on the review of the  
Regional Policy Statement for the Wellington Region

Quality for life



greater WELLINGTON REGIONAL COUNCIL | Environment





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# 1. Introduction

It wouldn't be surprising if you're confused by all the documents you get asked to comment on, and how they seem to ask the same sorts of questions. So, what is this document asking about? Is it important, or different in some way? How is it connected with all those other documents you get consulted on? And is it worth responding again?

## What's it about?

Hopefully, you'll get an idea about what this document is about from its title, *Our region - their future*. "*Our region...*" tells you it's about the people who live here right now, and about the whole of the Wellington region, including the Kapiti Coast, Porirua, Wellington, the Hutt Valley and the

Wairarapa. "*...their future*" lets you know it's about the future we can help create for our children and the environment. Through social and environmental well-being, we have a long-term, sustainable basis for economic prosperity.



## Is it important?

*Our region - their future* is a key part of a review of the *Regional Policy Statement for the Wellington Region 1995*. As you'll read a little later, a Regional Policy Statement is a formal, statutory document that identifies the major resource management issues for the region, and sets out objectives, policies and methods for tackling these issues. District plans,

prepared by city and district councils, and regional plans, prepared by Greater Wellington have a requirement (under the *Resource Management Act 1991* (RMA)) to put the provisions of the Regional Policy Statement into effect. So, the Regional Policy Statement is important – it will help shape change in the region and each of the various cities and districts that make up the region.

## How is it connected with other documents and plans?

We have mentioned the connection with district plans, but there is also a significant link with the long-term council community plans (LTCCP) that each council in the region (including Greater

Wellington) prepares. The LTCCPs set out a 10-year vision for projects to achieve community outcomes. The Regional Policy Statement helps implement some of the various community outcomes.

## Should you respond to it?

You might have made submissions on one or more of the LTCCPs. If so, you may be thinking that you've already made your points about "what the council should be doing". The Regional Policy Statement covers a lot more than any one council does, or is

responsible for. It covers issues such as water and air quality management, the coastal environment, looking after the region's biodiversity, how transport and urban areas can be managed more sustainably, and what the implications might be from climate change.

Okay, how best to tackle this document that runs to 60 pages? You don't have to read everything. You don't have to answer all the questions we ask. Read as much as you feel interested in, or that you feel applies to you or the organisation you represent. Your responses to the questions raised are welcome.

Please send comments to: *Our region – their future*, Freepost 181121, Greater Wellington Regional Council, PO Box 11646, Wellington or visit [www.gw.govt.nz/future](http://www.gw.govt.nz/future). Comments are due by 30 June 2006.



## 2. Background

The aim of *Our region - their future* is to get ideas and feedback so we can prepare the next Regional Policy Statement. The *Regional Policy Statement for the Wellington Region* became operative on 15 May 1995 and Greater Wellington is now required to review it.

The review began with an assessment of the success of the Regional Policy Statement. The findings from this work are reported in Greater Wellington's 2005 state of the environment report *Measuring up*.

We've summarised our assessment in chapter 5 of this document, the real heart of *Our region - their future*. In that chapter we also ask you if we have identified the right issues, whether we should do things differently in the next Regional Policy Statement and, if so, how?

The rest of chapter 2 provides information about what a Regional Policy Statement is, what it should contain, how we approached things in the current Regional Policy Statement, and how we have kept track of outcomes over the last ten years.

There is also a chapter (chapter 3) on the various changes to legislation, policies and strategies that will influence the next Regional Policy Statement in some way, notably the *Resource Management Act 1991*, long-term council community plans, the Wellington Regional Strategy and the *Regional Land Transport Strategy for Wellington 1999-2004*.

Chapter 4 outlines the Regional Policy Statement review process and chapter 6 looks at ways the next Regional Policy Statement could look and operate differently.



## 2.1 What is a Regional Policy Statement?

A Regional Policy Statement is a policy document that has the purpose of:

*“...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 in a particular region.” (section 59, RMA)*

In brief, it sets the policy framework for promoting the sustainable management of natural and physical resources.

## 2.2 What must be identified in a Regional Policy Statement?

A Regional Policy Statement must:

- identify the important resource management problems in a region (issues)
- outline what is to be achieved by a Regional Policy Statement (objectives)
- describe what is to be managed, where and how, to make progress towards the objectives (policies)
- state who is going to implement the policies, and by what mechanism (methods).

The statement must also include the reasons for adopting the objectives, policies and methods, state the anticipated environmental results, outline the process to deal with cross-boundary issues and monitoring, and specify the agencies responsible for land use control over natural hazards, hazardous substances and indigenous biological diversity.

A Regional Policy Statement cannot directly control resource use through rules. It can, however, direct that certain matters be “given effect to” in regional or district plans through rules.

## 2.3 The Regional Policy Statement for the Wellington Region 1995

The current Regional Policy Statement was based on managing specific natural and physical resources. Ten chapters covered: fresh water, soils and minerals, the coastal environment, air, ecosystems, landscape and heritage, energy, waste and hazardous substances, the built environment and transportation and natural hazards. There was also a chapter (the

iwi environmental management system) which addressed the relationship between Greater Wellington and the region’s seven iwi.





## 2.4 Monitoring of the Regional Policy Statement

The Regional Policy Statement stated how it would be monitored. This included:

- annual publications giving summary results of Greater Wellington's monitoring and compliance activities
- two comprehensive state of the environment reports
- two five yearly reports on the effectiveness of the Regional Policy Statement.

Since 2002, Greater Wellington has summarised the results of environmental monitoring and pollution response in a series of report cards.

We have published two comprehensive state of the environment reports since the Regional Policy Statement was made operative in May 1995. *Measuring up 1999* and *Measuring up 2005* used information from within and outside Greater Wellington to evaluate our progress towards achieving the Regional Policy Statement objectives.

*The First Five years – a report on the performance of the Regional Policy Statement* was released in 2000. Using the results reported in *Measuring up 1999*, this report assessed the implementation of each policy and method in each chapter, what had been done, and broadly assessed whether the actions had been effective in achieving the objectives.



We have used the results reported in *Measuring up 2005* to write a series of evaluation reports on the effectiveness of the implementation of the Regional Policy Statement over the ten years since it became operative. We used the findings from those reports to help prepare this discussion document.

## 2.5 Why review the Regional Policy Statement?

The *Resource Management Act 1991* (RMA) requires Greater Wellington to begin a full review of its Regional Policy Statement no later than ten years after it became operative. The Regional Policy Statement was made operative in May 1995 and the review began with the preparation of *Measuring up 2005* (see chapter 4 for an outline of the review process).

Depending on the outcome of the review, Greater Wellington is required to notify the changed Regional Policy Statement, or re-notify the existing one. As with all policy statements and plans prepared under the RMA, the notified Regional Policy Statement must go through the formal statutory process of consultation, public submissions and hearings.

# 3. Changes to legislation, policy and new strategies

Over the last ten years, there have been a number of changes to legislation and policy. These will impact on how the next Regional Policy Statement addresses certain issues. The **appendix** to this discussion document provides a list of new legislation, changes to legislation and new national policies or strategies.

To follow is an overview of some of the key changes.

## 3.1 Amendments to the Resource Management Act 1991 (RMA)

Since the Regional Policy Statement was adopted in 1995, the *Resource Management Act 1991* (RMA) has been amended a number of times. Amendments of particular importance to a Regional Policy Statement include:

### Part 2 “Purpose and Principles”

- Section 6, new “Matters of national importance”
  - the protection of historic heritage from inappropriate subdivision, use and development
  - the protection of recognised customary activities.
- Section 7, new “Other matters”
  - the efficiency of the end use of energy
  - the effects of climate change
  - the benefits to be derived from the use and development of renewable energy.

### Part 4 “Functions powers and duties of central and local government”

- Section 30 “Functions of regional councils”
  - the investigation of land for the purposes of identifying and monitoring contaminated land
  - the strategic integration of infrastructure with land use through objectives, policies and methods
  - if appropriate, the establishment of rules in regional plans to allocate water among competing types of activities.
- Section 30, “Functions of regional councils” and section 31, “Functions of territorial authorities” in relation to biodiversity
  - regional councils (section 30) responsible for the establishment, implementation and review of objectives, policies and methods for maintaining indigenous biodiversity, and the control of land for the maintenance and enhancement of ecosystems in water bodies and coastal water

- territorial authorities (section 31) responsible for the control of any actual and potential effects from the use or development of land for the purpose of maintaining indigenous biodiversity.
- Section 32, “consideration of alternatives, benefits and costs”
  - a new requirement to make available a report on the evaluation of the alternatives, benefits and costs of the objectives, policies and methods in a proposed Regional Policy Statement.
- Section 62 “Contents of a Regional Policy Statement”
  - requirement to state, in a Regional Policy Statement, the council responsible for specifying methods to control the use of land to maintain indigenous biological diversity
  - a responsibility to take into account iwi planning documents
  - a responsibility to recognise and provide for any management plans for foreshore and seabed reserves.
- Section 67 “Contents of regional plans” and 75 “Contents of district plans”
  - a new requirement for regional and district plans to give effect to Regional Policy Statements.

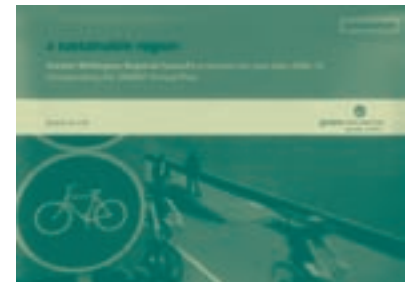
## 3.2 Long-term Council Community Plans and the draft community outcomes 2006-16 for the Wellington region

In accordance with the *Local Government Act 2002*, long-term council community plans provide a ten-year focus for local authority activities. They describe how a local authority’s activities contribute to the achievement of the community outcomes.

Greater Wellington’s *Draft Long-term Council Community Plan for 2006-16 (LTCCP)* has the following broad community outcomes:

- healthy environment
- quality lifestyle
- sense of place
- prosperous community
- prepared community
- connected community
- entrepreneurial and innovative region

- essential services
- healthy community
- strong and tolerant community.



Each city and district council in the Wellington region has their own community outcomes in their long-term council community plan. These further describe the region’s outcomes in the context of local desires and management.

As noted earlier, a Regional Policy Statement is one mechanism that can assist with implementing community outcomes for Greater Wellington and city and district councils in the region.

## 3.3 The Wellington Regional Land Transport Strategy 1999 to 2004

A regional land transport strategy is prepared under the *Land Transport Management Act 2003* and sets out the vision, objectives, policies and plans for land transport in the region. A regional land transport strategy is required to 'not be inconsistent' with the Regional Policy Statement for that region.

The *Wellington Regional Land Transport Strategy 1999 to 2004* is currently under review with an updated draft version due for release later in 2006. In the interim, a number of updates have been made which include the:

- *Hutt Corridor Plan* (December 2003)

- *Wairarapa Corridor Plan* (December 2003)
- *Regional Cycling Strategy* (May 2004)
- *Regional Pedestrian Strategy* (May 2004)
- *Regional Road Safety Strategy* (September 2004)
- *Regional Travel Demand Management Strategy* (December 2005)
- *Western Corridor Plan* (April 2006).



## 3.4 Wellington Regional Strategy

The Wellington Regional Strategy Forum represents the nine local authorities that make up the Greater Wellington region. The Forum's aim is to build an internationally competitive region through actions supporting economic prosperity and at the same time, enhance our quality of life.

The Wellington Regional Strategy Forum released a Growth Framework discussion document in 2005. The Framework identified four focus areas to ensure future prosperity. These were:

1. effective leadership and partnerships
2. quality regional form and systems
3. unlocking economic potential
4. internationalisation.

In relation to the Regional Policy Statement the "Quality regional form and systems" focus area is particularly relevant. The Framework also has nine action areas:

1. reinforce and improve compact corridor form
2. maturing our sub-regional centres
3. reinforce a strong regional central business district

4. strengthen green belts and open space corridors
5. design major roads to support our centres
6. build on culture and place
7. support marae as centres for change
8. improve range and location of housing stock
9. make sure land and infrastructure are used efficiently.

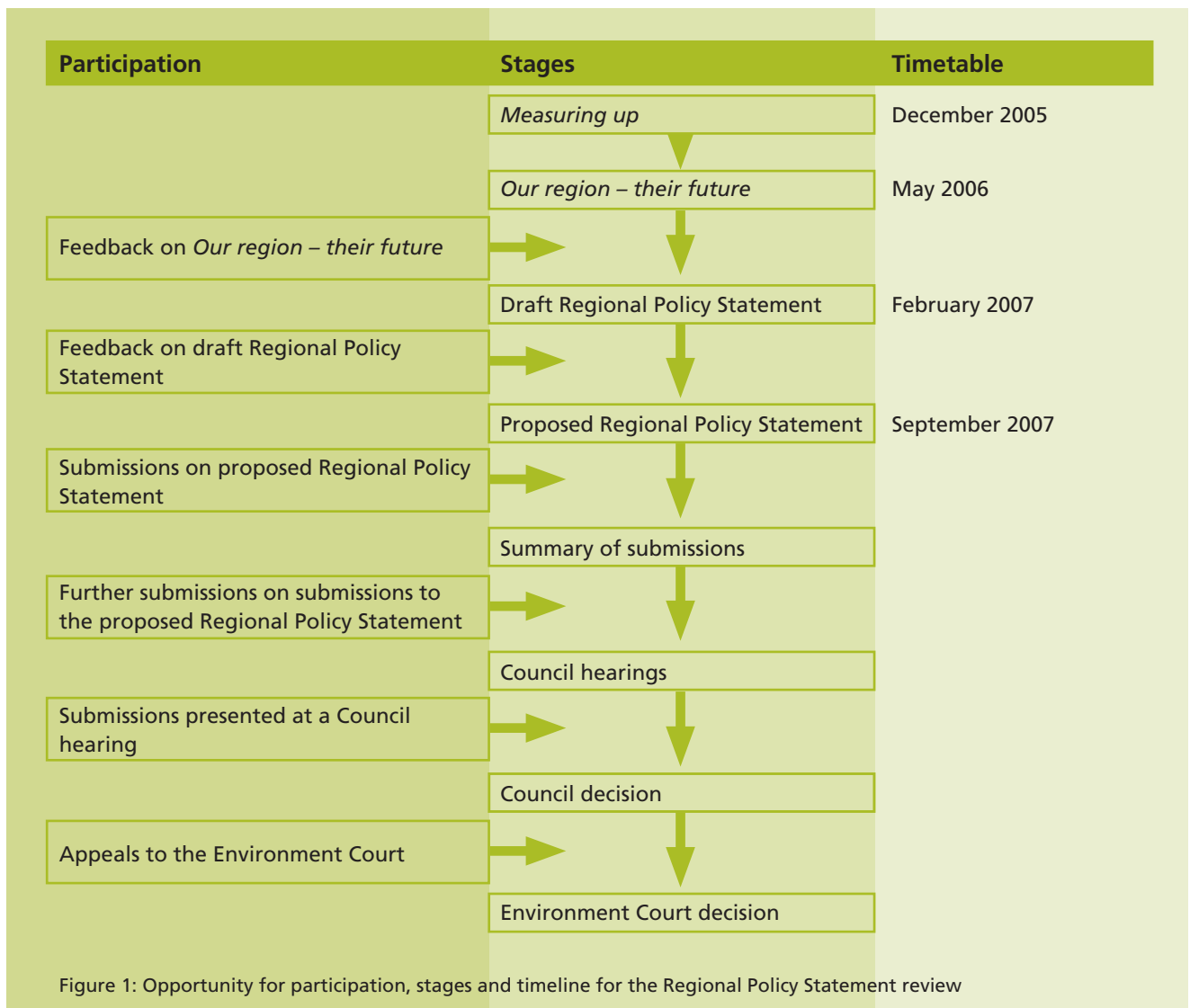


The Wellington Regional Strategy is being released for submissions in July this year, and will be signed off by the councils in late September 2006. The next Regional Policy Statement is likely to have a key role in implementing some of the outcomes, particularly the quality regional form and systems work.

