Proposed Regional Policy Statement for Otago

Section 32 Evaluation Report Consideration of alternatives, benefits and costs

This Section 32 Evaluation Report should be read in conjunction with the Proposed Regional Policy Statement for Otago.



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Abbreviations		
	Designed, situs and district equipally	
Local authority	Regional, city and district councils	
ORC	Otago Regional Council	
RPS	Proposed Regional Policy Statement for Otago	
RMA	Resource Management Act 1991	
NES	National Environmental Standard	
NPS	National Policy Statement	
NZCPS	New Zealand Coastal Policy Statement	
Note: use of section/Section:		
section	A reference to another section in this report.	

1. Introduction

This report assesses the Proposed Regional Policy Statement for Otago as required by Section 32 of the RMA, and should be read in conjunction with the Proposed Regional Policy Statement (RPS).

2. Background

The RMA requires regional councils to prepare regional policy statements, in order 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." (RMA Section 59). An RPS provides direction to city, district and regional councils, which must give effect to its provisions in their regional and district plans under RMA Sections 67 and 75.

The RPS must therefore:

- Describe the regionally significant issues faced by Otago, and set out how those issues will be addressed
- Co-ordinate the resource management decisions made by regional, city and district councils in Otago

As a result, the RPS is serving two functions: setting out a regional vision for achieving sustainable and integrated management of Otago's natural and built resources; and ensuring effective and cost-efficient resource management processes throughout the region.

The current Regional Policy Statement for Otago was made operative on September 1998. A full review and update is required.

3. Regional context (vision and outcomes)

The RPS sets out a regional vision for resource management based on four outcomes for achieving sustainable and integrated management of Otago's natural and built resources:

- Outcome 1 recognises the special relationship between takata whenua and the Crown, which must be given effect through the RMA
- Outcome 2 recognises the fundamental importance of the natural environment, the services provided by the environment to society and the inherent qualities of the environment that give value beyond human use
- Outcome 3 recognises that the way we build our communities needs to be able to address reasonably foreseeable risks, and provide for community health and safety

 Outcome 4 recognises that our economic, social, cultural and environmental wellbeing is built on the use, development and enjoyment of our natural and built resources.

Those outcomes offer a holistic approach to resource management, which takes full account of the synergy and inter-dependency of the quality of the natural environment and its ecosystems, with people's well-being.

The definition and adoption of those outcomes have been the result of extensive consultation with the councillors of the regional, city and district councils, and takata whenua (see Appendix 2 – consultation processes)

The RPS seeks to achieve those outcomes by applying the following principles, which are based on the ORC's Strategic Plan:

Parallel development

The proposed framework sets out how to achieve a convergence of different values and effects, blending environmental enhancement and protection whilst enabling natural resources based economic initiatives for the prosperity of the region.

Permissive/ output and outcome oriented

The outcome-oriented approach enables the regional community and businesses to operate by clarifying desired effects and bottom lines (which are prescribed in regional and district plans) for resource management.

User responsibility

Responsibility is placed on resource users to achieve good outcomes, underpinned by the least necessary regulation.

Innovation focus

By setting desired effects and clear bottom lines, individuals and businesses are able to innovate within a clear statutory framework.

Tactical risk reduction

Some risks to the natural and built environment can be reduced through RMA processes, and using community engagement to identify locally relevant solutions.

4. Approach to achieving the vision and outcomes for the region

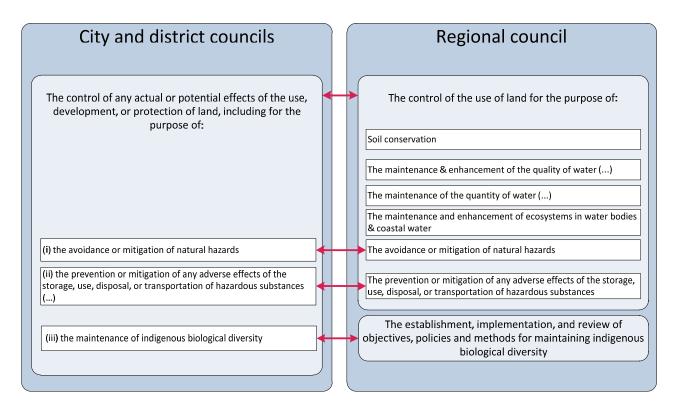
The effectiveness and efficiency of the RPS is a result of the joint definition of the roles and responsibilities of city, district and regional councils, and the policies and methods needed to achieve the proposed objectives.

This section discusses the sharing of roles and responsibilities proposed in the RPS, and the alternative options to achieve the vision and outcome described above.

4.1. Roles and functions of regional, city and district councils

Because one of the main functions of an RPS is to set out the coordination between resource management decisions by local authorities of a same region, it is necessary to clarify the roles and responsibilities of city, district and regional councils in resource management.

The key overlaps between the functions of regional, city and district council, as defined in sections 30 and 31 of the RMA, are represented in the diagram below:



As showed above, most overlaps concern the control of the use of land, with the exception of the maintenance of indigenous biological diversity. Those overlaps could be addressed either by appointing the council responsible for managing land uses, or by setting out processes ensuring the appropriate management of those overlaps.

Those options are assessed in the table below:

	OPTION 1: APPOINTING A LEADING AGENCY FOR THE CONTROL OF THE USE OF LAND	
BENEFITS	 Ensures a consistent management framework Reduces need for collaborative processes, which can be costly Reduces multiple consenting issues Under RMA S62(1)(i), is a requirement for: The avoidance or mitigation of natural hazards The prevention or mitigation of the adverse effects of the storage, use, disposal or transportation of hazardous substances The maintenance of indigenous biological diversity 	
Costs	 Risk that some effects are overlooked, depending on the expertise of the leading agency in assessing the actual or potential effects of the use of land Risk of inconsistencies between the control of land use, and other controls for the management of fresh and coastal water values, soil conservation, the management of natural hazards and of indigenous biodiversity 	
	OPTION 2: SETTING OUT PROCESSES FOR THE MANAGEMENT OF KEY OVERLAPS	
BENEFITS	 Ensures consistency of controls serving the same purpose Ensures all councils can use their expertise for the assessment of the effects of land use 	
Costs	 Requires a high level of collaboration to ensure consistent land use controls Requires a specific framework for: The avoidance or mitigation of natural hazards The prevention or mitigation of the adverse effects of the storage, use, disposal or transportation of hazardous substances The maintenance of indigenous biological diversity 	

Option 1, the appointing of a lead agency, is the preferred option, mostly because it reduces multiple consenting issues, and is therefore more cost-efficient for resource consent applicants. Land use controls can only be attributed to city and district councils, for the implementation of Option 1 stated above, as regional councils cannot control all the effects of land use.

It is however proposed that regional councils control land use on the beds of lakes and rivers. This approach is closest to the status quo, and will therefore be easier and cheaper to implement, whereas option 2 would not result in significant additional benefits. Appropriate collaborative processes can ensure that regional councils will provide their advice on their areas of expertise, including natural hazard risk or the effects of land use on water, and a strong policy framework in the RPS can ensure land use controls are adequately integrated to other controls, such as water management, for the maintenance and enhancement of environmental values (discussed later in this report).

The setting of objectives, policies and methods for the maintenance of aquatic indigenous biological diversity requires controls on the taking, use, damming and diverting of water, and on discharges to water (see the following table). As a result, the maintenance of indigenous biological diversity is proposed to be under the responsibility of district councils for terrestrial ecosystems, the responsibility of ORC for aquatic ecosystems and under the joint responsibility of city, district and regional councils for the margins of aquatic ecosystems. A similar management framework is proposed for the management of wetland values, for the same reasons.

4.2. Options for the framework of objectives, policies and methods

Three strategic regulatory options were considered in developing the framework for the RPS:

Option 1: Strong regulatory direction

This option provides strong regulatory direction, identifying provisions which must be incorporated within regional and district plan policies and rules. It is prescriptive and provides little choice in how a direction is to be given effect.

Option 2: General regulatory direction

This option provides general regulatory direction which must be given effect through regional and district plans, but unlike Option 1, does not prescribe precisely how the direction is to be given effect. Implementation is left open, as long as the intended effect is achieved. This gives local authorities more discretion in making RMA plans.

Option 3: Non-regulatory (voluntary) direction

This option provides general guidance and methods on how the region's natural and built resources are to be managed. It relies on people and businesses wanting to manage the environment well, without need for regulatory direction on issues of regional significance or regional integration.

Features	Option 1 Strong Direction	OPTION 2 GENERAL DIRECTION	OPTION 3 VOLUNTARY DIRECTION
Sets clear & consistent expectations	Yes	Possible	Less likely
Flexible to local circumstances	No	Possible	Yes
Harnesses spirit of voluntarism	No	Possible	Yes
Adds value to the RMA and national guidance documents	Possible	Possible	No
Is able to be given effect through regulatory plans	Yes	Yes	No

As outlined in the table above, options 1 to 3 all have value, and could be best applied depending on the context. As a general principle it has been considered that:

- Option 1 is the most effective and efficient option, to:
 - Address regionally significant issues which require a high level of consistency across districts and their resource management plans
 - Manage cross-overs between the areas of responsibility of Otago's local authorities
 - Maximise cost-efficiency and avoid multiplying court cases on similar matters
- Option 3 is the most effective and efficient option where individual and community interests are consistent
- Option 2 is preferred in most other cases, as better solutions for each community are likely to be achieved if there is some flexibility in how a community achieves the desired effects

An assessment follows of the suite of objectives under each of the outcome areas.

5. Kai Tahu values, rights and interests are recognised and kaitiakitaka is expressed

5.1. Evaluation of objectives and options to achieve those objectives

Proposed objectives:

- Objective 1.1 The principles of Te Tiriti o Waitangi are taken into account in resource management decisions
- Objective 1.2 Kāi Tahu values, rights and interests and customary resources are sustained

Objective assessment

Both these objectives recognise that resource management decisions affect Kāi Tahu's relationship with their ancestral resources, through their impact on the quality of the resources that underpin their values, and on Kāi Tahu's continued access to their ancestral land. These two objectives are consistent with Sections 6(e), 7(a) and 8 of the RMA.

Options to achieve objectives

A strong regulatory direction has been needed to guide the identification and protection of sites of cultural significance (Proposed Policies 1.2.2 and 1.2.3), in order to effectively address the resource management issues of significance to iwi authorities in Otago. However, flexibility is given for the identification and mapping of those sites, to ensure local community values are appropriately considered.

A general regulatory direction is considered appropriate, but necessary, for all other matters, to give as much flexibility as possible on how local authorities engage with Kāi Tahu, while ensuring resource management decisions take Kāi Tahu values into account.

5.2. Evaluation of proposed provisions

Proposed policies 1.1.1, 1.1.2 elevate Kāi Tahu involvement in resource management, and give takata whenua the assurance they will be involved in the identification and protection of their cultural values, and be able to exercise kaitiakitaka.

Proposed policies 1.2.1 to 1.2.4 set more specific principles on how the identification and protection of cultural values will be integrated in regional and district plans. In particular, provision is included for the identification and protection of important cultural sites, and the concept of wāhi tupuna, or ancestral landscapes, recognising the connections that make the landscape important.

Proposed policy 1.2.5 provides for the use of Māori land, and recognises the importance of providing takata whenua with the ability to provide for their economic, social and cultural well-being.

