12.0 Rural Environments

12.1 Introduction

The majority of the Wairau/Awatere Plan area comprises moderately steep to very steep hill country and mountain land bisected by major river systems. Less than 5% of the land area could be described as low lying or flat. The Wairau River originates in the alpine climate of the Spenser Mountains at the northern end of the Southern Alps and is fed by numerous tributaries until it meets the sea on the East Coast. The Awatere River originates in the vicinity of the Rachel Range which acts as a watershed between the Acheron and Awatere Rivers. In their course, these rivers and their tributaries flow through glacial landscapes, indigenous and exotic forests, tussock grasslands, exotic grasslands and eventually travel through the highly modified landscapes of the Wairau Plain and lower Awatere catchment. The lower Wairau Valley around Blenheim is, with its flat land and alluvial soils the most intensively farmed area within the Wairau/Awatere Plan area.

For the purposes of looking at the sustainable management issues of the Wairau/Awatere rural environment it is convenient to view it in terms of the following management areas:

- The lower Wairau Plain;
- The Rural Uplands;
- The balance area of rural land in general including the lower Awatere;
- Rural lifestyle localities;
- The skifield in the Rainbow forest, St Arnaud range; and
- Salt Works Zone.

12.2 Wairau Plain

12.2.1 Issue

Recognising and providing for the dynamic inter-relationships between land, water and people.

The Wairau Plain with its flat land, rich alluvial soils, relatively abundant water resources and population base is the most intensively farmed and developed area in the Wairau/Awatere Plan area. The lower Wairau Plain is also a very highly modified rural environment being the subject of extensive and costly flood management works and a complex managed drainage system which benefits some 10,000 hectares of productive land. For the purposes of this Plan the Wairau Plain are represented by a Rural 3 Zoning.

This zoning is intended to differentiate the Wairau Plain land resource from other rural land because of its particular characteristics which make it a valuable and versatile land resource. The versatility of this resource arises from a range of factors which include soil qualities, climate, drainage capacities, the availability of a significant groundwater resource, flat topography and location in relation to an urban centre with its associated infrastructure.

The principal land uses include:

Horticulture, viticulture, mixed farming, export lamb production, cereal production, small seeds production, the production of process crops (mainly peas) for food processing, dairy farming, intensive cropping (e.g. garlic) and the growing of corn.

In managing the resources of the Wairau Plain provision should be made for the following:

- Protection of rural amenity values;
- Control of the effects of residential, commercial and industrial development in the rural area:
- Safeguarding of water resources;
- Giving priority to floodplain management where appropriate;
- Drainage;
- Maintenance of a rural landscape;
- Mitigating the adverse effects of intensive land use activity; and
- Sustainable management of the land resource, including the life supporting capacity and primary production potential, of its soils.

12.2.1.1 Sustainable Management of the life supporting capacity of the land and its soils.

The soils of this part of the District have proven to be quite productive (ie soils favoured by their close proximity to good water resources, population and favoured by mild climatic conditions) compared with some other districts. Even in areas where soil profiles which are relatively shallow, the life supporting capacity supplemented by irrigation has enabled high value intensive production to succeed. The primary production potential of the land depends on the way in which it is managed and used. Good sustainable land management practice retains production options and improves production potential while protecting the environment.

Subdivision and use of small rural lots for principally residential activities can result in substantial areas of the lots being covered by buildings, impervious surfaces and unproductive investment. A reduction in allotment sizes may reduce production options, which is why a Controlled Activity minimum allotment size of 8 hectares for the Wairau Plain has been in place for over 20 years. The increase in property values resulting from subdivision and residential development can make the long-term utilisation of the life supporting capacity of the soils unlikely.

In addition, activities such as topsoil removal or turf production can adversely affect the life supporting capacity of those versatile soils. The Council recognises that there will be a continued demand for properties for intensive primary productive use and that specific provision should be made for rural/residential lifestyles in this part of the district.

12.2.1.2 Protection of rural amenity values.

Rural areas are the setting for a range of activities which result in levels of noise, dust, smell and traffic generation which will often be contrary to the expectations of people more used to the amenity of urban areas.

The rural areas of the Wairau Plain have traditionally been farmed for livestock and intensive cropping. In addition, intensification and diversification of rural farming activities has occurred in the last two decades. This is a result of rural people wishing to either exploit new opportunities or having to because of economic necessity; or because of the influx of people wishing to farm small rural properties and being prepared to try a range of new pastoral and horticultural enterprises. At the same time, there has also been a demand for residential dwellings in the rural area for people wishing to live in and enjoy the rural environment, or people wishing to farm blocks on a part time basis. However, the consequence of the variety of rural activities alongside residential activities in the rural area, means that some farming activities have become the subject of complaints from people residing in the rural areas. Traditional rural activities, such as spreading of manure, crop spraying, late night and early morning use of machinery creating some noise, dust or vibration or even the barking of dogs are perceived by some people as a nuisance. In addition, the noise from bird scarers and wind machines for frost control can become the subject of complaints from people living near intensive horticulture areas. The rural environment has particular amenity and environmental values which are important to rural people. These include privacy, rural outlook, spaciousness, ease of access, clean air and, most of the time, quietness. However, because of the range of activities that necessarily occur in a rural area, there are levels of noise, dust, traffic generation and smell that are an essential part of rural amenity values.

Although there is a duty under Section 17 of the Act to avoid, remedy or mitigate any adverse effects, the Council recognises that the principle rural activities inherently involve effects that may not meet the expectations of an urban environment. Urban activities at the rural/urban interface must expect to compromise their urban amenity expectations where there are justifiable and reasonable effects as a result of primary production activities in the rural environment.

12.2.1.3 Residential, commercial and industrial development.

The maintenance of a rural environment is to some extent dependent on the exclusion of "residential" activity, the two being to some extent incompatible. However, given that it is desirable for a number of reasons to have some residential activity in the rural areas it must be accepted that this will to some extent require rural activities to mitigate environmental effects where these have significant adverse effects on residential activity.

Some commercial or industrial activity must necessarily be located in rural areas and in particular activities such as the wine/craft trail are dependent on it, but a general dispersal of business activities to the rural areas can result in a loss of rural amenity values and fragmentation of business areas within settlements with a loss of convenience, accessibility and vitality of business areas.

There is a need for people to be able to provide for their economic wellbeing and, therefore, the Plan seeks to enable a wide range of rural land management activities to establish in the rural area, subject to standards and controls to avoid or mitigate any adverse effects. These include farming, forestry, viticulture, horticulture, outdoor recreation, homestay accommodation, home occupations and some commercial activities such as retailing of primary products grown or reared on site or crafts made on site. In allowing these activities to proceed, the Council recognises that standards are needed to protect rural amenity values, as has been discussed earlier. However, industrial activities and other commercial activities, which are not dependent on the land upon which they establish, can have significant adverse impacts on the rural amenity values and environment, irrespective of general standards.

The visual impact of large scale industrial, commercial or accommodation buildings and ancillary structures, as well as the likelihood of significantly increased traffic generation is likely to have a cumulative adverse impact on amenity values such as landscape, privacy, rural outlook, spaciousness and quietness. In addition the lack of services in the rural area would necessitate these industries or activities extracting sufficient quantities of water for their development and also establishing appropriate large scale on-site waste disposal systems.