The Regional Policy Statement review and the Wellington Regional Strategy processes are timetabled to ensure that the processes inform one another and the links will continue to be maintained.

# 4. Review process – next steps

The next step, after receiving feedback on *Our region - their future*, will be to release a draft Regional Policy Statement (February 2007). The draft will introduce any suggested changes and seek further feedback before being publicly notified as a proposed Regional Policy Statement (September 2007). The process and opportunities for input are set out in Figure 1.



# 5. Resource management topics

The following chapters look at the iwi and resource management, natural and physical resources and natural hazards in the *Regional Policy Statement for the Wellington Region 1995*. A specific chapter on climate change has also been included. Here we introduce each topic, discuss the success of the Regional Policy Statement, and look at what's changed and our assessment of the issues in 2006 and into the future. Each chapter then finishes with a series of questions, relevant to the particular topic that we would like your feedback on.

## 5.1 Iwi and resource management

### 5.1.1 Introduction

Maori know the Wellington region as a special place: Te Upoko o te Ika a Maui – the Head of the Fish of Maui. Over the centuries, many different tribes have lived here. The lands they occupy around Wellington and Porirua Harbours, the Kapiti Coast, the Hutt Valley and the Wairarapa have seen many changes.

The first European settlers landed in Petone in 1839, a year before the Treaty of Waitangi was signed. Today, the Treaty finds expression in most legislation, including the *Resource Management Act 1991* (RMA) which requires “all persons” exercising functions and powers under the Act to:

- take into account the principles of the Treaty.
- Recognise and provide for the relationship of Maori and their culture and traditions with their ancestral lands, water, sites, waahi tapu, and other taonga.
- To have particular regard to kaitiakitanga (the exercise of guardianship), and the ethic of stewardship.





Specifically in relation to Regional Policy Statements, section 61 of the RMA says that in preparing or changing a Regional Policy Statement, Greater Wellington must “take into account any relevant planning document recognised by an iwi authority, and lodged with the council, to the extent that its content has a bearing on resource management issues of the region”. Further, section 62 (contents of Regional Policy Statements) says that the policy statement “must state...the resource management issues of significance to... iwi authorities in the region”.

There are seven iwi authorities in the region.

When the *Regional Policy Statement for the Wellington Region 1995* was being prepared, iwi identified a diverse range of resource management issues which were generally incorporated in the topic-based chapters of the document (e.g. coastal environment, fresh water, landscape and heritage, and ecosystem management).

In addition to specific issues, the Regional Policy Statement has an iwi vision for the future and a chapter that sets out the basis of a relationship between iwi and Greater Wellington on resource management matters.

### 5.1.2 How successful has the Regional Policy Statement been?

Since the Regional Policy Statement became operative in 1995, all parties have put considerable effort into developing a mutually satisfactory relationship between iwi and Greater Wellington. Iwi and senior Greater Wellington staff generally feel positive about a maturing relationship. Some successes include:

- A Charter of Understanding between iwi and Greater Wellington. This sets out how all Greater Wellington activities will be subject to the terms of the Charter.
- Ara Tahi, a forum that meets at least five times a year, providing an opportunity for tangata whenua to discuss resource management policy and a diverse range of other strategic and environmental management issues.
- Greater Wellington employs two Maori Policy Advisors and runs training programmes for staff on a range of relevant issues.

- Copies of all resource consent applications are given to all iwi for their comment and feedback.
- Iwi project funding.

However, in early discussions as part of the review of the Regional Policy Statement and in consultation undertaken in the preparation of *Measuring up 2005*, iwi indicated that there are some areas where improvements are still needed. For example, the preference of all iwi was that the existing objective in the Regional Policy Statement about the principles of the Treaty being taken into account should go further and refer to the actual Treaty text. They also commented that, even though the principles are recognised in the Regional Policy Statement and other documents, they should be taken further – into practical action.

The need for practical action finds particular expression in relation to the damage and degradation of resources valued by Maori. Concern about environmental quality is nicely summed up in a comment made by one iwi representative about the loss and degradation of mahinga kai (the customary gathering of food and natural materials and the places where those resources are gathered). Such loss is seen by iwi as an “indicator” of ineffective environmental performance despite good intentions.

### 5.1.3 What’s changed, and what are the issues for iwi now and in the future?

When both the Regional Policy Statement and the Charter of Understanding were first developed, the principal legislation relating to iwi involvement with Greater Wellington was the RMA. Subsequently, Ara Tahi has advocated for stronger recognition of the Treaty and its application to all Greater Wellington business. This, together with provisions in the *Local Government Act 2002* has broadened the range of matters for consultation and liaison between Greater Wellington and iwi, and also other Maori.

*Measuring up 2005* documented iwi views on the relationship with Greater Wellington, and also provided feedback on other key issues for iwi. These relate to concerns about exercising kaitiakitanga, how far Greater Wellington and city and district

councils recognise cultural aspirations and tikanga, and as noted above, iwi preference for the text of the Treaty rather than just the principles to be taken into account.

Through the development of *Measuring up 2005*, a series of meetings and workshops were held with Ara Tahi and individual iwi. We will continue this process of involvement and consultation for the Regional Policy Statement review, the first step of which is to identify the issues that iwi wish to see addressed in the next Regional Policy Statement.

#### 5.1.4 Comments and questions for you to consider

The current Regional Policy Statement handled the responsibilities and requirements of the RMA by addressing Maori history, an iwi vision for the future, and “The Protection of ‘Mauri’ ”. There was also a chapter called “The iwi environmental management system” that focused on Greater Wellington’s relationship with iwi of the region. In addition, resource-based issues for iwi were scattered throughout other resource management chapters (e.g. the fresh water, coastal environment, landscape and heritage).

##### Question 1:

Should the next Regional Policy Statement adopt a similar approach to the current Regional Policy Statement? Does there need to be a chapter dealing with the relationship between iwi and Greater Wellington, or could this now be addressed in the Charter of Understanding? (The Regional Policy Statement is a statutory document which is not open to easy or frequent change, and there may be pros and cons in spelling out the relationship in such a formal and essentially fixed document.)

##### Question 2:

Should the Regional Policy Statement merely restate what the RMA says about how to work with Maori in terms of the Treaty principles, and what the Act identifies as relevant matters?

##### Question 3:

The RMA requires that Regional Policy Statements “take into account any relevant planning document recognised by an iwi authority”. At present there is only one such document finalised, and it is for only part of the rohe of one iwi. There is also one other draft Management Plan. How do these plan provisions get “taken into account”?

##### Question 4:

The RMA also requires that Regional Policy Statements “state the resource management issues of significance to iwi authorities in the region”. Taken together with the requirement about iwi management plans, how do we address issues of significance? Is it preferable to have a separate chapter dealing with all these matters (combined with provisions that deal with the relationship between iwi and Greater Wellington), or can the significant issues identified by iwi be effectively handled within the chapters dealing with particular resources? Or is the best option some combination of both approaches?

## 5.2 Air quality

### 5.2.1 Introduction

“Clean” air is a mixture of about 78 per cent nitrogen and 21 per cent oxygen. The remainder is made up of gases such as argon, hydrogen, carbon monoxide, methane and carbon dioxide. Any pollutants that are released into the atmosphere from one part of the world can be distributed to places on the opposite side within a week. The atmosphere is a dynamic system, with complex and ceaseless processes of mixing, and unexpected linkages between causes and effects. It doesn't take much to make clean air dirty or change its chemistry, with disproportionately large consequences.

Interest in the air has been principally driven by a concern about human health effects arising from poor air quality. As industrialisation proceeded during the 19<sup>th</sup> and 20<sup>th</sup> centuries, a whole new range of emissions were released into the atmosphere. Many of the more obvious, visible signs of air pollution have been successfully tackled and human health has improved. One of the less obvious changes – the relatively small percentage increases in methane and carbon dioxide from the expansion of pastoral agriculture and burning fossil fuels – is now widely believed to be having a very significant impact on the health of the planet itself.

The causes of climate change and its consequences are more fully considered in the **climate change** chapter of this document. This chapter, however, touches upon greenhouse emissions as an air quality issue for the Wellington region, but the focus is primarily on more localised air quality management issues.

### 5.2.2 How successful has the Regional Policy Statement been?

The current *Regional Policy Statement for the Wellington Region 1995* was prepared without much data on air quality, and one of the main priorities has



been to establish a good information base. The Air chapter (despite the absence of data on air quality for the region) sought to maintain and protect high quality air and to enhance air quality where there were identified problems. That chapter also had objectives for managing the effects of discharges of contaminants on human health and the environment and for managing greenhouse gas emissions (consistent, in both aspects, with central government policy or standards).

There has been definite progress in terms of data collection and developing a better understanding of air quality around the region. *The Regional Air Quality Management Plan for the Wellington Region 2000* has been particularly valuable in triggering relevant air quality and meteorological monitoring, development of an emissions inventory and providing a system for processing the necessary consents under the *Resource Management Act 1991* (RMA).

Air quality monitoring has shown that degraded air quality is only a problem in certain places under certain conditions. However, while the problems are not widespread or frequent, the RMA does require that something is done when standards or guidelines for managing human health are breached. The *Regional Air Quality Management Plan* and *National Environment Standards* provide a framework for identifying breaches and taking the necessary actions.

In New Zealand, transport emissions represent the fastest growing problem for local air quality and global effects. Motor vehicles are responsible for almost all the carbon monoxide, nitrogen dioxide and sulphur dioxide discharged in the Wellington region - these pollutants affect people's health. Vehicles are also responsible for nearly half the greenhouse gas emissions. The Regional Air Quality Management Plan provides a good regime for managing discharges from "fixed" sites (mainly industrial premises and activities), but does not include any rules controlling emissions from mobile sources. Even if it did, the RMA prohibits regional councils from having regard to the effects of climate change when assessing any discharge permit application.

Another major emission source in parts of the region (Masterton, Upper Hutt, and Wainuiomata) is domestic fires. The Regional Policy Statement indicated that Greater Wellington would "control" the effects of domestic emissions through the Regional Air Quality Management Plan, but the Plan leaves resolution of the issue to non-regulatory methods of education and advocacy rather than statutory controls.

Overall, there is certainly a much better idea about where degraded air quality occurs and what the sources are, but it would also be fair to say that actual air quality in these degraded areas is not improving.

### 5.2.3 What's changed and what are the air quality issues now and for the future?

In late 2005, the Ministry for the Environment introduced *National Environmental Standards for Air Quality*. The aim was to create a consistent approach across New Zealand for improving air quality by setting standards in relation to certain key pollutants of concern for human health.

The National Standard requires that Greater Wellington regularly tests for pollutants and to publicly notify all instances of the Standard being exceeded. The Standard also introduced the notion of "air-sheds" - there are now eight defined air-sheds in the region. If there is more than one instance where

the Standard is exceeded per year in an air-shed, no further resource consents to discharge to air can be granted for that air-shed.

The following are some of the main air quality issues identified in *Measuring up 2005*:

- Transport emissions have a range of impacts, from releasing pollutants such as carbon monoxide, nitrogen oxides and particulates into the local environment around and alongside roads (e.g. central Wellington), through to widespread release of a principal greenhouse gas, carbon dioxide (also see **climate change**).
- Emissions from domestic fires cause air quality to exceed the National Environmental Standard for air quality on cold, still winter nights. This is caused by a temperature "inversion", when the earth cools rapidly and cold air is trapped at ground level (along with the smoke and emissions from the fires) beneath a warmer layer of air.
- While it is feasible, and desirable, to introduce the means of addressing domestic fire emissions, there are significant social and cultural consequences from imposing an across-the-board solution (such as banning fires). On the other hand, there is the prospect of poor community health outcomes if nothing is done.
- Odours are a chronic problem frequently reported to the Greater Wellington Pollution Hotline, but while high in number, incidents nearly all relate to a limited number of odour-causing activities and locations.

### 5.2.4 Comments and questions for you to consider

Air quality seems to be generally good in the region, but there are "hot spots" which Greater Wellington must manage. The resource consent process is effective in managing many fixed sources of pollution. But the main air pollution sources (domestic fires and emissions from vehicles), and the most common effect of air discharges (objectionable odour) are harder to deal with.

### Question 1:

Do you think we have identified the right air quality issues? Are there other issues and aspects of air quality management that we should be recognising for the region?

### Question 2:

How effective do you think the Regional Air Quality Management Plan and associated air quality management initiatives and actions have been during the last decade? What have been the main factors that have influenced good performance? How might we further encourage the positive factors and reduce the bad ones?

### Question 3:

What role do you think the Regional Policy Statement should have for air quality management? Can air quality issues and management be left to the Regional Air Quality Management Plan and the National Environmental Standards?

### Question 4:

Would it be helpful if the Regional Policy Statement identified priority emission sources or areas for air quality management – for example, for domestic emissions or for transport-related emissions in busy city centres? Is there sufficient public awareness of the consequences of breaching National Environmental Standards – that for some areas, a breach will prevent any resource consents for discharges to air being granted, thus potentially restricting further development?

### Question 5:

To achieve its objectives for air quality, should the Regional Policy Statement be more directive in its policies, or should this be left to rules and/or standards in the Regional Air Quality Management Plan?

### Question 6:

How active should local government be in promoting programmes like “Clean Heat” in areas where there are problems with domestic fire emissions?



## 5.3 Fresh water

### 5.3.1 Introduction

It's a wet and windy day in Wellington. It's pouring down in Masterton and Paraparaumu too. Maybe we moan about the rain as it slants into our faces, as streets and pavements become awash and as rivers and streams start rising and perhaps threaten our homes or businesses. But this supply of rainwater is absolutely fundamental to us – fresh water sustains our health, our economy, our recreation and the region's ecosystems.



We put many demands on water – it is taken out of rivers and from groundwater aquifers, and wastes are put into it. We swim and fish in it, we kayak and canoe on it. Our multiple expectations and demands on fresh water can create conflicts of use. From the wider perspective of sustainability, fresh water health is important – it supports the biodiversity that drives the environmental systems which we depend on so heavily. For Maori, water is highly valued and disposal of waste into it is especially offensive.

We use and enjoy fresh water in all sorts of ways, yet we often take it for granted – it will always be there, it will be “clean”, and there will be enough. Are these realistic assumptions or do they reflect a dangerous complacency about the availability and value of water?

Fresh water in the region is managed by Greater Wellington through responsibilities given by a range of legislation, but primarily by the *Resource Management Act 1991* (RMA). The RMA provides the context within which both the *Regional Policy Statement for the Wellington Region 1995* and the *Regional Freshwater Plan for the Wellington Region 1999* were prepared.

Greater Wellington's responsibilities include “allocating” water, and managing water quality by controlling discharges. While the region's fresh water is generally adequate in quantity and quality for the

range of human and ecosystem needs in 2006, it is a relatively fixed supply (courtesy of our reasonably regular annual rainfall).

In future, water demand due to population growth is expected to rise and climate change may influence the frequency, intensity and distribution of rainfall in the region. Changes to rainfall will influence groundwater levels and the quantity of water in rivers. Areas with low rainfall will face the secondary effect of increased demand on a falling supply (e.g. for irrigation). (See also chapter on **climate change**).

At a national level, the Government is concerned about the availability of water, and how it might best be used to meet economic and environmental needs. In the Wellington region, we also need to think seriously about our changing pattern of supply (as a result of climate change) and our increasing demand for fresh water if we are to continue to meet the range of expectations we have for it.

### 5.3.2 How successful has the Regional Policy Statement been?

The current Regional Policy Statement has three objectives that broadly seek to ensure that water quality and quantity is sufficient for our current “uses”, that the cultural values attributed to water by iwi are appropriately recognised, and that there



is consideration for the potential fresh water needs of future generations. The life-supporting capacity of fresh water is also recognised.

Since the Regional Policy Statement became operative in 1995, and based on a history of responsibility for water management, Greater Wellington has continued to develop systems to allocate water to meet demands and to maintain water quality. Fourteen river catchments have formal minimum flows and allocation limits, and all groundwater aquifers that water is taken from have allocation regimes. Additionally, while many rivers in the region have no official minimum flows, they do have limits based on historical flows rather than “in-stream” needs, and these limits may be imposed as conditions of resource consents.