BENEFITS	Costs
Enviroi	NMENTAL
 Kāi Tahu values tend to support a healthy environment, being based around importance for food gathering and ecosystem health, which has wider benefits 	 Increasing use of native reserve land may have negative impacts on some environmental values in the coast or rural areas, where Kāi Tahu native reserve land tends to be
	ROWTH AND EMPLOYMENT)
 Kāi Tahu economic practices are better supported, raising the ability of Kāi Tahu people to become economically stable, and leverage cultural practices for economic gain Inclusion of marae related activity on native reserve land may provide some level of employment in those facilities, as well as facilitating rural tourism opportunities 	 Inclusion of Kāi Tahu values as a baseline may limit other economic activities, or provide them with extra costs for compliance with environmental standards Increased compliance costs may have flow on effects of decreasing employment. We consider these are likely to be minimal
Soc	CIAL
Kāi Tahu social wellbeing improved – better general social interaction	 Some may consider that Kāi Tahu are unfairly advantaged
Cut	URAL
Cultural expression for Kāi Tahu is supported and enhanced	Other cultural values may be down played in favour of Kāi Tahu values

The costs and benefits of the proposed provisions are outlined below:

UNCERTAIN INFORMATION POLICIES ARE BASED ON:

There is a uncertainty regarding:

- The extent of sites of significance which will be recognised in district and regional plans
- Local authority resources needed to effectively engage with Kāi Tahu
- The consistency of Kāi Tahu values and views within Iwi

RISK OF ACTING OR NOT ACTING IN FACE OF THIS UNCERTAINTY

- Risk of acting:
 - → Public and authority opposition to the increased negotiating power of Kāi Tahu
 - → Too much focus on Kāi Tahu values to the detriment of wider community interests
- Those risks are largely mitigated by RMA processes, which provide for the wider community and their values. Moreover, Kāi Tahu values and interests are often aligned with wider community values
- Risk of not acting:
 - \rightarrow Inconsistency with the RMA and the principles of the Treaty of Waitangi
 - → Under-representation of the cultural values of an important fraction of the community in resource management

EFFICIENCY & EFFECTIVENESS

- A more systematic approach to consultation with takata whenua is expected to reduce costs over ad hoc meetings, and associated timing issues that can arise. It also gives assurance that the resource management issues of significance to Kāi Tahu in Otago will be appropriately addressed
- The effective protection of takata whenua values in the region requires their identification at a site-specific level. It also requires a good understanding of how much those values depend on the natural resources of the region. The RPS provides for a management regime which takes those two aspects into account
- Finally, providing for the use of Māori land gives assurance to takata whenua they will be able to provide for their economic, social and cultural well-being

6. Otago has high quality natural resources and ecosystems

6.1. Evaluation of objectives and options to achieve those objectives

Proposed objectives:	
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- Objective 2.1 The characteristics and values of Otago's natural and physical resources are recognised, maintained and enhanced
- Objective 2.2 Otago's significant and highly-valued natural resources are identified, and protected or enhanced

Objective 2.3 Natural resource systems and their interdependencies are recognised

Objective assessment

The proposed objectives are the most appropriate way to achieve the purpose of the Act as:

- They set up the framework for the management of Otago's natural resources by:
 - Assisting with the set-up of environmental baselines in regional and district plans, within which communities are able to provide for their economic and social well-being
 - Providing guidance on matters for consideration for resource management decisions
- They set up the framework for the management of matters of national importance, identified in RMA Sections 6 and 7
- They are in line with the feedback received during public consultation on the issues and options for the RPS (see Appendix 1), and the reported importance of clean water, clean air, natural environment, sustainability, landscapes and indigenous biodiversity to Otago
- They highlight the importance of taking into account the systems and interdependencies between natural resources. This approach is consistent with the Maori world view, and with the concept of integrated management of natural and physical resources set out in RMA Section 59

Resource management decisions under the RMA are key methods to achieve those objectives, even though non regulatory methods might be required to fully achieve those objectives.

Options to achieve objectives

Achieving objectives 2.1 to 2.3 requires:

- The identification of those values and characteristics which most need to be recognised, maintained, enhanced or protected
- The recognition of the processes and resources those values and characteristics are dependent on

A general regulatory direction has been considered the most appropriate in most cases, as it gives general consistency across the region, yet flexibility to adapt regional and district plans to local conditions. This general direction sets out the values that need protection everywhere in Otago (e.g. achieving ambient air quality that supports human health) (Proposed Policies 2.1.1 to 2.1.7), and requires consideration of the interdependencies within and among resources (Proposed Policies 2.3 and 2.3.2).

However, a strong regulatory direction is considered the most effective and efficient for the identification and protection of the resources and areas most valued by Otago's communities. Those resources and areas are defined as the areas of significant indigenous vegetation and significant habitats of indigenous fauna, outstanding natural features and landscapes, and the areas of outstanding and high natural character, which are all matters of national importance under RMA Sections 6 and 7. A strong regulatory direction notably reduces the risks of multiple costly legal processes to define the criteria by which those areas and resources should be identified and ensures consistent criteria are used. Nonetheless, allowing flexibility in the mapping of those highly valued resources is desirable, to take better account of the local community values.

Similarly, given the interconnection between land use and freshwater values, and given that it is proposed that city and district councils centralise all land use controls, a strong regulatory direction, which highlights the relationships between land cover and land use, and freshwater values, is needed for the management of the interface between land use and water (Proposed Policies 2.1.1, 2.1.2, 2.2.13 and 2.3.3). Policy C2 of the NPS for Freshwater Management 2014 requires "Every regional council making or changing regional policy statements to the extent needed to provide for the integrated management of the effects of the use and development of (a) land on freshwater (....); and (b) land and freshwater on coastal water".

For soil resources, the focus of the RPS is on highly valued soil management, as the protection of soil values is to a large extent in the interest of land managers and the whole community. General provisions address erosion risk and land contamination (Proposed Policies 2.1.5, 2.2.14 and 2.2.15). A voluntary direction is proposed for the management of soil.

6.2. Evaluation of proposed provisions

6.2.1 Managing the values of all natural resources

Proposed Policies 2.1.1 to 2.1.7 indicate what level of protection should be applied to the values of natural resources. They generally seek to "preserve", "protect", "maintain" or "provide for" those values. "Preserve" is the highest protection threshold, and "providing for", the lowest.

The proposed policies are relevant to the setting of specific environmental limits, such as freshwater objectives, or any relevant airshed-specific air quality standard. It is anticipated that the use of natural resources will be enabled within those environmental limits. However the setting of those environmental limits is not required to give effect to those policies, and another management framework could be selected (unless specified otherwise in an NPS).

These policies will not require major changes to operative regional and district plans, but they will require:

- More active management of soil values
- A better understanding of, and greater consideration to, the interactions between the values of rivers, lakes, wetlands and their margins and natural processes
- Additional land use controls for some changes in vegetation coverage (e.g. tussock grasslands)

BENEFITS	Costs
Enviroi	NMENTAL
 More integrated approach to land use and freshwater management: → Lower risks to important ecological values from inconsistencies between regional and district plans More holistic approach to ecological values with the protection of habitats, interconnected resources and ecotones (water margin management and estuaries) Better recognition of soil's ecological values and ecosystem services Soil as a natural resource will have its life-supporting capacity retained 	 More research required to better understand: Coastal values The role of river morphology in supporting rivers' values Individual opposition to environmental protection on private land can increase risk of intentional damage

The costs and benefits of the proposed provisions are outlined below:

	GROWTH AND EMPLOYMENT)
 Protection of existing hydroelectricity generation activities Protection of soil's productive capacity and versatility, and against the effects of land use on erosion Lower vulnerability to flood events, through water margin requirements – associated lower risks to farming operations Provision for sustainable economic growth through the protection of important ecosystem services → Reliability of existing water supply for is protected from reduced catchment yields → Lower flooding risk and erosion through water margin requirements. This will result in reduced economic damage Potential opportunity for Otago's economy in: → Developing and exporting a sustainable model of farming, based on the full use of ecosystem services 	 productive use (riparian margin management, tussock grassland and wetland protection): → This could incur costs to farmers, or other industries, although some of those costs might also be required under other regulations (e.g. current water quality rules) → Costs to local authorities for water margin management → Costs to developers through riparian strips that could cascade to new houses' prices

The effect of the proposed objective and policies on employment cannot be evaluated, and will depend on the impact of the proposal on regional and district plans, and on the overall economy

Social			
 A greater resilience against flooding, erosion etc. will have positive effects on communities' social well-being High emphasis on: → Drinking water supply → Health value of air quality → Recreational values of rivers, lakes, wetlands and coast Enhancement of water margins and their natural character will enhance well-being through improved access and improved aesthetics 	 Social costs will be dependent on economic costs: → If effects on are significant there might be negative consequences on rural communities 		

Cultural			
High level of protection of takata whenua values	• There are no cultural costs anticipated with these policies		
 Healthy rivers, lakes, wetlands and their margins support the cultural use of land by Kāi Tahu who value the maintenance of the mauri of land and water Provision for other cultural values 			
UNCERTAIN INFORMATION POLICIES ARE BASED ON:			

- The main uncertainty relating to these provisions relate to the environmental baselines which will be needed to protect the values identified, and the effects of those environmental baselines on people's ability to provide for their economic, social and cultural well-being
- However, it is not anticipated that the proposed policies will necessitate changes to current district and regional plan provisions, except for:
 - → Water margin management
 - → The management of tussock grassland and significant changes in vegetation cover in water dry catchments
 - \rightarrow The management of wetlands

RISK OF ACTING OR NOT ACTING IN FACE OF THIS UNCERTAINTY

- The risk inherent to the provisions is related to how those policies are given effect to, as they could lead to rules that could potentially have a significant adverse impact on the economic use of land
- This risk is considered low as:
 - → RMA Section 5 explicitly states as a purpose of resource management "enabling people to provide for their social, economic and cultural wellbeing and for their health and safety"
 - → Consultation requirements to amend regional and district plans ensures that decisions reflect community values, and their economic needs
- Risk of not acting:
 - → Greater vulnerability to flooding and erosion through the loss of water margins, tussock grassland and wetlands
 - → Loss of biodiversity, which is contrary to regional council functions under the RMA, through loss of wetlands or water margins and soil degradation
 - \rightarrow Risk of reduced water supply reliability
 - \rightarrow Risk of soil degradation

EFFICIENCY & EFFECTIVENESS

- Setting out the environmental values which need protection in the RPS ensures that all resource management decisions by Otago's local authorities will seek to achieve the same outcomes, providing the appropriate methods are implemented for:
 - → Improving knowledge of the values of Otago's natural resources and processes
 - → Improving knowledge of the interconnections between Otago's natural resources, processes and their values
 - → Implementing adequate collaboration processes between Otago's local authorities, and other stakeholders engaged in the management of Otago's natural resources
- The proposed policies ensure the appropriate management of the land / water interface providing adequate methods are implemented to ensure good quality collaboration between Otago's local authorities

6.2.2 Identifying and protecting highly valued resources

Policies 2.2.1 to 2.2.15 set consistent criteria for the identification of areas of significant indigenous vegetation and significant indigenous fauna; outstanding natural features, landscapes and seascapes; areas of high or outstanding natural character in the coastal environment, and outstanding water bodies and wetlands, and highly valued soil resources. The policies also require a high level of protection on those areas and resources.