Furthermore, allowing any industry or commercial enterprise to establish in the rural area could cause fragmentation of the present industrial and commercial areas which have been established for Blenheim. Commercial, accommodation and industrial activities have been located in the past within the townships and will generally continue to be under this Plan for the following reasons:

- There is a supply of labour within the townships;
- There is ready access to goods and services;
- A range of activities is located conveniently to a large number of potential customers:
- There is access to environmental services such as reticulated water supply, sewer, stormwater and refuse services; and
- The types and scales of buildings and open space areas needed for these
 activities can be better accommodated within the character of the built
 environment.

The Business Areas section, under the Urban Environments chapter, sets up a hierarchy framework to enable the Council to consider the location of commercial activities outside the Central Business Zone. Consideration of large format retail commercial activity in the rural zone will be rigorously tested against this hierarchy, including requiring an assessment of whether those activities will significantly undermine the functionality of the Central Business Zone.

12.2.1.4 Safeguarding water resources

The ready availability of quality ground and surface waters in quantity is a major factor underlying the intensive development of the lower Wairau Plain. Sustainable management of the water resource is essential to the sustainability of this rural environment.

Water resources, ground, surface, and coastal waters, are vulnerable to contamination from various activities undertaken on land or on the surface of lakes and rivers. Sources of contamination may include dairy farm run off; septic tank effluent disposal; waste disposal from wineries; offal and refuse pits; mining operations; roading and tracking; spray or fertiliser application; or discharge of inadequately treated urban sewage. Such problems can be overcome by appropriate containment or treatment of possible contaminating discharges. In addition, there is potential that certain activities, for example forestry and irrigation schemes, can affect the water regime. Mismanagement can lead to impaired water quality and yields and its subsequent unsuitability or unavailability for drinking water or contact recreation; or its inability to support healthy natural aquatic ecosystems.

The Rarangi Community has an older settled area that has historically taken water from shallow wells. This water source is very susceptible to the risk of contamination, and development will be permitted where this aspect is identified and provided for.

12.2.1.5 Priority to floodplain management

For historical reasons modification of the inter-related watercourse of the lower Wairau floodplain is irreversible. The maintenance and improvement of the system is now an imperative and for as long as there is development of this area it will always be the case. In order to maintain the efficiency and effectiveness of the floodway system floodplain management will need to be accorded priority over other rural activities. This will mean controls on activities within the floodway, on subdivision and restrictions on gravel extraction from the plains in favour of strategic gravel extraction from the key rivers in the floodway system.

12.2.1.6 Drainage

A significant portion of the Wairau floodplain has naturally high groundwater levels that impact on agricultural and other productive use of the soil. The land to the east of Blenheim is low lying, being only a few metres above sea level. Much of it would barely drain except at low flows and low tides. Land to 4 km west of Blenheim is less low lying but is affected by groundwater springs. Overall there are some 10,000 hectares of land which benefits from the control of water levels in a network of natural watercourses and Council constructed drains. Agricultural and other production from these soils could not be sustained without control of the water level in these networks of watercourses.

12.2.2 Objectives and Policies

Objective 1	To maintain or enhance the life supporting capacity of the versatile soils of the Rural 3 Zone (Wairau Plain).
Policy 1.1	To sustainably manage the versatile soils of the lower Wairau Plain and recognise their life supporting and productive capacity.
Policy 1.2	To enable intensive rural activities to utilise the range of soil types and micro-climates available within the lower Wairau Plain.
Policy 1.3	Limit the scale and range of activities that can be established in rural areas to those that require a rural location, and discourage, as far as practicable, activities which do not rely on the productive capacity of the land of the Rural 3 Zone.
Policy 1.4	To encourage the long-term retention of the capabilities of the area's soils, through research and dissemination of relevant information to the community.
Policy 1.5	To promote environmentally sound land management practices.
Policy 1.6	To promote appropriate vegetative cover and implementation of land management practices which will improve or maintain soil organic matter and soil nutrient balance by retaining the soil and avoid accelerated soil loss through erosion.

The objective and policies are intended to protect the versatility and productive capacity of the soils of the lower Wairau Plain. The policies enable activities to occur while ensuring that any adverse effects on the soils of the Wairau Plain are avoided, remedied or mitigated. The soils of this part of the District are one of the significant resources which need to be managed to ensure the sustainability of the rural environment in this locality.

Objective 2	To protect rural amenity values of the Rural 3 Zone by encouraging the establishment of a range of activities which do not create unacceptably unpleasant living or working conditions for residents and visitors, nor a significant deterioration of the quality of the rural environment.
Policy 2.1	To recognise that activities permitted or provided for in rural areas may result in effects such as noise, dust, smell, and traffic generation but that these will require mitigation where they have a significant adverse effect on the rural environment.
Policy 2.2	To ensure that a wide range of rural land uses and land management practices can be undertaken in the rural areas without increased potential for the loss of rural amenity values or for conflict.
Policy 2.3	To limit the scale of rural subdivision and dwellings in order to retain the rural amenity values of openness, to reduce conflicts between residential and neighbouring rural activities, and to assist in protecting the quality of the water resources.
Policy 2.4	To avoid, remedy or mitigate the effects of activities that can cause unpleasant living or working conditions for the rural community, or that cause other significant adverse effects to the environment.
Policy 2.5	To avoid, remedy or mitigate the adverse effects of intensive farming activities, ensuring that their scale and nature, design and management, protect the amenity values of rural areas.
Policy 2.6	To manage the establishment of activities which result in higher than normal traffic generation to avoid, remedy or mitigate adverse effects on the safety and efficiency of the arterial road network.
Policy 2.7	 Ensure that the patterns of small-scale rural subdivision and related residential development are not located where: Rural amenity values of openness will be adversely affected; or The potential for conflict between residential and neighbouring rural activities will be created, or where they already exist, be exacerbated.
Policy 2.8	To enable rural activities which might generate adverse effects such as noise or smell, to operate in rural areas in accordance with accepted practices, without being significantly compromised by other activities demanding higher levels of amenity.

A wide range of activities occur in rural areas, including viticulture, traditional livestock farming and the farming of supplementary crops, as well as more intensive pastoral and horticultural enterprises. Low density residential development has also spread throughout rural areas.

People have differing expectations about what are acceptable amenity levels in the rural environment. Amenity means how noise levels, odour strength, air quality and visual appearance relate to the overall nature of the rural environment. The inherent nature of land based productive activities, means that intermittently high noise levels will be produced when agricultural machinery is being used, stock is being moved or held, or crop protection mechanisms are activated. These activities may also result in increased odour levels and reduced air quality.

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Therefore, current amenity levels in the rural areas of Marlborough are characterised by fluctuations in amenity because of both routine and seasonal land based primary production management practices. These fluctuations should be accepted as anticipated components of rural amenity values, particularly by those choosing to live in rural areas. This does not mean that the duty under Section 17 of the RMA to avoid, remedy or mitigate the adverse effects of activities is removed.

The policies seek generally to enable established rural land uses and associated management practices to continue to operate sustainably in rural areas, so long as the effects from these uses do not constitute a general nuisance or health risk. The Plan sets out the expected amenity levels for rural areas to protect human health and safety. This should ensure that the potential for reverse sensitivity conflicts between the expectations of rural residents and those undertaking rural land uses are avoided, as far as possible.

Control of subdivision is necessary to ensure that the rural zones can accommodate a full range of rural land-based activities. However, in providing for a full range of rural activities, the Council is mindful of the need to protect the rural amenity values.

Most of the problems associated with factory farming and intensive livestock farming activities occur as a result of poorly-sited and designed buildings and enclosures, and poor farm management practices and waste disposal methods.

