2. RURAL ENVIRONMENT

The rural environment covers the majority of the Horowhenua District, and is an important land resource. The rural character, amenity values and productive use of rural land underpins the social, economic and cultural well-being of the people of the District.

The rural environment has been, and continues to be used in many different ways to support and provide for those living in the Horowhenua. Although over time the activities undertaken within the rural environment have changed, evidence of historic archaeological and heritage features from Māori and early European settlement activities including the development of the early agricultural and pioneer industries, such as flax and timber milling are still present.

The rural environment currently supports a diversity of land based primary production activities, particularly dry stock, dairying, cropping, horticulture, exotic forestry and small niche primary production land uses. Infrastructural and other industrial-type activities also occur in the rural environment, such as network utility facilities, gravel extraction and quarrying/aggregate processing, and these are critical to the functioning of the District. Providing for a range of land use activities in the Rural Zone is important for ensuring diversity and resilience to the rural economy by providing additional employment and economic opportunities.

The Horowhenua rural area is a varied environment with three broad land types: being the distinctive coastal environment characterised by sand dune formations and natural features with typically large-scale primary production activities; the inland plains and river terraces comprising flat fertile land with extensive areas of developed pasture, cropping and other agricultural activities; and the hill country that forms the backdrop to the District, from the foothills through to the rugged Tararua Ranges. Within these three broad land types, there are distinct landscape character areas (called domains) which exhibit individual landscape character and qualities. The Council commissioned a report to assess the character and qualities of each land domain (see Appendix 1 for a summary of the landscape assessment of the rural environment). Each of these main land types and domains are described below.

Overall, the rural landscape and character is shaped by the interaction between human activities and the natural and physical resources in the area. While the identified land domains exhibit a range of qualities, there are common rural character and amenity values that are valued throughout the rural environment.

The rural environment has a rural character which includes a high degree of open space with vegetation predominating over built elements, productive working landscapes, including the potential to create nuisance effects such as noise, odour and dust, the occasional reasonably large utilitarian building associated with primary production, and self-serviced properties with respect to water supply, wastewater disposal, and stormwater management. Remnant areas of indigenous forest and wetlands are also evident in the rural environment.

Coastal Sand Country

The coastal sand country varies in width from north to south in the District. At the northern end near Foxton Beach and Foxton, the coastal landscape extends inland a significant distance, with the Manawatu River providing a clearly visible delineation between the coastal sand country and inland plains environment. At the southern end of the district near Waikawa Beach and Kuku Beach, the coastal landscape extends only a short distance until the inland plains become evident. This whole area has strong rural and coastal

characteristics, including natural areas and features, large scale landholdings and primary production activities, and sites of cultural and historical significance.

Within the coastal environment are a range of natural areas and features, including the Manawatu and Ohau River estuaries, dune lakes (including Waipunahau (Lake Horowhenua) and Waiwiri (Lake Papaitonga)), and smaller wetland areas. Since the early 1900's the dunelands have been reduced by approximately 70%. Much of the remaining area of dunes contains locally threatened plant species, and some are considered national priority sites for conservation.

The coastal environment particularly around the coastal lakes and dune land areas is a rich archaeological landscape, containing archaeological deposits such as middens, burials and ovens reflecting the early occupation and activities undertaken in this area.

The soils closest to the coastline are light, while the inland soils are more stable. However, all soils are vulnerable to wind and water erosion particularly where they are exposed by the removal of surface vegetation.

Primary production activities are predominantly large-scale dry stocking grazing, horticulture and commercial exotic forest plantations. Dairying has increased in recent years with the development of irrigation. The type and form of irrigation (in particular, centre pivot irrigators), has resulted in changes to the dune landforms and associated land use.

The coastal areas are also home to a significant number of archaeological sites and sites of particular value to Tangata Whenua resulting from the historical pattern of settlement of the area.

Within the coastal sand country land type are three land domains, being Coastal Environment, Foxton Dunefields and Coastal Lakes. The characteristics and qualities of these three land domains are identified and described in Appendix 1.

Inland Plains and River Terraces

The inland plains and river terraces are located centrally within the district, extending the full length of the district between the coastal sand country and the hill country. The inland plains have a characteristic flat to gently rolling landform with river terraces. The soils are generally highly fertile sand and silt loams. Rivers and streams are active in shaping the landscape and land management practices are important in influencing susceptibility of the land to erosion. The overall environment reflects the predominant grazing, cropping, and horticultural land use. There is a mix of large and small holding sizes reflected in the patchwork of paddocks and fence lines in the landscape. The rivers and streams crossing this landscape are another key feature of the plains. Large waterways, like rivers, were used historically as highways over which Tangata Whenua travelled. They were also boundary markers between lwi and hapu delineating food gathering areas.

There are limited areas of remnant indigenous vegetation on the inland plains and river terraces in terms of size. Most remnant areas are less than 1.0 hectare in size, with the exceptions being the kahikatea forests near the Manawatu River west of Shannon/Opiki and Waiopehu Scenic Reserve east of Levin.

Within the inland plains and river terraces land type are five land domains, being Moutoa-Opiki Plains, Levin-Koputaroa, Levin-Ohau, Kuku and Manakau Downlands. The characteristics and qualities of these five land domains are identified and described in Appendix 1.

Hill Country

The Tararua State Forest Park is dominant in the whole District's landscape. The majority of this land is publicly owned, as it is part of the Tararua State Forest Park. Although it is not farmed as part of the rural environment, the Tararua Ranges act as a significant backdrop to the rural character of the District. The Ranges and foothills also provide a significant recreation resource for the District and Region. The hill country, at the foothills of the Ranges, are characterised by steep hills and steep land soils which are vulnerable to erosion by wind and water. There are areas of ecological importance scattered throughout the steeper country including stands of indigenous vegetation. Land use has historically been low to medium intensity stock grazing and property boundaries reflect the larger land holdings associated with this land use. There are substantial plantations of exotic forestry throughout the hill country which are maturing at different rates and new plantations are being added.

The foothills have a mixed land use pattern, with areas of remnant indigenous forest vegetation, regenerating indigenous scrub vegetation, pastoral farming, horticulture and forestry blocks. The foothills are relatively undeveloped, with only a small number of buildings and other structures constructed in this area.

Within the hill country land type are two land domains, being Tararua Terraces and Hill Country. The characteristics and qualities of these five land domains are identified and described in Appendix 1.

Issue 2.1 EFFECTS OF SUBDIVISION AND SUBSEQUENT USE AND DEVELOPMENT

The effects of subdivision and subsequent use and development of rural land on:

- the amenity values and character of the rural environment in different localities
- features of natural character, landscape, biodiversity, historic heritage and cultural features of value to the community
- the safety and efficiency of the roading and railway networks, and other infrastructure services
- primary production activities.

ISSUE DISCUSSION

To provide a long term and strategic framework for the management of subdivision and development in the District, including the rural environment, the Council prepared and adopted the Horowhenua Development Plan in 2008. This Development Plan identifies the key planning principles and strategic direction for managing subdivision and development in the rural environment. These principles include maintaining the productive values of the rural environment, retaining the rural character as an important part of the District's identity, providing for a safe and efficient rural transport network and adopting best practice solutions for on-site disposal of wastewater and the supply of potable water.

One of the key drivers for preparing the Development Plan was the increasing pressure and amount of subdivision, use and development for rural-residential living in the rural environment. This demand for rural-residential living creates a tension between those relying on the productive capability of the rural land resource and those who, for a variety of reasons, elect to reside in the rural areas. Often the rural amenity provided in a primary

production area is also highly regarded by those who wish to live outside an urban environment. However, the demand for such rural living can in turn undermine the viability of primary production activities and erode the amenity and environmental qualities that make the rural area an attractive place in which to live. The Development Plan seeks to provide for rural-residential living opportunities in areas that consolidate and support existing communities and settlements, retain rural and coastal character, and promote environmental restoration and enhancement.

As described above, the rural environment has three distinct land types being the Coastal Sand Country, Inland Plains and River Terraces and the Hill Country. Within these three land types, ten landscape domains have been identified which exhibit individual qualities and landscape character. Given the character and qualities in each land domain, they have different capacity and ability to manage the effects of subdivision, use and development.

The rural environment has many areas of high quality landscape and ecological value, as well as many significant sites containing cultural and historic values. These important areas and sites are susceptible to degradation through subdivision, use and development, and where appropriate, can be protected through various provisions in the District Plan.

Increasing density of subdivision can also increase pressure on the range of infrastructure servicing, including the roading and railway network and any reticulated services in the locality. Furthermore, intensively developed areas of rural-residential development with individual on-site wastewater treatment facilities in relatively close proximity can have cumulative effects leading to saturation of soils and groundwater contamination.