Special recognition and protection of those areas and values are particularly required as:

- Areas of significant indigenous vegetation and significant indigenous fauna, outstanding natural features, landscapes and seascapes, and natural character in the coastal environment are matters of national importance under the RMA Sections 6 and 7
- The NZCPS requires the identification and protection of areas of high and outstanding natural character in the coastal environment
- The NPS for Freshwater Management 2014 Objectives A4 and B5 specifically require the protection of the significant values of wetlands, and of outstanding freshwater bodies
- As a rural region, Otago's economy is reliant on the quality and accessibility of its soil resources

BENEFITS	Costs
Environ	IMENTAL
 Improved knowledge on significant values Use of consistent criteria across Otago increases robustness of approach and reduces risk of loss of significant values Areas identified as significant or highly valued are extended a degree of protection, which: → Reduces risk of loss of significant values, indigenous ecosystem or species 	 Individual opposition to environmental protection on private land can increase risk of intentional damage
→ Enhances environmental resilience	
→ Enhances opportunities for positive action and environmental outcomes	

The costs and benefits of the proposed provisions are outlined below:

The adoption of consistent criteria or matters for identifying and assessing areas of significant values reduces risk of inconsistent approaches across administrative boundaries ECONOMIC (ECONOMIC C	GROWTH AND EMPLOYMENT)
 The adoption of consistent criteria or matters for identifying and assessing areas of significant values: Reduces administrative costs across the region and provides greater certainty to the regional community Increases certainty for landowners and the community regarding where values need to be managed Increased certainty can reduce consenting costs by focusing on relevant values and areas Focus on the values that contribute to the significance of areas provides greater flexibility to enable sustainable use of these areas The presence of significant environmental values, such as landscape or biodiversity, can add to property values Significant natural values such as landscape, biodiversity and natural character make important contributions to the regional and national economy including through tourism, recreation, film The proposal is unlikely to restrict current land use activities, such as farming, but provides greater protected on the values being protected 	 Greater restrictions on productive land uses in areas of high significance Administration and compliance costs associated with the process of identifying areas of significance Changes in land use that negatively affect identified values may be restricted Reduced flexibility in range of possible land uses may negatively affect land values Potential employment opportunities based on activities which would adversely affect identified values may be restricted

tourism, commercial recreation, film

Soc	CIAL
 Community anticipates protection of areas of significance provided for by statute The use of consistent approaches to identify significant values across the region recognises and enhances a sense of regional identity Some land owners may appreciate information about the value of biodiversity on their land and the encouragement to protect it 	 Protection of private land for public benefit can be contentious Risk that affected property owners perceive protection of private land as securing land Risk of perceived inequity, as some individual landowners will be more affected than others
CULT	URAL
 Recognition and protection of takata whenua values Provision for other cultural values Improved understanding of environmental values of other cultures 	• There may be reluctance to provide information on the location or cultural values attached to some sites
UNCERTAIN INFORMATION POLICIES ARE BASED ON:	

The mapping of areas of significance has not been undertaken, and there is some uncertainty over the extent of the areas of significance in Otago, and the effects of their protection on productive land uses

$\boldsymbol{R}\mbox{isk}$ of acting or not acting in face of this uncertainty

- The risk inherent to the provisions is related to how those policies are given effect to, as they could lead to rules that could potentially have a significant adverse impact on the economic use of land
- This risk is considered low as:
 - → RMA Section 5 explicitly states as a purpose of resource management "enabling people to provide for their social, economic and cultural wellbeing and for their health and safety"
 - → Consultation requirements to amend regional and district plans ensures that decisions reflect community values, and their economic needs
- Risk of not acting:
 - \rightarrow Uncertainty and potential loss of significant values
 - → Potential environmental and economic impacts on activities influenced by or dependent on significant values
 - \rightarrow Uncertainty around the level of protection required
 - → Costly resource consent processes

EFFICIENCY & EFFECTIVENESS

- Providing consistent measures to identify areas of significance across Otago is more efficient than each local authority undertaking this process as the costs associated with developing and defending it are only incurred once. This approach is also more effective as over time a consistent set of criteria will be applied across the region
- The identification of areas of significance is also a more efficient and effective method for managing the values of these areas than relying on general provisions to ensure the protection of the values of these areas
- Although this process will be efficient and effective to manage the loss of significant identified values, additional non-regulatory methods may be necessary to achieve positive outcomes in terms of restoration and enhancement

6.2.3 Ensuring the integration of the management of natural and physical resources

Proposed policies 2.3.1 to 2.3.2 provide a framework that all the relevant interdependencies between natural resources and processes, and their values are considered in impact assessments.

Proposed policies 2.3.3 to 2.3.5 are more specific, and seek to ensure that management of activities that cross jurisdictional and physical resource boundaries better recognise the connections in the functioning of the natural environment, particularly for water, air, and the coastal environment.

D	2
BENEFITS	Costs
ENVIRONMENTAL	
 Ensures consistency in resource management decisions Reduces the risks of unintentional losses of values due to a lack of integration of resource management decisions 	 Impact assessments may need to be more extensive
ECONOMIC (ECONOMIC GROWTH AND EMPLOYMENT)	
 Greater opportunity for collaboration between local authorities, which could result in greater cost efficiency and coordinated funding Reduced risk of unintentional loss of values / resources which some economic activities may be dependent on 	 May require more research and greater collaboration, which can incur costs to local authorities Risk of lengthy and costly resource management processes due to the investigation and consideration of all interdependencies between natural resources and processes and their values
The effects on employment would result from the effects on economic growth	
Social	
 Better collaboration and community input Increased consideration of distribution of effects on resource users Improved public trust local authorities 	There are no social costs anticipated with these policies
Cultural	

The costs and benefits of the proposed provisions are outlined below:

CUL	URAL
 Systems considered as a whole, better use of holistic approach and better alignment with lwi values and the Māori world view 	with these policies

UNCERTAIN INFORMATION POLICIES ARE BASED ON:

- Uncertainty over how well science can help identify and assess:
 - \rightarrow The relationships between natural resources and processes
 - \rightarrow The time and spatial scale of effects

RISK OF ACTING OR NOT ACTING IN FACE OF THIS UNCERTAINTY

- Risk of acting:
 - → Long and costly resource management processes, for the assessment and consideration of all inter-dependencies between natural resources and processes and their values
- Risk of not acting:
 - \rightarrow Incurring unintentional losses of values
 - → Not achieving the purpose of the RMA, and the integrated management of natural and physical resources, as required under RMA Section 59

EFFICIENCY & EFFECTIVENESS

Stronger co-ordination and increased collaboration and integration are expected to increase efficiency, in terms of input required, costs and resultant outcomes. Operations and processes should therefore also be more efficient.

7. Communities in Otago are resilient, safe and healthy

7.1. Evaluation of objectives and options to achieve those objectives

<u> </u>	
Proposed objectives:	
Objective 3.1	Use and development of natural and physical resources has regard to environmental constraints
Objective 3.2	Risk that natural hazards pose to Otago's communities are minimised
Objective 3.3	Otago's communities are prepared for and able to adapt to the effects of climate change
Objective 3.4	Good quality infrastructure and services meet community needs
Objective 3.5	Infrastructure of national and regional significance is managed in a sustainable way
Objective 3.6	Energy supplies to Otago's communities are secure and sustainable
Objective 3.7	Urban areas are well designed, sustainable and reflect local character
Objective 3.8	Urban growth is well designed and integrates effectively with adjoining urban and rural environments
Objective 3.9	Hazardous substances and waste materials do not harm human health or the quality of the environment in Otago

Objective assessment

The proposed objectives are the most appropriate way to achieve the purpose of the RMA as:

- They mostly aim at ensuring resource management decisions have a positive impact on people's health and safety and social and economic well-being, which is consistent with Section 5 of the RMA
- They recognise that land uses and their locations determine to a large extent the vulnerability of communities to natural hazards. They also recognise the significance of infrastructure and urban design in people's economic and social well-being, and give rise to a policy framework giving effects to the NPS for Renewable Electricity Generation (2011) and to the NPS on Electricity Transmission (2008)
- They highlight the importance of achieving the strategic integration of infrastructure with land use, which is a function of regional councils under RMA Section 30(1)(gb)

- Improved urban design and infrastructure services have both been identified as potential responses to the region's issues by the community, during consultation (Appendix 1).
- The management of natural hazards, hazardous substances and waste materials are important issues for the region, considering their importance for public health and safety.

Options to achieve objectives

Achieving proposed objectives 3.1 to 3.9 requires that resource management decisions:

- Minimise the vulnerability of communities to natural hazards, within the constraints and needs of the local communities
- Take sufficient account of the foreseeable long term changes to the environment, including those changes resulting from climate change
- Enable the development, upgrade, maintenance and operation of infrastructure which enhances the community's well-being, its health and safety and the environment
- Follow good urban design principle and manage urban growth in a way which maximises people's well-being, reduces their reliance on fossil fuels, and provides for the productive use of rural land

A general regulatory direction has been considered the most appropriate in most cases, as it gives flexibility to adapt regional and district plans to local conditions, while ensuring the strategic integration of infrastructure with land use and giving effect to the NPS for Renewable Electricity Generation (2011), and the NPS on Electricity Transmission (2008).

However, a strong regulatory direction is considered the most effective and efficient for the control of the use of land to avoid or mitigate natural hazards (Proposed Policies 3.2.1 to 3.2.11), insofar as city and district councils are given full responsibility for the control of the use of land (see section 4.1 of this report) while the ORC manages the existing community flood protection schemes under the Soil Conservation and Rivers Control Act (1941). Nonetheless, allowing flexibility in the level of protection against hazard prone areas is desirable, to take better account of the local community values.

A strong regulatory direction on the assessment of the effects of climate change and sea level rise on Otago's environment (Proposed Policies 3.3.1 and 3.2.2) notably reduces the risks of multiple costly legal processes to determine those effects. It is therefore the most efficient and effective way to achieve Proposed Objective 3.3.

A strong direction is also proposed for the management of urban growth, to reinforce the integrity of district plan policies in areas of high pressure for urban development, which might threaten the sustainable management of land.

7.2. Assessment of proposed provisions

7.2.1 Managing natural hazard risk

Proposed policies 3.2.1 to 3.2.11 set the framework for the control of the use of land to avoid or mitigate natural hazards, and establish a process based on the Risk Management – Principles and Guidelines Standard (AS/NZS ISO 31000:2009), for the identification, assessment and management of risk. These proposed policies mostly focus on avoiding the exacerbation of natural hazard risk, although they do not seek to specify the exact level of natural hazard risk that is tolerable to communities. They also ensure that natural hazard risk will be assessed taking into account the entire risk spectrum, including residual risk, i.e. the risk remaining after the implementation or undertaking of risk management measures, and new information on risk. An adaptive management approach to risk management is required to allow for improvements in the understanding of hazards, and the changing nature of risk.

The proposed framework is complemented by Proposed Policies 3.4.3 and 3.4.4, which address the management of lifeline utilities, and recognises the interaction of risk reduction, readiness, response and recovery in achieving a community resilient to the natural hazards it is exposed to.

It is acknowledged that changes will be required to district plans as a result of these policies, and it is considered that this will take place as part of district plan reviews with ORC technical assistance.