On the downside, we know that at least three of the groundwater aquifers may already be over-allocated. In addition, our knowledge of small water abstraction quantities from streams and groundwater is not complete, and we are unsure of the effect of these smaller water “takes” on the biodiversity of small streams and wetlands.

There have been improvements in water quality in some streams and rivers, with a correlation between improved quality and the stream’s biological health. For example, the region is home to a healthy diversity of 22 species of native fish. One of the major problems for water quality has been point-source discharges, and these have almost all stopped as a result of controls in the resource consent process. Nonetheless, discharges from municipal wastewater, urban and industrial stormwater, leachate from landfills, and silt run-off from major earthworks are still a problem in some areas.

At a general level, the Regional Policy Statement has been reasonably successful in managing water quality (from point sources) and quantity. However, some stream reaches and catchments do have water quality problems, while certain activities (particularly non-point source pollution) continue to create pressures on water quality and quantity. Urban streams are in poor shape and many lowland streams are suffering from stock access and lack of shade from streamside (riparian) vegetation.

### 5.3.3 What’s changed and what are the fresh water issues now and for the future?

Public concern about fresh water has seen an increased community involvement in streamside restoration, informal water quality monitoring and support for social marketing campaigns such as Greater Wellington’s “Be The Difference”. Greater Wellington’s programmes for schools (Take Action) and small industry (Take Charge) also focus on promoting water quality and stream habitat management.

All these programmes have raised people’s awareness of streams and the ecosystems that depend on them. The programmes have also resulted in an increase in personal involvement in projects and raised expectations about Greater Wellington’s management of streams and rivers.

On an international scale, New Zealand has a lot of fresh water per head compared with other countries (second highest behind Norway), but despite this abundance, or perhaps because of it, fresh water is not used very efficiently. This situation needs to change soon if we are to respect the role of good quality fresh water for economic and environmental sustainability.

In 2005, Greater Wellington produced its state of the environment report, *Measuring up 2005*. Within the “things are OK...at the moment” message in the chapter on fresh water, a number of issues were identified:

- There is enough water for now, but water use is increasing and we are reaching a critical stage. There needs to be new approaches to water management so that what we have is more efficiently allocated and used. Possibilities include water metering, water transfers and matching water more precisely to, for example, crop needs.
- We think we are okay right now with how the water allocation and minimum flows regime is working. Part and parcel of improved efficiency in water management will be clarification and confirmation of how much water is actually used, where it is coming from, which sources

are at their limits, what water is used for and what are the effects of takes (large and small) on ecosystems and biodiversity that are also dependent on the fresh water resource.

- As demands for human use of fresh water increase, the importance of maintaining and protecting the life-supporting capacity of river systems and groundwater also grows and this reinforces the need to be more efficient in what is taken, and to reduce contaminants that enter fresh water systems.
- Some fresh water ecosystems are under threat from water takes and the effects of upstream land use and activities. Wetland ecosystems are a good example, but within urban areas, there is an emerging problem for many small “first” and “second” order streams that begin their flow at the top of river systems. These streams might not have permanent water flow but are very important for stream health (by supplying water and biodiversity to the river and other water bodies that may exist downstream). As subdivision proceeds into steeper terrain, these ephemeral streams are being filled by earthworks and their value to the river system is being lost.
- Urban streams also suffer from stormwater pollution and sediment run-off from subdivision and development within their catchments. Stormwater run-off also contains contaminants from vehicles – pollutants from exhaust and engine systems but also from wear and tear of the vehicle itself (including rubber dust, aluminium, chromium, iron, paint etc.).
- Rural streams also suffer from agricultural run-off carrying excess nutrients and sediment into rivers, lakes and wetlands, which causes poor water quality and ecosystem disruption.
- Urban and rural streams both experience major impacts from flood management work. Many streams become drains, and rivers get

straightened to speed the flow of water to the sea. Natural patterns of drainage produce habitats that support more biodiversity and it would be helpful if we could mimic natural patterns in flood management.

- Access to and along rivers and lakes is a statutory consideration. Access issues arise from time to time and there may be a need for clearer guidance on how public rights of access can be most effectively met whilst respecting the rights of landowners.

### 5.3.4 Comments and questions for you to consider

Historically, we have tended to meet, rather than manage, demand for water. As we approach some of the limits on our use of water, the emphasis may have to shift from prolific use to efficient use.

Greater Wellington has primary responsibility for managing takes from and discharges to fresh water. However, land use activities can both influence demand for water and produce discharges that affect water quality. To date, Greater Wellington has not exercised its function of controlling land use for water quality. Land use management has been left to city and district councils through their district plans. Perhaps this is an arrangement that should be revisited.

The effects of land use on water can be divided between those arising from “point” sources (such as wastewater from a sewage treatment works) and “non-point” sources where contaminants are washed into streams overland (such as agricultural run-off). Point sources have been easier to manage. More difficult are the land use effects of overland run-off and stream modification, which can be more insidious and affect much wider areas. For the future, there may need to be more effective attention paid to non-point sources.

### Question 1:

Do you think we have identified the right issues for fresh water management? Are there other issues that we should recognise for fresh water management in the Wellington region? Should the Regional Policy Statement state the management goals for rivers – that water in rivers is to be managed to maintain aquatic ecosystems, or must be suitable for contact recreation, for example?

### Question 2:

How effective do you feel fresh water management practice has been during the last decade? What have been the main factors that have influenced our performance? How might we further encourage the good factors and reduce the bad ones?

### Question 3:

What are the priority areas for action? Should there be a focus on more efficient use of fresh water resources? How could we best promote improved efficiency? In terms of priority for water quality, are urban streams a more urgent priority than rural rivers?

### Question 4:

What role do you see for the Regional Policy Statement in fresh water management for the region as compared with the Regional Freshwater Plan? Would it be helpful if the Regional Policy Statement dealt with fresh water management more deliberately with related policy areas, such as ecosystems and biodiversity, soils and the coastal environment?

### Question 5:

Should city and district councils develop land use controls in district plans to more explicitly manage all effects of land use, including effects on fresh water? Should Greater Wellington exercise its function of controlling land use for water quality? Would it be helpful if there were more directive policies in the Regional Policy Statement to achieve integrated management of land and water?

### Question 6:

How should the cultural relationship of the tangata whenua with rivers, lakes, wetlands and other water bodies be recognised? How can we best promote the management of fresh water in ways that take into account iwi values and beliefs?

## 5.4 Soils

### 5.4.1 Introduction

It's easy to underestimate the importance of soils in supporting life on earth. Most of the time, soils and their billions of inhabitants are hidden from us – we occasionally see the top of another world when we dig the garden. Different soils have different structure, biology and chemistry and it is easy to degrade soils by modifying or destroying structure, reducing the biological and organic content, or changing soil chemistry.



Soils develop slowly, sometimes taking hundreds of years to form topsoil. But once formed, topsoil has enormous productive value in supporting a vast and diverse complex of plants – from indigenous forest through to economically important crops. In brief, soils are the foundation of all terrestrial food chains and central to economic wealth and ecosystem health.

Reducing the life-supporting capacity of soils, either by reducing their quality or allowing them to erode, means we are undermining our own well-being and depriving future generations of a most significant resource. Thinking about future needs is important when contemplating soil management because, in human life terms, soil is effectively finite as it takes so long to develop.

To pass life-supporting, healthy soils on to future generations, while using them ourselves, requires everyone to manage them in a sustainable way. This means keeping soil in place (i.e. prevent or limit erosion) and sustaining those characteristics of different soils that create and maintain their quality.

The management of soil erosion and maintenance of soil quality are two key objectives of the soils and minerals chapter in the *Regional Policy Statement for the Wellington Region 1995*.

### 5.4.2 How successful has the Regional Policy Statement been?

The Regional Policy Statement chapter on soils and minerals covers a range of soil issues, aspects of land management, and minerals topics. This wide coverage means that the chapter has a multiple focus

on soil quality, soil conservation, flooding, catchment management, quarries, gravel extraction and contaminated sites.

For these different areas, some objectives and policies have been successful and some have not been implemented. On the positive side, over 100 soil sites are now monitored for soil quality but this programme needs to continue for an extended period to build a series of results and a longer term picture.

Greater Wellington also works with farmers and landowners on soil conservation and gives advice through farm plans. There are now over 500 such plans, but we are unsure as to how effective these plans have been in managing erosion-prone land. Greater Wellington has databases that can show where erosion-prone land is, and this helps with planning for soil conservation work with landowners.

In summary, there have been quite a lot of positive initiatives and activity around some of the problems addressed by the objectives and policies of the Regional Policy Statement. It is not necessarily the Regional Policy Statement that has triggered, or directed, all of these useful actions. For example, the Ministry for the Environment, Landcare Research, and Crop and Food Research began support for soil quality monitoring by way of the "500 Soils Project".

Several of the contentious or topical issues addressed by the current Regional Policy Statement have declined in importance, so the relevance of certain parts of the chapter has also diminished. For example, topsoil mining and turf farming were difficult management issues in the early 1990s but have been largely resolved through rules in plans.



Similarly, management of land for quarries and associated reverse sensitivity issues have been addressed in district plans.

### 5.4.3 What's changed and what are the soil issues now and for the future?

There has been no change to legislation relating to soil conservation and management, but responsibilities for contaminated land have been more clearly spelled out in changes made to the *Resource Management Act 1991* (RMA) in 2005. City and district councils have primary responsibility for managing contaminated land through their land use planning function. This allows them to control land uses in order to prevent or mitigate any adverse effects of the development, subdivision, or use of contaminated land. Regional councils can now investigate land so that they can identify and monitor contaminated land.

Greater Wellington has a database of sites where past land uses suggest that the land may be contaminated. Being on the database can trigger the need for investigation if there is a proposal to change the land use. City and district councils have direct access to the database so they can assess applications for subdivision and changes in land use.

There are some broader societal and economic trends that do have some influence on soils. Among these have been shifts in land use and farming practice, and a raised awareness among the rural community of how sustainable land and soil management might be more effectively achieved and, perhaps more importantly, the costs of failure.

Although there has been modest success, Greater Wellington's state of the environment report for the region, *Measuring up 2005*, identified the following issues for sustainable soil management:

- On cropping land, there is evidence of over-cultivation and excessively high rates of fertiliser application (especially in areas of "good" soil quality to maintain fertility, whereas steeper, poorer areas are not being treated with enough).
- Some erosion-prone pasture land on hill country farms, particularly in the eastern Wairarapa, have little or no protective woody vegetation. This can increase rates of soil erosion. Moreover, soil loss from farms is an unwanted gain to the rivers, so it's really a lose-lose result.

- Plantation forestry is an extensive land use in the region and poses potential soil quality degradation issues. With increased logging anticipated in the next few years, problems with sedimentation of small streams off-site is also likely to be an issue.
- High quality soils are often in locations that are also suitable for subdivision and development (particularly on river floodplains). Such development means that these soils are effectively lost to production and the capacity to produce food locally (and therefore avoid wider "costs" associated with the international production and supply of food) is also reduced.
- Soils are the scene for a complex range of ecological processes and cycles that contribute to soil health. Poor soil management can inhibit these processes and cycles (damaging or destroying soil structure, biology and chemistry), and restrict soil renewal and potentially destroying life-supporting capacity.
- The consequences of climate change on patterns of rainfall and rainfall intensity could be significant for farming on erosion-prone land.

### 5.4.4 Comments and questions for you to consider

Soils are a fundamentally important resource, and can be damaged, lost or effectively made unavailable through soil erosion, land use change, fragmentation of land holdings and development (by being permanently covered over). Whilst Environment Court case law suggests that it may not be appropriate to try to legally "protect the best", it needs to be acknowledged that there are not many high quality soils in our region and that, for sustainability in the long-term, scarce resources should be looked after in some way. Soils need to be carefully managed so that their economic productivity is not permanently destroyed. Are Greater Wellington and the community being active enough in these areas of soil management?

In the current Regional Policy Statement, one major policy area concerns the supply of rock and aggregate from rivers and quarries for the development of roads, homes and businesses in the region. Transporting aggregate is an expensive exercise, so the Regional Policy Statement looks to safeguard local sources of rock and aggregate.

Quarries have historically been located at what originally was some distance from urban areas, but with growth and development creeping towards previously rural locations, there are concerns that the key resource for development itself may become subject to issues of “reverse sensitivity” from the new

neighbours. It is unclear whether this issue should be addressed by the Regional Policy Statement this time around, or left to city and district councils to deal with in their district plans. There is also the bigger question as to whether ensuring a supply of aggregate is a regionally significant issue.

### Question 1:

Do you think we have identified the right soils issues? Are there other issues and aspects of soil management that we should recognise for the region?

### Question 2:

How effective do you feel soil conservation initiatives and actions have been during the last decade? What have been the main factors that have influenced good performance? How might we further encourage the positive factors and reduce the bad ones?

### Question 3:

Do you think that the Regional Policy Statement should address mining and aggregates? Is it sufficient to leave the land use and river extraction issues associated with managing these activities and their effects to regional and district plans?

### Question 4:

What role do you see for the Regional Policy Statement in providing direction for sustainable management of soils for the region in the future? Would it be helpful if priority areas for soil conservation, such as particular river catchments, were identified? How might the Regional Policy Statement assist preparation for and adaptation to potential effects of climate change, including farming on erosion-prone land and large soil losses from high intensity rainfall?

### Question 5:

To achieve its objectives for soil quality, should the Regional Policy Statement be more directive in its policies? Would it be helpful if there was a greater focus on integrated management of land and water?

### Question 6:

Should the Regional Policy Statement be more directive about controlling land use on contaminated land? How could the Regional Policy Statement guide the integrated management of contaminated land? Does Greater Wellington’s work in identifying and monitoring contaminated land need to be guided by the Regional Policy Statement in some way? If so, how? (See also, **waste management and hazardous substances**).



## 5.5 Ecosystems and biodiversity

### 5.5.1 Introduction

An ecosystem may be described as a community of plants, animals and micro-organisms interacting with each other and their surrounding environment. There can be forest ecosystems, mountain ecosystems, wetland and fresh water ecosystems, and coastal and marine ecosystems.

Plants, animals, insects, fungi and bacteria (together forming biodiversity), their habitats and the ecosystems they form are not just a natural backdrop to our everyday activities. Healthy ecosystems provide us with life's essentials – plants and animals for food, fibre for clothing, timber for construction and so on. Ecosystems also supply the “services” that power the cycles of life – processes that purify air and water, decompose and detoxify wastes, give us productive soils and stabilise climate extremes. We do value them for their aesthetic and intrinsic qualities, but also for the unique sense of identity that they give our region. Worldwatch Institute estimate that the dollar value of the services provided by ecosystems is, at a conservative estimate, five times the annual gross domestic product (GDP) in the USA.

So, ecosystems are important for lots of reasons. They are at the heart of the “life-supporting capacity” that is central to the purpose and principles of the *Resource Management Act 1991* (RMA).

How should ecosystems be managed to sustain their life-supporting capacity? The problem is that they are not static, clearly defined areas that can be marked on a map. Ecosystems are dynamic – constantly changing – and the many and diverse natural processes which drive ecosystems are as important as the species within them. Some parts of ecosystems are closely interconnected and confined to a small area but others may be geographically extensive and distant from each other.

The *Regional Policy Statement for the Wellington Region 1995* attempts to address the management of complex ecosystems. But how complicated is it to manage a constantly moving target that changes itself through time?

It seems that everyone has found it very hard and, not surprisingly, we've not made a very good job of it.



### 5.5.2 How successful has the Regional Policy Statement been?

The current Regional Policy Statement has objectives about the overall quality of ecosystems and the desire to increase that quality, having a diverse and wide spread distribution of healthy ecosystems (especially indigenous ecosystems), full representation of the region's flora, fauna and habitats, and protection for special ecosystems.

Greater Wellington's state of the environment report, *Measuring up 2005*, gives some good and quite a lot of bad news about the region's ecosystems and biodiversity. The good news is that there is a growing awareness of the need to better manage ecosystems. Small scale practical actions to enhance and restore habitats and ecosystems are also underway across the region, through community and individual landowner's initiatives.