Objectives & Policies

Objective 2.1.1 Effects of Subdivision and Subsequent Use and Development

To ensure that subdivision and land development maintains and enhances the character and amenity values of the rural environment, and that the subsequent development resulting from subdivision such as on-site servicing and other infrastructure provision does not adversely affect the environment including the efficient and effective operation of existing transportation and infrastructure networks.

RURAL ENVIRONMENT WIDE POLICIES

Policy 2.1.2

Identify the following landscape domains within the Horowhenua Rural Environment in recognition of the specific landscape character, visual quality, primary productive values and sensitivity of different areas:

- Coastal Environment
- Foxton Dunefields
- Coastal Lakes
- Moutoa-Opiki Plains
- Tararua Terraces
- Levin-Koputaroa
- Levin-Ohau

- Kuku
- Manakau Downlands
- Hill Country

Policy 2.1.3

Manage subdivision and land development based on the landscape domains through subdivision controls that reflect the different characteristics and qualities of the landscape domains.

Policy 2.1.4

Provide for subdivision where it is compatible with the character and qualities of the landscape domain, and limit subdivision where the character and qualities of the landscape domain would be degraded by subdivision and land development.

Policy 2.1.5

Manage the design of rural subdivision to ensure that it is appropriate for the character and qualities of the landscape domain in which it is located.

Policy 2.1.6

Retention of an open and spacious character to the rural areas of the District, with a dominance of open space and plantings over buildings, and within which the potential for conflict between rural and residential activities is minimised.

Policy 2.1.7

Minimise obtrusive built elements in the rural environment by integrating building location and design with the surrounding landform and landscape qualities and recognise that farm building location is influenced by their function.

Policy 2.1.8

Ensure that adequate physical or spatial buffers or other mitigation measures are applied when allowing new allotments or buildings primarily or exclusively for residential purposes in rural areas, so that productive land use opportunities are not compromised.

Policy 2.1.9

Avoid, remedy or mitigate adverse effects of subdivision, use and development of land on areas or features of landscape, biodiversity, historic heritage or cultural value.

Policy 2.1.10

Provide for the subdivision of land to create Conservation Lots for the protection of natural habitats or wetland areas.

Policy 2.1.11

Provide for the protection and restoration of natural habitats or wetland areas on sites to be subdivided through formal protection, rehabilitation and planting of appropriate species.

Policy 2.1.12

Ensure that the ecological health of any waterway, stream or river adjacent to or within a subdivision is enhanced or protected through esplanade reserves and strips and riparian planting and management.

Policy 2.1.13

Ensure that any rural subdivision does not adversely affect the ecological values of the Manawatu, Ohau, Tokomaru River and Waikawa Stream environments.

Policy 2.1.14

Ensure that rural residences can access on-site adequate quantities of potable water to avoid risks to human health and amenity.

Policy 2.1.15

Manage the scale, intensity, size and design of subdivision and land development to ensure the on-site wastewater treatment and disposal systems do not result in contamination of soil, groundwater or other natural resources.

Policy 2.1.16

Provide for the creation of smaller lots to provide for the effective management and development of network utilities and other critical infrastructure.

Policy 2.1.17

Ensure that subdivision and land development adjoining State Highways, other arterial, collector or local roads and the North Island Main Trunk Railway Line, avoid, remedy or mitigates any adverse effects on the safe and efficient operation of the roading and rail networks.

Policy 2.1.18

Avoid, remedy or mitigate adverse effects on the operation, maintenance and protection of existing or designated infrastructure of district significance from the subdivision and development of land.

Policy 2.1.19

Having regard to the Explanation and Principal Reasons in respect of the elements of rural character ensure that new activities locating in the rural area are of a nature, scale, intensity and location consistent with maintaining the character of the rural area and to be undertaken in a manner which avoids, remedies or mitigates adverse effects on rural character, including rural productive values.

Policy 2.1.20

Ensure that new activities locating in the rural area are of a nature, scale, intensity and location consistent with maintaining the character of the rural area and to be undertaken in a manner which avoids, remedies or mitigates adverse effects on rural character, including rural productive values and potential reverse sensitivity effects.

Policy 2.1.21

Encourage the creation of an integrated network of local open spaces and connections when land is subdivided which provides:

- convenient and practical public access to existing and future areas of open space, reserves and water bodies
- health and safety of users, landowners and adjoining properties
- protection and restoration of conservation values
- integration with the transport network, including cycleways where appropriate.

LANDSCAPE DOMAIN POLICIES

Coastal Environment Domain Policies

POLICY CE.1

Protect the sensitive, distinctive and dynamic nature of the Coastal Environment landscape from inappropriate subdivision and land development.

POLICY CE.2

Protect the natural character of the coastal environment by avoiding inappropriate subdivision and land development.

POLICY CE.3

Limit subdivision to low intensity developments reflecting the sensitivity of the natural character and rural character and qualities of the coastal landscape.

POLICY CE.4

Protect from further subdivision and development, land that has been retained as open space either within any allotment or as an allotment, in an approved subdivision in the Coastal Environment Domain, for its productive, rural or coastal character, landscape, amenity, or wastewater or stormwater discharge management value.

POLICY CE.5

Avoid subdivision and land development of the coastal environment that results in unplanned expansions to existing coastal urban areas or new coastal urban areas.

POLICY CE.6

Maintain soil stability, landscape character and amenity values of the dune country landscape of the Coastal Environment Domain through subdivision design that minimises earthworks and vegetation clearance.

POLICY CE.7

Ensure that any new or upgraded roads, right-of-ways and driveways to be provided as part of any subdivision are sited sensitively to fit the natural dune landform and to minimise the visual and landscape effects.

POLICY CE.8

Ensure that existing vegetation that contributes to soil stability and the landscape character of the site is retained and incorporated into the subdivision design to reduce the visual and landscape effects of the subdivision

POLICY CE.9

Minimise obtrusive built elements in the dune country landscape by integrating building location and design with the surrounding landform and landscape qualities, including by avoiding buildings on dune ridgelines and elevated sites.

POLICY CE.10

Ensure that the coastal edge and margins of rivers, streams, estuaries and wetlands are identified and protected from inappropriate subdivision and development.

POLICY CE.11

Ensure that the natural habitats of the parabolic dunefields and inter-dunal areas, particularly dune habitats, coastal lakes and wetland areas, are identified and protected from inappropriate subdivision and development.

POLICY CE.12

Maintain and enhance public access to the coast in strategic locations, in conjunction with environmental protection, enhancement or restoration and in a way that does not adversely affect coastal processes and natural character and natural habitats.

POLICY CE.13

Protect identified historic heritage and cultural values within the Coastal Environment Domain by avoiding the adverse effects of inappropriate subdivision and land development.

Foxton Dunefields Policies

POLICY FD.1

Manage the scale, intensity, size and design of subdivision and land development to ensure that it reflects and retains the distinctive dune landform pattern, natural habitats and landscape character and qualities of the Foxton Dunefields Domain.

POLICY FD.2

Maintain soil stability, the parabolic dunefield landscape character and amenity values of the dune country of the Foxton Dunefields Domain through subdivision design that minimises earthworks and vegetation clearance.

POLICY FD.3

Ensure that any new or upgraded roads, right-of-ways and driveways to be provided as part of any subdivision are sited sensitively to fit the natural dune landform and to minimise the

visual and landscape effects.

POLICY FD.4

Ensure that existing vegetation that contributes to soil stability and the landscape character of the site is retained and incorporated into the subdivision design to reduce the visual and landscape effects of the subdivision.

POLICY FD.5

Minimise obtrusive built elements in the dune country landscape by integrating building location and design with the surrounding landform and landscape qualities, including by avoiding buildings on dune ridgelines and elevated sites.

POLICY FD.6

Ensure that the natural habitats of the parabolic dunefields and inter-dunal areas, particularly remnant indigenous forest areas and wetland areas, are identified and protected from inappropriate subdivision and development.

POLICY FD.7

Protect identified historic heritage and cultural values of the Foxton Dunefields Domain by avoiding the adverse effects of inappropriate subdivision and land development.

Coastal Lakes Domain Policies

POLICY CL.1

Manage the scale, intensity, size and design of subdivision and land development to ensure that it reflects and retains the distinctive dune landform pattern, natural habitats and landscape character and qualities of the Coastal Lakes Domain.

POLICY CL.2

Protect the natural character of the coastal lakes landscape, including wetlands, lakes, rivers and their margins, by avoiding inappropriate subdivision and land development.

POLICY CL.3

Protect from further subdivision and development, land that has been retained as open space either within any allotment or as an allotment, in an approved subdivision in the Coastal Lakes Domain, for its productive, rural or coastal character, landscape, amenity, or wastewater or stormwater discharge management value.