BENEFITS	Costs
ENVIRON	IMENTAL
 Protection of those natural features and systems that provide hazard mitigation ecosystem services Decreased need for engineered mitigation measures, which would have had adverse effects on the environment 	• Residual need for the development of engineered mitigation and lifeline utility infrastructure might have adverse effects on the environment

The costs and benefits of the proposed provisions are outlined below:

	GROWTH AND EMPLOYMENT)
 ECONOMIC (ECONOMIC G Greater cost efficiency due to: → Decreased need for engineered mitigation measures → Lower costs associated with recovery efforts Decreased or maintained insurance costs for households and businesses Greater certainty in district plans facilitates business planning and investment by private investors and landowners, and can reduce consenting costs The adoption of a consistent management framework across the region reduces administrative and litigation costs Reduced individual costs of investigations in many cases due to the collaborative approach of identification and assessment by local authorities in Otago Businesses and household more resilient to natural hazard risk: → More secure access to lifeline utilities 	 Administration costs associated with process of assessing natural hazard risk and community tolerance to that risk Costs of upgrading, maintaining or relocating infrastructure and development where appropriate Greater restrictions on land uses: → In areas of intolerable hazard risk → Over natural features and systems providing hazard mitigation services These restrictions could be exacerbated by the precautionary approach required by Proposed Policy 3.2.8 Potential increase in development costs due to increased information requirements for the assessment of natural hazards and possible need for mitigation Potential negative effects of hazard information and responses on property values and insurance costs

Soc	CIAL
 Communities are less likely to suffer loss of life, injury or loss of property / property damage → Reduced stress and fear → Increased quality of life Greater trust in RMA decisions taking into account and minimising natural hazard risk Risk tolerance is based on community input, creating buy-in More resilient, stable and cohesive communities Increased awareness of natural hazards and more informed choices The approach taken doesn't predetermine solutions and provides for flexibility at the community level Promotion of the maintenance and enhancement of natural features provides for potential open space and access opportunities to be developed 	 Some existing communities may not be able to expand and there may be a loss of other development opportunities which leads to a loss of expectations New natural hazard information may create concern over people's property values and perceived safety Risk of hazard prone areas being occupied by most sensitive parts of the community, exacerbating social inequalities relating to health and safety in society, due to lower property values
Cult	URAL
 Maintenance and enhancement of natural features provides potential open space and access opportunities to be developed and can improve cultural values and wellbeing Better natural hazard information and consistency in approach may assist in making decisions on resources / taonga that could be affected by natural hazards 	 Potential for more/tighter 'controls' on coastal land (Maori land is often coastal) New natural hazard information could create concerns for culturally important resources in hazard prone areas
UNCERTAIN INFORMATION POLICIES ARE BASED ON:	
Uncertainty over the level of community	tolerance for natural hazard risk

• Uncertainty over the extent of land use restrictions resulting from the management of natural hazard risk

RISK OF ACTING OR NOT ACTING IN FACE OF THIS UNCERTAINTY

- The risk inherent to the proposed provisions is related to how those policies are given effect to, as they could lead to rules that could potentially have a significant adverse impact on the economic use of land, and on the social well-being of Otago's communities in hazard prone areas
- Risk of not acting:
 - → Increased natural hazard risk to people, property and risk of injury, death and property damage
 - ightarrow Decreased quality of life, including from the unknown, stress and fear
 - → Not acting now could result in larger, more expensive problems to be resolved in the long term
 - \rightarrow Significant legislative and procedural risk managing natural hazards is mandatory under the RMA

EFFICIENCY & EFFECTIVENESS

- Providing criteria for the identification of natural hazards, and a process for assessing and managing that natural hazard risk will create consistency across Otago, and a comprehensive response to natural hazards, rather than assessment on an ad hoc basis
- The proposed process, and collaboration between Otago's local authorities, will ensure that implementation of the policies will be effective and cost efficient
- By developing a process based on the Risk Management Principles and Guidelines Standard and providing for flexibility at the community level in regard to assessment of tolerance of risk, the level of response will be commensurate with the level of risk to those that are potentially affected
- Promoting the use of the Civil Defence and Emergency Management Acts 4 R's (reduction, readiness, response and recovery), with a focus on reduction, assists to provide a holistic approach to natural hazard management and in particular, assists to intertwine the various legislations and authorities with natural hazard responsibilities to achieve a community resilient to the natural hazards it is exposed to. Also, by ensuring that lifeline utility co-dependence is considered, critical infrastructure will be better placed to continue to operate in case of an emergency

7.2.2 Ensuring people in Otago are able to adapt to the effects of climate change

Climate change is expected to have wide ranging effects in Otago, although the exact location and intensity are still uncertain. Those effects include changes to snowlines, snowfall rates and glaciers, increased intensity of weather events (flooding) and warmer summers (creating increased heat stress). The volume of rainfall should decrease overall, and sea level is expected to rise.

It is essential to note that local authorities do not manage the adverse effects of discharges of greenhouse gas emissions on climate change (RMA Section 70A), a principle that the Courts have extended to such activities as non-renewable energy generation (SC 94/2007, [2008] NZSC 112 – Greenpeace NZ Inc v. Genesis Power Ltd), and coal extraction ([2012] NZHC 2156 Royal Forest & Bird Protection Society v. Buller Coal Ltd and Solid Energy NZ).

However, the effects of climate change are a matter recognised in Section 7(i) of the RMA, and need to be taken into account in all resource management decisions, to achieve resilient communities and economy in Otago.

Proposed policy 3.3.1 sets a sea level rise figure that must be taken into account, when relevant.

Proposed policy 3.3.2 ensures that the effects of climate change are considered, provides for changing science and information, and promotes the use of the precautionary approach, as climate change effects are inherently complex and uncertain. Activities that assist to reduce or mitigate the effects of climate change are also encouraged through the methods.

The most recently available guidance to local government in New Zealand regarding sea level rise over the next 100 years (in line with the timeframe in the NZCPS) is from NIWA's report "Coastal Adaptation to Climate Change: Pathways to Change" (2011). This advises that a 1 metre rise by 2115 relative to 1990 mean sea level should be considered for sea level rise for New Zealand regions at this stage. This is equivalent to the 0.8 metre rise by the 2090s provided as one of the rises to be considered within a risk assessment framework in the Ministry for the Environment's report "Climate Change Effects and Impacts Assessment: A Guidance Manual for Local Government in New Zealand" (2008), and in line with their guidance that sea level rise will continue beyond the turn of the century at a rate of 10mm/year.

The proposed figure is also consistent with the Intergovernmental Panel on Climate Change Fifth Assessment Report which projects that global sea-level rise will likely be in the range of 0.26 to 0.98 metre by 2100 (relative to the 1986-2005 period), providing ice-sheet collapse does not accelerate.

The costs and benefits of the proposed provisions are outlined below:

BENEFITS	Costs
ENVIRO	NMENTAL
 Decreased need for engineered measures to mitigate the effects of climate change – those measures could have adverse effects on the environment Longer-term viability of infrastructure reduces need for further development and therefore pressure on environmental values 	 The development of any necessary mitigation measure, or any necessary infrastructure development or upgrade could have environmental adverse effects – these should be managed through other policies (Proposed Policies 4.5.1 to 4.5.9) Adverse effects on the environment may result from development being located where the effects of climate change will be milder
ECONOMIC (ECONOMIC G	ROWTH AND EMPLOYMENT)
 Greater cost efficiency due to decreased need for engineered mitigation measures and longer-term viability of buildings and infrastructure The adoption of a consistent management framework across the region reduces administrative and litigation costs Greater certainty in district plans facilitates business planning and investment by private investors and landowners, and can reduce consenting costs Reduced individual costs of investigations due to the provision of a sea level rise figure and other climate change information Decreased or maintained insurance costs for households and businesses Focus on the ability to adapt to the effects of climate change provides greater flexibility to enable sustainable use of at risk areas Consistent approach increases investment certainty Greater cost efficiency of infrastructure investment 	 Administration costs associated with collecting new information on effects of climate change Costs of upgrading, maintaining or relocating infrastructure and development where appropriate Risk of greater restrictions on land uses in areas where the effects of climate change are expected to be most acute, including in coastal areas. Those restrictions could be exacerbated by the precautionary approach required by Proposed Policy 3.3.2 Potential increase in development costs due to potential need for mitigation Likely negative effects of sea level rise estimate on property values and insurance costs for coastal communities

 and workforce as Otago perceived as a safe place to live, work, play and invest in Increased investment certainty, less business interruption costs, and increased job security due to minimized risk 	
Sou	CIAL
 Increased awareness of climate change and its effects Greater trust in RMA decisions taking into account and minimising the effects of climate change Allows for adaptation and time to get used to change The approach taken doesn't predetermine solutions and provides for flexibility at the community level More resilient, stable and cohesive communities 	 Potential distrust over the expected effects of climate change, and opposition from climate-skeptics and opponents to precautionary approach, as unnecessarily restricting people's ability to use their land Anxiety over the effects of climate change in communities likely to be acutely affected, especially in coastal areas Risk of most sensitive areas being occupied by most sensitive parts of the community, exacerbating social inequalities relating to health and safety in society, due to lower property values — it is likely a drop in property values would happen in time, regardless of the proposed provisions
Cult	IURAL
Better information on sea level rise and the effects of climate change may initiate programmes for the recording and protection of important artefacts/taonga at risk of being inundated	 Consideration of sea level rise may result in reduced occupation of the coastal area, potentially threatening the community's connection with important cultural areas New information could create stress and fear for people with culturally important resources in these areas Tension between managing the effects of climate change and enabling Kāi Tahu use of native reserves (Proposed Policy 1.2.5)

UNCERTAIN INFORMATION POLICIES ARE BASED ON:

- All climate change information has an element of inherent uncertainty
- Uncertainty over the extent of land use restriction resulting from the management of the effects of climate change

RISK OF ACTING OR NOT ACTING IN FACE OF THIS UNCERTAINTY

- Risk of acting:
 - → Reducing the growth of coastal communities sooner than what would have happened regardless of the proposed provisions
 - → Changes to the social make up of coastal communities sooner than what would have happened regardless of the proposed provisions
 - → Higher upfront infrastructure and construction costs, to ensure new infrastructure and buildings will be viable in the long term
- Risk of not acting:
 - \rightarrow Increasing community vulnerability to the foreseeable effects of climate change
 - → Incurring significant future costs to remedy or mitigate the impact of current decisions on people's vulnerability to the foreseeable effects of climate change
 - → Increasing risk of loss of lives and property damage from natural hazards exacerbated by climate change

- Providing a consistent sea level rise figure for use in resource management decisions will create consistency across Otago, rather than assessment on an ad hoc basis
- Providing for the use of the most relevant data minimises the risk of over-restricting land uses, will foster research, but still ensure that the effects of climate change are duly considered in resource management decisions
- Encouraging activities which protect communities against the effects of climate change will assist in reducing Otago's vulnerability to the effects of climate change
- The proposed process, and collaboration between local authorities, will ensure that implementation of the policies will be effective and cost efficient

7.2.3 Ensuring infrastructure meets communities' needs

Infrastructure underpins the economic and social well-being of communities, and can also contribute to mitigating the cumulative effect of communities on the environment (e.g. wastewater systems). Infrastructure recognised as "lifeline utilities" in the Civil Defence Emergency Management Act (2002) are essential to people's health and safety, and as such, need to be recognised and provided for.

The importance of some of Otago's infrastructure at a national level also needs recognition.