However, we don't really know if much of a difference is being made through these efforts, and the broader signs are that the region's biodiversity is now significantly diminished and that this trend is continuing. Ecological processes are impaired as a result of habitat fragmentation, and the presence of plant and animal pests in many ecosystems. The objectives and supporting policies in the Regional Policy Statement are ambitious; but does this make them unrealistic? Or is the real question, how well are the provisions being implemented?

What the Regional Policy Statement has achieved is a higher profile for, and a greater understanding of, the significance of ecosystem and biodiversity

management. The Regional Policy Statement has influenced the slow but growing number of ecosystem management provisions in district plans (although the pace of this process of inclusion in plans could be quicker). Significant habitats and remnants of rare and diminishing ecosystems continue to be the victims of development pressures. Controls and/or guidance in statutory documents would help address and relieve some of these pressures.

### 5.5.3 What's changed and what are the ecosystem and biodiversity issues now and for the future?

The imperative for managing ecosystems and their associated natural processes and biodiversity has gained greater urgency as these fundamental life-supporting resources continue to decline in area, numbers and health internationally, nationally and locally.

The theme for the *New Zealand Biodiversity Strategy 2000* was “turning the tide”. That message is important in two senses – of turning the tide of public opinion and agency awareness of the significance of ecosystems and biodiversity and also in the sense of actually stopping the pattern of species reduction and damage.

In addition to the New Zealand Biodiversity Strategy, maintaining indigenous biodiversity is now explicitly identified in the RMA as a function for Greater Wellington and city and district councils. Funding for biodiversity management has improved at national and regional/local levels and we are beginning to get a better picture of ecosystem health through advances in technology.

To sum up, there are some gains and some definite losses. But what are the likely issues for ecosystem and biodiversity management during the next decade or so? *Measuring up 2005* identified the following:

- Many of the issues identified in the current Regional Policy Statement are still relevant and there is now an even greater urgency in tackling them.
- While small gains are being made, we need to at least maintain, and preferably improve, the successful efforts in pest management and restoration and enhancement of habitat and ecosystem processes.

- Besides major animal pests like possums, goats, rats, cats and stoats, and plant pests too numerous to mention, there are less obvious but equally important pressures such as:
  - draining wetlands and channelling natural waterways
  - air and water pollution
  - fire
  - grazing forest remnants and riparian areas
  - clearance of regenerating scrub and native bush
  - water extraction (which drives up temperatures and increases nutrient and pollutant concentrations in streams, and reduces groundwater levels with drying out effects on wetlands)
  - urban expansion, land use changes and structures that modify or destroy habitat
  - pollution and over-fishing of coastal waters
  - climate change (reducing habitat for mountain species, placing stresses on indigenous species to adapt and increasing the risks of new pests).
- As a result of these issues, the most at-risk ecosystems are lowland forests, rivers and lakes and their margins, wetlands, dunes, estuaries and coastal escarpments.
- We know that seals populate parts of our coastline and whales and dolphins visit our coastal waters but, in general and much more importantly, we have very limited knowledge about marine ecosystems and the marine biodiversity that inhabits or visits our coast.

### 5.5.4 Comments and questions for you to consider

Are we achieving our aim of “turning the tide”? Some would argue that to sustain our very existence, we have to keep trying. Moreover, Greater Wellington has a statutory obligation to do something about ecosystems and biodiversity, so we would like some feedback about what can be done collectively: where we should put our efforts; who can help; and what roles each of us may have.

### Question 1:

Do you think we have identified the right ecosystem and biodiversity issues? Are there other issues that we should recognise for the region?

### Question 2:

How effective do you feel ecosystem and biodiversity management practice has been during the last decade? What have been the main factors that have influenced our performance? How could we further encourage the good factors and reduce the bad ones?

### Question 3:

Where do you think the priority areas are for action? Should there be a focus on some areas, ecosystems or species while we leave others to fend for themselves as best they can?

### Question 4:

What role do you see for the Regional Policy Statement in ecosystem and biodiversity management for the region in the future? Would it be helpful if the Regional Policy Statement kept a separate chapter on ecosystem and biodiversity management or should there be a more integrated approach with related policy areas, such as provisions that address fresh water, soil, air, the coast and the urban environment?

### Question 5:

Can ecosystem and biodiversity management be effectively addressed by district plans alone, or does the Regional Policy Statement need to provide some policy guidance? If city and district councils prepare changes to district plans for ecosystem and biodiversity management, would it be helpful if there were more directive policies in the Regional Policy Statement (and rules and/or standards in regional plans)? What guidance do the community and private landowners need on ecosystem and biodiversity management?

### Question 6:

Is the allocation of responsibilities shown below, the most effective way to specify the objectives, policies and methods for the control of the use of land to maintain indigenous biological diversity? Is this the best way to achieve good biodiversity outcomes for the region?

	Responsibilities for developing objectives	Responsibilities for developing policies	Responsibilities for developing methods
Coastal marine area	GW	GW	GW
Beds of lakes and rivers	GW	GW	GW
Other land	GW* TA	GW* TA	GW TA*

GW = Greater Wellington Regional Council

TA = Territorial authorities (district and city councils)

\* = Primary responsibility

## 5.6 Coastal environment

### 5.6.1 Introduction

The coastal environment is an important focus of human activities and aspirations. Many of us live near the coast, we go to the beach, we fish in the sea and, especially for Maori, there are strong cultural associations with the coast and all it provides. It can also be the scene of dispute, reflecting different demands and perceptions of ownership – but fundamentally, the heat of debate shows how important the coastal environment is to all New Zealanders.

The coast is also a dynamic natural environment with unique ecological values. Where these processes and valued natural areas are under the sea – in the coastal marine area – we might be excused for not realising that their presence contributes to a dynamic, diverse and healthy marine environment.

On coastal land, this dynamic environment is more visible. There are ongoing natural processes that, over the years, have built up dunes, eroded headlands, deposited mud in estuaries and formed the characteristic coastlines we see. This constantly changing land is cloaked with distinctive vegetation and populated by birds and insects specially adapted to windy and salty conditions. On coastal land, as at sea, there are valuable natural sites, but they are becoming rarer and damaged as pressures grow with more of us wanting to live near or visit the coast.

The sea and the land are not separate environments. What people do on the land has major impacts on the health of the sea. Rivers bring sediment and pollution from our land use activities in their catchments. Looking after water quality and habitat in the sea requires us to look after the land first. Conversely, the sea can be at times a serious hazard to coastal settlements and property.

Balancing the use and the protection of the coastal environment clearly requires very careful management that goes beyond looking after the rubbish on the beach! Because of the importance of the coast to us all, and because there are so many complex links between land and sea, management of the coastal environment is shared between a number of authorities.



The *New Zealand Coastal Policy Statement 1994* (NZCPS) is prepared by the Department of Conservation for all New Zealand's coastal environment. The NZCPS sets out objectives and guidance on a range of nationally important matters including access to the coast, maintenance and protection of natural character, improving coastal water quality, how appropriate development might be most suitably accommodated, and protection of places and aspects of special value to tangata whenua. The NZCPS is currently being reviewed.

The *Resource Management Act 1991* (RMA) requires that Regional Policy Statements give effect to the NZCPS, and that regional councils prepare regional coastal plans (which reflect and give effect to both the NZCPS and the relevant Regional Policy Statement). The *Regional Coastal Plan for the Wellington Region 2000* only applies to the "wet" part of the coast – the coastal marine area. Management on land is the responsibility of city and district councils through their district plans.



## 5.6.2 How successful has the Regional Policy Statement been?

As noted above, the *Regional Policy Statement for the Wellington Region 1995* is part of a management framework for the coastal environment. Provisions in the coastal environment chapter derive strongly from the NZCPS, and gave direction and context for the Regional Coastal Plan and district plans. District plans are especially important for coastal care because they manage the dry land part of the coastal environment and the effects of land uses and activities that are either close, or eventually find their way, to the coast and coastal waters.

Until recently, district plans only had to be “not inconsistent” with the Regional Policy Statement. This wording does not encourage active pursuit of the provisions of the Regional Policy Statement. Recent amendments to the RMA (see also next section) now require district plans to “give effect” to the Regional Policy Statement, so it may be expected that there will be greater uptake and application of policies in the next Regional Policy Statement. Having said that, the last decade has seen the successful introduction of provisions in several district plans to provide guidance on where development might occur, and which significant sites and special values should be protected.

In broad terms, the objectives and policies in the Regional Policy Statement are still suitable and have been used more perhaps than other parts of the Regional Policy Statement when considering resource consent applications for subdivision and development in the coastal environment. A notable success in this regard has been the three tables in the coastal environment chapter that specify sites, landscapes and outstanding natural features. There has also been some success in achieving recognition and some form of protection for several nationally and regionally significant natural areas.

The coastal environment is arguably the area of most pressure for development in the region. Coastal locations are highly valued and are commonly the subject of subdivision enquiries and applications. A good proportion of proposals get approval. While district plans and conditions on resource consents increasingly reflect wider community concerns

about impacts of development on a sometimes fragile coastal environment, the bottom line is that a scarce resource perceived as a public asset – the coast – is being steadily developed. To that extent, it is questionable how successful the Regional Policy Statement or the NZCPS have been in relation to managing change in the coastal environment.

## 5.6.3 What’s changed and what are the coastal environment issues now and for the future?

Besides the continuing, if not accelerating, interest in coastal property, there have been legislative changes since the preparation of the current Regional Policy Statement. There has also been growing interest and participation by community groups in restoration projects and, on a somewhat larger scale, local authorities have made major progress with sewage treatment and discharges into the coastal marine area. In the Wairarapa, the three district councils and Greater Wellington have worked together on the *Wairarapa Coastal Strategy 2004*.

Among the legislative and other regulatory changes are the *Resource Management Act (Marine Pollution) 1998 Regulations*, the *Foreshore and Seabed Act 2004*, aquaculture reform, establishment of the Kapiti Marine Reserve and the likelihood of further such areas (e.g. Taputeranga Marine Reserve at Island Bay). The NZCPS is currently under review and recent amendments to the RMA have resulted in Greater Wellington having new functions in relation to historic heritage and maintaining and enhancing ecosystems in the coastal marine area.

One other significant change, foreshadowed in the current Regional Policy Statement, is climate change. The potential for sea level rise, increased storm surges and the consequential flooding of and damage to coastal property and assets has become a very high profile concern in the last few years. The threats to life and property, and more broadly on the economy and society, carries significant implications for all of the region but especially those who live or work on or near the coast. Given the scale of impacts and the necessity to consider this matter more fully, it is mentioned here, but also in the separate chapter on **climate change**.

Besides the issue of climate change and its effects, what are some of the other enduring or new issues for coastal management? Through the preparation of Greater Wellington's state of the environment report, *Measuring up 2005*, and early discussions for the review of the Regional Policy Statement, the following issues have been highlighted:

- Those areas of land adjoining the sea that have not been developed are either rocky and wild (and not likely to be easily developed soon), or rare and fragile (and under threat from development or its effects). In this latter category are dune systems (in the Wairarapa and on the Kapiti Coast) and "low energy" estuaries (such as Porirua Harbour and Pauatahanui Inlet) which contain delicate habitats where sediment and contaminants can build up as they are not flushed by strong tides or river flows.
- We have four years of data about water quality for bathing and shellfish gathering at 76 locations around the coast. However, we know little about the biodiversity of the coastal marine area – we don't know what is there or its condition. We don't know about the effects of fisheries management on marine habitats or on other species of marine life. Nor do we know the effects of our land-based activities on marine ecosystems generally.
- Risks associated with living on the coast have been made readily apparent in recent years. Besides the catastrophic impacts of tsunamis, there are the more frequent storms that regularly erode the coastline. This process of erosion is natural, but when it comes into conflict with human occupation, there are demands for sea defences and associated structures. In conjunction with considering climate change and sea level rise, we will need to seriously consider long-term land use policy for the coastal environment.
- Several of the above issues (use of coastal water, subdivision and development, pollution of coastal waters) can affect "natural character".

Preserving the coast's natural character, which encompasses landform, vegetation, scenery and ecology, is a matter of national importance in the RMA. However, certain areas of the coast do need to be available for strategically important uses (the port areas are the obvious example). At the same time, there are other activities that do not need to be on the coast (other than reasons of financially capitalising on a marketable asset). The coast is a finite resource and, as it diminishes, a key issue is what development should occur on the coast and how it will affect natural character.

- Access to and along the coast is a statutory consideration. As noted earlier, there is a strong public perception that "the coast" is a community, rather than a private, asset. Meeting public expectations and private property rights, while maintaining legally prescribed access to a diminishing resource will be a complex issue for most authorities to deal with in the next decade.

#### 5.6.4 Comments and questions for you to consider

The Wellington region has mainly an urban population, with many of our urban centres enjoying coastal locations. Concentrations of people, growing numbers of vehicles on transport networks, drainage systems coping with increasing amounts of often polluted run-off, and liquid waste disposal – all of these factors intensify the pressures we put on our coastal environment. Places on the coast where we are not yet living or influencing natural processes and biodiversity by our land-based or coastal activities are rare or non-existent.

Many contaminants from land eventually end up in estuaries and the sea. Different agencies and authorities may have to work more closely on their separate, but linked, responsibilities for land and coastal management.



### Question 1:

Do you think we have identified the right issues for the coastal environment? Are there other issues that we should recognise for the coastal areas of the Wellington region?

### Question 2:

How effective do you feel coastal management practice has been during the last decade? What have been the main factors that have influenced performance? How can we encourage the good factors and reduce the bad ones?

### Question 3:

Where do you think the priority action areas are? Should there be a focus on coastal areas that have high development pressures? Should only special places with high natural character warrant attention while we leave others to change without controls? How should the Regional Policy Statement deal with natural character?

### Question 4:

What role do you see for the Regional Policy Statement in coastal management for our region? Would it be helpful if the Regional Policy Statement dealt with the coastal environment by ensuring it is managed in a more integrated way by considering it with related areas such as fresh water, ecosystems, and the urban environment? How might this be done in conjunction with other agencies?

### Question 5:

If city and district councils prepared changes to district plans for land use that explicitly managed effects on the coastal environment, would it be helpful if there were more directive policies in the Regional Policy Statement? What guidance does the community need for coastal management? What role do coastal strategies have in managing the coastal environment?

## 5.7 Landscape and heritage

### 5.7.1 Introduction

The landscapes and heritage of the Wellington region define a special place. Long stretches of rocky coastline, rugged mountain ranges, and floodplains with their river systems dominate the landscape we live in. There is evidence everywhere of our history and heritage – showing how the region has evolved under human occupation. Wellington’s landscapes and heritage make it unique and help give us our particular “sense of place”.



Landscapes do change through time, and when heritage gets added, it is often a mix of accident and design. Landscape and heritage have been described as the “children of change”. Like children, we can’t keep them just as they are, forever. But like good parents or guardians, we want to do our best to help them through the inevitable changes. In providing guidance, however, we need to remember why these “children” are special and how we might help them keep their individuality.

The *Regional Policy Statement for the Wellington Region 1995* has objectives and policies that focus on identifying and managing “regionally outstanding landscapes” and “regionally significant cultural heritage resources”. The way to identify the regionally outstanding landscapes was to be through the preparation of a Regional Landscape Plan. The significant cultural heritage resources are those items listed on the New Zealand Historic Places Trust (HPT) Register as Category 1 (there were 114 items listed for the Wellington region in 1995).

### 5.7.2 How successful has the Regional Policy Statement been?

#### 5.7.2.1 Landscape

Greater Wellington prepared a Regional Landscape Plan, invited public submissions, held hearings and

made a decision to withdraw the Plan. Instead, non-statutory landscape guidelines were proposed as a way to manage landscape. This proposal was also withdrawn as councillors felt that guidelines were unnecessary and that the review of the Regional Policy Statement would provide an appropriate opportunity for revisiting the question of landscape management.

