The First Five Years

A Report on the Performance of the Regional Policy Statement in its first Five Years

Prepared by

The Resource Policy Department
Wellington Regional Council
June 2000

Executive Summary and Recommendation

Background

The Regional Policy Statement for the Wellington Region (RPS) became operative in May 1995. It requires the Council to report this financial year on:

(1) the appropriateness of significant issues and objectives in the statement

(2) the effectiveness of the policies and methods in meeting the objectives.

The Council is required to commence a full public review of the RPS no later than 10 years after it became operative. *The First Five Years* is a staff evaluation of the provisions of the RPS at the half way stage.

The RPS specifically requires the report to contain:

(a) recommendations for any changes

(b) an assessment of the appropriateness of the significant issues and objectives

(c) an assessment of the degree to which the policies are reflected in regional and district plans

(d) an assessment of the degree to which the methods have been implemented

(e) an assessment of the degree to which the anticipated environmental results are being achieved.

General

Each issue, objective, policy, method, and anticipated environmental result in the RPS was examined in its context and reported on in the subsequent pages.

There are many provisions that we would write differently now. After five years of implementation, we know a lot more about how we can effectively promote sustainable management of natural resources than when the RPS was prepared. However, it is unnecessary to embark on such rewrite now. The costs in staff time and public consultation would be large. Anything spent on changing the RPS is going to deter from spending on its implementation. Shortcomings of the RPS can be accommodated by the Council's other planning and strategy documents.

It will be sensible to leave the RPS untouched for up to another five years to see how well ongoing implementation and the Council's new initiatives in its Proposed 10-Year Strategy are able to achieve measurable changes. A review of the RPS at or before the 10-year mark will be a suitable time to reassess performance and make changes.

The Issues and Objectives

The starting point for all other provisions in the RPS are the issues. Generally, the significant issues of the Region in the RPS remain appropriate. The only instances where issues are no longer appropriate occur because of changes to the Local Government Act 1974 that affect the Council's role in relation to the Waste Management and Hazardous Substances Chapter. Issues in this chapter can now be narrowed down from 12 to four. Eight of the issues are no longer appropriate because they are now dealt with by means outside the Resource Management Act 1991. The 8 issues and provisions in the chapter which follow them are already nullified by the law change and it is unnecessary to amend them in the RPS. There is also a single issue in the Soils and minerals Chapter that could be reworded but it is unnecessary to change it now. Where issues in the RPS remain appropriate, the objectives are also appropriate.

The Policies and Methods

Policies and methods in the RPS outline the courses of action and methods of implementation that are to be used to achieve the objectives.

Changes are needed to the Landscape and Heritage Chapter. The landscape provisions in this chapter are based on the notion of "regionally outstanding landscapes", which the Council has not been able to identify. Without a change to this part of the RPS, provisions relating to landscapes cannot be effective.

In all other chapters of the RPS, the policies and methods are generally meeting objectives or can do so in the next five years. Implementation of new initiatives in the Council's Proposed 10-Year Strategy will help ensure that policies and methods of the RPS are effective. The new initiatives will increase the effectiveness of many policies and methods, particularly in the Iwi, Freshwater, Soil, Air, Ecosystems, and Waste and Hazardous Substances Chapters. These initiatives include:

- iwi initiatives
- the Environmental Education Initiative
- an Ecosystems Strategy
- a Wetland strategy
- air monitoring implementation
- implementation of the Regional Land Transport Strategy.

The First Five Years is particularly concerned with situations where policies and methods may not be effective. Except for the landscape provisions in the Landscape and Heritage Chapter, mentioned above, no other changes are recommended. The following paragraphs of this summary highlight those parts of the RPS that will have to be given particular attention when the RPS is reviewed.

Policies and methods in the Iwi Chapter are suitable but their effectiveness, in practice, will be enhanced through more action by the Council to implement them. Feedback from Iwi highlighting the need for more implementation of methods has generally been positive, in anticipation of improvements to their relationship with the Council over the next 3 years.

Review of the Soils and minerals Chapter has identified that lack of information about the soil resource will be a problem in the future when we try to evaluate the effectiveness of our policies and methods. The need for monitoring and baseline information is a matter that should be addressed in the Councils' Regional Monitoring Strategy, which is currently being prepared, rather than by changing the RPS.

The provisions of the Soils and minerals Chapter reflect the Council's approach to soil conservation at the time the RPS was prepared. Five years later, we are developing new tools for sustainable land management that are worthwhile promoting. These are being progressed through development of a Sustainable Land Management Action Plan. It is unnecessary to change the RPS now but in the future, review of the RPS will need to consider this initiative.

Probably more than any other chapter of the RPS, if we were writing the Ecosysyems chapter today, we would write it differently. We know a lot more about ecosystems and how we can be involved in their management now than we did when the RPS was prepared. Now we would focus less on knowing more and more on doing more. However, it is not necessary to change the chapter at this time. An Ecosystems Strategy for the Council is in preparation and it will accommodate any changes to our approach. The sharpness of focus that the Council needs will be provided by the Strategy. It will be sensible to leave the ecosystems chapter untouched for at least another five years to see how the more active approach of the Council is working, and whether there are measurable changes becoming apparent in the state of our special resources

The Energy Chapter and the Built Environment and Transport Chapter have sound policies and methods but rely heavily on implementation of the methods. Implementation of some methods is demanding. The scope of some of them is large, often relies on the support of other agencies, and would require significant resources to implement. More effective implementation of some methods in these chapters would require considerable input and

proactive leadership from the Council and a high degree of support and participation by other agencies. Rather than consider changes now, a public review of these chapters at the end the ten year period should more properly determine the Council's future role for Energy and for the Built Environment and Transportation.

Recommendation

That the Council changes the landscape provisions of the Landscape and Heritage Chapter of the RPS so that the significant landscape issues in the Region are able to be addressed effectively.

Contents

1. Introduction

1.1 The RPS

The Resource Management Act 1991 (the Act) aims to promote the sustainable management of natural and physical resources. Key instruments in the Act for the promotion of sustainable management are regional policy statements, which must be prepared by regional councils for their regions. The purpose of a regional policy statement is:

to achieve the purpose of the Act by providing an overview of the resource management issues of the region and policies and methods to achieve integrated management of the natural and physical resources of the whole region (s.59)

The Regional Policy Statement for the Wellington Region (the RPS) is an important document for managing natural and physical resources, not just for the Council, but also for territorial authorities in the Region. When preparing regional and district plans, local authorities must not be inconsistent with it. When considering resource consent applications local authorities must have regard to the provisions of the RPS. Most importantly, the RPS includes policies and methods that set the course for the Council's involvement in non-regulatory initiatives with the community.

1.2 The Five Year Report on the RPS

The RPS became operative five years ago in May 1995. It requires the Council to report this financial year on

(1) The appropriateness of the significant issues and objectives in the Statement; and

(2) The effectiveness of the policies and methods in meeting the objectives.

The RPS requires the Report to contain:

(a) Recommendations for any necessary changes to the Statement;

(b) An assessment of the appropriateness of the significant issues and objectives in the light of feedback from territorial authorities, resource users, the public or other interested or affected parties. This feedback may come from the media, correspondence, meetings or other means, such as Council research;

(c) An assessment of the degree to which the policies are reflected in regional and district plans;

(d) An assessment of the degree to which the methods have been implemented; and

(e) An assessment of the degree to which the anticipated environmental outcomes have been achieved.

The requirement for a five year report is in section 15.7 of the RPS, which is attached to this report as Appendix 1. The Report is an internal Council report, rather than a statutory review of the RPS. A full statutory review of the RPS is required by the Act in another five years although the Council can change the RPS earlier should it wish to do so.

The Report does not set out to rewrite the RPS. Rather, it is a check on how well the RPS is performing and whether it is setting the Council in the right direction. The Report identifies where we are making satisfactory progress and where more effort and resources are needed if the provisions of the RPS are to be achieved over its 10 year lifetime. When preparing the Report, recommendations to change the RPS were considered if the following circumstances were identified:

- provisions of the RPS prevent sustainable management; or
- a major new policy direction is needed as a result of new significant issues in the Region that are not addressed by existing objectives.

This approach to recommendations on changing the RPS is appropriate because, generally, the policies and methods of the RPS enable action rather than require it. The RPS includes policies and methods outlining courses of action that should be taken but it does not preclude other ways of meeting objectives that might be provided for in the Council's other strategy and planning documents. Also, changes to the RPS are not needed just because circumstances change. For example, some objectives of the RPS have already been met or policies and methods have been implemented. Other provisions may have become redundant, eg. due to legislation changes. These provisions can remain until the statutory 10 year review of the RPS.

1.3 What "Criteria" were used to Evaluate the RPS?

The guidance provided in section 15.7 of the RPS (Appendix 1) about what the Report should contain was used as the basis for evaluating the RPS. Matters (b) to (e) in section 1.2, above, are "criteria" for reporting on (1) and (2). How each of these "criteria" were used in this report is described in this subsection.

The appropriateness of significant issues was considered by asking the following questions. Do the issues identified in the RPS remain the significant resource management issues in the Region? Have the issues changed? Are there any new significant issues in the Region?

The appropriateness of the objectives was assessed by asking whether the objectives address the issues. This exercise was carried out when the RPS was prepared. In the context of this report, it is a check and it ensures that any changes to issues are accommodated by the objectives.

Policies indicate a course of action for meeting the objectives. The policies are supported by methods, which identify the specific actions to meet the objectives. Therefore, the policies and methods work **together** to meet the objectives of the RPS.

How well policies are being addressed in regional and district plans was assessed. The degree of implementation of methods was also assessed to determine whether there is satisfactory progress in putting the methods into practice. The policies and methods were then looked at together to determine whether they are effective in meeting the objectives of the RPS.

Finally, the anticipated environmental results were looked at. Assessing whether the anticipated environment results are achieved provides a check on how well the objectives are being met.

1.4 Structure of the Report

The Report begins with an overall summary of findings and recommendations. It is then divided into separate sections that correspond to the chapters of the RPS. The following section of this report is on the Iwi Environmental Management System Chapter of the RPS. Subsequent sections are on each of the RPS chapters that address natural and physical resources. Each of the following sections is divided into the following subsections:

- A summary of findings
- Background information
- Issues
- Objectives
- Policies and methods
- Anticipated environmental results.

1.5 How was the Report prepared?

Council Staff prepared the Report. During its preparation there was consultation with territorial authorities and iwi authorities in the Region.

The report relies on the spoken and written feedback Council staff have received on the RPS over the last five years. Some key documents that are relevant to the RPS were also used during the preparation of the Report: These include:

- Measuring up: The State of the Environment Report for the Wellington Region 1999
- The Regional Policy Statement Implementation Program
- Council's annual environmental reports
- Councils annual monitoring reports
- Regional plans
- District plans.

2 The Iwi Environmental Management System

2.1 Summary

There are no issues set out in the Iwi Environmental Management System Chapter (the Iwi Chapter). Nor are any issues clearly identified elsewhere in the RPS in a way that links them to objectives in the Iwi Chapter. Notwithstanding, the Objectives are appropriate and it is unnecessary to include issues now.

The main shortcoming of the Iwi Chapter is that there has not been enough implementation of the policies and methods. This conclusion is shared by Council staff and by iwi representatives consulted during preparation of this report. While the provisions of the Iwi Chapter are suitable, there needs to be more action to implement them.

Feedback from iwi highlighting the need for more implementation of methods has been positive, in anticipation of action planned by the Council over the next 3 years. Action should not be limited to the existing RPS methods, since other sensible non-regulatory approaches have emerged since the RPS was made operative that do not need to be included in it now.

2.2 Some Comments from Iwi in the Region

Discussions on the RPS were held with representatives from most Iwi in the Region. The provisions of the Iwi Chapter of the RPS are considered by the people consulted to be satisfactory.

Exceptions to specific wording were raised. For example, use of the phrase 'where appropriate' in provisions was considered unnecessary. Other exceptions are mentioned in Tables 2.1 and 2.2. However, there was no suggestion that wording changes were necessary now. Iwi made it clear that, at this time, they want to see more action rather than changes to the RPS.

Some of the people the RPS was discussed with made comments about the importance of the document. For them, it has a lot of mana. Several of the people spoken to expressed disappointment that, sometimes, they did not see due recognition being given to the provisions of the document by all Council Staff.

A suggested addition to the RPS, when it is next changed, is that it spell out more clearly how Iwi and the Council can help each other. This should be a two way process that involves not the Council letting iwi know what it intends but also telling iwi know how they can contribute to and help the Council do its job. What are Council's expectations of iwi? If iwi have a better idea of how they add value to the Council's work, then they will be in a better position to contribute.

These are a few of the ideas that came from iwi. Overall, a positive impression of the RPS and its contents was received with the qualification that more implementation is needed now.

2.3 Background

The Iwi Chapter differs from the other chapters of the RPS. It attempts to create a framework for the relationship between iwi and the Council. Other chapters address the management of specific natural or physical resources. Provisions in the Iwi Chapter focus on the relationship between iwi and those managing resources under the Act. Objective 1 is an example of the distinction between the Iwi Chapter and other chapters in the RPS. It states:

A mutually satisfactory relationship is developed and maintained between the Wellington Regional Council and the iwi of the Region

This objective is about a changing relationship between two parties rather than bio-physical outcomes, which are contained in the objectives of other chapters. Other chapters of the RPS address specific resource management issues relating to natural and physical resources that are of particular interest to iwi.

Because the Iwi Chapter of the RPS differs from other chapters, it is treated slightly differently in this report. In other sections of this report assessments are made on whether methods have been implemented satisfactorily or whether policies and methods are satisfactorily achieving objectives. These evaluations are not made in this section because there is already a good measure of agreement on how to proceed, as mentioned in the summary in section 2.1, above.

There is a second important forum for expressing the relationship between iwi and the Council, namely, the Charter of Understanding. This was completed before the RPS was made operative and is currently being reviewed.

2.4 Issues

The Iwi chapter of the RPS does not contain any specific issues. It refers to general issues identified in the proceeding chapter, namely section 3.3 of the RPS entitled, Tiakina Te Mauri Ora: The Protection of "Mauri". However, there are no matters referred to as "issues" in section 3.3 of the RPS.

Section 2.4 of the RPS identifies the following issue:

*The **tangata whenua are perturbed that their role in managing the natural resources of the Region** is not being fully recognised and that their ability to carry out this role is impaired through lack of resources (see section 3.3). For example, tangata whenua are seeking an active role in coastal management.*

No other issues are explicitly stated. The absence of any explicitly stated issues in Chapter 4 and the uncertain references to issues in other sections of the RPS is unhelpful. The issue stated in section 3.3 of the RPS is appropriate.

2.5 Objectives

Within the Iwi chapter there are four objectives. These objectives are listed in full in Table 2.2 of this report.

According to an explanatory note in the RPS these objectives provide for Iwi aspirations in a realistic manner within the framework of the Act and reflect what is achievable in the lifetime of the RPS.

The are consistent with the Act and assume that the relationship between the Council and tangata whenua will be a fruitful one. They are also consistent with the Iwi vision for the future, which states (p 23 of the RPS):

> *Iwi therefore have a vision for the future based on two broad objectives: first, the protection of mauri and, secondly, the exercise of kaitiakitanga.*
>
> *This vision is:*
>
> - *The Treaty of Waitangi will be the basis of the relationship of tangata whenua with the Regional Council and territorial authorities;*
> - *Tangata whenua will become a primary agent in achieving better environmental outcomes by exercising their kaitiaki role; and*
> - *Recognition will be given to the need for tangata whenua to utilise their resources according to their own cultural preferences and to respond to the socioeconomic needs of the Iwi and hapu.*

The objectives are appropriate even though issues are not adequately identified. They remain relevant and do not require amendment.

2.6 Policies and Methods

2.6.1 Implementation of Methods

Table 2.1 provides comments on the implementation of methods in the Iwi Chapter of the RPS. There are 15 Methods. Three of these (Methods 1, 7, and 9) have been completed. A Charter of Understanding is currently in place. A joint statement on access to information on sites of significance has been prepared. Regional plans have included provisions relating to iwi and the management of important sites and taonga.

Six of the Methods (Methods 2, 3, 4, 6, 8, and 14) are being implemented during ongoing work by the Council, to varying degrees. Progress is being made on these methods but there is a lot of scope for more to be done. Method 15 is also being implemented but in an ad hoc rather than a systematic way.

The remaining 5 methods (Methods 5, 10, 11, 12, and 13) have not been implemented at all. Tangata whenua monitoring is not a part of any Council monitoring programs. Iwi have not requested the need for Heritage Orders, so investigations have not occurred. Opportunities for iwi management or joint management have not been investigated. Hence, there have been no transfers of powers and the Council has not been in a position to support the administration of transferred powers.

2.6.2 The Effectiveness of Policies and Methods

Table 2.2 comments on the effectiveness of policies and methods. Some of the provisions are effectively addressing objectives, while other are probably not. The progress made so far is disappointing but, also, the targets set are difficult and likely to take longer than the 10 year timeframe of the RPS.

It must also be remembered that the policies are not implemented by non-statutory methods alone. For example, when granting a resource consent, or preparing regional or district plans, regard must be had to these policies. Therefore the comments in the Table may underestimate implementation.

One common thread that emerges from many of the methods is that the Council should not rely on them, alone. There is a lot more that can be done outside them to help implement the policies. The methods in the RPS should not limit the Council.

There is a recognition by the Council and Iwi that:

- the relationship is a changing one
- new and positive initiatives are planned
- some important initiatives like tangata whenua monitoring have not yet begun
- no meaningful dialogue on transferral of powers has yet occurred
- the Council is not yet taking into account the principals of the treaty in a systematic way.

While, there is a question mark over how well the provisions of the Iwi Chapter are being implemented, neither iwi nor the Council want the RPS changed because making progress on all the bullet points listed above will depend on action not words.

2.7 Anticipated Environmental Results

The degree that Anticipated Environmental Results (AERs) are being achieved are described below for each AER. They reflect the effectiveness of the policies and methods.

AER 1 *Environmental policies of iwi authorities are developed and implemented*

AER 2 *Appropriate consultation is undertaken on all resource management matters of significance to tangata whenua*

AER 3 *Tangata whenua are involved in resource management decision making processes, as appropriate*

AER 4 *Tangata whenua are involved in environmental monitoring of matters of resource management significance to them*

AER 5 *Tangata whenua values are incorporated, where appropriate, into sustainable management*

Progress is being made on AER 1 with the release of the Otaki River and Catchment Iwi Management Plan. Ati Awa ki Whakarongatai have developed a policy on disposal and treatment of effluent.

AER 2 is being achieved because there is consultation with tangata whenua on resource management of significance to iwi. With regard to AER 3, the Council is currently investigating using Maori hearing commissioners. It might be said that AER 5 is being achieved because there are relevant provisions in the Council's regional plans. However, it should not be assumed, because tangata whenua, generally, did not become involved during the statutory stages of plans. AER 4 is not being achieved at all.

Table 2.1. Assessment of the Implementation of Methods in the Iwi Chapter of the RPS

Methods	Assessment of Implementation
Method 1: *The Wellington Regional Council and iwi representatives will jointly prepare a Charter of Agreement to guide their relationship under the Act.*	The Charter of Understanding was completed in 1993. A review of the Charter is currently underway and good progress is being made.
Method 2: *Provide information to tangata whenua on resource management matters, including the respective responsibilities of different resource management agencies*	There is ongoing implementation of Method 2 in response to any requests from iwi.
Method 3: *Liaise with other environmental and resource management agencies on resource management matters of significance to iwi.*	Method 3 is implemented through ongoing liaison with agencies when matters of significance to iwi are raised with the Council.
Method 4: *The Wellington Regional Council, where it is the consent granting authority, will*: *(1) Consult tangata whenua on all consent applications it considers will have a significant effect on tangata whenua;* *(2) Encourage applicants to consult with tangata whenua as part of the assessment of effects;* *(3) Appoint Maori as hearings commissioners, when appropriate;* *(4) Recognise, when appropriate, tikanga Maori in pre-hearing meetings and hearings; and* *(5) Consider effects on iwi when assessing whether consent applications should be non-notified.*	Part (1) and (2) of Method 4 are implemented when resource consent applications are made. Regarding Part (3), Maori are appointed as hearing commissioners from time to time. The process and circumstances for appointing Maori hearing commissioners is currently the subject of discussion by iwi and the Council. A workshop was held in April 2000, which will lead to guidelines on procedures. Regarding Part (4), the Council has implemented this method in response to iwi but have not necessarily promoted it. Tikanga Maori is recognised at pre-hearings and hearings. Parts of hearings have been in the Maori language. The Council will provide interpreters. Regarding Part (5), iwi are sent copies of all non-notified consents and their comments are sought.
Method 5: *The Wellington Regional Council will recognise and provide for tangata whenua participation in environmental monitoring, as appropriate.*	Method 5 has not been implemented. Tangata whenua monitoring has not been recognised and provided for.

Methods	Assessment of Implementation
Method 6: *The Wellington Regional Council will conduct training courses for Council staff and elected representatives on the Treaty of Waitangi and the Maori environmental management system.*	Method 6 has been implemented to varying degrees. Councillors and some staff have received training on the Treaty of Waitangi and Maori perspectives on the Environment. Te Reo courses have also been conducted. On the other hand, some staff have received little or no training. This method has been implemented but there is scope for more training to occur.
Method 7: *The Wellington Regional Council and the tangata whenua will jointly produce a statement on access to information on waahi tapu and other sites and issues of significance*	This method has been implemented.
Method 8: *The Wellington Regional Council will consult with tangata whenua over the management of any waahi tapu or any other significant sites or taonga which are located on Wellington Regional Council land or which are managed by the Wellington Regional Council*	As a landowner the Council implements this policy on the land it owns. As a resource manager under the Resource Management Act, the council has primary responsibility for fresh water, the coastal marine area and air. Territorial authorities are primarily responsible for the management of land use. The Council has made progress on implementation of this method through the Regional Coastal Plan, the Regional Freshwater Plan, and the Regional Air Quality Management Plan. These plans contain provisions for the protection of waahi tapu and other significant sites or taonga. The main problem with implementing this method is that the Council does not have information on the location of many sites. The Freshwater Plan and the Coastal Plan contain methods to assist with site identification but it dependent on Iwi being involved.

Methods	Assessment of Implementation
Method 9: *The Wellington Regional Council will, in its regional plans:* *(1) Acknowledge and incorporate, where appropriate, the special relationship that tangata whenua have with the environment, as reflected in their environmental management system;* *(2) Recognise and provide for waahi tapu and any other sites of significance to tangata whenua, where appropriate; and* *(3) Include objectives, policies and methods, as appropriate, for the management of taonga of importance to tangata whenua.*	The Council has 5 regional plans that address the coastal marine area, fresh water, discharges to land, soil, and air. In relation to these plans the Council has primary responsibility for the coast, fresh water and air. In these three plans it takes a lead role in implementing this method. Territorial authorities have a primary responsibility for managing land use and are primarily responsible for managing sites on land. The Coastal Plan, Freshwater Plan, and Air Plan implement the method to an extent that reflects information held by the Council at the time the plans were written. In relation to parts (2) and (3) of the Method, specific sites have not been identified, largely because the Council and iwi have not yet progressed this far together. The plans include methods that are intended to assist with the identification of sites. Further implementation will rely on the Council and Iwi working together more closely.
Method 10: *The Wellington Regional Council, when requested to do so by an iwi authority, will investigate the need for Heritage Orders.*	This method has not been implemented. There have been no requests from iwi so it has not been necessary to implement it.
Method 11: *The Wellington Regional Council, in consultation and partnership with tangata whenua, will investigate opportunities for iwi management of resources and opportunities for joint management, where appropriate*	Method 11 has not been implemented. So far the Council and iwi have hardly begun the discussion on iwi management/joint management of resources. The stage where an investigation will occur has not yet been reached.
Method 12: *Appoint tangata whenua as kaitiaki by a transfer of powers, where appropriate*	Method 12 has not been implemented. The same comments made on Method 11 apply.
Method 13: *Support tangata whenua to administer transferred powers, functions or duties, where appropriate.*	Method 13 has not been implemented in the absence of any implementation of Method 12.
Method 14: *Support iwi to prepare iwi management plans, where appropriate and where iwi wish to do so.*	There has been one example where this method has been implemented. Only a few occasions have arisen when iwi have begun the process for preparing management plans.

Methods	Assessment of Implementation
Method 15: *The Wellington Regional Council will conduct training courses, or use other appropriate training mechanisms, to assist iwi representatives to increase their ability to participate in resource management activities*	There has been no systematic training to implement Method 15 but some "ad hoc" training has occurred through presentations at Ara Tahi meetings on various resource management matters. Council staff have also visited iwi and provided advice..

Table 2.2. Effectiveness of Policies and Methods in Meeting Objectives in the Iwi Chapter of the RPS

Objectives	Policies	Effectiveness of Policies and Methods
Objective 1: *A mutually satisfactory relationship is developed and maintained between the Wellington Regional Council and the iwi of the Region.*	**Policy 1:** *To develop an understanding of, and recognise the relationship between, rangatiratanga and kawanatanga in the management of the Region's natural and physical resources, including recognition of the principle of tino rangatiratanga and its association with tribal autonomy, authority, control and self-determination.*	Policy 1 is a strong statement that seeks to establish the importance of the terms 'kawanatanga' and 'tino rangatiratanga' that are found in the Treaty of Waitangi. The Council is required to develop its understanding and recognition of these two terms. The method that implements this policy is the creation of a Charter of Understanding. This was completed in 1993. Since that time there has been one technical review. The Council is currently undertaking another review of the Charter that is progressing satisfactorily. This one method alone does not necessarily satisfy the policy or achieve the objective. The Charter outlines principles relating to the Council's obligations towards tangata whenua under the Resource Management Act 1991. These principles contain references to the terms kawanatanga and tino rangatiratanga. However, these references do not guarantee an ongoing understanding of these terms. The Charter establishes a forum of Iwi representatives and Councillors called Ara Tahi. This forum allows Iwi to highlight the differences in interpretation of these terms. It does not guarantee the recognition of these terms but provides Iwi with a forum to voice their concerns. Implementation of the policy is fragmented because there is no one person or group in the Council that is responsible for its implementation.
Objective 1:	**Policy 2:** *To support the active participation of tangata whenua in the development and implementation of resource management policy and plans, and in the resource consent granting process*	Policy 2 is specifically implemented by Methods 2-5 and 15. Table 2.1 identifies that Methods 2-4 are being implemented but Method 5 has not been implemented and Method 15 has only been implemented in an ad hoc way. Method 5 states that tangata whenua will have the opportunity to participate in environmental monitoring. Method 15 is for the Council to conduct training courses for iwi on resource management issues. The relationship between Council and tangata whenua is a changing one. Recent initiatives by the Council in its new proposed 10 Year Strategy coupled with the review of the Charter should improve implementation of this policy.

Objectives	Policies	Effectiveness of Policies and Methods
		A further point to note is that Policy 2 can be seen as ambiguous. The resource management policy and plans could refer to Council policy and plans or Iwi policy and plans. However, as the methods imply, the policies and plans that are envisaged are those of the Council.
Objective 2: *The principles of the Treaty of Waitangi are taken into account in resource management*	**Policy 3:** *To promote awareness of the Treaty of Waitangi and the Maori environmental management system within local authorities and other resource management agencies*	Policy 3 is specifically implemented by Method 6. Table 2.1 identifies that method 6 has been implemented to various degrees within the Council. Quite a bit has been done but there is a lot more to do. Further, the method does not fully implement the policy. The focus of the method is on Council staff and Councillors while the policy is aimed at a much larger audience – local government and resource management agencies. The State of the Environment Report identifies in the "bad news" associated with this Chapter of the RPS is that the Council is not taking into account the principles of the Treaty in a systematic way. This is a positive and proactive policy that requires greater priority and planning than has occurred so far.
Objective 2: **Objective 3:** *There are increased opportunities for tangata whenua to exercise kaitiakitanga in the Region*	**Policy 4:** *To recognise and provide for the relationship of Maori and their culture and traditions with their ancestral lands, water, sites, waahi tapu and other taonga*	Method 7 specifically implements Policy 4. Table 2.1 identifies that method 7 has been implemented. However, it is noted that Policy 7 is a course of action that is broader than Method 7 implements. Method 7 is just one step on the way to putting the policy into practice.
Objective 2:	**Policy 5:** *To take account of relevant Treaty of Waitangi claims when developing policies and plans and making decisions under the Act*	One iwi talked to during the preparation of this report raised an example where resource consents had been granted in a situation where a relevant treaty claim should have resulted in the consent being declined. However, there is case law from the Planning Tribunal (A077/93 and A129/93) which indicates that the policy may be inappropriate. There is no method to implement the policy. When there is no method in place to ensure that the policy is implemented, then the likelihood of it being acted upon may be reduced. An example of a method could be to provide ongoing education of the claims process and current claims in the Wellington area to Council staff and Councillors. A recent workshop for staff and Council established the worth of this approach.

Objectives	Policies	Effectiveness of Policies and Methods
Objective 3:	**Policy 6:** *To recognise and promote the role and importance of kaitiakitanga*	Policy 6 is specifically implemented by Methods 11-13. Table 2.1 identifies that none of these methods have been implemented. The methods are proactive and provide opportunities for Iwi to participate in the management of resources. However, the role of kaitiaki is not limited to these methods. These methods could also be interpreted to mean that kaitiaki are appointed when a section 33 transfer of powers occurs. This is not the only situation that could arise. There are numerous ways that kaitiakitanga can be expressed within the realm of tikanga ie Mäori law and custom.
Objective 3:	**Policy 7:** *To recognise environmental management plans prepared by iwi authorities*	Policy 7 is specifically implemented by Method 14. The policy and method are consistent. There has been one example where this method has been implemented.
Objective 4: *There are increased opportunities for the cultural aspirations and tikanga of tangata whenua with regard to natural and physical resources to be met*	**Policy 8:** *To recognise the Treaty right of iwi development and to facilitate resource development initiatives which are practical and permissible under the Act. This includes supporting, where appropriate, tangata whenua to develop and enhance their resources in accordance with their own tikanga and values*	The policy is limited to implementation by Method 14. Resource development initiatives can include other ideas and projects. The policy is sound, however, it needs other methods of implementation in order to fulfil its requirements.

3 Freshwater

3.1 Summary

The Issues and objectives of the Freshwater Chapter of the RPS remain appropriate. Generally, the policies and methods are effectively meeting the objectives. However, there are some areas of implementation where not as much progress is being made as the Council would like to see. These are:

- Protection of wetlands
- Reduction of non-point source pollutants.

The Council has already proposed initiatives that will help address these areas of implementation through its new proposed 10-year strategy. In particular, A Wetland Strategy is being prepared. Also, Ecosystem Initiatives are underway that will include riparian management, and Environmental Education Initiatives will involve communities more in taking care of our water bodies and mitigating the effects of non-point source pollutants.

No changes to the RPS are necessary.

3.2 Background

The Wellington Regional Council has a long history of water management through its predecessors, the Manawatu Catchment Board, Wellington Regional Water Board, and Wairarapa Catchment Board and Regional Water Board. Freshwater management is not new to the Council. The RPS provided the Council with an opportunity to put in place policies for integrated water management that set the direction for future use and protection of the resource in the Region.

The main method of implementation of the RPS is the Regional Freshwater Plan (Freshwater Plan) which became operative in December 1999.

3.3 Issues

The RPS identifies ten Issues for freshwater management in the Region. In brief, these relate to:

- Poor water quality
- Uses that do not meet the expectations of the tangata whenua
- Conflicts in the allocation of water because of competing uses and values
- The need for residual flows in some rivers that are over allocated
- The needs of future generations
- Activities in the beds of rivers and lakes that have significant adverse effects on river ecosystems and related groundwater systems
- Loss of freshwater habitats
- Protection of the various values that people hold in relation to water
- Access to water bodies
- The need for more water conservation because of increasing use of water.

These issues provide an overview of the resource management issues of the Region, as required by the Act for an RPS. They cover all freshwater issues in the Region to a greater or lesser degree except those that are addressed in other chapters of the RPS, such as issues

relating to flood hazard, which are addressed in the Chapter 11 on Natural Hazards. The commentaries on issues in the RPS do not necessarily identify all the elements associated with each issue. Commentaries focus on the most important aspects of issues for the Region. Such an approach is appropriate because the "less important" parts of an issue can be, and are, raised and addressed in the Freshwater Plan.

Since the RPS became operative, there are no new issues relating to fresh water in the Region that need to be included.

3.4 Objectives

There are three objectives for fresh water in the RPS. These objectives are listed in Table 3.2. They outline the environmental outcomes for the Region relating to water quality; water quantity; and the management of freshwater resources of high value for cultural, spiritual, scenic, ecosystem, natural, recreational, or other amenity reasons. The objectives are broad and comprehensive, which is appropriate because more specific outcomes can be, and are, identified in the provisions of the Freshwater Plan.

The objectives align with other provisions of the RPS with one exception. There is no objective in the RPS that identifies an environmental outcome for river and lake bed management. The RPS contains issues, policies, and methods relating to river and lake bed management. The absence of such an objective has not created any problems. Any objective for river and lake bed management would need to be closely aligned with the other objectives because of the close association between all aspects of fresh water management. There are objectives for river and lake beds in the Freshwater Plan that make it unnecessary to include a new objective in the RPS.

At this time objectives in the RPS for fresh water are appropriate.

3.5 Policies and Methods

3.5.1 Regional and District Plans

Regional Plans

Specific methods in the RPS are directed at the Freshwater Plan. Methods 2, 18, 38, 47 implement policies in the RPS. Other methods refer to regional plans or would be appropriately put into practice through the Freshwater Plan. These include Methods 3, 4, 5, 13, 14, 15, 17, 19, 20, 22, 23, 25, 27, 34, 39, 40, 44, and 46. Table 2.1 identifies that all of these methods have been implemented through the Freshwater Plan.

Still other methods in the RPS are reflected in the Freshwater Plan by providing more specific approaches in the Plan about how RPS methods will be implemented. Such methods from the RPS that are developed further in the Freshwater Plan include Methods 9, 12, 21, 24, 26, 28, 31, 32, 36, 41, 43, and 48.

Overall, the policies and methods of the RPS have been reflected to a high degree in the Freshwater Plan.

District Plans

The Freshwater Chapter of the RPS identifies three main issues that would be appropriate for the district plans to address. These are:

- Landuse controls to manage the water quality, flow, levels and bed levels of significant water bodies;
- The protection and promotion of healthy functioning wetlands; and
- Ensuring that land use decisions do not lead to a reduction in the level of access to regionally significant or locally important water bodies.

The first of these issues is only relevant to 6 of the 8 territorial authorities assessed as part of this report. This is because the other two do not contain any of the significant water bodies as listed in tables 4-7 of the Freshwater Chapter. Of these 6 plans, 3 have specific sections that outline objectives and policies relating to water quality. The remaining 3 all have policies in relation to water quality within their general sections on the natural environment, ecosystems or river zones.

Esplanade reserve and strip provisions are a common method of implementing all 6 district plans. These provisions allow territorial authorities to protect or acquire strips of land adjacent to rivers and lakes as a condition of a subdivision consent. The width of the strips varies between plans, and may also vary within a district plan reflecting the significance of the water body.

In addition to these provisions, 3 territorial authorities also include buffer strips that restrict earthworks within a specified distance of the water bodies. Amongst the plans there are other relevant provisions, such as building set backs and vegetation clearance rules, although these are not common to more than 2 plans.

In relation to the protection of wetlands, all of the Region's district plans contain policies which aim to protect or at least avoid, remedy or mitigate the effects of land uses on significant natural resources (SNRs). Most of these policies are general to all SNRs and not specific to wetlands, although two district plans do have policies that directly refer to wetlands.

The two common approaches in the plans which implement these policies are the inclusion of schedules of SNRs and also the earthwork buffer strips that were mentioned above. The SNR schedules are included in 5 district plans and of the remaining 3, 2 have indicated that they intend to include these at a later date.

Access to the region's significant water bodies is well provided for in all of the district plans by the esplanade reserve and strip provisions referred to above. This reflects the fact the Resource Management Act 1991 makes specific reference to esplanade reserve and strip provisions in its sections relating to subdivision. There is some concern as to whether these provisions are being adequately implemented at the subdivision consent stage. It is not clear whether territorial authorities are requiring the esplanade reserves or strips as regularly as may be anticipated by the district plan provisions.

Generally, the policies and methods of the RPS have been reflected to a satisfactory degree in district plans.

3.5.2 Implementation of Methods

Table 3.1 provides an assessment of the implementation of the methods in the Freshwater Chapter of the RPS. Ticks in the right hand column indicate that a method is being implemented satisfactorily. A cross in the right hand column indicates that a method, or part of a method, is not being implemented satisfactorily.

There are 55 methods in the Freshwater Plan. With 4 exceptions, they are being implemented satisfactorily. These exceptions are discussed below. Almost half the methods (27) have been implemented through the Freshwater Plan. The remaining satisfactorily implemented methods (24) involve ongoing implementation by council staff in the course of their work.

Method 7 has not been implemented because conditions on resource consents relating to efficiency and water conservation are probably not legal conditions.

Method 20, 30, 31, 32, and 33 are recorded in table 3.1 as having limited implementation, which is considered satisfactory because of the work that the Council intends over the next 3 years as part of the new proposed 10-Year Stategy. Method 20 relates to "… *improving the quality of water through, for example, riparian management and the encouragement of better land use practices …* ". Methods 30, 31, 32, and 33 all relate non-point source discharges, riparian management and land use practices.

There has not been much implementation of Method 35. Table 3.1 indicates that Method 48, on the protection of wetlands, is not being implemented satisfactorily. As identified in the Table, limited implementation relates to wetland protection on private land. The Council is committed to doing more wetland protection work in the next 3 years through the implementation of a Wetland Strategy.

Method 49 has not been implemented. It relates to investigation of transfer of powers so that some wetlands can be managed by iwi/or interested groups. No investigation has occurred.

3.5.3 **Effectiveness of Policies and Methods**

Table 3.2 provides a summary of the effectiveness of policies and methods in meeting the objectives of the Freshwater Chapter of the RPS. Ticks in the right hand column indicate that the policies and their associated methods are effectively meeting the objective(s). A cross in the right hand column indicates that the policies and methods, or a component of them, are not effective.

Table 3.2 identifies that all but Policy 14, and its associated method, are effective in meeting the objectives of the Freshwater Chapter of the RPS. More needs to be done by the Council to implement Policy 14. The Council is already preparing a wetland strategy and its implementation is programmed over the next 3 years.

3.6 **Environmental Results Anticipated**

Table 3.3 assesses the degree to which the Anticipated Environmental Results (AERs) are being achieved.

Most environmental results anticipated have been met in full or met for the most part. One result, that "*riparian management programmes are established where appropriate*", is identified as hardly being met at all. However, this must be qualified by proposals over the next 3 years to complete and implement a Wetland Strategy for the Region. It can make significant progress towards achieving the AER.

There is one result, that "*efficiency and conservation targets established by relevant authorities are achieved*". There is insufficient information available for any assessment. For a suitable assessment the Council would have to find out more about the efficiency or conservation targets of other organisations.