The proposed policies associated with Objectives 3.4, 3.5 and 3.6 seek to:

- Recognise the benefits of infrastructure, and encourage and promote infrastructure development with significant benefits to the community
- Ensure infrastructure development takes account of the long term needs of the community, including its need to reduce reliance on non-renewable energy
- Ensure the efficient use of existing infrastructure and reduce the need for new infrastructure development to the extent possible
- Enable the development, upgrade, and normal operation and maintenance of regionally or nationally significant infrastructure, including in outstanding landscapes, areas of significant biodiversity and areas of outstanding natural character, providing their adverse effects are appropriately managed
- Ensure the long-term viability of lifeline utilities and regionally or nationally significant infrastructure by protecting them from adverse effects of other activities on their normal operation and maintenance, including reverse sensitivity effects

BENEFITS	Costs
Environ	MENTAL
 Longer-term viability of existing lifeline utilities and regionally or nationally significant infrastructure reduces needs for further developments and therefore pressure on environmental values Ensures land use will be managed to minimise needs for further infrastructure development 	 Infrastructure development, upgrade or maintenance generally has adverse environmental effects – these should be managed through other policies (Proposed Policies 4.5.1 to 4.5.9) Lower environmental requirement for the development, upgrade or maintenance of nationally or regionally significant infrastructure Adverse effects on the environment may result from development being located to avoid reverse sensitivity effects on nationally or regionally

The costs and benefits of the proposed provisions are outlined below:

	significant infrastructure or lifeline utilities
ECONOMIC (ECONOMIC GRO	WTH AND EMPLOYMENT)
 Infrastructure fit for supporting economic activity Greater resilience of community and its economy through good quality infrastructure A more efficient use of existing infrastructure should ensure the costefficient provision of infrastructure. Infrastructure development, upgrade and maintenance made possible to support economic growth Ensures a high level of financial certainty and security thereby providing for future investment in nationally or regionally significant infrastructure or lifeline utilities Provides certainty that the operation, maintenance and upgrading of infrastructure will not be unnecessarily restricted or limited Greater access to job market through good quality transport and telecommunication infrastructure 	 Restrictions on economic activities that have adverse effects on significant infrastructure, or that might create reverse sensitivity issues
Soci	AL
 Good quality mobility / connectivity / access to social services and social events Maintain and improve communities' health and safety through the provision of efficient and effective nationally or regionally significant infrastructure and lifeline utilities 	 Perception that nationally or regionally significant infrastructure is given unwarranted priority over community values
Cultur	RAL
Good quality mobility / connectivity / access to cultural events	 Nationally or regionally significant infrastructure may adversely affect Kāi Tahu cultural values

UNCERTAIN INFORMATION POLICIES ARE BASED ON:

- There is uncertainty over:
 - → Whether infrastructure providers will meet any increase in infrastructure demand in Otago
 - \rightarrow The future variations of community needs in infrastructure
 - → The potential conflicts between highly valued landscapes and biodiversity and future infrastructure projects (although there has been indication that there will not be great pressure on electricity generation and transmission activities in the next decade)

RISK OF ACTING OR NOT ACTING IN FACE OF THIS UNCERTAINTY

- Risk of acting:
 - → Protection of infrastructure setting too stringent standards on other activities. However, the greatest potential for conflicts are with transmission activities, which are already addressed in an NPS and NES
 - → Loss of values in areas of significant biodiversity or in outstanding landscapes the management of adverse effects required by the policy should be adequate
- Risk of not acting:
 - \rightarrow Restrictions on the development or upgrade of important infrastructure
 - → Unnecessary infrastructure costs due to an inefficient use of existing infrastructure and negative impacts on existing infrastructure
 - → Restrictions on economic activities, people's well-being and health and safety due to inadequate infrastructure

- The proposed policies are considered efficient and effective as they:
 - → Give a consistent direction on resource management decisions relating to infrastructure, in the absence of any regional or district plan specifically dedicated to the management of infrastructure
 - → Give effect to the NPS for Renewable Electricity Generation (2011), and on Electricity Transmission (2008)
 - → Are consistent and will assist with the fulfilment of the Civil Defence and Emergency Management Act 2002's requirements
 - → However, they cannot ensure the provision of good quality infrastructure, as infrastructure investment decisions are made by infrastructure providers

7.2.4 Ensuring liveable and sustainable urban areas

Policies 3.7.1 to 3.7.4 recognise the significant role our urban areas play in providing for our social and economic wellbeing and provide direction to improve the responsiveness of our built environment to our needs. The future development of our urban areas needs to be managed to create well designed and more sustainable urban environments that support economic prosperity and create places where people want to live, work and play. These policies achieve Objective 3.7: "Urban areas are well designed, sustainable and reflect local character".

BENEFITS	Costs
Environ	NMENTAL
 Incorporating the natural environment into the urban environment has the potential to mitigate adverse environmental effects such as from stormwater, and provide environmental benefits such as ecological corridors The use of low impact design techniques can reduce the environmental impact of our built environment Better insulated or orientated housing can reduce our requirements for power for heating and the environmental impacts of generating that energy 	There are no anticipated environmental costs associated with these policies
ECONOMIC (ECONOMIC G	ROWTH AND EMPLOYMENT)
 High levels of urban amenity and safer urban environments contribute to vibrant commercial areas and stimulate economic activity Greater recognition of the sense of identity of our communities in our urban areas contributes to their ability to attract visitors High levels of urban amenity have been shown to increase property values Better insulated or orientated housing can reduce costs associated with heating Safer urban environments reduce costs 	 Increased time and costs for developers and local authorities to prepare and consider urban design solutions Potential for higher initial design and development costs for high quality urban design solutions

The costs and benefits of the proposed provisions are outlined below:

	associated with crime
•	High quality urban design increases the
	liveability of communities encouraging economic growth

The effect of the proposed objective and policies on employment cannot be evaluated, and will depend on the impact of the proposal on regional and district plans, and on the overall economy

Soc	Social		
 Good urban design promotes a sense of identity in our urban areas and recognition of features of historic and cultural importance Good urban design recognises and provides for the various needs of different sectors of the community Urban design can help reduce vulnerability of community to crime Promotes better accessibility for people of all ages and abilities Improves sense of ownership of urban areas Community health, safety and wellbeing enhanced by improved amenity, accessibility and effectiveness of infrastructure 	There are no anticipated social costs associated with these policies		
Cult	URAL		
 Urban design provides opportunity for expression of cultural values or elements in our built form and urban areas 	There are no anticipated cultural costs associated with these policies		
UNCERTAIN INFORMATION POLICIES ARE BASED ON:			
The information available to develop these policies is not uncertain or insufficient.			

RISK OF ACTING OR NOT ACTING IN FACE OF THIS UNCERTAINTY

- There is no risk associated to the implementation of the proposed policies
- Risk of not acting:
 - \rightarrow Breach of good urban design principles by individual developers

- The policies seek more efficient and effective design that meets the needs of the wider community. Although achieving high quality urban design may require more time and higher initial investment, the benefits of better designed buildings and urban areas on amenity, environmental quality and social and economic wellbeing of the community last significantly longer and provide greater flexibility for adaptation over time
- These policies are considered to be moderately effective because while the principles proposed are consistent with the purpose of the RMA and may improve the quality of our built environment, the reliance on encouraging the adoption of these approaches will limit their application

7.2.5 Urban growth is well designed and integrates effectively with adjoining urban and rural environments

Policies 3.8.1 - 3.8.3 seek to achieve objective 3.8 "Urban growth is well designed and integrates effectively with adjoining urban and rural environments":

- Policy 3.8.1 seeks greater focus on planning for future urban growth in appropriate locations and the integration of growth with the provision of infrastructure. In addition, Policy 3.8.1 requires the use of low or no emission heating systems in areas with degraded ambient air quality or at risk of ambient air quality degradation. The costs and benefits of this requirement are analysed in section 7.2.6 of this report
- Policy 3.8.2 provides guidance on how urban growth may be controlled where city or district councils adopt growth management instruments including Future Urban Zones or Urban Growth Boundaries
- Policy 3.8.3 provides direction on the management of subdivision and development of rural land to prevent fragmentation of productive rural land

BENEFITS	Costs	
Environmental		
 Reduced pressure on rural land for greenfield expansion More efficient use of land resources Reduces potential impacts on natural resources and values affected by urban expansion 	 Intensified use of urban areas reduces opportunity for integration of environment in urban areas and places pressure on existing greenspaces 	
ECONOMIC (ECONOMIC GROWTH AND EMPLOYMENT)		
 Reinforces role of existing urban areas and may increase the vibrancy of urban areas Encourages a more compact urban form which increases efficiency of infrastructure and reduces costs of operation and maintenance Integration of development with infrastructure reduces potential costs to community of extending or providing additional infrastructure Avoids potential for future infrastructure costs associated with ad boc 	 Identifying areas for development constrains development outside these areas Administration costs to manage and defend urban growth policies Higher costs involved in infrastructure planning Reducing availability of land supply and encouraging more intensive development may result in a loss of local character and increasing land and development costs Costs associated with upgrading 	
costs associated with ad hoc development or retrofitting infrastructure systems	 Costs associated with upgrading infrastructure to cope with more intensive urban development 	
Avoids opportunity costs of over	Areas subject to growth pressures and	

The costs and benefits of the proposed provisions are outlined below:

provision of infrastructure	restricted land supply may experience
Reduces pressure for peri-urban	property price rises and housing
development into productive rural land	affordability issues
Encourages forward planning and	Restricts range of opportunities for
integration of urban growth and	urban growth and ability to respond to
infrastructure	market demand
Integration of urban expansion and	
infrastructure provision avoids costs	
associated with duplication, over	
provision or unanticipated retrofitting or	
upgrading of infrastructure due to lack	
of ability to manage location of urban	
growth	
Provides greater certainty on the intended leastion of future urban	
intended location of future urban	
growth	
Provides greater certainty for activities	
seeking to operate in the peri-urban and rural area	

As the focus of these policies is not on restricting growth but managing its form and location it is considered likely that employment opportunities remain similar

SOCIAL		
 More compact urban forms support the provision of active transportation options Amenity values associated with 	Potential impacts on the affordability of housing supply	
undeveloped areas retained		
CULTURAL		

There are no anticipated cultural benefits or costs associated with these policies

UNCERTAIN INFORMATION POLICIES ARE BASED ON:

- There is uncertainty over:
 - → The population growth rates and demographic changes in Otago's population
 - \rightarrow Future pressure on the housing market from overseas investors

RISK OF ACTING OR NOT ACTING IN FACE OF THIS UNCERTAINTY

- Risk of acting:
 - \rightarrow Higher property prices and housing affordability issues
- Risk of not acting:
 - \rightarrow Environmental costs resulting from urban sprawl
 - \rightarrow Increasing infrastructure costs due to ad hoc or sprawling development
 - \rightarrow Loss of amenity values and lower social well-being resulting from urban sprawl

 \rightarrow An increase in the community's reliance on transport fossil fuels

- The proposed policies are considered efficient as:
 - → Growth options should be evaluated having regard to long term assessments of land supply and environmental constraints and future demand that takes into account demographic change and business activity
 - \rightarrow Growth directed to existing urban areas supports established infrastructure
 - → Linking the provision of necessary urban infrastructure with the expansion of the urban activities requiring these services reduces both the financial cost of providing the services but also the environmental impact of the urban development and the provision of the infrastructure itself
- The proposed policies are considered an effective way to manage urban growth because they require a forward looking approach that focuses on avoiding the environmental costs of expansion into sensitive or highly valued environments and coordinating that growth with infrastructure development programmes

7.2.6 Managing emissions to air from new subdivision in air pollution sensitive areas

Policy 3.8.1 proposes to require the use of low- or no-emission heating in new urban areas, in areas with degraded air quality, or at risk of degradation.

Some parts of Otago have a significant air quality issue, with the highest air pollution records of the country. Those issues are the result of a conjunction of factors: climatic conditions and terrain for inversion layers, quality of current housing, fuel prices, heating behaviours, and cultural preference to solid fuel burners.

The existing air quality issues can only be addressed through a holistic approach, and multi-stakeholder engagement. As a first step, we could prevent air pollution from worsening, or extending to new areas, by requiring low- or no-emission heating in new developments. Current building standards could be improved to suit Otago's climate, and reduce home heating demand.