Objective 3	To maintain or enhance the life supporting capacity of soils, and the quality of surface, ground and coastal water.
Policy 3.1	To encourage the efficient use of water, thereby conserving both water quality and quantity.
Policy 3.2	To avoid, remedy or mitigate the adverse effects of discharges on soil and water quality. The Deferred Township Residential Zone at Rarangi will only develop when a permanent potable water supply has been installed and service connection made to all properties in both the Deferred Township Residential Zone and the Township Residential Zone.
Policy 3.3	To safeguard the natural character and nature conservation values of riparian margins, and associated ecosystems.
Policy 3.4	To improve the control of run-off stormwater, including from roadways, to reduce the levels of sediment and contamination entering waterbodies.
Policy 3.5	To ensure that regard is given to the effect of activities on water quality, water yields and the water requirements of ecosystems, when considering resource consents.
Policy 3.6	Require land use consent for the establishment and operation of any new dairy farm.
Policy 3.7	Approve land use consent applications for new dairy farms where the proposed farming would have no more than minor adverse effects on ground, surface, and coastal water quality or wetland. A land use consent application must identify the risks of new dairy farming and provide measures to address those risks, including as a minimum:

- (a) Measures, including fences, bridges or culverts, to prevent stock entering onto, or passing across, the bed of any river, stream, creek, lake, wetland or significant ephemeral stream, and any drain;
- (b) Provision of an appropriate, non-grazed, buffer along the margins of any water body, including a river, stream, creek, lake, wetland or significant ephemeral stream, and any drain, to intercept the runoff of contaminants from grazed pasture, with reference to Appendices A, J and Q;
- (c) Provision for storage of dairy effluent, with all storage ponds sufficiently sized to enable deferral of application to land until soil conditions are such that surface runoff and/or drainage do not occur;
- (d) Demonstration of appropriate separation distances between effluent storage ponds and any surface waterbodies to ensure contamination of water does not occur (including during flood events);
- (e) A nutrient management plan that includes nutrient inputs from dairy effluent, animal discharges, fertiliser, and any other nutrient input.

The quality and quantity of the District's water resources are essential to the prosperity and pleasantness of the lower Wairau, in terms of their life supporting capacity and availability for domestic and productive use. Water quality is also integral to the landscape character, recreation potential and amenity values of the area.

Objective 4	The control of water levels in a network of natural watercourses and drains so as to remove surplus water and enable sustainable management of the soils of the lower Wairau flood plain.
Policy 4.1	To maintain and upgrade a network of drains, drainage channels and small rivers within a drainage district on the floodplain.
Policy 4.2	To keep these drains and watercourses in a hydraulically efficient state by removal of weed and sediment.
Policy 4.3	To prevent backflows of major river floodwater into the network by means of floodgated culverts.
Policy 4.4	To use pumps and gates to aid in the removal of water from the network, or improve its efficient operation.
Policy 4.5	To enhance functioning of the network as ecological and habitat corridors.

The sustainable use of parts of the lower Wairau floodplain for agriculture is dependent on the ongoing maintenance of the existing drainage system which keeps the groundwater table high in the summer and low in the winter. The network of waterways also provides opportunities for the development of ecological corridors for fauna and flora.

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12.2.3 Methods of Implementation

Rules	Plan rules provide for activities on the basis of their effects on the sustainable management of the lower Wairau Plain as an area for intensive rural development.
	In general rural activities are provided for as Permitted Activities subject to performance conditions.
	Rural activities with the potential to cause significant adverse effects such as dairy farming, factory farming and intensive livestock farming are provided for as Discretionary Activities. A number of other activities are also provided for as Discretionary Activities.
	Land disturbance rules will control non-point sedimentation laden runoff from rural land use activities, and will avoid, remedy or mitigate the effects of land use activities on riparian margins. Plan rules provide a water allocation mechanism.
	Plan rules control discharges and set performance standards on discharges to protect water quality.
	Plan rules will control subdivision to protect the rural environment.
	Rules will be used to ensure that maintaining hydraulic efficiency is a priority function for drains and water courses less than 3 metres in width in the lower Wairau Plain.
Council Activities	Maintain and improve a network of natural watercourses and constructed drains as detailed in a suitable comprehensive engineering plan.
	Operate pump discharges from the drainage network into the major rivers as detailed in a suitable operational plan within a range of specified water levels, and specified discharges.
	Operate control gates within the drainage network as per a suitable operational plan.
	Encourage riparian management and wise land use management practice through education e.g. Rivers Environmental Handbook, Land Disturbance Best Practices.
Performance Conditions	Conditions are included for Permitted Activities to protect rural amenity values and environmental quality. These address matters such as noise, agricultural spraying, building bulk and location and land disturbance.
Research	Conduct, and where appropriate, encourage research into land use and land management practices that sustain the versatile soil resource of the Wairau Plain. Identify trends in the State of the Environment monitoring report which need to be addressed through changed land management practices.
Monitoring	Monitor the effects of land use activities on ground and surface water. Undertake a surveillance programme to ensure culverts and floodgates operate in a safe and effective manner.

Self Regulation Recognise, support and promote initiatives such as self regulation by resource users themselves, where those users have a track record of compliance with performance standards in the Plan. Investigate self regulation through approved environmental management systems, which may benefit resource users and the Council through reduced consent administration, within one year of this Plan becoming operative. Guidelines Provide information on appropriate land use practices and encourage use of voluntary guidelines and best practices. Education Assist resource users to understand and implement the results of research into the effects of land use patterns and land management practices. The Council will recognise environmentally sound farming Rural Awards Programme practice by supporting the Marlborough Rural Environment Awards. Riparian The Council will prepare, in consultation with relevant parties, Management a riparian management strategy to provide further guidance on Strategy the appropriate management of riparian margins so that their habitat, water quality, amenity and public access benefits are recognised and enhanced. Management Water Quality Management Plans will be required as a means of **Plans** demonstrating on an ongoing basis that any adverse effects on water quality resulting from dairy farming will be avoided, remedied, or sufficiently mitigated. They provide the ability to consider all farm management practices that have the potential to adversely affect surface water and groundwater and manage these risks in an integrated way. This also enables the dairy farmer to progressively plan farm upgrades based on priority or, in the case of new farms, at the time of establishment. Water Quality Management Plans can be used to support applications for land use consent to convert the use of land to dairying. Nutrient Management Plans will be required as a means to demonstrate how nutrient inputs associated with dairy farming are to be managed to ensure any adverse effects on water quality will be avoided, remedied, or mitigated. Nutrient Management Plans should be written documents, incorporating a nutrient budget, developed by an accredited nutrient adviser using OVERSEER® or similar, that describes how the major plant nutrients (nitrogen, phosphorus, sulphur and potassium, and any other of importance to specialist crops) will be managed, including all sources of nutrient, for example discharges from farm dairy effluent systems, animal discharges, atmospheric nitrogen fixation.

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Rules to control subdivision are considered a useful tool to ensure that lot sizes are appropriate to enable sustainable management of rural land that results in the retention of the life supporting capacity of the land and soil resource, allows for a range of future uses, retains the character and amenity values of the rural environment and minimises conflict between activities in rural areas.

Management Plans as part of resource consents for new dairy farm conversions will enable rural land to be used in such a way as to avoid adverse effects on water quality, while providing farmers the flexibility to manage their activity in a manner best suited to achieving the outcomes they are seeking.