POLICY CL.4

Maintain soil stability, the parabolic dunefield landscape and amenity values of the dune country of the Coastal Lakes Domain through subdivision design that minimises earthworks and vegetation clearance.

POLICY CL.5

Ensure that any new or upgraded roads, right-of-ways and driveways to be provided as part of any subdivision are sited sensitively to fit the natural dune landform and to minimise the visual and landscape effects.

POLICY CL.6

Ensure that existing vegetation that contributes to soil stability and the landscape character of the site is retained and incorporated into the subdivision design to reduce the visual and landscape effects of the subdivision.

POLICY CL.7

Protect the landscape, natural, ecological, historic heritage and cultural values of the Coastal Lakes landscape, particularly Waipunahau (Lake Horowhenua) and Waiwiri (Lake Papaitonga) and their surrounding areas, from inappropriate subdivision and land development.

POLICY CL.8

Protect the tallest and most dominant dune, Moutere Hill, by avoiding subdivision and land development on this outstanding natural feature.

Moutoa-Opiki Plains Domain Policies

POLICY MO.1

Maintain the expansive, open and productive landscape of the Moutoa-Opiki Plains Domain landscape by restricting the number, size and shape of new lots created through subdivision of land.

POLICY MO.2

Avoid further fragmentation of the Moutoa-Opiki Plains Domain landscape into more intensive lots to protect the open and productive landscape, particularly from the cumulative effects of subdivision.

POLICY MO.3

Provide for the amalgamation of land parcels and adjustments of the boundaries of land parcels where this would enable a greater range of primary production activities.

POLICY MO.4

Ensure that the natural habitats of the open plains, particular remnant indigenous forest areas, oxbow lakes and wetland areas, are identified and protected from inappropriate subdivision and development.

POLICY MO.5

Protect identified historic heritage and cultural values of the Moutoa-Opiki Plains by avoiding the adverse effects of inappropriate subdivision and land development.

Tararua Terraces Domain Policies

POLICY TT.1

Manage the scale, intensity, size and design of subdivision and land development to ensure that it reflects and responds to the varied topography and elevated landform, productive capacity and hill backdrop that contribute to the landscape character and qualities of the Tararua Terraces domain.

POLICY TT.2

Avoid, remedy or mitigate any adverse effects from earthworks as part of any subdivision on water bodies, land stability, the landscape and vegetation.

POLICY TT.3

Ensure that any new or upgraded roads, right-of-ways and driveways to be provided as part of any subdivision are sited sensitively to fit the natural terraced landform and to minimise the visual and landscape effects.

POLICY TT.4

Ensure that existing vegetation that contributes to soil stability and the landscape character of the site is retained and incorporated into the subdivision design to reduce the visual and landscape effects of the subdivision.

POLICY TT.5

Minimise obtrusive built elements in the terraced landscape by integrating building location and design with the surrounding landform and landscape qualities, including by avoiding buildings close to terrace edges and on elevated sites.

POLICY TT.6

Ensure that the natural habitats of the terraces and foothills, particular remnant and regenerating indigenous forest and scrub areas, are identified and protected from inappropriate subdivision and development.

Levin-Koputaroa Domain Policies

POLICY LK.1

Manage the scale, intensity, size and design of subdivision and land development to ensure that it reflects and responds to the varied and undulating topography, productive capacity and open views that contribute to the landscape character and qualities of the Levin-Koputaroa Domain.

POLICY LK.2

Avoid, remedy or mitigate any adverse effects from earthworks as part of any subdivision on water bodies, land stability, the landscape and vegetation.

POLICY LK.3

Ensure that existing taller vegetation that contributes to the landscape character of the site is retained and incorporated into the subdivision design to reduce the visual and landscape effects of the subdivision.

POLICY LK.4

Ensure that the natural habitats, particularly remnant indigenous forest areas and wetland areas, are identified and protected from inappropriate subdivision and development.

Levin-Ohau Domain Policies

POLICY LO.1

Manage the scale, intensity, size and design of subdivision and land development to ensure that it reflects and responds to the flat and terraced landform, productive capacity and open views that contribute to the landscape character and qualities of the Levin-Ohau Domain.

POLICY LO.2

Avoid, remedy or mitigate any adverse effects from earthworks as part of any subdivision on water bodies, land stability, the landscape and vegetation.

POLICY LO.3

Ensure that existing taller vegetation that contributes to the landscape character of the site is retained and incorporated into the subdivision design to reduce the visual and landscape effects of the subdivision.

POLICY LO.4

Minimise obtrusive built elements in the open and elevated landscape by integrating building location and design with the surrounding landform and landscape qualities, including by avoiding buildings in prominent sites on elevated terraces or uplands.

POLICY LO.5

Ensure that the natural habitats, particularly remnant indigenous forest areas, riparian areas adjacent to river and stream corridors and wetland areas, are identified and protected from inappropriate subdivision and development.

Kuku Domain Policies

POLICY K.1

Maintain the expansive, open and productive landscape of the Kuku Domain landscape by restricting the number, size and shape of new lots created through subdivision of land.

POLICY K.2

Avoid further fragmentation of the Kuku Domain landscape into more intensive lots to protect the open and productive landscape, particularly from the cumulative effects of subdivision.

POLICY K.3

Provide for the amalgamation of land parcels and adjustments of the boundaries of land parcels where this would enable a greater range of soil-based production activities.

POLICY K.4

Ensure that existing vegetation that contributes to the landscape character of the site is retained and incorporated into the subdivision design to reduce the visual and landscape effects.

POLICY K.5

Ensure that natural habitats and the margins of rivers, streams, estuaries and wetlands, particularly riparian areas adjacent to the Ohau River, Waikawa Stream and Manakau Stream, and remnant indigenous forest areas, are identified and protected from inappropriate subdivision and development.

Manakau Downlands Domain Policies

POLICY MD.1

Manage the scale, intensity, size and design of subdivision and land development to ensure that it reflects and responds to the varied topography, productive capacity, aesthetic appeal and hill backdrop that contribute to the landscape character and qualities of the Manakau Downlands domain.

POLICY MD.2

Avoid, remedy or mitigate any adverse effects from earthworks as part of any subdivision on water bodies, land stability, the landscape and vegetation.

POLICY MD.3

Ensure that existing vegetation that contributes to the landscape character of the site is retained and incorporated into the subdivision design to reduce the visual and landscape effects of the subdivision.

POLICY MD.4

Minimise obtrusive built elements in the open and elevated landscape by integrating building location and design with the surrounding landform and landscape qualities, including by avoiding buildings in prominent sites on elevated land.

POLICY MD.5

Ensure that natural habitats and the margins of rivers, streams, estuaries and wetlands, particularly the Waikawa Stream and Manakau Stream, and remnant indigenous forest areas, are identified and protected from inappropriate subdivision and development.

Hill Country Domain Policies

POLICY HC.1

Protect the natural, unmodified and sensitive nature of the Hill Country landscape from inappropriate subdivision and land development.

POLICY HC.2

Avoid subdivision in the Hill Country landscape that would compromise the visual and landscape qualities of this area through more intensive subdivision.

POLICY HC.3

Limit subdivision to small scale and/or low intensity developments reflecting the sensitivity of the natural and rural character and qualities of the hill landscape.

POLICY HC.4

Avoid, remedy or mitigate any adverse effects from earthworks and vegetation clearance as part of any subdivision on landscape and biodiversity values and land stability.

POLICY HC.5

Ensure that any new or upgraded roads, right-of-ways and driveways to be provided as part of any subdivision are sited sensitively to fit the natural hill landform and to minimise the visual and landscape effects.

POLICY HC.6

Ensure that the natural habitats, particularly remnant indigenous forest areas, riparian areas adjacent to river and stream corridors and wetland areas, are protected from inappropriate subdivision and development.

Explanation and Principal Reasons

The District Plan seeks to protect the character and amenity values in the District's rural environment, as they contribute towards the identity and well-being of the district. The District's rural character and amenity values are represented by a diverse range of primary production activities resulting in an open and working landscape; predominance of vegetation (including indigenous and exotic vegetation), and a low level of built development with a few large utilitarian buildings.

Rural character in the Horowhenua may include any one or more of the following key elements:

- The dominance in the landscape of natural features and vegetation and dynamic primary production regimes, including pasture, crops and forestry;
- The presence of manmade structures where those structures are related to rural production activities or industry and infrastructure for which a rural location is either required or is most appropriate;
- High ratio of open space relative to built environment;
- Significant areas of land in pasture, crops, forestry and/or indigenous vegetation;

- A rural working production environment, consisting of a wide range of activities and including components such as animals, farm buildings, farm machinery and shelterbelts;
- The use of rural land for a wide range of agricultural, horticultural and forestry purposes including such effects as noise, smells, dust, and agrichemical spraying associated with such activities;
- Low population densities relative to urban areas;
- General lack of urban infrastructure such as streetlighting, footpaths and reticulated water and wastewater systems.