Table 3.1. Assessment of the Implementation of Methods in the Fresh Water Chapter of the RPS

Methods	**Assessment of Implementation**	satisfactory/ unsatisfactory
Method 1: *Manage the use and development of all fresh water by means of resource consents unless the use is allowed by a rule in a regional plan or the water is taken for reasons allowed by the Act (s. 14 (3)).*	This Method is implemented. It is unnecessary because it states the position of the Act.	✓
Method 2: *Prepare a Regional Fresh Water Plan to address water availability and allocation issues, to permit or regulate the use of fresh water and activities which affect it, to establish priority uses for low flow periods (including life supporting capacity) and to consider other water issues of a regional nature.*	Method 2, 3, and 4 have been implemented in the Freshwater Plan, which became operative in December 1999.	✓
Method 3: *Develop and apply flow regimes and safe yields based on instream habitat requirements and other relevant factors (e.g., to preserve amenity, cultural or intrinsic values) for surface water bodies which require them*		
Method 4: *Prepare a location specific plan to safeguard life supporting capacity, establish minimum flows and allocate the safe yield of any water body (or the water resources of a particular locality) which is under pressure from competing uses, or has special ecological needs or values that need protection. The water resources of the Kapiti Coast District are a priority*		
Method 5: *Investigate transferable water permits (under s. 136) and provide for their use where appropriate*.	Method 5 has been reported on during the preparation of the Freshwater Plan. Tonkin and Taylor carried out a specific investigation for the Council in 1995 that resulted in a report *Wellington Regional Council Transferable Water Permits*. Some relevant methods are included in the Freshwater Plan.	✓
Method 6: *Establish a methodology for providing for future generations and identifying the components of life supporting capacity of the Region's fresh water*	This method has been completed as part of the preparation of the Freshwater Plan.	✓

Methods	**Assessment of Implementation**	satisfactory/ unsatisfactory
Method 7: *Place conditions on water permits to promote efficiency and water conservation*	Method 7 has not been implemented since conditions on resource consents relating to efficiency and water conservation are probably ultra vires.	x
Method 8: *Investigate the use of consumption targets for uses such as irrigation, residential supply and leakage from closed pipe reticulation systems, in order to encourage the efficient use of water*	Council staff have reported to the Environment Committee on the implementation of methods 8-12 (Environment Committee 99.207). A specific report *Water Conservation* was completed in June 1998. An irrigation needs study in the Wairarapa is in progress. Utilities Services are promoting water conservation and territorial authorities are carrying out programs to reduce water loss from residential supply and closed pipe reticulation. Abstractors are required to meter water takes as a requirement of resource consent conditions in circumstances that warrant it. Resource consents for some water race systems have already been addressed while other water races will need to apply for consents prior to 1 October 20001.	✓
Method 9: *Promote water conservation and the efficient use of water through advocacy, education, and the provision of information*		
Method 10: *Require water race systems to obtain consents to take water by 1 October 2001*		
Method 11: *Require, where practicable, that abstractors provide evidence of actual consumption according to the class or type of consumption and demonstrate how water is being used.*		
Method 12: *Undertake or promote research into methods which promote water conservation and efficient use, including the use of economic instruments, and collect and publicise water usage data to ensure progress in meeting consumption targets.*		
Method 13: *Determine the safe yield of significant groundwater systems (e.g., Lower Hutt, Te Ore Ore), and allocate groundwater in order to protect its recharge capability and minimise sea water intrusion.*	Methods 13, 14, and 15 have been implemented in the Freshwater Plan, which became operative in December 1999.	✓
Method 14: *Require resource consents for all groundwater abstractions (except where s. 14 of the Act allows otherwise) and bore permits for the construction of bores.*		

Methods	**Assessment of Implementation**	satisfactory/ unsatisfactory
Method 15: *Review the suitability and applicability of the general authorisations relating to groundwater and the Underground Water Bylaws operating in the Hutt Valley and prepare, if appropriate, a regional plan for the Hutt groundwater system, and for such other aquifers as required*		
Method 16: *Seek to educate drillers and groundwater users in appropriate construction methods to improve efficiency and prevent leakage or wastage between aquifers.*	A driller education kit has been put together. The implementation of Method 16 is ongoing by staff involved in resource consents, enforcement, and groundwater investigations.	✓
Method 17: *Require resource consents for all discharges to water, land or groundwater not allowed for in the Act or in a regional plan.*	This Method is implemented. It is unnecessary because it states the position of the Act.	✓
Method 18: *Include fresh water quality in the Regional Fresh Water Plan and/or prepare a location specific regional plan for water bodies, or parts of water bodies, which are suffering from poor water quality (including from non-point sources) or are not suitable for the uses or values the community desires (if the issue is not manageable through the consent process).*	Methods 18, 19, and 20 have been implemented in the Freshwater Plan, which became operative in December 1999.	✓
Method 19: *Review its water classification methodology. A new methodology, if judged necessary, will review areas not presently classified and determine which areas require water quality standards (s. 69).*		
Method 20: *Investigate the use of bonds and other financial contributions in preventing discharges of contaminants.*		
Method 21: *Investigate and engage in public education about the use and care of fresh water.*	The implementation of Method 21 is ongoing. It is also an important part of the Council's Education Initiative that will be put into practice during the next 3 years	✓

Methods	**Assessment of Implementation**	satisfactory/ unsatisfactory
Method 22: *Identify water requiring an improvement in its quality and provide advice to consent holders and the public as to how this might be achieved* **Method 23:** *Investigate any request for contaminated or poor quality water to be improved and, if necessary, prepare a programme for doing so for public debate*	Methods 22 and 23 have been implemented as part of the preparation of the Freshwater Plan. Method 23 is also subject to ongoing implementation when requests are made about contaminated or poor water quality. Targeted investigations of selected rivers occurs, eg. Waikanae River, Waitohu River, Waiwhetu River.	✓
Method 24: *Where the quality of fresh water entering the coastal marine area is inadequate to meet any purposes for which coastal water is being managed, investigate means of improving the quality of the water through, for example, riparian management and the encouragement of better or alternative land use practices, and conditions on consents which require staged improvements in quality over time*	Method 24 is subject to ongoing implementation by Council staff. There has been limited implementation of the policy because there has not been much investigation of *"means of improving the quality of the water through, for example, riparian management and the encouragement of better or alternative land use practices"*. However, some investigation has been done by the Council and a lot more is intended over the next three years as part of the Council's Ecological Initiatives. With the qualification that further action on this method is planned, the method is being implemented satisfactorily.	✓
Method 25: *Seek improvements in water quality in the Waikanae River Estuary, Mazengarb Drain, Ngauranga Stream, and Makoura Stream in co-operation with the relevant territorial authority; monitor the effectiveness of works undertaken to reduce bacterial contamination in the Kaiwharawhara Stream which the Wellington City Council provided for in its 1993/94 capital works programme; monitor Hulls Creek and the Waingawa Freezing Works aquifer for improvements which are expected from remedial work which has been completed; address the discharge of treated sewage to the Wainuiomata River through the consent process and prepare a regional plan for the management of this river*	Method 25 is implemented as part of the preparation of the Freshwater Plan and the renewal of resource consents for the rivers identified. The rivers identified are also being looked at in a non-regulatory context through the implementation of methods such as the previous one that identify riparian and the encouragement of better or alternative land use practices. Targeted investigations of the Waikanae River and Hulls Creek have occurred.	✓

Methods	**Assessment of Implementation**	satisfactory/ unsatisfactory
Method 26 *Where necessary, develop standards, guidelines and codes of practice (based on nationally recognised codes of practice and in association with territorial authorities, industry and professional groups) for the following activities or effects:* *(1) Dairy shed effluent disposal;* *(2) Stormwater run-off;* *(3) Land clearance;* *(4) Subdivision and mass earthworks effects;* *(5) Mining;* *(6) On-site sewage treatment and disposal (e.g., septic tanks);* *(7) Installation of underground storage tanks; and* *(8) Spills of contaminants*	The Council has been involved in the preparation of several Codes of Practice, eg. (1), (6), (7), and (8). Some have already been prepared by industry, eg. (3), (4), and (5). The Council generally promotes the preparation of guidelines and codes of practice by industry. This approach, which is promoted in the Freshwater Plan has had some effective results.	✓
Method 27: *Reassess the effectiveness of the general authorisations (under s. 22 of the Water and Soil Conservation Act 1967) and replace these where necessary.*	Method 27 has been implemented during the Preparation of the Freshwater Plan.	✓
Method 28: *Undertake education programmes and provide information and advice to the public and industry on the requirements for, and proper handling of, discharges*	This method has been subject to ongoing implementation by Council Staff. Pamphlets and brochures have been prepared on specific subjects, eg., stormwater. Advice is provided during the processing of resource consents. More can always be done in this area and is planned as part of a major Environmental Education Initiative over the next 3 years.	✓
Method 29: *Investigate complaints regarding water resource misuse, including unauthorised pollution, and will invoke the enforcement procedures of the Act when less formal methods of enforcement are not successful.*	Method 29 is carried out as part of the ongoing business of the Council. All pollution incidents are recorded, investigated, and reported on. Enforcement action is taken in appropriate circumstances.	✓

Methods	**Assessment of Implementation**	satisfactory/ unsatisfactory
Method 30: *Identify land based activities which contribute to adverse effects on water bodies and provide advice on ways of minimising those effects through district plans or other means available to territorial authorities.*	Methods 30-33 are being implemented through Council advocacy on district plans and resource consents, and by ongoing non-statutory efforts. Land based activities which contribute to adverse effects on water bodies have been identified. Waterways suffering from the effects of non -point source pollution have also been identified. There has been quite a lot of investigation of riparian management and other land use alternatives that can mitigate adverse effects. However, there has been limited implementation of putting into practice the knowledge gained. Some practical implementation of riparian management and the use of alternative land use practices is occurring on Council owned land and in other areas. The Council's knowledge in this area is increasing as more practical experience is gained. A riparian management code of practice for forestry has been prepared this year. More work relating to these methods is planned over the next three years and will lead to satisfactory implementation. It will include a programme to trial the effectiveness of riparian management on selected rivers and assistance to private landowners.	✓
Method 31: *Identify waterways suffering from the effects of non -point source pollution and investigate the potential of managing riparian margins (e.g., by afforestation and other vegetation management systems) to mitigate these effects.*		
Method 32: *Encourage landowners and other organisations or agencies acting under other legislation to create and manage riparian margins (including, where appropriate, advocating to territorial authorities that esplanade reserves or strips be used for water bodies suffering from non-point source pollution).*		
Method 33: *Manage land it owns or controls to implement Fresh Water Policy 7 and will encourage land users to adopt management practices which control non-point contaminant sources.*		
Method 34: *Control activities in river or lake beds by means of resource consents or authorisation in a regional plan*	Method 34 is implemented through the Freshwater Plan.	✓
Method 35: *Prepare, where appropriate, guidelines to assist in the reduction of adverse effects on river and lake beds and promote adherence to any that are prepared amongst those engaged in riverbed activities*	Method 35 was considered last year but it was decided not to implement it yet. Conflicts between users (which is what the method is intended to address) are included as part of the river management code of practice in the Wairarapa.	x
Method 36: *Require river works to provide for the passage of fish, where appropriate*	Method 36, 37, 38, 39, and 40 are implemented through the Freshwater Plan and implementation is ongoing through resource consents.	✓

Methods	**Assessment of Implementation**	satisfactory/ unsatisfactory
Method 37: *Place conditions on consents to work in a river or lake bed that require, where appropriate, activities to be undertaken in ways that cause the least disturbance to aquatic ecosystems (e.g., outside breeding season) or indigenous fauna and flora.*		
Method 38: *Prepare, as part of the Regional Fresh Water Plan, an inventory of water bodies of high value and identify means of protecting these waters where necessary (including heritage protection and water conservation orders and rules in regional plans). It will include water bodies of national, and regional significance, as well as those waters of regional significance to iwi*		
Method 39: *In determining safe yields or preparing plans for water bodies or catchments, take into account natural character, any values attached to highly regarded rivers, lakes, and streams, and the amenity and intrinsic values of other water bodies.*		
Method 40: *Identify, in co-operation with other agencies such as the Department of Conservation, water bodies most likely to provide regionally significant habitats for indigenous fauna (freshwater fish, etc.) and areas of significant indigenous flora*		
Method 41: *Where waters are of national or regional significance, encourage the protection of adjacent land in order to maintain or enhance their value*	Methods 41 and 42 have been implemented through advocacy to district plans and resource consents for land uses that are processed by territorial authorities.	✓
Method 42: *District plans would be an appropriate means of implementing Fresh Water Policy 10 through land use controls alongside waters of high value*		

Methods	**Assessment of Implementation**	satisfactory/ unsatisfactory
Method 43: *Promote, where appropriate, high water quality, restoration of degraded water and the maintenance of the spiritual integrity of water bodies through its management of the Region's freshwater resources.*	Methods 43 and 44 have been implemented through the Freshwater Plan.	✓
Method 44: *Investigate and provide, if necessary, policy for the diversion of water from one catchment into the watercourses of another catchment.*		
Method 45: *Request territorial authorities to ensure it is notified of any proposal for any activity on land (which includes or lies adjacent to a wetland) or for any other activity which may have an impact on the quality or quantity of water in a wetland.*	Method 45 has been implemented though Council Staff communicating with territorial authority staff.	✓
Method 46: *Require permits to take, divert, or discharge into water where wetlands may be affected. An assessment of effects will be required and the appropriateness of any effect measured against the criteria in the policy.*	Methods 46 and 47 have been implemented through the Freshwater Plan.	✓
Method 47: *Identify wetlands and wetland systems of national and regional significance, and establish methods for their protection in a regional plan or the Regional Fresh Water Plan.*		
Method 48: *Manage wetlands on land owned or controlled by it in accordance with Fresh Water Policy 14, investigate the workability of measures required to protect wetlands and wetland systems (e.g., buffer zones and land use practices), and advocate for protection by landowners for all significant wetlands.*	The first part of Method 48 "*Manage wetlands on land owned or controlled by it in accordance with Fresh Water Policy 14 is being implemented by the Council*". This is a major thrust of the Wetland Strategy envisaged in the Councils proposed 10-year strategy. The second part of the method "*Investigate the workability of measures required to protect wetlands and wetland systems (e.g., buffer zones and land use practices)"* is being helped by the knowledge Council staff are gaining as they implement the first part of Method 48. There is limited implementation of the final part of this method "*advocate for protection by landowners for all significant wetlands"* but it will be a focus of the Council's Wetland Strategy over the next three years.	x
Method 49: *Where appropriate, investigate transferring powers of management so that some wetlands could be managed by iwi and/or interested groups*	This method has not been implemented since appropriate circumstances have not yet arisen.	x

Methods	**Assessment of Implementation**	satisfactory/ unsatisfactory
Method 50: *District plans and resource consents would be appropriate means for territorial authorities to give effect to Fresh Water Policy 14.*	This method has been implemented through submissions on district plans and resource consents.	✓
Method 51: *Through resource consents, control abstractions and discharges with the potential to detract from the quality or quantity of any water which is used to maintain public water supplies. Conditions may be imposed on existing consents over time where it is necessary to improve the quality or availability of water.*	Method 51 is implemented through resource consents.	✓
Method 52: *Encourage water supply authorities and other authorities to use the provisions and powers of other Acts, regulations and guidelines to protect the quality of water in water bodies and promote public health.*	The Council and other water supply authorities are implementing Method 52 through ongoing efforts.	✓
Method 53: *Investigate and identify water bodies or parts thereof which are of regional significance in terms of public access, and encourage the provision of access where appropriate*	Water bodies of regional significance for public access have been identified and efforts to encourage public access are ongoing. A report on public access with recommendations for improving it was completed in 1997/98.	✓
Method 54: *Where riparian management is adopted as a method, encourage its dual use for public access where this is possible.*	Methods 54 and 55 are implemented through submissions to district plans and subdivision consents. Opportunities to encourage landowners to provide access are taken when they arise	✓
Method 55: *District plans and land use consents would be an appropriate means of implementing Fresh Water Policy 16.*		

Table 3.2. Effectiveness of Policies and Methods in Meeting Objectives in the Freshwater Chapter of the RPS

Objectives	Policies	Effectiveness of Policies and Methods	satisfactory / unsatisfactory
Objective 1: *The quantity of fresh water meets the range of uses and values for which it is required, safeguards its life supporting capacity, and has the potential to meet the reasonably foreseeable needs of future generations*	**Policy 1:** *To manage the quantity of fresh water so that it is available for a range of uses and values, and:* *(1) Its life supporting capacity is safeguarded; and* *(2) Its potential to meet the reasonably foreseeable needs of future generations is sustained; and,* *(3) For surface water, any adverse effects on aquatic ecosystems are avoided, remedied, or mitigated*	Policy 1 is implemented by Methods 1-6. Table 3.1 indicates that the implementation of these methods is satisfactory. Policy 1 is an effective policy for achieving objective 1. With the exception of Method 1, the methods associated with the policy have been implemented during the preparation of the Freshwater Plan. Method 1 states that resource consents are needed for water use unless the use is allowed by a rule in a regional plan. This method is unnecessary because it is already the position of the Act. Method 2, 3 and 4 for the development of flows and water allocations in water short rivers have been implemented effectively in the Regional Freshwater Plan. Method 5 is for the investigation of transferable water permits. The investigations carried out have not lead to the adoption of such an approach but it has been worthwhile to explore. Method 6 is to establish a methodology for providing for future generations and identifying the components of life supporting capacity of the Region's fresh water. It has been an integral part of the development of the Regional Freshwater Plan.	✓
Objective 1:	**Policy 2:** *To promote the conservation and efficient use of fresh water.*	Policy 2 is implemented by Methods 7-12. Table 3.1 indicates that the implementation of these methods is satisfactory with the exception of Method 7. Method 7 is not effective because, legally, there are limitations on how conditions can be placed on water permits that would promote efficiency and water conservation. Methods 8 to 12 provide opportunities for the Council to promote reductions in water taken from rivers, which is particularly valuable in parts of the Region where water shortages occur (eg. Kapiti Coast). The policy and associated Methods 8-12 are effective ways of achieving objective 1.	✓
Objective 1:	**Policy 3:** *To control the use and allocation of groundwater so that it is not depleted in the long-term and sea water intrusion is minimised*	Policy 3 is implemented by Methods 13-16. Table 3.1 indicates that the implementation of these methods is satisfactory. Methods 13 to 15 have been implemented during the preparation of the Freshwater Plan. Method 16 has been carried out as a separate project by the Consents Management Department and its implementation is ongoing. Policy 3 is an effective policy for achieving objective 1. The State of the Environment Report identifies that The Lower Hutt	✓

Objectives	Policies	Effectiveness of Policies and Methods	satisfactory / unsatisfactory
		Groundwater zone is over 100% allocated. The safe yield identified in the Regional Freshwater Plan is 90 megalitres/day. Current allocation is 91 megalitres/day. When the Freshwater Plan was notified 163 megalitres/day was allocated. Since notification, the process for renewing resource consents has enabled the Council to significantly reduce the amount of water allocated. In this instance the RPS and the Regional Freshwater Plan are effective because the Lower Hutt Groundwater Zone is only nominally over allocated.	
Objective 2: *The quality of fresh water meets the range of uses and values for which it is required, safeguards its life supporting capacity, and has the potential to meet the reasonably foreseeable needs of future generations*	**Policy 4:** *To maintain and protect the quality of fresh water so that it is available for a range of uses and values, and:* *(1) Its life supporting capacity is safeguarded; and* *(2) Its potential to meet the reasonably foreseeable needs of future generations is sustained; and* *(3) For surface water, any adverse effects on aquatic and riparian ecosystems are avoided, remedied, or mitigated.*	Policy 4 is implemented by Methods 1, 2 and 17-21. Table 3.1 indicates that the implementation of these methods is satisfactory. With the exception of Methods 1 and 21, the methods associated with the policy have been implemented during the preparation of the Freshwater Plan. Method 1 states that resource consents are needed for water use unless the use is allowed by a rule in a regional plan. This method is unnecessary because it is already the position of the Act. Method 21 has been promoted in the Freshwater Plan by including more specific approaches that will help to implement it. Implementation of methods 18 and 19 has resulted in effective provisions in the Freshwater Plan that protect water quality. Method 20 is for the investigation of bonds and other financial contributions in preventing discharges of contaminants. The investigations so far have not lead to their adoption in the Regional Freshwater Plan but bonds can be included in resource consents. Policy 4 and the associated objectives are effective for achieving objective 2.	✓
Objective 2:	**Policy 5:** *To improve water quality and restore contaminated water to a standard which is appropriate for its desired uses and natural values.*	Policy 5 is implemented by Methods 22-25. Table 3.1 indicates that the implementation of these methods is satisfactory. Methods 22, 23, and 25 have been implemented in the Freshwater Plan. Method 23 is also subject to ongoing implementation when requests are made about contaminated or poor water quality. The State of the Environment Report indicates that the worst affected water bodies in the Region have not improved significantly, which is not unexpected because improvement will take some time. At this stage, we know the water bodies in the Region that need improvement. We know what contaminants are causing problems. The policies and methods identified in the RPS should assist with improving degraded water bodies but it is too early yet to be certain about their effectiveness. The Council's Environmental Education Initiatives	✓

Objectives	Policies	Effectiveness of Policies and Methods	satisfactory / unsatisfactory
		and Ecological Initiatives (eg. riparian management), proposed in the next 3 years will assist.	
Objective 2:	**Policy 6:** *To ensure that the effects of contaminants contained in point source discharges on the quality of fresh water and aquatic ecosystems are avoided, remedied, or mitigated and allowing for reasonable mixing:* *(1) Do not render any fresh water unsuitable for any purpose specified in any regional plan for that water;* *(2) Do not prevent the receiving fresh water from meeting any standards established in any regional plan for that water;* *(3) Do not render any water in the coastal marine area unsuitable for any purpose specified in a regional coastal plan for the Wellington Region*	Policy 6 is implemented by Methods 26-29. Table 3.1 indicates that the implementation of these methods is satisfactory with the exception of Method 26. The Council has implemented Method 26 by being involved in the preparation of guidelines. The approach of the Council encouraging and supporting guidelines and codes of practice means that they are "owned" by resource users rather than being told what to do by the Council. The approach is promoted in the Freshwater Plan and there are instances where it has shown to be effective. The recently completed State of the Environment Report identifies that in some cases water quality is deteriorating due to stormwater and non-point source discharges-if left unchecked water may not be suitable for its purpose of management. The potential problems associated with stormwater are not new. They were considered when the RPS and the Freshwater Plan were prepared. For stormwater discharges, the key thing that will influence the effectiveness of the RPS policies and methods is whether or not resource consents are required, which is decided by the Freshwater Plan not the RPS. The regulation of stormwater discharges would provide the impetus to treat and monitor them, which is unlikely to occur otherwise. Conditions can be placed on resource consents that are more readily enforceable than if the activity is permitted. At present, stormwater discharges are permitted activities in the Freshwater Plan, even though their potential for adverse effects was acknowledged during the preparation of the Plan. On the other hand, there are large costs for all concerned that are associated with any requirement for resource consents for stormwater discharges. Overall, Policy 5 is effective for achieving objective 2, but whether or not stormwater discharges should remain a permitted activity in the Freshwater Plan will depend on whether improvements to discharges can be made at some locations through non-regulatory means.	✓
Objective 2:	**Policy 7:** *To avoid, remedy, or mitigate adverse*	Policy 7 is implemented by Methods 30-33. Table 3.1 indicates that the implementation of these methods is satisfactory. However, there is a	✓

Objectives	Policies	Effectiveness of Policies and Methods	satisfactory / unsatisfactory
	effects on water quality and aquatic ecosystems of contaminants contained in non-point source discharges.	qualification that putting the methods into practice has been limited although a lot more will occur over the next three years. For example, there has been limited implementation of Method 32, which is for the encouragement of people to create and manage riparian margins. However, the Council's knowledge about riparian management is increasing as more practical experience is gained. The recently completed State of the Environment Report identifies that in some cases water quality is deteriorating due to stormwater and non-point source discharges-if left unchecked water may not be suitable for its purpose of management. The potential problems associated with non-point source discharges are not new. They were considered when the RPS and the Freshwater Plan were prepared. It is a significant water quality issue facing the country, not just the Council. Generally, non-point source discharges should not be addressed through regulation but are most effectively addressed through non-regulatory means. This is the approach of the RPS, which is developed further in the non-regulatory methods of the Council's regional plans. The Council's Environmental Education Initiatives and Ecological Initiatives (eg. riparian management), proposed in the next 3 years will assist.	
Objective 2:	**Policy 8:** *To promote the retirement and planting of riparian margins for the purposes of maintaining or improving the structural integrity of the beds and banks of water bodies, flood management, maintaining or enhancing water quality, and encouraging the healthy functioning of aquatic and riparian ecosystems.* *In determining catchments, subcatchments, or reaches of water bodies to which this policy might apply, to have regard to the following:* *(1) Any existing inferior water*	Policy 8 is implemented by Methods 30-33. Table 3.1 indicates that the implementation of these methods is satisfactory. The same comments in the comments on the previous policy apply to Policy 8. Overall, it is effective.	✓

Objectives	**Policies**	**Effectiveness of Policies and Methods**	satisfactory / unsatisfactory
	quality (including high water temperatures, and nitrate and dissolved phosphate levels); (2) *Any existing inferior habitat quality (including instream habitat);* *(3) The potential of land uses to affect water quality and their proximity to a watercourse;* *(4) The actual or likely contamination from non-point source contamination* *(5) The extent of any bank degradation, erosion, or loss of vegetation;* *(6) The actual or potential uses made or to be made of the water body* *(7) The actual or potential amenity values of the water body (including scenic and recreational values);* *(8) Any relevant Maori spiritual or cultural values; and* *(9) Any significant flora or fauna in the water body*		
Objective 2:	**Policy 9:** *To avoid, remedy, or mitigate the adverse effects of modifications to the beds of water bodies on water quality, groundwater, aquatic ecosystems, and the amenity and cultural values of water*	Policy 9 is implemented by Methods 34-37. Table 3.1 indicates that the implementation of these methods is satisfactory with the exception of Method 35. Method 34 states that activities in river or lake beds are controlled by resource consents unless the activity is allowed by a regional plan. This method is unnecessary because it is already the position of the Act. Method 35 has not been effective because the Council has not prepared guidelines although it has promoted and assisted others to prepare them. Methods 36 and 37 have been effective through their implementation in the Freshwater Plan	✓

Objectives	**Policies**	**Effectiveness of Policies and Methods**	satisfactory / unsatisfactory
		and resource consents. Overall, Policy 9 and the relevant Methods are effective for achieving Objective 2.	
Objective 3: *Freshwater resources of significance or of high value for cultural, spiritual, scenic, ecosystem, natural, recreational, or other amenity reasons are protected or enhanced*	**Policy 10:** *To manage the quality of water in, and the flows, levels and beds of, water bodies so that the following values are protected:* *(1) Regionally significant natural features, indigenous vegetation or regionally significant habitats of indigenous aquatic fauna, including those identified in table 4.* *(2) Scenes or landscapes of regional significance within which water forms an essential component, as identified in table 5.* *(3) Landforms and geological features of regional significance, including those identified in table 6.* *(4) Heritage, recreational, scientific, or other amenity or intrinsic values of regional significance, including those identified in table 7.*	Policies 10, 11, and 12 are implemented by Methods 38-42. Table 3.1 indicates that the implementation of these methods is satisfactory. Methods 38 to 40 were realised in the preparation of Regional Freshwater Plan. They are effective methods. Methods 41 and 42 are also effective and have been put into action when advocating on district plans and resource consents processed by territorial authorities. Overall, Policies 10, 11, and 12 and the methods are effective for achieving Objective 3.	✓

Objectives	Policies	Effectiveness of Policies and Methods	satisfactory / unsatisfactory
Objective 3:	**Policy 11:** *To ensure that, in respect of all water bodies not covered by Fresh Water Policy 10, any adverse effects on amenity values or the intrinsic values of ecosystems which may result from any use and development, and on any natural or near natural areas, are avoided, remedied, or mitigated*		
Objective 3:	**Policy 12:** *To avoid, remedy, or mitigate any adverse effects of any new or existing use and development where these effects impact on the natural character of wetlands, lakes, rivers, and other water bodies, and their margins*		
Objective 3:	**Policy 13:** *To recognise the cultural relationship of the tangata whenua with rivers, lakes, wetlands, and other water bodies, and to promote the management of fresh water in ways that take into account iwi values and beliefs. In addition, to promote the protection and management of sites of significance to iwi within the beds of water bodies.*	Policy 13 is implemented by Methods 43-44. Table 3.1 indicates that the implementation of these methods is satisfactory. Implementation through Method 43 has been effective in terms of the provisions in the Freshwater Plan but achieving outcomes "in the water" has been limited. Method 44 has been implemented in the Freshwater Plan.	✓
Objective 3:	**Policy 14:** *To protect the healthy functioning of wetlands and their biological*	Policy 14 is implemented by Methods 45-50. Table 3.1 indicates that the implementation of these methods is satisfactory except for Methods 48 and 49. Method 46 has been implemented and means we are generally aware of activities that occur on wetlands. Methods 46 and 47 have been put into action	X

Objectives	Policies	Effectiveness of Policies and Methods	satisfactory / unsatisfactory
	communities from the inappropriate effects of land and water use and to promote the restoration of degraded wetlands and the creation of artificial wetlands *In assessing the appropriateness of the effects of land and water use, to have regard to the following characteristics of any wetland:* *(1) The degree of modification from a natural state;* *(2) The degree of significance of areas of indigenous vegetation and/or habitats of indigenous fauna;* *(3) The degree of representative importance;* *(4) The biological uniqueness and/or diversity of species, communities, or habitats;* *(5) The amenity values of the wetland (including cultural, recreational, and aesthetic values); and* *(6) The degree to which the wetland provides for the continued functioning of ecological and physical processes.*	through the Freshwater Plan. Parts of Method 48 are being effectively implemented but limited progress has been made on that part relating to investigating "the workability of measures required to protect wetlands and wetland systems (e.g., buffer zones and land use practices). However, the Council is gaining experience through pilot projects and more work is proposed in the next 3 years. Method 49 relates to transferring the powers of wetland management. Method 50 has been effectively implemented through submissions on district plans and resource consents. Overall, the effectiveness of the policy and methods in achieving Objective 3 is questionable.	
Objective 3:	**Policy 15:** *To protect water resources used for public water supply from abstractions of water and discharges of contaminants which may affect the*	Policy 15 is implemented by Methods 51 and 52. Table 3.1 indicates that the implementation of these methods is satisfactory. Method 51 has been implemented effectively through the Freshwater Plan and through resource consents. Method 52 is effective through ongoing implementation. The policy and methods are effective for achieving Objective 3.	✓

Objectives	**Policies**	**Effectiveness of Policies and Methods**	satisfactory / unsatisfactory
	suitability of those waters for water supply purposes		
Objective 3:	**Policy 16:** *(1) To ensure, when planning for and making decisions on new subdivision, use, and development, that:* *(a) There is no reduction in the quality of existing legal access to and along water bodies, and* *(b) Opportunities to enhance access to water bodies, or parts of water bodies, which are:* *(i) Of regional significance (as listed in tables 4 to 7 of Policy 10 or in a regional plan); or* *(ii) Are considered by the relevant territorial authority to be of benefit to the local community for their recreational, cultural, scenic, spiritual, or other amenity values* *are recognised and provided for.* *(2) To promote through other means, where practicable, access to and along water bodies (to which subsection 1(b) of this policy applies), other than in exceptional circumstances.*	Policy 16 is implemented by Methods 53-55. Table 3.1 indicates that the implementation of these methods is satisfactory. That part of Method 53 for the investigation of water bodies of regional significance in terms of public access is complete. The remaining part of Method 53 and Methods 54 to 56 are effective ways of implementing the Policy through non-statutory means or advocacy to territorial authorities. Their implementation is ongoing.	✓

Table 3.3 Assessment of Anticipated Environment Results in the Freshwater Chapter of the RPS

AER from Chapter 5	Met, or almost met, in full	Not met, but good progress is being made	Not met, with little progress being made	Unable to assess
AER 1: *Water quality, flows and levels do not fall below standards set to safeguard the life supporting capacity of water or the needs of future generations*	✓			
AER 2: *Water quality, flows and levels set to manage a water body for certain purposes are maintained.*	✓			
AER 3: *Water is available for the social and economic development of the Region.*	✓			
AER 4: *The sustainable yield of groundwater is not exceeded and saltwater intrusion is minimised.*	✓			
AER 5: *The ecological health of aquatic ecosystems is protected and enhanced.*				
AER 6: *The relationship of the tangata whenua with fresh water is better understood and iwi concerns and values are considered in the management of water bodies.*		✓		
AER 7: *Water of poor quality is enhanced where necessary and contaminated water is restored to appropriate levels.*		✓		
AER 8: *Water quality is improved through appropriate land use practices and integrated land and water management*			✓	
AER 9: *All discharges into fresh water comply with the relevant water*	✓			

AER from Chapter 5	Met, or almost met, in full	Not met, but good progress is being made	Not met, with little progress being made	Unable to assess
quality standards.				
AER 10: *The quantity and quality of water for public water supply is protected so that supply is ensured and public health is protected.*	✓			
AER 11: *Efficiency and conservation targets established by relevant authorities are achieved*				✓
AER 12: *The adverse effects of river works and other activities in the beds of lakes and rivers are avoided, remedied, or mitigated.*	✓			
AER 13: *The special values attached to water bodies are protected*	✓			
AER 14: *Significant indigenous flora and significant habitats of indigenous fauna are protected*.				
AER 15: *There is no net loss in the number and quality of wetlands and wetland systems in the Region of national and regional significance*				
AER 16: *Riparian management programmes are established where appropriate.*		✓		
AER 17: *Public access to water bodies is maintained and/or enhanced where appropriate*	✓			

4 Soils and Minerals

4.1 Summary

Evaluation of the Soils and minerals Chapter of the RPS has highlighted a key problem for our management of the resource. In short, the Council does not have enough information about the resource to know how effective we are. The RPS does not recognise this lack of information. There is a corresponding example in the Air Chapter of the RPS. Five years ago the Council identified there was insufficient information about the air resource in the RPS. This was recognised in the RPS and the Air Plan and has been acted on.

If we were writing the RPS now the need for information on the soil resource would be included. This is not a reason for changing the RPS but it needs to be acted on otherwise we will be unable to properly evaluate environmental performance in the future. The Regional Monitoring Strategy, which is to be completed next year, is an opportunity to reconsider the information we need to evaluate soil management.

If we were rewriting the RPS now there could be changes to the Soils and minerals Chapter. Some key matters that would be reconsidered include:

- more direction towards identifying information needs, or establishing monitoring programmes to determine trends in soil quality, soil loss, and effects on water bodies and biodiversity.
- in relation to the extraction of mineral resources, identification of reverse sensitivity as the relevant land use issue rather than protection of the use of the resource
- better integration with the Freshwater Chapter on activities in river beds, such as the effects of extraction of minerals, and better integration with the Natural Hazards Chapter on risks relating to soil hazards – some policies (eg. 4 and 5) and methods (eg. 14, 15, 16, 17, 18, 19) may not even belong in the Soils and minerals Chapter

The provisions in the Soil Chapter reflect the Council's approach to soil conservation at the time the RPS was prepared. There is a strong focus on soil conservation and flood protection. We are now developing new tools that will enhance integrated approaches to sustainable land management. If we were writing the RPS now, direction for new initiatives could be included, such as:

- Integration of Council wide programs (soil conservation, pest management, land management, ecosystems management)
- Integrated farm plans
- Urban land management
- Intensive land use management
- Community involvement

No changes need to be considered now. The Chapter does not limit the Council, nor does it provide conflicting direction for the management of resources in the Region. Some of the suggested changes can be provided for in the Sustainable Land Management Action Plan that is currently being prepared.

4.2 Background

The Council and its predecessors have a long involvement in soil conservation in the Region through our functions under the Soil Conservation and Rivers Control Act 1941. Since that time we have built up knowledge, expertise, practical experience and relationships with the community on soil conservation matters. The focus of the Council's activity has been on erosion control.

The Resource Management Act 1991 broadens the Council's role to include all aspects of sustainable land management, not just soil conservation. With the additional role new initiatives for sustainable land management that build on the Council's previous approach are emerging.

4.3 Issues

Fifteen issues are identified and outlined in the Soils and minerals Chapter of the RPS. Several of the issues do not define the environmental problem and its cause clearly, and there is significant overlap in the descriptions accompanying different issues (e.g., Issues 2 and 10, or Issues 4, 6 and 10). Issue 1 is confusing as it refers to erosion due to natural processes, but then goes on to describe that poor land management practices can trigger erosion (i.e., it refers to accelerated erosion caused by land owner's practices, rather than to natural processes).

The fifteen issues can be summarised into seven key issues, being

- different forms of erosion (e.g., surface, wind, slumping and slips) caused by natural processes
- different forms of erosion caused or accelerated by land management practices (e.g., overdrying or vegetation disturbance)
- effects of soil erosion on water quality, aquatic ecosystems and other downstream effects (e.g., run-off, riparian management and soil contamination)
- loss of soil quality, including fertility and soil structure (e.g., soil contamination, high quality soils)
- soil and vegetation disturbance activities
- mineral extraction
- inappropriate land uses.

If the fifteen issues were amalgamated into seven key issues, overlap could be removed without diminishing the scope of the environmental problems identified. This simplification would serve to clarify the significant issues, which are currently somewhat lost in the array of issues described.

Despite these criticisms, only one of the issues is considered to be inappropriate, that is, Issue 15 which relates to restrictions that may be placed on mineral extraction activities due to their adverse effects on air, water and amenity values. This is not so much a soils and minerals issue as it is a land use conflict issue, i.e., between mineral extraction and subdivision. It relates to the broader concern of reverse sensitivity, which is becoming a problem as urban land uses encroach on, and conflict with traditionally rural land uses. This issue is inappropriate.

Issue 8 of the Soils and minerals Chapter relates to gravel and sand extraction from river beds. While sand and gravel are considered to be minerals, this issue also relates to freshwater and flood mitigation, or natural hazards. It has also been appropriately identified in the Freshwater Chapter (Issue 6) and may be unnecessary to include it here.

Soil contamination, loss of soil fertility, and the protection of high quality soils (Class I and II soils) are identified as issues in the Soils and minerals Chapter. These issues all relate to aspects of soil quality, but do not fully cover the broader issue of loss of soil quality (which includes soil fertility, as well as physical and biological properties) that can occur on all soil types as a result of land management practices. This issue is covered by the Proposed Regional Soil Plan (Soil Plan).

A lack of monitoring and research information is a major limitation in the management of soils and minerals, and promoting sustainable land management in the Region. The Council does not have comprehensive information on current soil quality or the changes in soil quality and productivity over time. Nor does the Council know the survival rate and effectiveness of soil conservation operations

such as pole planting. The RPS could contain an issue that identifies the need for information on the state of soil resources and pressures on those resources. Such issues relating the need for information on other resources are contained in other chapters of the RPS (eg. the Air Chapter). A change to the RPS is not essential because the relevant data collection and monitoring can be carried out anyway.

4.4 Objectives

The Soils and minerals Chapter contains seven Objectives. These are included in the first column of Table 4.2. Each issue is addressed to some extent by one or more objectives.

Objective 2 states that "land degradation is limited to that for which there is no feasible remedy". This raises the question of what is "feasible". For example, one extreme interpretation might be that the objective means that land degradation is limited to that which would occur naturally, or at the other extreme, it may relate to economic feasibility for a land owner.

Objective 3 refers to land uses being consistent with downstream river management and water use requirements. The meaning of this is unclear. It is assumed that it means that effects of land uses, e.g., accelerated erosion, do not raise flood risks in the catchment, or cause significant adverse *effects* on water quality which could in turn impinge on water uses. This objective also introduces consideration of appropriate and inappropriate land uses, which was not explicitly raised as an issue, but is important.

Objectives 3 and 4 overlap in that Objective 3 addresses storm damage and "natural calamities", and Objective 4 addresses natural hazards. Objective 4 refers to levels of risk associated with soils that are acceptable to communities. This is a natural hazard objective that is adequately covered in the Natural Hazards Chapter.

Objective 5 (the offsite impacts of soil degradation) overlaps significantly with both Objective 3 (effects on water quality) and 4 (effects on communities). It is the only objective that can apply to effects of soil loss on aquatic ecosystems, which is a significant issue of concern to the Council.

Objectives 6 and 7, relating to Class I and II lands and rock extraction respectively, directly reflect Issues 14 and 15. As stated above, Issue 15 is inappropriate, and likewise Objective 7 is also inappropriate. It does not provide a direction or desired result for the rock resource, but instead seeks to protect hard rock extraction activities.

No objective addresses the extraction of gravel and sand from river beds identified in Issue 8, This issue may be adequately, and perhaps more appropriately, addressed through water quality objectives in the Freshwater Chapter, or through the Natural Hazards Chapter objective. Gravel extraction was not specifically identified as an issue in the Natural Hazards chapter, but is covered by Issue 4 (relating to human actions, which increase or decrease hazards).

4.5 Policies and Methods

4.5.1 Regional and District Plans

Regional Plans

The policies and methods of the RPS provide direction for provisions in the Soil Plan and they are generally well reflected in it. Some provisions are also reflected in the Freshwater Plan and the Discharges to Land Plan. Rather than examine those RPS provisions that are developed further in regional plans, the RPS provisions that are not developed in the regional plans are highlighted below.

Policy 2 about topsoil removal, mineral extraction, and turf farming operations is not implemented in the Soil Plan. The policy applies to regional and district plans and it has been left to district plans to

implement it. There is guidance for territorial authorities on these matters but the Soil Plan does not " … ensure …" outcomes through rules. The Council decided that controls on topsoil mining were more appropriately the responsibility territorial authorities and their district plans. Similarly, in response to Policy 9 of the RPS, the Council has not included rules in regional plans relating to Class I and Class II land. Once again the Council made its decisions on this during the preparation of the Soil Plan.

A few of the methods in the RPS, such as Method 33, are not reflected at all in regional plans because they are better developed outside regional plans.

District Plans

This chapter anticipates that territorial authorities will have a significant role in the management of the Region's soil resource and of the effects associated with mineral extraction. This includes avoiding remedying or mitigating the on and off site effects of earthworks as they relate to water quality, flooding and erosion. The Chapter also anticipates that territorial authorities will take an integrated, whole catchment approach to soil management and that they will consider the wider community interest when making decisions relating to Class I and II land. Finally, the Chapter gives territorial authorities a significant role to reduce the conflict between quarries and other land uses.

Despite what the RPS says, the district plans have taken on these policy directions in a very limited manner.

The extent of the soil provisions within the district plans is generally limited to restricting the scale, nature and location of individual earthworks with the aim to reduce their environmental effects, although two plans do not even go this far. The purpose of these provisions is to manage the effects of earthworks in relation to landform, water quality or natural hazards rather than just the effects on the soil resource itself. For example, three territorial authorities have provisions that restrict earthworks within the vicinity of a water body. Similarly, those councils which have residential areas on steeper land tend to have more stringent earthwork requirements in order to reduce the potential for land slippage.

None of the district plans take the more holistic approach to soil management anticipated by the Regional Policy Statement. In particular there is no mention of catchment based land management and little of protecting higher class soils. In relation to this last point, while several of the district plans include relatively large minimum lot requirements for rural subdivision, only one justifies this in relation to maintaining their higher class soils.

4.5.2 Implementation of methods

Table 4.1 provides an assessment of the implementation of the methods in the Soils and minerals Chapter of the RPS. Ticks in the right hand column indicate that a method is being implemented satisfactorily. A cross in the right hand column indicates that a method, or part of a method, is not being implemented satisfactorily.

There are 36 methods in the Soils and minerals Chapter. Most of these are being implemented satisfactorily either through the Soil Plan or through the ongoing work of Council staff, particularly the soil conservation staff in the Wairarapa. Method 13 is not being implemented satisfactorily.

Methods 14-16 do not relate to soil or minerals and should not be included in this chapter. Gravel and sand extraction from river beds is defined as a soils and minerals issue (Issue 8). However, this issue is not covered in the objectives, and then is expanded to cover river and flood plain management in Policy 4 and Methods 14-16. Although the extraction of gravel and sand from river beds is considered to be a minerals issue in the RPS (Issue 8), all of the effects of extraction relate to water quality and flood risks. Therefore, Methods 17-19, which relate to Issue 8, probably do not belong in the Soils and minerals Chapter. It would be more appropriate to include relevant provisions in the Freshwater or Natural Hazards Chapters.

Overall, the methods in the Soil Plan reinforce the Council's approach to soil conservation, particularly soil erosion, at the time the RPS was prepared. Increasingly, the emphasis is now on sustainable land management, integrated catchment management, and integrated farm management. The Council is currently preparing a Sustainable Land Management Action Plan that will add to the tools that the Council already has.

4.5.3 Effectiveness of Policies and Methods

Table 4.2 summarises the effectiveness of policies and methods in meeting the objectives of the Soils and minerals Chapter of the RPS. Ticks in the right hand column indicate that the policies and their associated methods are effectively meeting the objective(s). A cross in the right hand column indicates that the policies and methods, or a component of them, are not effective.

All the policies and their associated objective are considered to be effective in meeting the objectives of the Soils and minerals Chapter of the RPS. However, this is probably not the full story. The "bad news" items in the recently published State of the Environment Report identify that "we have little detailed knowledge about the quality of soils in the Region – no baseline has yet been established". It is sometimes difficult to assess just how effective our policies are, in practice. Lack of information about soil quality, and sustainable land management is not identified as an issue in the RPS. Consequently, there are no policies or methods in the Soils and minerals Chapter directing information gathering and monitoring. A soil/land monitoring strategy is required if the Council is to be able to properly assess its effectiveness in the future.

The State of the Environment Report also finds that:

- Some severely erosion-prone land is still being used in a non-sustainable way; and
- More sustainable land use is needed.

Policies and methods in the Soils and minerals Chapter do not refer directly to promoting sustainable land management on erosion prone land. Policies 1, 7, 8, 9 refer to minimising erosion and various adverse effects, rather than referring to land uses. Methods 3, 5, 7, 8, 20, 21, 24, 26-29, 32, and 33 all relate to promoting better land use practices in some respect or other.

Soil and vegetation disturbance activities are identified as issues in the Soils and minerals Chapter. The effects of these activities are given such high priority that a method directs the preparation of a Soil Plan to guide and regulate them. Yet, there is no objective or policy that provides direction specifically for these activities. While policy guidance in the RPS is not effective in addressing soil and vegetation disturbance activities, these issues have effectively been addressed through the Soil Plan.

4.6 Anticipated Environmental Outcomes

At this stage, the Council has limited ability to determine whether or not the Anticipated Environmental Results (AERs) are being achieved, since there is no baseline and no soil monitoring is carried out. Each AER is discussed below.

AER (1) *There is sustainable use of the remaining high quality soils throughout the Region.*

Less than 1% of the Region is Class I and less than 4% is Class II. In most parts of the Region, the best arable land available is Class III. The Council has not assessed current land uses or the state of soil quality on these soils. Without this information, the degree to which this anticipated result has been achieved cannot be determined.

AER (2) *The physical, chemical and biological characteristics of the Region's soils are maintained.*

The Council has no data on the state of the physical, chemical or biological characteristics of soils in the Region. To determine whether this anticipated result is being achieved, long term soil quality monitoring is required. The Council will join the '500 soils' soil quality monitoring programme being run by Landcare Research in June 2000.

AER (3) *The rate of soil degradation is the natural rate resulting from processes beyond the control of landowners.*

The Council does not have sufficient information to determine soil degradation rates in the Region. Therefore, achievement of this AER cannot be determined.

The Council calculates that 17% of severely erodable land is still used unsustainably. In saying that, the Council targets severely erodable land that is under an incompatible land use for soil conservation programmes. More than 90% of targeted land now has an approved soil conservation plan. However, the success of these programmes in terms of reducing erosion has not been determined.

AER (4) *Damage to farmland, urban areas and other land from floods, erosion and subsidence is at levels acceptable to local communities and the regional community.*

Damage to land from floods, erosion and subsidence is most likely to occur as a result of large storm events. Communities are involved with the Council in flood management planning and approaches to erosion control that are intended to mitigate the effects of natural hazards. The current risk reflects levels that are considered acceptable.

AER (5) *The life supporting capacity of the Region's soil resources is maintained or enhanced.*

The life supporting capacity of soils is strongly associated with the physical, chemical and biological characteristics of soils in the Region. As stated above, the Council has no data on the state of the physical, chemical or biological characteristics of soils in the Region. To determine whether this anticipated result is being achieved, long term soil quality and productivity monitoring is required. The Council will join the '500 soils' soil quality monitoring programme being run by Landcare Research in June 2000.