Guidelines and education allow flexibility of approach to accommodate new information, changes in community perceptions, and take account of management systems and the needs of crop rotations. Farm environment awards both reward and educate farmers on environmentally sustainable farming practices.

Rules limit the use of rural resources to include those activities that are rural land based activities in nature, require a rural setting or are necessary to enable rural communities to provide for their social, cultural and economic wellbeing.

Drains and watercourses less than three metres in width are particularly prone to blocking with vegetation spreading from each bank. Control of riparian weed vegetation is essential to maintain the hydraulic effectiveness of such watercourses and drains.

One of the roles of the riparian management strategy is to investigate the appropriateness of existing riparian management detailed in this and other chapters and the rules contained in Volume Two of the Plan. If, following this investigation, changes to plan provisions are required then those changes will be pursued through the plan change process.

12.3 Rural Uplands

12.3.1 Issue

The continued use of the tussock grasslands for extensive pastoral farming has the potential if managed inappropriately, to adversely affect the life supporting capacity of the soil and the robustness and diversity of the indigenous fauna and flora of the Wairau/Awatere uplands.

For much of the land in the Plan area above 1000 metres, extensive pastoralism, historically was and still is the predominant land use activity. Its relative isolation and topographical and climatic limitations means that pastoralism is likely to remain the major land use activity well into the future. Much of the land is Crown owned and is in pastoral lease subject to private management.

A primary issue which concerns the management of these upland areas (and indeed most South Island uplands) is the need to protect communities of tall tussock grasslands and other significant indigenous flora and fauna and to limit erosion and general land degradation. There is considerable debate over the sustainability of grazing of tussock grasslands and the interaction with land degradation causal factors such as rabbit infestations and invasion by hieracium. Most parts of the rural uplands have experienced changes in vegetation from tall tussock lands into species such as

hieracium, briar and wilding pines, which reduce grazing and in some cases threaten ecological value.

Research and past experience shows that in some areas repeated summer burning and grazing may not be sustainable in the long term. This may be because areas transformed from tall tussock land to short tussock grasslands are much more vulnerable to invasion by rabbits and hieracium. Burning also results in a significant

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loss of nutrients and carbon from the soil, further depleting naturally skeletal upland soils. Exposure of the soils at higher altitudes as a result of burning practices has resulted in the past in large scale scree erosion, accelerating a naturally occurring process. It is acknowledged however that burning practices have dramatically decreased and conservation practices have assisted rehabilitation of tussock grasslands in recent years.

12.3.2 Objectives and Policies

Objective 1	Sustaining the life supporting capacity of the soils of the rural uplands.
Policy 1.1	To promote appropriate vegetative cover and implementation of land management practices which will improve or maintain soil organic matter and soil nutrient balance by retaining the soil and avoid accelerated soil loss through erosion.
Policy 1.2	To encourage land uses and land management practices which are appropriate for the high country environment.
Policy 1.3	To avoid, remedy or mitigate the adverse effects of burning practice within the upland environment.
Policy 1.4	To recognise the voluntary retirement of pastoral leases having high conservation or landscape values.

The objective seeks to ensure that rural uplands are managed in such a way as to sustain the life supporting capacity of the soil, including the maintenance of robust, diverse and intact vegetation cover.

The policies reflect the Council's concern that there may be some areas where the continuing loss of vegetation cover, through for example the spread of hieracium, may give rise to adverse environmental consequences. The Council believes that the maintenance of a healthy vegetative cover is essential to protect the soil in order to meet the reasonably foreseeable needs of future generations.

12.3.3 Issue

Reduction/damage to the ecological values of the upland environment.

The uplands often support large continuous natural areas and are home to areas of significant indigenous vegetation and habitats of significant indigenous fauna. Within these areas plant and animal diversity is unique. The widespread removal and modification of the original vegetation cover, easily eroded soil and rock types, slow recovery in the high altitude climate and major exotic biota and indigenous invasive weed and pest competition has produced widespread loss of habitat. Within this setting the areas of remaining forest and well developed shrubland and plant communities are ecologically important.

12.3.4 Objectives and Policies

Objective 1	To recognise and protect the ecological values of the sensitive upland environment.
Policy 1.1	To recognise and protect significant ecological and landscape values.
Policy 1.3	To discourage activities which involve extensive land disturbance.
Policy 1.4	To recognise the ecologically sensitive environment of the uplands which if disturbed (by activities such as land disturbance, fire, forestry, and inappropriate over grazing) can lead to soil erosion and habitat loss.
Policy 1.5	To encourage and facilitate the establishment of multi-agency Landcare Groups comprised as follows:
	 Landholders - one representative per Station/Run;
	 Marlborough District Council - one representative;
	 Department of Conservation - one representative;
	 Commission of Crown Land - one representative;
	 Others - specialist input as required; and
	Iwi - one representative.
Policy 1.6	Manage pests according to a regional pest management strategy.

12.3.5 Methods of Implementation

Rules	Most land disturbance activities in the Wairau/Awatere uplands will require a resource consent which will enable close assessment of the potential effects.
Advocacy	The Council will support the voluntary retirement of pastoral leases where this will promote sustainable vegetation cover.
Monitoring	The Council will monitor trends in pest population and vegetation cover in the rural upland environment.
Self Regulation	Recognise, support and promote initiatives such as self regulation by resource users themselves, where those users have a track record of compliance with performance standards in the Plan. Investigate self regulation through approved environmental management systems, which may benefit resource users and the Council through reduced consent administration, within one year of this Plan becoming operative.
Education	Assist resource users to understand and implement the results of research into the effects of land use patterns and land management practices.

Pest	
Management	İ

Maintenance of a Regional Pest Management Strategy.

Landcare Groups The Council will encourage and facilitate the setting up of multiagency Landcare Groups to develop Sustainable Land Management Guidelines (similar to industry Codes of Practice) for Upland Valleys and Catchments, and those stations identified in Appendix B.

The primary purpose of the Landcare Groups shall be:

- To develop, promote and set down agreed Sustainable Land Management Guidelines appropriate to the area in question;
- To implement the agreed Guidelines within the defined Landcare Groups area;
- To identify and agree the extent of protection required for areas of significant indigenous vegetation and significant habitats of indigenous fauna;
- To identify and agree on methods for the sustainable management of areas of significant indigenous flora and
- To identify and agree on methods of implementation to manage all resources within the Landcare Groups defined area in a sustainable manner; and
- To comply with other relevant Council initiatives (e.g. The Regional Pest and Plant Management Strategies).

Rural Awards Programme

The Council will recognise environmentally sound farming practice by supporting the Marlborough Rural Environment Awards.

Riparian Management Strategy

The Council will prepare, in consultation with relevant parties, a Riparian Management Strategy to provide further guidance on the appropriate management of riparian margins so that their habitat, water quality, amenity and public access benefits are recognised and enhanced.

Generally the 1000m contour has been used as an indicative method to define high country and differentiate between Rural Uplands and General Rural. For the purpose of determining specific resource management issues however, it will be necessary to recognise that the circumstances relating to specific definitions may vary widely throughout the Plan area. The Council recognises that the sustainable management of land can not be solely achieved through regulation and believes that the establishment of Landcare Groups will allow more effective consideration of sustainable management issues, based on the actual characteristics of the land in question.

Sustainable management of rural uplands depends on the interaction between climate, relief and soil as well as land use activities. Rules can to some extent be used to control land use activities but by far and away the greatest change will come through increased awareness and sensitivity to the vulnerability of the high country environment. The Council believes that where Landcare Groups formalise and adhere to Sustainable Land Management Guidelines these may take precedence and obviate the requirement for Rules.