The District Plan recognises there are differences in the rural character that exists throughout various parts of (landscape domains) the Horowhenua. It is therefore appropriate and important that the District Plan recognises the differences between these landscapes, particularly in the management of the effects of subdivision, land development and the resulting land use change. Different techniques and thresholds are applied to the land domains in response to the particular characteristics and qualities of each land domain.

The policies seek to maintain or enhance the features and values that contribute to the landscape character of each domain through the management of subdivision. Controls over the scale, intensity, size and dimensions of new allotments is an effective way of addressing the effects on character and amenity values where intensification through subdivision could compromise and degrade the character and amenity values of the respective land domains. Additional controls are applied in individual landscape domains where the characteristics and qualities are sensitive to modification associated with subdivision, such as new roads, earthworks and vegetation clearance.

Creating an integrated network of open spaces and connections provides opportunities for improved accessibility and movements, improving and strengthening ecological corridors, health and well being of local residents and creating tourism potential. The Council has prepared an Open Space Strategy which provides overall direction on where, what and how an integrated network of open spaces and connections can be created. This Strategy identifies connections along river corridors, along the coast, between the ranges and the coast, connections to the ranges, and along the railway corridor. One method of implementation is creating connections when land is subdivided. Council will encourage and support landowners/subdividers in making these connections, recognising that due to the scale and complexity of some of the wider networks, it may take many years for these complete integrated networks to be realised and appreciated.

Methods for Issue 2.1 & Objective 2.1.1

District Plan

- Maps will define the geographic extent of the identified Landscape Domains
- All subdivisions will require resource consent.
- The District Plan rules will specify minimum conditions for subdivision within each landscape domain recognising the differences between the domains to provide for subdivision and land subdivision that is compatible with the character and qualities of each domain.
- Subdivision consents will be assessed in terms of their environmental effects against both the policies of the Rural zone and those policies relating specifically to each domain

- Assessment of environmental effects through the resource consent process for subdivision proposals, including using assessment criteria and standards, both those that are zone wide and those specific to each domain.
- Conditions on resource consent such as consent notices and covenants on Certificates of Title to manage the effects of subdivision including potential reverse sensitivity effects on primary production activities.
- Design guidelines relating to rural subdivision

Standards expressed as District Plan rules are considered to be the most appropriate and effective method of maintaining minimum standards for the matters over which the Council has jurisdiction. Rules provide certainty for resource users and for the neighbours which is important for community understanding of what environmental quality is expected.

Other Statutory Plans

• Horizons Regional Council will control discharges to air, land and water under the provisions of the One Plan.

Issue 2.2 FRAGMENTATION AND SOIL RESOURCE

The effects that fragmentation through subdivision has on the ability to use land for rural production activities including safeguarding the life-supporting capacity of Horowhenua's finite soil resource within the rural environment, so that both current and future generations are able to sustainably use versatile land, for a wide range of productive purposes, including those uses that may not currently be present in the Horowhenua.

ISSUE DISCUSSION

Parts of the Horowhenua District have particular qualities of highly fertile soils and climate which make them highly versatile and suitable for a diverse range of uses. The areas of versatile land within New Zealand and within the Horowhenua District which have these qualities are, however in relatively limited and finite supply. Versatile land generally includes those soils that have Land Use Capability Classification of I or II. This classification is based on the New Zealand Land Resource Inventory which give eight classes, ranging from Class I land which has very few limitations to use and can be used for a wide range of productive purposes to Class VIII which has extreme limitations and is unsuited to any use except catchment and protection planting.

In the Horowhenua District, versatile land is considered to be land that contains highly versatile Class I and II soils. These soils are those that have the greatest potential capability for a range of land uses. The soils are the sandy, silt, and stoney loams which make up about one third (or 38,981ha) of the rural land area. While the LUC classification gives a very generalised indication of the soil quality it does need to be used with caution. The mapping of the soils within the district at 1:50,000 was completed in 1992. The limitations associated with the methods and scale at which the LUC maps were produced, means that detailed information of a site requires a closer site specific analysis.

It is recognised that soil quality is just one of several factors that influence how land is actually used. Other factors include location, existing land uses, water, climate, community values, scarcity, drainage and infrastructure. The District Plan relies on the mapped Class I

and II soils as the basis for identifying versatile land. Whilst it is acknowledged that this is a blunt instrument to achieve this purpose, it does provide a point for departure.

Versatile land is a significant natural resource due to its contribution to the economic wellbeing of the Horowhenua. The Horowhenua District has a significantly rural based economy with primary production a very important part of it. Many of the primary production activities that occur within the Horowhenua are not only located within areas of versatile land, but they are also dependent on this resource for their livelihood. The use of this resource is constantly changing, in response to economic demands and conditions.

Versatile land can be used for the widest range of potential uses of any land. It has the greatest potential capacity of supporting life. Safe guarding the life-supporting capacity of soil is part of the purpose and principles of achieving sustainable management in Section 5 of the RMA.

Section 7 of the RMA also sets out responsibilities in relation to managing the use, development and protection of natural and physical resources. Included in this section are responsibilities for the efficient use and development of natural and physical resources and the need to have regard to the finite characteristics of natural and physical resources. Versatile land in the Horowhenua context is a finite non renewable resource, that for a number of reasons is worthy of protection and careful management.

Some fertile soils were previously wetlands which were, and remain, an important food and mahinga taonga source for Tangata Whenua. The possible long term adverse effects of these historical and cultural trends on the availability of versatile land for future generations is a significant resource management issue for the District. Whilst the issue is particularly acute for versatile land, safeguarding the life-supporting capacity of soil is also a concern for the non versatile land which also offers opportunities for a range of different productive uses.

A principal issue of concern with the rural land resources is the continued fragmentation of rural land into ever-smaller lot sizes. Some of the consequences of this fragmentation from subdivision and land development are:

- The development of buildings, curtilage and access to sites takes a certain amount of land out of the available supply of versatile land or restricts the ability to use the land productively,
- Fragmentation of land into small certificates of title forecloses land use options for present and future generations and can reduce the life supporting capacity of soil,
- Small lots primarily used for residential purposes on rural land can result in issues of reverse sensitivity.

There will be occasions where fragmentation may allow for more intensive use of rural land for soil-based rural activities. These situations need to be provided for, where they can occur without resulting in the principal effect of land fragmentation; the cumulative reduction in opportunities for the productive potential of land. As subdivided lots become smaller, and as new structures or services are established, the range of primary production activities that can be physically or economically undertaken progressively reduces in scope. The reduction in productive potential of any land, together with the physical coverage of productive land, may reinforce the demand for further fragmentation. This cumulative effect is particularly significant for the relatively small amount of land in the District with high productive value (approximately five percent). As versatile land is a finite resource, its loss through fragmentation is effectively irreversible.

Objectives & Policies

Objective 2.2.1 Fragmentation and Soil Resource

To safeguard the life supporting capacity of soils to enable a wide range of primary production activities and provide a resource for future generations while recognising the finite nature of the versatile land resource.

Policy 2.2.2

Manage the scale, intensity, and design of subdivision to ensure that versatile land is available to be used for a range of primary production activities and that the life-supporting capacity of soils is not compromised through fragmentation or poor subdivision design.

Policy 2.2.3

Avoid further fragmentation of land in the predominant areas of the District containing versatile land to protect this finite resource and to safeguard the life-supporting capacity of the soil from the cumulative effects of subdivision below the minimum lot standard.

Policy 2.2.4

Encourage the amalgamation of land parcels and adjustments of the boundaries of land parcels where this would enable a greater range of soil-based production activities.

Policy 2.2.5

Ensure that land use activities on versatile land are undertaken in a manner that safeguards the life-supporting capacity of the soil and recognises the finite nature of the land resource.

Policy 2.2.6

Subdivision, use and development of the versatile rural land resource should occur in a way which retains its potential to be used for a range of productive rural purposes and which maximises the likelihood of it actually being used for such purposes.

Policy 2.2.7

Fragmentation of the versatile rural land resource for purposes not directly related to maintaining or enhancing the primary productive potential of the rural land resource should be minimised and, where possible avoided.

Policy 2.2.8

Except where specifically tailored to accommodate other activities with a legitimate need for a rural location, new rural lots created through subdivision should be of a size and shape suitable for a range of primary productive uses.

Policy 2.2.9

Subdivision, use and development which has the potential to inhibit the efficient use and development of versatile land for primary production should minimised and, where possible avoided.

Policy 2.2.10

Ensure that subdivision for non rural activities, including industrial activities, commercial activities and residential activities not ancillary to the primary production land use and not dependent on versatile land in a rural location are avoided.