AER (6) *Catchments are stable and robust enough to withstand the effects of natural hazards and to accommodate human activities where required.*

The Council does not have enough information about the effects of natural events, (e.g., heavy rain) on catchments (e.g., soil loss) and down stream activities (e.g., flooding) to determine whether this AER is being achieved.

Table 4.1. Assessment of the Implementation of Methods in the Soils and Minerals Chapter of the RPS

Methods	**Assessment of Implementation**	satisfactory/ unsatisfactory
Method 1: *Prepare a Regional Soil Plan to guide and/or regulate activities which can cause adverse effects through the destruction of vegetation and disturbance of soils.*	Method 1 is complete. The Soil Plan is about to become operative.	✓
Method 2: *Identify priorities for soil conservation on a regional scale, based on land use capability, frequency of damaging events, and downstream impacts of erosion.*	On a large scale, Method 2 is implemented through the Soil Plan by identifying erosion prone and non erosion prone land and by requiring resource consents for some activities and taking a non-regulatory approach to others. A lot of work has been done by the Operations Department, Wairarapa, on prioritising the Council's "non-regulatory" efforts prior to, and since, the RPS. The Operations Department specifically addressed the method in the 1998/1999 year. Currently, non-regulatory initiatives arising from the Soil Plan are being prioritised as part of a Sustainable Land Management Action Plan.	✓
Method 3: *Provide information to landowners on land use capability, soil conservation principles and practice and soil rehabilitation.*	Method 3 is being implemented satisfactorily as part of the core business of the Operations Department, Wairarapa	✓
Method 4: *In consultation with territorial authorities and industrial and professional groups, develop (where appropriate) and encourage adherence to relevant guidelines and codes of practice for routine activities such as mineral extraction (gravel, sand, hard rock, etc.), topsoil removal, turf farming, river management, forestry operations, and urban and rural earthworks, in order to avoid or mitigate adverse environmental effects.*	Method 4 is being implemented satisfactorily as part of the ongoing work by consents staff and the Operations Department, Wairarapa. There are codes of practice or guidelines relating to the activities mentioned. For example, this year forestry guidelines relating to riparian areas were prepared.	✓

Methods	**Assessment of Implementation**	satisfactory/ unsatisfactory
Method 5: *Provide advice on establishing and managing soil conservation plantings used in revegetation programmes to ensure long-term stability is maximised.*	Methods 5 and 6 are being implemented satisfactorily as part of the core business of the Operations Department, Wairarapa.	✓
Method 6: *Inspect Wellington Regional Council plantings and other works put in for soil conservation purposes, particularly after storm events, to ensure that they are adequately maintained and to assess their effectiveness.*		
Method 7: *Encourage and promote the retirement, legal safeguarding and reafforestation of areas affecting targeted waterways to diminish and prevent excessive sediment in run-off entering such waterways and to avoid and mitigate erosion risk.*	Method 7 is generally implemented through the ongoing efforts of Council staff. Rivers most affected by soil erosion have been targeted. Extensive soil conservation plantings have been carried out on the banks of many rivers in the Region.	✓
Method 8: *Encourage and facilitate the afforestation of areas of Class VI and Class VII land identified as being increasingly susceptible to erosion and where it is shown to be ultimately unsustainable for pastoral use.*	Method 8 is being implemented satisfactorily as part of the core business of the Operations Department, Wairarapa.	✓
Method 9: *Investigate the use of other policy mechanisms, including economic instruments, as a means of avoiding, remedying or mitigating soil erosion and degradation, and other adverse effects of land use.*	Method 8 has been implemented through completion of an internal WRC Report *Managing the Environment: What are the Regional Council's Options* , which suggests that the Resource Management Act 1991 is unsuitable for using economic instruments for the management of resourcesdischarges.	✓
Method 10: *District plans would be an appropriate means of implementing Soil and Minerals Policy 1 by providing for the susceptibility of sites to soil erosion, soil degradation and other adverse effects caused by existing land uses and potentially caused by new land use, development and subdivision.*	This method has been implemented during the preparation of district plans and will be ongoing when plan changes are made.	✓

Methods	**Assessment of Implementation**	satisfactory/ unsatisfactory
Method 11: *include objectives, policies and, where appropriate, rules and other methods in the Regional Soil Plan to contribute to the implementation of Soil Policy 2.*	Method 11 has been implemented during the preparation of the Soil Plan. There are relevant objectives and policies but no rules. The absence of any rules was arrived at as a result of due process during preparation of the Soil Plan.	✓
Method 12: *Make provision through the consent granting process for the rehabilitation of land used for mineral extraction and soil removal (e.g., require applications for consents to be accompanied by a site rehabilitation plan).*	Method 12 is implemented through the consent process	✓
Method 13: *Investigate the use of performance bonds as an incentive for operators of mineral extraction, topsoil removal, and turf farming activities to undertake site rehabilitation or other remedial action. Bonds should cover a period long enough to adequately assess the long-term impacts of extraction activities and rehabilitation methods.*	Method 13 has not been implemented specifically for topsoil removal, mineral extraction, and turf farming operations because the Soil Plan does not require consents for these activities. Hence it is a matter for territorial authorities to consider as part of their consent processes rather than the Council	x
Method 14: *Undertake, as appropriate, floodplain management and hydrological studies as the basis for selecting river management policies for major rivers in the Region.*	This Method is being satisfactorily implemented by the Operations Department, Wairarapa and by the Flood Protection Department.	✓
Method 15: *Provide funding assistance, as appropriate, for river management activities in accordance with management policies for each river.*	This method has been satisfactorily implemented.	✓
Method 16: *Consult with those affected by river management schemes*	This Method has been satisfactorily implemented during ongoing maintenance of existing schemes and any new schemes.	✓
Method 17: *Maintain and modify stream beds and channels, when necessary, to improve the flow of flood water in accordance with the provisions of flood hazard management programmes in a regional plan or floodplain management plan.*	Method 17 has been satisfactorily implemented during ongoing maintenance of flood works and new proposals.	✓

Methods	**Assessment of Implementation**	satisfactory/ unsatisfactory
Method 18: *Authorise, through resource consents or regional plans, the extraction of sand and gravel from targeted rivers.*	Method 18 has been implemented through a rule in the Freshwater Plan and through resource consents.	✓
Method 19: *Monitor riverbed levels and other relevant indicators to provide information for decisions on gravel extraction rates and sites.*	Ongoing monitoring occurs in rivers of the Region.	✓
Method 20: *Control the discharge of waste products, chemical contaminants and effluent onto or into soil through provisions in a regional plan dealing with the discharge of contaminants to land.*	Method 20 has been implemented through the Regional Plan for Discharges to Land, which is now operative. Discharges are controlled through conditions on permitted activity consents or through resource consents.	✓
Method 21: *Advocate a strengthening of the educative and information provision role played by manufacturers and suppliers of agrichemicals to commercial contractors and consumers (e.g., farmers, urban residents) in terms of minimising the risks of and potential for contamination of soils.*	These approaches are being implemented through the Regional Plan for Discharges to Land and the Regional Air Quality Management Plan.	✓
Method 22: *Encourage the preparation of waste management codes of practice by industries that generate liquid and solid wastes which may be discharged to land (e.g., poultry, pig farms).*	Method 22 is implemented through the Regional Plan for Discharges to Land. The Council has been directly involved in helping with codes of practice for poultry and pig farms.	✓
Method 23: *Investigate soils that are known to be, or may be, contaminated as a basis for identifying contaminated sites and for developing appropriate strategies for remedial action*	Method 23 is implemented through the Regional Plan for Discharges to Land and ongoing work by the Council on contaminated sites.	✓
Method 24: *Produce and promote integrated land management plans for catchments and individual properties based on sustainable land use.*	Method 24 is implemented through property plans of various types (eg.conservation plans, shelter plans) that help integrate management and are based on sustainable land use concepts. More work is being done in this area as a result of the Soil Plan. A Sustainable Land Use Action Plan is being developed.	✓
Method 25: *District plans would be an appropriate means of implementing Soil and Minerals Policy 7.*	This method has been implemented during the preparation of district plans and will be ongoing when plan changes are made.	✓

Methods	**Assessment of Implementation**	satisfactory / unsatisfactory
Method 26: *Advise on techniques of land management that reduce the risk of soil erosion, flooding, subsidence and landslip.*	Method 26 is being implemented satisfactorily as part of the core business of the Operations Department, Wairarapa. It is implemented through the soil conservation programme, which targets severely erodable land under incompatible land uses in the Region.	✓
Method 27: *When appropriate, develop conservation plans to identify any long-term soil conservation and land management practices required for sustainability*	Methods 27 and 28 are being implemented satisfactorily as part of the core business of the Operations Department, Wairarapa.	✓
Method 28: *Provide funding assistance, as appropriate, for soil conservation activities identified in conservation plans and in accordance with Regional Council policies.*		
Method 29: *Work with territorial authorities and landowners to ensure regional soil management objectives are met.*	The Regional Council submits on district and city plans and consents to control smaller soil disturbance activities on non-steep land. The Regional Council's ability to ensure that these methods are implemented at the district level is through Method 31. The Council also works closely with landowners to assist them with soil conservation efforts, such as through Method 26.	✓
Method 30: *As part of a consent process, require developers to provide an assessment of environmental effects for land development proposals where there is a significant risk of soil erosion or degradation*	This Method is implemented as part of the ongoing process for consents	✓
Method 31: *District plans would be an appropriate means of implementing Soil and Minerals Policy 8.*	This method has been advocated during the preparation of district plans and will be ongoing when plan changes are made.	✓
Method 32: *Identify areas of highly versatile soils that are viable for continued agricultural or horticultural use and promote the continued availability of these soils where the benefits of doing so outweigh the costs.*	Areas of highly versatile soils have been identified and their continued viability, when threatened, has been promoted to territorial authorities.	✓
Method 33: *Identify situations in which urban expansion onto agricultural land is likely to cause effects which are of significance to the Region.*	Information is available on Council data bases about the locations of areas under potential threat. GIS maps have been prepared which show likely areas of overlap between towns and Class I and Class II land.	✓

Methods	**Assessment of Implementation**	satisfactory / unsatisfactory
Method 34: *Establish a methodology to evaluate the full range of economic, social and environmental costs and benefits of proposed land use changes on Class I and Class II land*	A methodology has been established and reported to the Council.	✓
Method 35: *District plans would be an appropriate means of implementing Soil and Minerals Policy 9.*	This method has been advocated during the preparation of district plans and will be ongoing when plan changes are made.	✓
Method 36: *District plans would be an appropriate means of implementing Soil and Minerals Policy 10*	This method has been advocated during the preparation of district plans and will be ongoing when plan changes are made.	✓

Table 4.2. Effectiveness of Policies and Methods in Meeting Objectives in the Soils and minerals Chapter 6 of the RPS

Objectives	Policies	Effectiveness of Policies and Methods	satisfactory / unsatisfactory
Objective 1: *The soils of the Wellington Region maintain those desirable physical, chemical, and biological characteristics which enable them to retain their life supporting capacity and to sustain plant growth* **Objective 2:** *Land degradation is limited to that for which there is no feasible remedy* **Objective 3:** *Land uses within river catchments are consistent with downstream river management and water use requirements, and do not undermine catchment resilience to storm damage and other natural calamities* **Objective 4:** *The susceptibility of soils to natural hazards (flooding, land movement, subsidence, erosion, fire and wind) is such that the risk of damage is acceptable to the communities affected and the*	**Policy 1:** *To avoid, remedy or mitigate erosion and other forms of soil degradation on susceptible sites and avoid off-site effects of erosion and other soil degradation, including the contamination of water, contamination of the beds of water bodies and the coastal marine area and contamination of air*	Policy 1 is implemented by Methods 1-10. Table 4.1 indicates that the implementation of these methods is satisfactory. Overall, the policy and methods are considered effective. Measures being taken are summarised below. The extent to which soil degradation and off-site effects have actually been avoided, remedied, or mitigated has not been well monitored. Policy 1 provides general guidance on avoiding soil erosion and the off-site/downstream effects of that erosion. This policy targets several issues (i.e., 1-7, 10-13). It may have been useful to have provided several more policies that more specifically target each issue. Large scale soil disturbance and vegetation disturbance on erosion prone land are controlled through the Soil Plan (Method 1). The Council targets severely erodable land under unsustainable land uses with conservation programmes. The Council has included guidelines for topsoil mining in the Soil Plan, and promotes the Forest Industry Code of Practice. Further guidelines, e.g., for river management are yet to be developed. Riparian plantings along major rivers in Wairarapa are carried out by the Council, and fencing to protect those plantings is encouraged.	✓

Objectives	Policies	Effectiveness of Policies and Methods	satisfactory / unsatisfactory
adverse effects of these events are reduced as far as is practicable **Objective 5:** *The off-site impacts of soil degradation on land, water, air, ecosystems and communities are avoided or mitigated* **Objective 6:** *The total stock and occurrence of Class I and Class II land is sufficient to meet the needs of existing and future users, and future uses are not limited by the irreversible effects of existing uses.*			
Objective 1: **Objective 2:** **Objective 5:**	**Policy 2:** *To ensure that the adverse effects of commercial topsoil removal, mineral extraction and turf farming operations are avoided, remedied or mitigated, or do not exceed any relevant rules or standards set for soil, water, air, ecosystems or landscape in any regional or district plan*	Policy 2 is implemented by Methods 1 and 411. Table 4.1 indicates that the implementation of these methods is satisfactory. The Council does not have much monitoring information regarding adverse effects of current topsoil mining or turf farming in the Region, although it has some relating to a turf farming operation at Pauatahunui. The effectiveness of this policy, in practice, cannot be fully determined. The Resource Consent Annual Compliance Report for 1999 shows that quarrying and gravel extraction operations have complied with the standards set for air discharges and water quality respectively. The Council has included topsoil mining guidelines in the Soil Plan. The Soil Plan does not regulate topsoil mining because district councils are expected to control the effects of this activity. The Council has not assessed the degree to which district councils have implemented the policy.	✓
Objective 1: **Objective 2:** **Objective 3:**	**Policy 3:** *To ensure that, where feasible, sites are rehabilitated in circumstances where, as a result of either natural*	Policy 3 is implemented by Methods 1, 12, and 13. Table 4.1 indicates that the implementation of these methods is satisfactory except for Method 13. Method 13 is for the investigation of the use of bonds. Although this specific investigation has not been carried out, bonds are used by the regional council and by territorial	✓

Objectives	Policies	Effectiveness of Policies and Methods	satisfactory / unsatisfactory
Objective 4: **Objective 5:**	*processes or human activities, or some combination of both, soils are, or are likely to be, eroded, removed, disturbed or otherwise rendered unable to sustain their life supporting capacity or to meet the needs of the local or regional community*	authorities in resource consent conditions. The lack of implementation of Method 13 has probably not made the policy any less effective. The Council manages four extremely eroded/degraded properties as gazetted soil conservation properties. These properties are being rehabilitated through appropriate soil conservation plantings. The Council also targets severely erosion prone private land in the Region with soil conservation planting programmes. Large scale vegetation and soil disturbance on steep erosion prone land requires a resource consents under the Soil Plan, which include conditions relating to rehabilitation after the disturbance (implementing Methods 1and 12). The Resource Consent Annual Compliance Report indicates that any such land use activities complied with these conditions during 1998/1999. The Council does not monitor soil quality across the Region, so it's ability to identify sites with degraded soil quality and consequently degraded life supporting capacity is limited. Therefore, the Council has limited ability to assess whether all sites that are degraded are being rehabilitated.	
Objective 4: **Objective 4:**	**Policy 4:** *To manage rivers within approved design standards derived from floodplain management studies* **Policy 5:** *To manage river gravel extraction at sustainable levels so as to complement river management programmes*	Policies 4 and 5 are implemented by Methods 1, and 14-19. Table 4.1 indicates that the implementation of these methods is satisfactory. These policies relate to flood plain and river management. They are important in terms of managing and addressing gravel extraction issues, but it would be more appropriate for the issue and associated policies to be located in the Freshwater and Natural Hazards Chapters. The policies and methods are being effectively implemented for major rivers in the Region that pose flood risks to people and their property. Policy 5 is not being implemented through Method 1, "*prepare a Regional Soil Plan …*". Gravel extraction in river beds is appropriately controlled through rules in the Regional Freshwater Plan.	✓
Objective 1: **Objective 2:** **Objective 5:**	**Policy 6:** *To avoid, remedy or mitigate the adverse effects of harmful waste and contaminants on soil, and to dispose*	Policy 6 is implemented by Methods 1, and 20-23. Table 4.1 indicates that the implementation of these methods is satisfactory. This policy is implemented through rules in the Regional Plan for Discharges to Land (as directed by Method 20) that control the discharge of contaminants to land. The Resource Consent	✓

Objectives	Policies	Effectiveness of Policies and Methods	satisfactory / unsatisfactory
	of these in ways which respect the assimilative capacity of the soil and which comply with relevant standards set for water quality and air quality	Annual Compliance Report indicates that conditions for all discharge to land permits were complied with during 1998/1999. Thus, it would appear that Policy 6 is effective, assuming that the conditions on resources consents 'respect the assimilative capacity of soil and comply with relevant standards for air and soil'. Because Method 1 is a matter for implementation relating to discharges to land and air and is addressed in the Councils regional plans on these subjects, Policy 6 is not being implemented through Method 1, *"prepare a Regional Soil Plan …"*. The Council has supported and commented on several codes of practice regarding waste management, e.g., the Pork Industry Board's code of practice for piggeries and the code for stock truck effluent. The Council does investigate some sites, as directed by Method 23. However, the Council's role is primarily advisory, and it's normally the site owner's responsibility to investigate contaminated sites. The Council makes submissions on district plans for the inclusion of appropriate policies, methods, and rules to control activities on contaminated sites.	
Objective 3: **Objective 4:**	**Policy 7:** *To integrate soil conservation with other land management objectives on a planned whole catchment or subcatchment basis*	Policy 7 is implemented by Methods 1, 6-10, and 24-25. Table 4.1 indicates that the implementation of these methods is satisfactory. To date, soil conservation work has been prioritised based on land use capabilities compared with land uses. This approach is not directed through any policy, but is promoted through Methods 2, 3, 8 and 9). The catchment-based, integrated approach directed in Policy 7 (and Method 24) has been used to date to some degree to assist soil conservation or other sustainable land management programmes run by the Council. However, more could be done to more effectively implement the policy. Policy 7 is probably not well reflected in the methods. Methods 6-10 relate to soil conservation, as already discussed, not to integrating soil conservation with other land management objectives.	✓
Objective 1: **Objective 2:** **Objective 3:**	**Policy 8:** *To manage soils in such a way that the risks of flooding, erosion, land*	Methods 1 and 26-31 are referred to in relation to Policy 8. All these methods have been implemented satisfactorily. Policy 8 relates more to natural hazards than to the management of soil or mineral resources. To date, community tolerance of risk has not been considered during the development of soil conservation programmes, although it has been considered during riparian	✓

Objectives	Policies	Effectiveness of Policies and Methods	satisfactory / unsatisfactory
Objective 4: **Objective 6:**	*movement and subsidence are reduced to a level which is acceptable to the affected community*	management planning.	
Objective 6:	**Policy 9** *To ensure, when planning for and making decisions on new subdivision, use and development on Class I and Class II land (as defined by the Land Use Capability Survey), that there is a net benefit to the local community which includes consideration of environmental standards, the needs of future generations, and any matters of significance for the Region*	Policy 9 is implemented by Methods 32-35. Table 4.1 indicates that the methods have been implemented satisfactorily. However, a question mark remains over the effectiveness of the policy because we do not have information on whether the objective is being met. This is because the Council has not regulated the use of Class I and Class II land in the Soil Plan. Therefore, it is not in a position to ensure that the action prescribed in the policy is carried out. While the Council can and does advocate the contents of the policy to territorial authorities, it is up to them to make rules in their district plans about land use and to decide on resource consents on Class I and Class II land. A survey of district council resource consent decisions would be required to determine whether the policy has been implemented by territorial authorities.	✓
Objective 7: *The Region's needs for rock material continue to be met and are not unnecessarily disadvantaged by restrictions on the availability of, or access to and operation of, extraction sites*	**Policy 10** *To ensure, when planning for and making decisions on new use, development and subdivision of land, that consideration is given to the consequences for access to and the location of existing or proposed mineral extraction sites on nearby land*	Policy 10 is implemented by Method 10. Table 4.1 indicates that the implementation of these methods is satisfactory. As stated previously in comments on Issue 15 and Objective 7, the protection of mineral extraction activities is inappropriate. However, the policy does not reflect the objective because it focuses on the issue of reverse sensitivity rather than protecting mineral extraction. Policy 10 directs consideration of existing mineral extraction sites when planning and making decisions on new use, development, and subdivision of land. In effect, this policy directs TLAs to consider reverse sensitivity issues associated with any change in land use. It is appropriate that the RPS provides direction of this sort. Subdivision near many other rural activities (e.g., such as poultry farms and pig farms) in addition to mineral extraction can also result in reverse sensitivity problems like odour and dust complaints. Subdivision consents are a territorial authority function. The Council's ability to ensure this policy is implemented is limited.	✓

5 The Coastal Environment

5.1 Summary

The issues and objectives of the Coastal Environment Chapter remain appropriate. Generally, the policies and methods are achieving the objectives. One important exception is that natural character of the coast is being lost in some parts of the Region as a result of development, such as subdivision. However, loss of natural character is occurring in spite of the provisions in the RPS rather than because of them. No changes should be made to the RPS.

5.2 Background

The Resource Management Act 1991 (the Act) includes two terms that are relevant to this chapter of the RPS. The "coastal environment" refers to the "dry" part of the coast above mean high water springs and to the "wet" part below mean high water springs. In the RPS the Council can make policies for the coastal environment. As well as an RPS, the Council must prepare a Regional Coastal Plan (Coastal Plan). The Coastal Plan controls activities in the "coastal marine area", which refers only to the "wet" part of the coast. Territorial authorities control land use on the "dry" part of the coast.

Prior to the Act the Council had fewer responsibilities on the coast than now. It controlled discharges to water and the taking, use, damming, and diversion of water. Passage of the Act included other responsibilities for regional councils in the coastal marine area such as controlling discharges to air, structures, and disturbance of the seabed. Hence, the management by the Council of some resources is relatively new.

5.3 Issues

The RPS identifies ten Issues for the Coastal Environment in the Region. In brief, these relate to:

- The potential for use and development to cause significant adverse effects and cumulative adverse effects, and the potential for loss of natural character and damage to coastal ecosystems and landscape features
- Public access
- Finite coastal resources
- Degradation of coastal water quality, contamination of sediments and biota, and disruption to natural processes
- Limited knowledge of the nature and functioning of coastal ecosystems, and coastal processes, particularly in the coastal marine area
- Catastrophic events
- The relationship of Maori and their culture and traditions with the Coast.

These issues broadly cover the range of significant issues in the coastal environment of the Region. They remain appropriate.

5.4 Objectives

There are 4 objectives in the Coastal Environment Chapter. These are identified in Table 5.2. Like most other objectives in the RPS, they are broad outcomes for the Region. They address the protection and restoration of the coastal environment and avoiding, remedying, or mitigating the adverse effects of activities. Such objectives are

appropriate, particularly as there is now an operative Coastal Plan that provides more details on outcomes the Council is seeking for the coast.

5.5 Policies and Methods

5.5.1 Regional and District Plans

The Regional Coastal Plan

Method 1 of the RPS directs that the Council will prepare a Coastal Plan. It is also mandatory under the Act. The methods of the RPS do not provide much specific guidance for provisions in the Coastal Plan. However, the policies in the RPS provide a lot of general guidance for the Coastal Plan. These general policies are given a lot more detail in the Coastal Plan.

District Plans

The Coastal Environment Chapter of the RPS anticipates that the Region's territorial authorities will play a significant role in the management of the coastal environment. The Chapter identifies 5 specific issues that involve territorial authorities:

1. Natural character
2. Access
3. Water quality
4. Natural hazards
5. The values of significance to Maori.

All the territorial authorities give significant attention to the coastal environment in their plan objectives and policies. To a large extent these reflect and build on the provisions in section 6 of the Resource Management Act 1991 relating to the preservation of natural character and to maintaining and enhancing access to and along the coast. To a reasonable degree these policies also give recognition to the other issues mentioned in the Regional Policy Statement, ie water quality, natural hazards and Maori values.

In contrast to the generally consistent policy approach, there are significant differences between the ways that each of the territorial authorities implement these policies, particularly those relating to natural character and coastal hazards.

While five of the territorial authorities identify some form of coastal area these vary in width and purpose. For example one plan includes a 60 metre coastal strip to deal with both natural character and coastal hazards. This is only of limited benefit in terms of the natural character issue as any development outside this strip is not controlled by the Plan's coastal environment policies.

A second plan includes a 100 metre building set back for hazards and natural character. In addition, this plan includes a relatively extensive coastal subdivision zone that has minimum lot size and subdivision design standards aimed to mitigate potential effects on natural character.

A different method used by one council is to identify existing settlements as the only areas that residential development should occur within their district. If coastal development does occur within that district, this rule should have the effects of containing its impacts to those areas where natural character has already been compromised.

The issue of coastal water quality is arguably mainly an issue for the Regional Council, ie we have the power to control the large point source discharges from waste treatment and stormwater drainage systems. However the Region's territorial authorities do have some influence. Generally, they all deal with this through policies that require consideration of related issues as part of a resource consent application. Most of these policies do not refer directly to coastal water quality, rather the intention is to avoid, remedy or mitigate the effects of land use, generally, on water quality. For example, all of

the territorial authorities impose condition on rural subdivision requiring on-site effluent systems to meet certain standards.

5.5.2 Implementation of Methods

Table 5.1 provides an assessment of the implementation of the methods in the Coastal Environment Chapter of the RPS. Ticks in the right hand column indicate that a method is being implemented satisfactorily. The table indicates that all the methods in the RPS are being implemented satisfactorily.

The methods of the Coastal Environment Chapter are notably different from methods in the other chapters. There are only 3 of them. The first two methods refer to the Coastal Plan and district plans, respectively. These plans become the primary means of implementing the coastal environment policies of the RPS. The third method is also a fairly broad one without much detail on how it is to be put into practice. The approach differs from the methods in other chapters of the RPS because of the reliance on the provisions of regional and district plans to give effect to the policies of the RPS. Nevertheless, the approach is an appropriate one that can be just as effective as including more detailed methods in the RPS.

Although there are no detailed methods in the RPS for the coastal environment, the Council is taking initiatives and doing quite a lot of non-statutory work on the coast. Some of this work has anticipated the Coastal Plan becoming operative, while other work has been done because it makes sense to do it. An example of the latter is the Council's efforts to resolve "roles and responsibilities" of agencies with an involvement in management on the coast. In the coastal environment, there are a lot of overlap and gaps when identifying the responsibilities of various agencies. The Council has already reached agreements with some agencies on how to proceed.

5.5.3 Effectiveness of Policies and Methods

Table 5.2 provides a summary of the effectiveness of policies and methods in meeting the objectives of the Coastal Environment Chapter of the RPS. Ticks in the right hand column indicate that the policies and their associated methods are effectively meeting the objective(s). A cross in the right hand column indicates that the policies and methods, or a component of them, are not effective.

Policies 1 and 3-6 are identified in Table 5.2 as being effective in meeting the objectives of the Coastal Environment Chapter. In concluding this, there is a heavy reliance in the Coastal Plan and district plans performing effectively on their relevant coastal environment provisions because there is a heavy reliance on them in the RPS methods. Despite the general conclusion that these policies are effective, there are some elements of them that need qualification. The effectiveness of Policy 3 on restoration and rehabilitation will be dependent on implementation of the Council's Education Initiatives, particularly the success of Care Groups that are part of the initiative. Regarding Policy 5, there are still areas of poor water quality in the Region that need to be improved. Ongoing effort will be needed to pursue water improvements in the future.

Policy 2 is identified as not being effective, primarily because of the findings of the State of the Environment Report regarding the loss of natural character on the coast. The State of the Environment Report states that development, including subdivision have significantly altered the natural character of the coastal environment in the Wellington Region. Despite provisions in statutory regional and district plans that seek to protect natural character, there is ongoing pressure for new developments and uses that have the potential for adverse impacts, with a high potential for cumulative effects. If current trends to approve developments continue, there will be further loss of natural character of the coast. The Council's RPS provisions relating to subdivision have recently come under scrutiny on the Wairarapa Coast. No change to the RPS is needed.

The final policy of the Coastal Chapter relates to characteristics of the coastal environment of special value to the tangata whenua. Although there are implementation provisions in the Coastal Plan, just as there is for fresh water in the Freshwater Plan, the problem arises that not enough practical "on the water/ground" implementation is yet occurring. The policy is an appropriate one but, as indicated in this report in section 2 on the Iwi Environmental Management System, more work is needed with tangata whenua.

5.6 Anticipated Environmental Results

There are 5 Anticipated Environmental Results (AERs) in the Coastal Chapter of the RPS. These are listed below

AER (1) *The natural character of the coastal environment is preserved and protected from the adverse effects of inappropriate subdivision, use and development; where appropriate, sites of national and regional significance are protected and degraded areas are restored.*

AER (2) *Public access to and along the coastal marine area is maintained and enhanced, except in those circumstances in which access is constrained to protect ecological or cultural values, provide for property rights and security for property, meet the requirements for Customs or quarantine facilities, or to provide for the safety of people.*

AER (3) *There is no further degradation of the quality of water in the coastal marine area and, where possible, water quality is improved.*

AER (4) *Finite coastal resources are used efficiently*

AER (5) *The characteristics of the coastal environment of special value to the tangata whenua are protected, where appropriate.*

With the exception of AER (4), these anticipated results are being achieved to the extent described in the discussions of objectives, policies and methods in this section of the report. In other words, good progress is being made on all these results with the qualifications mentioned in sections 5.5.2 and 5.5.3.

AER (4) refers to the efficient use of finite resources. Finite resources refer to resources that are not renewed when they are used such as the availability of land when it is occupied, aggregate, beach sand, and shoreline areas with good access. In the coastal marine area these resources marine are not diminishing.

Table 5.1. Assessment of the Implementation of Methods in the Coastal Chapter of the RPS

Methods	Assessment of Implementation	satisfactory / unsatisfactory
Method 1: *The Wellington Regional Council will prepare a Regional Coastal Plan.*	This method has been implemented in full. The Regional Coastal Plan will be operative in June 2000	✓
Method 2: *District plans would be an appropriate means of implementing Coastal Environment Policies 1-7.*	This method has been implemented through submissions on proposed district plans and there will be ongoing implementation, through submissions, when plan changes are proposed.	✓
Method 3: *To achieve integrated management, other means which could be used to implement Coastal Environment Policies 1-7 include:* *(1) Development and implementation of management plans and other non-statutory plans by territorial authorities for areas and issues that impact on the coastal environment;* *(2) Liaison between the Wellington Regional Council, territorial authorities, iwi and the Department of Conservation to identify projects in the coastal environment of the Wellington Region where voluntary organisations, companies and individuals may assist in caring for the coastal environment; and* *(3) Liaison between the Regional Council, Department of Conservation and Ministry of Agriculture and Fisheries.*	Method 3 identifies approaches that "could" be used rather than any requirement on the Council to implement an action. Such approaches are appropriate because implementation of this method is reliant on others wanting to carry out the actions. Regarding Part (1), there has not been much implementation with one notable exception. An Action Plan is currently being prepared for the Pauatahanui Inlet. The Porirua City Council has a key involvement but the Action Plan is being put together by an advisory group and involves the entire community. This example is occurring in the area of the Region where implementation of the method will be most beneficial. Regarding Part (2), implementation is ongoing. Each year, the Council assists with activities such as cleanups and Sea Week is a focus of attention. More can be done and implementation of this method will occur through the Council's Environmental Education Initiatives. Regarding Part (3), liaison occurs through Council involvement in the Wellington Fishery Liaison Committee.	✓

Table 5.2. Effectiveness of Policies and Methods in Meeting Objectives in the Coastal Environment Chapter of the RPS

Objectives	Policies	Effectiveness of Policies and Methods	satisfactory / unsatisfactory
Objective 1: *The natural character of the coastal environment is preserved through:* *(1) The protection of nationally and regionally significant areas and values;* *(2) The protection of the integrity, functioning and resilience of physical and ecological processes in the coastal environment;* *(3) The restoration and rehabilitation of degraded areas; and* *(4) The management of subdivision, use and development, and the allocation of resources in the coastal environment so that adverse effects are avoided, remedied or mitigated.*	**Policy 1:** To give effect to the following matters when planning for and making decisions on subdivision, use and development in the coastal environment: (1)Protection, from all actual or potential adverse effects, of areas of nationally or regionally significant indigenous vegetation and significant habitats for indigenous fauna, including those listed in table 8; *(2)Protection of the values associated with nationally or regionally outstanding landscapes, seascapes, geological features, landforms, sand dunes and beach systems and sites of historical or cultural significance, including those listed in tables 9 and 10;* *(3)Protection of sensitive, rare or unusual natural and physical resources, habitats, amenity values and ecosystems which are unique to the coastal environment (including estuaries, coastal wetlands, mangroves and dunes, and their margins) by avoiding, remedying or mitigating adverse effects so as to preserve the natural character of the coastal environment.* *(4)Protection of the integrity, functioning and resilience of the coastal environment in terms of the:* *(a)Dynamic processes and features arising from the natural movement of sediments, water and air;* *(b)Natural movement of biota;*	All the policies in the Coastal Chapter are implemented by Methods 1-3. Methods 1 and 2 provide, respectively, for implementation through the Coastal Plan and district plans in the Region. These two methods are very broad and, as described in sections 5.5.1 and 5.5.2, they are generally being implemented satisfactorily. The third method is also a fairly broadly based one. The Coastal Plan effectively implements the policy in the coastal marine area through its general provisions and by identifying Areas of Significant Conservation Value and Areas of Important Conservation Value. Specific provisions relating to these areas provide for the protection of areas and values. On land the policy is provided for under the Conservation Act 1987 and the Reserves Act 1977. District Plans also contain provisions on land for significant areas and values. Ongoing implementation of the policy also occurs through resource consents. One present shortcoming identified in the State of the Environment Report is that there is a lack of information on ecosystems and ecological processes in the coastal environment, particularly in the "wet" part (the coastal marine area). To overcome this shortcoming the Council is putting more emphasis on monitoring coastal ecosystems and finding out more about them. Overall, the policy is regarded as effectively meeting its objectives, although more can still be done.	✓

Objectives	Policies	Effectiveness of Policies and Methods	satisfactory / unsatisfactory
	(c)Natural substrate composition; *(d)Natural water quality and quantity, and air quality;* *(e)Natural biodiversity, productivity and biotic patterns; and* *(f)Intrinsic values of ecosystems.*		
Objective 1:	**Policy 2:** *To consider, where relevant and to the appropriate extent, the following matters when planning for and making decisions about subdivision, use or development in the coastal environment:* *(1) The degree to which the proposed activity will impose effects additional to those resulting from existing subdivision, use and development, and the extent to which such cumulative adverse effects on natural character may be avoided, remedied or mitigated;* *(2) The extent to which natural character has already been compromised in an area and the need to avoid sprawling or sporadic subdivision, use or development;* *(3) The efficient use of finite resources in the coastal environment and the viability of alternative sites outside the coastal marine area and outside of the coastal environment for the proposed activity;* *(4) The potential impact of projected sea level rise;* *(5) The actual or potential adverse effects of subdivision, use or development on areas of*	As for Policy 1, implementation is through methods 1-3. Methods 1 and 2 provide, respectively, for implementation through the Coastal Plan and district plans in the Region. These two methods are very broad and, as described in sections 5.5.1 and 5.5.2, they have generally been implemented satisfactorily. With the exception of subdivision, this policy can be said to be effective in meeting its objectives. The third method is also a fairly broadly based one. The State of the Environment Report identifies that approval of development in the coastal environment, such as subdivision, is leading to loss of natural character. In this regard, the policies and methods are not effectively achieving the objective. The policy is also implemented through consents. The Council's AER gives a figure of 183 coastal permits which were inspected in the western Wellington Region during 1997/98. Some of the permits were issued for construction, use and maintenance of structures in the coastal marine area. It was found that most of the permit holders operate according to the conditions of their permit.	X

Objectives	Policies	Effectiveness of Policies and Methods	satisfactory / unsatisfactory
	cultural or spiritual significance, heritage resources and on scenic, scientific, recreation, open space or amenity values; and *(6) The adequacy of provision of infrastructure services (particularly for the disposal of waste)*		
Objective 1:	**Policy 3:** *To restore and rehabilitate the natural character of the coastal environment where appropriate*	All the policies in the Coastal Chapter are implemented by methods 1-3. Methods 1 and 2 provide, respectively, for implementation through the Coastal Plan and district plans in the Region. These two methods are very broad and, as described in sections 5.5.1 and 5.5.2, they have generally been implemented satisfactorily. The third method is also a fairly broadly based one. The policy itself does not give much guidance on how the objectives are to be achieved and neither do the methods. More guidance is provided in the Coastal Plan. Restoration and rehabilitation of natural character is usually a major undertaking, probably similar in scope to the rehabilitation and restoration of ecosystems, which is discussed in relation to provisions of the Ecosystems Chapter in section 7 of this report. The Policies provide a firm basis for the Council's restoration and enhancement activities on the coast. Originally there was little interest in active restoration on the part of the Council but over the last two years this has turned around and significant initiatives are planned, which include areas in the coastal environment. Already a few small restorations are being carried out around the Region and more are planned, specifically through Council action, care groups and other local community activities. Overall, bearing in mind the potential of the Council's new Education Initiatives, the policy is regarded as achieving its objectives.	✓
Objective 2: *Existing provisions for public*	**Policy 4:** *To ensure, in planning for or making decisions about*	All the policies in the Coastal Chapter are implemented by methods 1-3. Implementation of Policy 4 in the Coastal Plan (Method 1) and district plans (Method 2) is satisfactory. Method	✓

Objectives	Policies	Effectiveness of Policies and Methods satisfactory / unsatisfactory	
access to and along the coastal marine area remain and appropriate opportunities are taken to enhance public access	*new subdivision, use or development, that there is no reduction in the quality of existing legal access to and along the coastal marine area; and that opportunities are taken, other than in exceptional circumstances, to enhance the amount and variety of public access to and along the coastal marine area.*	3 is probably not relevant. There is generally a high level of access to the coast in the Region with the exception that, as identified in the SER, public access to the coast is limited north of Cape Palliser. On the other hand, the opportunities to enhance access north of Cape Palliser are also limited. Generally, the policy and its implementation through regional and district plans, and through consents, is effective	
Objective 3: *Coastal water quality is of a high standard*	**Policy 5:** *To maintain or improve the quality of coastal water by:* *(1) Improving, where necessary, the quality of fresh water entering the coastal marine area;* *(2) Avoiding, remedying or mitigating the effects of activities in the coastal environment that can degrade coastal water; and* *(3) Avoiding, remedying or mitigating the effects of point discharges that directly enter the coastal marine area so the effects do not render any water in the coastal marine area unsuitable for any purpose specified in a Regional Coastal Plan for the Wellington Region*	All the policies in the Coastal Chapter are implemented by methods 1-3. Method 1, the preparation of a Coastal Plan is particularly relevant for this policy. The Coastal Plan sets water quality guidelines for all parts of the coastal marine area. The Council's monitoring reports over recent years indicate that coastal waters, are being maintained or improved in 95% of sites monitored around the Region. Improvements to coastal water quality are primarily due to work carried out by territorial authorities to improve storm water and sewage systems in different parts of the Region. The SER reports that the quality of our coastal water is generally good, in terms of meeting the purpose for which it is being managed. "We've seen the upgrades in stormwater and sewage networks can improve the quality of coastal water. Further improvements in these networks are likely to result in further enhancement of quality water." The sites that do not achieve the desired standards are all located near stormwater discharges or river or stream mouths. The positive aspect about our current knowledge of water quality is that improvements are occurring at some locations and the Council is now able to target its efforts at improving water quality in the coastal marine area to a few locations. Overall the effectiveness of Policy 5 and its related methods are meeting their objectives although there is still more to do.	✓
Objective 1:	**Policy 6:** To adopt a precautionary approach to the evaluation of	All the policies in the Coastal Chapter are implemented by methods 1-3. The precautionary approach is reflected in the	✓

Objectives	Policies	Effectiveness of Policies and Methods satisfactory / unsatisfactory	
	risk in making decisions that affect the coastal environment, recognising that there will be situations where there is a low probability of an event occurring, but that such an event has the potential to create major adverse effects. Such events include: *(1) Earthquakes and tsunami;* *(2) Maritime shipping disasters; and* *(3) Accidents involving release of contaminants into the coastal marine area.*	coastal plan. Otherwise, this policy is effectively implemented through resource consents, emergency management, pollution response, and oil spill response. They are all effectively implementing the policy.	
Objective 4: *There are increased opportunities for the aspirations of the tangata whenua for the coastal environment to be met.*	**Policy 7:** *To protect, where appropriate, the characteristics of the coastal environment of special value to the tangata whenua including waahi tapu, tauranga waka, mahinga maataitai and taonga raranga.*	All the policies in the Coastal Chapter are implemented by methods 1-3. None of these methods provide any specific guidance relating to tangata whenua. The Coastal Plan and district plans in the Region develop the policy further but do not provide directly for its practical implementation. Ongoing implementation of the policy is provided for in response to resource consent applications. Methods 7, 8, and 9 of the RPS in relation to the Iwi Environmental Management System Chapter of the RPS, discussed in section 2 of this report, are particularly relevant. No overall assessment is made on whether the policies are being implemented satisfactorily or not for the reasons outlined in section 2.3 of this report. There are instances where Iwi do not consider the policy has been effective. For example, during consultation with Iwi over this report, a specific resource consent was raised where Iwi involved did not consider the outcome was in keeping with the policy. In other instances Iwi have been satisfied that the policy has been satisfactorily implemented.	

6 Air

6.1 Summary

The issues and objectives identified in the Air Chapter of the RPS remain appropriate and should not be changed at the present time.

For the most part the policies and methods of the Air Chapter are effectively meeting their objectives. In the following cases, the effectiveness of the policies and methods is questionable:

- Domestic air emissions
- Motorised transport emissions
- Greenhouse gas emissions
- Ozone emissions

On these matters it is not recommended that any changes be made to the RPS now but that the Council rely on further implementation of the methods. As a priority, greater emphasis should be placed on those methods where the Council is most able to influence the outcomes sought by the RPS, namely, for domestic air emissions and motorised transport.

6.2 Background

Prior to the Resource Management Act 1991, central government managed discharges to air. In 1991, when the Act came into force, air discharges became a responsibility of regional councils. At the time, management of air quality by regions was new. The Council found there was a lack of suitable information to manage air in a regional context. The need to establish baseline information became an important component of the RPS, as well as providing appropriate management approaches.

A key method adopted by the RPS for developing the Council's approach to managing discharges to air was to prepare the Air Plan. This Plan is now operative.

6.3 Issues

Nine issues are identified in the Air chapter of the RPS, relating to:

1 Lack of data about air quality in the Region

2 Climate change and ozone depletion from the emission of green house gases and ozone depleting substances

3 Odour

4 Smoke, dust and other particulate

5 Stationary, or point source emissions

6 Mobile sources

7 Area emissions

8 Waste disposal practices

9 Spray drift.

These issues are appropriate. They broadly cover the range of pressures on air quality in the Region.

At the time that the RPS was prepared, the Council had very little air quality information and, consequently, little understanding of the relative contributions of different air pollutants to air quality pressures and potential effects in the Region. As a result, the issues tend to focus on sources of pollutants rather than on effects. They do not reflect the relative significance of different emissions/pressures, although all of the major contributors are identified, e.g., traffic and domestic burning.