One of the roles of the Riparian Management Strategy is to investigate the appropriateness of existing riparian management detailed in this and other chapters and the rules contained in Volume Two the Plan. If, following this investigation, changes to plan provisions are required then those changes will be pursued through the plan change process.

12.4 General Rural

12.4.1 Issue

The sustainable management of the extensive land areas given over to rural land uses below 1000 metres and not part of the intensively developed land of the lower Wairau Plain.

This area is distinguished by its vastness and relative isolation from major centres of population. The dominant and traditional land use remains pastoral farming producing wool and meat. However, in some areas pastoralism is experiencing pressures to change to forestry and horticultural activities as people seek alternative ways to provide for their economic and social well-being. The Plan seeks to enable a wide range of appropriate activities to establish in the General Rural area, subject to standards and controls to avoid or mitigate adverse effects on vegetation and soil resources, landscape and amenity values, and water quality.

Given the distance, isolation and in many cases the climatic constraints this area is unlikely to be subjected to intensive development of any form within the foreseeable future. Where developments (such as tourism) are likely to be one off events these ought to be able to be readily assimilated into the management area provided that attention is given to the avoidance, remediation or mitigation of any adverse effects on the environment.

12.4.2 Objectives and Policies

Objective 1	Maintenance or enhancement of the life supporting capacity of the soils and the retention of primary production options for rural land.
Policy 1.1	To promote appropriate vegetative cover and implementation of land management practices which will improve or maintain soil organic matter and soil nutrient balance by retaining the soil and avoid accelerated soil loss through erosion.
Policy 1.2	To encourage and assist in continued research to establish thresholds for sustainable soil conditions and vegetative cover.
Policy 1.3	To encourage land users to monitor the condition of vegetation on their land by providing information and assistance, where possible.
Policy 1.4	To ensure controls do not unnecessarily inhibit land use and management options that sustain the land and soil resources.
Policy 1.5	To encourage and facilitate the establishment of local groups such as land care groups, which promote and action policies and methods of sustainable land management.
Policy 1.6	Ensure that subdivision/development does not compromise existing primary production options.

Maintenance of soil quality depends largely on the maintenance of an appropriate continuous vegetation cover. Sustainable management of the soil resource has tangible benefits for the District. Stable and viable rural communities depend upon the implementation and maintenance of sustainable land use systems which retain soil quality, fertility and health.

Inappropriate subdivision and development can compromise primary production options in circumstances where there is a decrease in the availability of versatile soils for productive uses, or a reduction in existing primary production opportunities. These factors can be ascertained by the Council through the resource consent process.

Objective 2	To provide for a range of activities which do not create an unacceptable working environment while avoiding, remedying or mitigating adverse effects on the environment.
Policy 2.1	To limit the scale of subdivision and dwellings for rural purposes to the creation of lots which retain the amenity values of openness, and minimise the potential conflicts between residential and neighbouring rural activities.
Policy 2.2	To enable rural activities which might generate adverse effects such as noise or smell, to operate in rural areas in accordance with accepted practices, without being significantly compromised by other activities demanding higher levels of amenity.
Policy 2.3	To identify existing rural residential locations within the Rural 4 Zone and to acknowledge the demand for rural lifestyle allotments whilst taking into account potential adverse effects, particularly on rural amenities and on the sustainable management of the land resource, of the Rural 4 Zone.
Policy 2.4	To avoid, remedy or mitigate the effects of activities that can cause unpleasant living or working conditions for people in the rural community, or that cause other significant adverse effects on the environment.
Policy 2.5	To ensure that the location, scale and nature, design and management of industrial, commercial or rural intensive activities are such as to protect the amenity values of rural areas.

A wide range of activities occur in rural areas, including viticulture, traditional livestock farming and the farming of supplementary crops, as well as more intensive pastoral and horticultural enterprises. Low density residential development has also spread throughout rural areas.

People have differing expectations about what are acceptable amenity levels in the rural environment. Amenity means how noise levels, odour strength, air quality and visual appearance relate to the overall nature of the rural environment. The inherent nature of land based productive activities, means that intermittently high noise levels will be produced when agricultural machinery is being used, stock is being moved or held, or crop protection mechanisms are activated. These activities may also result in increased odour levels and reduced air quality.

Therefore, current amenity levels in the rural areas of Marlborough are characterised by fluctuations in amenity because of both routine and seasonal land based primary production management practices. These fluctuations should be accepted as anticipated components of rural amenity values, particularly by those choosing to live in rural areas. This does not mean that the duty under Section 17 of the RMA to avoid, remedy or mitigate the adverse effects of activities is removed.

The policies seek generally to enable established rural land uses and associated management practices to continue to operate sustainably in rural areas, so long as the effects from these uses do not constitute a general nuisance or health risk. The Plan sets out the expected amenity levels for rural areas to protect human health and safety. This should ensure that the potential for reverse sensitivity conflicts between the expectations of rural residents and those undertaking rural land uses are avoided, as far as possible.

Objective 3	Manage the land resource and associated waste discharges in such a way as to protect the life supporting capacity of the soils; and surface, ground and coastal water quality and quantity (consistent with the human consumption of groundwater and fish from surface waters); water contact recreation; and the maintenance of the natural and scenic values of the water resources and their associated ecosystems.
Policy 3.1	To encourage the efficient use of water, thereby conserving both water quantity and quality.
Policy 3.2	To avoid, remedy or mitigate the adverse effects of discharges on the life supporting capacity of soils and water quality. The Deferred Township Residential Zone at Rarangi will only develop when a permanent potable water supply has been installed and service connection made to all properties in both the Deferred Township Residential Zone and the Township Residential Zone.
Policy 3.3	To safeguard the natural character and nature conservation values of the riparian margins and associated ecosystems.
Policy 3.4	To ensure that regard is given to the effect of activities on water quality, water yields and the water requirements of indigenous ecosystems, when considering resource consents.
Policy 3.5	To manage land use activities in a manner that avoids, remedies or mitigates the contamination or sedimentation of surface water bodies.
Policy 3.6	Require land use consent for the establishment and operation of any new dairy farm
Policy 3.7	Approve land use consent applications for new dairy farms where the proposed farming would have no more than minor adverse effects on ground, surface, and coastal water quality, or wetland. A land use consent application must identify the risks of new dairy farming and provide measures to address those risks, including as a minimum:

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(a) Measures, including fencing, bridges or culverts, to prevent stock entering onto, or passing across, the bed of any river, stream, creek, lake, wetland or significant ephemeral stream, and any drain;

- (b) Provision of an appropriate, non-grazed, buffer along the margins of any water body, including a river, stream, creek, lake, wetland or significant ephemeral stream, and any drain, to intercept the runoff of contaminants from grazed pasture, with reference to Appendices A, J and Q;
- (c) Provision for storage of dairy effluent, with all storage ponds sufficiently sized to enable deferral of application to land until soil conditions are such that surface runoff and/or drainage do not occur;
- (d) Demonstration of appropriate separation distances between effluent storage ponds and any surface waterbodies to ensure contamination of water does not occur (including during flood events);
- (e) A nutrient management plan that includes nutrient inputs from dairy effluent, animal discharges, fertiliser, and any other nutrient input.

The quality and quantity of the District's water resources are essential to the prosperity and pleasantness of the District, in terms of their life supporting capacity; their availability for domestic and productive use; and their integral part in the recreation and tourism values of the District. Efficient use of this water is essential to safeguard the quality and quantity of water for future generations.