Explanation and Principal Reasons

The area of versatile land is a finite resource. Primary production activities that utilise this resource contribute to the economic and social well-being of the district. The potential and cumulative adverse effects of land fragmentation include the progressive loss of this land for primary production uses and opportunities. Similar effects occur with fragmentation of less productive land, but the significance of the loss is likely to be less in terms of the soil resource and the potential needs of future generations. In order to maintain an acceptable level of availability of land for productive use, controls are required on subdivision. The policies seek to provide for a range of primary production opportunities to be retained, providing flexibility in land use in response to economic demands and conditions.

Versatile land effectively applies as an overlay on the land domains for the Rural Zone. The subdivision thresholds and techniques for sites identified as containing Versatile land provide limited opportunities to subdivide, to provide flexibility for a range of productive uses to be made of the soil and land resource to sustaining its long-term capacity for production. Subdivision below the threshold will be restricted to that which supports the objective.

Whilst subdivision and the resulting fragmentation can have adverse effects on the versatile land resource, it can also be necessary to enable the most efficient use of versatile land. The policies above support subdivision that would maximise the likelihood that versatile land will be used for productive rural purposes. Subdivisions that are unable to satisfy the subdivision thresholds can be supported where a subdivision involves one or more of the following;

- Subdivision of a title created after 10/01/09 that is being undertaken to facilitate or support an existing production system.
- Subdivision of lots below minimum lot size where the lots incorporate an existing production system and it is demonstrated that it can continue to operate at the subdivided scale.
- Subdivision of lots below minimum parent lot size where the subdivision being undertaken to facilitate or support an existing production system.
- Subdivision where the minimum shape factor or frontage cannot be achieved but where the subdivision can demonstrate that the lots can be used to support a viable production system.
- Subdivision to enable land aggregation for the purpose of supporting or facilitating an existing production system.

And the overall objective for safeguarding the life-supporting capacity of soils is achieved.

For people wishing to live in a rural environment, some opportunities for smaller lot subdivision are provided in areas which are not considered versatile land. In addition, Greenbelt Residential areas have been identified and provided for in the District Plan specifically for the purpose of rural-residential living. These identified areas are intended to relieve ongoing pressure for fragmentation of the rural land resource.

Where a site is identified as versatile land but it can be demonstrated that the site does not contain Class I or II soil, it is appropriate for the site to be considered as non-versatile land and to benefit from the associated more enabling subdivision provisions.

Methods for Issue 2.2 & Objective 2.2.1

District Plan

- The Plan will identify an area of "Versatile Land" (being Land predominantly identified as Land Use Capability (LUC) Class 1 and 2).
- Rules will control the intensity, size and design of subdivision provided for within areas containing "Versatile Land" that are within the Rural Zone.
- Assessment of environmental effects through the resource consent process for subdivision proposals, including using assessment criteria and standards.
- Conditions on resource consent such as consent notices and covenants on Certificates of Title to manage the effects of subdivision including the potential for reverse sensitivity effects.

Subdivision rules and standards provide a high degree of certainty in achieving the objective. Where subdivision applications are not able to meet the Controlled Activity standards, the effects of the subdivision, including the cumulative effects on the long term sustainability of versatile land, will be according to the conditions relevant to the activity status of the subdivision.

Issue 2.3 DEMAND FOR, AND RISKS ASSOCIATED WITH RESIDENTIAL SITES

The demand for residential sites through subdivision in rural areas that are generally unsuitable for residential use due to;

- a significant risks from natural hazards, or
- b the potential for reverse sensitivity effects from residential activities on permitted rural activities and those activities lawfully established particularly primary production activities or those involving large scale processing and infrastructure facilities.

ISSUE DISCUSSION

Human activity can exacerbate natural occurrences such as flooding, but by developing in hazard prone areas such as flood plains, we increase the potential for damage should an event occur. Due to the proximity of rural properties to rivers, streams and stopbanks there is a risk of potential damage and inconvenience particularly if precautions have not been taken. The Council will focus on reducing the risk of known hazards on development together with reducing the effects of development on hazards.

Where land, or any structures on that land is likely to be subject to damage by erosion, subsidence, slippage, or inundation from any source, or may increase the risk of natural hazards, the RMA provides that Council has the discretion to refuse consent, or impose conditions relating to avoiding, remedying, or mitigating those effects, in addition to those that may be listed in the relevant rule.

Reverse sensitivity is a term that explains the effect that new development of one kind may have on activities already occurring in an area. It usually results from the people involved in an activity that is newly established-complaining about the effects of existing activities in an area. Subdivision and subsequent development in the rural locations also has the potential to create reverse sensitivity issues as residential and rural activities increasingly adjoin each other. People moving into rural areas are often not aware of the effects created by rural activities, in particular odour and noise. Therefore, the presence of residential activities in rural locations may create pressure to impose controls on primary production activities as the effects may not be acceptable to residential neighbours. This incompatibility between land uses may constrain the efficient operation or viability of some primary production activities.

Reverse sensitivity issues may also arise near to existing large-scale processing activities and infrastructure facilities which may generate external adverse effects on the immediate area. In most cases, the rural environment is the only place where large-scale processing and infrastructure facilities such as landfills, treatment plants, and aggregate extraction and processing activities can be sited to have sufficient resources and/or land to operate and be sufficiently far enough away from residential dwellings to avoid adversely affecting occupants. It is important that this requirement is recognised and provided for, and that increased residential development resulting from rural subdivision is not encouraged in these locations.

Objectives & Policies

Objective 2.3.1 Demand for, and Risks Associated with Residential Sites

To avoid subdivision in areas where there is a significant risk from natural hazards or where reverse sensitivity issues may compromise the efficient and effective operation of lawfully established and permitted rural activities including primary production activities and large-scale processing and infrastructure facilities.

Policy 2.3.2

Identify the locations at significant risk from natural hazards and existing large scale processing and infrastructure facilities to be protected from residential activities.

Policy 2.3.3

Restrict subdivision in areas identified as being at significant risk from natural hazards or the external effects of existing large scale processing and infrastructure facilities.

Policy 2.3.4

Ensure that adequate physical or spatial buffers or other techniques are applied when allowing new allotments or buildings primarily or exclusively for residential purposes in rural areas, so that the effective, efficient and lawful operation of primary production activities are not compromised.

Policy 2.3.5

Ensure that any measures used to avoid, remedy or mitigate the risks of natural hazards do not have significant adverse effects on the environment.

Policy 2.3.6

Ensure that the potential for reverse sensitivity effects on existing primary production activities and other lawfully established activities where such effects are created by subdivision which would result in residential activity are avoided, remedied or mitigated.

Explanation and Principal Reasons

The rural environment contains a wide range of hazards that can place limitations on the extent to which the land can be further modified and developed. While the Natural Hazards (Chapter 8) deals with the risks throughout the District, this objective and policies ensures that more intense subdivision of land in the rural environment addresses any hazard limitations. Subdivision usually leads to some form of further land development, and the size of allotments can influence future use of the land, particularly where hazards are present.

In using measures to avoid, remedy or mitigate the risks of natural hazards it is also necessary to consider the effects of the mitigation measures themselves, which can also have significant adverse environmental effects. An example of this is carrying out earthworks to create access or building platforms which may interfere with the functioning of natural flood plains and ponding areas.

Primary production activities and large-scale processing and infrastructure facilities contribute significantly to the district's economic and social well-being. Although these sorts of activities together with more typical rural activities are required to operate within a regime of District Plan rules or consent conditions to control the effects of the activity beyond the boundary, conflicts can occur when subdivision and land development, principally residential activities, are sensitive to the effects of these activities and facilities, particularly, when it occurs within close proximity (a phenomenon called 'reverse sensitivity'). As a result of these conflicts, there can be demands to restrict legitimate rural activities such as primary productive activities or the existing large scale processing and infrastructure facilities in order to reduce what in the circumstances, are normally regarded as acceptable effects. For this reason, it is important to limit potential future conflicts by preventing the intensification of residential activities within close proximity of these activities and facilities.

Methods for Issue 2.3 & Objective 2.3.1

District Plan

- Identify the areas at significant risk from natural hazards and areas where reverse sensitivity effects from rural land use activities and physical resources may be incompatible with residential activity.
- Rules will control the intensity, size and design of subdivision within areas at significant risk from natural hazards or reverse sensitivity effects from land use activities.
- Assessment of environmental effects through the resource consent process for subdivision proposals, including using assessment criteria.
- Conditions on resource consent such as consent notices and covenants (including non-complaint encumbrances) on Certificates of Title to manage the effects of subdivision including the potential for reverse sensitivity effects.

Subdivision rules and standards provide a high degree of certainty in achieving the objective. Where subdivision applications are not able to meet the Controlled Activity standards, the

effects of the subdivision, including the risks to occupiers of future residential activities, will be assessed according to the conditions relevant to the activity status of the subdivision.