The commentary on Issue 1, relating to the lack of data, is now dated. While the Council still lacks long term data on ambient air quality trends in the Region, it has obtained a lot more short term information since 1994, when the RPS was prepared. Emission's inventories have been completed for industrial and mobile sources, area based domestic and commercial sources, and the final inventory of biogenic sources is being prepared. A series of screening investigations have been carried out in several sites around the Region to identify areas where ambient air quality is under pressure. A long term ambient air quality monitoring network is yet to be established, although its establishment is in progress, so an issue identifying the need for further air quality information is still appropriate.

Issues 2 to 7 remain appropriate. Issues 8 (waste disposal practices) and 9 (spray drift) are more specific than the other issues and are covered by those other issues. It appears that these particular issues were considered to be of such significance that they needed to be identified separately. The emissions inventory for the Region indicates that landfills can have significant localised emissions, but they do not contribute more than several other sources, e.g., fuel combustion. Likewise, the Council receives a few spray drift complaints each year, some of which cannot be confirmed, but it is not significantly more problematic than several other air quality concerns. The reason for specifically defining these issues is unclear but it is not necessary to rewrite them.

6.4 Objectives

The four objectives in the Air Chapter are quite broad. The objectives are listed in the first column of Table 6.2. Objectives 1-3 identify a desired result for air quality, that is, to maintain and enhance air quality, and to avoid, remedy or mitigate adverse effects of the discharge of contaminants to air. These objectives provide a clear direction and desired state for the Region's air quality, and are appropriate for the RPS.

Objective 4 directs that the Council manage green house gas emissions to a level that is consistent with central government policies. This appropriately acknowledges the national and global nature of the enhanced greenhouse effect, and the need for a nationally co-ordinated approach.

6.5 Policies and Methods

6.5.1 Regional and District Plans

Regional Plans

The development of an Air Plan is directed in Method 1 in the Air Chapter of the RPS. All of the policies and methods in the Air Chapter are reflected in some way in the Air Plan. Further, the Air Plan expands upon the policies and methods of the Air Chapter, and provides more detailed directions.

The only discrepancy between the Air Chapter of the RPS and the Air Plan is that method 7(5) of the Air Chapter directs the Air Plan to control the effects of domestic emissions to air. The Air Plan takes a non-regulatory approach to domestic burning, which is less stringent than was anticipated during the preparation of the RPS.

District Plans

While none of the methods in the Air Chapter of the RPS anticipate that the district plans of territorial authorities in the Region have a role in the management of air quality, several district plans do address this issue. The main focus of their provisions relates to the effects of odour on amenity values. Territorial authorities consider air discharges are an issue relevant to the management of the effects of land use activities and include it in their district plans.

The omission from the RPS of any role that the territorial authorities have in the management of air discharges is something that can be

considered when the RPS is reviewed but it is unnecessary to do so now.

6.5.2 Implementation of Methods

Table 6.1 provides an assessment of the implementation of the methods in the Air Chapter of the RPS. Ticks in the right hand column indicate that a method is being implemented satisfactorily. A cross in the right hand column indicates that a method, or part of a method, is not being implemented satisfactorily.

Methods 1, 2, 6, 7, and 14 (with the exception of 7(5)) have been satisfactorily implemented through the Air Plan. Part (5) of Method 7 is to include *controls on the effects of domestic emissions to air in the Regional Air Quality Management Plan.* This approach has not been included in the Air Plan because it was decided during the process of its preparation that controls on domestic discharges in the Wellington Region are not inappropriate. This approach will need to be reviewed when the Plan is reviewed because present monitoring indicates that air quality problems can occur at some localities as a result of domestic air emissions. In the meantime, the Council should place an emphasis on implementing relevant non-regulatory methods from its RPS and Air Plan implementation programs.

Methods 3, 4, 8 and 9, relate to monitoring and obtaining information. They are being implemented primarily through resource consents, the development of the Wellington Regional Ambient Air Quality Monitoring Strategy, and a regional air emissions inventory.

Methods 5 and 10 identify approaches that "could" be used to implement RPS policies. These methods often involve other agencies having a lead role in taking action that would lead to implementation. Generally, the Council has taken opportunities such as making submissions on national initiatives that are leading to satisfactory implementation of Methods 5 and 10.

Method 12 has been adopted through the Regional Land Transport Strategy.

Implementation of Methods 11 and 13 has been limited. These methods are for Council action relating to greenhouse gases and ozone depleting substances. With the exceptions of the preparation of a report on climate change and a project, in progress, on establishing a green house gas and ozone depleting substance emissions inventory for the Region, little has been done by the Council, in practice.

6.5.3 Effectiveness of Policies and Methods

Table 6.2 provides a summary of the effectiveness of policies and methods in meeting the objectives of the Air Chapter of the RPS. Ticks in the right hand column indicate that the policies and their associated methods are effectively meeting the objective(s). A cross in the right hand column indicates that the policies and methods, or a component of them, are not effective.

For many policies and methods it is difficult to determine precisely whether they are effective in achieving the objectives, because the Council lacks long term monitoring information that would reveal trends in air quality. Policies 1-5 and their associated methods relate to obtaining better information so that the resource and the pressures on it can be adequately measured. These policies and methods are effective and significant progress is being made towards gathering information that will enable objectives of the RPS to be better assessed in the future.

Policies 8, 11, and 12 and the methods associated with them are identified in Table 6.2 as being effective in meeting Objective 3.

Policy 6 is identified as not being effective in achieving Objective 2 because Method 7(5) has not been implemented. Method 7(5) is for control of the effects of domestic emissions in the Air Plan. Domestic air emissions are not controlled in the Air Plan. Monitoring has

identified that these discharges can contribute to significant localised deterioration in air quality.

With regard to Objective 2, there is no specific policy that targets areas with low air quality that may have been a next step for addressing the objective. However, it is not necessary to include such a policy because monitoring efforts are targeting potential areas with low area quality.

In Table 6.2, Policies 7 and 9 are also identified as not meeting Objectives 2, 3 and 4, whichever is relevant. The Council is unable to adequately control motorised transport discharges and not much has been done by the Council to promote government initiatives to reduce green house gases and ozone depleting substances.

For motorised transport discharges and green house gas emissions, the RPS contains non-regulatory approaches because it would usually be impractical to control these discharges through regulation. A relevant objective in the RPS is that *the output of gases which potentially promote climate change is at a level which is consistent with central government climate change policy.* It is difficult to assess our progress against this objective because there is not enough information relating to central government climate change policy. In practice, it is always going to be difficult for the Council to evaluate how well it is doing in relation to motorised transport and greenhouse gas discharges because of the difficulty of obtaining appropriate data and because these are primarily national rather than regional issues. Notwithstanding, these are discharges that the Council could probably do more about. Implementation of the Regional Land Transport Strategy together with non-statutory methods of the Air Plan provides opportunities for some increased effectiveness.

Similarly, the effectiveness of policies and methods relating to discharges of ozone depleting substances relies on the implementation of non-statutory methods. Not much implementation of these methods has occurred.

Policy 10 of the RPS *to avoid, remedy or mitigate the adverse effects of air pollution on surface and groundwater, soil, plants and animals* is not effective because there are no methods to implement it. At present the Council has little information on air discharge effects on surface and groundwater, soil, plants and animals. It is unnecessary to change the policy because it does not reduce the effectiveness of objectives.

6.6 Anticipated Environmental Results

Anticipated environmental results (AERs) identify more specific outcomes than the objectives that the RPS is intended to achieve in over its 10 year life. There are 5 AERs in the Air Chapter of the RPS. The degree to which each AER is being achieved is discussed below.

AER (1) *There is up-to-date and relevant information available about the characteristics and condition of air quality for the Wellington Region*

Substantial progress has been made on determining air quality in the Region. A series of screening investigations of common pollutants in ambient air is near completion, providing a snapshot of ambient air quality across the Region. A series of emission inventories is being prepared, and the complaints data base provides an illustration of localised effects on amenity values. However, the Council is yet to carry out a long term ambient air quality and dispersion monitoring network in order to monitor changes in air quality over time.

AER (2) *High quality air is found in all parts of the Region. For those areas which do not already meet the desired air quality, air quality improves to at least an acceptable standard within 10 years of the Regional Air Quality Management Plan being operative.*

Monitoring results indicate that air quality is within health guidelines in most of the Region for most of the time. However, some localised exceedences occur for some contaminants, e.g.,

winter time particulates in parts of Lower Hutt and Masterton. It is anticipated that exceedences like this will not occur after the Air Plan has been operative for 10 years. Clearly, the achievement of this anticipated result cannot be determined yet. The result is considered to be achievable except, perhaps, for transport sources.

AER (3) *Human health, environmental systems and public amenity in the Region are not adversely affected by ambient or local air quality*

Monitoring results indicate that air quality is within health guidelines in most of the Region for most of the time. However, as described in the previous paragraph, some localised exceedences occur for some contaminants. Therefore, human health effects could potentially occur in some localities at certain times of the year. The Council has not received reports of any actual health effects. The Council does not have any direct measures of the effects of air quality on environmental systems, so achievement of this anticipated result cannot be determined.

In 1998/1999, 596 complaints about air quality were received across the Region, more than 80% of which related to odour. These complaints provide an indicator of air quality effects on amenity values. The majority of odour complaints relate to sewage systems and treatment plants, fish and meat processing operations, landfills and some agricultural activities, such as pig farming. This indicates that public amenity in some locations is affected by emissions to air from point sources. The majority of these odourous discharges are controlled by resource consents.

AER (4) *The net amount of greenhouse emissions produced by activities in the Wellington Region is reduced so that levels are consistent with, or below, national and international requirements*

The Council is in the process of preparing a green house gas emissions inventory for the Region, which will provide an estimate of the total amount of greenhouse gases emitted in the Region. Until the inventory is complete, the Council does not have the information necessary to determine the extent to which this anticipated result might be achieved.

AER (5) *Ozone depleting substances are safely collected and disposed of, and eventually are no longer used in the Wellington Region*.

The Council does not have any information about the use of ozone depleting substances in the Region, so progress towards AER (5) cannot be determined.

Table 6.1. Assessment of the Implementation of Methods in the Air Chapter of the RPS

Methods	**Assessment of Implementation**	satisfactory / unsatisfactory
Method 1: *The Wellington Regional Council will prepare a Regional Air Quality Management Plan*	Method 1 has been implemented in full. The Regional Air Quality Management Plan is now operative.	✓
Method 2: *Implement Air Policies 1-4 through the inclusion of provisions in the Regional Air Quality Management Plan that:* *(1) Identify key information areas relevant to improving knowledge of the atmosphere, air quality and emissions in the Wellington Region and determine the extent and deficiencies of information available in these areas; and* *(2) Determine primary indicators of air quality and any other significant contaminants.*	Regarding Part (1), the Regional Air Quality Management Plan includes specific policies and methods that implement this RPS method. Good progress is being made that will ensure this method is implemented in practice, particularly through the development of an ambient air quality monitoring program and a regional emissions inventory. Regarding Part (2), the method has been implemented in full. The Regional Air Quality Management Plan includes indicators of air quality.	✓
Method 3: *Monitor and gather information on air quality in the Region by:* *(1) Developing an ambient air quality monitoring programme;* *(2) Developing an emissions inventory on sources of discharges; and* *(3) Investigating the factors that influence the dispersion and transport of contaminants.*	Regarding Part (1), the development of an air quality monitoring program is ongoing. A Wellington Regional Ambient Air Quality Monitoring Strategy is in place. The first stage of identifying where monitoring sites will be located is complete. Monitoring ambient air quality according to the strategy is underway. Regarding Part (2), an emissions inventory for mobile transport, domestic, and commercial discharges is complete. An inventory for biogenic sources is underway. Regarding Part (3), a project looking at the influences of meteorology for dispersion and transport of contaminants is underway.	✓
Method 4: *Require those industries and activities that require a resource consent to discharge contaminants to air to carry out emission monitoring as part of the resource consent requirements where appropriate.*	This Method is ongoing, through the resource consent process	✓

Methods	**Assessment of Implementation**	satisfactory / unsatisfactory
Method 5: *To achieve integrated management, other means which could be used to implement Air Policies 1-4 include:* *(1) National co-ordination of air quality data by central government; and* *(2) Technical and quantitative input to the Regional Council's air quality monitoring programme by central government, Crown Research Institutes and the Ministry of Health.*	This method identifies approaches that "could" be used rather than any requirement on the WRC to implement an action. Such approaches are appropriate because implementation of this method is largely out of our control. Regarding Part (1), the WRC is promoting national co-ordination by making submissions on proposals for national air quality guidelines and through a national Air Quality Working Group convened by MfE. Regarding Part (2), the approach is promoted though the response in Part (1), above.	✓
Method 6: *The Wellington Regional Council will implement Air Policy 5 through the inclusion of ambient air quality guidelines which are appropriate to the Wellington Region in the Regional Air Quality Management Plan.*	Method 6 is implemented in full through the Regional Air Quality Management Plan	✓
Method 7: *Implement Air Policy 6 by including provisions in the Regional Air Quality Management Plan that:* *(1) Set appropriate emission guidelines and promote strategies to reduce emissions;* *(2) Define prohibited, non-complying, discretionary, controlled and permitted activities;* *(3) Control activities that do not require a discharge permit through rules, where appropriate;* (4) Ensure compliance with discharge permits; and *(5) Control the effects of domestic emissions to air.*	Regarding Part (1), ambient air quality guidelines are established in the Regional Air Quality Management Plan. Emission guidelines are set to the extent that rules include the condition that air discharges shall not be noxious dangerous, offensive, or objectionable. More prescriptive guidance on air emissions is generally not included in the Plan but standards are being worked on by MfE and regional councils, through a national Air Quality Working Group. Regarding Part (2), the method is completed in full. Regarding Part (3), the method is completed in full. Regarding Part (4), implementation of the method is ongoing through the monitoring and enforcement actions of the Council. Regarding Part (5), The method is not implemented in the Regional Air Quality Management Plan because it was decided during the process of its preparation that controls on domestic discharges in the Wellington Region are not inappropriate.	x

Methods	**Assessment of Implementation** satisfactory / unsatisfactory	
Method 8: *Develop guidelines for information to be provided with resource consent applications for developments that could affect air quality.*	Information guidelines for applicants for air discharge resource consents are available from the Consents Management Department.	✓
Method 9: *Implement a monitoring programme for all activities subject to a discharge permit, both to ensure compliance with that permit and also to monitor the effects, including cumulative effects, that discharges have on the receiving environment.*	Ongoing monitoring of discharge permits is carried out by resource consent holders where appropriate. The Wellington Regional Ambient Air Quality Monitoring Strategy described in the assessment of Method 3 provides for the ongoing implementation of this method.	✓
Method 10: *To achieve integrated management, other means which could be used to implement Air Policies 6 and 7 include:* *(1) Advocacy and promotion of improvements to current air quality management practice and technology by authorities and organisations with responsibilities for air quality management;* *(2) Integration of air management policies with policies for the management of energy, transportation and waste management by relevant authorities and organisations;* *(3) Investigation of the use of economic instruments to avoid or minimise air pollution at source;* *(4) Development of design guides and codes of practice by industry groups, central government and other appropriate organisations;* *(5) Promotion by the Regional Council through the Regional Land Transport Strategy, and by other relevant organisations, of the use of cleaner transport fuels, improved efficiency in the use of all transport fuels, and the greater use of public transport systems; and* *(6) Development and implementation of motor vehicle emission control strategies by central government.*	This method identifies methods that "could" be used rather than any requirement on the WRC to carry out an action. Such an approach is appropriate because implementation of this method is largely out of our control. Regarding Part (1) and (2), implementation is ongoing through the various opportunities available. Comments are made during the development of relevant management documents, eg. MfE emissions standards or governments vehicle fleet emissions strategy. The WRC is involved in promoting guidelines and better practice by industry, eg. fumigation. Regarding Part (3), an internal WRC Report *Managing the Environment: What are the Regional Council's Options* suggests that the Resource Management Act 1991 is unsuitable for using economic instruments for the management of discharges. Regarding Part (4), The WRC has promoted the development of codes of practice and design guides, eg. the NZ Pork Industry Board's code of practice, fumigation guidelines, air venting design. Regarding Part (5), the method has been implemented through the WRC Regional Land Transport Strategy although action in practice has been limited. Regarding Part (6), the WRC has made submissions on central governments vehicle fleet emissions strategy.	✓

Methods	**Assessment of Implementation**	satisfactory / unsatisfactory
Method 11: *Support and promote Government initiatives to reduce emissions of greenhouse gases and ozone depleting substances.*	Limited progress has been made on implementing Method 11. One project carried out in relation to greenhouse gases was a brief review of climate change. It identifies actions the Council can take in relation to its own operations and support and encouragement for the activities of others. Also, the Council is in the process of establishing a green house gas and ozone depleting substance emissions inventory for the Region.	x
Method 12: *Through the Regional Land Transport Strategy, encourage energy efficiency, changes to fuels that contribute less emissions of greenhouses gases and the utilisation of public transport systems in order to reduce greenhouse gas emissions.*	Method 12 is being satisfactorily implemented through the Regional Land Transport Strategy.	✓
Method 13: *Discourage the use of ozone depleting substances in the Region and promote the recovery of such substances by encouraging the provision of appropriate collection facilities*.	There has been little implementation of this method although there are provisions in the Regional Air Quality Management Plan that promote is implementation. As identified in the implementation of Method 11, the Council is in the process of establishing a green house gas and ozone depleting substance emissions inventory for the Region.	x
Method 14: *Implement Air Policies 11 and 12 by including objectives, policies and where appropriate, rules or other methods relating to the control of nuisance (particularly due to odours) and loss of public amenity, in the Regional Air Quality Management Plan.*	Method 14 is implemented in the provisions of the Regional air Quality Management Plan	✓

Table 6.2. Effectiveness of Policies and Methods in Meeting Objectives in the Air Chapter of the RPS

Objectives	Policies	Effectiveness of Policies and Methods	satisfactory / unsatisfactory
Objective 1: *High quality air in the Region is maintained and protected, and there is no significant deterioration in air quality in any part of the Region*	**Policy 1:** *To identify and describe the existing air quality of the Wellington Region.*	Policy 1 is implemented by Methods 2-5. Table 6.1 indicates that the implementation of these methods is satisfactory. At the time the RPS was prepared, there was a lack of data to determine the state of air quality in the Region and to manage the resource. Although the policy and methods do not lead directly to the outcome sought in the objective, their implementation is enabling better evaluation of all objectives of section 6 of the RPS. Therefore, Policy 1 and the associated methods are effective.	✓
Objective 1:	**Policy 2:** *To identify pollution sources that currently degrade, or have the potential to degrade, air quality in the Region*	Policy 2 is implemented by Methods 1-4. Table 6.1 indicates that the implementation of these methods is satisfactory, largely through development of the Regional Air Quality Management Plan, air quality screening investigations and emission inventories. The policy and associated methods require the Council to identify actual and potential pressures on air quality in the Region. The policy and methods are an effective first stage in managing air quality that enable Objective 1 to be met.	✓
Objective 1:	**Policy 3:** *To identify and improve understanding of the links between atmospheric processes, air quality and the range of human activities that occur in the Region*	Policy 3 is implemented by Methods 1-5. It provides direction for determining how the air pollution from sources identified in the issues are dispersed, and consequently, how they affect the environment. This builds on to Policies 1 and 2, which involves identifying sources and determining the state of our air. Table 6.1 indicates that the implementation of the relevant methods is satisfactorily underway. Part (3) of Method 3 is particularly relevant to implementation of Policy (3). Its implementation ensures that the Policy 3 is effective for achieving Objective 1.	✓
Objective 1:	**Policy 4:** *To develop, enhance and maintain systems for measuring air quality in the Region, for storing and analysing air quality information, and for assessing the effects of poor air quality on human health,*	Policy 4 builds further on Policies 1-3. Like Policies 1-3 its focus is on obtaining information rather than the environmental outcome in Objective 1. However, the information sought by the Policy is essential for assessing whether Objective 1 is being met. The first part of the policy is in the process of being implemented through Methods 1-5 as identified in Table 6.1. Ambient air quality monitoring screening investigations that identify where air quality monitoring sites should be located are complete. These sites will provide snapshots of air quality across the Region. However, long term ambient air quality monitoring data needs to be	✓

Objectives	Policies	Effectiveness of Policies and Methods	satisfactory / unsatisfactory
	environmental systems and public amenity	collected to determine whether we are achieving Objectives 1 and 2. The second part of Policy 4 relates to assessing the effects of poor air quality. As well as contributing towards Objective 1, it would be an effective means of achieving Objective 3. The Council does not have a means of directly assessing the effects of air pollutants on environmental systems, so it currently relies heavily on internationally recognised health guidelines, e.g., USEPA, as an indicator for both environmental and human health effects. Ambient air quality guidelines for the Region (Maximum Desirable Levels and Maximum Acceptable Levels) are used to assess potential effects on human health (see Method 6). The Council has a procedure for assessing offensive and objectionable air pollutants; this is not directed by any method in the RPS. Information is gathered, as necessary, for specific cases where localised emissions may cause health effects, e.g., spray painting or fumigation operations near residential areas. Overall, the policy and methods are effectively meeting objectives 1 and 3.	
Objective 1:	**Policy 5:** *To establish and promote air quality guidelines for setting desirable ambient air quality and for the control of activities which cause discharges to air*	This Policy, together with Method 6, direct an effective means of defining desirable ambient air quality, which can be used to measure progress towards achieving Objectives 1 and 2. As identified in Table 6.1, ambient Air Quality Guidelines for the Region have been established in the Air Plan for major air pollutants. They will need reviewing once the current review of national guidelines are published.	✓
Objective 2: *Air quality is enhanced in those areas with degraded air quality*	**Policy 6:** *To avoid or minimise, where appropriate and practicable, the discharge of contaminants to air at their source by the development and implementation of improved control technology and by good pollution control practice.*	Policy 6 is implemented by Methods 7-10. In many cases, control of the discharge of contaminants to air at their source is the most effective means of addressing the issues and achieving Objective 2 and other objectives identified in the Air Chapter of the RPS. The Council's approach to influencing discharges at their source can include; regulation; promotion by non-regulatory means; development and advocacy of guidelines; or incentives. All these approaches are directed in Methods 7-10. Promoting other agencies with a role in air quality management, e.g., central government, is also an important role that the Council can play. Most of methods 7-10, together with Policy 6 are effective means of meeting objective 2. As indicated in Table 6.1, the Council has partially to fully implemented all of these methods. However, Policy 6 and associated methods may	X

Objectives	Policies	Effectiveness of Policies and Methods	satisfactory / unsatisfactory
		not be completely effective in meeting objective 2. Method 7(5) *Control the effects of domestic emissions* has not been implemented through the Air Plan. Air quality monitoring has shown that domestic emissions from fuel combustion can contribute to significant localised deterioration in air quality. The Council has not yet done much to encourage a decrease in those emissions, and in the future the effectiveness of a non-regulatory versus a regulatory approach may need to be reviewed. All large point source emissions from industries are effectively controlled through resource consents.	
Objective 2: **Objective 4:** *The output of gases which potentially promote climate change is at a level which is consistent with central government climate change policy*	**Policy 7:** *To promote the use of energy sources and transport fuels that are low or non-polluting of the atmosphere*	The State of the Environment Report highlights that motorised transport is the greatest contributor of major air quality contaminants in the Region. Transport related problems are very difficult to manage, and the Council's ability to control emissions is limited. Policy 7 is a reasonable course of action for decreasing emissions from the transport sector, but its effectiveness is questionable. Policy 7 is implemented by Methods 7, 10, 11, and 12. Table 6.1 indicates that not all the Methods relating to Policy 7 are being implemented satisfactorily. One approach would be to regulate the use of vehicles or vehicle emissions, but it not practicable at the regional level. Policy 7 is not being implemented through Method 7 (regulation through the air quality management plan), but the Council has contributed to the development of the national vehicle emissions control strategy. Methods 10(5), 11 and 12 are being implemented although not much has been done in practice on Method 10(5) and 11. Overall, more long term ambient air quality monitoring information is needed to determine actual effectiveness.	x
Objective 3: **Objective 4:** *The adverse effects of the discharge of contaminants into air on human health, local or global environmental systems and public amenity are avoided, remedied or mitigated*	**Policy 8:** *To avoid, remedy or mitigate the adverse effects of local and global air pollution on human health*	Policy 8 addresses Objective 3 of the Air Chapter. It is implemented by methods 6-14 to the extent described in Table 6.1. To some extent, all of the policies and methods are directed at avoiding, remedying, or mitigating adverse effects on human health and the broader environment. Overall, the Policy and associated methods are effective approaches to meeting objective 3. Notwithstanding this conclusion, it is recognised that more can be done. Screening investigations have shown that, in some localised areas under certain meteorological conditions, ambient concentrations of some contaminants exceed health guidelines, e.g., particulate concentrations in Lower Hutt and Masterton during winter. Long term ambient air quality monitoring information is needed to determine actual	✓

Objectives	Policies	Effectiveness of Policies and Methods	satisfactory / unsatisfactory
		effectiveness, i.e., whether the frequency of health guideline exceedences are diminishing.	
Objective 3: **Objective 4:**	**Policy 9:** *To promote measures that achieve a net reduction in the emission of greenhouse gases and ozone depleting substances.*	Policy 9 is implemented through Methods 7, 10, and 11-13. The RPS recognises that global warming is a national and global problem. The Region is subject to the effects of global warming, but actions to manage green house gas emissions in this Region alone will not improve the situation. Cumulative contributions must be made at the local and regional level, to achieve a result. To date, the Council is not controlling green house gas emissions and has no information on the amount of green house gases or ozone depleting substance emitted in the Region. Methods 11 is being implemented to some extent by establishing a green house gas and ozone depleting substance emissions inventory for the Region. Promoting reduction of greenhouse gas emissions is being implemented to some extent through consent conditions controlling landfill gas emissions. Information from ongoing monitoring and future emission inventories is required to determine whether objective 3 is being met by Policy 9 and the associated methods. However, the Council's actions so far are unlikely to have led to effective implementation that would meet the objectives.	X
Objective 3:	**Policy 10:** *To avoid, remedy or mitigate the adverse effects of air pollution on surface and groundwater, soil, plants and animals*	This policy reflects Objective 3 and the RMA. Breaking the 'environment' down into soil, water, plants, animals and ecosystems (Ecosystems Policy 4), does not appear to serve any purpose. Without any associated methods, this policy is not particularly useful or effective. The Council has little information on the effects of air pollution on soil, water, plants or animals, so the effectiveness of this policy cannot be determined directly. The Ministry for the Environment is in the process of scoping the effects of air pollution on ecosystems.	X

Objectives	**Policies**	**Effectiveness of Policies and Methods** satisfactory / unsatisfactory	
Objective 3:	**Policy 11:** *To avoid, remedy or mitigate the adverse effects of air pollution on public amenity values* **Policy 12:** *To avoid, remedy or mitigate the adverse effects of odours on public amenity*	Policies 11 and 12 reflect Objective 3. Policy 11 is implemented by method 14, which is put into practice through policies, methods and rules in the Air Plan. All of the permitted activity rules in the Air Plan contain a condition that there is "no noxious, dangerous, offensive or objectionable, odour, vapour, or particulate beyond the boundary of the property". This is considered to be the most appropriate means of protecting amenity values from adverse effects at the present time. Policy 12 is implemented by Methods 7, 8, 10, and 14. Table 6.1 indicates that these methods are implemented satisfactorily, with the exception of 7(5) and 10(5). Public complaints are one measure of adverse effects on amenity values. Our records show that the number of complaints is increasing each year, with the vast majority relating to odour. This may reflect an increase in odourous activities, or may relate to a decrease in public tolerance of odour. Either way, it shows that amenity values are being affected and the implementation of these policies and methods may not be as effective as we would like.	✓

7 Ecosystems

7.1 Summary

If we were writing the Ecosysyems chapter today, probably more than other chapters in the RPS, we would write it differently. We now know a lot more about ecosystems and how we can be involved in their management than we did when the RPS was prepared. Now we would focus less on knowing more and more on doing more.

Is it necessary to change the chapter at this time? This section of the Report indicates possible areas where we might change the RPS. Suggested changes to provisions indicate a greater level of activity than was originally envisaged by the Ecosystems Chapter. On balance the answer must be no. The cost to make these changes in staff time and public consultation is likely to be large. Anything spent on changing the RPS is going to have a direct bearing on spending on its implementation. An Ecosystems Strategy for the Council is in preparation and it will accommodate any changes to our approach. The sharpness of focus that the Council needs will be provided by the Strategy.

It will be sensible to leave the ecosystems chapter untouched for at least another five years to see how the more active approach of the Council is working, and whether there are measurable changes becoming apparent in the state of our special places and vanishing species. A review of the RPS at 10 years is required by law, and this would be a good time to reassess the Council's overall ecosystems approach and success or failure.

7.2 Background

When the Ecosystems Chapter was written we knew little about our ecological responsibilities under the Resource Management Act 1991, had little knowledge of what it should contain by way of policy, and worked within a framework of low spending, do little, co-ordinate don't initiate, and be cautious above all. The policies and methods reflect this conservative approach.

Over the last three years the Council's approach has changed. A revolution in the Council's approach to resource management is occurring through the adoption of the "ecosystems approach". This has meant managing resources as part of living systems, not as discrete and static items. The Ecosystems Chapter does not fully capture this changed way of doing things.

Over time the pervasiveness of the Ecosystems Chapter has become more pronounced. This revolution is being driven by the Chapter. There are numerous programmes that will commence next year which have their origins in its policies and methods. As we have determined and refined these, the chapter itself is beginning to show its age. Some parts are now even more relevant, whilst others have declined in relevance.

For some time it has been apparent that there is a need for a more focused document which will spell out how the Council intends to implement its ecosystem responsibilities. An Ecosystems Strategy for the Council is required and is in preparation. This takes as its starting point the objectives and policies of the ecosystems chapter of the RPS. It asks "what does the Council need to do to meet these objectives?" It uses and adds to the methods in the document to deliver a set of actions on the Council's part.

This set of actions was put before the Council for consideration during discussions on the Long Term Financial Strategy in 1999-2000. This was the first practical opportunity to seek from the Council additional funding for new programmes. The Council has been broadly sympathetic with its contents and, thus far, has not rejected any of its components.

7.3 Issues

There are ten ecosystem issues identified in the RPS. In summary, these are:

1 Decline of specific ecosystem types – wetlands, indigenous forest, dunes

2 Decline in quality though pollution

3 Diversity of indigenous species in decline (loss of biodiversity)

4 Need to improve the quality of modified ecosystems (e.g., urban streams)

5 Inappropriate protection for some specific ecosystems

6 Poor management of remnant ecosystems on private land

7 Need to manage wider ecosystems around key remnant areas

8 Pest plants and animals

9 Lack of information about regional ecosystems

10 Lack of awareness amongst the public.

In general, this is still a good description of the issues – that is, they are still appropriate. However, some points can be made about them.

1 Issues 1 and 5 are basically the same but expressed slightly differently.

2 Issue 3 (on the decline in our biodiversity) is likely now to receive a very much higher emphasis from the Council than it did eight years ago when it was written originally. The NZ Biodiversity Strategy has elevated knowledge and expectations about this issue. If it were rewritten now it would probably be re-ordered or particular emphasises would be added.

3 Issue 2 (decline in quality) could do with greater explanation to describe accurately what it is on about. There are a number of "sub-issues" within it that could be drawn to the surface – i.e. aspects of quality.

4 Issue 8 is no longer completely accurate in its description of the state of bovine tuberculosis in the region.

5 Issue 9 refers to a "relative lack of data". While this will always be true, we have made considerable strides in recent years in finding out about our environment.

It would be possible to reformulate these issues at a greater or lesser degree of abstraction. But this would not be helpful. In essence, these are the issues for the region and little would be gained from further navel-gazing over them. Since the RPS became operative, DOC or members of the public have not made us aware of any desire to reformulate these issues.

7.4 Objectives

There are five ecosystem objectives. These are:

1 Overall quality (health) of ecosystems is increased

2 Healthy ecosystems are distributed throughout the region

3 Area and quality of indigenous ecosystems is increased

4 Full regional biodiversity is represented

5 Special ecosystems are actively protected (mainly indigenous)

These objectives represent a satisfactory set of ecosystem "end-points" for which we might aim as a Region. They are fairly generic and cover most possible eventualities.

The question that might be put in relation to them is whether or not they are too broad and consequently not directive enough. Some people and organisations (including our own Councillors) might wish for more specific targets to be set (e.g., 10 areas of native vegetation are given protection annually). This question could be debated at length, as it was when the RPS was drawn up. The benefit of generality is that it encompasses most conceivable situations; nothing

misses out. It also enables the Council to build an ecological programme which is responsive to a range of issues – in other words, the Council is not tied down to an overly restrictive work programme.

The problems that beset our valued regional ecosystems are many and varied. It follows that any policy framework for understanding ecosystems or guiding activities that might impinge upon them also needs to be of a generic nature. The RPS ecosystems framework is of this nature, and this is appropriate.

7.5 Policies and Methods

7.5.1 Regional and District Plans

Regional Plans

Ecosystems are considered and addressed in the Regional Coastal Plan, Regional Freshwater Plan and Regional Air Quality Management Plan, which are the regional plans that manage resources that the Council has primary responsibility for. These regional Plans contain provisions for ecosystem management and monitoring. Section 7 of this report, on the Coastal Chapter, identifies that management of the coast would benefit from more information on coastal ecosystems and greater monitoring of them. The Council plans more work in these areas over the next 3 years. The Coastal Plan addresses how management of coastal ecosystems will occur, particularly in its section 4.

The Regional Freshwater Plan includes provisions, particularly in its section 4, which specify freshwater ecosystem management. Ecosystem monitoring is provided for in section 11. The Air Plan includes provisions relating to ecosystems but identifies that there are information limitations on using an ecological basis for managing or monitoring discharges to air. This lack information is raised in section 6 of this report, on the Air Chapter.

District Plans

The Ecosystems Chapter of the RPS anticipates that the territorial authorities will take a significant role in the maintenance, enhancement or protection of ecosystems. The focus of the provisions in the RPS range from the management and enhancement of specific sites to those that promote an integrated ecosystem approach to land use control and that also aim to maintain the links or corridors that exist between individual sites.

The district plans generally all include policies relevant to the management and enhancement of specific sites. These have largely been implemented through the inclusion of:

- schedules of significant sites and associated rules limiting development; and/or
- rules which restrict the clearance of indigenous vegetation generally within the district.

Of those councils that have included schedules a number have only listed a limited number of well recognised sites. The reasons given for these limited schedules, and by those councils that have not included a schedule at all, are concerns about the quality of information available on the sites and about the impact that such provisions have on private property rights.

While the implementation of the site specific policies has its limitations, a much larger disparity is evident between the RPS provisions and those of the district plans in relation to the "ecosystem approach" and corridor protection ideals outlined in the Ecosysyems chapter. Basically the district plans do not consider these more integrated approaches. Having said this, it is acknowledged that this is a much more difficult task and is perhaps more likely to be addressed in the second generation of district plans. One territorial authority is already considering using an ecosystem approach as part of its review of the rural provisions of its district plan.

In addition to rules, the Region's territorial authorities also include non-regulatory methods as ways of implementing their policies on ecosystems. One example of this is the Kapiti Coast Native Plant Guide. Other territorial authorities may develop similar methods as they, like the Regional Council, move from plan development to plan implementation.

7.5.2 Implementation of Methods

Table 7.1 provides an assessment of the implementation of the methods in the Ecosystems Chapter of the RPS. Ticks in the right hand column indicate that a method is being implemented satisfactorily. A cross in the right hand column indicates that a method, or part of a method, is not being implemented satisfactorily.

Methods 1, 2, 6, 7, 8, 9, 10, 11, 12, 13, 16, 17, have been implemented satisfactorily.

There has been limited implementation of Methods 3 and 5. The Council has not put much emphasis on tangata whenua or community monitoring, which is also a matter raised and discussed in section 2 of this report on the Iwi Environmental Management System Chapter. Method 3 and 5 remain relevant and effect can be given to them over the next 5 years through the development of a better relationship with iwi and community initiatives such as care groups.

Method 4 has been implemented to varying degrees as described in Table 7.1. It promotes the Council as a co-ordinator and promoter of information about ecosystems rather than a "doer" of tasks. This is not necessarily the approach the Council now wishes to take since its present thrust is on being directly involved in many ecological initiatives as well as co-ordinating and promoting information about ecosystems. If it were written now, these methods would probably be different but it is unnecessary to rewrite them because they provide a satisfactory basis for action such as the ecological initiatives in the Council's new Proposed 10-Year Strategy.

Method 18 has been addressed to the extent that a discussion paper has been written on the potential for linking corridors in the Region. Otherwise, no implementation has occurred in practice by the Council.

Method 20 has been implemented satisfactorily except for Part (2) of the Method that suggests conditions be placed on resource consents for planting native vegetation. In almost all instances such conditions have not been used.

7.5.3 Effectiveness of Policies and Methods

Table 7.2 provides a summary of the effectiveness of policies and methods in meeting the objectives of the Ecosystems Chapter of the RPS. Ticks in the right hand column indicate that the policies and their associated methods are effectively meeting the objective(s). A cross in the right hand column indicates that the policies and methods, or a component of them, are not effective.

Table 7.2 indicates that Policies 4, 5 and 10, and their associated methods, are effective in meeting the objectives. Policies 1, 2, 6, 7, 8, are also identified as effective but are qualified by recognising that they rely on further implementation of methods that is already planned for.

Policy 3 and its associated methods are not effective. Greater integration of ecological principles from Maori and western cultures is needed for the policy to be effective. The policy is appropriate but needs more implementation, which can be achieved through the development of a better relationship with iwi.

Policy 9 is also probably not effective. Although a discussion paper has been written on the potential for linking corridors in the Region, there has been no implementation in practice. The Council has no information on whether the policy has been effective. The need for the policy is doubtful because it is one of many other physical habitat

conditions, not mentioned in the RPS, that are relevant to ecosystem health and need to be considered.

7.6 **Anticipated Environmental Results.**

There are 3 Anticipated Environmental Results (AERs) in the Ecosystems Chapter of the RPS. They do not differ much from the objectives in the chapter.

AER (1) *The area of indigenous ecosystems in the Region is increased and, in particular, there is an increase in the area of vegetation which is native to the Region.*

AER (1) cannot be measured at present but will be measured when next the land cover database satellite imagery is updated (3-4 years away).

AER (2) *There are healthy, functioning ecosystems throughout the urban, rural and natural areas of the Region.*

AER (3) *Rare and endangered species in the Region are protected through protection of their habitat and the management of pests.*

AER (2) and (3) are being met in part only. While there is still plenty more to do, good progress is being made and, given the additional resources that the Council is putting into ecosystems work in the next 10 years, the rate of improvement will increase.