In the absence of “regionally outstanding landscapes” and guidelines, the Regional Policy Statement provisions have had no means of application. Currently, a policy vacuum exists and there is no strategic or consistent guidance for managing landscape change. Major development proposals with significant landscape impacts have had to be assessed on a case-by-case basis using, where available, various provisions in district plans. To date, the Regional Policy Statement has been unsuccessful in identifying, and then managing, important landscapes.

Feedback from Greater Wellington’s state of the environment report, *Measuring up 2005*, and the early work on reviewing the Regional Policy Statement reveals a widely held view that managing landscape change is important and that management is more than protecting the best places (whatever or wherever they are). The message being given is almost the opposite of “protecting the best and forgetting the rest”. It is that we need to think more

broadly – to recognise that local landscapes (and heritage) contribute strongly to local identity and that landscape management is about managing change in landscapes – not preventing change.

### 5.7.2.2 Heritage

The Regional Policy Statement confines its interest to Category 1 items on the Historic Places Trust Register. It also recognises that change in use for many of these buildings and items is economically inevitable if the structures are to survive. The aim has been to try to make sure that the special features or qualities of these buildings and places are recognised and appropriately protected or managed during these changes.

While there has been some success in the recognition of Category 1 items in district plans, recognition has not always guaranteed protection or effective management of their special values. Several items have been demolished and a number of others have been modified in ways that are not sympathetic to the original form of the historic buildings or structures.

For heritage, as with landscape, the message from *Measuring up 2005* (and from changes to the definition of historic heritage in the *Resource Management Act 1991* (RMA)) is that a broader interpretation needs to be taken to what constitutes heritage and how it might be managed.

In short, the clear message is that historic heritage includes more than just the 120 Category 1 items currently listed on the HPT Register and recognised in the Regional Policy Statement. Arguably, it applies to over 500 Category 2 HPT items, a very large number of Maori and European archaeological sites, and to a variety of buildings and places that reflect diverse themes and successive periods of human occupation of the region.

This broader range is not coherently recognised or well managed in the region. The current Regional Policy Statement has taken a limited view of what constitutes heritage and has only been moderately successful in promoting suitable management of the items it determined to be of regional significance.

### 5.7.3 What's changed and what are the landscape and heritage issues now and for the future?

For **landscape**, no new or additional statutory mandate exists to provide for landscape management in the Regional Policy Statement. However, the degree of professional and public concern about, and support for, strategic and consistent landscape guidance tells us that the topic is a significant resource management issue for the region, and therefore a relevant matter for the Regional Policy Statement to address.

For **heritage**, a broader interpretation and upgrading of status is reflected through recent amendments to the RMA. A new definition of “historic heritage” has been provided and the protection of “historic heritage” has been elevated to section 6 – a matter of national importance. Authorities and agencies exercising powers and functions under the RMA “shall recognise and provide for” section 6 matters in, for example, their policy documents (such as Regional Policy Statements and regional or district plans).

*Measuring up 2005* and the early work on reviewing the Regional Policy Statement has identified the following concerns for landscape and heritage:

- There continues to be concern about the impacts of development and land use changes on important natural features around the region, as well as on “landscape” generally.
- Current pressures on landscape and natural features include large-scale earthworks (modern earth-moving equipment can transform landform, not just move soil), development in the coastal environment (e.g. in parts of the Wairarapa and along the Porirua and Kapiti coastlines), and infrastructure associated with wind energy generation (on ridgelines and hill tops).
- Vegetation removal has visual and ecological impacts on natural character, both on the coast and inland.

- Private landowners' rights to use and manage their land can conflict with community expectations for land (in public and private ownership) to provide visual enjoyment for current inhabitants and, longer term, for future generations.
- The HPT list of registered places has increased but is concentrated in certain areas (Wellington and Porirua). There is not a good geographic spread through the region, nor is there consistent representation through periods of human occupation or items that reflect the various themes of that occupation (e.g. whaling, early Maori and pakeha settlement, archaeological sites).
- HPT listing and scheduling in district plans does not mean that items are "safe". Most plans have rules for heritage items, but their effectiveness varies and important historic heritage continues to be lost.

#### 5.7.4 Comments and questions for you to consider

A key problem around protection and consequent management of landscape and historic heritage is uncertainty about their true value to the regional community.

For landscape, there is a lack of guidance on how we can manage the inevitable changes that affect the appearance of the region. Is guidance necessary? Is it necessary for the whole region or just at a local scale? Do we want to meld, rather than just weld, change on to what is already here? Would it be helpful, as a first step, if Greater Wellington and the city and district councils were to describe and classify the sorts of landscapes we have? A second step might involve getting widely-based community agreement on how best to manage change in these various types of landscape.

Heritage helps define who we are and where we have come from. Managing heritage reflects how much we, as a community, value and identify with our history.

Like landscape, heritage items face the pressures of change and development. Our challenge is to decide what should be kept and how it can be more effectively cared for. In the absence of a clear statutory mandate for historic heritage management, is it helpful to have some overall policy direction? Does there need to be one leader, a champion, for historic heritage? Would shared responsibility between interested groups and agencies lead to prevarication and inaction or constructive progress?

### Question 1:

Do you think we have identified the right sorts of landscape and heritage issues? Are there other problems you would like to highlight?

### Question 2:

Do you feel that the phrase “landscape management” means managing change? Should we be managing change at all scales; from coastlines and mountains to the areas and places local communities feel are special for their individual identity?

### Question 3:

Would it be helpful to know what the ingredients or characteristics of our landscapes are? Would landscape description and classification be useful to help get a clearer picture of the range and rarity of our landscapes so we can manage change in them appropriately?

### Question 4:

Historic heritage may be a matter “to recognise and provide for”, but what does this mean for local government? Should Greater Wellington and city and district councils simply let the Historic Places Trust and central government agencies “recognise” heritage in their registers and “provide” funding and advice? Is there a role for local government too?

### Question 5:

Do you think that the Regional Policy Statement is the appropriate document to provide policy guidance on landscape and heritage management for the region? Is guidance needed at all? Should each city and district council decide for its own area, how it will manage heritage and landscape issues? Do you feel there are landscapes that are regionally significant and that there should be a way to manage them? Should we just let change happen in its own way and live with the consequences?



## 5.8 Natural hazards

### 5.8.1 Introduction

The Wellington region is especially vulnerable to natural hazards, such as earthquakes, tsunamis, floods, landslides, coastal erosion, wind, wildfire, drought and even volcanic activity. The effects of these hazards depend on their scale and where and when they strike. Destructive natural events will occur. We can't avoid them – but we can try to lessen their effects.



The aim is to reduce vulnerability to hazard events and build resilient communities to cope with them should they occur. Several agencies have a role in achieving this aim, including local and central government, the Earthquake Commission and crown research institutes. The new Civil Defence Emergency Management arrangements under the *Civil Defence Emergency Management Act 2002* also encourage individuals and communities to take responsibility for managing their hazard risks.

Greater Wellington has statutory responsibilities for the control of “the use of land for the purpose of avoiding or mitigating natural hazards”, and city and district councils are responsible for controlling the effects of the use, development or protection of land for that same purpose. The *Regional Policy Statement for the Wellington Region 1995* sets out how these responsibilities are shared for our region. In summary, Greater Wellington is responsible for developing objectives and policies while the city and district councils develop rules for land. Greater Wellington is responsible for objectives, policies and rules for the coastal marine area.

How has this arrangement worked? Have the objectives and policies in the Regional Policy Statement provided a good framework for rules in plans? Do people understand more about natural hazards and their likely effects because of the guidance in the Regional Policy Statement?

### 5.8.2 How successful has the Regional Policy Statement been?

The natural hazards chapter of the current Regional Policy Statement has only one objective, but it is hard to measure. It states that “Any adverse effects of natural hazards on the environment ...are reduced to an acceptable level.”

“Acceptable level” is not defined and will vary from hazard to hazard, place to place, and be different for each affected community at different times. For example, in the *Hutt River Floodplain Management Plan 2001*, the affected community determined it wanted a particular level of flood protection (against a 1-in-440 year event). However, the same level of protection might not be acceptable to another community in another flood-prone area.

The policies in the Regional Policy Statement expand on how we might address the unspecified “acceptable level” – with appropriate information about the region’s hazards, consideration of hazard risk through decision-making on new (and existing) development, and by promoting greater community awareness of hazards.

There is scope in the next Regional Policy Statement to give more specific guidance on “how” we could manage hazard risk.

### 5.8.3 What's changed and what are the natural hazard issues now and for the future?

Since preparing the current Regional Policy Statement, a lot of work has gone into upgrading the information base to improve decision-making. We now have a better picture of hazards in the region, but we also need a better understanding of the consequences (and risk associated with) hazard events. As a community, we are reasonably knowledgeable about earthquakes, but for most other hazards, we have little understanding of consequences. For all hazards, including earthquakes, we do need to keep up-to-date with constantly emerging information (e.g. changing demographics and locations of new development) and their implications for risk.

The absence of current data about consequences is perhaps even more important for climate change (see chapter on **climate change**). The region may not be able to significantly influence the causes of climate change (although there are energy conservation and other environmental benefits from managing emissions) but, along with the rest of the world, we will certainly feel the effects.

What other natural hazard management issues do we face? We identified several when preparing the current Regional Policy Statement. Our state of the environment report, *Measuring up2005*, confirms their continuing relevance:

- The Wellington region is susceptible to a wide range of natural hazards. Nearly half a million people live and work in the region and realistically, we cannot eliminate the risks so we need to find ways of coping with the consequences of natural hazard events.
- We are constantly learning more about hazards. It is important to keep pace with this knowledge to plan and make well-informed decisions.
- We need more coordination between agencies on hazard research, establishing priorities and responsibilities for communicating information and advice.

- While hazard mitigation works may be necessary (e.g. for flood control), the works or associated structures can create adverse effects on the environment. Conversely, people don't always recognise that some landforms and ecosystems provide a degree of beneficial natural protection against hazards (e.g. wetlands act as sponges to hold excess water). The cause-effect relationships between hazard mitigation measures and environmental processes need to be more explicit when assessing hazards and how we can manage them.

### 5.8.4 Comments and questions for you to consider

Up-to-date, reliable information is an essential first step in making decisions about new developments and risk associated with their location. This information is also important for managing risk from hazards within existing developed areas. To be effective, this information generally needs to be transferred to "lines on maps" so we know where events might happen, where effects might be felt, where to place appropriate controls and where people can feel confident about living.

While this is desirable it is just not practically possible or financially feasible for many hazards. Perhaps hazard zones could be shown on maps for certain hazards. Over time the characteristics, frequency and consequences of hazard events within these zones could be measured and monitored (e.g. the number of people and buildings affected by particular hazard events, the dollar value of losses or damage). As this information accumulates it will be possible to better understand the risks and for the community to assess whether these risks are of an "acceptable level" or if something needs to be done.

The highest risks for the region come from earthquakes and floods. However, the implications of climate change for rainfall patterns and associated flooding, drought, sea level rise and storm surges are potentially the most serious and far reaching risks to our social and economic well-being. (See **climate change** chapter.)

### Question 1:

Do you think we have identified the right natural hazard issues? Are there other issues that we should recognise for the region?

### Question 2:

How effective do you feel natural hazard management has been during the last decade? What have been the main factors that influenced our performance? How can we encourage the good factors and reduce the bad ones?

### Question 3:

Where do you think the priority areas are for action? Should there be a focus on some areas or specific hazards (such as tsunamis or the effects of climate change) or should there be an across-the-board attempt to deal with all hazards everywhere? What different sorts of information do individuals, communities and authorities need – for themselves or to fulfil their statutory functions?

### Question 4:

Do you want the Regional Policy Statement to give policy guidance on natural hazard management? If so, would it be helpful to have guidance on managing hazards in developed areas as well as for new development?

### Question 5:

Would it be helpful if the Regional Policy Statement was more specific and directive in its provisions: identifying priorities and specifying responsibilities and timescales for action?

### Question 6:

Does the Regional Policy Statement need to address preparedness for natural hazard events or is it sufficient to leave this aspect to the provisions of the Civil Defence Emergency Management Act, and the operative Wellington Region Civil Defence Emergency Management Group Plan?

### Question 7:

Is the allocation of responsibilities shown below the most effective way to specify the objectives, policies and methods for the control of the use of land for the avoidance or mitigation of natural hazards?

	Responsibilities for developing objectives	Responsibilities for developing policies	Responsibilities for developing methods
Coastal marine area	GW	GW	GW
Beds of lakes and Rivers	GW	GW	GW
Other land	GW* TA	GW* TA	GW TA*

GW = Greater Wellington Regional Council      TA = Territorial authorities (district and city councils)

\* = Primary responsibility

## 5.9 Climate change

### 5.9.1 Introduction

Climate change may be the biggest challenge for humanity during the next 100 or more years. The problem is global, the effects are worldwide, solutions must be international and our responses will be national, local and individual. We are all involved in climate change.

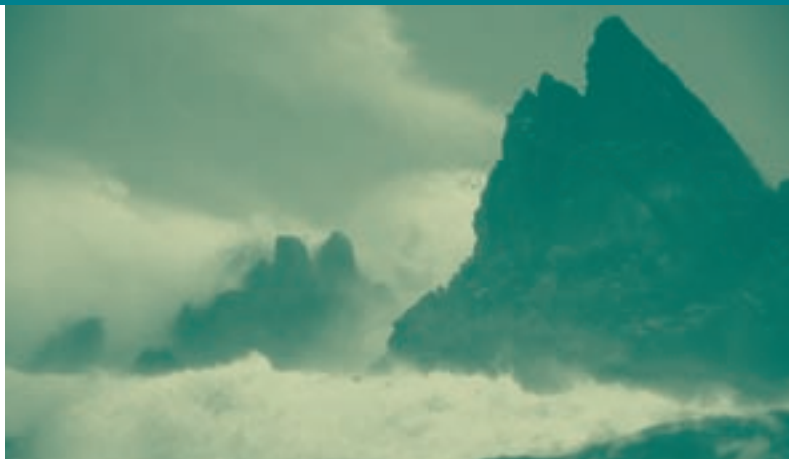
Some say that we need not worry – if climate changes, “Windy Wellington” will become like “Balmy Palmy” and is that so bad? Others say that there’s little point in New Zealanders cutting down on energy use and the resulting carbon dioxide emissions because our contribution to the problem is so small and that changing our economy and way of life will put us at a disadvantage compared with our “competitors”. A few people still think climate change is not happening, not going to happen, or if it is happening, it’s a natural phenomenon anyway and there’s nothing we can do.

The weight of scientific evidence indicates that climate change is already happening and that the unusual weather conditions experienced in most parts of the world during the last decade or two will become more frequent and extreme. No country can escape the consequences, and some low-lying countries may even cease to exist.

New Zealand is expected to suffer drier conditions in the east, wetter weather in the west, but overall, we can expect more frequent drought, intense rainfall and floods. Our coastline is predicted to experience sea level rise, but, of more dramatic and destructive consequence will be the increased frequency of major storm surges threatening people and property.

The effects of changed weather patterns will have profound implications for our economy, our lifestyles, where we live and our biodiversity. In an international context, New Zealand may come under pressure as a destination for climate change refugees. While we may not know exactly how weather will change, or precisely where the effects will be felt, or over what time scale we might experience sea level rise, common sense tells us we need to be prepared.

This chapter focuses more on climate change’s effects than its causes. Nationally and regionally, there are



definite economic and environmental benefits in shifting our energy use away from vulnerable and finite imported fossil fuels. There are also other reasons to manage our greenhouse emissions – to act as a sound role model, to have credibility and to provide leadership (we are in the top five countries in the world for emissions-per-head of population, so we need to do better). But whatever we do to reduce New Zealand’s greenhouse gas emissions, we will not be able to escape the effects of climate change.

To cope with both the causes and the effects of climate change, we may need to make some profound changes to our lifestyles and behaviour. These changes will be far reaching, beyond the time-scale of the Regional Policy Statement, and beyond the ability of local government to dictate what people should or shouldn’t do. Local government does have the authority to make decisions on behalf of the community, and responsible leadership may involve difficult choices that may impact on individuals but have collective community advantage.