Other Statutory Plans

• Horizons Regional Council will control discharge to air, land and water under the provisions of the One Plan.

Issue 2.4 LAND USE ACTIVITIES – NATURE, CHARACTER, AMENITY VALUES AND SERVICING

A diversity of primary production and non-primary production activities occur in the rural environment. These activities can have a wide range of effects on the nature, character and amenity values of the rural environment. However, some of these effects are anticipated and expected in a rural working environment. These effects can result in the potential for incompatibility between rural activities and more sensitive land use.

ISSUE DISCUSSION

The rural environment hosts a diverse range of activities spread throughout a large area. The nature and distribution of primary production is largely determined by natural patterns of landform, climate and soil type, with other activities influenced by other factors such as accessibility and proximity to markets and other facilities. The predominant activities in the rural environment are primary production based, including farming, horticulture and forestry. These primary production activities can vary widely in scale from large scale and extensive beef/sheep and dairying operations through to small scale lifestyle blocks. There are also many activities associated with these primary production activities located in the rural environment, including packing and processing sheds, fertiliser depots and rural contractors. In addition, other activities and facilities are located in the rural environment, including infrastructure and aggregate extraction activities. There are other non-primary production activities located in the rural environment including residential, recreation, home occupations, and visitor accommodation. These activities are often more sensitive to external effects from primary production activities and infrastructure.

While there is diversity in the nature and scale of land use activities, the elements which combine to give the rural environment its character and amenity values are listed in Explanation and Principal Reasons under Issue 2.1 above.

Given the nature and scale of some primary production activities and other activities in the rural environment, at times these activities may generate external effects which cannot be avoided (e.g. noise, odour and dust). Dogs barking, stock noise, farm machinery noise, aerial topdressing and spraying, stock movements, burning, and spraying are all necessary and usual aspects of life in a rural area.

Other activities in the rural environment should therefore anticipate and expect the amenity values to be modified by such effects. In particular, with the increase in the number of rural-residential "lifestyle" properties within the rural environment, there is greater potential for an increase in conflicts between primary production activities (and their effects) and recent arrivals who hold aspirations for a totally quiet and passive environment. The desire to provide for such lifestyle opportunities and other sensitive activities in a manner that protects the rural character while maintaining and enabling primary production activities to operate

without unreasonable restriction is a key challenge in the management of the rural environment.

In managing activities in the rural environment, there are a number of actual or potential adverse effects to be considered. Examples of adverse effects of activities that are of particular concern include:

- Close-density, urban-style residential settlement patterns.
- Inadequate or inappropriate disposal of wastes.
- Noise disturbance.
- Offensive and unabated smell.
- The potential for adverse effects from off target spray drift and complaints due to agrichemical spraying being undertaken.
- Encroachment into the privacy of rural dwellings.
- Effects of additional traffic and new intersections/entrance ways on the safety of rural roads.
- Inappropriate advertising signage which detracts from visual amenity or road safety.

Objectives & Policies

Objective 2.4.1 Land Use Activities – Nature, Character, Amenity Values and Servicing

To enable primary production activities and other rural based land uses to function efficiently and effectively in the Rural Zone, while avoiding, remedying or mitigating the adverse effects of activities, including reverse sensitivity effects caused by new activities on existing activities, in a way that maintains and enhances the character and amenity values of the rural environment.

Policy 2.4.2

Provide for the establishment and operation of primary production activities which rely on a location in the rural environment, provided they meet minimum environmental standards reasonably necessary to avoid, remedy or mitigate any adverse effects without unduly affecting landowners' ability to use their land productively.

Policy 2.4.3

Provide for the establishment and operation of new non-primary production activities and the ongoing operation of existing lawfully established activities which are compatible and/or associated with primary production activities in the rural environment provided they meet minimum environmental standards to avoid, remedy or mitigate any adverse effects.

Policy 2.4.4

Control and manage the establishment and operation of a range of other land use activities, including sensitive activities, in the rural environment to ensure their adverse effects on the environment (including reverse sensitivity effects on existing lawfully established activities) are avoided, remedied or mitigated.

Policy 2.4.5

Manage any activity which does not meet minimum standards by assessing on a case-bycase basis to ensure the adverse effects on the environment are avoided, remedied or mitigated.

Policy 2.4.6

Ensure that all activities within the rural environment manage and dispose of wastes in a manner that does not create a nuisance and that avoids, remedies or mitigates adverse effects on amenity values.

Policy 2.4.7

Avoid, remedy or mitigate the impact of buildings on the rural landscape and maintain overall low building density and building height throughout the rural environment.

Policy 2.4.8

Provide for a principal residential dwelling and family flat that supports the primary production and/or lifestyle role of the property, with the family flat a secondary building that is minor in form and scale compared to the principal residential dwelling.

Policy 2.4.9

Manage the effects of additional dwellings on the rural land resource, life-supporting capacity of soils and the character and amenity values of the rural environment, recognising any farm worker accommodation should be located and related to the scale and intensity of the primary production activities on site.

Policy 2.4.10

Avoid, remedy or mitigate adverse effects on rural privacy and rural character in the Rural Zone by maintaining road and site boundary setbacks for all buildings, while recognising the degree of privacy and rural spaciousness is different in areas comprising existing smaller rural-residential lots.

Policy 2.4.11

Manage potential reverse sensitivity conflict between primary production activities and sensitive activities through appropriate separation distances or other measures, while giving priority to existing lawfully established activities.

Policy 2.4.12

Avoid, remedy, or mitigate any adverse environmental effects of shading of roads and reduction in rural amenity caused by tree shelterbelts or plantation forestry on adjacent and adjoining properties.

Policy 2.4.13

Avoid, remedy or mitigate any adverse effects upon residential properties or road safety caused by lighting or glare from any source.

Policy 2.4.14

Avoid, remedy or mitigate, where necessary, any offensive or objectionable odours likely to affect the amenity of residential properties or buildings and other sensitive activities.

Policy 2.4.15

Maintain separation distances between residential activities and intensive farming activities and effluent storage, treatment and disposal systems so as to minimise adverse effects (including reverse sensitivity effects) for all activities.

Policy 2.4.16

Ensure that land use activities, subdivision and development adjoining the National Grid, the State Highway network and the North Island Main Trunk Railway Line avoid, remedy or mitigate any adverse effects on the safe and efficient operation of the electricity transmission, roading and rail networks.

Policy 2.4.17

Maintain overall day and night time noise conditions at levels compatible with the amenity and activity present in the rural environment.

Policy 2.4.18

Ensure that effects of increased traffic or changed traffic type or change to road access do not compromise the safe and efficient operation of any road or adversely affect the safe and convenient movement of people on public roads.

Policy 2.4.19

Provide for a limited amount of signage located on the site to which the activity relates to minimise the effects on the rural environment.

Policy 2.4.20

Restrict the amount of remote advertising-signage in the rural environment and the adverse visual effects on rural amenity through a proliferation of road-side advertising signs.

Policy 2.4.21

Protect the Levin Wastewater Treatment Plant in Mako Mako Road from the effects of reverse sensitivity.

Policy 2.4.22

Recognise the existence of aggregate extraction activities in two locations on the Ohau River and protection them from reverse sensitivity effects by managing the establishment of new dwellings nearby.

Policy 2.4.23

Manage the establishment and operation of aggregate extraction activities recognising these activities are constrained by the location of the resource, while ensuring the adverse effects on the environment are avoided, remedied or mitigated.

Explanation and Principal Reasons

Primary production activities rely on a rural location due to the existence and availability of natural and physical resources. Providing for primary production and other associated activities enables these resources to be utilised in a sustainable manner, without unduly hindering or controlling these activities. Minimum standards are applied to ensure any significant adverse effects of these activities are avoided, remedied or mitigated (e.g. building setbacks, maximum noise levels, planting standards).

Many other activities (e.g. vegetable and fruit packing, rural contractors yard) are appropriate in a rural setting and can establish and operate without compromising the core primary production activities in the rural areas. In addition, other activities can rely on a rural location as this is where the resource is located (e.g. infrastructure, electricity generation, quarries and gravel extraction), and/or due to its linear nature and the need to traverse districts and regions (e.g. transmission lines, roads and rail). Minimum standards are also applied to these other activities to ensure their adverse effects are avoided, remedied or mitigated.

Conversely, some other activities (e.g. commercial, retail, industrial) are inappropriate in the rural area where they may be incompatible with the rural character and amenity values, or create conflict with other existing lawfully established activities. In addition, these other activities may introduce urban characteristics or features, and they lend themselves to be more appropriately located in an urban location, where the servicing, infrastructure and facilities can assist in avoiding, remedying or mitigating their adverse effects.