Table 7.1. Assessment of the Implementation of Methods in the Ecosystems Chapter of the RPS

Methods	**Assessment of Implementation**	satisfactory / unsatisfactory
Method 1: *Gather information and monitor the state of the Region's ecosystems by:* *(1) Carrying out State of the Environment Reporting for the Region;* *(2) Developing and maintaining a data base of the Region's ecosystems, including data on rare and endangered species;* *(3) Including ecosystem monitoring provisions in regional plans; and* *(4) Encouraging the inclusion of ecosystem monitoring provisions in district plans.*	Regarding Part (1), Method 1 has been implemented to date through the Council's State of the Environment Report for the Wellington Region 1999. Regarding Part (2), the Council has developed some data bases for the Regions ecosystems but is also able to rely on data bases held by others (eg. DoC), which makes it unnecessary to develop our own. Regarding Part (3), the Council has included ecosystem monitoring provisions in regional plans as discussed in section 7.5.1 of this Report. Regarding Part (4), the Council has adopted the approach in the method when making submissions on district plans.	✓
Method 2: *Where it is the resource consent authority, consider applying resource consent conditions which require holders to monitor ecosystems which may be affected by the resource consent.*	Ongoing implementation of this method occurs through resource consents, particularly notified consents.	✓
Method 3: *Encourage the development of processes for tangata whenua and local communities to monitor the health of ecosystems.*	There has not been much implementation of this method to date	x

Methods	**Assessment of Implementation**	satisfactory / unsatisfactory
Method 4: *To achieve integrated management, means which could be used to implement Ecosystems Policy 2 include:* *(1) Using statutory public participation processes as an opportunity to increase public awareness of ecosystem considerations (e.g., in the preparation of regional plans, district plans, and management plans);* *(2) Preparing publications or leaflets on local ecosystem issues;* *(3) Making opportunities for educational institutions to learn about local ecosystems (e.g., school trips);* *(4) Setting a good example of ecosystem awareness when carrying out operational responsibilities;* *(5) Providing interpretation centres at reserves and parks;* *(6) Developing codes of practice which incorporate sound environmental principles;* *(7) Carrying out environmental audits;* *(8) Reporting against environmental objectives in annual reports;* *(9) Sponsoring community ecosystem restoration and protection projects;* *(10) Establishing environmental education centres;* *(11) Including appropriate teaching modules in schools, universities and polytechnics; and* *(12) Using student "placements" in environmental management organisations*	The implementation of the parts of Method 4 has been carried out to varying degrees which range from satisfactory implementation to none all. Parts (1), (2), (4), (5), (6), (7), (8), and (9) have all been implemented to some degree. Parts (3), (10), (11), and (12) have not yet been attempted yet, although there are firm proposals for more to be done over the next 3 years, particularly as part of the Council's proposed environmental education initiatives.	x
Method 5: *The Wellington Regional Council will integrate relevant ecological principles derived from western and Maori environmental philosophy in all relevant policies and plans*	This method has not been implemented satisfactorily.	x

Methods	**Assessment of Implementation** satisfactory / unsatisfactory	
Method 6: *To achieve integrated management, other means which could be used to implement Ecosystems Policies 1-3 include:* *(1) Liaison between all agencies with responsibilities for ecosystem research and resource management in the Region;* *(2) Co-ordination of ecosystem data bases and monitoring requirements across the Region;* *(3) Integration of research results into regional and territorial policy and plans; and* *(4) Co-ordination of the management of adjacent ecosystems*	Method 6 identifies approaches that "could" be used rather than any requirement on the Council to implement an action. Such an approach is appropriate since the Council cannot require others to do things in most cases. All parts of this method have been implemented with satisfactory results. The method is ongoing and will continue to be implemented.	✓
Method 7: *The Wellington Regional Council will, in co-operation with the Animal Health Board, the Ministry of Agriculture and Fisheries Quality Management and the Department of Conservation:* *(1) Provide control and maintenance programmes for the management of possums in specified areas; and* *(2) Continue to educate landowners on the control of animal pests.*	This is a significant function of the Council and the Method is implemented in full by the Biosecurity Department of the Council.	✓
Method 8: *District plans would be an appropriate means of implementing Ecosystems Policy 4.*	This method has been implemented during the preparation of district plans and will be ongoing when plan changes are made.	✓
Method 9: *To achieve integrated management, other means which could be used to implement Ecosystems Policy 4 include the use of the provisions of the Biosecurity Act 1993 and other legislation and non-statutory mechanisms, by all agencies with responsibilities for the control of substances or organisms with the potential for adverse effects on ecosystems.*	This Method is implemented primarily by the Biosecurity Department of the Council.	✓

Methods	**Assessment of Implementation**	satisfactory / unsatisfactory
Method 10: *The Wellington Regional Council will, in consultation with the agencies with responsibility for ecosystems management and the regional community, identify and prioritise ecosystems of regional significance.*	Method 10 is being implemented in a number of ways. By far the majority of this type of work is being carried out by the Department of Conservation. The Regional Council assists DoC and some territorial authorities to collect this information (eg. KCDC and PCC). Ecosystems are surveyed and prioritised as part of the KNE program. Method 10 has also been used to identify ecosystem priorities and will continue to be used as the Council implements expanded ecosystem activities (i.e., protection of indigenous vegetation on private land, wetlands, riparian management etc). The Council also prioritises ecosystems for management on its own land through asset management plans for regional parks and recreation areas.	✓
Method 11: *Restore or enhance high priority degraded ecosystems, where practicable, and where it is within the Council's powers to do so.*	There was limited implementation of this Method until two years ago when selected projects were begun that are helping the Council develop skills in this area. There are firm proposals for a lot more work in the next 3 years as part of the Council's Ecosystems Initiatives. On the basis that the work programmed is carried out, implementation of the method can be regarded as satisfactory.	✓
Method 12: *Protect indigenous ecosystems and high priority urban and rural ecosystems, where practicable, and where it is within the Council's powers to do so.*	Like the previous method, implementation is really just beginning and a lot more work is now in the Council's program for the next 3 years. Other work such as that identified in relation to method 10 (eg. KNE work) is ongoing.	✓
Method 13: *Review and, where appropriate, improve the management of protected and high priority ecosystems on Regional Council land, including through the preparation of management plans, where appropriate.*	This Method is being implemented satisfactorily as a result of ongoing initiatives involving the Landcare Division, Operations Department and Biosecurity Department. Asset management plans are in preparation across the Council.	✓
Method 14: *Support community initiatives for the restoration and protection of high priority ecosystems in the Region.*	In practice, the Council has only recently begun to take action on Methods 14 and 15, so far. In the next few years implementation through the care group program of the Council's Environmental Education Initiative, and through the development of its relationship with iwi in the Region, will significantly increase. The Council has supported landowners in erosion prone areas to protect native bush through QE II Covenants. It is proposing extending this program, from 2000/01, to include all areas that have indigenous vegetation worthy of permanent retirement and protection. On the basis of programmed initiatives, implementation is regarded as satisfactory.	✓

Methods	**Assessment of Implementation**	satisfactory / unsatisfactory
Method 15: *Encourage, support and facilitate the protection of high priority ecosystems on private land, and ecosystems of significance to iwi, by:* *(1) Acting as a source of information on the different options available to private landowners and iwi;* *(2) Investigating and co-ordinating the use of financial incentives and other available assistance; and* *(3) Adopting a flexible approach towards the use of formal and informal voluntary protection mechanisms.*		
Method 16: *District plans would be an appropriate means of implementing Ecosystems Policy 7.*	This method has been implemented through advocacy during the preparation of district plans and will be ongoing when plan changes are made.	✓
Method 17: *To achieve integrated management, other means which could be used to implement Ecosystems Policies 6-8 include:* *(1) The use, by territorial authorities, of the esplanade reserve and strip provisions of the Act for the protection of riparian ecosystems;* *(2) The use of other legislation by agencies with statutory responsibilities for ecosystem restoration and protection; and* *(3) The use of Ecosystems Methods 10-14 above by all agencies with responsibilities for ecosystem management, where it is within their powers to do so.*	Method 17 identifies approaches that "could" be used rather than any requirement on the Council to implement the action identified. Such an approach is appropriate since the Council cannot require others to take the actions in the method. All parts of this method have been implemented to some degree with satisfactory results. The method is ongoing and will continue to be implemented. Further steps can be taken such as developing protocols with other agencies	✓
Method 18: *The Wellington Regional Council will, in consultation with other agencies with responsibilities for ecosystem management, identify areas where linking corridors and buffer zones are needed and advocate for their establishment and protection.*	The method has been addressed to the extent that a discussion paper has been written on the potential for linking corridors in the region. Otherwise, no implementation has occurred in practice by the Council.	x
Method 19: *District plans would be an appropriate means of implementing Ecosystems Policy 9.*	This method has been implemented through advocacy during the preparation of district plans and will be ongoing when plan changes are made.	✓

Methods	**Assessment of Implementation**	satisfactory / unsatisfactory
Method 20: *To achieve integrated management, means which could be used to implement Ecosystems Policy 10 include:* *(1) Incorporating policies supporting the planting of regionally appropriate native vegetation in regional plans, district plans and other management plans, as appropriate;* *(2) Placing appropriate conditions on resource consents; and* *(3) Planting indigenous vegetation in parks, reserves and other public areas.*	Reference in this method to achieving integrated management is an indication that the method applies to all agencies involved in ecosystems management, not just the Council. This method identifies approaches that "could" be used rather than any requirement on the Council to implement the action identified. Such an approach is appropriate since the Council cannot require others to take some of the actions in the method. Regarding Part 1, the planting of appropriate native vegetation has been promoted in the context of regional, district, or other plans. A regional plant guide has also been prepared and can be viewed in hard copy or on the Council's website. Regarding Part 2, the method has not been implemented because in almost all instances placing conditions on resource consents for particular species of indigenous trees to be planted would be ultra vires. Regarding Part 3, the Council has carried out some plantings described in the method and will carry out ongoing implementation.	x

Table 7.2. Effectiveness of Policies and Methods in Meeting Objectives in the Ecosystems Chapter of the RPS

Objectives	Policies	Effectiveness of Policies and Methods	satisfactory / unsatisfactory
Objective 1: *The overall quality of ecosystems in the Region is increased* **Objective 2:** *Healthy, functioning ecosystems are distributed throughout the Region, including the rural and urban environments* **Objective 3:** *The area and quality of indigenous ecosystems in the Region is increased* **Objective 4** *The Region has a diversity of healthy ecosystems which represent the full range of regional flora, fauna and habitats*	**Policy 1:** *To increase understanding of the Region's ecosystems to a level to enable the effective monitoring of change*	Policy 1 is implemented by Methods 1-3 and 6. Table 7.1 indicates that the implementation of these methods are satisfactory except for Method 3, which is for the Council to encourage tangata whenua and community involvement in monitoring. With this exception, the Policy and relevant objectives are effective in meeting the objectives. As raised in section 7.5.2 of this Report, and discussed in section 2 on the Iwi Environmental Management System, work is intended over the next 5 years on the development of a better relationship with iwi and community, initiatives such as care groups. One area where the effectiveness of the Policy could be improved is through an audit of the extent to which resource consents give effect to ecosystem policies (especially Policy 4). Another area for improvement might be more detail about what sort of SOE monitoring we will be involved in. However, these are matters that can be addressed in the Regional Monitoring Strategy that the Council is preparing.	✓
Objective 1: **Objective 2:** **Objective 3:** **Objective 4:**	**Policy 2:** *To encourage a greater awareness of the importance of ecosystems to human survival and well-being in all sectors of the regional community*	Policy 2 is implemented by Methods 4 and 6. Method 4 is a menu of actions, some of which the Council is doing and others that are intended but have not yet been implemented. Method 6 is being implemented satisfactorily. Overall, bearing in mind work that is intended in the next 3 years, the Policy and associated methods are effective ways of achieving the objectives. One hurdle that has been found when implementing the Policy is that the word "ecosystem" itself is hard for most people to understand. Table 6.1 mentions that the emphasis on future implementation will be through the Environmental Education Initiative, which will assist with people's understanding of words like	✓

Objectives	**Policies**	**Effectiveness of Policies and Methods** satisfactory / unsatisfactory	
		"ecosystems". If the policy and methods were being written now it would have a more active formulation, and reference should be made to Council's educational initiatives.	
Objective 1: **Objective 2:** **Objective 3:** **Objective 4:**.	**Policy 3:** *To integrate ecological principles, derived from Maori and western environmental thought and practice, throughout resource management policy, planning and practice.*	This policy has not been given much effect and clearly needs to be addressed more. While iwi have had an input into plans during their preparation (Method 5), neither the plans nor our management of resources reflect a Maori view of the world. This policy is still appropriate but it needs more implementation.	x
Objective 1: **Objective 2:** **Objective 3:** **Objective 4:** **Objective 5:**	**Policy 4:** *To avoid, remedy or mitigate the adverse effects of activities on ecosystems, and in particular, to avoid, remedy or mitigate any of the following effects:* *(1) Reduction in the indigenous biodiversity of an ecosystem;* *(2) Prevention of the natural processes of an ecosystem, including nutrient cycles and energy flows, from operating effectively;* *(3) Simplification of the structure of indigenous ecosystems; and* *(4) Reduction in the quality or quantity of the non-living parts of an ecosystem (e.g., decaying plant and animal*	Policy 4 is implemented by Methods 7, 8, and 9. Table 7.1 indicates that the implementation of these methods is satisfactory. This policy requires adverse effects on the underlying processes of ecosystems to be avoided, remedied, or mitigated. It is also the only Policy in the chapter which provides direction to decision makers operating under the RPS (such as the Council's Consents Department). It tells what needs to be kept in mind about ecosystems when making resource management decisions, i.e., the major processes at work within the ecosystem that need to managed so that its life supporting capacity (its ability to keep functioning into the future) is maintained. It does not include all of the major processes and could include references to "competition" (the naturalness of the ecological communities present), regeneration, healthy air, water , and soil etc. Nonetheless, it does focus attention on the fact that ecosystems are systems and have processes which need to be looked after. Though seemingly innocuous, this policy is probably the most important of the chapter since it does direct the Council and other relevant agencies to manage ecosystem processes. We are heading towards this in our implementation of the RPS and plans. The policy could probably be added to with similar policies to reflect the other important aspects of this approach. Certainly, the opening three policies of the chapter which are ostensibly about taking an "ecosystem approach" are clearly not about this but more about collecting more information about ecosystems. Policy 4 is also generally not referenced by our Consents Department when	✓

Objectives	**Policies**	**Effectiveness of Policies and Methods** satisfactory / unsatisfactory	
	remains, water, air, soil) to a level which adversely affects the life-supporting capacity of the ecosystem.	assessing non-notified consents. Those that are notified get a more in-depth analysis. Methods 7-9 are designed to implement this policy but refer mainly to the Council's work in controlling plant and animal pests. They are lacking in two respects: 1. The way the WRC works in managing the environment is evolving. We are working much more along an ecosystems basis, recognising that for the life supporting capacity of natural resources to be maintained requires sustaining the ecological processes that enable "life" to occur. There is nothing in these methods which acknowledges this approach. They could spell out in some detail what the council is now doing to achieve this. 2. The pest management work of the WRC is also a lot more ecosystem focused than suggested by these methods. The KNE work post-dates this method and the proposed ecosystem-led pest management is also new. This should be changed. It would also be beneficial to have a more explicit description of our pest management work to build a direct linkage between the Council's overarching policy (the RPS) and its biosecurity work (done under Pest Management Strategies). It is necessary to show that some of this work has clear environmental benefits (and thus might take place under the RMA) and that not all of it is Biosecurity Act inspired.	
Objective 1: **Objective 2:** **Objective 3:** **Objective 4:** **Objective 5**:	**Policy 5:** *To prioritise ecosystems for restoration and protection in the Region, on the basis of the following criteria:* *(1) Ecosystems with a high priority for protection:* *(a) are currently or are likely to be under a high degree of threat; and* *(b) are representative of the Region's natural (indigenous) diversity; or*	This policy and Method 10 that implements it are effective and remain useful and appropriate. They have been used to identify ecosystem priorities and will continue to be used as we implement expanded ecosystem activities (i.e., protection of indigenous vegetation on private land, wetlands, riparian management etc). The criteria are simple, clear and common sense.	✓

Objectives	**Policies**	**Effectiveness of Policies and Methods** satisfactory / unsatisfactory
	(c) are regionally or nationally rare or vulnerable; or *(d) have special features such as regionally or nationally rare, vulnerable or unique species, populations of species known or likely to be of value as a genetic resource, an unusually high diversity of indigenous species, unique or unusual geological features, or special cultural or spiritual values* *(2) Ecosystems with a high priority for restoration are degraded and:* *(a) are currently under a high degree of threat; and* *(b) have one or more of the criteria listed under (1)(b)-(1)(d) above; or* *(c) have the potential to be significant areas of indigenous vegetation or significant habitats of indigenous fauna; or* *(d) have significant public support for their restoration.*	

Objectives	**Policies**	**Effectiveness of Policies and Methods** satisfactory / unsatisfactory	
Objective 1: **Objective 2:** **Objective 3:**	**Policy 6:** *To restore or enhance:* *(1) Indigenous ecosystems which have been degraded; and* *(2) Urban and rural ecosystems which have been identified as being of high priority for restoration.*	Policies 6 and 7 are implemented by Methods 11, 12, and 14- 17. Table 7.1 indicates that these methods are being implemented satisfactorily. The policies and their associated methods are effective but their effectiveness is qualified by completion of work recently underway and work that is intended in the next three years as part of the Council's Ecosystems Strategy and Environmental Education Initiative. These policies (and their associated methods) provide a firm basis for the Council's ecological restoration and enhancement activities, specifically care groups and other local community activities. Originally, there was little interest in active restoration on the part of the Council but over the last two years this has turned around and significant initiatives are planned. Already existing work is being carried out in the successful Trees for Survival programme and in a number of small restorations being carried out around the Region. It should be noted that just about every type of ecosystem gets a mention in these policies somewhere (including the explanation) and that this could lead to a more defined policy. In other words, there would be merit in defining a little more the types of ecosystems we are particularly interested in (these are lowland forests, coastal dunes and escarpments, wetlands, estuaries, river margins, and where resources permit, the marine environment).	✓
Objective 1: **Objective 2:** **Objective 3** **Objective 4:** **Objective 5:**	**Policy 7:** *To actively protect:* *(1) Indigenous ecosystems; and* *(2) Urban and rural ecosystems which have been identified as being of high priority for protection.*		
Objective 1: **Objective 2:** **Objective 3:** **Objective 4:** **Objective 5:**	**Policy 8:** *To improve the management of protected ecosystems, where existing management regimes are not adequately safe-guarding the valued aspects of the protected ecosystems*	Policy 8 is implemented by Methods 13 and 17. Table 7.1 indicates that these methods are being implemented satisfactorily. This policy has bearing on Council owned and managed ecosystems. It is a useful policy and should be retained. Considerable effort will be put over the next 3 years into improving the management of the Council's own special ecosystems. It should be noted that Methods 11 and12 also refer to ecosystem enhancement or protection "where it is within the Council's power to do so", i.e., the Council is mentioned specifically. In other words, the RPS puts an onus on us to manage our lands appropriately and it will be beneficial to leave these methods alone as a reminder to continue with this work. Also, there is potential in key areas for agencies to work together, as is currently happening in Pauatahanui Inlet. Ideally, *Method 17* should reflect this.	✓
Objective 1:	**Policy 9:**	Policy 8 *is* implemented by Methods 18 and 19. Table 7.1 indicates that the Method	X

Objectives	**Policies**	**Effectiveness of Policies and Methods**	satisfactory / unsatisfactory
Objective 2: **Objective 3:** **Objective 4:**	*To prevent the isolation of ecosystems by providing linking corridors and buffer zones and avoiding the fragmentation of ecosystems*	18 is not being implemented satisfactorily. This policy sounds good in theory. It does relate to one of the main ecological processes but it is only one of them. We could have additional policies promoting physical conditions which might assist breeding, diversity, effective hydrological systems, resilience to disturbance etc. It is hard to see why this one aspect has been singled out, except that it was a popular notion at the time. It is impossible to say whether the policy has been effective as we have no information on it. The method has been addressed to the extent that a discussion paper has been written on the potential for linking corridors in the region but in practice there has been no implementation.	
Objective 1: **Objective 2:** **Objective 3:** **Objective 4:**	**Policy 10:** *To encourage the planting of native vegetation, and particularly, regionally appropriate species*	Policy 10 is implemented by Method 20, which matches it. Table 7.1 indicates that the Method 20 is being implemented satisfactorily. This is an effective policy that has been given effect to through the Regional Plant Guide and through comments on consents, district plans and other opportunities.	✓

8. Section 8 Landscape and Heritage

8.1 Summary

As was previously pointed out the Council's Policy and Finance Committee (Report 00.127, 9 March 2000) the landscape provisions on the Landscape and Heritage Chapter require amendment. The reason for this is that the provisions are based on the notion of "regionally outstanding landscapes" which the Council has not been able to identify.

A minor change to the provisions dealing with outstanding natural features may also be necessary. This change would be to include a method which ensures that adequate information on the current state of these features.

For the most part the remaining provisions of the Chapter remain appropriate. There has been some difficulty implementing the heritage provisions of the Chapter, however this reflects an on-going review of heritage management nationally rather than the provisions themselves.

8.2 Background

The Landscape and Heritage Chapter addresses 3 general resource management issues. These are the management of:

1. The regionally outstanding natural features and landscapes;
2. The Region's cultural heritage resources; and
3. Those natural and physical resources which provide regional recreation opportunities.

Since the Regional Policy Statement was written the Regional Council has focussed mostly on the first of these issues. In this line the Regional Council prepared and notified a Proposed Regional Landscape Plan (PRLP). The PRLP was intended to replace a list of features and landscapes which had been a controversial aspect of the Landscape and Heritage Chapter of the Proposed Regional Policy Statement.

The Council received 151 submission and further submissions on the PRLP. A formal hearing was held in June/July 1998. As a result of the submissions and the hearing, the Regional Council decided to withdraw the PRLP and to implement non-statutory guidelines (Report 98.368, 26 September 1998).

In March 2000, following a round of public workshops, the Council also chose to withdraw from the landscape guideline project (Report 00.127, 9 March 2000).

This series of setback in landscape management has undermined the Council's original intent with regard to the Landscape and Heritage Chapter.

The provisions of the Landscape and Heritage Chapter relating to heritage management have also been affected by subsequent action. However in this case the action are those of central government, not the Regional Council.

During the period since the Regional Policy Statement was written there has been an on-going national review of heritage management. This has resulted in the responsibility for the Historic Places Act 1993 and for the New Zealand Historic Places trust being transferred from the Department of Conservation to the Ministry for Culture and Heritage. The review has led to proposed Resource Management Act amendments and to proposals to change the functions of the New Zealand Historic Places Trust. It has also led to a proposal to develop a national policy statement for heritage management.

Each of these proposals is still under review. Consequently, the council is limited in how far it can pursue some of the methods in the Landscape Heritage Chapter.

8.3 Issues

The RPS identifies eight issues for Landscape and Heritage in the Region. In brief these relate to:

- the vulnerability of natural features such as landforms, geological features and soil sites
- the diminution in the quality of regionally outstanding landscapes
- the importance of landscape for the tangata whenua
- the loss of natural character especially remnant areas of remnant vegetation
- the conflict between public aspirations for landscape protection and the rights of private landowners
- the conflict between immediate economic pressures and the need to preserve for future generations
- the loss of recreational opportunity through landuse changes and landscape alteration.
- the threat to the Region's cultural heritage

These issues provide an overview of the Landscape and Heritage issues facing the Region. In all but one case, the issues remain a valid summary and no new issues have been identified.

The exception is the second issue, that relating to the loss of quality of Wellington's regionally outstanding landscapes.

Since the RPS was written the Regional Council has attempted to identify the regionally outstanding landscapes through a regional landscape plan. However, for numerous reasons this has not proved possible. As mentioned above, the Regional Council withdrew the Proposed Regional Landscape Plan (PRLP) in September 1998 following significant opposition from parts of the regional community. The Council is now left with a list of landscapes which it believes are regionally outstanding, but which have not been accepted and ratified as such through a statutory process by the regional community.

Further, the Regional Council cannot clearly state where these landscapes begin and end.

What the landscapes are, and where they begin and end, are both significant points of fact that need to be determined before appropriate issues, objectives, policies and methods can be stated. Most fundamentally it seems inappropriate to state that "the diminution in the quality of landscapes which are regionally outstanding" is a regionally significant resource management issue when the regionally outstanding landscapes cannot be identified.

Recent case law appears to support this concern. In *Wakatipu Environment Society Incorporated v Queenstown-Lake District Council (Environment Court C180/99, 2 November 1999 Judge Jackson)* the Environment Court states that:

The RMA requires us to evaluate, as one relevant factor, the appropriate outstanding natural landscapes of a district so that appropriate objectives and policies (and implementation methods) can be stated for them. If the areas of outstanding natural landscape cannot be identified then how can objectives and policies (and methods) be properly stated for them?

While the Court's comment refers to district plans and outstanding natural landscapes within a district, it would appear equally applicable to regional policy statements and regionally outstanding landscapes.

The Regional Policy Statement itself recognises that identifying the regionally outstanding landscapes is the "most immediate need". In

the explanation of the Landscape and Heritage Chapter methods it state that:

Further advocacy or service provision by the Wellington Regional Council will depend on the knowledge acquired through the development of this plan (the anticipated Regional Landscape Plan). The Council also recognises that until this information is provided to territorial authorities, they will be limited in their ability to have regard to these policies.

As a minor point, the appropriateness of Issue 2 and the objective and policies, which flow from, is further questionable because of the term used. Issue 2 refers to "landscapes which are regionally outstanding" and the relevant objectives and policies refer to "regionally outstanding landscapes". This is different to the term "outstanding **natural** landscapes" used in section 6(b) of the Resource Management Act 1991. Section 6(b) is one of the main parts of the RMA used to justify the Regional Council's involvement in landscape management.

As a result of these points it is recommended that all of the landscape provisions of the Landscape and Heritage Chapter be reviewed and amended. It is also recommended that this review be extended to include the landscape provisions of the Coastal Environment Chapter so that there is consistency between the two sets of provisions.

Until these amendments are made, or the regionally outstanding landscapes are identified, the landscape provisions of the Landscape and Heritage Chapter will have little statutory weight.

8.4 Objectives

The four objectives in this Chapter deal with relatively distinct issues. For this reason each of the objectives are addressed separately.

Objective 1 states that:

Nationally and regionally outstanding geological features, landforms, soil sites and other natural features of the Region are protected from inappropriate subdivision, use and development.

Through the explanation to Policy 2 of this Chapter the nationally and regionally outstanding natural features within the Wellington Region have been identified. Given this, and the fact all persons exercising authority under the Resource Management Act 1991 are required to recognise and provide for the protection of outstanding natural features as a matter of national importance, Objective 1 is appropriate.

Objective 2 aims to ensure that:

Adverse effects of human activities on the Region's natural and physical resources are avoided, remedied or mitigated so that the quality of any regionally outstanding landscapes which those resources contribute to is maintained.

As discussed in the section on resource management issues, the references in the Regional Policy Statement to regionally outstanding landscapes appear inappropriate because the regionally outstanding landscapes have not been adequately identified. For this reason it is recommended that the provisions dealing with landscape in the Regional Policy Statement be amended.

Objective 3 states that:

The cultural heritage of the Region which is of regional significance is:

(1) Recognised as being of importance to the Region;

(2) Managed in an integrated manner with other resources; and

(3) Conserved and sustained for present and future generations.

The explanation of Policy 6 identifies those places, buildings, structures, sites and other resources listed as Category 1 items in the Register of Historic Places, Historic Areas, Wahi Tapu and Wahi Tapu Areas (prepared by the New Zealand Historic Places Trust under s. 22 of the Historic Places Act 1993) as regionally significant cultural heritage resources. Given this, and the provisions of the Resource Management Act 1991 it is appropriate that Objective 3 is included in the Landscape and Heritage Chapter.

Objective 4 aims to ensure that:

The attributes of natural and physical resources which provide for regional recreational opportunity, and for the appreciation and enjoyment of those resources by the regional community, are maintained or enhanced.

Objective 4 recognises that recreational opportunity is an important value attributed to the Region's natural and physical resources. The Objective also recognises that our patterns of recreation are taking a regional dimension as our landscapes, natural features and open spaces become more accessible. For these reason it is appropriate that the Regional Council provides for the integrated management of the recreational resources through Objective 4.

8.5 Policies and Methods

8.5.1 Regional and District Plans

Regional Plans

As has already been mentioned, the Council attempted to complete a Regional Landscape Plan for "for the outstanding natural features and landscapes of the Region, including those of significance to the tangata whenua".

A proposed plan was notified for public submissions and a hearing of the submission was held. However, in response to some of the points made at the hearing the Council chose to withdraw the Proposed Plan and prepare guidelines instead.

Following initial consultation of the landscape guidelines, the Regional Council also chose not to complete this project.

The Landscape and Heritage Chapter also indicates that regional plans may be necessary for the management of the regionally significant cultural heritage resources and regional recreational opportunities. The Council has since decided that it is not necessary to prepare a regional recreation plan (Report 98.204, 18 June 1998). It has also postponed consideration of the need for a regional heritage plan because of the current national review of heritage management responsibilities (Report 99.124, 25 March 1999).

While not a direct reflection of the Regional Policy Statement policies on Landscape and Heritage, the Regional Coastal Plan (Coastal Plan) includes provisions relating to the natural character and amenity values of the coastal marine area and also relating to views to and from the coastal marine area. These provisions are beneficial in terms of landscape protection.

Of more direct relevance to the Regional Policy Statement, the Coastal Plan includes provisions that aim to protect significant cultural and heritage features, which are located in the coastal marine area, from the adverse effects of use and development. Further the Coastal Plan includes provisions which support any initiatives to improve public access to and along the coastal marine area. As the coastal marine area is an important recreational resource, these policies are important in achieving the objectives and policies of the Landscape and Heritage Chapter.

District Plans

As noted, the Landscape and Heritage Chapter is split into three general policy sections. Each section anticipates a significant role for the Region's district plans.

Generally all of the district plans contain policies which address landscape issues. However, the plans do not identify the landscapes as necessarily being of regional significance rather of significance more generally.

The landscape policies are implemented by several methods. Some territorial authorities use the schedules of significant sites referred to in the ecosystem section and impose relevant resource consent conditions on development on these sites. Three territorial authorities have identified specific "landscape protection areas" with specific policies and development standards associated with them. Other territorial authorities have marked specific ridgelines on their planning maps and have included rules restricting development in the vicinity of these features.

The heritage aspects of the Regional Landscape and Heritage Chapter expects that territorial authorities will recognise these values in their decision making and avoid, remedy or mitigate potential effects on them. In this regard all of the territorial authorities have included heritage registers in their plans and impose some form of restriction on the development of these resources. However there is some variation in the activity status of modification to these heritage items. For example, some councils simply impose permitted activity standards while others require developers to apply for resource consent. Within some district plans the activity status may also vary depending on the degree of modification proposed.

The recreation policies in the RPS refer to the need to protect existing recreation areas and promote future recreation opportunities. The district plans all address these issues well through a range of provisions including esplanade reserve and strip requirements, financial contribution rules and recreation or open space zoning.

8.5.2 Implementation of Methods

Table 8.1 provides an assessment of the implementation of the methods in the Soils and minerals Chapter of the RPS. Ticks in the right hand column indicate that a method is being implemented satisfactorily. A cross in the right hand column indicates that a method, or part of a method, is not being implemented satisfactorily.

Following a hearing of public submissions, the Regional Council has chosen not to implement Method 1 (Regional Landscape Plan). The method might be considered implemented unsatisfactorily. However, the process undertaken with regard to Method 1 represents satisfactory implementation of that method, the Council's decision to withdraw the Regional Landscape Plan means that it is unable to satisfactorily implement Methods 3-5. These methods relate to advocacy of the values associated with the regionally outstanding landscapes. As these landscapes have not been identified it is difficult to adequately implement such methods.

The remaining methods are all being implemented satisfactorily although Method 9 will not be implemented until 2002/03.

8.5.3 The Effectiveness of Policies and Methods

Table 8.2 provides a summary of the effectiveness of the policies and methods in meeting the objectives of the Landscape and Heritage Chapter.

The table indicates that Policies 1-4, and their associated methods, have in part been ineffective in achieving the objectives of the Chapter. The main reason for this is that the regionally outstanding landscapes,

which the policies and the objective aims to protect have not been identified.

With regard to the regionally outstanding natural features, which importantly have been identified, it is difficult to gauge the success of the policies and methods as no information is available on the current state of the features ("Measuring Up", WRC 1999). It is therefore suggested that a new method be added to the Chapter which ensures that this information is gathered.

Policies 5 and 6, which relate to the management of regionally significant cultural heritage resources have been effective to a certain extent. However, consideration of the most significant method, Method 9 (Regional Heritage Plan) has had to be postponed because of the current national review of heritage management. This review has also stalled the Heritage Liaison Group established by the Regional Council.

Policy 7 has also only been of limited effect as there has been significant development pressure placed on the Regional Council's recreation land from the current road upgrades being undertaken on the Region's strategic road network. Cumulatively these road upgrades have resulted in, or will result in, a reduction in the quality of what is an important regional recreation resource.

8.6 Anticipated Environmental Results

There are three Anticipated Environmental Results (AER) in the Landscape and Heritage Chapter.

AER (1) *The adverse environmental effects of activities on regionally outstanding landscapes and nationally and regionally outstanding natural features are avoided, remedied or mitigated.*

There are two significant concerns relating to this AER. First, the Council cannot achieve that part relating to regionally outstanding landscapes because the regionally outstanding landscapes have not been identified. Second, it is not clear whether that part relating to outstanding natural feature has been achieved because, as "Measuring Up" notes, there is no information on the current state of the natural features.

AER (2) *The heritage values attached to any regionally significant cultural heritage resource are recognised and adverse effects on them avoided, remedied or mitigated.*

"Measuring Up" notes that the survival rate of the Category 1 (regionally significant) heritage buildings has been relatively healthy during the period since the Regional Policy Statement was written. However, the Regional Council's role in this effort has been somewhat limited as a result of the national review of the heritage management.

AER (3) *Regional recreational amenity values are maintained and enhanced.*

Generally, through the efforts of the Regional Council and the Region's territorial authorities the amenity values associated with the region's recreational resources has been maintained and enhanced. However as noted already, the region's recreational resource, particularly the Regional Council's recreation lands, has come under some pressure from the current round of roading upgrades on the Region's strategic road network.

Table 8.1. Assessment of the Implementation of Methods in the Landscape and Heritage Chapter of the RPS

Methods	**Assessment of Implementation**	satisfactory / unsatisfactory
Method 1: *Prepare a regional plan for the outstanding natural features and landscapes of the Region, including those of significance to the tangata whenua.*	Method 1 has been implemented to the extent that the Proposed Regional Landscape Plan was notified and the submissions on it were heard. However in response to these submissions the Proposed Plan was withdrawn. The withdrawal of this Plan means that it is difficult for the Regional Council to effectively implement any of the methods of this chapter which make reference to "regionally outstanding landscapes". The comments that follow should be read with this qualification in mind.	x
Method 2: *Investigate landscape character assessment as a tool for identifying valued aspects of regionally outstanding landscapes*	Method 2 has been implemented as part of the preparation for the Proposed Regional Landscape Plan.	✓
Method 3: *Discourage development which is not in keeping with the character of any regionally outstanding landscape through comments on district plans and consent applications to territorial authorities.*	The Regional Council uses a variety of means to implement this method. Most notably it makes submissions on landuse and subdivision consents, and on district plans within the Region. However, the Council has and will continue to have difficult satisfactorily implementing this method until the regionally outstanding landscapes are adequately identified.	x
Method 4: *Advocate for the sustainable management of regionally outstanding landscapes and regionally and nationally outstanding landforms, geological features, soil sites and other natural features.*	The Regional Council has advocated for the sustainable management of these landscapes and natural features through the Proposed Regional Landscape Plan and the landscape guidelines project. The Council also advocates for the protection of the landscapes and natural features through its submissions on District Plans and subdivision and landuse consent applications. However, the Council has and will continue to have difficult satisfactorily implementing this method until the regionally outstanding landscapes are adequately identified.	x

Methods	**Assessment of Implementation**	satisfactory / unsatisfactory
Method 5: *Encourage the protection of privately owned land which is, or is a part of, a regionally outstanding landscape or a nationally or regionally outstanding landform, geological feature, soil site or other natural feature.*	The Regional Council has encouraged the protection of private land through the Key Native Ecosystems programme. Proposed funding to assist landowners wishing to legally protect areas on their land should advance this effort further. It should be noted that this effort is not being made to protect land which is part of a regionally outstanding landscape or a outstanding natural feature. The Council is unable to fulfil this method with regard to regionally outstanding landscapes because these have not been identified.	x
Method 6: *Where appropriate, prepare regional plans or management plans for landscapes or areas of open space which require management or protection, including on its own land, and include in relevant regional plans (such as a Regional Coastal Plan) provisions for the management of landscape values*	No Regional Plans have been prepared in response to this method because it is not appropriate to do so. In the preparation of Management Plans for Regional Council land landscape values have been considered (the "signature" assessment technique has been used). The Regional Coastal Plan includes landscape provisions.	✓
Method 7: *Investigate adopting the New Zealand Charter for the Conservation of Places of Cultural Heritage Value to guide any heritage conservation activities it carries out.*	This method was investigated and the adoption of the charter was subsequently rejected. (Report 98.280, 18 June 1998).	✓
Method 8: *Provide for the management and conservation of any cultural heritage values relating to any land it owns and for the recognition and protection of these values in any plan it prepares (including a Regional Coastal Plan) and through the consent granting process.*	The management and conservation of any cultural heritage values is well integrated into the management of Regional Council land. These values have also been included in plans that the Regional Council has prepared, including the Proposed Regional Coastal Plan. The issues on the resource consenting process are discussed with regard to Methods 12 and 13.	✓
Method 9: *Investigate the need for, and prepare if necessary, a regional plan for regionally significant cultural heritage matters.*	Investigation of the need for a Regional Plan for regionally significant cultural heritage matters has been delayed until 2002/03. It was decided that investigating the need of this Plan before this date would be premature because the management of cultural heritage across the country is being reviewed.	✓

Methods	**Assessment of Implementation** satisfactory / unsatisfactory	
Method 10: *Co-operate, where appropriate, with the Historic Places Trust and other relevant agencies to conserve the heritage values of places, sites and structures which are considered to be of regional significance, including sharing information and using its powers as a Heritage Protection Authority as appropriate.*	The Regional Council has worked closely with the New Zealand Historic Places Trust. In addition the Council established a Heritage Liaison Group containing representatives from the NZHPT and other heritage professionals. This has stalled over the last 18 months as result of the impending review of heritage management. The Regional Council continues to work with NZHPT on a case by case basis.	✓
Method 11: *Collect and maintain the information necessary to enable the Council to undertake its heritage policy and heritage protection authority functions.*	The role of the Heritage Liaison Group was to facilitate the flow of information. The NZHPT continues to provide regular updates of information to the Regional Council.	✓
Method 12: *Recognise the New Zealand Historic Places Trust as an affected person in relation to any non-notified resource consent which affects a Category 1 heritage resource on the Register of Historic Places, Historic Areas, Wahi Tapu and Wahi Tapu Areas.*	The Regional Council's Consent Management Department has an agreement with NZHPT which reflects this method.	✓
Method 13: *Require, where relevant, that an assessment of effects, undertaken as part of an application for a resource consents affecting a cultural heritage resource of regional significance, has regard to its heritage values.*	The relevant provisions within the Proposed Regional Coastal Plan direct applicants to have regard to heritage values, where relevant, when undertaking activities within the coastal marine area. The Regional Council also submits on district plans and subdivision and landuse consents within the region to ensure that this method is met.	✓
Method 14: *Continue to provide and manage a range of recreational facilities (including regional parks) for the purposes stated in the Local Government Act 1974 and the Wellington Regional Water Board Act 1972, including the management and protection of natural features, landscapes, and cultural values.*	The Regional Council actively promotes manages and promotes recreational opportunities on land that it administers. This land includes significant landscapes, natural features and areas of cultural value.	✓
Method 15: *Prepare, if necessary, a regional plan to promote regional recreational amenity and to manage the adverse effects of recreation on the environment.*	The Council has investigated and rejected the need for a regional plan to promote regional recreational amenity and to manage the adverse effects of recreation on the environment (Report 98.204, 18 June 1998).	✓

Methods	**Assessment of Implementation**	satisfactory / unsatisfactory
Method 16: *Prepare, if necessary, inventories of regional recreational opportunities, resources, and facilities*	In recent years the Regional Council has focussed on improving the management of the land resources that it already owns or manages. The Council has not felt that it is necessary to prepare an inventory such as that referred to in method 16. However, it has prepared the Parks and Forests Asset Management Plan to ensure recreational, environmental and heritage assets on land it administers are maintained and prudently managed.	✓
Method 17: *Advocate for the preservation of recreational opportunities of a regional nature for future generations, particularly where they are vulnerable to irreversible effects.*	The Regional Council advocates for the preservation of recreational opportunities through its submissions on district plans, subdivision and landuse consents, and designation requirements within the Region. The Council has identified new regional parks to further enhance the recreational opportunities available to future generations/	✓
Method 18: *District plans would be an appropriate means of providing for Landscape and Heritage Policies 1 to 8.*	The Regional Council advocated these policies be implemented within the Region's district plans through its submissions on those plans.	✓
Method 19: *To achieve integrated management, other means which could be used to implement Landscape and Heritage Policies 1 to 6 and 8 include:* *(1) Protecting regionally outstanding landscapes and nationally or regionally outstanding landforms, geological features, soil sites and other natural features through covenants under the Reserves Act 1977 (s. 77) and with the Queen Elizabeth II National Trust;* *(2) The voluntary retirement of land, assisted, where necessary, through rate remission under the Rating Powers Act 1988; and* *(3) The use of other mechanisms by territorial authorities to protect regionally outstanding landscapes from inappropriate development.*	The Regional Council has advocated the use of the mechanisms referred to in method 19 through its submissions on district plans, landuse and subdivision consents and designation requirements.	✓

Table 8.2. Effectiveness of Policies and Methods in Meeting Objectives in the Landscape and Heritage Chapter of the RPS

Objectives	Policies	Effectiveness of Policies and Methods	satisfactory / unsatisfactory
Objective 1: *Nationally and regionally outstanding geological features, landforms, soil sites and other natural features of the Region are protected from inappropriate subdivision, use and development* **Objective 2:** *Adverse effects of human activities on the Region's natural and physical resources are avoided, remedied or mitigated so that the quality of any regionally outstanding landscapes which those resources contribute to is maintained.*	**Policy 1:** *To manage the use, development, and protection of natural and physical resources in ways which recognise and respect their contribution as elements of regionally outstanding landscapes*	Policy 1 is implemented by Methods 1-6, 18 & 19. As table 8.1 indicates the implementation of these methods has been limited by the fact that the Proposed Regional Landscape Plan has been withdrawn. Until the regionally outstanding landscapes are identified in a statutory document the effectiveness of Policy 1 and the related Methods will be limited.	x
Objective 1: **Objective 2:** **Objective 4:** *The attributes of natural and physical resources which provide for regional recreational opportunity, and for the appreciation and enjoyment of those resources by the regional community, are maintained or enhanced*	**Policy 2:** *To avoid, remedy, or mitigate the adverse effects of subdivision, use, and development on regionally outstanding landscapes, and nationally and regionally outstanding landforms, geological features, soil sites, and other natural features*	Policy 2 is implemented by Methods 1-6. The comments above are relevant in relation to that part of Policy 2 which deals with regionally outstanding landscapes. The explanation to Policy 2 identifies reference documents within which the regionally outstanding natural features are identified. About 40% of those features which are at risk from human activity have also been identified in district plan providing a further level of protection. However the State of Environment report notes that there is no information available on the current state of the regionally outstanding natural features. It may therefore be appropriate to include a method which ensures that this information is collected.	x

Objectives	Policies	Effectiveness of Policies and Methods	satisfactory / unsatisfactory
Objective 2:	**Policy 3:** *To manage the use, development and protection of outstanding landscapes of significance to the tangata whenua*	Policy 3 is implemented by Methods 1-6, 18 & 19. The Regional Council has undertaken work to identify those landscapes of value to the tangata whenua as part of the preparation for the Regional Landscape Plan and as part of the landscape guideline project. However, because the Regional Landscape Plan has been withdrawn, the effectiveness of Policy 3 and the relevant methods is limited.	x
Objective 1: **Objective 2:** **Objective 4:**	**Policy 4:** *To promote the maintenance and enhancement of the amenity and intrinsic values of regionally outstanding landscapes, and of nationally and regionally outstanding landforms, geological features, soil sites, and other natural features*	Policy 4 is implemented by Methods 1-6 and 15-19. The comments made on Policies 1 & 2 are relevant.	x
Objective 3: *The cultural heritage of the Region which is of regional significance is:* *(1) Recognised as being of importance to the Region;* *(2) Managed in an integrated manner with other resources; and* *(3) Conserved and sustained for present and future generations*	**Policy 5:** *To recognise, when planning for and making decisions on new subdivision, use, and development, the heritage values of regionally significant cultural heritage resources and to manage those heritage resources in an integrated manner with other natural and physical resources*	Policy 5 is implemented by Methods 7-13. The Policy and the relevant Methods have had some effect in relation to Objective 3. Most notably the explanation to Policy 6 identifies those cultural heritage resources of regional significance. However, as the State of the Environment Report notes, the Regional Council's ability to advocate for the heritage values of the regionally significant cultural heritage resources has been limited as many of the resource consent applications have not been notified to the Council. The Territorial Authorities have shouldered most of the responsibility for the management of these heritage resources and have responded well with regard to regionally significant buildings. The Regional Council's role in the management of cultural heritage of regional significance remains uncertain because the management of heritage resources continues to be under review at the national level.	✓

Objectives	**Policies**	**Effectiveness of Policies and Methods** satisfactory / unsatisfactory	
Objective 3:	**Policy 6:** *To avoid, remedy or mitigate the adverse effects of subdivision, use and development on regionally significant cultural heritage resources.*	Policy 6 is implemented by Methods 7-13. The comments above are relevant.	✓
Objective 4:	**Policy 7:** *To manage and protect existing recreational opportunities of regional significance*	Policy 7 is implemented by Methods 6 & 14-17. In accordance with these methods the Regional Council has continued to maintain and enhance those recreation opportunities for which it has management responsibility. The Council has also used advocacy and worked with other organisations to encourage the appropriate management of other recreation opportunities. The maintenance of the values associated with some of the regionally significant recreational opportunities has come under pressure from development within the Region, particularly from road construction.	✓
Objective 1: **Objective 4:**	**Policy 8:** *To promote, on behalf of future generations, the protection of the potential for recreation of open space, indigenous and exotic vegetation, water bodies, the coast, and regionally outstanding landscapes, and any other regionally or nationally outstanding natural features*	Policy 8 is implemented by Methods 6 and14-18. In accordance with this Policy and related Methods the Regional Council has continued to advocate for potential recreational opportunities on its own and other land. Examples include the provision of esplanade reserves and strips, ensuring the maintenance and enhancement of access to the coast and existing reserves, and encouraging the provision for open space within district plans. The Council has identified new regional parks for future enhancement of recreational opportunities and the environment. The Council has also identified environmental enhancement projects on existing parks and forests.	✓

9 Natural Hazards

9.1 Summary

The Issues and objectives of the Natural Hazards Chapter of the RPS remain appropriate. The policies and methods are effectively meeting the objectives at the present time. Over the next five years it will be important to continue implementing the policies and methods to maintain the present rate of progress. No changes to the RPS are necessary.

9.2 Background

The Council has specific responsibilities for natural hazards relating to flooding and soil conservation. It implements these through its operational departments, namely the Flood Protection Department, based in Wellington, and the Operations Department, based in the Wairarapa. The Council also has a regulatory role under the Resource Management Act 1991 for control of the use of land for the purpose of avoiding or mitigating natural hazards. The Environment Division in Wellington and Planning and Resource Department in the Wairarapa carry out this role. The Council is also responsible for Emergency Management in the Region in terms of the Civil Defence Act 1983. The Emergency Management Department implements this responsibility.

Territorial authorities also have responsibilities relating natural hazard management that stem from the Resource Management Act and other legislation. It is against this backdrop of responsibilities that the RPS is considered.

9.3 Issues

There are 6 issues identified in the RPS for natural hazards. These are briefly outlined below:

1 Susceptibility of the region to a range of natural hazards;

2 Acceptable levels of risk are generally unknown;

3 Inadequate information on natural hazards;

4 Human actions impact on the frequency and magnitude of natural hazard events;

5 The frequency and magnitude of natural hazard events may be affected by climate change;

6 People and communities of the region are generally inadequately prepared for natural hazard events.

Issue 1 of the RPS is extant, as, regardless of any mitigating factors or available information, the region will always be susceptible to a range of natural hazards due to its physical location and the existence of developed communities of people within the region. More information regarding natural hazards is becoming available as research continues. This is helping to reduce the risks and to assist in planning and preparedness and also to help in the response and recovery phase of a natural hazard occurrence. This information and the ramifications of its dissemination will be a factor in reducing the susceptibility of communities but will not eliminate susceptibility. This issue remains relevant.