### 5.9.2 How successful has the Regional Policy Statement been?

Although the *Regional Policy Statement for the Wellington Region 1995* does not have a chapter on climate change, it does have a reasonably extensive and linked series of provisions recognising the issue and providing a base for action, if agencies choose to take it.

The air chapter has two objectives and at least three policies relating to greenhouse gas emissions and climate change. Similarly, the energy chapter has an objective and specific policies that recognise



the consequences of climate change of our use of fossil fuel energy and the need to shift to greater production and use of renewable energy. Likewise, the built environment and transportation and waste management chapters respectively acknowledge the effects of energy use on local and global environmental systems, and the potential to capture methane for practical use. Finally, the natural hazards and coastal environment chapters recognise sea level rise as a relevant concern when considering development decisions in the coastal environment.

In terms of the management of sources of greenhouse gas emissions from energy use, the Regional Policy Statement has been largely unsuccessful. Greater Wellington's state of the environment report, *Measuring up 2005*, highlights the fact that both the Regional Policy Statement and the National Energy Efficiency and Conservation Strategy's (NEECS) goals for energy efficiency and greater production of renewable energy are not being achieved. Worse, the trends were the opposite of the outcomes sought, with oil-based transport fuel in particular showing an accelerated growth in use.

Managing climate change effects is only really addressed in a place-specific way in the Regional Policy Statement's coastal environment chapter. The coast has been the scene of considerable development during the last 10-15 years, and decisions made about location have been more about maintaining amenity and natural character than about climate change and its associated risks. Recently, climate change effects have been considered in a small number of coastal subdivisions or (e.g. in Wellington) waterfront developments.

Nevertheless, because of our love of the coast and historical development patterns on flat land in river valleys, many of our communities, transport networks and infrastructure are located in an increasingly at-risk proximity to the sea or on floodplains of potentially powerful river systems.

### **5.9.3 What's changed and what are the climate change issues now and for the future?**

When delegates from 150 countries met in Kyoto in 1997 to agree the Protocol on Climate Change, landmark collaboration at international level was achieved. New Zealand ratified the Kyoto Protocol in 2002 and it came into force in February 2005.

New Zealand's target is to reduce greenhouse gas emissions to what they were in 1990, or take responsibility for excess emissions.

Not all countries have signed up to Kyoto, and not all countries are required to try to meet targets for greenhouse gas emission control. However, the world is generally now much more aware of climate change through debate on the Kyoto Protocol and its implications.

The debate about whether New Zealand should participate in the Kyoto Protocol has been vigorous in New Zealand. The economic pros and cons produce column inches in business sections of newspapers. Reports of extreme weather in news sections have produced divergent views on causes, but news coverage of one sort or another has led more New Zealanders to consider the possibility that climate change might be happening.

This shift in attitude and the "mainstreaming" of climate change provide a slightly easier platform from which to more widely debate the consequences of, and adaptation to, climate change.

Amendments to the *Resource Management Act 1991* (RMA) have provided a statutory mandate for addressing the effects of climate change and the closely related matters of energy production and efficient use. Section 7 of the RMA now requires all persons exercising functions and powers under the Act to "have particular regard to" three related matters - the effects of climate change, the benefits to be derived from the use and development of renewable energy and efficiency of the end use of energy.

However, as it currently stands, the RMA also says (in section 104E) that a consent authority must not consider the effects of a discharge on climate change. The intention is that central government would provide the necessary controls for greenhouse gas emissions.

We have already discussed some of the broader issues associated with climate change and other chapters refer to more specific concerns for the Wellington region. Here is a list of concerns drawn primarily from these chapters:

- The cost of dealing with climate change is unknown. This is partly because the scale and location of effects are uncertain so it is hard to price mitigation measures. But it is also because



dealing with the causes of climate change will require a fundamental shift in the way the world does business and the lifestyles we aspire to. The difficulty is that these sorts of costs are incalculable. The cost of not making those changes, however, carries considerably more than economic consequences – there are ethical, social, environmental and huge international implications if climate change has the effects predicted and nothing is done about it.

- We are learning more about climate change and modelling its implications, but there are still many uncertainties about the effects – what will happen, when and where.
- There may be win-win benefits from investing in choices that reduce greenhouse gas emissions and also move us away from an economic dependence on imported fossil fuels to a post-carbon economy and society. More support for public transport and encouragement for renewable energy production (from wind, solar and ocean currents) and use (domestic and commercial) would help, but cannot happen overnight. Government at all levels will need to take leadership roles in supporting and helping finance the transition, but as yet, there is little public acceptance of the need for such public expenditure.
- Climate change will have impacts on rainfall and drought characteristics in different parts of the region, affecting water supply and soil erosion. Too much rain at higher intensity will cause erosion of marginal land and increase the rate of storm water run-off into streams. Too little rain will lead to increased demands for irrigation in a situation of lower water supply.
- Transport-related greenhouse gas emissions are the fastest, and accelerating, area of emissions growth in the region. Agricultural emissions are relatively stable.
- Climate change will reduce habitat for certain species (e.g. mountain species) and put stress on indigenous species to adapt and also face pressure from new pests.
- Sea level rise and an increase in the number and intensity of storm surges will lead to an increased flood risk and damage to coastal property and infrastructure. At the same time, there is an increasing expectation from coastal communities for “protection”.

## 5.9.4 Comments and questions for you to consider

Earlier in this chapter, the wording hinted at decisions that local government might need to take on behalf of the regional community, and that some of these decisions might not be welcome. One difficult area immediately apparent is management of coastal development.

For existing developments, we could construct defences in some locations but this may not be financially viable or physically possible. One response to the threat of property damage and loss of life is to think about medium- to long-term moves away from the areas most at risk. This approach – managed or planned retreat – could be explicitly recognised, so that public and private investment decisions are better informed. Local authorities and utility supply companies, for example, may strategically choose routes or locations for infrastructure that are less likely to be at risk during their economic lifetime (perhaps up to 100 years). When authorities make decisions about infrastructure, they could build into their calculations the scale and frequency of storm events, or drought.

Areas of the coast where there is little or no development could be maintained in their current state, but such an approach would lead to controversy over unfulfilled owner expectations to be able to develop their land. For these areas, district plans may have “no development” zones, to recognise the risks of coastal erosion and inundation. The insurance industry is already signalling an unwillingness to provide insurance cover for an increasing number of at risk locations, both along the coast and on river floodplains.

What provisions could we include in the next Regional Policy Statement to anticipate and guide development and change in the likelihood of climate change effects? This list is a guide about possible areas for coverage as a lead-in to the questions that follow:

- Is climate change and its effects identified as a regional issue requiring a response (in the Regional Policy Statement)?
- Should the Regional Policy Statement have provisions that seek to manage greenhouse gas emissions?
- Should the Regional Policy Statement explain the national policy context?

- Should the Regional Policy Statement specify the time horizon for different types of decisions on climate change and its effects?
- Should the Regional Policy Statement give guidance on the contents of regional and district plans relating to managing the effects of climate change?
- Should the Regional Policy Statement promote a consistent approach towards climate change by local authorities within the region and across boundaries with neighbouring regions?
- Should the Regional Policy Statement promote public education as a way of responding to climate change effects?
- Should the Regional Policy Statement promote avoidance or limitation of damage and costs from natural hazards including those exacerbated by climate change, such as:
  - sea level rise
  - increased rainfall intensity
  - increased incidence or severity of drought
  - wind events.
- Does the Regional Policy Statement include any provision to monitor effects of climate change?

### Question 1:

Do you think we have identified the right sort of climate change issues and considerations? Are there other related aspects we should recognise for the region?

### Question 2:

What role should the Regional Policy Statement play in managing the causes and effects of climate change? Is the informal checklist provided (see above) a suitable range of options? Should the Regional Policy Statement address greenhouse gas emissions in an active way? If so, how?

### Question 3:

Should the Regional Policy Statement have a chapter specifically addressing climate change or should this issue be tackled in chapters addressing energy management, the urban environment, transportation, the coast and natural hazards? What would be the advantages and disadvantages of either approach?

### Question 4:

Do you agree that leadership and collaboration is needed across the region's local authorities, in partnership with central government, to tackle climate change effects? What sort of action and initiatives could authorities take to provide leadership?

### Question 5:

How important do you believe it is to tackle climate change effects? Are there higher priorities for action and investment? What issues or problems do you think would be more important?

## 5.10 Energy

### 5.10.1 Introduction

The energy chapter in the *Regional Policy Statement for the Wellington Region 1995* begins by saying that “energy is an essential input to natural and economic systems, but its use has both good and bad effects”. Affordable, reliable energy also underpins the lifestyle we enjoy – freedom and mobility to go where we want, hot water and heating in our homes, and power to run the many appliances, equipment and gadgets we use in our domestic and working lives.

Little has changed, in the last decade, in the fundamental importance of energy in maintaining the long-term sustainability of our economy and way of life.

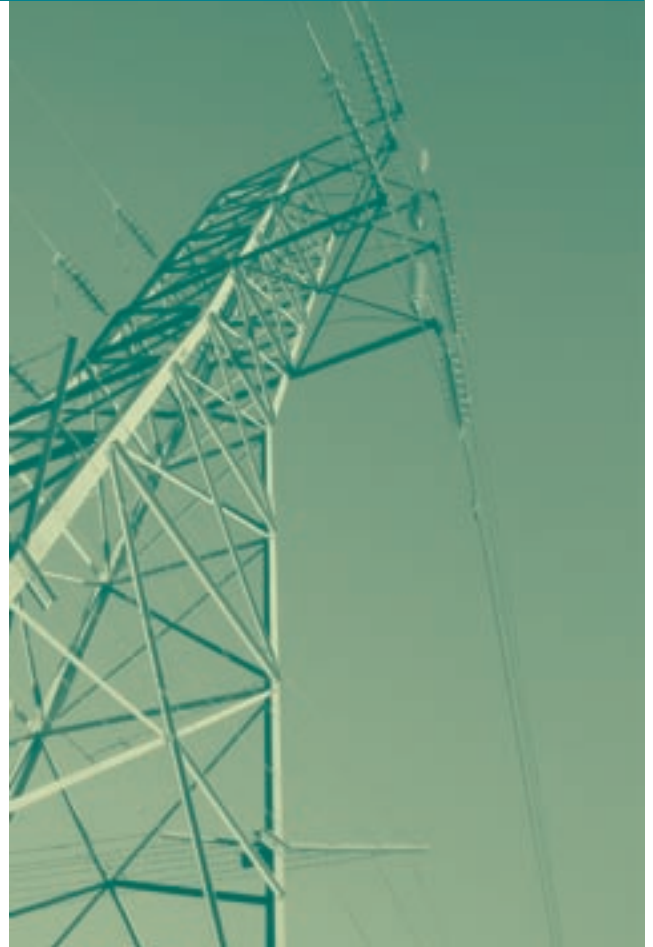
Unfortunately, what has changed is our accelerating demand for energy, and especially, for imported transport fuels. Everyone knows these fuels are finite and that we may be approaching “peak oil” – the time when supply of fossil fuels declines and increasingly fails to meet demand. We’re also learning more and more about the consequences of burning fossil fuels on global climate.

Security of supply, price rises and the environmental consequences of using fossil fuels as energy sources are all highlighted as issues in the Regional Policy Statement. In the absence of national guidance, the Regional Policy Statement has tried to provide a regional framework for sustainable energy management.

### 5.10.2 How successful has the Regional Policy Statement been?

The Regional Policy Statement objectives aim to moderate energy demand for fossil fuel-based energy, promote greater production from renewable energy sources, be more efficient in the energy we use, and manage the adverse effects of energy production, transmission and use.

The *National Energy Efficiency and Conservation Strategy 2001* (NEECS) also has goals for renewable energy production and energy efficiency. However, neither NEECS nor the Regional Policy Statement have been at all successful in achieving their goals.



Nationally, the production of energy from renewable sources has been largely static for many years. The modest target set by NEECS of an additional 30 petajoules from renewables by 2012 is already acknowledged as unachievable. The intention to improve energy efficiency across all sectors of the New Zealand economy by 20 per cent has also proved unrealistic. The NEECS is currently under review.

For the Wellington region, it is hard to assess the effectiveness of the Regional Policy Statement because there is so little energy data available. What there is, however, indicates that national trends of growing demand are being followed in the region too (see also issues identified in the **built environment and transportation** chapter).

Assessment is also difficult because many actions specified in the Regional Policy Statement depend on agencies (particularly the Energy Efficiency and Conservation Authority) and public authorities

(including Greater Wellington and city and district councils) voluntarily taking various initiatives. Whether such initiatives were acted upon (in most cases, they have not been) has probably been less driven by the Regional Policy Statement than by other factors specific to the agencies involved, such as lack of resources, higher priorities and no statutory mandate for action.

Does this lack of achievement mean that the objectives and policies in the Regional Policy Statement are wrong, or are they just not being effectively implemented?

### 5.10.3 What's changed, and what are the energy issues now and for the future?

Since the Regional Policy Statement became operative in 1995, there have been amendments to section 7 of the *Resource Management Act 1991* (RMA) that have had the effect of raising the profile and importance of sustainable energy management.

The RMA now identifies end use efficiency, the benefits to be derived from the use and development of renewable energy and the effects of climate change as matters to which "particular regard" shall be had. Together, these changes have given a clearer mandate to tackle energy (and climate change) issues. (See chapter on **climate change**.)

What are the current energy issues for the region and the foreseeable future? Greater Wellington's state of the environment report, *Measuring up 2005*, highlights that:

- The region's total demand for energy continues to grow.
- Imported finite fossil fuels continue to be the largest area of energy growth, raising issues of security and reliability of supply, as well as exposure to price uncertainties.
- Transport is the sector showing the highest, and accelerating, growth in energy use. Transport is also the main source of energy-related carbon dioxide emissions.

- Thirty three per cent of primary energy is "lost" in processing (e.g. refining crude oil), conversion (e.g. burning coal to generate electricity) and transmission (e.g. carrying electricity long distances through power lines).
- There is a further loss of effective energy by inefficient appliances, equipment, buildings systems and vehicles because of how they work. Vehicles, for example, only use 15 per cent of the energy poured into them to actually move us around.
- Carbon dioxide emissions from energy production and use have grown by over 40 per cent between 1990 and 2003.
- Renewable energy production from the region's plentiful wind resource is beginning to show small, but positive, signs of development.
- Any energy-related development, from whatever source, can cause effects that need to be carefully managed.

### 5.10.4 Comments and questions for you to consider

Most of the sustainable energy management issues are large-scale. It could be argued that central government should be doing something, if anyone should. The Government is considering the preparation of a National Energy Strategy, but the scope and responsibilities are yet to be finalised. However, we expect that the Strategy will have similar generic aims as the objectives and policies in the Regional Policy Statement.

It is also arguable that energy issues are global, that government regulation would be largely ineffective and that the international energy supply and demand market will resolve things. But major energy supply corporations have vested (and sometimes conflicting) interests and there is considerable debate and uncertainty about energy supplies and availability. When will "peak oil" be reached? How might it affect us – nationally, regionally and locally?

### Question 1:

Do you think we have identified the right energy management issues? Are there other issues we should address in the region?

### Question 2:

Do you believe that these are the sorts of issues that should be dealt with by the Regional Policy Statement?

### Question 3:

How could policy implementation be improved? Can the Regional Policy Statement help in any way or should decisions be left to central government or energy supply companies? Who, if anyone, should be leading energy management?

### Question 4:

Would implementation be more effective if there was a strong and more directive set of policies, actions and responsibilities in the Regional Policy Statement?

### Question 5:

How important is energy management? Would there be benefits from closer and practical linkage between energy objectives, policies and actions and those identified elsewhere in the Regional Policy Statement for transport, climate change, local air quality and the management of the urban environment?



## 5.11 Built environment and transportation

### 5.11.1 Introduction

Most of us live in urbanised areas – from smaller settlements like Martinborough to cities like Wellington. Each place may be thought of as a separate community with its own identity, but our towns and cities are very much linked by physical, social, economic and cultural inter-relationships. Infrastructure and transportation networks bring many parts of the region together. They provide access for travel and carry essential supplies from mountains and rivers to homes and businesses and take away our waste.