There are various pressures on the character and amenity values of the rural environment from the wide range of activities. Buildings and structures are associated with most activities, and the location, scale and density of buildings can adversely affect rural character and amenity values. As part of this it is recognised that additional dwellings for farm worker accommodation may be required on larger rural properties. Typically, rural character and amenity values are where buildings and structures are at a relatively low non-urban density with generous setbacks from external property boundaries and where the height, scale, density and number of buildings do not dominate the landscape and spacious and open space qualities of the rural environment are maintained.

Existing areas of smaller rural-residential properties need to be recognised, where the level of spaciousness and privacy is different compared to the typical rural lot sizes. Appropriate levels of development and amenity protection for these denser areas of the rural environment require consideration of context, compared to the areas of the rural environment which display all the attributes listed in Issue 2.4.

Activities can also have external effects which are out of character and unacceptable in the rural environment. These external effects can degrade the characteristics and values of people in the rural environment, including privacy, rural outlook, spaciousness, ease of access, clean air and, at times, quietness. Inappropriate level of vehicle movements and parking, excessive out-of-character noise, and obtrusive or excessive signage can also degrade these values.

With the absence of reticulated services in rural areas, an on-site water supply is required as well as managing and disposing of all wastes. The nature, location and scale of the activities can influence the on-site servicing requirements. The individual water supplies and on-site management of waste can have adverse effects in addition to the activity itself. The Regional Council is responsible for all waste discharges to land, water and air, which are managed under the One Plan. The District Council is responsible for managing the use of land, including waste where it causes a nuisance or adversely effects amenity values.

Signs are erected for a range of purposes, such as specific identification of any site or building, providing directions or information, or for promoting forthcoming events. Therefore, signs have a role in providing for the needs of the community. However, signs can have adverse environmental effects, particularly on visual amenity, and may conflict with traffic and safety in the District. In particular, rural environment and visual amenity can be compromised by a clutter of signs or signs of an inappropriate character. These effects are especially relevant for remote advertising signs along major transport routes in the District which can create adverse visual amenity effects as well as a hazard to motorists in terms of being a distraction.

Provision is made for signs which are generally accepted as essential for the provision of information with some restrictions on size and location. Forms of signage which are considered to be undesirable because of their potential adverse effects on visual amenity and traffic safety require resource consent. This approach enables Council to consider their suitability with respect to matters of traffic safety and visual amenity.

Habitable buildings within an 800 metre buffer of the Levin Wastewater Treatment Plant, as shown on the Planning Maps, are controlled activities. This provision is necessary to protect the plant from the effects of reverse sensitivity. Reverse sensitivity is a term used that is the effect that new development may have on activities already occurring in an areas and usually results from people in a new activity, complaining about the effects of existing activities, in this case the wastewater treatment plant. The concept recognises that it can be appropriate to restrain new activities to existing activities, particularly key infrastructure. The restraint is limited to the control Council can exercise requiring, where appropriate, that resource consents be granted on the condition that the activity be subject to the restraint of a covenant being registered against the title of the land to be used for the controlled activity, to the effect that owners, lessees or successors entitled, acknowledge the presence of the wastewater treatment plant in the vicinity and will not seek to constrain its continued lawful operation. Reverse sensitivity can also exist where sensitive activities locate in close proximity to existing primary production activities, leading to complaints about the existing lawfully established activity.

Methods for Issue 2.4 & Objective 2.4.1

District Plan

- A Rural Zone will be identified in the Planning Maps.
- Rules will specify permitted activities and conditions and standards derived from the above policies.
- Rules will specify the resource consent requirements for activities that do not meet standards.
- Assessment of environmental effects through the resource consent process for development and subdivision proposals.

- In assessing resource consent applications the Council will have regard to relevant industry codes of practice/guidelines, e.g. EnviroPork™: Pork Industry Guide to Managing Environmental Effects, NZ Pork Industry Board, Version 1, 2005.
- Council will encourage land users to use Codes of Practice and other good practice guidelines.

Standards expressed as District Plan rules are considered to be the most appropriate and effective method of maintaining minimum standards for the matters over which the Council has jurisdiction. Rules provide certainty for resource users and for neighbours which is important for community understanding of what environmental quality is expected.

Other Statutory Plans

• Horizons Regional Council will control discharge to air, land and water under the provisions of the One Plan.

ANTICIPATED ENVIRONMENTAL RESULTS

The environmental results for the rural environment which are anticipated to result from the combined implementation of the above policies and methods are as follows:

- 2(a) An adequate supply of versatile land (including Land Use Capability (LUC) Class 1 and 2) will continue to be available to meet the reasonably foreseeable food-production needs of future generations.
- 2(b) Primary production activities are the principal land use complemented by other compatible activities which efficiently use the natural and physical resources in the rural environment.
- 2(c) Diversity of activities within the Rural Zone that are compatible with the rural environment in nature, scale, amenity and character.
- 2(d) The low-density of settlement and the special rural landscape character will be maintained.
- 2(e) Avoidance of subdivision on land subject to natural hazards or potential natural hazards where the potential adverse effects cannot be avoided, remedied or mitigated.
- 2(f) Avoidance of subdivision where it could accelerate or worsen the risk of natural hazards
- 2(g) Limited or no increase in conflicts between residential activities and adjacent primary production activities or other land uses and physical resources.
- 2(h) Maintenance of rural character and rural amenity values throughout the District's rural areas in accordance with the particular character and qualities of the individual landscape domains.

Appendix 1: Rural Environment Landscape Assessment

A Landscape Assessment of the Horowhenua rural environment, has been undertaken and identified 10 Landscape Domains (Areas).

The Landscape Assessment has considered several layers of information in determining the location of the Landscape Domains. In some cases the boundary between two Landscape Domains is a very distinct and an identifiable point, in other cases the boundary is blurred as the transition between the different Landscape Domains occurs over a larger area. Despite this the boundary between the Landscape Domains has been identified as a single line and it is important to realise that where this occurs the Domain may contain features or landscape Domain. As detailed in the Landscape Assessment Report (*Landscape Assessment of the Rural Environment of the Horowhenua District, October 2008*) many adjoining Landscape Domains do share some similarities, however it is the overall combination of characteristics together with their context that gives each Landscape Domain its own identity.

The important characteristics such as the landscape character, visual quality, sensitivity, opportunities and constraints that distinguish each of the 10 Landscape Domains are summarised from this Assessment report and are set out below. The summary is designed to assist with the understanding of the Landscape Assessment Report and is not intended to change the meaning of the Assessment report itself.

1. Coastal Environment

LANDSCAPE CHARACTER

The Coastal Environment contains a mix of both mobile and stable dune systems. Although primary production is not the dominant element in this domain, pine forestry covers a large proportion of the dunes in the area.

Landform

The dune systems result in a dynamic landscape, with the strong prevailing winds contributing to the constant movement of sand on the dunes near the coastal edge. Hollows between the dunes provide dune lakes and swamps where the water table is elevated. This area also includes the estuaries for the District's lakes.

Landcover

Apart from exotic forestry, land cover is predominantly sand dune species and exotic pastoral grasses. In the estuarine areas particularly, there are significant areas of indigenous vegetation which support a wide range of indigenous fauna. The remnant wetland and kanuka/manuka forest areas also provide important habitats.

Landuse

Land use in this area is restricted to exotic plantation forestry and some pastoral farming. There is increasing residential development in the coastal settlement and there have been some areas which have experienced subdivision development in the rural coastal areas outside the existing settlements. This domain also accommodates infrastructure such as Council's wastewater treatment schemes and landfill site.

VISUAL QUALITY

Natural Science Factors

The unique parabolic dune system has high value, due to its rarity and the impressiveness of the large dune ridges. Additionally, the dune system is fragile and is easily damaged through modification. The estuaries are also specific to this district's coastline and support a wide range of indigenous fauna.

Aesthetic values

The aesthetic values for this domain stem directly from the natural values in this environment, described above.

SENSITIVITY

The uniqueness and dynamism of the coast and its processes result in a high level of sensitivity to modification.

Visual absorption capability (VAC)

The VAC for this domain is reduced through its very simple but distinctive landscape character. The only exception to this would be in the areas of large pine plantations, or where modification has already occurred to the extent that the character has almost gone completely.

OPPORTUNITIES AND CONSTRAINTS

The existing coastal settlements present opportunities for expansion as identified in the Horowhenua Development Plan. Any future development should provide ecological and amenity benefits through design that enhances biodiversity from the rehabilitation of wetlands and the planting of appropriate indigenous coastal vegetation.

The forested dunes can provide screening and absorption of development where this is carefully located. Alternatively, sites currently with a forestry cover also provide opportunities for development that promotes the planned harvesting of the pines and the replanting of the sites with indigenous, local dunal species.