The appropriateness of Issue 2 as it relates to “unknown levels” of “acceptable” risk is considered relevant as these levels

continue to be difficult to discern. Acceptable risk levels pertain directly to the communities that are at risk from the particular hazard. Through effective consultation, communities should be able to direct those responsible, i.e. councils, to implement strategies that effect acceptable levels of risk, for instance, the construction of flood protection walls. Within the constraints of economics, ecological sustainability and regulatory responsibility, not all relevant issues can be satisfied. Also, acceptable risk levels are changing as development continues and as societal attitudes evolve. Therefore, the understanding of what constitutes the concept of an acceptable level of risk may be developing, but a quantitative or qualitative discernment is ever changing hence establishing Issue 2 as appropriate.

The inadequate information relating to natural hazards as outlined in Issue 3, continues to be a relevant facet of hazard mitigation and planning. Ever changing technology and information availability in the face of complex systems will warrant the continuation of analysis so as to improve accuracy and reliability of existing information as well as to breach new areas of relevant concern. Research is ongoing as we continue our endeavours toward safeguarding communities from the adverse effects of natural hazards.

Human actions impacting on the frequency and magnitude of natural hazard events will continue as development and manipulation of the natural environment occurs. Issue 4 continues to be relevant and appropriate.

Climate change is an ongoing global concern. Regional implementation of a globally collective strategy to safeguard the well being of the world population will be essential if such a strategy is to be effective. Recent data showing the two previous years as being the warmest on record advocate Issue 5 as being appropriate and should be addressed in the RPS.

Issue 6 of the RPS states that people are generally inadequately prepared for natural hazard events. Recent Y2K experiences may have advanced the preparedness concept with the general population but continued apathy is likely. This lack of forward planning for disaster events remains a serious issue to be considered in the RPS.

The issues outlined in the RPS give a general overview of the facets associated with natural hazards that are of concern in the regional context. These issues reiterate the responsibilities of the Wellington Regional Council in its function of reducing the impacts of natural hazard occurrences. All of the issues remain relevant with no further issues requiring inclusion in the RPS.

9.4 Objectives

The objective as stated in the RPS to address the issues concerning natural hazards for the region is:

Any adverse effects of natural hazards on the environment of the Wellington Region are reduced to an acceptable level.

This objective is directly related to Issues 1 and 2 of the RPS and indirectly related to Issues 3 to 6. As Issue 2 is considered appropriate, i.e. “acceptable levels of risk are generally unknown”, it follows that the discernment of acceptable levels is necessary to achieve the objective. Issues 3 to 6 are important considerations when ‘acceptable levels’ of risk are being ascertained. The appropriateness of this objective remains relevant as it relates to the previously discussed issues, states

how the issues can be resolved and gives a state to which levels of adverse effects should be reduced to.

9.5 Policies and Methods

9.5.1 Regional and District Plans

Regional Plans

There are 5 regional plans, namely, the Coastal Plan, the Freshwater Plan, the Discharges to Land Plan, the Soil Plan and the Air Plan. All of these regional plans contain provisions relating to natural hazards that implement the RPS to varying degrees. They all include specific provisions, including rules that will help manage natural hazards when activities are planned that could increase risk. Hazards specifically addressed in plans include tsunami, erosion, landslip, subsidence, sedimentation, drought, fire and flooding. Each plan identifies matters that the Council needs to consider when it is making resource management decisions. In addition, the regional plans contain non-regulatory methods that the Council will take to implement its natural hazard responsibilities.

District Plans

The RPS breaks the role of territorial authorities into two parts. First, it anticipates that territorial authorities will use their district plans to ensure that there is sufficient information available on natural hazards to guide decision making. Second, it identifies a series of natural hazard related issues that the territorial authorities need to consider when they are making resource management decisions.

All of the territorial authorities provide some form of hazard information through their district plans. Most commonly this is done by identifying areas susceptible to inundation or fault rupture on the planning maps. However the method of marking this information is not consistent throughout the plans. For example, in relation to fault rupture some councils include a wide fault band to allow for inaccuracies in the information while others mark only what is expected to be the location of the fault. Further some councils have chosen to only map the larger faultlines rather than all those known in their district. Finally, the scale that the information is presented at limits the value of some of the mapping.

Differences also occur between the methods used to represent flood hazard information. Some councils have chosen to mark the 1% flood extent in their districts, while one council has given much more detail by splitting the areas susceptible to inundation into river corridors, secondary flow paths and ponding areas. A third council has chosen not to specifically identify the flood hazard within their district because of concern about the impacts on private property rights. Having said this, their district plan does include a river zone, one of the purposes of which is to restrict development within the flood paths of their major rivers.

As mentioned in the section on the coastal environment, several councils use some form of coastal strip to identify those areas susceptible to coastal hazards, particularly coastal erosion.

The RPS recognises that the provision of hazard information is not just a territorial authority responsibility. The Council also has responsibility to collect and hold such information. Therefore there clearly needs to be an effort to share the information that the Regional Council has with the territorial authorities so that they can provide the most up-to-date and

accurate advice. This is particularly important for the PIM and LIM responsibilities that territorial authorities fulfil under the Building Act.

The provisions in the district plans associated with this hazard information, ie policies and rules, require a range of natural hazard issues to be considered as part of the consent process. In fact, while the information within their maps maybe limited to flooding and faultline hazards, several of the territorial authorities address a wider range of natural hazards through their policies. This includes tsunamis, wind hazards and land slippage.

Implementation of these policies is done by requiring consent for specific activities within the hazards areas. However the type and scale of activity that requires consent varies considerably. For example, in territorial authorities earthworks are more stringently controlled in flood areas, but this is not consistent throughout the Region. Further, not all of the hazards identified in the policies are supported by rules requiring resource consent. This is most commonly the case for tsunami hazard, and probably reflects uncertainty about this hazard.

Generally, where resource consent is required for activities within the hazards areas the district plans require consideration of mitigation measures (eg raised floor levels) and where relevant alternative, including building design. These provisions reflect the requirements that the territorial authorities are expected to meet under section 106 of the Resource Management Act, as much as the provisions of the RPS.

The district plans also refer to several non-regulatory means of addressing natural hazards, including the building consent process, civil defence work and advocating public preparedness.

9.5.2 Implementation of Methods

Table 9.1 provides an assessment of the implementation of the methods in the Natural Hazards Chapter of the RPS. Ticks in the right hand column indicate that a method is being implemented satisfactorily. A cross in the right hand column indicates that a method, or part of a method, is not being implemented satisfactorily.

There are 15 Methods. Table 9.1 indicates that all of these are being implemented satisfactorily with the exception of Method 4. This method is for the identification of areas in the Region which are susceptible to coastal erosion and inundation. While no systematic region-wide approach has been taken, the areas most at risk are known and territorial authorities are addressing localised issues. There are unlikely to be detrimental implications of not having carried out the work now or in the next 3 years but it should be programmed at some time in the future.

9.5.3 Effectiveness of Policies and Methods

Table 9.2 provides a summary of the effectiveness of policies and methods in meeting the objectives of the Natural Hazards Chapter of the RPS. Ticks in the right hand column indicate that the policies and their associated methods are effectively meeting the objective(s). A cross in the right hand column indicates that the policies and methods, or a component of them, are not effective.

Table 9.2 indicates that the policies and methods of the Natural Hazards Chapter of the RPS are effective in achieving the objectives.

9.6 Anticipated Environmental Results

The Anticipated Environmental Results (AERs) in the Natural Hazards Chapter of the RPS are outlined below

AER (1) *The adverse environmental effects arising from natural hazards are minimised as far as possible*

AER (2) *Risks to existing subdivision, use and development are identified, and mitigation measures implemented where appropriate*

AER (3) *New development in hazard prone areas occurs only after explicit consideration of the natural hazard aspects of the proposals*

AER (4) *People and communities in the Region are better prepared to cope with the occurrence of natural hazard events.*

Regarding AER (1), it may always be possible to further reduce risks associated with some natural hazards. Risk identification and mitigation is ongoing. However, on the basis of the hazard events that have occurred in the Region over the last 5 years, and considering the impacts on the communities in the region, this AER is being met.

Regarding AERs (2) &(3), we know that risks associated with new and existing developments have been identified and mitigation measures considered and implemented where we have considered it to be cost effective. Explicit consideration is given to potentially adversely affected development where appropriate.

Regarding AER (4), the availability of more information about hazards and the interest people and communities have shown that some progress has been made in helping people prepare for natural hazard events. The Y2K lead up programme with the community went a long way toward focussing individuals on personal resilience in response to disaster situations.

Table 9.1. Assessment of the Implementation of Methods in the Natural Hazards Chapter of the RPS

Methods	Assessment of Implementation	satisfactory / unsatisfactory
Method 1: *The Wellington Regional Council will complete flood hazard assessments on all major floodplains in the Region. The assessments will include an analysis of the potential effect of flooding events.*	Flood plain assessments are carried out in the initial stages of the formulation of flood plain management plans. For the western region, flood hazard assessments have been completed for the Otaki, Waikanae, Hutt, Omata, Porirua and Waiwhetu Rivers. Other major river assessments are programmed for completion. In the Wairarapa, the Huangaroa, Tauhernikau and Kopuaranga are the only major floodplains that have not been assessed. These flood plains are due to be mapped in the next three years. Copies of existing flood hazard maps have been incorporated into district plans. This method is being implemented satisfactorily.	✓
Method 2: *The Wellington Regional Council will complete regional scale assessments of the various components of seismic hazard including surface fault rupture, ground shaking, tsunami, liquefaction and ground damage, landslides, and locally significant hazards.*	Seismic hazard has been progressively assessed over the preceding years with hazard maps of liquefaction, groundshaking, slope failure and fault lines completed in 1996. A tsunami hazard scoping study is scheduled for the next financial year, looking at impacts on specific sites in the Wairarapa and Kapiti Coasts. This method is being implemented satisfactorily.	✓
Method 3: *The Wellington Regional Council will continue to identify and investigate the risks from slope instability within areas of greatest development or development potential within the Region.*	A Slope failure hazard map was produced in 1995, as part of the seismic hazard map series, which identified areas of likely landslide potential. This method is being implemented satisfactorily.	✓
Method 4: *The Wellington Regional Council will identify those areas in the Region which are susceptible to coastal erosion and inundation. The work will concentrate on the areas of greatest development or development potential.*	No systematic approach has been initiated to address this method at a regional level. However, a number of localised issues have been addressed at territorial authority level, with some summary analysis carried out by the Wellington Regional Council in the Wairarapa coastal region. A Tsunami study has been carried out for Wellington.	X
Method 5: *The Wellington Regional Council will undertake a scoping study on the hazards of wild fire, severe wind, tsunami and drought and set priorities for more detailed investigations of these hazards if the scoping study shows this to be warranted.*	A wild fire study was completed in 1997. A Tsunami scoping study is planned for 2000/2001 financial year. Drought and severe wind will be considered in a severe meteorological hazard study scheduled in the Operating Plan for 2001/2002. This method is being implemented satisfactorily.	✓

Methods	**Assessment of Implementation** satisfactory / unsatisfactory	
Method 6: *The Wellington Regional Council will periodically review the current knowledge on climate change and possible effects on natural hazards.*	A review of climate change was carried out and a report was completed in 1999. This method is being implemented satisfactorily.	✓
Method 7: *The Wellington Regional Council will make information it has on natural hazards available to the people and communities of the Wellington Region.*	Information on natural hazards is provided free of charge to people and communities of the Wellington Region. This is carried out on an as requested basis with some information, particularly the earthquake hazard maps, made available on the WRC internet home page. A hazard register project is currently being scoped, aiming to present hazard information on the WRC web page through a spatial query database. The method is being implemented satisfactorily.	✓
Method 8: *The Wellington Regional Council will encourage and assist, where possible, territorial authorities to investigate natural hazards within their districts. These investigations should include flood hazard assessments for land in floodways managed by territorial authorities (including watercourses managed by agreement with the Wellington Regional Council) and seismic hazard and landslip studies at a greater level of detail than provided for in the regional scale studies.*	The Council assists with territorial authority investigations, having developed flood hazard assessments as described at Method 1 with further assessments programmed. Council data regarding seismic and landslip studies has been provided to territorial authorities when requested. Further research interaction should be developed through more formal channels between territorial authorities and the Regional Council. This issue is likely to be addressed with the advent of impending Civil Defence / Emergency Management legislation. This method is being implemented satisfactorily but there is plenty more to do.	✓
Method 9: *The Wellington Regional Council will, in situations where it is the consent granting authority, require applicants for resource consents to include, in their assessment of effects, the risks posed by natural hazards. The level of assessment should be appropriate to the potential consequences of the hazard and the location of the activity in relation to known natural hazards.*	This method is being implemented satisfactorily through the ongoing processing of resource consents.	✓
Method 10: *The Wellington Regional Council will use its information on natural hazards to identify the risks to existing development and ways in which these can be reduced.*	The development of flood plain management plans around the region, ensuring that appropriate hazard information is included in district plans and commissioning research that identifies areas that are prone to the adverse effects of natural hazards ensures that the Council continues to implement the "identification of risks" function of this method. Risk reduction is carried out by considering the impacts of hazards when granting consents and through appropriate hazard zoning in district plans. The method is being implemented satisfactorily	✓

Methods	**Assessment of Implementation**	satisfactory / unsatisfactory
Method 11: *The Wellington Regional Council will implement measures directly within its power to ensure risk levels are acceptable. This will involve the Council exercising its functions, powers, and duties under the legislation which governs its operations. The cost effectiveness of any measures must be acceptable to the Council.*	The Council, within its budgetary constraints, has continued to implement flood control measures and soil conservation control measures where appropriate. Risk reduction through response and readiness to civil emergencies also continues to be implemented. The method is being implemented satisfactorily	✓
Method 12: *The Wellington Regional Council will, in consultation with major regional civil defence responding organisations, territorial authorities and other interested parties, prepare a five year strategy to inform people and communities in the Region about the ways in which they can prepare for the occurrence of natural hazard events.* *In developing the strategy consideration will be given to:* *(1) The various means available to inform the public including advertising programmes, brochures, presentations to schools and interest groups, signs, and the provision of reports;* *(2) The actions that people can and should take to prepare themselves for the occurrence of natural hazard events;* *(3) Funding implications; and* *(4) Identification of the appropriate agencies to implement the strategy.*	An emergency management marketing strategy was produced in 1998. The aims in this strategy have not been developed specifically, but all the other parts of Method 12 are being carried out at present through ongoing work. Further developments are ongoing with a Hazard Register project being scoped at present. This method is being implemented satisfactorily but there is still more to do in the next 5 years.	✓
Method 13: *The Wellington Regional Council will ensure that the risks from natural hazards to its own assets and operations are minimised. Where significant risks still exist, the Council will prepare contingency plans to ensure that essential operations can continue to function following a major natural hazard event. The Council will also ensure that, as far as practicable, it is covered by insurance against damage from natural hazard events.*	The Council has considered the risk associated with natural hazards and the potential impacts on its own assets and operations. Where appropriate, earthquake strengthening has taken place and re-routing pipe lines has been considered. Contingency plans have been made in the form of self insurance and fund access should the need arise in the case of a major hazard event. This method is being implemented satisfactorily.	✓

Methods	**Assessment of Implementation** satisfactory / unsatisfactory	
Method 14: *The Wellington Regional Council will implement natural hazards policies, as appropriate, through regional plans.*	As discussed in section 9.5.2 of this report the Council's regional plans include relevant provisions regarding natural hazards.	✓
Method 15: *District plans would be an appropriate means of implementing Natural Hazards Policies 1 and 2.*	The Council has advocated it natural hazards policies in district plans and will continue to do so through district plan changes.	✓

Table 9.2. Effectiveness of Policies and Methods in Meeting Objectives in the Natural Hazards Chapter of the RPS

Objectives	Policies	Effectiveness of Policies and Methods	satisfactory / unsatisfactory
Objective 1: Any adverse effects of natural hazards on the environment of the Wellington Region are reduced to an acceptable level.	**Policy 1:** *To ensure that there is sufficient information available on natural hazards to guide decision making*	Policy 1 is implemented by Methods 1-8 and 15. Table 9.1 indicates that the implementation of these methods is satisfactory with the exception of Method 4. However, the lack of implementation of Method 4 is not an immediate concern and does not detract from the effectiveness of the policy at this stage. Research is ongoing with completed studies being provided to local authorities. Some local authorities complete their own research. All studies are made available to the public. Researched reports are taken into consideration when planning and policy decisions are made. Research can always be improved upon as knowledge and technology advances. Further work required in making information more available – marketing or packaging of information can be improved. Further implementation of the policy is an ongoing process.	✓
Objective 1:	**Policy 2:** *To consider all of the following matters when planning for, and making decisions on, new subdivision, use, and development in areas which are known to be susceptible to natural hazards:* *(1) The probability of occurrence and magnitude of the natural hazards, and the location of the effects, including any possible changes which might arise from climate change;* *(2) The potential consequences of a natural hazard event occurring, both on-site and off-site. Potential loss of life,*	Policy 1 is implemented by Methods 9, 10, 14, and 15. Table 9.1 indicates that the implementation of these methods is satisfactory. This policy is a particularly important one in the Natural Hazards Chapter of the RPS because it identifies key criteria for consideration when resource consents are applied for to carry out activities with implications for natural hazards. Hence it is important that ongoing implementation occurs.	✓

Objectives	Policies	Effectiveness of Policies and Methods	satisfactory / unsatisfactory
	injury, social and economic disruption, civil defence implications, costs to the community, and any other adverse effects on the environment should be considered; *(3) The measures proposed to mitigate the effects of natural hazard events, the degree of mitigation they will provide, and any effects on the environment from adopting such measures;* *(4) Alternative measures that might be incorporated into the subdivision, use and development to mitigate the effects of natural hazard events, the degree of mitigation they will provide, and any effects on the environment from adopting such measures. Both structural and non-structural measures should be considered;* (5) The benefits and costs of alternative mitigation measures; (6) The availability of alternative sites for the activity or use; and *(7) Any statutory obligations to*		

Objectives	Policies	Effectiveness of Policies and Methods	satisfactory / unsatisfactory
	protect people and communities from natural hazards		
Objective 1:	**Policy 3:** *To recognise the risks to existing development from natural hazards and promote risk reduction measures to reduce this risk to an acceptable level, consistent with Part II of the Act*	Policy 3 is implemented by Methods 10 and 11. Table 9.1 indicates that the implementation of these methods is satisfactory. All territorial authorities, through their district plans, require a range of natural hazards to be considered as part of the consent process, although there is a lack of consistency as to what hazards are supported by rules requiring a resource consent. Where resource consent is required within an identified hazard zone, mitigation measures are considered as part of the consent process. This policy is proving to be effective. Further review of method 11 will be required, consistent with the incumbent changes to the Civil Defence Act.	✓
Objective 1:	**Policy 4:** *To ensure that human activities which modify the environment only change the probability and magnitude of natural hazard events where these changes have been explicitly recognised and accepted*	Policy 4 is implemented by Method 9. Table 9.1 indicates that the implementation of this methods is satisfactory. The policy and method are implemented effectively via the consent process. The consideration given to the relevant natural hazards must be appropriate to the situation.	✓
Objective 1:	**Policy 5:** *To encourage people and communities to prepare for the occurrence of natural hazard events by providing them with relevant information and advice.*	Policy 1 is implemented by Methods 1-8. Table 9.1 indicates that the implementation of these methods is satisfactory with the exception of Method 4. However, the lack of implementation of Method 4 is not an immediate concern and does not detract from the effectiveness of the policy at this stage. Recent public and lifeline services exposure to Y2K publicity, has heightened and focussed awareness on preparations for hazard events. This policy is seen as effective but will require ongoing publicity to sustain the current level of public understanding.	✓

10 Energy

10.1 Summary

The provisions in the Energy Chapter are soundly based. Their direction is to try and slow down the extraction rate and use of all energy sources and materials and be efficient in energy use. We should make the most of those renewable energy resources we have locally.

The issues and objectives of the Energy Chapter are appropriate. Like the Built Environment and Transportation Chapter, discussed in section 12 of this report, evaluating the effectiveness of policies and methods is complex and difficult. The policies are suitable but their effectiveness in practice relies on implementation of the methods, which is variable. The Council can control the implementation of a number of methods and some of these are being carried out satisfactorily. The implementation of other methods is largely outside our control because it relies on other organisations to carry them out.

The council could achieve more effective implementation by putting more resources into energy matters and providing greater leadership. However, it is not a primary function of the Council to do this. A major role for us is to try and influence the activities of others, particularly central government. It is unnecessary to change the RPS now. Rather our role and approach to energy matters should be reviewed, subject to public submissions, at the end of the period for the current RPS.

10.2 Background

The Resource Management Act 1991 includes energy in its definition of natural and physical resources. Therefore, it is a resource that the Council should consider in the RPS. Unlike other resources such as water, soil and air, we have no specific function relating to it. In the past, energy has been the subject of management at central government level, rather than at the regional or local level of government. Central government is where the primary focus of energy management remains. At present there is an energy policy arm in the Ministry of Commerce and the Energy Efficiency and Conservation Authority (EECA) provides independent advice to the Minister of Energy.

10.3 Issues

There are 5 Issues in the Energy Chapter of the RPS. In brief these relate to:

1 Data on energy sources and sectoral use is not generally available at the regional level

2 There are many players in the energy field

3 There is a high degree of dependence by the Region on non-renewable sources of energy

4 The production, transmission, and use of energy are not as efficient as they could be

5 There are adverse environmental effects from energy production.

Issue 1 remains appropriate. Most of the relevant data is collected and analysed by EECA. When staff prepared the State of the Environment Report it was difficult to retrieve and apply their data at the regional scale. Nevertheless, EECA information is of a sufficient quality to assist with an understanding of the type of energy spent and the sectors where it is most used.

There is no need to change Issue 2. In most large, competitive open economies, many players make up the mix to produce the goods and services that keep economies functioning and growing. Given current trends in NZ and overseas the trend of creating openness in sectors

such as energy will not decrease but accelerate in the coming years. For example, wind power companies are becoming an alternative that was only talked about 20 years ago, and are now becoming a reality.

There is no doubt that Issue 3 is still relevant. Non-renewable sources of energy make up the most important energy sectors of our economy. The Wellington Region and NZ are not alone however, as all OECD countries have non-renewable sources of energy as their core building blocks to form new growth. Alternatives are available, but not necessarily in the forms or price to make them competitive in our present economic structures.

Little has changed regarding Issues 4 and 5. Embarking on more energy efficiency programs will help reduce the greenhouse effect and other environmental effects and has the potential to reduce costs for all in the community.

10.4 Objective

There are 3 objectives in the Energy Chapter of the RPS. They follow from the issues and, because little has changed with the issues, remain desirable. The objectives are listed in Table 10.2.

10.5 Policies and Methods

10.5.1 Regional and District Plans

The relevance of the Energy Chapter to regional and district plans is closely linked with the relevance of the Built Environment and Transportation Chapter. This subsection of the report is combined with comments on the Built Environment and Transportation Chapter in section 12. 5.1 of this report. Hence, refer to subsection 12.5.1.

10.5.2 Implementation of Methods

Table 10.1 provides an assessment of the implementation of the methods in the Energy Chapter of the RPS. Ticks in the right hand column indicate that a method is being implemented satisfactorily. A cross in the right hand column indicates that a method, or part of a method, is not being implemented satisfactorily.

There are 8 methods in the Energy Chapter of the RPS. Methods 1, 3, and 4 are all methods which the Council can implement directly. They are being implemented satisfactorily. Method 4, which relies on district councils, is also being implemented satisfactorily and is commented on further in subsection 12.5.2 of this report.

Table 10.1 indicates that Methods 3, 5, and 8 are not being implemented satisfactorily. All these methods rely to a large extent on actions by other agencies as well as a lot of involvement from the Council. The open-ended nature of these methods is because it is not appropriate for the Council to direct other parties to make a commitment to take particular actions. Consequently, important initiatives for sustainable energy management are not yet happening.

Method 6, relating to discharge and other environmental standards that would reduce pollutants associated with energy has also not been implemented specifically in regional or district plans. There is very little energy production in the Wellington Region. During the preparation of regional plans there has not been much call to control discharges associated with energy production, transmission, transportation, conversion, and end use.

10.5.3 The effectiveness of Policies and Methods

Measuring the effectiveness of policies and methods in the Energy Chapter is a difficult exercise because the Council does not have sufficient information. Central government, not the Council, is the primary "manager" of energy as a natural resource. Central

government has some information but a lot of it is not easily applicable in a regional context.

Table 10.1 comments on the effectiveness of policies and methods in the Energy Chapter of the RPS. Unlike the approach in most other sections of this report, there is no evaluation of whether policies and methods are effective or not because of the lack of information. The comments below also discuss effectiveness rather than evaluate it.

Policies 1, 2 and 3 relate to moderating energy demand and increasing energy efficiency. These policies and methods are appropriate for the delivery of objective 1. Apart from some work in energy audits for the Council building, and continued liaison with personal from EECA, there is not enough information to assess their effectiveness.

Policies 4, 5 and 6 are concerned with the orderly transition to renewable and environmentally friendly energy sources. The policies, though ambitious, are appropriate for objective 2. They are difficult policies to implement, considering our present reliance on non-renewable forms of energy to run important parts of our economy, notably transport. New Zealand is not alone however, as every world nation relies on non-renewable forms of energy to run important sectors of their economies. The Regional Land Transport Strategy has been released, and it does promote existing forms of sustainable transport, and slow-growth forms of transport (cycling and walking). However, there has been no further promotion of renewable forms of energy for the transport fleet. Wind power has made an appearance in the Region with a new wind farm in the eastern Wairarapa and a wind turbine established by ECNZ at Pol Hill, above Wellington City. These developments although not directly promoted by the Council are not opposed either (the only exception was the proposed wind farm at Baring Head which was opposed on natural character grounds), indicating a general acceptance of this alternative form of energy production.

Policies 7, 8, and 9 are there to address the adverse effects of energy production, transportation, transmission, conversion, and end use. Methods relate to the establishment of discharge and other environmental standards to achieve reductions in pollutants and the creation of policies and methods in district plans to fulfil the policies. Specific standards to reduce the discharge of contaminants that are associated with energy production or any other adverse effect related to energy processes are not included in regional plans. There has been little call to include such standards For the most part the policies and methods relating to energy projects are at the national scale and guidance must come from central government.

Policy 10 emphasises improvements to our knowledge of energy use and the effects of energy use. It is to co-ordinate policies and actions aimed at achieving the sustainable management of energy. A method suggests the setting up of an energy forum to facilitate links with energy agencies like EECA to improve or create integrated management of energy policies. The Council has not set-up any such integrated links with outside agencies, other than personal links forged between individuals of the organisations concerned.

10.6 Anticipated Environmental Outcomes

There are 5 Anticipated Environmental Results (AERs) for the Energy Chapter of the RPS. They are:

(1) There is a reduced demand for all forms of energy and public needs for energy services are met.

(2) There is increased efficiency in energy use in all sectors of the economy.

(3) An increasing proportion of renewable energy sources is used.

(4) There is a decreased use of fossil fuels and an increased use of the less environmentally damaging energy sources, including those available within the Wellington Region.

(5) There is a reduction in the adverse effects attributable to the production, transportation, transmission, conversion and end use of energy.

These AERs mirror the objective set out in the beginning of the chapter. The discussions of policies and methods in 10.5.3 above are all relevant to whether the results sought are being achieved. The wording of the AERs suggest that they will be achieved if some small level of attainment is met. Lack of available information makes it difficult to assess the AERs but it is unlikely that anything more than very minor gains are being achieved for any of these results at this stage.

Table 10.1 Assessment of the Implementation of Methods in the Energy Chapter of the RPS

Methods	**Assessment of Implementation**	satisfactory / unsatisfactory
Method 1: *Serve as a role model for energy efficiency by conducting Energy Audits as part of a commitment to implement a long-term energy efficiency action programme dealing with its in-house energy-using assets.*	The Regional Council has been involved in Energy Audits as part of the commitment to long term energy efficiency. Officers recently completed an energy audit of the Regional Council building (143-145 Wakefield Street). This audit resulted in the introduction of new lighting systems and other techniques to achieve a greater efficiency of energy usage. There is certainly scope for the Council to act as a role model for the next 5 years. This method does not involve large injections of resources, rather a willingness to be involved in energy efficiencies in the Region.	✓
Method 2: *Consider, where relevant, energy efficiency in regional plans, in transport policy development and in assessments of environmental effects required by the Council as part of the resource consent granting process.*	Regional plans must have regard to Part II of the Act when they are prepared, in particular section 7(b), which refers to the efficient use of natural and physical resources. There is very little production of energy in the Wellington Region compared to other part of the country, eg., hyrdro electric power, oil or coal fired power, although there is a small amount of energy production by wind power. Regional plans address the use of coastal, freshwater, soil, and air resources, but not energy resources. Hence, provisions in regional plans about energy use that extend beyond the provisions of the RPS are not particularly relevant. Resource consents must also have regard to Part II of the Act and the RPS when they are considered. The Council's recent Regional Land Transport Strategy has numerous references to maintaining and encouraging sustainability in transportation methods, and systems in the Region i.e., page 38, 42, 49 – 52. The Regional Land Transport Strategy is for the next 4 years, therefore, the Council has opportunities to implement and consider further energy efficient measures in transport policy and planning.	✓
Method 3 *To achieve integrated management, other means which could be used to implement Energy Policies 1-3 include:* *(1) Advocacy by concerned organisations and individuals for the preparation of a New Zealand Energy Policy Statement;* *(2) Introduction, by appropriate organisations, of a consistent and comprehensive range of measures to promote energy efficiency*	Much of Method 3 refers to action that is carried out by other agencies, eg., central government rather than policies of the Council. Therefore, implementation of this method, in practice, largely lies with other agencies. The following comments reference the larger central government focus in terms of what may be actually achieved in the current policy environment. Regarding Part (1), a NZ Energy Policy Statement has not eventuated yet in NZ. There does not seem any likelihood that one will be produced in the near future.	x

Methods	**Assessment of Implementation** satisfactory / unsatisfactory	
and a moderation in energy demand; *(3) Provision of information and promotional campaigns by appropriate organisations to increase public awareness about the means for achieving, and benefits of, moderating energy demand and improved efficiency in the use of transport fuels;* *(4) Continuation of the provision of information and advice by the Energy Efficiency and Conservation Authority (EECA) to all sectors of economic and domestic activity on the benefits of energy efficiency and the availability of energy efficient equipment and products;* *(5) Encouragement from and targeted campaigns by the EECA and the energy supply industry to industry, trade associations and the construction industry and related professions to identify and adopt energy efficient practices;* *(6) Provision of financial and other incentives by the energy supply industry to encourage improved energy efficiency in all sectors of the economy;* *(7) Introduction of energy audits by public and private sector organisations, and implementation of cost-effective findings from such audits;* *(8) Establishment of demonstration projects on energy efficiency by the EECA, the energy supply industry or other relevant organisations; and* *(9) Implementation through the provisions of district plans.*	Regarding Part (2), apart from EECA, and regional councils, there are not many organisations that actually publicly promote energy efficiency and moderation of energy demand. The Green Party does actively promote energy efficiency in our society, and they have promoted energy efficiency provisions in the re-drafting of the Energy Efficiency and Conservation bill that is currently before Parliament. Regarding Part (3), EECA is the only organisation that promotes information to the public to moderate energy demand or encourage energy efficiencies in business or manufacturing. Regarding Part (4), the approach indicated is currently undertaken by EECA and should continue. Regarding Part (5), it can be assumed that EECA will continue encouragement and have campaigns to target different energy related industries in NZ. It is likely that this will continue into the future. Regarding Part (6), It is possible for EECA or other moves by government to promote more energy efficiency through supply or distribution companies. The primary objective of the companies is to maximise financial return. One aspect of the deregulated energy environment is that provision of alternative forms of energy power should reduce impacts on the environment. The government could certainly offer incentives for alternative forms of energy to be promoted in to the overall supply network. Regarding Part (7), energy audits have been introduced by EECA for industry and other trade organisations. This system of audits is at an early stage, and has not widespread coverage throughout the country. Regarding Part (8), EECA does promote energy efficiency projects in its regular magazine 'Energy Wise', and in other trade promotional shows etc., that occur from time to time. This role could increase into future with further funding. Regarding Part (9), an analysis of district plans suggests they all include some	

Methods	**Assessment of Implementation**	satisfactory / unsatisfactory
	policies, which are relevant to the Energy chapter. For the most part policies relate to the more efficient use of the Region's transport systems. The district's all have policies expressing the need to encourage an urban form, which reduces travel times and increases the viability of public transport. The means to achieve this policy is through rules that discourage greenfield development, allow higher intensities closer to major transports routes, and allow a mix of uses within various urban zones. In addition, all districts include some policies to encourage the use of cycling as an alternative mode of transport. Such additional provisions are usually implemented through resource consents for various projects that occur in the Region. Beyond the scope of transport, district plans only make a cursory comment on energy efficiency, most including policies that promote subdivision design that optimises resource and energy usage.	
Method 4: *The Wellington Regional Council, through its Regional Land Transport Strategy, will:* *(1) Promote existing modes of sustainable transport and their associated infrastructure;* *(2) Promote, in the short-term, more efficient use of fossil fuels in transport; and* *(3) Promote, where appropriate, in the medium to longer- term, the progressive development and use of cost effective transport modes that are propelled by motive power derived from renewable energy sources.*	The recently published Regional Land Transport Strategy (1999) makes specific reference to the methods in the Energy Chapter. Regarding Part (1), page 38 of the Strategy makes specific mention of improving the effectiveness of the strategic road network. This is by improving the existing road network to attain peak efficiencies; providing heavy traffic bypasses of local communities on strategic road networks; increasing the flexibility of the strategic road network; providing for freight movement; and promoting the need to provide for increased tourist movement. Regarding Part (2), page 50 of the Strategy considers the efficient use of fossil fuels in transport. This is suggested through a number of mechanisms such as small car engines, electric vehicles, CNG and LPG, and encouraging the use of walking, and cycling. Regarding Part (3), promotion of cost effective, and renewable energy sources for transport modes is described through slow mode forms of transport, such as more walking, cycling, carpooling, and through the encouragement of environmentally sustainable vehicles (electric cars, CNG, and LPG).	✓
Method 5: *To achieve integrated management, other means which could be used to*	Method 5 is listed as a series of suggestions that could be made to enhance integrated management. As mentioned above, EECA has implemented a number of schemes in NZ to promote the concepts of energy efficiency and a reduction on the reliance of	x

Methods	**Assessment of Implementation**	satisfactory / unsatisfactory
implement Energy Policies 4-6 include: *(1) Promotion of cost effective use of renewable energy sources in the industrial, commercial, domestic and transport sectors, by the EECA and other relevant authorities working in conjunction with research institutions and energy sector representatives.* *(2) Promotion and co-ordination of funding for a research and development programme for the establishment of cost effective and environmentally acceptable energy ventures in the Region; and* *(3) Distribution to interested parties of information about the Wellington Region's potential for renewable energy provision.*	fossil fuels as the prime provider of energy. In the Region, the deregulated energy supply market has allowed companies to set up wind energy ventures with wind farms in Wairarapa and in the northern Tararua's. These farms are probably the first tangible results for the establishment of cost effective, and environmentally friendly energy ventures. Other forms of renewable energy supply are solar power, and hydroelectric power. The amount of solar power uptake in the Region has been slow, mostly through the lack of appropriate panels for the tasks required, and having an infrequent number of sunshine hours, spread throughout the year. Nevertheless, the technology in panels is increasing, and perhaps in the future these may provide a reliable renewable energy supply. Hydroelectric power is the other possibility where energy supply is largely sustainable over the medium to long term. A number of schemes have been proposed for the Region but have not eventuated. This is primarily through the environmental cost outweighing the benefits from this form of energy supply.	
Method 6: *Establish discharge and other environmental standards, where appropriate, in order to achieve reductions in pollutants associated with energy production, transmission, transportation, conversion and end use.*	Discharge standards are included in regional plans and other standards relating to land use can be included in district plans. These standards do not specifically address aspects relating to energy and will not achieve the reductions in pollutants intended by the method.	x
Method 7: *District plans would be an appropriate means of implementing Energy Policies 7-9.*	Energy policies that are incorporated into district plans are commented on in relation to Method 3(9). Further information is provided in subsection 12.5.1 of this report.	✓
Method 8: *To achieve integrated management, means which could be used to implement Energy Policy 10 include:* *(1) Establishment of a regional energy forum, for:* *(a) Bringing together energy interests in the Region;* *(b) Facilitating links between the EECA and local government; and* *(c) Advocating on energy matters on behalf of the Region.* *(2) Assessment of the energy characteristics of the Region, and monitoring of:* *(a) Energy **sources** used by activities and communities in the Region (e.g., type and location of sources, quantities used*	Method 8 identifies some approaches that "could" be used to implement Policy 10. Therefore it suggests approaches rather than directing them. Like some of the other methods in the Chapter, implementation would in part be by other agencies and is outside our control. Regarding Part (1), The establishment of an energy forum would be a useful method to gather parties together that have some interest in energy matters for the Region. This has not eventuated, either from EECA or local government. Regarding Part (2), EECA continues to record and analyse energy data from around the country. This is available from EECA in a number of formats. EECA also summaries information through their regular magazine 'Energy Wise News'.	x

Methods	**Assessment of Implementation** satisfactory / unsatisfactory	
and trends in proportions of non-renewable and renewable sources); *(b) Energy **use** (e.g., by sector);* *(c) Energy **efficiency** (e.g., by sector, by product improvement rate); and* *(d) **Effects** of energy production, transportation, transmission, conversion and end use (including effects on air, water, soil, ecosystems and human health).*	With respect to Part (2)(d), The effects of energy production, transportation, transmission, conversion, and end use are not within the scope of EECA. This has largely been left to regional councils. Energy production is not particularly relevant because little occurs in the Region. Effects attributable to transport, transmission conversion, and end use sectors are not specifically addressed in regional and district plans, as mentioned in relation to Method 6.	

Table 10.2. Effectiveness of Policies and Methods in Meeting Objectives in the Energy Chapter of the RPS

Objectives	Policies	Effectiveness of Policies and Methods
Objective 1: *Energy demand is moderated and energy that is needed is produced, distributed and used efficiently so as to reduce impacts on the environment and to make effective use of limited energy resources*	**Policy 1:** *To promote a more efficient match between the characteristics of different energy sources and the required end uses:* · *In production processes and activities (including production and transmission of energy);* · *In the management of energy needs for commercial buildings and businesses; and* · *In domestic energy service requirements*	Policy 1 is implemented by Method 3. Table 4.1 indicates that the implementation of Method 3 is not satisfactory although there is probably not enough information to fully assess the effectiveness of the policy. The method promotes the use of audits, financial incentives, and the formulation of projects to bring about energy efficiency in the supply and consumer sectors. Policy 1 is an interventionist one, given NZ's developing deregulated energy market. The energy agency EECA has encouraged and targeted industries to identify and adopt energy efficiency practices. This is through the use of energy audits, which have been taken up by some energy intensive use industries and in the commercial sector.
Objective 1:	**Policy 2:** *To promote a moderation in energy demand and efficient energy use:* · *In production processes and activities (including production and transmission of energy);* · *In the operation of equipment and appliances; and* · *Through the development of energy efficient products and services.*	Policy 2 is implemented by Method 3. Table 4.1 indicates that the implementation of Method 3 is not satisfactory although there is probably not enough information to fully assess the effectiveness of the policy. There have been no effective campaigns released to promote moderation (reduction) of energy demand. Some firms (Fisher and Paykel) have introduced energy efficiency campaigns for some of their appliances.
Objective 1:	**Policy 3:** *To promote the consideration and the application of energy efficiency and a moderation in energy demand:*	Policy 3 is implemented by Method 1-3. Table 4.1 indicates that the implementation of the methods is satisfactory except for Method 3. One of the "bad news" items in the SER is that there have only been modest gains in energy efficiency. This policy is directed at territorial authorities and those involved in the building and

Objectives	Policies	Effectiveness of Policies and Methods
	· *In building design and site layout;* · *In the use of construction materials;* · *In the design and operation of transport vehicles and transportation systems; and* · *In plans, policies and proposals that influence urban form and the distribution of land uses and activities.*	construction industry. There is little information to assess what progress is being made. The Ministry of Commerce has been investigating changes to the building codes for the provision of building paper (foil) around newly buildings to increase heating efficiency. Method 1 and 2 requires the Regional Council to act as a role model for building, construction, and transport sectors. The Regional Land Transport Strategy (1999) has regard to this policy (Pages 41, 42) by attempting to influence travel demand by well-considered land use. This may be promulgated through Land Use Guidelines that encourage Territorial Authorities to make provision for public transport, walking and cycling when deciding upon major developments (usually retail).
Objective 2: *An increasing proportion of energy is provided by sources that are renewable.*	**Policy 4:** *To promote efficient and effective use and management of all energy resources in the short-term, and the adoption and use of appropriate renewable energy resources for industry, commerce and domestic energy services in the longer-term*	Policy 4 is implemented by Method 5. The policy is relevant to a "bad news" item in the SER that there have only been modest gains in energy efficiency. We still rely heavily on fossil fuels to provide most of our energy needs. This is an ambitious and idealistic policy for any Council to make effective. The policy has a number of actions through Method 5, which rely on EECA and 'other government' agencies' to bring about fundamental change. EECA has developed policies to promote renewable and energy efficiency technologies, and to a lesser extent demand. Some progress is being made with wind and landfill gas as renewable energy suppliers.
Objective 2:	**Policy 5:** *To promote a movement away from the use of non-renewable fossil fuels as the primary source of motive power for transport in the Region*	Policy 5 is implemented by Methods 4 and 5. Method 4 has been implemented satisfactorily but method 5 has not. The transport sector is the largest producer of greenhouse gases and other pollutants in areas of Wellington City (CO, and NO oxides). The Regional Land Transport Strategy has suggested several ways where transport efficiencies can be introduced, and promotes the use of renewable forms of transport such as walking, cycling, bus (trolley) and rail. To some extent these methods have made some impact with walking becoming popular in the inner city, new cycle ways formalised (from Oriental Bay to Evan's Bay), and the promotion of buses, trains, and improved interconnection between the two to improve efficiency.

Objectives	Policies	Effectiveness of Policies and Methods
Objective 2:	**Policy 6:** *To promote efficient energy production from the Region's renewable energy assets, where the effects of the development are environmentally acceptable*	Policy 6 is implemented by Method 5. The RPS suggests that wind power and landfill gases are renewable energy assets. Both of these forms of energy are being promoted and made possible in the Region through the deregulation of the energy suppliers market and an acceptance by distribution and retail companies that these forms of energy are reliable and cost effective compared with traditional forms. Wellington City Council has recently accepted a contract from Nova Gas to supply gas from the Southern Landfill. Supply contracts such as this one are providing some headway for the renewables energy market.
Objective 3: *Adverse local and global environmental effects of energy production, transportation, transmission, conversion and end use are avoided, remedied or mitigated*	**Policy 7:** *To avoid, remedy or mitigate effects on the atmosphere, including emissions of greenhouse gases, that result from energy production, transportation, transmission, conversion and end use, consistent with national standards and international protocols*	Policy 7 is implemented by Method 6. In Table 10.1 the implementation of Method 6 is identified as not satisfactory. Some other actions that have occurred are relevant to the policy. MfE is addressing some greenhouse gas issues. The RPS and Air Plan has policies and methods to support and promote any new initiatives for reducing greenhouse gases. The Regional Land Transport Strategy refers to limiting greenhouse gases through policies mentioned above. These include: creating more efficient connections between rail and road transport; encouraging non-greenhouse transport options; and promoting rail and bus transport over individual vehicle usage.
Objective 3:	**Policy 8:** *To avoid, remedy or mitigate pollution of soil, water and ecosystems that arise from energy production, transportation, conversion and end use consistent with any standards or rules that may be set for managing such effects*	Policy 8 is implemented by Method 6. In Table 10.1 the implementation of Method 6 is identified as not satisfactory. Policies in the Freshwater (4-7), Soil and Mineral (6), and Ecosystems chapters (4) of the RPS are also relevant.
Objective 3:	**Policy 9:** *To avoid, remedy or mitigate any adverse effects on human health that arise from the production, transmission, transportation, conversion and end use*	Policy 9 is implemented by Methods 6 and 7. Table 10.1 identifies that implementation of Method 6 is unsatisfactory, whereas Method 7 implementation is satisfactory. There are policies relating to contact recreation in the Coastal Plan and Freshwater Plan. Air quality Guidelines have been developed as part of the Proposed Air Quality Management Plan. These are intended for use when resource consents are applied for.