We need food and water. We need building materials and the means of travelling around. To support our lifestyles, we seem to need an ever-growing supply of energy (especially for transport) and other products and services. We need to dispose of sewage and waste. Our consumption and waste put pressure on the local environment – to accommodate our pollution and unwanted material – and on the global environment, which we expect to supply much of our food, fuel, cars and household goods and appliances.

We can think of our impact as a “footprint” – a rough measurement of the amount of land needed to provide the resources we consume and absorb the waste we produce. The Wellington region has the fourth largest footprint in New Zealand and a Massey University study calculated we would need an area almost 50 per cent bigger than the size of our region to sustain our current level of consumption and waste production. In other words, we are not living within our region’s means.

Urban areas are large consumers of resources and producers of waste, but they are also centres of entertainment, employment, commerce and retailing. They also provide essential health and community services. Wellington is the capital of New Zealand, with government, a major port and an international airport. It’s easy to forget that urban areas are assets as well as environmental liabilities!

Sustainable management of our urban environment is about maintaining the positive aspects and minimising the negatives. The *Regional Policy Statement for the*



*Wellington Region 1995* takes a similar view of the built environment and the region’s infrastructure, and seeks to ensure that the region’s “footprint” does not press too heavily on the underlying environmental systems that support us. It attempts to do this with provisions in the built environment and transportation chapter and throughout the document in chapters dealing with related activities (waste management, energy) and environmental systems (fresh water, the coast, air and soil).

### 5.11.2 How successful has the Regional Policy Statement been?

Generally speaking, the Regional Policy Statement provides a comprehensive description of the complex nature of the strategic issues associated with the built environment and transportation. The relationships between urban activities and environmental effects are well defined. There are policies on urban form, on managing transportation systems and infrastructure and their effects, and on maintaining and enhancing environmental quality in urban areas.

There has been mixed success. For example, the quality of our urban environments has improved

in locations such as Wellington’s central business district, Greytown and Jackson Street, Petone. We have also kept the region’s relatively compact “corridor” form, which extends from Wellington’s central area and then branches out into a “Y” shape. One arm stretches through northern Wellington, Porirua, Pukerua Bay and up the Kapiti Coast while the other runs through the Hutt Valley and over into the Wairarapa.

This compact corridor form supports public transport networks and consequently reduces some of the energy and other costs associated with private transport. It also makes access to services and centres that much easier. Ad hoc development outside the main corridor, and poorly designed or poorly managed development within it, can create a range of adverse effects. These include inefficient use of land and resources, increased traffic congestion, increased storm water run-off into sensitive environments, and unexpected (and therefore unplanned) demands for new or extended infrastructure.

The role of the Regional Policy Statement in maintaining or enhancing the quality of our urban environments, managing the region’s form, and addressing the effects of urban activities and transportation has been minimal. The built environment and transportation chapter has sound policy direction but it has not provided clear “on the ground” direction.

### 5.11.3 What’s changed and what are the built environment and transportation issues now and for the future?

Since 1995, there has been a flood of legislation, strategies and programmes relevant to sustainable management of the built environment. Interestingly, much of the content has reflected the intent of the Regional Policy Statement – encouraging good urban design, promoting alternative modes of transport such as cycling and walking, encouraging efficiency in energy use and the increased production of renewable energy, and promoting a strategic approach to waste management.

During the mid to late 1990s, the Parliamentary Commissioner for the Environment undertook

a major review of how we managed urban environments in New Zealand. A variety of other initiatives have emerged in the last five years, including:

- *National Energy Efficiency and Conservation Strategy 2001*
- Various Energy Efficiency and Conservation Authority (EECA) programmes for travel planning and vehicle fleet management
- *New Zealand Transport Strategy 2002* (which recognised broader social and environmental objectives in transport planning)
- Transport Sector Review in 2004 (recommending a more integrated approach across sectors and responsibilities)
- *National Environmental Standards for Air Quality 2004*
- *Vehicle Fleet Emission Control Strategy 2004*
- *Getting There on Foot, by Cycle 2005*
- *New Zealand Waste Strategy 2002*
- *New Zealand Urban Design Protocol 2005* and associated guides.

Greater Wellington has also commenced a review of the *Wellington Regional Land Transport Strategy 1999 - 2004*. This has resulted in a number of new initiatives including strategies for cycling, pedestrian movement and travel demand management. The next Regional Land Transport Strategy in 2007 will identify an updated set of priorities for land transport (road, and public transport) for the region.

Since 2004, Greater Wellington and the eight city and district councils in the region have been working together on a “sustainable growth framework” – the Wellington Regional Strategy. The aim of the Wellington Regional Strategy is to build an internationally competitive region and, at the same time, enhance our quality of life.

One of the four focus areas in the Strategy is “quality regional form and systems” and a number of action areas are being investigated to help achieve this, such as reinforcing the region’s compact urban form, maturing sub-regional centres and the Wellington central business district, designing major roads so that they support centres, and making sure that infrastructure (existing and new) is used efficiently.

In addition, amendments made in 2005 to the *Resource Management Act 1991* (RMA) gave a new function to regional councils of “the strategic integration of infrastructure with land use” by means of objectives, policies and methods.

Things have clearly moved on for urban management since the Regional Policy Statement became operative in 1995, but have these changes resolved the issues facing us in urban areas? Greater Wellington’s state of the environment report, *Measuring up 2005*, and early discussions for the review of the Regional Policy Statement indicate that the following matters are still of concern:

- Development and change has tended to proceed in a largely ad hoc fashion in different areas of the region. This raises questions about consistency of policies across council boundaries, cumulative impacts of separately considered development proposals, associated demands for infrastructure, and pressures on valued resources and places.
- While the region has a distinct and compact pattern of development there is a perception that strategic direction on “regional form” is required to reinforce this pattern. “Regional form” is here understood to have a meaning of where change should be generally located or concentrated in the region rather than giving specific direction on the structure, appearance and shape of each urban area (which might be usefully assisted by principles from the Urban Design Protocol and guides).
- There is a concern about the size and environmental effects of the “footprint” made by our urban (and rural) lifestyles and behaviour. Implications of this behaviour for energy and waste are discussed in other chapters of this document, along with the effects of transport and urban activities on streams, air quality and ecosystems.
- Pressures and problems are not evenly spread around the region, so it may be appropriate to have policy guidance that is targeted at specific issues or particular areas. Development in some areas will put additional pressures on special places (e.g. around Pauatahanui Inlet), reduce an already diminishing type of environment (e.g. subdivision along the Kapiti coastline), or

extend semi-urban activity into new areas and potentially create demand for, and inefficiencies in, the provision of infrastructure and services (e.g. in parts of the Wairarapa and Upper Hutt).

- The region’s significant resources, including infrastructure, are important for the community’s social and economic well-being. The location of development (and redevelopment) is strategically important as it has a major influence on the form and direction of the region’s growth. Infrastructure is important but a balance needs to be struck between its provision as a community asset and the conflicts that such provision can cause with local communities and the adverse effects it can create for the environment.

#### 5.11.4 Comments and questions for you to consider

Urban areas are rather like ecosystems – they are constantly changing and evolving. Their management is as much about the processes that drive them as looking after their component parts. In urban areas, this translates to enjoying the spaces, places, services and inter-actions they offer us for our social, economic and cultural well-being. At the same time, we need to keep the viability of the basic processes that underpin and enable this quality of life – things like

- reliable infrastructure to supply water, power and to carry away sewage and stormwater
- transport networks that give access to places people want or need to be
- a healthy environment for enjoyment and for the life-supporting services it provides.

Our activities are complex so our management of change has to be sophisticated too. Integrated management across agencies and activities is often proposed as the way to do this, and indeed, amendments to the RMA identify the strategic integration of infrastructure with land use as a new function for regional councils. But what this actually means and how it might be achieved are harder questions. Different agencies and authorities have explicit statutory responsibilities and, understandably, with their limited resources and many demands on them, they focus on the things they have to do.

The Wellington Regional Strategy (see **3.4 Wellington Regional Strategy** and **5.11.3** above) is a significant attempt to take an integrated, collaborative approach to managing change in our region. We hope that the Strategy will be sufficiently advanced to identify how the next Regional Policy Statement can fit with and

help implement the Wellington Regional Strategy's agreed outcomes. If it is not, we also need to think how the Regional Policy Statement might, of itself, advance integrated management of change in the region's built environment.

### Question 1:

Do you think we have given an accurate interpretation and identified the right issues for the built environment and infrastructure? Are there other issues that we should recognise for the region?

### Question 2:

How important do you feel it is to provide some sort of strategic management of regional form and urban systems? Is it appropriate to reinforce our current form, and, for example, encourage intensification of development largely within existing areas and particularly around certain key centres and passenger transport nodes and networks (e.g. rail stations and transport corridors)?

### Question 3:

Do you think that regionally significant infrastructure and natural areas with high values should be identified in the Regional Policy Statement? Should such identification then be reflected in directions for how these places should be managed in, for example, district plans and/or through other statutory and non-statutory documents that help shape decisions that affect the built environment?

### Question 4:

How do you see the relationship between the Wellington Regional Land Transport Strategy, the Wellington Regional Strategy and the Regional Policy Statement? What role do you see for the Regional Policy Statement in managing the region's built environment in the future? Should there be any sort of focus in the Regional Policy Statement on some priority areas or should there be general policy direction for all areas? Or a mix of both?

### Question 5:

Would it be helpful if the Regional Policy Statement dealt with the management of urban areas, infrastructure, energy and waste in a more integrated way by considering it in one package of "urban activities"? How would this approach best link to those parts of the Regional Policy Statement that deal with the "receiving environments" for urban activities, such as fresh water, soil, air, the coast and their associated ecosystems?



## 5.12 Waste management and hazardous substances

### 5.12.1 Introduction

The *New Zealand Waste Strategy 2002* identifies “waste” as any material – solid, liquid or gas – that is unwanted and/or unvalued, and discarded or discharged by its owner. Thus, one person’s waste might still be able to be used by someone else, recycled into something else or, as in the case of methane from landfills, used as an energy source. From a long-term sustainable management perspective, the more waste we throw away, the more we are wasting limited resources. We have not “made the most” of the original resources that went into a product.

The *Regional Policy Statement for the Wellington Region 1995* and the *New Zealand Waste Strategy* both promote what has been termed the “waste management hierarchy”. Reduce, re-use and recycle are the first three of five steps in the hierarchy and are relatively well known. The fourth step is to recover resources from waste – e.g. green waste for composting and landfill gas as a source of energy. The last step is safe disposal of what remains after the first four steps have been taken.

Are we all taking these steps? Are we giving the first ones the highest priority or are we hopping around, taking one or two steps but not others? Will we trip up if we don’t take the right steps?

Continuing to throw large amounts of solid waste away is evidence that resources are still not being used efficiently and that more could be done to follow the steps in the waste hierarchy. Liquid waste is now better treated before it is disposed of, but 200,000 cubic metres of sewage effluent is still put into coastal and fresh water systems in the region every day.

### 5.12.2 How successful has the Regional Policy Statement been?

The first objective in the waste management and hazardous substances chapter of the Regional Policy Statement is that we reduce the quantity of waste. The second and connected objective seeks that the reduction is achieved by re-use, recycling and resource recovery. Greater Wellington’s state of the



environment report, *Measuring up 2005*, indicates that both objectives are showing some small level of achievement, but there is still large scope for improvement.

Only 20 per cent of recyclable materials are recycled and, while there has been a slight drop in the total of solid waste taken to landfills, most landfills are filling up and some areas are intending to “export” their waste to other parts of New Zealand. Hazardous waste is often sent off-shore to countries capable of disposing of it safely – put bluntly, the region is exporting the problem.

The majority of waste put in landfills in the region is commercial, so even if we do our best as individuals, we must target the management of commercial waste if we want to decrease annual landfill volumes.

Objectives 3 and 4 in the waste management and hazardous substances chapter are about managing the effects of disposal of solid and liquid waste and hazardous substances. There has been some improvement in the number of landfills meeting the necessary environmental standards in recent years,



but there are still problems associated with leachate from closed landfills. For some sewage discharges, there is poor compliance with resource consents and “permitted activities” standards.

Regional councils and city and district councils have identical functions for controlling the use of land for the transportation, storage, use and disposal of hazardous substances. The *Resource Management Act 1991* (RMA) requires Regional Policy Statements to allocate who is responsible for specifying the objectives, policies and methods for this function. The way these were allocated in the current Regional Policy Statement is set out at the end of this chapter.

### 5.12.3 What’s changed and what are the waste management and hazardous substances issues now and for the future?

Since the Regional Policy Statement became operative in 1995, waste management responsibilities have been spelled out by changes to the *Local Government Act 1974* to provide clear guidance to city and district councils on how to manage waste in their areas. They must prepare waste management plans which must describe the measures needed to implement the waste management hierarchy. However, waste management plans do not have to conform to or be consistent with provisions in the Regional Policy Statement and there is no penalty if plans do not meet their own targets.

In 2004, the Ministry for the Environment introduced a National Environmental Standard requiring greenhouse gases from landfills of over 1 million tonnes capacity to be collected and destroyed (or utilised). The Ministry is now also working on New Zealand-wide programmes to reduce waste (e.g. the *New Zealand Packaging Accord 2004 – 2009* is a voluntary initiative for industry and government to take a more sustainable approach to packaging).

A 2005 amendment to the RMA placed new functions on regional councils and city and district councils for contaminated land. Regional councils are responsible for the investigation of land to identify and monitor contaminated land, while city and district councils control the subdivision, use and development of such land (refer to **soils** for more information about contaminated land).

So, although some responsibilities have changed, are the core issues facing waste management very different from what they were in 1995? From *Measuring up 2005*, the current issues include the following:

- Like everywhere else in New Zealand, we throw away a lot of material that still could be used. Paper, plastic and glass are the obvious examples but nutrients in our liquid waste are another wasted resource and one that can cause problems in the environment.
- Approximately 80 per cent of potentially recyclable material is still going to landfills. However, while there is scope for improvement, there is also an uncertain and changeable market for recycled materials.
- There is still considerable potential to divert green waste, reducing demands on landfills and the production of greenhouse gas emissions
- Only three landfills collect gas from decomposition and only two of these use it for fuel.
- Leachate from closed landfills may be an issue in some parts of the region.
- Not all councils collect hazardous waste
- While a growing number of landfills and sewage treatment works are complying with their resource consent conditions, many are not, with consequent environmental impacts.
- Community concerns, particularly Maori concerns, about sewage discharges are not well addressed in assessments of resource consent applications.

### 5.12.4 Comments and questions for you to consider

Waste management is primarily the responsibility of city and district councils. The role of the Regional Policy Statement is to identify significant resource management issues for the region, and then propose policies and methods for dealing with these issues. Key considerations, therefore, are whether waste management is a significant resource management issue and, secondly, what added value the Regional Policy Statement might provide for waste management in the region.

### Question 1:

Do you think we have identified the right waste management issues? Are there other issues that we should recognise for the region?

### Question 2:

How effective do you feel waste management practice has been during the last decade? What have been the main influences on our regional waste management performance? How might we further encourage the good influences?

### Question 3:

Do you see a role for the Regional Policy Statement in waste management for the region in the future? Can all the issues be addressed by the New Zealand Waste Strategy and waste management plans for each district?

### Question 4:

Would there be any benefits if the Regional Policy Statement dealt with waste management by considering it with related urban activity policy areas, such as provisions that address the built environment, transportation, infrastructure, and energy? Similarly, could the effects of waste management practice be properly addressed in the “receiving environment” chapters, such as fresh water, coastal environment, air and soil?

### Question 5:

Is the allocation of responsibilities for the control of the use of land for the prevention or mitigation of any adverse effects of the storage, use, disposal or transportation of hazardous substances set out in the current Regional Policy Statement (and shown below) appropriate?