12.4.3 Methods of Implementation

Zoning

Represent the Rural area by way of Rural 4 Zoning.

Expansion to Ward and Seddon, which may result if the Clifford Bay ferry terminal proceeds, will be examined by way of a resource study which would be implemented through the plan change process.

Rules

Plan rules will provide for activities and a zoning pattern on the basis of their effects on the sustainable management of the rural area generally.

Plan rules will provide water quality standards and controls on discharges.

Plan rules will provide water allocation mechanisms.

Subdivisional controls will be applied to ensure that rural amenities will be protected.

Land disturbance rules will provide for control of sediment and debris in rivers and watercourses.

Vegetation clearance rules will control vegetation and habitat disturbance.

Research	Conduct research into land management practices that sustain the District's soil resource.
Riparian Margins	The Council will develop, in consultation with all relevant parties a schedule of rivers and relevant riparian margins.
Management Plans	Prepare soil conservation management plans for areas badly affected by soil erosion (e.g. Wither Hills).
	Water Quality Management Plans will be required as a means of demonstrating on an ongoing basis that any adverse effects on water quality resulting from dairy farming will be avoided, remedied, or sufficiently mitigated. They provide the ability to consider all farm management practices that have the potential to adversely affect surface water and groundwater and manage these risks in an integrated way. This also enables the dairy farmer to progressively plan farm upgrades based on priority or, in the case of new farms, at the time of establishment. Water Quality Management Plans can be used to support applications for land use consent to convert the use of land to dairying.
	Nutrient Management Plans will be required as a means to demonstrate how nutrient inputs associated with dairy farming are to be managed to ensure any adverse effects on water quality will be avoided, remedied, or mitigated. Nutrient Management Plans should be written documents that incorporating a nutrient budget developed by an accredited nutrient adviser using OVERSEER® or similar, that describes how the major plant nutrients (nitrogen, phosphorus, sulphur and potassium, and any other of importance to specialist crops) will be managed, including all sources of nutrient, for example discharges from farm dairy effluent systems, animal discharges, atmospheric nitrogen fixation.
Monitoring	Monitor the effects of land use activities on ground and surface water.
Self Regulation	Recognise, support and promote initiatives such as self regulation by resource users themselves, where those users have a track record of compliance with performance standards in the Plan. Investigate self regulation through approved environmental management systems, which may benefit resource users and the Council through reduced consent administration, within one year of this Plan becoming operative.
Rural Awards Programme	The Council will recognise environmentally sound farming practice by supporting the Marlborough Rural Environment Awards.
Promotion and Guidelines	The Council will encourage the establishment of Landcare and other similar groups.
Education	The Council will assist resource users to understand and implement the results of research into the effects of land use patterns and land management practices.

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Riparian
Management
Strategy

The Council will prepare, in consultation with relevant parties, a Riparian Management Strategy to provide further guidance on the appropriate management of riparian margins so that their habitat, water quality, amenity and public access benefits are recognised and enhanced.

Identification of the values of water bodies

The natural and human use values supported by surface water bodies within the Plan area are identified in Appendix A of Volume One the Plan. These values include ecological, habitat, recreational and natural character values. Regard can be had to these values when considering resource consent applications required as a result of rules in this Plan.

As more is learnt about the values supported by water bodies in South Marlborough, it is possible to add to Appendix A by way of plan change.

12.5 Rural Residential (residential activity in the rural environment)

12.5.1 Issue

Accommodating rural residential living in a manner that does not result in incompatible activities in the rural environment.

Any residential development extending into the rural area may bring potential residents into closer contact with landuse activities such as viticulture, orchards, intensive livestock operations, forestry or rural industries. Adverse effects can include smell, noise, spray drift or in the case of forestry, fire risk and fire hazard.

Rural activities which are legitimately established should not be expected to relocate to accommodate residential activity. Residential activities should only be permitted to establish where clear steps have been taken to mitigate any adverse effects. The onus is clearly on the developer to ensure that a situation of conflict between the residential activity and the legitimate rural activity does not arise.

Existing rural residential areas in the Wairau/Awatere area such as at Rarangi have been given a rural residential zoning. New locations will be considered where it can be demonstrated that there will be no adverse effect on existing legitimate rural activities and where public health concerns (such as sewage disposal), water availability and water quality issues have been addressed, along with factors involving ecology, landscape, land stability, inundation and drainage and transport.

Although there is a duty under Section 17 of the Act to avoid, remedy or mitigate any adverse effects, the Council recognises that the principal rural activities inherently involve effects that may not meet the expectations of an urban environment. Urban activities at the rural/urban interface must expect to compromise their urban amenity expectations where there are justifiable and reasonable effects as a result of primary production activities in the rural environment.

12.5.2 Objectives and Policies

Objective 1	To adequately provide within the rural zones for a range of persons wishing to live in the rural areas without placing undue demands on existing facilities in the rural areas and without inhibiting or diminishing the life supporting capacity of the soil or the primary productive capacity of the land.
Policy 1.1	To prevent the establishment of rural residential development which exacerbates conflicts between rural uses and residential activity.
Policy 1.2	Where proposals are received for rural residential developments, preference will be given to locations that minimise the loss of productive soils.
Policy 1.3	To provide a specific zone for rural-residential activities, and also provide flexibility within the Rural 4 Zone for part-time or hobby farming uses and intensive farming on small lots.
Policy 1.4	Ensure that rural residential developments do not result in a demand for or an extension of urban services.
Policy 1.5	Ensure that rural residential developments make adequate provision for sewage and stormwater disposal. The Deferred Township Residential Zone at Rarangi will only develop when a permanent potable water supply has been installed and service connection made to all properties in both the Deferred Township Residential Zone and the Township Residential Zone.
Policy 1.6	To ensure that when development occurs the full costs of remedying or mitigating adverse effects on the environment are met.
Policy 1.7	To take into account the cumulative adverse effects of rural residential development proposals on the environmental and conservation values of rural areas.
Policy 1.8	Further residential development, outside those areas already zoned for residential purposes, shall be assessed against the following matters:
	• The need to avoid sprawling or sporadic subdivision, use or development in the coastal environment;
	• The effects of changes in land use from rural to residential on the natural character of the coastal environment;
	 The likely exposure to natural hazards;
	The need to protect coastal ecosystems that are vulnerable to modification; and
	The contribution that the area makes to the amenity values found in the coastal environment.

The Council believes that it is appropriate to provide for people to live throughout rural areas provided that any adverse effects of the development on the rural environment have been avoided or suitably mitigated.

12.5.3 Methods of Implementation

Zoning	Zones will identify existing rural residential areas.
Rules	Rules will be used to ensure conflicts are minimised between residential and rural activities. Rules will establish minimum environmental standards.
Plan Changes	New localities will be accommodated through plan change procedures.

Zoning and rules are the appropriate method of recognising existing developments. The Council does not believe that it should predetermine the location of new localities, rather that applications be guided through plan change procedures assessed on merit and guided by the objectives and policies of this Plan.

12.6 Skifield Area

12.6.1 Issue

Managing the effects of skifield activity in a sensitive alpine environment.

The Rainbow Skifield is located high in the St Arnaud Range close to the District boundary above the Wairau River. It is acknowledged that the substantial site development has left the terrain in a highly modified state.

The land is owned by the Crown and managed by the Department of Conservation under the Conservation Act 1987.

The skifield and access road have been developed and continue to develop under a licence from the Department of Conservation.