Objectives	Policies	Effectiveness of Policies and Methods
	of energy	In district plans there are provisions relating to transport. The larger urban authorities make reference to reducing travel times, and creating an urban form that will reduce travel times for commuters and increases the viability of public transport. Rules have been introduced into some plans to restrict fringe developments (commonly referred to as 'greenfield developments'). Other polices and rules allow greater density of urban living in and around transport nodes. The plans also make reference to slow-modes of transport, cycling and walking and the need to make provision for these people with bike lanes and access pathways. Only one district plan refers to energy efficiency in any way beyond the transport provisions. This plan includes a subdivision design guide that promotes subdivision form and housing which makes the best use of sunlight.
	Policy 10: *To improve knowledge of energy use and the effects of energy use, and to co-ordinate implementation of national, regional and local policies and actions aimed at achieving the sustainable management of energy*	Policy 10 is implemented by Method 8. Some liaison occurs between officers of the Council and EECA. These contacts are reinforced for particular projects such as energy audits. Method 8 specifically instructs the Council to establish a regional energy forum. This has not eventuated due to priorities in other areas. Given the recent changes in the energy industry, the establishment of an energy forum may not be the best method to implement this policy. The second part of this Method requires an assessment of the energy characteristics of the Region. This data is being collected and analysed by EECA. The data is collected on energy sources, energy intensity, and to a lesser energy efficiency. This information is available at some considerable cost, and does not always provide data at a Regional scale.

11. Waste Management and Hazardous Substances

11.1 Summary

The Waste Management and Hazardous Substances Chapter of the RPS identifies 12 issues about waste management and hazardous substances. Most issues can only be addressed through non-regulatory methods or actions under other legislation, such as the preparation of Waste Management Plans under the LGA. In terms of local authority resource management functions, eight of the 12 issues are less appropriate now than when the RPS was prepared because they are dealt with (more effectively) by means outside the RMA. They are not inappropriate because they identify aspects where waste and hazardous substances management is not promoting the purpose of the Act.

Objectives 1 and 2, which are directed at reducing the amount of waste generated and disposed of, are still appropriate in terms of sustainable management of natural resources. They have less relevance in an RPS now than in 1995 because regional councils cannot directly influence courses of action towards meeting them, and territorial authorities now have statutory obligations under the LGA that should achieve the same ends. Objectives 3 and 4, which are directed at the effects of waste and hazardous substances, are still appropriate and some progress has been made towards meeting them.

Policies directed at reducing the effects of waste and hazardous substances on the environment are helping to achieve the objectives in this Chapter. Other policies do not appear to be effective in achieving the objectives because they commit the WRC to some courses of action that are outside regional council functions.

Despite the lack of effectiveness of some waste management policies, there is no need to change them because they are not inconsistent with the statutory direction now provided by the LGA and some territorial authorities have had regard to them when they prepared their Waste Management Plans.

There is not enough information to determine if the policies which deal with the management of hazardous substances and past effects of waste management are meeting the objectives.

11.2 Background

In 1995, when the RPS was made operative, regional councils had some responsibilities for hazardous waste although our waste management role mostly related to our RMA functions of controlling discharges of contaminants to the environment. Since the Local Government Act was amended in 1996 by the Local Government Amendment Act (No 4), waste management responsibilities have rested almost entirely with territorial authorities.

Part XXXI of the Local Government Act obliges territorial authorities to follow a procedure similar to the direction provided in the Waste Management and Hazardous Substances of the RPS. RPS policies and methods are not binding on territorial authorities, whereas their LGA obligations have statutory force, and can have more effect than any direction provided in the RPS. Regional councils cannot effectively influence the contents of Waste Management Plans because territorial authorities are not required to consult with regional councils when they prepare them.

11.3 Issues

The RPS identifies twelve waste management issues. In summary these are

1. Responsibilities for waste management and hazardous substances
2. Lack of reliable comprehensive information
3. Large quantities of waste

4. Recycling markets not available
5. Reuse and recovery of valuable resources from waste not fully utilised
6. Concern about discharges of sewage
7. Adverse effects from illegal discharges
8. Pollution and adverse effects from past and present practices
9. Limited life spans of existing landfills
10. Fate of unused agrichemicals
11. Hazardous substance management (transport, use, handling and disposal)
12. Consideration of energy management as part of waste management.

Of the 12 issues identified for Waste Management and Hazardous Substances, only Issues 6, 7, 8, and possibly 10 are resource management issues which relate to a matter that needs to be addressed to achieve the purpose of the Act **and** do not duplicate territorial authority responsibilities under the LGA.

Issues 1, 2, 3, 4, 5, and 9 are less relevant now because they are not matters that can be addressed directly under the RMA. They are more closely associated with territorial authority responsibilities under Part XXXI of the Local Government Act. Their relevance now relates to the wider role of the RPS in integrated management of natural resources, rather than any specific policy guidance that is adopted to achieve them.

The obligations for waste management in the Local Government Act are very specific. Territorial authorities **must** adopt a waste management plan (section 539 of the LGA). Every waste management plan **shall**—

(a) Make provision for the collection and reduction, reuse, recycling, recovery, treatment, or disposal of waste in the district:
(b) Provide for its effective and efficient implementation, or for activities considered appropriate for that purpose to be undertaken by, or under contract to, the territorial authority.

Section 541 of the LGA **enables** territorial authorities to

(a) Provide, establish, construct, own, maintain, and operate works and facilities for the reduction, reuse, recycling, recovery, treatment, or disposal of waste:
(b) Undertake the collection and transportation of waste, activities for the temporary or permanent storage, and reduction, reuse, recycling, recovery, treatment, or disposal of waste (including, but not limited to, hazardous waste).

Territorial authorities **may** enter into an arrangement or contract with any other person, including any regional council exercising the power conferred on it by section 37SB of this Act, to carry out any of the matters described in clauses (a) and (b) above on such terms and conditions as may be agreed upon between the territorial authority and the regional council.

Regional councils **may** fund, establish, and manage sites for the regional disposal of hazardous wastes (section 37SB of the LGA).

Issue 6, which identifies that "the discharge of treated and untreated sewage into water, including the discharge of sewage into the sea in Wellington and the Hutt Valley, and into rivers in the Wairarapa, is of general concern and of particular concern to Maori," is an appropriate issue but could more appropriately be addressed in the Water and Coastal Chapters.

Issue 7, which concerns illegal discharges, is appropriate in terms of sustainable management, but is a compliance matter already provided for by enforcement provisions in the Act.

Issue 8 identifies that "Inadequate waste management practices, both in the past and at present, are causing pollution and adverse environmental effects." This issue is relevant for reasons in addition to those given in the RPS, which relate exclusively to landfills (past and present). Inadequate waste management practices occur at many kinds of sites and take many forms. For example, poor site management on industrial sites is affecting stormwater quality, and hence receiving waters.

Issue 10 identifies that "the fate of unused agrichemicals is of concern". Council staff still have concerns about unwanted agrichemicals being stored in circumstances that may cause adverse environmental effects. Territorial authorities have not addressed the collection of hazardous substances in their Waste Management Plans.

Issue 11 is no longer relevant because hazardous substances management is a central government responsibility under the HSNO Act, and removing land use control duplication is required under section 62 (ha) of the RMA. Issue 12 pertains to an environmental problem that needs to be addressed to achieve the purpose of the Act, but is more appropriately addressed in the Energy Chapter.

11.4 Objectives

There are four objectives to address the issues.

Objectives 1 and 2 have limited relevance because Issues 3, 4, and 5, which they address, are no longer appropriate. Nevertheless, territorial authorities can, and do, have regard to them when they prepare their Waste Management Plans. Overall less waste should mean more sustainable use of resources in the Region.

Objective 3 is still relevant because it addresses Issues 6, 7, 8, and 9, which are core functions of regional councils under the RMA. Objective 3 is not entirely appropriate because it directs decision making only for "inappropriate disposal of residual liquid or solid wastes". There is no objective for the "appropriate" disposal of liquid or solid wastes that are not "residual".

Objective 4 is still relevant for addressing Issues 10 and 11. Regional Policy Statements are required to remove land use control duplication for hazardous substances. The management of hazardous substances is dealt with by ERMA.

11.5 Policies and Methods

11.5.1 Regional and district plans

Regional plans

All policies in the Waste Management and Hazardous Substances Chapter have been reflected in a combination of policies and methods in the Regional Plan for Discharges to Land except for Policy 1, which is reflected by the Plan itself, and Policy 12, which relates to our pollution response capability. Having a pollution response capability is an operational matter that has now been achieved and did not need to be followed through in regional plans. The RPS policies and their associated regional plans policies are given below.

RPS Policy	Regional Plan for Discharges to Land policies and methods
Policy 1	None (although the Regional Plan for Discharges to Land could be argued to be an integrated waste management framework)
Policy 2	Policies 4.2.1, 4.2.31
Policy 3	Method 6.1.6
Policy 4	Policies 4.2.3, 4.2.30
Policy 5	Policies 4.2.2, 4.2.31,

RPS Policy	Regional Plan for Discharges to Land policies and methods
Policy 6	Policy 4.2.4, Method 6.1.7
Policy 7	Policies 4.2.6, 4.2.7, 4.2.8, 4.2.9, 4.2.10, 4.2.32, 4.2.34, 4.2.35
Policy 8	Policies 4.2.9, 4.2.10, 4.2.11, Methods 6.1.10, 6.1.11
Policy 9	Policies 4.2.5, 4.2.6, Method 6.1.8
Policy 10	Policies 4.2.13, 4.2.14, 4.2.16, 4.2.17, 4.2.18
Policy 11	Policies 4.2.27, 4.2.28, 4.2.29, 4.2.38
Policy 12	None
Policy 13	Policies 4.2.43, 4.2.44, 4.2.45, 4.2.46, 4.2.47, 4.2.48, 4.2.49, 4.2.50.
Policy 14	Policy 4.2.40

District plans

The Regional Policy Statement provisions on waste management are also split between two issues. These are:

1. The policies relating the principles of waste management, i.e. waste minimisation, reuse and recycling and waste generators meeting the cost of the waste that they produce.
2. The policies that anticipate that the territorial authorities will avoid, remedy or mitigate the effects of waste disposal.

Only four of the Region's territorial authorities, including the three predominantly rural district councils, make any reference in their district plans to the waste management principles. These four all include specific sections in their district plans with policies encouraging waste minimisation, cleaner production or recycling and reuse. However these plans all identify only limited number of methods to implement these policies. One council states that it will use the resource consent process to implement its policies, although it is not clear how this will be done. More commonly the councils signal they intend to use non-regulatory, promotional-advocacy type approaches.

The second aspect of waste management, ie. the effort to avoid, remedy or mitigate the effects of waste disposal, is partially addressed by the general policies within the district plans on amenity and environmental quality. In addition, the three predominantly rural territorial authorities and one urban territorial authority include policies specific to landfills.

While not all of the territorial authorities have policies specific to waste management, the policies and rules that they use to manage the amenity of different areas have the effect of separating incompatible uses, including waste disposal facilities. Landfills, for example, require resource consent in almost all parts of the Region. Given this the appropriateness of the proposed location should be assessed as part of the consent application.

Hazardous substances, like natural hazards, are well covered in the Region's district plans. Again this reflects the requirements of the Resource Management Act as much as the provisions of the Regional Policy Statement although several territorial authorities do acknowledge the division of responsibilities outlined in the Regional Policy Statement.

In relation to specific standards and rules, four of the Region's urban authorities include the Hazardous Facilities Screening Procedure in their district plans. These provisions require activities to meet specified thresholds or apply for resource consent. Three other district plans include other storage and treatment standards, or in one case require any activity associated with hazardous substances to get resource consent. As part of the consent process the applicants are expected to demonstrate that they will provide an adequate waste disposal system.

One territorial authority does not include any rules or standards in their plan. The reason given is that, at the time of writing the responsibility for hazardous substances was not clearly defined and under review.

11.5.2 Implementation of methods

An assessment of the degree to which methods have been implemented is given in Table 11.1. A summary of these comments is given below.

Methods for integrated waste management

Methods 1 to 4 were adopted to implement Policies 1 to 3. Except for the preparation of the Regional Plan for Discharges to Land, there has been little implementation of these methods. The Council has an advisory role in the three Waste Liaison Groups it participates in and in waste forums co-ordinated by the Ministry for the Environment. Given the increased direction to territorial authorities by the LGA for waste management, there is little need to increase the implementation of these methods.

Methods for minimising the amount of residual waste for disposal

Methods 5 to 8 were adopted to implement Policies 4 to 6. These methods have not been implemented, except by including similar methods in the Regional Plan for Discharges to Land. There is little need for the Council to be more proactive than this because the required procedure set out in the Local Government Act provides similar direction.

Methods for avoiding the adverse environmental effects of waste disposal

Methods 9 to 14 implement Policies 7 to 10. These methods have been implemented through our regulatory functions by regional plans and resource consents.

Methods which deal with the management of hazardous substances

Methods 15 to 19 implement Policies 11 and 12. There has been limited implementation of these methods. Management of hazardous substance facilities through land use controls is being achieved through district plan provisions. Central government is taking more of a leading role in hazardous substances management with the Regional Council limiting its role to preparing inventories of sites that use or store hazardous substances that could present a risk to the environment in the event of a natural hazard.

Methods to address the adverse effects of past waste management problems

Methods 20 to 23 implement Policies 13 and 14. Methods requiring action on contaminated sites in the Region have been implemented to the extent that the Council maintains a "site use" database. Information from the database is exchanged with territorial authorities so that adverse effects that may arise when there is a proposed change in land use can be properly evaluated and addressed by the site owners.

Methods requiring action for unwanted agrichemicals have not been implemented. The WRC intends to co-ordinate the collection of unwanted agrichemicals in the Region starting in 2001. Territorial authorities have not taken any leadership in this matter despite having a statutory responsibility for ensuring that waste is collected.

11.5.3 Effectiveness of the Policies and Methods

The Policies and Methods are sorted into five groups:

- achieving an integrated approach to waste management;
- minimising the amount of waste which needs to be disposed of;
- avoiding the adverse environmental effects of waste disposal;
- dealing with the management of hazardous substances; and
- addressing the adverse environmental effects of past waste management problems.

The effectiveness of these policies and methods in meeting the objectives has been assessed against the State of the Environment Report (2000), annual monitoring reports, resource consents compliance reports, and targeted investigations. Comments about each policy are given in Table 11.2. A summary of the comments is given below.

Policies and Methods for Integrated Waste Management

Policies 1 to 3 provide the general plan or strategy required to achieve Objectives 1 and 2. These policies are to be implemented by Methods 1 to 4. (Note that Policies 4 to 6 also provide the general plan or strategy required to achieve Objectives 1 and 2).

Policy 1 and Method 1 direct the Council to prepare a waste management framework that integrates waste management both environmentally and institutionally. This requirement has been made largely unnecessary by the requirements of Part XXXI of the LGA. Part XXXI provides a statutory framework that should result in a consistent approach throughout the country. This removes the need for the WRC to provide the direction for integration across jurisdictional boundaries and levels of government. The need for a framework to provide integration across environmental media has been addressed by the development of regional plans, specifically the Regional Plan for Discharges to Land.

In theory, these policies are not effective ways to meet Objectives 1 and 2 because territorial authorities are not required to take them into account when they prepare their Waste Management Plans. Despite this, some territorial authorities have had regard to them, and they do not need to be changed because they are not inconsistent with the statutory direction now provided by the LGA.

The only available information to assess whether these policies are being effective in meeting Objectives 1 and 2 is the quantities of waste disposed to landfills and recycled through recycling centres. Quantities of waste being disposed of is not decreasing but recycling of material like plastics, bottles and cans is happening in most areas. Disposal of residual waste is causing some adverse effects in some areas.

Policies and Methods for Minimising the Amount of Residual Waste for Disposal

Policies 4 to 6 provide the general plan or strategy required to achieve the desired results in Objectives 1 and 2. (Note, Policies 1 to 3 also provide the general plan or strategy required to achieve the desired results in Objectives 1 and 2.)

Policies 4 to 6 are not effective in meeting Objective 1 or 2. The Council cannot exert direct influence over waste production practices because its role in waste management is primarily to control the effects of discharges. The Council cannot influence whether the costs of waste disposal are passed on to the waste generators. The Council can only ensure that the costs of avoiding, remedying or mitigating the effects of the disposal, and monitoring any adverse effects, are met by landfill owners.

The Council cannot provide opportunities for the reuse of waste materials, recycling, and the recovery of resources from waste (including composting and the recovery of landfill gas) except by supporting the Enviromart initiative, and removing or reducing regulation. Council efforts with promoting discharges of agricultural effluent to land through reduced regulation and provision of information are resulting in some recycling of waste nutrients. In 1991, effluent from 34 % of 220 dairy farms in the Wairarapa was discharged to waterways or soak holes. In 2000, this has dropped to 21 % of 288 dairy farms in the Region.

The methods to implement these policies are not being used, except by Council departments setting a good example through setting up ISO 14001 procedures, and providing information through Planwell and the recently established Businesscare Group. It is too soon to measure how effective these methods are.

Policies and methods for avoiding the adverse environmental effects of waste disposal

Policies 7 to 10 provide the general plan or strategy required to achieve the desired results in Objective 3. These policies may be more effective with respect to managing sewage waste than solid wastes.

State and compliance monitoring indicates that adverse effects from sewage disposal are being avoided to a greater extent than adverse effects from landfills, both closed and operating. All sewage treatment in the Region is being upgraded to decrease adverse effects on the aquatic habitat and recreational use of receiving waters. Leachate from landfills is still likely to be causing adverse effects in some places.

Overall, there may not be any significant change in the environmental effects from landfills since these policies were adopted. This is difficult to measure because there is very little information about the effects of the landfills prior to 1991.

Pollution complaints for the 1998-99 year indicate that inappropriate disposal of hydrocarbons and other waste to stormwater drains is the most frequent cause of adverse effects on fresh water and marine water in the Region. The Council participates in a programme to educate people not to dispose of waste to stormwater drains. There is not enough information to assess the effectiveness of this programme. Work is planned for the next five years to increase our knowledge of the effects of stormwater discharges.

Policies and methods which deal with the management of hazardous substances

Policies 11 and 12 provide the general plan or strategy required to achieve the desired results in Objective 4.

Only about 35 of the 1145 pollution incidents responded to in the 1998-99 year were caused by hazardous substances. There is not enough information about the amount or toxicity of hazardous substances used in the Region between 1995 and 1999 to evaluate if either of these criteria has decreased.

The Council's pollution response capability, directed by Policy 12, is contributing to achieving Objective 4 by ensuring that any adverse effects arising from the use, storage, transportation or disposal of hazardous substances are remedied or mitigated. The Council's pollution response staff can offer advice for ways to remedy or mitigate adverse effects and take enforcement action against those who don't do this. The Council's pollution response rate has trebled from about 370 in 1995 to 1145 in 1998-99.

Policies and methods to address the adverse effects of past waste management problems

Policies 13 and 14 provide the general plan or strategy required to achieve the desired results in Objective 4.

The risk of damage to the environment and human health from contaminated sites is not known because many contaminated sites have not been assessed for their degree of contamination (Policy 13). Maintaining a "site use" database of sites that have used or stored hazardous substances is helping to achieve Objective 4 by ensuring that where the Council has information about a contaminated site, that information is made available to territorial authorities. Territorial authorities can then make this information available to people who use the site via the LIM. Territorial authorities can require any site that is contaminated to an extent that it is not suitable for its specified land use to be cleaned up before the land use is changed.

The risk of damage to the environment and human health from unused and unwanted agrichemicals is not known because there have been no surveys about the quantities of unused and unwanted agrichemicals in the Region although quantities have been estimated at about eight tonnes. Because this hasn't been done, it appears that Policy 14 is not an effective way of achieving Objective 4. Territorial authorities have not been willing to fund the collection of unwanted agrichemicals in their districts despite their LGA obligations. The WRC intends to co-

ordinate the collection of unwanted agrichemicals throughout the Region starting in 2001.

11.6 Anticipated environmental results

There are four Anticipated Environmental Results in the Waste and Hazardous Substances Chapter of the RPS. Table 6.3 is a summary of the degree to which they are being achieved. Each AER is discussed below.

AER 1: Less waste is produced and there is a more sustainable rate of the use of natural resources including energy.

This result has not been achieved. Available information indicates that more waste is produced today than there was when the RPS was made operative. There has been no measurement of the rate of use of natural resources in the Region, including energy.

AER 2: Pollution from the disposal of waste is avoided.

The Council is making good progress towards this result. Adverse effects from waste disposed to rivers and the coastal marine area are being avoided or mitigated. Adverse effects of odour are occurring from both sewage treatment and landfill operations. Pollution of waterways from open and closed landfills could be occurring in some areas but the extent has not been determined.

AER 3: The quality of water, air and soil in the Region is improved.

The Council is making good progress towards this result for water quality, some progress for air quality, and unknown progress for soil quality. The quality of freshwater and coastal water impacted by sewage discharges is improving, and should have improved further in the next five years. Air quality is suffering from the effects of odour at many waste treatment sites in the Region, both sewage treatment and landfills. Measures to mitigate these effects are being put in place. The Council is not monitoring soil quality in the Region.

AER 4: Environmental damage from hazardous substances is avoided.

The Council is making good progress towards this result. There is little evidence that there is any environmental damage from hazardous substances in the Region. Areas to investigate are the effect of hazardous substances in stormwater reaching sensitive receiving environments, the effects of landfill leachate and whether they can be mitigated, and sites where hazardous substances have been used or stored and may be having adverse effects.

Table 11.1 Assessment of the Implementation of Methods in the Waste Management and Hazardous Substances Chapter of the RPS

Methods	**Implementation Assessment**	satisfactory / unsatisfactory
Method 1: *Prepare a Regional Framework for Waste Management*	The Council has prepared a regional framework for waste management in its regional plans, specifically the Regional Plan for Discharges to Land. Provisions in that plan achieve some integration across environmental media.	✓
Method 2: *Establish and service a regional waste liaison group made up of representatives of territorial authorities and other agencies with waste management responsibilities in the Region.*	The Council is part of three Waste Liaison Groups with territorial authorities in the western and eastern part of the Region, but these groups don't discuss ways to reduce waste generated or minimise waste disposed.	x
Method 3: *Promote and co-ordinate the adoption of the Waste Analysis Protocol to monitor and gather information on the waste stream.*	The territorial authorities in the Region have used the Waste Analysis Protocol but neither its use, nor the gathering of information, is being co-ordinated by the WRC.	x
Method 4: *To achieve integrated management, other means which could be used to implement Waste Management and Hazardous Substances Policies 1-3 include:* *(1) Liaison with central government over waste management issues which need to be dealt with at a national level; and* *(2) Iwi Waste Management Plans.*	The Council liaises with central government over contaminated sites management and hazardous waste indicators. One iwi Waste Management Plan has been prepared in the Region. This was prepared by Kapakapanui. The Council had no input into the Plan.	✓
Method 5: *Prepare a statement of the objectives, policies and methods to contribute to the implementation of Waste Management and Hazardous Substances Policies 4-6 and consider including this statement in a regional plan for waste minimisation.*	Policy 4.2.3 in the Regional Plan for Discharges to Land promotes policy 4. Policy 4.2.2 and Methods 6.1.1, 6.1.2, and 6.1.3 of the Regional Plan for Discharges to Land promote policy 5. Policy 4.2.4 and Method 6.1.7 of the Regional Plan for Discharges to Land promote policy 6.	✓

Methods	**Implementation Assessment**	satisfactory / unsatisfactory
Method 6: *Investigate the use of appropriate incentives for waste reduction.*	The WRC has not investigated the use of appropriate incentives for waste reduction. Territorial authorities could develop incentives for waste reduction through their Waste Management Plans. These are prepared because of their LGA obligations rather than this method.	X
Method 7: *District Plans would be an appropriate means of implementing Waste Management and Hazardous Substances Policies 4-6.*	District plans do not implement Policies 4 to 6 because these policies are not land use matters. Waste management policy guidance for territorial authorities is achieved under the LGA, not the RMA. Only four of the Region's territorial authorities, including the three predominantly rural district councils, make any reference in their district plans to the waste management principles. More commonly the councils signal they intend to use non-regulatory, promotional-advocacy type approaches.	X
Method 8: *To achieve integrated management, other means which could be used to implement Waste Management and Hazardous Substances Policies 4-6 include:* *(1) Education and information dissemination on waste minimisation;* *(2) Setting a good example by implementing measures which minimise the generation of waste; and* *(3) Providing appropriate waste management services.*	Education and information dissemination on waste minimisation: Some information about cleaner production and waste minimisation has been provided in Planwell. A Business care group has been formed as part of a national initiative to promote cleaner production and waste minimisation. So far this has the support of one TA. A trust is being set up. Setting a good example: programme begun with the development of ISO 14001 procedures. Providing appropriate waste management services is a territorial authority responsibility under the LGA.	✓
Method 9: *Include objectives, policies and, where appropriate, rules and other methods in the regional plans dealing with the discharge of contaminants to land, water and air.*	Objectives, policies and rules have been adopted in the Regional Plan for Discharges to Land dealing with the discharge of contaminants to land. Unconsented landfill sites still exist. Objectives, policies and rules have been adopted in the Regional Freshwater Plan dealing with the discharge of contaminants to water. Objectives, policies and rules have been adopted in the Regional Air Quality Management Plan dealing with the discharge of contaminants to air.	✓

Methods	**Implementation Assessment**	satisfactory / unsatisfactory
Method 10: *Review, improve and extend landfill leachate monitoring for the Wellington Region.*	All known closed landfills (114) were investigated in 1998. Eighteen sites needed further investigation because of effects from leachate or landfill gas: 15 for leachate, three for landfill gas, and five for both leachate and gas (Landfills in the Wellington Region, 1998). Iron was the most common leachate pollutants breaching ANZECC guidelines for aquatic ecosystems and stock water. Others were Zn, Mn, Pb, Cr, Ni. The comprehensive 1998 survey has been followed up by the 1999 survey for four of the sites. Iron levels in leachate from two of those four are breaching ANZECC guidelines. Leachate from one of the remaining sites is being discharged to stormwater, where it is diluted and discharged to Wellington harbour. The monitoring has been reviewed, but not improved or extended.	✓
Method 11: *Liaise with the relevant iwi and give particular consideration to any relevant iwi management plans or statements of iwi views when developing policies and plans on waste disposal, and disposal of sewage in particular.*	One iwi management plan for waste has been prepared (Kapakapanui). This was prepared after the regional plans were developed. It was not given "particular consideration" at the 1999 LEJV consent hearing although Kapakapanui were submitters to the application.	x
Method 12: *District plans would be an appropriate means of implementing Waste Management and Hazardous Substances Policy 8.*	The effort to avoid, remedy or mitigate the effects of waste disposal is partially addressed by the general policies on amenity and environmental quality in the district plans. The three predominantly rural territorial authorities and one urban territorial authority include policies specific to landfills, which require resource consent in almost all parts of the Region. There is limited scope for implementing Policy 8 through district plans for closed landfills. District plans can restrict changes in land use for closed landfills if there is a proposal to change the land use to ensure that adverse effects are avoided, remedied or mitigated. District plans cannot influence decisions for closed sites where there is no proposal to change the land use.	x

Methods	**Implementation Assessment**	satisfactory / unsatisfactory
Method 13: *To achieve integrated management, other means which could be used to implement Waste Management and Hazardous Substances Policy 7 include:* (1) Provision of information and education programmes on appropriate waste disposal to all waste generators, including the industrial, commercial, agricultural and domestic sectors; (2) Provision of facilities for the collection and disposal of wastes, including hazardous wastes; and *(3) Use of the provisions and powers of other legislation, regulations and guidelines for the disposal of hazardous wastes.*	(1) Achieved through Planwell, regional plans, septic tank brochures, etc. (2) This is a territorial authority responsibility under the LGA ("make provision for the collection and reduction, reuse, recycling, recovery, treatment, or disposal of waste in the district"). They are not required to have regard to RPS policies when adopting provisions in their Waste Management Plans. (3) Other provisions relevant to requiring that all residual wastes are safely disposed in appropriate facilities include NZ standards, Ministry of Health and Ministry for the Environment Guidelines, and ANZECC guidelines. The WRC refers to all these when making decisions on resource consents.	✓
Method 14: *To achieve integrated management, other means which could be used to implement Waste Management and Hazardous Substances Policy 10 include research into alternative means of sewage treatment and disposal.*	The WRC is not researching any alternative means of sewage treatment and disposal, nor is it contributing funding any such research.	x
Method 15: *Establish and service a liaison group of local authorities and other agencies with responsibilities for hazardous substances in the Region.*	The Council facilitates a Hazardous Waste Management Liaison Working Group that is developing recommendations for a co-ordinated approach to hazardous waste management in the Region. This group does not address general hazardous substance matters.	✓
Method 16: *In consultation with territorial authorities, develop a regional inventory of hazardous substances, including facilities and activities which use hazardous substances*	The Council has compiled a regional inventory of petroleum storage tanks, and is working an inventory of non-petroleum hazardous substances that are at risk from natural hazards.	✓

Methods	**Implementation Assessment**	satisfactory / unsatisfactory
Method 17: *Include in the Regional Framework for Waste Management objectives, policies and, where appropriate, rules and other methods in regional plans dealing with the discharge of contaminants to land, water and air, to contribute to the implementation of Waste Management and Hazardous Substances Policies 11 and 12..*	Policies 4.2.27, 4.2.28 and 4.2.29 in the Regional Plan for Discharges to Land will contribute to implementing the first part of Policy 11, but not "a reduction in the amount and toxicity of hazardous substances used in the Region". Policy 12 is implemented in the Regional Plan for Discharges to Land and in the Regional Coastal Plan by having enforceable regional rules covering discharges of hazardous substances to land and for activities involving hazardous substances in the coastal marine area.	✓
Method 18: *District plans would be an appropriate means of implementing Waste Management and Hazardous Substances Policy 11.*	Four urban authorities in the Region have adopted the Hazardous Facilities Screening Procedure in their district plans. This procedure applies to sites where hazardous substances are stored or used and requires specified thresholds to be met, or resource consents obtained. Three district plans include other storage and treatment standards, or in one case requires any activity associated with hazardous substances to get resource consent. At least one district plan has rules about the transport of hazardous substances.	✓
Method 19: *To achieve integrated management, other means which could be used to implement Waste Management and Hazardous Substances Policies 11 and 12 include:* *(1) Promoting and providing information on cleaner production practices; and* *(2) Using provisions and powers of other legislation, regulations and guidelines for the transportation, use and storage of hazardous substances.*	Information on cleaner production practices is promoted in Planwell. Some of this information is directed at the storage and use of hazardous substances. The WRC and TA's use provisions and powers of other legislation, such as HSNO, NZS 5433, the Dangerous Goods Act, and Maritime Transport Act to achieve integrated management of the storage, transportation and use of hazardous substances.	✓
Method 20: *In conjunction with territorial authorities, compile a register of all confirmed contaminated sites in the Region, including underground storage tanks.*	The WRC has a Site Use database which contains information about sites proven to be contaminated, and sites with a land use history of storing, using, or disposing of hazardous substances. Sites with underground storage tanks are included on the database.	✓

Methods	**Implementation Assessment**	satisfactory / unsatisfactory
Method 21: *Adopt the ANZECC guidelines on contaminated sites to assist in the assessment of risk, prioritisation of sites, and development and implementation of a strategy for action for contaminated sites in the Region.*	The ANZECC guidelines are used for this purpose.	✓
Method 22: *Co-ordinate the development of a data base of the unwanted agrichemicals in the Region.*	There is no database for unwanted agrichemicals in the Region.	x
Method 23: *Develop and implement a strategy for the redistribution, reuse, collection, treatment and disposal of unwanted agrichemicals in the Region.*	No strategy has been developed or implemented, but the Resource Investigation department intends to co-ordinate the collection of unwanted agrichemicals starting in 2001.	x

Table 11.2. Effectiveness of Policies and Methods in Meeting Objectives in the Waste Management and Hazardous Substances Chapter of the RPS

Objectives	Policies	Effectiveness of Policies and Methods	satisfactory / unsatisfactory
All objectives are relevant.	**Policy 1:** *To develop an integrated waste management framework in the Region, including integration across environmental media and jurisdictional boundaries, and between levels of government.*	The effectiveness of Policy 1 is difficult to assess because it is not directed at any particular objective. All of them are relevant. Part XXXI of the LGA requires territorial authorities to prepare and adopt a Waste Management Plan. The WMP preparation requirements, such as following the waste management hierarchy, are consistent with the direction provided in Chapter 13 of the RPS. Territorial authorities are not required to have regard to the RPS or district plans when they prepare their WMPs, nor is there any requirement for them to consult with regional councils. This makes it difficult for RPS policies to have any effect on waste management practices. Some jurisdictional boundaries for waste management, such as the allocation of responsibilities for abandoned cars, litter and dead animals in the coastal environment, are being addressed through memorandums of understanding between the Regional Council and territorial authorities. This initiative, which was not directed by the RPS, is an example of the type of response that can address jurisdictional issues of waste management without the need for an "integrated waste management framework". A disadvantage of having no formal waste management framework is that the WRC is not driving any waste management procedures that can apply region-wide, including those that can help achieve the Objectives in Chapter 13. The result is that territorial authorities are preparing their WMPs without any regional co-ordination. Initiatives like Enviromart is an example of how the WRC can work with the TA's. Enviromart is supported by the WRC, all TA's in the Region, plus some consultants. Policy 1 is implemented by Methods 1, 2, 3, and 4. A Regional Framework for Waste Management (Method 1) is provided to some extent by regional plans. The plans help, but don't fully address, integration across environmental media. For example, under the current framework, the discharge and recycling of agricultural effluent is managed under two plans, the Regional Plan for Discharges to Land and the Regional Air Quality Management Plan, with separate policies. This is not	

Objectives	Policies	Effectiveness of Policies and Methods	satisfactory / unsatisfactory
		providing effective integration across environmental media. The preparation of the User Guide will help improve integration of the environmental framework, although integration won't be fully achieved until the plans are reviewed and written as a single document, with an integrated approach to all effects of all activities. The Council participates in three Waste Liaison Groups (Method 2) with territorial authorities in the eastern and western part of the Region. This helps integration between jurisdictional boundaries. These are the Wellington Regional Environment Agency (WREA), the Hazardous Waste Liaison Group (HWLG), and the Waste Management Wairarapa (WMW) Committee. These Groups discuss landfills, hazardous waste management matters, and some of the wider matters envisaged by Policy 1 but not Waste Management Plans, which are the key method of implementation for waste management. The WREA and HWLG are mainly made up of council staff with limited financial decision-making powers. The focus of the Groups leaves the WRC with little opportunity to promote RPS policies, or for the groups to engage in projects such as peer reviews of WMPs which could help advance progress towards an integrated framework across jurisdictional boundaries. Territorial authorities are not consistently following any formal waste analysis programme, but are collecting information on waste volumes and types accepted at landfills. They have all used the Waste Analysis Protocol (Method 3) at least once, but the WRC is not promoting its use. Method 4: Liaison with central government for contaminated sites management and hazardous waste indicators is contributing to integration between levels of government. Lack of Council input into iwi Waste Management Plans means there is little integration across these institutional boundaries.	
Objective 1: *The quantity of waste generated is reduced* **Objective 2:** *The quantity of residual wastes for disposal is minimised through reuse, recycling and resource*	**Policy 2:** *To adopt and implement the waste management hierarchy of:* *(1) Reducing the amount of waste generated;* *(2) Reusing waste resources;* *(3) Recycling waste resources;*	There is not enough information available about the **quantity of waste generated** to determine if this policy is effective in achieving Objective 1, but the **quantity of residual waste for disposal** (Objective 2) is not decreasing (SER "bad news"). Territorial authorities are giving consideration to the waste management hierarchy when they prepare their Waste Management Plans because they have a statutory obligation to do so under the LGA. They have no statutory obligation to have regard to the RPS when they prepare their Waste Management Plans although to date they have. **Reusing** waste resources: not enough information to comment on effectiveness. The	X

Objectives	Policies	Effectiveness of Policies and Methods	satisfactory / unsatisfactory
recovery	*(4) Recovering resources (including energy) from waste; and* *(5) Disposing of residual waste in an environmentally safe way.*	EnviroMart is supported by the WRC with limited support to date from territorial authorities. Many territorial authorities have implemented **recycling** initiatives (SER "good news"). Agricultural waste discharges to land recycle nutrients to the environment where they can be re used. Compliance records for these operations are good. **Recovering resources**, including energy, from waste: not enough information to comment on effectiveness. There is landfill gas recovery at three landfills, and composting at two landfills. **Environmentally safe disposal**: Every discharge permit issued by the Council authorises the disposal of some waste. Every discharge permit has conditions attached to ensure that the disposal is "environmentally safe". Compliance with conditions on discharge permits is reported on in the Resource Consent Annual Compliance Report (RCAC Report), prepared by the Resource Consents department. Results form this report are given below. Three of the 13 operational landfills in the Region do not have resource consents (SER "what's being done?") despite the RMA requirement since 1 April 1995 for applications for these consents to be lodged. Compliance for consented landfills shows that of the nine landfills in the western region, three did not comply with consent conditions relating to environmental effects (RCAC Report). Adverse effects were odour, potential fill instability, and groundwater contamination. Waste is incinerated at two sites in the Region in volumes that require resource consents. One of these had good compliance with its consent conditions in the 1998-99 year, one did not. This was the Medical Waste incinerator at Miramar, whose permit was reviewed in 1999-2000. There are a large number of smaller incinerators in the Region, such as at schools, that do not require discharge permits. Monitoring these permitted activities relies on complaints and state of the environment monitoring which do not indicate any problems. Nearly four out of ten agricultural discharges have a three year record of good compliance, entitling them to a reduced inspection charge. Policy 1 is implemented by Methods 1, 3, 5, 6, 7, and 8. Regional plans provide the regional framework for waste management (Method 1), specifically the Regional Plan for Discharges to Land. Territorial authorities have used the Waste Analysis Protocol (Method 3) to monitor and	

Objectives	Policies	Effectiveness of Policies and Methods	satisfactory / unsatisfactory
		gather information on the waste stream in their districts because of their waste management obligations under the LGA. The Council is not promoting or co-ordinating use of the WAP. There are policies and methods to contribute to the implementation of RPS policies 4, 5 and 6 (Method 5) in the Regional Plan for Discharges to Land. Territorial authorities could develop incentives for waste reduction (Method 6) through their Waste Management Plans. This would be because of their obligations under the LGA to promote effective and efficient waste management rather than any effect of this method. District plans are not an effective means of implementing Policies 4 to 6 (Method 7) because Policies 4 to 6 are not land use control matters. Method 8: There is not enough information to comment on the effectiveness of education and information dissemination on waste minimisation. In setting a good example, the programme for ISO 14001 compliance has begun but there has not been enough time to determine effectiveness. Providing appropriate waste management services is outside the Council's RMA or LGA functions and cannot be an effective method of implementing Policy 2.	
Objective : No related objective	**Policy 3:** *To give consideration to energy management in the development of waste management policies and plans and the delivery of waste management services.*	The effectiveness of this policy cannot be assessed because the policy was not adopted to achieve any particular objective. Territorial authorities are responsible for the delivery of waste management services. This policy cannot be an effective means of achieving RPS objectives because territorial authorities are not required to have regard to the RPS or district plans when they prepare their waste management plans. Policy 3 is implemented by Method 1 The Council has not prepared a regional framework for waste management (Method 1) except the Regional Plan for Discharges to Land. The Council did not consider energy management during the preparation of the Regional Plan for Discharges to Land.	x
Objective 1: *The quantity of waste generated is reduced* **Objective 2:** *The quantity of residual wastes for disposal is*	**Policy 4:** *To ensure that, as far as is practicable, the Region's waste generators meet the costs of the waste they produce.*	There is not enough information to determine if this policy is effective in helping to reduce the quantity of waste generated (Objective 1), but the quantity of residual waste for disposal (Objective 2) is not decreasing (SER "bad news"). The territorial authorities may have information about whether the costs of waste disposal are met by the waste producers and whether this is helping to reduce the quantity of waste produced. Policy 4 is implemented by Methods 5, 6, and 7.	x

Objectives	Policies	Effectiveness of Policies and Methods	satisfactory / unsatisfactory
minimised through reuse, recycling and resource recovery		Policy 4.2.3 in the Regional Plan for Discharges to Land promotes this policy (Method 5) but territorial authorities are not required to have regard to regional plans when they prepare their waste management plans so Method 5 cannot be effective. There is not enough information to determine whether territorial authorities have investigated the use of incentives for waste reduction (Method 6) when preparing their Waste Management Plans because only three WMPs have been prepared (KCDC, HCC, and PCC). District plans are not an effective means of implementing Policies 4 to 6 (Method 7) because Policies 4 to 6 are not land use control matters.	
Objective 1: *The quantity of waste generated is reduced* **Objective 2:** *The quantity of residual wastes for disposal is minimised through reuse, recycling and resource recovery*	**Policy 5:** *As a matter of priority, to promote the concepts of clean production and waste minimisation and to support all sectors of the community in the implementation of these concepts.*	There is not enough information available about the quantity of waste generated to determine if promoting cleaner production and waste minimisation is effective in helping to reduce the quantity of waste generated (Objective 1), but the quantity of residual waste for disposal (Objective 2) is not decreasing (SER "bad news"). Policy 5 is implemented by Methods 5, 6, 7, and 8. Policy 4.2.2 and Methods 6.1.1, 6.1.2, and 6.1.3 of the Regional Plan for Discharges to Land promote this policy (Method 5) but little work has been done to date so it is too soon to assess their effectiveness. There is not enough information to determine whether territorial authorities have investigated the use of incentives for waste reduction (Method 6) when preparing their Waste Management Plans because only three WMPs have been prepared. District plans are not an effective means of implementing Policies 4 to 6 (Method 7) because Policies 4 to 6 are not land use matters. Method 8 is not an effective means of implementing policy 5 and is not achieving Objectives 1 or 2. See discussion in Policy 2.	x
Objective 2: *The quantity of residual wastes for disposal is minimised through reuse, recycling and resource recovery*	**Policy 6:** *To provide opportunities for the reuse of waste materials, recycling, and the recovery of resources from waste (including composting and the*	Policy 6 cannot be effective in achieving Objective 2 because the WRC cannot provide opportunities for the reuse of waste materials, recycling, and the recovery of resources from waste (including composting and the recovery of landfill gas) except by removing regulation. Many territorial authorities have implemented recycling initiatives (SER good news), three landfills have landfill gas recovery and there are two municipal composting plants. There is not enough information to determine if TA initiatives were prompted by this policy or by	x