	Responsibilities for developing objectives	Responsibilities for developing policies	Responsibilities for developing methods
Coastal marine Area	GW	GW	GW
Beds of lakes and rivers	GW	GW	GW
Other land	GW* TA	GW* TA	GW TA*

GW = Greater Wellington Regional Council      TA = Territorial authorities (district and city councils)  
\* = Primary responsibility

# 6. Ideas for structure, form and delivery of the next Regional Policy Statement

As part of the review process, Greater Wellington has looked at the current Regional Policy Statement and asked “could it be better structured or arranged to make it easier for people to use and understand?” We have come up with four ideas we would like your feedback on.

## 6.1 A vision/description of sustainable management in the Wellington region

A Regional Policy Statement’s purpose is to achieve sustainable management of natural and physical resources by providing an overview of the resource management issues in the region and the policies and methods to achieve integrated management.

Does the next Regional Policy Statement need to describe, upfront, what sustainable management in our region would involve or look like? This vision or

description could celebrate the positives and focus on priority resources or locations where the next Regional Policy Statement would seek improvement. The current Regional Policy Statement includes a vision. This vision is a list of 15 bullet points (generally one point related to each resource chapter) that state what the future “could be”.

### Question 1:

Should the next Regional Policy Statement go further than the current vision and describe what sustainable management for the region would involve or look like?

### Question 2:

What do you expect the Regional Policy Statement to deliver in the next 10 years? What issues do you think are a priority? Should the Regional Policy Statement identify these priorities?

## 6.2 A more specific, targeted and transparent document

The current Regional Policy Statement identifies 100 significant resource management issues, 40 objectives, 103 policies and 182 methods. Not surprisingly, Greater Wellington's evaluation of the Regional Policy Statement has determined that a number of the methods have not been implemented, or not been fully implemented.

The objectives and policies are generally comprehensive, but they don't describe what success would look like on the ground or in a particular location. Feedback suggests that the most useful objectives and policies are those that specifically identify locations (for example, the high natural character areas in the coastal environment chapter) or types of activities to be supported (for example, renewable energy in the energy chapter). The anticipated environmental results are re-statements of the objectives and are considered to have added little value. Our assessment also questions whether the issues identified are always "regionally significant".

There are ways to address these problems and make the next Regional Policy Statement more specific, targeted and transparent. These could include:

- Strengthen the criteria used to determine whether an issue is "regionally significant".
- Emphasise, where appropriate, any specific locations or activities that relate to objectives or policies.
- Limit methods to those that will be implemented over the 10-year lifetime of the Regional Policy Statement.
- Use the anticipated environmental results to measure and describe what we expect to achieve within the 10-year lifetime of the Regional Policy Statement.
- A structure or mechanism (e.g. table or diagram) that clearly shows how an issue translates into an objective, policy, method and anticipated environmental result.

### Question 3:

Should the next Regional Policy Statement be more specific, targeted and transparent? If so, should we use the steps suggested above? Are there other steps you think need to be taken?



## 6.3 A document that is relevant to locations or a place

The current Regional Policy Statement covers the entire Wellington region, but there is huge diversity within the region. An issue of regional significance can be relevant in one or a number of locations, but not necessarily all.

District plans for city and district councils generally have a structure based on land use zones. Greater Wellington is also interested in the possibility of using an area-based approach – for example, river catchments – in the future. The current Regional

Policy Statement is structured by topic (for example, fresh water, soils, waste management, etc) rather than location.

A location-based structure for the Regional Policy Statement could include separate chapters for water catchments, districts, or land uses (urban and rural). Or, where there is a regionally significant issue in a particular location, we could have a separate section for that location but leave the rest of the document resource or topic-based.

### Question 4:

Do you think we should structure the next Regional Policy Statement around locations or topics, or a combination of both?

## 6.4 Grouping common chapters together

The current Regional Policy Statement has eleven chapters and some topics (e.g. natural hazards) are covered by several chapters. Should we group common topics together?

We could:

- Group natural resource chapters together (e.g. fresh water, air quality, soil quality, biodiversity and ecosystems). This group could focus on communicating the environmental “bottom lines” to be achieved or maintained.
- Group natural hazards topics together instead of having them scattered throughout the document and include a specific section on climate change.
- Group chapters and provisions about land use activities. This might include a general chapter (integrating the built environment and transportation, waste management and hazardous substances, and energy chapters with other land use provisions) and a specific chapter on the coastal environment.

### Question 5:

Would grouping chapters together by common purpose and role help? What do you think of the groups above?



# Appendix: New legislation and amendments, national policies and strategies

## 1. Amendments to legislation and new legislation

New statutes or amendments to statute, of relevance to the review of the Regional Policy Statement include:

- *Hazardous Substances and New Organisms Act 1996*
- *Energy Efficiency and Conservation Act 2001*
- *Local Government Act 1974 and 2002*
- *Civil Defence Emergency Management Act 2002*
- *Land Transport Management Act 2003*
- *Building Act 2003*
- *Aquaculture Reform Act 2004*
- *Foreshore and Seabed Act 2004.*

### **Hazardous Substances and New Organisms Act 1996**

This Act provides for the protection of the environment and the health and safety of people and communities by preventing or managing the adverse effects of hazardous substances and new organisms.

### **Energy Efficiency and Conservation Act 2001**

This Act promotes energy efficiency, energy conservation and renewable energy within the context of a sustainable energy future. The Act established the Energy Efficiency and Conservation Authority with responsibilities for preparing the *National Energy Efficiency and Conservation Strategy 2001*.

### **Local Government Act 1974 and 2002**

Part 31 of the *Local Government Act 1974*, which deals with waste management was amended in 1996. It was not repealed with the introduction of the *Local Government Act 2002*. This part requires city and district councils to prepare waste management plans that “Make provision for the collection and reduction, reuse, recycling, recovery, treatment, or disposal of waste in the district.” These plans must also describe who will provide the waste services in their districts.

Under the *Local Government Act 2002*, local authorities acquired broader powers and new obligations. The new Act signalled a strong commitment to the principles of sustainable development with regional and district councils now having a leading role in promoting the social, economic, environmental and cultural well-being of their communities.

As part of an adjusted accountability, local authorities were required to identify community outcomes, monitor and report to the community on progress in achieving these outcomes.

### **Civil Defence Emergency Management Act 2002**

This Act contains provisions relating to the declaration of national and local emergencies and powers in relation to civil defence emergency

management. It also establishes a new framework for promoting a comprehensive, integrated and coordinated approach to the management of all hazards, including risk reduction.

### Land Transport Management Act 2003

This Act changed the purposes, roles and funding framework of land transport agencies and was designed to reform the land transport funding system. The purpose of the Act is to contribute to achieving an integrated, safe, responsive and sustainable land transport system. The Act amends the purposes of regional land transport strategies so they are in line with the purpose of the Act. Regional land transport strategies now must take into account a number of new matters, including how they will ensure environmental sustainability.

### Aquaculture Reform Act 2004

The *Aquaculture Reform Act 2004* amended five existing Acts (*Resource Management Act, Fisheries Act, Conservation Act, Biosecurity Act, Te Ture Whenua Maori Act*) and created two new Acts. The reforms introduced a requirement that aquaculture can occur only in Aquaculture Management Areas. These are to be defined in regional coastal plans.

### Foreshore and Seabed Act 2004

The *Foreshore and Seabed Act* provides for Crown ownership of the public foreshore and seabed, on behalf of all New Zealanders. Concurrent amendments to the *Resource Management Act 1991* include the protection of customary rights and provision for management plans prepared in respect of foreshore and seabed reserves.

## 2. Central government policy and strategies

A number of central government strategies and policy activities are also relevant to the Regional Policy Statement review. These include:

- *Kyoto Protocol* and foundation policies in 1997
- *New Zealand Biodiversity Strategy 2000*
- *The National Energy Efficiency and Conservation Strategy 2001*
- *New Zealand Transport Strategy 2002*
- *New Zealand Waste Strategy 2002*
- *New Zealand Coastal Policy Statement 1994 review*
- Oceans Policy
- Walking Access Project
- *New Zealand Sustainable Development Programme of Action 2003*
- *New Zealand Urban Design Protocol 2005*
- National Environmental Standards
- Sustainable Water Programme of Action.

### Kyoto Protocol and foundation policies 1997

In October 2002, the Government announced its confirmed policy package on climate change, setting out its policies for meeting New Zealand's greenhouse gas reduction target under the Kyoto Protocol. The policies include price-based and non priced-based measures to enable New Zealand to meet its international agreements under the Kyoto Protocol.

### New Zealand Biodiversity Strategy 2000

Released by the Department of Conservation and the Ministry for the Environment in March 2000, the New Zealand Biodiversity Strategy "Our Chance to Turn the Tide" sets out a 20-year plan to halt the decline of New Zealand's indigenous biodiversity. It sets out a comprehensive range of actions to initiate or improve progress on in order to achieve its goal.

The Government has set aside a New Zealand Biodiversity funding package to implement a number of initiatives. This includes financial assistance for projects that improve the condition of biodiversity on private land and the extent of formally protected natural areas. The Strategy also recommended the preparation of a national policy statement for biodiversity under the *Resource Management Act 1991*. Any national policy statement prepared must be given effect to by a Regional Policy Statement.

## The National Energy Efficiency and Conservation Strategy 2001

The *National Energy Efficiency and Conservation Strategy 2001* was prepared as a requirement of the *Energy Efficiency and Conservation Act 2001*. Its purpose is to promote energy efficiency, energy conservation and renewable energy and move New Zealand towards a sustainable energy future. The strategy's overall plan is to improve New Zealand's energy efficiency by at least 20 per cent by 2012 and to increase the supply of renewable energy by 30 petajoules by 2012. The Strategy is currently under review.

## New Zealand Transport Strategy 2002

This Strategy defines the Government's vision of an affordable, integrated, safe, responsive and sustainable transport system by 2010. One of its aims is to ensure environmental sustainability and contribute to reducing greenhouse gas emissions from the transport sector.

## New Zealand Waste Strategy 2002

This Strategy deals with all forms of waste whether solid, liquid or gas. Its emphasis is on minimising waste and improving management. The Strategy sets a new direction including national targets and an action plan for reducing and better managing waste.

## Oceans Policy

There are 14 government departments with responsibilities in the marine environment, with at least 18 pieces of domestic legislation governing the ocean and various other marine policy initiatives.

To promote more integrated management of the marine environment, central government established a Ministerial Group and the Oceans Policy Secretariat to oversee the development of an Oceans Policy. In particular, central government seeks to develop an Oceans Policy that will provide a clear statement of what New Zealanders, individually and collectively, value about the sea and coastline and what relative priority should be attached to different options at different times and in different places.

Amongst the matters to be addressed is provision of public access, use and enjoyment of both the ocean and the coastal environment. The objective of the Oceans Policy is to safeguard these values against unreasonable erosion by other activities.

## New Zealand Coastal Policy Statement 1994 review

The *New Zealand Coastal Policy Statement 1994*, prepared by the Department of Conservation, is the only national policy statement required by the *Resource Management Act 1991*. The purpose of the New Zealand Coastal Policy Statement is to provide policy direction, in order to achieve the purpose of the Act, specifically within the coastal environment. A Regional Policy Statement must now give effect to these policies. The first Statement was made operative in 1994 and is now under review.

The New Zealand Coastal Policy Statement review will involve updating the statement in the light of new legislation and policy, the development and implementation of regional coastal plans, better information on natural hazards (including climate change), increasing conflicts over public access and advances in wastewater management. The review is looking to provide further guidance on:

- defining the coastal environment
- natural character and landscape (incl. identification of features)
- precautionary approach
- inappropriate subdivision
- duration of consents
- improving restricted coastal activity processes
- defining monitoring responsibilities.

## Walking Access Project

In 2003, the Government reviewed the extent and nature of the problems around access to waterways and public land. The review concluded that public access in New Zealand is becoming increasingly restricted to the detriment of many New Zealanders. The review recommended the development of a national strategy to promote better public access to the outdoors.

## New Zealand Sustainable Development Programme of Action 2003

The Government has agreed to a *Sustainable Development Programme of Action* in 2003. This action programme establishes a set of operating principles for policy development that requires government to take into account the economic, social, environmental and cultural consequences of its decisions and to ensure the well-being of current and future generations. The action programme focuses on the practical application of the sustainable development approach to certain key issues – these being quality and allocation of fresh water, energy, sustainable cities and child and youth development.

## New Zealand Urban Design Protocol 2005

The Ministry for the Environment launched an *Urban Design Protocol* in March 2005. The Protocol is a key part of the Government's Sustainable Development Programme of Action around sustainable cities.

The Protocol is a voluntary commitment by signatory organisations. Signatories include central and local government, the property sector, design professionals, professional institutes and other groups. The Protocol aims to make our towns and cities more successful by using quality urban design to help them become:

- Competitive places that thrive economically and facilitate creativity and innovation.
- Liveable places that provide a choice of housing, work and lifestyle options.
- Environmentally responsible places that manage all aspects of the environment sustainably.

- Inclusive places that offer opportunities for all citizens.
- Distinctive places that have a strong identity and sense of place.
- Well-governed places with a shared vision and sense of direction.

## National Environmental Standards

The Ministry for the Environment introduced the first *National Environmental Standards for Air Quality* in October 2004. These include:

- Seven standards to prevent emission of dioxins and toxics through a ban on certain activities (such as burning tyres) that emit these hazardous pollutants to air.
- Five standards for ambient (outdoor) air quality, to keep the air outdoors clean and safe. These standards deal with pollutants like smoke and soot (fine particles, called PM10), sulphur dioxide, carbon monoxide, nitrogen dioxide and ozone.
- One standard for the design of new domestic wood burners used in urban areas to minimise smoke and soot emissions.
- One standard requiring landfills (over one million tonnes) to collect and destroy (or use) landfill gas to help reduce greenhouse gases.

The Ministry for the Environment is also preparing other national environmental standards on:

- Human drinking-water sources. This proposed standard intends to empower and require councils to consider the quality of drinking water supplies when deciding on resource consents. The standard will aim to ensure that water treatment plants are able to deal with possible pollution that might result from high-risk activities, like spills or accidents and ensure that water supply catchments remain good sources for safe drinking water.
- Contaminated land. In some places in New Zealand, past industrial and agricultural activities have contaminated soil. Most contaminated sites stem from historical contamination, and the Government wants to work to clean up these sites to achieve clean and healthy land for the future.

The Ministry is also investigating whether standards are desirable or necessary for:

- application of biosolids to land
- land transport noise
- electricity transmission and generation
- telecommunications facilities.

### Sustainable Water Programme of Action

The Ministry for the Environment has embarked on a Sustainable Water Programme of Action, coordinated by the Ministries for the Environment and Agriculture and Forestry.

The programme is investigating the need for, and likely content of:

- A national policy statement on managing increasing demands on water.
- A national environmental standard for methods and devices for measuring water take and use.
- A national environmental standard on developing methods for establishing flows to protect environmental values.

The programme also intends to look at policy options to:

- Enhance current practice for transferring water consents and the role of water user groups in managing water under cooperative management regimes
- Improve methodologies for determining flows to protect environmental values in water bodies
- Recover costs for water management.

The Government will also report on the potential effectiveness of:

- Methods for identifying and protecting natural character and biodiversity values
- Methods for managing over-allocated catchments including the examining the possible effectiveness of alternatives to first-in-first-served allocation mechanisms
- Model resource consents and consent conditions for water
- Strategies for better alignment of science priorities and the Sustainable Water Programme of Action.

## 3. Wellington Region Civil Defence Emergency Management Plan

All councils in the Wellington region formed the Wellington Region Civil Defence Emergency Management Group as a requirement of the *Civil Defence Emergency Management Act 2002*. The Group developed the *Wellington Region Civil Defence Emergency Management Group Plan* which became operative in May 2005.

The Plan's purpose is to achieve the vision that "the communities of the Wellington region are resilient". The Plan outlines the strategic and operational arrangements for civil defence and emergency management in the region. It identifies issues and goals around risk reduction, readiness, response and recovery and details methods for achieving these goals.





Water, air, earth and energy: elements in Greater Wellington's logo combine to create and sustain life. Greater Wellington promotes **Quality for Life** by ensuring our environment is protected while meeting the economic, cultural and social needs of the community.

#### FOR FURTHER INFORMATION

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