BENEFITS	Costs	
Environmental		
 Avoiding exacerbation or creation of air pollution Lower reliance on behaviours to determine the level of emission from heating systems No increase in the health consequence of air pollution 	 Will not resolve existing air pollution issues in Otago Discourages the use of wood, a renewable source of fuel 	
ECONOMIC (ECONOMIC GROWTH AND EMPLOYMENT)		
 No increase in the costs, including health costs, incurred by air pollution Greater attractiveness of those areas, especially as tourism is a significant economic activity in Central Otago and Queenstown Lakes district Allows urban expansion and growth in areas with air pollution or significant potential for inversion layers 	 Potential decrease in individual resilience through higher reliance on imported fuels (gas), or non-storable fuel (electricity) 	
The effect of the proposed provisions will probably not be significant on employment		
Soc		
Protects amenity values relating to clear and adoutless air in areas of	Risk of increasing unaffordability of new houses (unfront costs + expected)	

The costs and benefits of the proposed provisions are outlined below:

•	Protects amenity values relating to	•	Risk of increasing unaffordability of new
	clear and odourless air, in areas of clean ambient air with potential inversion layers		houses (upfront costs + expected energy costs)

CULTURAL

- Potential shifts in the values on heating choice following greater use of low- or no-emission heating and expectations on housing quality
- Limited ability to put in wood burners, despite strong cultural attachments to this type of heating

UNCERTAIN INFORMATION POLICIES ARE BASED ON:

Uncertainty over the effect of requiring no- or low-emission heating appliances on house affordability (house price + expected fuel costs)

RISK OF ACTING OR NOT ACTING IN FACE OF THIS UNCERTAINTY

- Risk of acting:
 - \rightarrow Restricting access to new houses to people with higher socio-economic status
 - → Reducing household resilience through greater reliance on imported or nonstorable fuels

The latter risk can be mitigated through civil defence emergency plans and individual preparedness.

- Risk of not acting:
 - \rightarrow Air quality degradation and increased health costs
 - → Lower attractiveness of New Zealand and lower amenity in areas where tourism is a significant industry
 - → Higher restrictions on industries in case of breach of existing air quality standards (NES for Air Quality 2004)

- The proposed provision will be effective and efficient in avoiding the further degradation of ambient air quality in Otago by reducing the increase of the main source of PM10 emissions
- It is complemented by Proposed Policy 3.7.3 to ensure new buildings in Otago will be designed so they can be efficiently heated by low or no-emissions heating
- It will assist with the achievement of the NES for Air Quality's ambient air quality standards, although there is a need to reduce existing emissions to achieve those standards throughout Otago

7.2.7 Managing waste and hazardous substances sustainably

The policies under Objective 3.9 are focused on the need for greater regional integration in the management of waste, hazardous substances and contaminated land, and the recognition of the inter-related nature of these elements.

Proposed policies 3.9.1, 3.9.2, 3.9.6 and 3.9.7 recognise the importance of managing waste and hazardous substances in enabling our communities to provide for their health and well-being, while providing sufficient guidance to local authorities to ensure the appropriate control of the potential adverse effects. The management of hazardous substances is addressed through both the Hazardous Substances and New Organisms Act 1996 (HSNO) and the RMA. The RMA is particularly relevant where the effects of the use or disposal of hazardous substances may extend beyond the site on which they are used, such as areas prone to natural hazards or unconfined aquifers, with potential adverse effects on the environment, economy and the health and safety of the community.

These policies are also linked to proposed policy 4.4.2 "Encouraging Waste Minimisation". Research from the Ministry for the Environment on the administration of the waste levy has indicated that the lack of robust data on waste disposal is limiting our ability to effectively manage the waste disposal process. The RPS can direct the collection of this information at a more relevant scale and more effectively than through provisions in district plans while avoiding issues around the trade competition between district councils and commercial waste operators.

The use and disposal of hazardous substances and waste contribute to the creation of contaminated land. Proposed policies 3.9.3 to 3.9.5 seek to manage the legacy of contaminated land in Otago by identifying existing sites of contaminated, managing contaminated sites and avoiding the creation of new contaminated land through controls. The direction of the RPS extends beyond the National Environmental Standard for Assessing and Managing Contaminants in Soil to Protect Human Health to recognise the role of the regional council in managing the effects of contaminated land on wider environmental health.

BENEFITS	Costs
ENVIRON	IMENTAL
• The adoption of the waste hierarchy encourages the use of natural resources at a more sustainable rate and greater consideration of the environmental impacts of waste generation	There are no environmental costs anticipated with these policies
 Reducing use of, and risks associated with, hazardous substances reduces 	

The costs and benefits of the proposed provisions are outlined below:

 avoiding adverse potential effects Improving facilities for the disposal of hazardous waste will reduce risk of land contamination elsewhere Economic (ECONOMIC Economic benefit from increasing 	
 efficiency in management and disposed of solid waste Economic benefits from reducing the potential risks or costs of remedying the adverse effects of: Hazardous substances particularly in sensitive areas Discharges from contaminated sites A reduction in waste generated and disposed of reduces the cost associated with waste management by extending the life of waste disposed facilities Improved information on contaminated and increases certainty for investment in land development and reduce associated costs 	 transporting or disposing hazardous substances in sensitive areas Opportunity costs of limiting establishment of hazardous substances near sensitive activities or in sensitive areas
It is considered likely that employment opportunities remain similar SociAL	

30	
 Areas vulnerable to the effects of natural hazards will be less vulnerable to the risks posed by hazardous substances during hazard events Engling the community to be better 	with these policies
 Enabling the community to be better informed about waste streams and understand the impact of waste behavior empowers people to behave in a more sustainable way 	
 Greater trust that the potential adverse effects from hazardous substances beyond those addressed by HSNO are appropriately managed 	
• Health and safety provided for by	

managing risk of potential discharges to sensitive areas, such as aquifers or community drinking water supplies		
Cult	URAL	
 Culturally sensitive areas will have greater protection Better integration will enable Kāi Tahu to exercise kaitiakitanga more effectively 	There are no cultural costs anticipated with these policies	
UNCERTAIN INFORMATION POLICIES ARE BASED ON:		

There is uncertainty over:

- The amount or nature of waste being disposed to land
- The extent and location of contaminated land in Otago
- Whether hazardous substances are being disposed to authorized facilities
- How much the disposal of hazardous substances outside authorized facilities may be contributing to the creation of contaminated land and discharges to the environment

RISK OF ACTING OR NOT ACTING IN FACE OF THIS UNCERTAINTY

- Risk of acting:
 - → Higher costs associated with waste disposal (through higher transportation costs)
 - → Potential displacement of the adverse effects from the disposal of waste and hazardous substances outside of Otago
- Risk of not acting:
 - → Inefficient waste management in Otago due to a lack of information on waste streams. This could affect the viability of community services and increase the risk of illegal disposal
 - \rightarrow Creation of contaminated land
 - → Discharges to the environment from the disturbance of unidentified contaminated land

- The economic costs of these policies and methods may be moderate to the individuals directly affected but would be minor to the community as a whole. However the economic, environmental, social and cultural benefits would be significant to the community as a whole. Overall the policies are considered efficient
- The provisions improve integration between the management of hazardous substances, waste and contaminated land and are considered to be effective at achieving the objective

8. People are able to use and enjoy Otago's natural and built environment

8.1. Evaluation of objectives and options to achieve those objectives

Proposed obje	actives:
Objective 4.1	Public access to areas of value to the community is maintained or enhanced
Objective 4.2	Historic heritage resources are recognised and contribute to the region's character and sense of identity
Objective 4.3	Sufficient land is managed and protected for economic production
Objective 4.4	Otago's communities make the most of the natural and built resources available for use
Objective 4.5	Adverse effects of using and enjoying Otago's natural and built environment are minimised

Objective assessment

The proposed objectives are the most appropriate way to achieve the purpose of the RMA as:

- They seek to maintain or enhance access to the natural environment, including to and along the coastal marine area, lakes and rivers, which is a matter of national importance under RMA Sections 6 and 7
- They seek to protect historic heritage which is a matter of national importance under RMA Sections 6 and 7
- They set up a framework to managing incompatible activities, nuisance effects and reverse sensitivity issues, to allow the wide range of activities needed to sustain the economy and local communities. These are the main areas where resource management can support economic activity – as requested by the community during consultation (see Appendix 1)
- They express and support the notion of efficient use of resources, which is a key community value, and is recognised as an important matter in the RMA Section 7(aa) and (b)

Resource management decisions are key methods to achieve these objectives, even though non regulatory methods might be required to fully achieve these objectives.

Options to achieve objectives

Achieving objectives 4.1 to 4.5 requires:

- The identification of those historic heritage resources which most need to be recognised, maintained, enhanced or protected
- The recognition of the values of different land uses in the community's well-being and their need to have access to appropriate resources
- A framework directing how the adverse effects of human activities on the environment should be managed

A strong regulatory direction for the identification and protection of historic heritage resources reduces the risk of multiple costly legal processes to define the criteria by which those areas and resources should be identified. Nonetheless, allowing flexibility in the mapping of those highly valued resources is desirable, to take better account of local community values.

A strong regulatory direction is needed to ensure resource management decisions do not risk the viability of industrial, commercial and rural land use (Proposed Policies 4.3.1 to 4.3.5). This particularly applies to the protection of water supply reliability through the protection of catchment yield (Proposed Policy 4.3.2) and the requirement for efficient allocation of water (Proposed Policy 4.4.1).

The setting of strong principles is also proposed for the avoidance of objectionable discharges (Proposed Policy 4.5.1), the management of pest species (Proposed Policy 4.5.5), and the management of mineral extraction (Proposed Policy 4.5.6), as the management of those issues is not addressed in specific regional plans in Otago.

A general regulatory direction has been considered the most appropriate for the maintenance and enhancement of access to the natural environment, and the promotion of activities which enhance environmental values (Proposed Policies 4.1.1 & 4.4.3) as it gives flexibility to adapt regional and district plans to local conditions.

8.2. Assessment of proposed provisions

8.2.1 Ensuring access to the natural environment

Proposed Policy 4.1.1 seeks to maintain or enhance public access to the natural environment.

The costs and benefits of this policy are outlined below:

BENEFITS	Costs	
Environ	NMENTAL	
Likely to enhance people's respect and connection with natural processes	• Human access and use of the natural environment can cause degradation of the environment	
ECONOMIC (ECONOMIC G	ROWTH AND EMPLOYMENT)	
 Tourist access to natural areas supports Otago's natural tourism industry. Maintenance of tourism- related employment 	 Ability of private landowners to use their property to the full, e.g. farming potentially affected Costs to local authorities through reserves Costs to developers through riparian strips that could cascade to new houses' prices 	
SOCIAL		
 Evidence suggests that access to the natural environment supports good physical and mental health Many important cultural and social activities – recreation, hunting and fishing, tramping etc. rely on access to the outdoors 	Risks of opposition by landowners feeling access impinges on their private property rights	
Cult	URAL	
 Many important cultural activities – recreation, hunting and fishing, tramping etc. rely on access to the outdoors Provides for access to areas of cultural or historic significance 	There may be reluctance to provide information on the location or cultural values attached to some sites	
	I POLICIES ARE BASED ON:	
There is uncertainty over the extent by w be enhanced by local authorities	hich access to the natural environment can	

RISK OF ACTING OR NOT ACTING IN FACE OF THIS UNCERTAINTY

- There is no risk associated with the proposed policy
- Risk of not acting:
 - \rightarrow Reduced ability for the public to access the natural environment
 - → Degradation of social well-being and recreational opportunities
 - → Failure in meeting RMA Section 6's requirements

EFFICIENCY & EFFECTIVENESS

The proposed policy's effectiveness is likely to be moderate, as local authorities have a limited ability to enhance access to the natural environment through resource management (esplanade reserves and esplanade strips requirements on subdivisions)

8.2.2 Protecting heritage values

Policy 4.2.1 identifies particular heritage themes or elements which are characteristic or of particular importance to Otago's historic growth and development. Examples of these themes may merit consideration for identification and protection. Policy 4.2.2 establishes criteria for use in the identification of historic heritage. Policy 4.2.3 provides direction on how the protection, maintenance or enhancement of historic heritage values will be achieved.