The Rainbow Skifield is the only commercial skifield in the north of the South Island. It is an important recreation/tourism attraction for Marlborough and the adjacent Nelson area, with the potential for further expansion.

In recognition of the unique use of this sensitive area the Rainbow Skifield area has a specific skifield zoning.

The area included in the Skifield Zone is sensitive for a number of reasons. It is an area of high landscape and ecological importance with only limited ability to absorb change and development. It is also a highly unstable area as erosion potential and soil/slope instability is very high.

The development of the skifield is recognised as having modified this sensitive environment. The Department of Conservation has an important role ensuring the continuing integration of the commercial operation, including any intended expansion or upgrading of facilities, in a sustainable manner.

12.6.2 Objectives and Policies

Objective 1	To accommodate the sustainable development of the Rainbow Ski Area in a way that recognises the sensitive alpine environment in which it is located.
Policy 1.1	Protect the predominantly natural alpine character of the skifield area.
Policy 1.2	Avoid, remedy or mitigate any adverse effects of skifield activities on any areas of indigenous vegetation or any habitats of indigenous fauna.
Policy 1.3	Ensure that any structures, buildings or earthwork activities do not significantly impact on landscape or visual values.
Policy 1.4	Ensure that land disturbance activities, in particular excavation and filling, are carried out in a manner which avoids, remedies or mitigates any adverse effects.
Policy 1.5	Avoid, remedy, or mitigate the adverse effects of solid, effluent and stormwater waste within the skifield area.
Policy 1.6	Safeguard the natural functioning of freshwater ecosystems, including tarns, from the effects of skifield management, including snowmaking.
Policy 1.7	Ensure that the discharge of water and ice nucleating additives for snowmaking purposes avoids, remedies or mitigates any adverse effects when eventually discharged to waterbodies.
Policy 1.8	Ensure that any discharge to watercourses from upgraded toilet facilities, avoids, remedies or mitigates any adverse effects.

The objective and policies aim to ensure that the skifield continues to develop in a manner which is appropriate within the environment in which it is located. Any adverse effects generated by the skifield operation must be avoided, remedied or mitigated.

12.6.3 Methods of Implementation

Zoning	The Skifield Zone is identified on the planning maps, incorporating both the area used for skifield activity and the access road to the field.
Rules	Rules permit skifield activity including the construction of skifield facilities and transportation systems subject to performance conditions.
	Rules require resource consents for effluent and stormwater disposal in order to ensure that any adverse effects on the sensitive mountain environment of such discharges are avoided, remedied or mitigated.

	A resource consent for land disturbance activities, such as excavation for roads and tracks, is generally required due to the Class VIII land use capability classification of the skifield area.
	Further rules are used to prohibit the disposal of any solid waste material within the Skifield Zone.
Monitoring	The Council will monitor, and require the skifield operator to monitor, the effects of skifield activity, including the effects of discharges.

The Council recognises the importance of the Rainbow Ski Area in terms of its recreation/tourism role. The skifield is located within a sensitive alpine environment and is managed as conservation land by the Department of Conservation. Management of the skifield area must also be consistent with the underlying status of this land. The Plan acknowledges the importance of skifield activities as well as the sensitivity of the surrounding environment by specifically identifying the area used by the skifield and providing it with a specific zone to ensure that the adverse effects are appropriately managed. The associated rules are constructed accordingly.

12.7 Airport Zone

12.7.1 Issue

Recognition of the need for and importance of national, regional, and local air facilities, and providing for them, whilst avoiding, remedying or mitigating any adverse effects of airport activities on surrounding areas.

National access to the District for both passengers and freight is provided by Marlborough Airport, with the smaller Picton Airport and Omaka Airfield catering for more localised air traffic. Picton Airport (situated at Koromiko) operates daily commercial commuting flights to and from Wellington. Omaka Airfield lies on the south-western corner of Blenheim, to the west of the Taylor River, and caters for private air traffic, crop spraying, recreational flying, skydiving and gliding, generating a steady level of take-off and landing activity.

Marlborough Airport is situated at the Royal New Zealand Air Force Base Woodbourne, mid-way between Blenheim and Renwick. The modern, quality terminal facilities provide an attractive and important gateway for the travellers arrival in Marlborough District, be it on business or increasingly on holiday as the district's attractiveness as a tourist destination is consolidated. The maintenance and enhancement of this gateway area is therefore a matter of importance, and further improvements and developments must be pursued with sensitivity.

Marlborough Airport occupies an area within Royal New Zealand Air Force Base Woodbourne and shares use of the runway facilities. This combined civilian and military activity means that the airport could be required to operate on a continual basis.

Each of the air facilities has the potential to cause significant environmental effects including traffic generation, chemical/fuel hazard, landscape impact, and most significantly, noise pollution. The operational efficiency and functioning of Marlborough Airport, Base Woodbourne, and Omaka Airfield requires continual on-site maintenance and servicing of aircraft, often associated with significant noise

generation (engine testing in particular). It is essential for the continued development of industry, commerce and tourism activity in the District that a high level of air transport access is maintained. Performance standards will be applied to all activities within airport areas to avoid, remedy, or mitigate adverse effects. Likewise the sustainability of the airport is also dependent on not being penalised by the encroachment of activities which are by their very nature sensitive to noise for normal airport operations.

12.7.2 Objectives and Policies

Objective 1	The effective, efficient and safe operation of the District's airport facilities.
Policy 1.1	To provide protection of air corridors for aircraft using Marlborough, Omaka, and Picton Airports through height and use restrictions.
Policy 1.2	To establish maximum acceptable levels of aircraft noise exposure around Marlborough Airport and Omaka Aerodrome for the protection of community health and amenity values whilst recognising the need to operate the airport efficiently and provide for its reasonable growth.
Policy 1.3	To protect airport operations from the effects of noise sensitive activities.

It is critical in safety terms to provide for protection of the air corridors used to approach and leave the airports. Certain air spaces have been defined around Blenheim for flight paths for planes approaching and leaving airfields. Height restrictions and land use controls are required to ensure these flight paths remain clear from such obstructions as trees, aerials, or concentrations of birds as may be associated with landfill sites, or bodies of open water.

It is necessary to protect the operation of the airports from outside uses in order that they can function effectively and safely whilst protecting outside uses from the noise and related activity associated with the airport. Residential and similar developments in the vicinity of the airports potentially subjects residents to adverse noise impacts. Noise "buffers" surrounding the airport are considered the most effective means of protecting their operation.

12.7.3 Methods of Implementation

Zoning	Represent the airports as Airport Zones.
Rules	Plan rules provide for the continued development, improvement and operation of the airports subject to measures to avoid remedy or mitigate any adverse effects. Rules define the extent of the airport protection corridors through height and surrounding land use restrictions.
	Plan rules will, within an area determined with reference to the 55 Ldn noise contour (surveyed in accordance with NZS 6805 "Airport Noise Management and Land Use Planning"), require activities to be screened through the resource consent process and where permitted to establish noise attenuation will be required.

Performance Conditions are included to protect surrounding residential land uses from excessive noise.

The above methods are required to ensure the effective, efficient, and safe operation of the District's airport facilities, whilst minimising any adverse effects on surrounding areas.

12.8 Lake Grassmere Salt Works Area

12.8.1 Issue

The sustainable management of the existing environment of Lake Grassmere, its surrounds and adjacent waters of Clifford Bay whilst enabling solar salt production of Lake Grassmere.