Objectives	Policies	Effectiveness of Policies and Methods	satisfactory / unsatisfactory
	recovery of landfill gas).	their LGA obligations. Policy 6 is implemented by Methods 5, 6, 7, and 8. Policy 4.2.4 and Method 6.1.7 of the Regional Plan for Discharges to Land promote this policy (Method 5). Composting of agricultural effluent is promoted by the Plan because no discharge permit is required to discharge composted effluent land. There is no evidence yet that this approach is effective. The use of incentives to promote waste reduction (Method 6) can only be done by TA's. Territorial authorities are not required to have regard to the RPS or regional plan policies when they prepare their WMPs, so Method 6 cannot be as effective as their LGA obligations. District plans are not an effective means of implementing Policies 4 to 6 (Method 7) because Policies 4 to 6 are not land use matters. Some information about reuse, recycling and resource recovery (Method 8) has been provided in Planwell, but there is not enough information to assess the effectiveness.	
Objective 3: *Adverse effects on the environment and human health from the inappropriate disposal of residual liquid and solid wastes are avoided or, where this is not possible, remedied or mitigated*	**Policy 7:** *To ensure that all residual wastes are safely disposed of in an appropriate facility.*	Action taken by WRC in implementing Policy 7 may be helping to achieve Objective 3, but not all residual waste is being disposed of in appropriate facilities. Three of the 13 operational landfills in the Region do not have resource consents (SER "what's being done?") despite the RMA requirement since 1 April 1995 for consent applications to be lodged. Compliance for the consented landfills shows that of the nine landfills in the western region, three did not comply with conditions relating to environmental effects (Resource Consent Annual Compliance Report). Adverse effects were odour, potential fill instability, and groundwater contamination. Enforcement for illegal disposal of residual wastes at inappropriate facilities in 1998-99 comprised: two prosecutions (illegal discharges to the cma), one enforcement order (breach of cleanfill consent), two abatement notices (rubbish in a river and a floodway), and many warnings. Policy is implemented by Methods 9, 11, and 13. Objectives, policies and rules have been adopted in the Regional Plan for Discharges to Land (Method 9) to ensure all residual wastes are disposed of in an appropriate facility. Unconsented sites and illegal discharges still exist. One iwi management plan (Method 11) for waste has been prepared (Kapakapanui). This	X

Objectives	Policies	Effectiveness of Policies and Methods	satisfactory / unsatisfactory
		was prepared after the development of regional plans. Information has been provided (Method 13(1)) in Planwell about cleanfills and landfills. There is insufficient information to assess the effectiveness of this information provision in achieving Objective 3. Territorial authorities are required to "make provision for the collection and reduction, reuse, recycling, recovery, treatment, or disposal of waste in the district" (LGA, and Method 13(2)). They are not required to have regard to RPS policies when preparing their WMPs. The WRC cannot influence their decision-making on the contents of their WMPs, and so the effectiveness of Policy 7 cannot be assessed. Since August 1997, territorial authorities have been required to prepare Waste Management Plans. This LGA requirement (Method 13(3)) has been partially effective in achieving Objective 3. Of the eight territorial authorities in the Region, two have completed the formal consultation for their plans, three (the Wairarapa districts) have prepared a pre-notification draft, one has begun drafting a plan, and two have not begun drafting their plans.	
Objective 3: *Adverse effects on the environment and human health from the inappropriate disposal of residual liquid and solid wastes are avoided or, where this is not possible, remedied or mitigated*	**Policy 8:** *To avoid, remedy or mitigate all adverse effects of waste disposal sites, including those sites that are no longer used for waste disposal, and as a matter of priority to avoid the adverse effects of landfill leachate.*	Not all adverse effects of waste disposal sites are being avoided, remedied or mitigated so Policy 8 appears to be only partially effective in achieving Objective 3. Better controls over the effects of waste disposal activities have occurred through the resource consent process (SER "good news") but unconsented sites still exist. Policy 8 is implemented by Methods 9, 10, 11, and 12. Objectives, policies and rules have been adopted in the Regional Plan for Discharges to Land (Method 9) to avoid, remedy or mitigate all adverse effects of waste disposal sites including contaminated sites like closed landfills. It is too soon to determine if these provisions have been effective in achieving Objective 1. Leachate monitoring (Method 10) results showed that pollutants breached ANZECC guideline values to protect aquatic ecosystems and stock water at 18 of the 114 known closed landfill sites investigated in 1998. A 1999 study of four sites showed that two were still discharging pollutants at levels that breached the guidelines. Policy 8 is not being effective in achieving Objective 3 because the effects of these discharges are not being avoided. No iwi management plans (Method 11) were in place when the regional plans were being developed. Council staff consulted with iwi when preparing all regional plans. It is too soon	X

Objectives	Policies	Effectiveness of Policies and Methods	satisfactory / unsatisfactory
		to determine if this liaison will be effective in achieving Objective 1. All district plans (Method 12) require land use consents for landfills. Adverse effects would be assessed for any new landfill site. District plans can control changes in land use for closed landfills to ensure that adverse effects are avoided, remedied or mitigated if there is a proposal to change the land use. District plans cannot influence decisions for closed sites where there is no proposal to change the land use. Method 12 would have limited effect in achieving Objective 3.	
Objective 3: *Adverse effects on the environment and human health from the inappropriate disposal of residual liquid and solid wastes are avoided or, where this is not possible, remedied or mitigated*	**Policy 9:** *To rationalise the siting of landfills within the Wellington Region.*	Policy 9 is partially effective in avoiding, remedying or mitigating adverse effects of landfills (Objective 3). The northern landfill was developed and consented by the end of 1994 without regard to this or any other policy in the RPS. The Wairarapa councils are in the process of closing down their existing landfills and choosing a new site to serve the three districts. This is being done with regard to this policy. Policy 9 is implemented by Method 9. Policies 4.2.5 and 4.2.6 and Method 6.1.8 have been adopted in the Regional Plan for Discharges to Land to implement this policy (Method 9). It is too soon to determine if policies in that plan will be effective in achieving Objective 3.	✓
Objective 3: *Adverse effects on the environment and human health from the inappropriate disposal of residual liquid and solid wastes are avoided or, where this is not possible, remedied or mitigated*	**Policy 10:** *To ensure, in all decisions on the treatment and disposal of sewage, that:* *(1) Sewage is treated to a level which is appropriate to the means of disposal so that adverse effects on human health and the quality of ecosystems are avoided, remedied or mitigated, and in particular:* *(a) For discharge into or onto land, adverse effects on the quality of groundwater and*	Policy 10 contributes to achieving Objective 3. Adverse effects are being avoided, remedied or mitigated by the imposition of conditions on resource consents. Ninety-one consents for sewage discharges have been granted since the RPS became operative, including discharges to the coastal marine area, fresh water and to land. Decision-makers had regard to this policy for all decisions. Most sewage discharges to land are from domestic systems, schools, and small businesses like camping grounds. These are mainly allowed as permitted activities. For these discharges, the Council is implementing Policy 10 by educating homeowners and territorial authority staff about the effects of on-site sewage disposal and how to design systems so that adverse effects are avoided. There are 13 municipal STPs in the Region. Five of the seven STPs in the western region did not comply with consent conditions over 1998-99 (Resource Consent Annual Compliance Report). Non-compliances were for odour (two), faecal coliforms (four), and phosphorus, suspended solids, and BOD (one each). The effects of these non-compliances on human health and the quality of the ecosystems is not reported.	✓

Objectives	Policies	Effectiveness of Policies and Methods	satisfactory / unsatisfactory
	surface water are avoided, remedied or mitigated; *(b) For discharge into coastal water, the discharge, after reasonable mixing, does not render the receiving waters unsuitable for contact recreation or for any other purpose specified for that water in the Regional Coastal Plan;* *(c) For discharge into freshwater, the discharge, after reasonable mixing, does not render the receiving waters unsuitable for any purpose specified for that water in any relevant plan;* *(2) The values and views of the relevant iwi are given due recognition; and* *(3) The values and views of the appropriate communities of interest are taken into account.*	The Otaki discharge is the only municipal sewage discharge to land in the Region. This discharge is in full compliance with its consent conditions and there is no evidence that it is causing any adverse effects on groundwater or surface water. There are three sewage discharges to the coastal marine area (at Cook Strait, the outer Wellington harbour, and Titahi Bay). While some coastal water quality in the Region is unsuitable for contact recreation and shellfish gathering, this has not been linked to the sewage discharges because the water is not monitored near the discharge points. The remaining nine sewage discharges are to fresh water. The Mazengarb Drain (a tributary of the Waikanae River) is identified in the Regional Freshwater Plan as requiring enhancement up to aquatic ecosystem suitability. It is affected by the sewage discharge from Paraparaumu and currently unsuitable for aquatic ecosystems (Annual Freshwater Quality Report, 1999). The plant generally meets its consent conditions and will be upgraded by 2003. The Ngarara Stream is identified in the Regional Freshwater Plan as requiring enhancement up to aquatic ecosystem suitability. It is affected by the sewage discharge from Waikanae and currently unsuitable for aquatic ecosystems (AFQR, 1999). The plant repeatedly breaches its consent conditions and will be closed down by 2004. The Wainuiomata River is identified in the Regional Freshwater Plan as requiring enhancement up to aquatic ecosystem suitability. It is affected by a sewage discharge and is sometimes unsuitable for aquatic ecosystems (AFQR, 1999). The plant repeatedly breaches its consent conditions. New consent conditions require an upgrade. The Makoura Stream and Mangaterere River (tributaries of the Ruamahanga River) are identified in the Regional Freshwater Plan as requiring enhancement up to aquatic ecosystem suitability. Papawai Stream and Donald Creek (tributaries of the Ruamahanga River) and the Ruamahanga River are being managed for aquatic ecosystem suitability. All are affected by sewage discharges. The Makoura Stream and Donald Creek are generally not suitable for aquatic ecosystems. The Mangaterere River and the Ruamahanga River (downstream of the Makoura Stream and the Mangaterere River confluences) and Papawai Stream are generally suitable for aquatic ecosystems (AFQR, 1999). All sewage discharges are being upgraded now or will be upgraded over the next five years.	

Objectives	Policies	Effectiveness of Policies and Methods	satisfactory / unsatisfactory
		Sewage from Castlepoint discharges via a wetland to Castlepoint Stream and then to the sea. Castlepoint Stream is being managed for aquatic ecosystem suitability. The very small discharge appears to have no effect on the stream. Policy 10 is implemented by Methods 9 and 11. All regional plans except the Regional Soil Plan contain objectives, policies and methods to implement this policy (Method 9). The Council has consulted with iwi during the preparation of its regional plans. Iwi are notified and consulted over all applications to dispose of sewage, except for some non-notified applications for small systems such as septic tanks. Iwi were consulted individually on the preparation of all regional plans (Method 11).	
Objective 4: *The potential for any accidental or unanticipated effects to arise as a result of the use, storage, transportation and disposal of hazardous substances is minimised and any adverse effects that do occur are remedied or mitigated*	**Policy 11:** *To ensure that the storage, transportation and use of hazardous substances is safely carried out and, in particular, to encourage, where practicable, a reduction in the amount and toxicity of hazardous substances used in the Region.*	There is not enough information to judge whether this policy is helping to achieve Objective 4. Land use controls on facilities that store or use hazardous substances are in district plans. There is no evidence that their controls are not working. Only about 35 of the 1145 pollution incidents responded to in the 1998-99 year were caused by hazardous substances. There is not enough information about the amount and toxicity of hazardous substances used in the Region between 1995 and 1999 to evaluate if either has decreased. Policy 11 is implemented by Methods 15, 16, 17, 18 and 19. The Council facilitates a Regional Waste Management Liaison Working Group (Method 15) that is currently developing recommendations for a co-ordinated approach to hazardous waste management in the Region. This group does not address general hazardous substance matters so would not be effective in achieving Objective 4. The Council has not developed a regional inventory of all hazardous substances, or of facilities that use or store hazardous substances (Method 16). The Council has compiled an inventory of petroleum storage tanks in the Region and is working on a database of non-petroleum hazardous substances. The purpose of these inventories is to evaluate risk to the environment during any natural hazard. It is too soon to judge whether this method would help achieve Objective 4. Policies 4.2.27, 4.2.28 and 4.2.29 in the Regional Plan for Discharges to Land will contribute to implementing the first part of this policy, but not "a reduction in the amount and toxicity of hazardous substances used in the Region" (Method 17). There is not enough information to judge whether this method would help achieve Objective 4.	X

Objectives	Policies	Effectiveness of Policies and Methods	satisfactory / unsatisfactory
		District plans (Method 18) require land use consents for facilities that use or store large quantities of hazardous substances. There is not enough information to judge whether this method would help achieve Objective 4. Cleaner production is promoted (Method 19) in relation to hazardous substances. There is not enough information to judge whether this method would help achieve objective 4.	
Objective 4: *The potential for any accidental or unanticipated effects to arise as a result of the use, storage, transportation and disposal of hazardous substances is minimised and any adverse effects that do occur are remedied or mitigated*	**Policy 12** *To have a response capability for pollution incidents, including spills of hazardous substances on land and in the coastal marine area.*	The number of pollution incidents responded to by the Council has trebled from about 370 in 1995, to 1145 in 1998-99. This policy is contributing to achieving objective 4 by ensuring that any adverse effects arising from the use, storage, transportation or disposal of hazardous substances are remedied or mitigated. Policy 12 is implemented by methods 15, 16, 17, and 19. Pollution response is not discussed at the liaison group (Method 15), which meets mainly to discuss hazardous substance issues. A regional inventory of petroleum storage tanks has been compiled towards the implementation of Method 16. Policy 12 is implemented in the Regional Plan for Discharges to Land and in the Regional Coastal Plan (Method 17) by having regional rules covering discharges of hazardous substances to land and activities involving hazardous substances in the coastal marine area. The Council provides information on cleaner production (Method 19(1)) in terms of reducing inputs of hazardous substances such as oil into stormwater drains and thence to the coastal marine area. Provisions to control hazardous substances under other legislation (Method 19(2)) are used by territorial authorities.	✓
Objective 4: *The potential for any accidental or unanticipated effects to arise as a result of the use, storage, transportation and disposal of hazardous substances is minimised*	**Policy 13:** *To minimise the risk of damage to the environment and human health from contaminated sites in the Region.*	The Council is implementing Policy 13 by maintaining a database of sites in the Region that have a history of storing or using hazardous substances (the "site use" database). Maintaining the database contributes to achieving Objective 4 by ensuring that where the Council has information about a contaminated site, that information is made available to territorial authorities. Territorial authorities can then make this information available to people via the LIM. If any site is contaminated to an extent that it is not suitable for the type of land use stipulated in the district plan, territorial authorities can require it to be cleaned up before they authorise a change in land use. This ensures that adverse effects arising from historical use or storage of hazardous substances are remedied.	✓

Objectives	Policies	Effectiveness of Policies and Methods	satisfactory / unsatisfactory
and any adverse effects hat do occur are remedied or mitigated		Policy 13 is implemented by Methods 20 and 21. The number of confirmed contaminated sites in the Region has not been assessed (Method 20). Instead the Council has compiled a site use database. This includes sites with underground storage tanks. The ANZECC guidelines are used to assess the degree of contamination of sites on the site use database (Method 21). Methods 20 and 21 are helping to achieve Objective 4 because territorial authorities are given information from the database (on request) before they authorise any change in land use.	
Objective 4: *The potential for any accidental or unanticipated effects to arise as a result of the use, storage, transportation and disposal of hazardous substances is minimised and any adverse effects that do occur are remedied or mitigated*	**Policy 14:** *To minimise the risk of damage to the environment and human health from unused and unwanted agrichemicals in the Region.*	There is not enough information to determine whether this policy has contributed to achieving Objective 4. There have been no surveys about the quantities of unused and unwanted agrichemicals in the Region, but quantities have been estimated at about eight tonnes. Territorial authorities are not willing to fund any collection of unwanted agrichemicals despite their obligations under the LGA to make provision in a Waste Management Plan for the collection and disposal of waste in their district. Policy 14 is implemented by Methods 22 and 23. The Council has not co-ordinated any database of information about unwanted agrichemicals in the Region (Method 22), nor has it developed or implemented a strategy for unwanted agrichemicals (Method 23), although Resource Investigations intend to co-ordinate the collection of agrichemicals starting in 2001. To date, these methods have not been effective in achieving Objective 4.	X

12 Built Environment and Transportation

12.1 Summary

The provisions in the Built Environment and Transportation Chapter of the RPS are all soundly based. The Issues and objectives are appropriate. The question of whether the policies and methods are effective is more difficult to answer. The policies are appropriate but their effectiveness, in practice, relies heavily on implementation of the methods. Implementation is variable. When implementation of the policies has occurred, the results are achieving the objectives of the chapter. However, the implementation of some methods is a demanding task. The scope of some of them is large, often relies on the support of other agencies, and would require significant resources to implement.

Does this mean that we should change the RPS now? The answer is probably no. More effective implementation of the methods in the chapter would require considerable input and proactive leadership from the Council and a high degree of support and participation by other agencies. Rather, a review of the chapter at the end the ten year period that is subject to public submissions should more properly determine the Council's future role for the Built Environment and Transportation.

12.2 Background

The Built Environment and Transportation Chapter of the RPS addresses matters which, in terms of the Resource Management Act 1991, are controlled by territorial authorities for the most part. The breadth of the Chapter is wide. It touches upon social, economic and environmental aspects of urban living. It specifically addresses matters relating to infrastructure, urban design and development, and resource use. It has relevance for, and links with, virtually every other chapter in the RPS, notably those dealing with Energy, Waste Management, Air Quality, and Ecosystems management. The quality of the urban environment and links between areas now built upon with the Region's cultural past are also matters of significance for iwi.

Because the Built Environment and Transportation Chapter is a wide-ranging one, touching upon many types of resource use and the environmental impacts arising from that use, there are question marks about the quantity and the availability of useful data for assessment. While there are huge quantities of information about urban issues, urban sustainability and the quality of urban life from around the world to draw upon (particularly using such resources as the Internet), there is only patchy information for the Region. The principal exception to this is in the area of transport, where some useful material has been provided through the preparation of the Regional Land Transport Strategy. Also, some of the territorial authorities have pursued aspects of urban sustainability and published associated information (notably Wellington City through projects like Our City, Our Future). The ***State of the Environment Report for the Wellington Region*** provides a compilation of available information and has been an important source in the assessment that follows.

12.3 Issues

The RPS considers 5 aspects of the urban environment from which issues and objectives arise:

1. The human values placed on **buildings, structures and facilities**
2. The need for physical resources such as transportation systems and public utilities (**infrastructure**) that connect and service human settlements

3. The **natural systems** (air, water, land and ecosystems) that are essential for life, but that also contribute to the quality of the built environment

4. The **resources** used (including energy) and the **wastes** produced by activities undertaken by people for their social and economic well-being

5. The **process of development** by which the built environment changes, and the **urban form** which results from the process.

These aspects of the urban environment formed the focus for the RPS because the Resource Management Act 1991 does not allow for consideration of social and economic activities per se – only the consideration of environmental effects on resources arising from activities. There are likely to be amendments to the Act. For example, greater recognition of social outcomes or built heritage might be needed through regional policy statements. Conversely, amenity values and health and safety considerations may become inappropriate matters. In either case, the breadth of the Issues and associated Objectives and Policies may need adjustment.

Generally speaking, and within the constraints of current legislation, the range of issues remains appropriate. There could be some "fine tuning" of certain issues (e.g. including in Issue 6, among the environmental impacts of transport systems, the amount of land used for transport and its unavailability for other uses). There could be minor wording additions to achieve greater consistency between documents (e.g. making reference to pedestrians and transport safety issues, for consistency with the Regional Land Transport Strategy). However, while such amendments marginally improve the coverage of the Issues, the generic nature of the wording of the Objectives, Policies and Methods already does enable consideration of these additional matters.

The following analysis summarises each Issue identified for the RPS, and makes a short comment by way of assessing its continued appropriateness (or relevance) in the light of current legislation and knowledge.

Issue 1

There is uncertainty about what sustainable management of the urban environment involves.

While a number of cities and communities have begun to directly address sustainable development (e.g. through Local Agenda 21 programmes), there continues to be discussion about what constitutes sustainable management and how well government and local authorities are geared up to deliver the concept (see for example the Parliamentary Commissioner for the Environment's recent report, *The Cities and Their People – New Zealand's Urban Environment*).

Issues 2 and 3

There are negative resource impacts and inefficiencies associated with low density and extended forms of urban development (Issue 2) and with unco-ordinated, sporadic development around the Region (Issue 3).

Both issues are related, and both remain pertinent to considerations of urban development in the Region. Currently, for example, there are several proposals for subdivision on the Kapiti Coast and in parts of the Wairarapa, each being considered on their individual merits and their specific sets of environmental effects. While such assessment is consistent with the requirements of legislation, assessing the cumulative impacts of proposals is a more difficult exercise. In Kapiti, the local authority has acknowledged the implications of continuing pressures on resources, and has begun the preparation of a Growth Strategy. Nevertheless, the problems that underlay Issues 2 and 3 remain relevant for the Region.

Issue 4

Decisions about the location of major facilities need to recognise that the effects can be more than local.

Again, still a relevant issue. In the last few years, there have been proposals for retail and sporting facilities that have had strategic transport implications beyond their immediate locations. In assessing

effects, these wider consequences do need to be addressed, because they could lead to a need for additional infrastructure (which needs to be planned for, and financed) or compete with or undermine investment already made in other (public) facilities.

Issue 5
The efficiency and effectiveness of public transport systems can be enhanced if there is better integration with land use decisions about the location and design of development.

The need to provide efficient public transport systems for their environmental (and social) benefits will continue to remain an issue to be addressed in transport planning and resource management.

Issue 6
The adverse local and global environmental effects arising from the use of transport systems.

Awareness of the effects (and environmental costs) of using different transport modes is an on-going and important issue.

Issues 7, 8 and 9
Because costs associated with providing and maintaining infrastructure are high, and decisions about infrastructure can determine development direction for the long term, a full assessment of costs and benefits is important (Issue 7). Once investment has been made in expensive infrastructure, it should be protected (Issue 8). Infrastructure use and construction can, however, cause environmental damage (Issue 9).

These Issues have clear links with Issue 3, highlighting the continuing need for an appreciation of the wider and longer-term costs of infrastructure decisions.

Issues 10 and 11
Urban areas are large consumers of energy and producers of waste, and the concentration of activities in urban areas can place unsustainable effects on natural resource systems.

These Issues recognise, at the scale of cities and larger settlements, that large numbers of people use a lot of resources and produce considerable quantities of waste. Further, there is a concentration of the adverse effects of consumption and waste production, partly as a product of numbers and partly as a product of urban life-styles and mobility. Environmental problems arising from these Issues link to other chapters of the RPS, and through the production of pollutants for air, water and soil, underpin many aspects of sustainable management. The Issues are fundamental and therefore remain appropriate to consider.

Issues 12 and 13
Levels of amenity in urban areas are important, but vary widely, and the special features that contribute to the character of the Region are important and need appropriate protection.

These Issues touch upon heritage, recreation, landscape, pollution and traffic levels, the condition of the natural environment in urban areas, and the unique combinations of features that give places a sense of identity and the Region its distinctive character. People want to feel good about their region and feel safe in their neighbourhood, town or city. They want to feel that the place they live is special, and that it has good prospects. These are not things that can be easily measured, but a high "quality" urban environment remains an important factor for local communities and a physical focus for local authorities in carrying out their resource management responsibilities.

12.4 Objectives

The objectives in the RPS were designed, in their scope and wording, to embrace all of the identified issues, and to be generally applicable to other issues that might arise for urban area management. The 3 objectives are identified in Table 12.2. They deal with the efficient resource use in the development of urban areas and transportation systems, managing the adverse effects arising from urban living, and maintaining/improving the quality of the urban environment.

Given that there does not appear to be any significant new issues emerging, and that the Objectives are comprehensive in their potential application, the conclusion is that the Objectives do not need to be changed.

12.5 The effectiveness of Policies and Methods

12.5.1 Regional and District Plans

This subsection of the report combines with two RPS chapters, the Energy Chapter and the Built Environment and Transportation Chapter. These have been combined because the relevant regional and district plan provisions for both are the same or very similar.

Regional plans address adverse effects on soil, air, water, the coastal marine, and adverse effects from discharges to land that result from the use of energy and activities relating to the built environment and transportation. For example, motorised transport and other discharges to air from energy sources and the built environment and transportation are addressed in the Air Plan. Adverse effects are addressed through the policies and rules in regional plans in order to achieve environmental objectives set out in the plans.

The main focus for the Energy Chapter and the Built Environment and Transport Chapter is on district plans not regional plans. The Built Environment and Transportation chapter anticipates that territorial authorities will address three issues within their district plans:

1. Provision for and protection of utilities and transport corridors as a significant physical resource;
2. Promotion of better environmental quality and amenity; and
3. Promotion of the efficient use of our natural and physical resources through urban form and by avoiding the use of non-renewable resources.

This third aspect is also a major theme of the Energy Chapter. More specifically the Energy Chapter anticipates that territorial authorities will promote energy efficiency through building design, construction materials and transportation systems, and by influencing urban form and the distribution of landuses. The Chapter also looks to avoid, remedy or mitigate the effects of the production, transport and use of energy.

All of the district plans include some policies and rules which are relevant to both the Energy chapter and the third issue in the Built Environment Chapter. In the most part these relate to the efficient use of the Region's transport systems. For example the larger urban authorities all have policies which make reference to the need to encourage an urban form which reduces travel times and increases the viability of public transport. One means by which this policy is implemented is through rules which make it difficult to undertake greenfield subdivision. Another is to allow higher development density in the vicinity of major transport routes, and a third is to allow a mix of uses within various zones.

In addition to these provisions all of the district plans include some reference to the need to provide for cyclists and pedestrians. Such provisions are generally implemented by consent conditions.

Beyond transport the district plans make only general statements about the need to improve energy efficiency. One plan includes a policy which aims to:

Encourage subdivision design and housing development that optimises resource and energy use.

One method of implementation identified in the district plan is a subdivision design guide however this only has a limited number of provisions which address energy efficiency.

The other two parts of the Built Environment Chapter, ie provision for utilities and the promotion of environmental quality and amenity, are well provided for in the district plans. Several of the district plans

include sections which specifically provide for utilities. These sections generally aim to balance the benefits of the utilities with the need to avoid, remedy or mitigate their adverse environment effects. In addition to these provisions the Resource Management Act allows requiring authorities, including territorial authorities, to designate land for future public works.

All of the territorial authorities have included provisions which promote amenity and environmental quality. In fact these provisions are one of the main themes within the district plans and form the basis for the different zones or areas that all of the territorial authorities split their districts or cities into.

12.5.2 **Implementation of Methods**

The methods in the Built Environment and Transportation Chapter are listed in Table 12.1. The implementation of methods is closely aligned with the policies. Hence, the implementation of methods is discussed further in section 12.5.3 of this report and in Table 12.2, which looks at the effectiveness of policies and methods.

12.5.3 **The Effectiveness of Policies and Methods**

Any assessment of the effectiveness of the policies and methods in the Built Environment and Transportation Chapter needs to acknowledge at the outset that there is not necessarily a direct and simple cause and effect relationship between desired environmental outcomes and the existence of a policy and implementation methods. This consideration is especially relevant given the complexity of inter-linkages between activities and people's behaviour in urban areas. A particular RPS method might appear to be working, but there may be several extraneous factors that are also contributing to the signs of success. Conversely, a method might be working well, by itself, but insufficient time has elapsed to demonstrate its effectiveness. The RPS has only been operative for less than 5 years. Further, there may be no relevant information to make any sort of judgement about success or otherwise, about who to applaud or blame!

In brief, making an assessment of the effectiveness of the RPS policies and methods in this chapter is, at best, a qualified guess rather than a quantitative calculation. The following commentary should be read, therefore, as a broad summary drawn from a mixed bag of information about change in the Region. Conclusions have to be tentative.

Table 12.2 lists objectives and related policies in the Built Environment and Transportation chapter, identifies related methods of Implementation, and provides a short commentary. The text that follows draws upon the findings of the *State of the Environment* report (SER), providing some discussion of the relationship between the "bad news" items in the SER and policies and methods in the RPS.

The "bad news" in the SER for the Built Environment chapter took the form of a sweeping observation that "where we live and the way we live create environmental pressures." It is difficult to tie this piece of "news" back to any one or combination of policies in the Built Environment and Transportation Chapter. Indeed, it is a reflection of decisions and actions taken by many individuals, businesses and authorities, many of which are outside the influence of the RPS.

In making the statement about the environmental pressures created by our urban lifestyles, the SER is not, then, necessarily judging the effectiveness or suitability of the RPS Policies. The policies may well still be an appropriate "general plan or strategy required to achieve the desired end" (RPS page 31). It is more likely that the Methods for implementing the Policies are not being as effective as hoped. They may need to be more vigorously pursued. Some should be dropped. Different ones might be needed. Effort may need to be put into implementation of some methods on a continuing or regular basis. These comments about the effectiveness of methods are relevant for many of the RPS methods, since so many have an influence on the urban environment.

Within the Built Environment and Transportation Chapter, the methods can be put in three categories according to implementation responsibility. There are three methods where the Council is identified as the primary agency for carrying out, or at least initiating, particular actions (Methods 1, 3 and 5). There are two methods that suggest that district plans would be an appropriate means of implementing particular policies (Methods 2 and 6). Finally, there is one method (Method 4) which provides a list of appropriate actions that could be taken by a variety of agencies, authorities and businesses. An assessment of effectiveness of the six methods needs to bear these implementation responsibilities in mind, and the time scale anticipated for implementation.

Of the 3 methods for which the Council has responsibility, the preparation and review of the RLTS (Method 3) has perhaps the highest priority and has shown most progress in implementation. The Method says that the RLTS will "promote" various actions, and in the two versions produced since the RPS was drafted, the RLTS does indeed contain the necessary wording to promote the identified actions. The problem is that many of the environmental outcomes sought through such "promotion" remain distant. In the area of transport and environmental management, both the RPS and the RLTS may benefit from greater specification of desired actions, together with the ability to provide incentives (or sticks) to produce appropriate results.

Method 5 sets out 4 sets of actions for the Council to pursue for taking an integrated approach to considering the effects of major developments. As noted in Table 12.2, this method has been effective in relation to the Wellington Stadium development, but there has been less success in other areas of integrated urban management. In this regard, the Council might consider the potential of the final clause of Method 4, which has not yet been programmed for implementation. The clause says that the Council will "consider the preparation of a Regional Urban Development Strategy as a means of providing guidance and direction for matters relating to infrastructure, urban areas and urban development that are of regional significance".

The other method for which the Council has primary responsibility is one that calls for relevant information is to be reviewed and research undertaken into what constitutes sustainability for urban (and rural) areas. The Council has not got a mandate to take the lead in this matter, recognising that city councils will variously face different issues and aspects of sustainability. While this method has therefore been a low priority, the 1998 report on urban sustainability from the Parliamentary Commissioner for the Environment calls for better co-ordination of urban-based resource management. Arising from the Commissioner's report, it may be appropriate to more actively pursue Method 1, but it would need to be with the support of other relevant agencies and authorities within the Region.

Comments on the degree to which territorial authorities have implemented Methods 2 and 6 are made in the section of this Review dealing with District Plans. The only additional comment would be that given the fact that all of the Region's District Plans are either operative or close to becoming operative, it is unlikely that District Plans will be an effective implementation tool again until the time of their review, which will be at least 5-7 years away.

Method 4 carries no primary implementation responsibility, and its component parts have therefore been variously picked up or ignored. The open-ended nature of this method (and numerous others in the RPS) arose from advice that it was not appropriate to direct parties (other than the Council) to make a commitment to take particular actions. In consequence, some important actions for sustainable urban management, relying on voluntary efforts or the development of technical guidance from an appropriate authority, have not always been followed through as effectively as they might.

The overall conclusion as to the effectiveness of the policies and methods of the Built Environment and Transportation Chapter is that the policies effectively reflect the Objectives that they are intended to elaborate on, and that the methods could, in some cases, be more rigorously pursued. Given the impact of other parts of the RPS on the urban environment, and the multiple agencies involved in urban management, it is hard to say which of all the RPS methods should be

a priority. Nor is it appropriate, without external input to the review process, to suggest which agencies could take a more active role in implementation, and for which methods.

While the SER tells us that urban lifestyles do create environmental pressures, the pace at which those pressures are addressed and the extent to which the Council and others wish to pursue an integrated management approach to their resolution is a political decision. Participation in this Review will assist that decision.

12.6 Anticipated Environmental Results

Table 12.3 assesses the degree to which the Anticipated Environmental Results (AERs) are being achieved.

The table reflects the comments in section 12.5 of this report on policies and methods. Three AERs are being met in full or met for the most part. Two are hardly being met at all.

Table 12.1. Methods in the Built Environment and Transportation Chapter of the RPS

Methods
Method 1: *The Wellington Regional Council will review relevant information sources on sustainability and urban and rural systems, and will consider undertaking research or policy analysis to further understanding.*
Method 2: *District plans would be an appropriate means of implementing Built Environment and Transportation Policy 2.*
Method 3: *The Wellington Regional Council will prepare and review the Regional Land Transport Strategy and through the Strategy and its other transport responsibilities:* *(1) Promote public awareness about the full social, economic and environmental costs of using different modes of transport;* *(2) Promote the use of urban transport modes which use renewable energy resources and that are efficient in the use of energy generally;* *(3) Promote policies that encourage the provision and use of alternatives to individual vehicles as a means of meeting needs for accessibility;* *(4) Promote fuel efficient driving practices; and* *(5) Provide, where appropriate, funding for the investigation, planning and provision of public transport services.*
Method 4: *To achieve integrated management, other means which could be used to implement Built Environment and Transportation Policies 3-6 include:* *(1) Encouraging the introduction, monitoring and enforcement of emissions standards for all land transport vehicles;* *(2) Encouraging relevant authorities, in their plans and decisions, to make adequate and appropriate provision for the development, maintenance and upgrading of network utility operations and infrastructure, and for the protection of existing transportation corridors;* *(3) Encouraging the owners and operators of existing infrastructure to ensure that such infrastructure, where practicable and reasonable, is used to capacity before additional infrastructure is programmed and provided; and* *(4) Ensuring that all infrastructure is developed and used in ways that reduce, as far as practicable, any adverse*

environmental effects.
Method 5: *The Wellington Regional Council will:* *(1) Carry out a review to determine how the integrated management of the Region's urban areas can be best achieved;* *(2) Promote the assessment, where appropriate, of regionally significant effects, including transportation effects, of proposals for significant public and commercial developments and facilities;* *(3) Liaise with territorial authorities, Government departments and agencies, and other relevant organisations on issues of infrastructure and urban development that are of regional significance; and* *(4) Consider the preparation of a Regional Urban Development Strategy as a means of providing guidance and direction for matters relating to infrastructure, urban areas and urban development that are of regional significance.*
Method 6: *District plans would be an appropriate means of implementing Built Environment and Transportation Policy 8*

Table 12.2. Effectiveness of Policies and Methods in Meeting Objectives in the Built Environment and Transportation Chapter of the RPS

Objectives	Policies	Effectiveness of Policies and Methods
	Policy 1: *To improve understanding of sustainable management in relation to urban areas and the built environment, and to develop means by which it can be implemented.*	Policy 1 is implemented by Method 1. There has been some progress in community awareness of the notions of sustainability and the "ecological footprint" of urban areas. However, an integrated approach to managing urban areas, involving the many different organisations that have an influence on urban living, continues to prove elusive, perhaps because there are so many players. There is no over-arching framework, or responsibility, for managing urban areas and their hinterlands, in a sustainable fashion. Agenda 21 programmes for cities might be one opportunity for an approach that co-ordinates agencies and connects the resolution of related environmental management issues.
Objective 1: *Urban areas, the built environment and transportation systems are developed so that they, and their associated activities, use resources efficiently and demand for the use of finite resources is moderated.*	**Policy 2:** *To use natural and physical resources efficiently in the development of urban areas and in use of the built environment by:* *(1) Encouraging forms of urban development that reflect efficient use of resources; and* *(2) Avoiding, where practicable, the use of new resources, particularly non-renewable resources.*	There has not been a high degree of success thus far in implementing Policy 2 and Method 2. Development location and urban design generally dictated more by the choice/desire of developers than by the conscious pursuit of efficient resource use. Locations within the coastal environment are popular for sub-division activity, as are rural areas within easy distance of urban work opportunities. These areas are often separated from existing areas of development, make demands on local environmental systems for water supply and effluent disposal, depend on private transport for accessibility, and in consequence, increase demand for (finite) energy. District Plans (Method 2) have been variable in their success in implementing this Policy.
Objective 1: **Objective 2:** *The adverse environmental effects that result from the use of urban*	**Policy 3:** *To promote the development of transportation systems in the Region that:*	Policy 2 is implemented by Methods 3 and 4. There has been variable success. While public transport use is relatively high compared with other NZ cities, the number of vehicle trips continues to grow. Moreover, there are plenty of car-parks to encourage car use. Energy use for transport is not moderating, although there is some efficiency improvements in the performance of vehicles (outweighed

Objectives	Policies	Effectiveness of Policies and Methods
areas, transportation systems and infrastructure are avoided, remedied or mitigated and, in particular, any effects that result from the concentration and scale of activities in urban areas are recognised and provided for	*(1) Meet community needs for accessibility;* *(2) Use modes of transport that are powered by renewable energy fuels;* *(3) Help moderate demand for energy and use energy efficiently;* *(4) Discourage dispersed development; and* *(5) Avoid or reduce adverse effects on human health, public amenity and water, soil, air and ecosystems.*	in their beneficial effect by the increased distances travelled, and energy used). The Regional Land Transport Strategy (Method 3) has reflected and refined the components of Policy 3. For example, it purposefully pursues the accessibility needs of the region's population by encouraging and providing for the needs of cyclists and pedestrians, and for improving the facilities these modes of transport require. Regional plans set standards of air and water quality that potentially influence the adverse effects of transport system use. However, greenhouse gases from the transport sector continue to account for the more than 40% of NZ's emissions
Objective 2:	**Policy 4:** *To provide for the accessibility needs of the Region by protecting existing transport corridors*	Policy 4 is implemented by Method 4. The process of designating road and rail infrastructure in District Plans has been an effective way of implementing this Policy.
Objective 1: **Objective 2:**	**Policy 5:** *To recognise that the services provided by network utility operations and infrastructure make an important contribution to the social and economic well-being of the Region.*	Policy 5 is implemented by Methods 4 and 5. Advocacy by the Council for the development, maintenance and upgrading of infrastructure (Method 4(2)) and for avoiding adverse environmental effects from infrastructure use (see Policy 6 below) has had mixed success. From a transport infrastructure perspective, the importance of having an efficient and high quality transportation network for regional well-being is identified in the RLTS, and enjoys a good level of public interest. However, as noted in Policy 2, there remains a more general need to ensure that decisions about urban development link up with decisions about infrastructure provision, and the capacity of local environmental systems to accommodate such development.
Objective 1: **Objective 2:**	**Policy 6:** *To promote the provision and efficient use of infrastructure n the*	Policy 6 is implemented by Method 4. Water quality indicators in the more polluted areas show little improvement as yet, but provisions regarding effects of

Objectives	Policies	Effectiveness of Policies and Methods
	Region, and the reduction of adverse environmental effects from its use.	infrastructure use are being progressively incorporated in district plans, regional plans and individual resource consents. Major improvements can be expected from the Wellington and Hutt Valley sewage treatment upgrade systems.
Objective 2:	**Policy 7:** *To take account of regionally significant effects on the environment of any new use or development, the size, function or location of which is likely to give rise to those effects.*	Policy 7 is implemented by Method 5. The Wellington stadium decision-making process showed how a collective, regional overview of a proposal could sensibly deal with the management of a range of regionally significant effects. However, the benefits of a co-ordinated approach have not often been grasped for other larger development proposals.
Objective 3: *The environmental quality of urban areas is maintained and enhanced*	**Policy 8:** To promote a high level of environmental quality in urban areas by: *(1) Encouraging good urban design;* *(2) Enhancing and protecting amenity values; and* *(3) Maintaining and enhancing natural areas and protecting those places, features or buildings with significant heritage, ecological, cultural or landscape values.*	Some major achievements, with the enhancement of Wellington's environment, for visitors and residents, particularly significant. Elsewhere, area enhancement projects (e.g. Jackson Street in Petone) have also lifted the vitality and viability of the commercial parts of settlements. Heritage protection has developed a higher public profile and support, and examples of active protection are increasing in number. Enhancement schemes for streams and rivers, where they pass through urban areas, are also beginning to get started.

Table 12.3 Assessment of Anticipated Environment Results in the Built Environment and Transportation Chapter of the RPS

AER from Chapter 14		Met, or almost met, in full	Not met, but good progress is being made	Not met, with little progress being made	Unable to assess
(1)	The use of finite resources in urban areas is moderated and those finite resources and renewable resources which need to be used are used more efficiently.			✓	
(2)	Urban infrastructure and transportation systems are used efficiently and, as far as practicable, adverse effects of their use are avoided.		✓		
(3)	Urban systems are more energy efficient, and have a high level of renewable energy use per capita.			✓	
(4)	The urban environment is healthy and provides a high standard of urban amenity for its residents and visitors.		✓		
(5)	Buildings, urban areas and features with significant heritage, ecological, landscape or cultural values are protected.		✓		

Appendix 1
Section 15.7 of the RPS

Monitoring and Review of the Regional Policy Statement

The Act establishes a general duty for the Regional Council to monitor the suitability and effectiveness of the Regional Policy Statement (s. 35(2)(b)).

In addition, the Council is required to state in the Regional Policy Statement the procedures to be used to review the matters set out in s. 62(1)(a)-(ha) of the Act and to monitor the effectiveness of the Statement as a means of achieving its objectives and policies (s.62(1)(i)).

The Regional Council is also required to commence a full review of its Regional Policy Statement, no later than 10 years after the Statement becomes operative (s. 79). However, the Regional Policy Statement may also be changed at the instigation of a Minister of the Crown, the Regional Council or any territorial authority within or partly within the Region (s. 60).

In meeting these requirements the Council will report, five years after the Statement has become operative, and thereafter at five yearly intervals, on:

(1) The appropriateness of the significant issues and objectives in the Statement; and

(2) The effectiveness of the policies and methods in meeting the objectives.

The report will contain:

(1) Recommendations for any necessary changes to the Statement;

(2) An assessment of the appropriateness of the significant issues and objectives in the light of feedback from territorial authorities, resource users, the public or other interested or affected parties. This feedback may come from the media, correspondence, meetings or other means, such as Council research;

(3) An assessment of the degree to which the policies are reflected in regional and district plans;

(4) An assessment of the degree to which the methods have been implemented; and

(5) An assessment of the degree to which the anticipated environmental outcomes have been achieved.

For the purpose of, and as part of this five yearly review report, and to fulfil its monitoring responsibilities under the Act, the Council will implement a **Regional Monitoring Strategy** which will include:

(1) A comprehensive "State of the Environment Report", to be prepared five years after the Statement has become operative and thereafter at five yearly intervals. This will provide information on the current state of the environment, describe changes and trends in environmental systems, and relate, where possible, such environmental changes to causes;

(2) An annual publication containing summary results of the Council's monitoring activities;

(3) Regular publications on social and economic trends in the Region;

(4) Surveys of people's attitudes about the environment, particularly the attitudes of major resource users;

(5) The monitoring of consents to ensure compliance with conditions; and

(6) Special surveys, or investigations which focus on specific issues, as and when required.

In carrying out these tasks, the Council will consult, where necessary, with other relevant resource management and research agencies and, where possible, co-operate with them to reduce monitoring costs, to share information and to avoid duplicating data collection.

The Regional Council will review the Regional Policy Statement no later than ten years after the Statement becomes operative (s. 79). Having completed such a review, the Wellington Regional Council will change or replace the Statement in accordance with the requirements set out in the First Schedule of the Act.

The Regional Council may also make changes to the Statement whilst it is operative. These changes may be made after the five yearly report or if instigated by a Minister of the Crown, the Regional Council or a territorial authority within (or partly within) the Region.