The costs and benefits of this policy are outlined below:

BENEFITS	Costs
Environmi	ENTAL
• As a result of protecting heritage places and areas, the environment within which these places are located may gain some protection, for example, pest management	There are no anticipated environmental costs associated with this policy
ECONOMIC (ECONOMIC GRO	WTH AND EMPLOYMENT)
 Economic benefits from generating a unique sense of place defined by heritage origins including heritage tourism associated with amenity values and local character Promotion of adaptive reuse of historic heritage features and buildings as a mechanism for protecting historic heritage sites and items contributes to maintaining value of existing building stock The identification of more consistent criteria for adoption across Otago will reduce the cost of undertaking and defending this process on a council by council basis Recognizable local character and amenity can increase value of development for urban areas Development of unique sense of place provides opportunities for marketing points of difference of Otago from other destinations and opportunities for economic diversification 	 Costs to local authorities to identify and manage heritage through plans Potential consenting costs for owners of heritage property seeking to maintain or modify historic heritage features It costs property owners of heritage places, sites or items to protect and maintain historic heritage values Developers and land and property owners may incur additional costs for heritage assessments and longer statutory approval processes when undertaking activities or development that affects heritage items or places Potential restrictions on activities or development which may affect identified heritage values may discourage some activities There may be potential ongoing economic costs and limitations such as insurance, inability to undertake
 Provides opportunity for specialist 	upgrades and additions to some buildings

ampleyment in beritage to view		
 employment in heritage tourism Provides opportunity for specialist employment in heritage maintenance and preservation 		
Socia	L	
 Protection of heritage features contributes to the amenity and character of urban environments including public spaces which improves the social and cultural wellbeing of the community Use and enjoyment of such areas will benefit the community with a sense of place and attachment to the area Positive recognition of contribution of private property owners in protecting of heritage reduces potential conflict or negative associations with ownership of heritage features 	 Owners of heritage buildings can feel marginalized as they are subject to personal costs to maintain public good Potential for demolition by neglect if provisions are too restrictive 	
CULTURAL		
 Tangible examples of our past are invaluable assets for education and enhancing our understanding of our different cultures and values Enhances community identity and connection with cultural heritage Greater certainty that unidentified and sensitive heritage sites can be managed as they are discovered or subject to development pressure 	Concern that identification of sites of cultural significance may lead to intentional or unintentional damage	
	OLICIES ARE BASED ON:	
	ric heritage sites is incomplete.	

RISK OF ACTING OR NOT ACTING IN FACE OF THIS UNCERTAINTY

Proposed methods anticipate and provide for activities to occur where there is uncertain information.

- The proposed policies assist in the identification of heritage that is significant to the region, and seeks the protection of that heritage. The proposed policies are considered an effective way of achieving the objective because they build on the requirements of the RMA and provide direction at a regional level. These directives will apply to the future management of historic heritage through provisions in plans
- The proposed policies may contribute to the costs associated with owning historic heritage features, and it is considered these are reflected in RMA requirements and

the benefits derived from the polices in terms of efficiency is significant. The adoption of regional direction for the identification and protection of historic heritage, including the use of consistent criteria will reduce costs on the community and will enable greater focus on the heritage values themselves

8.2.3 Managing land for economic production

Policy 4.3.1 recognises the role of productive activities associated with the rural environment in providing for the communities social and economic well-being and managing activities that may adversely affect those activities. Policy 4.3.2 identifies an area where land use activities may significantly impact on water quality and quantity and an integrated response from regional and district and city councils is required. Policies 4.3.3 to 4.3.5 seek to recognise the significant investment in development to provide for urban commercial and industrial areas that meet the needs of activities and address their effects. Policy 4.3.6 recognises the locational needs of mineral and gas exploration, extraction and processing, but the effects of this are addressed through Policy 4.5.6.

BENEFITS	Costs
ENVIRON	IMENTAL
 Reduces risk of incremental urbanization of sensitive areas on urban fringe 	 Amenity and natural values associated with rural environment retained Rural residential development can have lower impact than productive rural uses Potential environmental impact and loss of significant values to mineral extraction activities
ECONOMIC (ECONOMIC G	ROWTH AND EMPLOYMENT)
 Provides greater recognition of needs of productive activities whether rural, commercial or industrial activities Improves degree of certainty of decision making for commercial activities operating in zones that intended to provide for their effects Avoids the establishment of land use patterns that could result in reverse sensitivity effects Potential conflict between incompatible activities avoided Supports investment in social and physical infrastructure provided in areas zoned for commercial activities Recognition of the needs of extractive industries Provides greater certainty for 	 Reduces range of opportunities for activities to establish outside areas which specifically anticipate their effects May restrict the establishment of sensitive activities in areas where lower levels of amenity are anticipated Costs to local authorities to administer plan provisions Reduces flexibility on where economic growth can occur

The costs and benefits of this policy are outlined below:

•	commercial activities on where economic activities can occur with limited constraint Reduces the risk economic growth in commercial areas will be restricted by unanticipated activities		
	Soc	:IAL	
•	Promotes balanced urban development that anticipates different levels of amenity to recognize the functional needs of different activities Recognizes and provides for different levels of amenity associated with productive environments Recognizing and providing for a wider range of rural based activities adds diversity to the local economy and supports the social well-being of rural communities	•	Restrictions on sensitive activities may curtail opportunities for adaptive reuse of historic buildings

CULTURAL

There are no anticipated cultural costs or benefits associated with this policy

UNCERTAIN INFORMATION POLICIES ARE BASED ON:

- The frequency with which sensitive activities will seek to establish in areas zoned for other purposes
- The ability of sensitive activities to avoid conflict with other activities through conditions on consent
- Uncertainty on where mineral exploration or extraction may occur or the significance of the values that may be affected

RISK OF ACTING OR NOT ACTING IN FACE OF THIS UNCERTAINTY

- Risk of not acting:
 - \rightarrow Loss of viability of existing commercial zones
 - → Resource use conflict

- These policies are effective because they recognize that integrated management of our natural and physical resources involves providing for a range of different land use activities. Providing for these different activities involves recognizing different levels of amenity and providing different levels of infrastructure service
- These policies are efficient as they recognize the significant investment of physical and social infrastructure provided to meet the needs of commercial activities and to manage development that would adversely affect the sustainable use of these areas

8.2.4 Protecting water yields of dry catchments

Proposed Policy 4.3.2 protects catchment yields in Otago's dry catchments, in order to maintain the reliability of water supply for existing uses, through requiring the setting of restrictions on forestry activities, and on tussock grassland conversion in those catchments.

It is to be noted that the policy does not impact on existing forestry plantations, nor the ability to re-plant existing forestry blocks post-harvesting.

BENEFITS	Costs		
Environmental			
 Sustainability of water allocation limits Protection of significant freshwater ecosystems through protection of water yield Lower vulnerability to extreme flows (flood and drought attenuation provided by tussock) Prevention of erosion through the maintenance of tussock Lower vulnerability to climate change Contributes to addressing overallocation in dry catchments, as required by the NPS for Freshwater Management 2014 	 Potential opportunity loss for greater carbon absorption from forestry plantations Potential for greater erosion, from pasture land than from forestry – this effect would be mitigated by water margin requirements, or the use of water margins as a means to comply with current water quality provisions 		
	ROWTH AND EMPLOYMENT)		
 Increased reliability of supply for existing and potential future land uses downstream of dry catchments Decreased vulnerability to erosion, flooding and drought downstream of Otago's dry catchments 	 Increased difficulty for forestry developments in some parts of Otago Potential restrictions on extent of productive land – this effect could be mitigated by the fact that tussock can assist farmers with complying with current water quality regulations 		
• Economic growth impacts depend on	the relative economics of alternative land		

The costs and benefits of this policy are outlined below:

- Uses • A bigher religibility of water supply will facilitate the intensification of land uses
- A higher reliability of water supply will facilitate the intensification of land uses downstream
- Those intensified land uses are generally more profitable than forestry
- Employment impacts depend on the relative economics of alternative land uses

Sou	CIAL	
 Higher resilience of existing uses to water shortages – greater security and increased well-being Protecting catchment yield will contribute to social wellbeing through increased amenity, landscape and in- river recreational values 	 Enabling land use intensification downstream of dry catchment through protecting water supply reliability could be disruptive to the community Some landowners may resent the intrusion of local authorities in the management of their land 	
CULTURAL		
Maintenance of "iconic" landscapes/ local character (tussock grassland in Central Otago)	There are no cultural costs anticipated with these policies	

UNCERTAIN INFORMATION POLICIES ARE BASED ON:

There is uncertainty over:

- The relative industry economics
- The potential profitability of forestry operations in Otago's dry catchments
- The effects of tussock grassland conversion on catchment yield

RISK OF ACTING OR NOT ACTING IN FACE OF THIS UNCERTAINTY

- Risk of not acting:
 - → Lower reliability of water supply in some of Otago's catchments
 - → Resulting restrictions to land uses in those catchments
 - \rightarrow Risk to ecosystems
 - \rightarrow Risk of erosion and soil damage from tussock grassland conversion
 - \rightarrow Exacerbation of flooding and drought risks
 - \rightarrow Increased vulnerability to climate change
 - → Risks of exacerbation of water over-allocation in Otago's dry catchments, which could constitute a breach of the NPS for Freshwater Management 2014 Policies B6 (phasing out of over allocation) and C2 (integrated management of land use and freshwater)
- Risk of acting:
 - → Opportunity costs by closing off the development of a specific industry, and the productive use of some land (except for the over sowing and grazing of tussock)

EFFICIENCY & EFFECTIVENESS

This policy is expected to be effective and efficient.

8.2.5 Making the most of resources available for use

Proposed Policies 4.4.1 to 4.4.3 are focused on the efficient use of Otago's natural resources, and the adequate promotion of activities contributing to the enhancement of environmental values.

Proposed Policy 4.4.1 is dedicated to the efficient use of water, and sets out how Policy B2 of the NPS for Freshwater Management 2014 will be given effect to in Otago. Most of the principles set out in this Policy are already implemented in the operative Regional Plan: Water for Otago. However, the proposed policy provides for better coordination between decisions on water infrastructure and the allocation of water, and recognises the importance of appropriate infrastructure to achieve the efficient use of water. For example this also extends the requirement of efficiency of use to urban water supply

Proposed Policy 4.4.2 recognises the importance of the waste minimisation hierarchy of responses. The assessment of its efficiency and effectiveness is incorporated in section 7.2.7 of this report.

Proposed Policy 4.4.3 seeks the promotion of activities contributing to environmental enhancement.