Lake Grassmere has been used since 1943 for the solar production of salt. The ability to produce solar salt at Lake Grassmere arises from low rainfall, high sunshine hours, strong drying winds during the summer months, generally from the north-westerly direction, a large area of flat terrain with impervious soils located close to the coast, unimpeded access to sea water and ready access to transport facilities. While these factors are important, the production of solar salt is difficult and it must be carefully managed.

Approximately 50% of New Zealand's annual salt consumption and specialist high grade salt is produced from Lake Grassmere and exported. The operations are unique in New Zealand, while some of the methods used to produce the solar salt are unique in the world. It is because of this uniqueness, its importance nationally, regionally and to the district, that special provision for the salt works is made in the Plan.

Sea water (coastal water under the Resource Management Act 1991) is pumped into the Lake and then through a series of concentrating ponds as it increases in strength. Salt is finally deposited on the bottom of the crystallising ponds in summer and harvesting usually begins by early March.

Solar salt production is adversely affected by rain storm events. Production can also be adversely affected by dust and air-borne contaminants and the possibility of contaminants in stormwater from adjacent sealed roads and farmland. These adverse effects are mitigated to an acceptable level by careful management of the stormwater in three ways:

- A dedicated system of canals for stormwater extending generally northwest, north and east from the Cattle Creek rail bridge around the western, northern and eastern periphery of the property;
- Decanting rainwater off the top of the crystallising and deep storage ponds, either to the main lake area or disposal via the stormwater canals; and
- Management of the inflow of stormwater via creeks and drains into the main lake.

In extreme storm conditions (twice in the last 45 years) it has been necessary to cut a temporary outfall through the sand dunes and gravel beach about 100 metres south of the sea water intake to allow the excess stormwater to escape.

A variety of storage and processing facilities on the property is associated with the harvest of solar produced salt from the crystallising ponds. Salt is stockpiled in large

mounds up to 18 metres high and from there is processed to cleaned bagged product or refined and processed to specific end products.

The solar production of salt does have the potential to cause significant environmental effects. In particular, those with the potential to become issues on surrounding rural land include dust, noise, soil contamination and wind borne salt foam. Performance standards will be applied to avoid, remedy or mitigate these adverse effects and on the salt works operation generally.

12.8.2 Objectives and Policies

Objective 1	To enable the production of solar salt at Lake Grassmere in a sustainable manner.
Policy 1.1	Recognise the national, regional and district significance of the salt works operation.
Policy 1.2	Enable the continuation of the salt works operation provided that any adverse effects on the environment are avoided, remedied or mitigated.
Policy 1.3	Ensure appropriate measures are in place to avoid the potential for cross boundary effects.
Policy 1.4	Encourage the establishment of a Landcare Group comprising residents, iwi, Department of Conservation and the Salt Works Company to manage the boundary area of the Zone.
Policy 1.5	Activities in the coastal marine area will be required to meet standards that will maintain the quality of coastal water at Class NS within 1km radius of the coastal water intake existing at 30 May 2002.

12.8.3 Methods of Implementation

Zoning	The Lake Grassmere Salt Works Zone is identified on the planning maps and includes the Lake itself, an administration, workshop, salt refining and processing area, and a Pipeline Extension Corridor in the coastal marine area.
Rules	Rules permit the solar production of salt and associated by-products and the full range of processes required, subject to standards and conditions.
	Rules require resource consents for certain discharges to air, excavation of land, land based aquaculture and activities in the coastal marine area.
	Resource consents are also required for activities associated with management of salt water intrusion into Cattle Creek and to manage stormwater entering Lake Grassmere.
Performance Conditions	Conditions are included to protect surrounding rural land uses from excessive noise, soil contamination, dust and wind borne salt foam.

Landcare Group The Council will encourage the establishment of a Landcare Group with membership from residents, iwi, the Department of Conservation and the Salt Works company.

The Council recognises the importance of the Lake Grassmere Salt Works in terms of its national, regional and district significance. The Council has therefore specifically identified the area used by the salt works operation and provided it with a zone to allow for its continued operation.

The salt works situation is unique in New Zealand. It also presents the advantage that the bulk of the activities contemplated are already established. They can be seen and have been seen in operation. Because of this circumstance, although the proposed provisions break new ground, a degree of permissiveness (enablement) has been incorporated into the rules regime, where established activities are environmentally of low impact, e.g. seawater (coastal water) take. Conversely, rules of a more limiting status have been applied to the likes of anticipated aquaculture activities and associated practices, where a level of precaution is warranted. This approach is consistent with Part II of the Act, in that it recognises "sustainable management" and accords with the Act's purpose.

The Council considers that the establishment of a Landcare Group or similar would be of benefit to those with interests in the area, particularly in terms of the continued management of the effects of the salt works operation at the boundary of the Zone.

12.9 Anticipated Environmental Results

- The sustainable management of the life supporting capacity of the versatile soils of the Wairau/Awatere;
- Sustainable management and enhancement of the life supporting capacity of the soils, including a robust, diverse and intact vegetation cover;
- Environmentally sound farming practices based on:
 - Strategies enhancing, maintaining and restoring soil structure and fertility, and minimising soil erosion;
 - Strategies enhancing efficiency in the use of energy, water fertiliser and pesticide inputs; and
 - The use of systems for the sustainable management of weeds, pests and diseases
 - Strategies avoiding, remedying, and mitigating adverse effects of land use activities on water quality;
- A level of spaciousness and openness in the rural areas, which enables the
 undertaking of a wide range of rural land uses and land management practices
 without increasing the potential for loss of amenity values or conflict between
 activities;
- Land uses and land management practices which do not create unacceptable or significant conflict with neighbouring land based activities, including adjoining urban areas;
- Maintenance of a level of rural amenity, including privacy, rural outlook, spaciousness, ease of access and quietness, consistent with the range of permitted activities in the rural zones;

- Retention of the amenities, quality and character of the different rural environments within the Plan area;
- Consolidation of commercial, service and industrial activities in settlements, except where these activities need to be close to particular resources in rural areas, or when it is unsuitable for these activities to locate in urban or township areas:
- Development of a range of viticultural based activities including associated commercial, industrial and service activities;
- Maintenance of the landscape values including spaciousness, outstanding landforms, extensive indigenous vegetation cover, and views and panoramas;
- Retention of the indigenous bio-diversity of the Wairau/Awatere and its remaining indigenous ecosystem functioning;
- The sustainable management of the resources within the defined areas of Landcare Groups;
- The protection and conservation of areas of significant indigenous flora and fauna;
- Protection of riverbeds and associated lake and wetland habitats for birdlife and fish;
- Water quality consistent with protecting the safe human consumption of groundwater and fish from surface waters, safe water contact recreation, and protection of the natural and scenic values of the water resources;
- Retention of a wide range of recreation opportunities;
- Avoidance of loss of property or danger to people from natural hazards;
- Retention of clear distinctive urban area boundaries;
- Efficient access to properties without interfering with the safe and efficient functioning of adjacent roads;
- Future development and consolidation of the Rainbow Ski Area, in a manner which avoids, or mitigates any adverse effects to their locality or the wider environs:
- The effective, efficient and safe operation of the airport facilities;
- Airport activities carried out in a way which avoids or mitigates adverse effects on the environment;
- Minimal noise nuisance from airport activities on nearby residents;
- Enable the continued operation of the solar production of salt at Lake Grassmere in a manner, which avoids, remedies or mitigates any adverse effects on the locality or the wider environment; and
- Retention of primary production options on the Wairau Plain.