BENEFITS	Costs
Environ	IMENTAL
 The efficient use of water creates opportunities for sustainable in-river flows, and aquifer and lake levels without unacceptable costs to water users Ensures resource management decisions are not solely focused on adverse environmental effects, but also support positive environmental effects 	 Infrastructure developments or upgrade for higher efficiency of water use and greater water storage is likely to incur adverse environmental effects
ECONOMIC (ECONOMIC G	ROWTH AND EMPLOYMENT)
 Wider range of uses enabled through a more efficient and flexible water allocation regime Greater reliability of water supply Lower vulnerability of primary production to droughts and climate change Greater attractiveness of Otago as a region to live, work and play in, or to visit through: 	 Costs linked to the maintenance and upgrade of infrastructure for the efficient use of water - including for the upgrading of community water supply "First in first served" principle still the basis of water allocation - risk that voluntary water management groups will not "optimize" the economic use of water

The costs and benefits of this policy are outlined below:

→ Co	onservation	initiatives	

- → Improved biodiversity
- → Improved natural character of wetlands, lakes, rivers and the coastal environment

The benefits to economic growth are expected to have positive flow-on effects on employment

Social		
 Initiatives for environmental enhancement are opportunities to bring communities together and enhance its sense of identity and community pride Conservation initiatives, and the enhancement of the natural character of wetlands, lakes, rivers and the coastal environment, increase amenity values and are likely to have positive effects on people's well-being 	 Infrastructure development and upgrade can have: → Short-term adverse effects on the community's social well-being through dust emission, noise, road closure and traffic, and transient workers → Longer term adverse effects on landscapes 	
Cultural		

The efficient use of water is a key community value, shared by Kāi Tahu and the wider community
 There are no cultural costs anticipated with these policies

UNCERTAIN INFORMATION POLICIES ARE BASED ON:

There is uncertainty over:

- The level of investment required for the efficient use of water for community water supply and irrigation
- The extent by which initiatives for the enhancement of the natural environment will be undertaken

RISK OF ACTING OR NOT ACTING IN FACE OF THIS UNCERTAINTY

- Risk of acting :
 - → Costly infrastructure investment
- Risk of not acting:
 - ightarrow Lower resilience to water shortages and the effects of climate change
 - → Inconsistencies between resource management decisions on infrastructure and water management requirements, raising difficulty in the implementation of the Regional Plan: Water for Otago
 - → Greater difficulty in setting sustainable environmental flows and levels for Otago's rivers, lakes and aquifers

- Policy 4.4.3 will be only moderately effective and efficient, as local authorities cannot initiate environmental enhancement under the RMA – although it can do so under other statutes
- Policy 4.4.1 will be efficient and effective insofar as it integrates the management of infrastructure with the management of water
- However, the current and proposed allocation regime cannot guarantee the best financial return from the use of water. Moreover, mining privileges which will expire in 2021, will reduce the effectiveness of the proposed policy.

8.2.6 Adverse effects of using and enjoying Otago's natural and built environment are minimised

Proposed Policies 4.5.1 to 4.5.11 set the principles under which the adverse effects of human activities are proposed to be managed. Those principles are:

- Avoiding objectionable activities or adverse effects
- Requiring an adaptive management approach to the management of adverse effects, when there is some uncertainty around the nature or intensity of those adverse effects

Proposed Policies 4.5.4 and 4.5.5 focus on specific adverse effects that require management, namely soil erosion and pest control.

Proposed Policy 4.5.6 highlights the adverse effects of mineral and gas extraction, to ensure those adverse effects will be appropriately considered and managed in future resource management decisions.

Policies 4.5.7 to 4.5.9 provide for the offsetting of adverse effects on indigenous biodiversity and air quality.

BENEFITS	Costs	
ENVIRONMENTAL		
 Ensures that adverse effects will be proactively managed through adaptive management approaches Ensures key adverse effects will be considered and managed Ensures that matters for consideration are consistent from one decision maker to the other Reduces risk of biodiversity loss while providing for economic activity 	Offsetting results in some local costs	
ECONOMIC		
 Ensures a wide range of activities will be provided for through allowing for some uncertainty in the adverse effects of some activities, and for the offsetting of some adverse effects Minimising soil erosion contributes to the protection of productive land 	Environmental requirements could increase industries' compliance costs	
The effect of the proposed objective of	and policies on employment cannot be	

The costs and benefits of this policy are outlined below:

The effect of the proposed objective and policies on employment cannot be evaluated, and will depend on the impact of the proposal on regional and district plans, and on the overall economy

Social		
 Provides for the potential offsetting of adverse effects on air quality when it improves access to reliable and affordable domestic heating Reduces risks of biodiversity loss while providing for economic activity 	There are no social costs anticipated with these policies	
CULTURAL		
Recognition and avoidance of activities which are objectionable to Kāi Tahu or the wider community	There are no cultural costs anticipated with these policies	
UNCERTAIN INFORMATION POLICIES ARE BASED ON:		

There is uncertainty over the financial and economic costs of complying with environmental requirements

RISK OF ACTING OR NOT ACTING IN FACE OF THIS UNCERTAINTY

- Risk of not acting:
 - \rightarrow Risk of key community values not being taken into consideration or recognised
 - \rightarrow Risk of inconsistent matters for decision making
 - → Risk of key principles being breached under pressure of specific consent applications / private plan changes
- Risk of acting:
 - $\rightarrow\,$ Risk that mineral and gas exploration and extraction have a too lenient way in

EFFICIENCY & EFFECTIVENESS

The proposed provisions will be efficient and effective in:

- Managing adverse effects from mineral and gas exploration and extraction
- Ensuring that key environmental issues such as soil erosion and pest control are addressed adequately
- Ensuring key community values are not breached, by avoiding objectionable discharges

9. Consultation

The RPS was prepared following extensive consultation with the community, key stakeholders and city and district councils.

An issues and options brochure was distributed region wide in May 2014 and made available on ORC's website. Public meetings and drop in sessions were held in Alexandra, Queenstown, Dunedin, Oamaru and Balclutha throughout May, with approximately 40 attendees. Feedback opened on Monday 19 May 2014 and closed on Friday 20 June 2014. Written feedback was received from 113 individuals, groups and organisations, a high level summary of which is included in Appendix 1.

The Consultation Draft of the RPS was released in November 2014. It was distributed to key stakeholders in accordance with Clause 3 of the First Schedule of the RMA. Comments opened on Saturday 1 November 2014 and closed on Friday 28 November 2014. The Consultation Draft was available on ORC's website. Written comments were received from 48 individuals, groups and organisations, a summary of which is included in Appendix 2. As part of this consultation, several meetings were held with key stakeholders and a meeting was also held for Maori landowners in December 2014, at which there were 14 attendees.

Aside from these consultation phases, numerous other meetings and workshops were held between 2013 and 2015 with internal staff, key stakeholders and city, district and regional council staff and councillors. These included:

- 11 workshops with ORC councillors
- 7 cross-council workshops held in Dunedin, Alex and Queenstown involving city, district and regional council staff and councillors
- 5 specific workshops with city and district council staff and councillors, one at each city or district council
- 7 formal city and district council staff workshops (involving all councils)
- 3 Manawhenua Group workshops (these participants providing representation for runaka across Otago)
- Over 170 other meetings, including with internal staff, city and district council staff, key stakeholders, individuals, interest groups and organisations

10. Conclusion

The RPS has four outcomes:

- Kāi tahu values, rights and interests are recognised and kaitiakitaka is expressed
- Otago has high quality natural resources and ecosystems
- Communities in Otago are resilient, safe and healthy
- People are able to use and enjoy Otago's natural and built environment

The approach in the RPS aims to consider the needs of all of Otago's communities by:

- Addressing matters of regional importance
- Focusing on values and effects
- Managing effects on those values
- Requiring environmental baselines to be set
- Enabling activities unless there is a good reason for them to be avoided or managed
- Reflecting the connections of the natural and built environment
- Using common criteria to provide consistency in assessing values across Otago
- Assisting city, district and regional councils to work well together

This report identifies that the RPS is the most effective option for:

- Providing an overview of the resource management issues Otago faces
- Achieving sustainable and integrated management of Otago's natural and physical resources
- Ensuring effective and cost-efficient resource management processes throughout the region.

11.Supporting information

In addition to the specific references detailed below, the following materials were also used in the preparation of the RPS and Section 32 Evaluation Report: All relevant Acts, National Policy Statements, National Environmental Standards and Regulations, ORC regional plans and strategies, regional policy statements of regional councils adjoining Otago and city, district plans within Otago

- ORC Report 2014/0765 Natural Hazards and the Dunedin City District Plan
- ORC Report 2014/0957 Update on South Dunedin groundwater monitoring and sea level rise
- ORC Report 2012/0885 Land Management to Address Natural Hazards
- ORC Report 2012/1281 Proposed Review of Regional Policy Statement for Otago
- ORC Report 2014/1539 Consultation Draft of Proposed Review of the Regional Policy Statement for Otago Regional Council (release deferred)
- ORC Report 2014/1838 Consultation Draft of Proposed Regional Policy Statement
- ORC Report 2015/0858 Notification of Proposed Regional Policy Statement
- ORC Report 2014/0983 Air Quality in Otago Issues and Considerations
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Appendix 1: Summary of feedback received on the Issues and Options consultation

What in Otago is important to you?



What do you think the major issues facing Otago are?



How do you think these issues should be addressed?



Appendix 2: Summary of comments received on the Regional Policy Statement Consultation Draft

Response to content

No clear way to prioritise values

- The way values should be prioritised against each other is not clearly articulated. It
 is not dealt with in the document except for policies on industrial land and
 locationally constrained infrastructure.
- The consultation draft uses the words "subject to environmental baselines", which are not clear. Respondents were not sure what the "baselines" refer to.
- There is not enough emphasis on economic benefits of activities.
- Call to recognise regionally important infrastructure.

Restrictive approach

- A significant amount of concern relates to the Supreme Court decision in New Zealand King Salmon, and how language such as "avoid" may be interpreted as a result.
- The RPS is overly restrictive on the use of resources and disposal of waste or hazardous substances.
- Common request to state 'avoid / remedy / mitigate in many policies'.

Concern that some policies are ambiguous

- Concern at the breadth of application of some proposed policies, in particular:
 - Maximising benefits
 - Requiring efficient resource use
 - o Managing cumulative effects
 - Minimising reverse sensitivity
 - Providing for offsetting
 - Unavoidable adverse effects

Urban Growth Boundaries

• The reasons these are required are not clearly articulated. As drafted, they appear to provide little benefit.

Reverse sensitivity and offsetting provisions need to be more specific

- Reverse sensitivity effects could be more strictly managed, but need to be more specific. Some call for policies directed at specific industries.
- Offsetting policies need a higher level of detail to ensure they operate as expected. Often these provisions need to be situation specific.
- Offsetting policies may require a specific schedule of criteria.

Rural issues not adequately addressed

- Concern about a lack of emphasis on rural areas, and lack of recognition given to primary production and associated issues, such as water storage and supply
- While locationally constrained infrastructure is mentioned, locationally constrained activities are not, particularly dairy and mineral extraction.

Takata whenua content is not visible enough

 Takata whenua content is not visible enough, and needs to be more clearly articulated.

Response to structure and process

Document Structure can be confusing

 There was some indication that the structure was confusing, compared to more standard topic based structures, although this was balanced by other comments that supported the structure as presented.

Concern that the document was incomplete

- Several respondents found it difficult to provide full comment on an incomplete document, and noted that the methods for implementation were a vital component of how the RPS will function.
- Concern that the RPS did not do enough to give effect to National Policy Statements on Renewable Electricity, Coast and Freshwater.

Consistency

• Noted inconsistency between provisions, particularly hazards, urban growth and infrastructure services, urban limits, and fragmentation of urban land.