The limited road access from SH1 to the coastal settlements places constraints on where development can be successfully located, in terms of existing infrastructure and community building.

While development can enhance degraded sites, the Coastal Environment has particular and unique ecosystems and biological processes that require protection. This includes the integrity of the dune formations and protection of them from modification; the functioning of wetlands and swamps; and protection of the high water tables, aquifers and other hydrological systems, above and below ground.

This environment also provides habitats for a range of indigenous fauna; some of which are at risk from the modification of the environmental elements described above. This includes indigenous fish species, wading birds and those that nest within the dunes.

This environment is known for the presence of cultural sites of importance to Tangata Whenua.

The dunes in the Coastal Environment are an important characteristic of the area, by virtue of being visible from much of the district, they form part of the character of the district itself. Construction on or modification to the dunes that would be visible or that would potentially adversely affect the environmental sensitivities of the dunes, should be restricted.

2. Foxton Dunefields

LANDSCAPE CHARACTER

The Foxton Dunefields landscape domain is located between the Coastal Environment domain and the Moutoa-Opiki Plains domain. The landscape is characterised by the dissected parabolic dunefields, large areas of pastoral grazing and pine forestry, resulting in an active topography with diverse vegetation cover.

Landform

The linear dunes stretch some 20km plus in a northwest-southeast orientation. The age of the inland dunes (which began accumulating 6500 years before present (BP)) means the dunes are stable, and the planting of forestry has further settled the elevated areas and contributed to the developed soil surface. Some modification to the dunes has occurred to allow for the use of irrigation devices, but in general the dunes remain intact and are a distinctive landscape element of this domain.

Nearer the coast, the dunes are younger but are also stable with large areas covered in exotic forest plantations.

The inter-dunal areas still contain some important remnant wetland areas, including Lake Koputara, however most swamp areas have been drained and are used for grazing. High class soils (LUC 1 and 2) are found in the south-western part of the domain where it extends to the fertile river terraces.

Despite the significant modification through pastoral and forestry activities, the area contains some remnant areas of indigenous vegetation, including Himatangi Scenic Reserve and Roundbush Reserves.

Landcover

Due to their age, the dunes themselves would have been forested prior to human occupation of the area. Species within the plant communities would have included tawa, matai, hinau, miro, totara, pukatea and kahikatea. At the time of European settlement, however, clearance by the first people meant the vegetation on the younger dunes was largely bracken fern, scrub, and natural grasses.

Now the dominant cover is pastoral together with forestry plantations. The inter-dunal swamp areas and peaty backswamps would have originally contained swamp forest and wetland species. Where these landforms remain intact, the wetland shrub and reed species still exist.

Landuse

Due to the peaty wet soils, flax production was integral to the initial economic growth of the area. At one time 50 mills were operating within a 16 km radius of Foxton. Later reliance on pastoral use meant that the soils became dryer through drainage and flood management, and much of the flax and kahikatea has now gone.

Dairy and sheep farming are now the dominant productive activities in the rural area, along with some horticulture, poultry and pig farming.

Rural living associated with production activities occurs throughout the domain. Recent rural lifestyle development is typically located closer to the township of Foxton.

Flood protection measures including the spillway associated with the Manawatu River mean that parts of this domain are only used on a temporary basis.

VISUAL QUALITY

Natural science factors

The dune field system in this area is unique to the country and contributes strongly to the character of this area. The dunes in this area are the oldest occurring along the coast of the Kapiti and Horowhenua districts and have a high level of value for their rarity and distinctiveness.

The scale and linear form of the dunefield is quite distinct from other local elevated topographical features in the district (such as the terraces and foothills) and is a product of the processes of winds, wave action and hydrology. The linear movement of the dunes inland is a particular characteristic of this domain, and has influenced the location and direction of roads, siting of houses and provided view shafts through to both the Tasman Sea and the Tararua Ranges.

Aesthetic values

Deforestation and re-forestation have added other aspects to the quality of the dunes, both in terms of the natural processes and also the aesthetic qualities.

While the forestry emphasises the difference in elevation between the dunes and inter-dunal depressions, it also has the effect of standardising the differences between dunes. The height and dense nature of the vegetation also blocks views within and through the dunes including the extended visual combinations of dunes, wetlands and coastal features that would have been previously available.

The drainage of the wetlands and conversion to pasture has removed the changeable, delicate textures provided by reed species and grasses. However, the usually lush bright green pasture grasses contribute strongly to the perceptions of rural character, providing a sense of openness and expanse.

SENSITIVITY

The dunes are of high value and are sensitive to modification through earthworks. The rarity of the dune formation, and its importance in contributing to the landscape character of this domain requires continued protection to be afforded to the dunes, in particular.

Visual absorption capability

This landscape has relatively simple topography. Its particular character comes from the two visually distinct topographical elements – the inter-dunal flats/hollows, and the extensive, linear elevated forms of the dunes themselves.

This simplicity results in the landscape's ability to absorb change as being low. Structures, landform modification and even alteration in vegetation will impact at a level higher than that in a more complex and varied landscape.

Despite the elevated sites the dunes offer, built structures on the tops of dunes are relatively few and where this has occurred, buildings have been reasonably well integrated through planting and other measures.

OPPORTUNITIES & CONSTRAINTS

This is one of the few domains that is not characterised by high class soils. This in itself creates more flexibility for development location, however the distinctive landform and land patterning requires any development, or change in land use, to acknowledge the domain's particular characteristics.

The Foxton township is situated on SH1, however the locations of the main arterial routes within the majority of the domain area are strongly influenced by the dune ridges extending inland. This results in long straight roads running east-west, with few secondary roads intersecting these. This has generally meant that the dune formations have been protected from major modification, and their linear form is somewhat emphasised. It also results in the roads forming permanent view shafts from the mountains to the coast and vice versa.

The existing parcels also reflect the road and dune patterning. The parcels tend to be large, with frontages on the roads and boundaries across the dune ridges indeterminately defined by shelterbelts and/or forestry plantations.

The insertion of additional intersecting roads or significant driveways running perpendicular to the existing roads and cutting through the dunes would be ecologically and visually at odds with the character of this domain.

Settlement types need to acknowledge the integrity of the dune formation. Measures to ensure this include the considered design and location of the development in relation to the strong linear patterning, and the avoidance of the dune ridges when locating fencelines, building sites and structures.

The opportunity exists, to use development as a means to enhance biodiversity through the rehabilitation of wetlands and the dune vegetation cover. The change in land use from forestry to residential development can enhance the ecological and environmental values of the domain, but the process involved in the physical change needs to be carefully staged and managed so as to avoid disturbance of the dune structures and related wetlands, while utilising remaining vegetation for screening and absorption purposes.

The Foxton Dunefields are renowned and unique to the country. Their presence is a dominant characteristic of the area and their form and role in the landscape requires protection from visual degradation or damage from modification.

3. Coastal Lakes

LANDSCAPE CHARACTER

The Coastal Lakes landscape domain is so named because of its proximity to the Coastal Environment domain and the inclusion of dune lakes within this area. It is of a very diverse nature, with high, dry dunes interspersed with low wetland hollows, as well as the major lakes, Waiwiri (Lake Papaitonga) and Waipunahau (Lake Horowhenua).

Landform

Most of this domain consists of parabolic dunefield topography, which extends in a latitudinal fashion over 10km inland. The dunes tend to be of the younger dune-building phase than others in the district, which results in the dunefields not extending so far inland. The topography is no less distinctive. The most significant of the dunes, Moutere Hill can be viewed from most parts of the district.

The natural hydrology within this domain is complex and dynamic, although extensive modification has occurred through the creation of deep channelled drains. Meandering streams and contiguous wetlands maintain their natural patterning under the grid-like drain system. Despite the drainage systems, the elevated water table allows the remaining wetland areas to function naturally and provide habitats for a range of indigenous flora and fauna.

There are a number of freshwater dune lakes in this domain, two of which - Waipunahau (Lake Horowhenua) and Waiwiri (Lake Papaitonga) - are significant natural features which have high historical and cultural values.

Waipunahau – Lake Horowhenua has a surface area of 290 ha and an average depth of less than 2 metres. It is drained by a single outlet, Hokio Stream, and the lake level is controlled by a weir within this outlet. Water input is received from both surface flow and groundwater, the latter via a number of submerged springs.

Waiwiri - Lake Papaitonga is a 61.8 ha dune lake with two islands, Motukiwi and Motungarara. It is located within a 122 ha protected a scenic reserve, managed by the Department of Conservation (DoC).

Soils are generally low nutrient sands, except in areas adjacent to the Manawatu River margins where peaty wet soils exist. Isolated pockets of high class soils are found near the two lakes, but otherwise these are not the dominant soil class of this landscape.

Landcover

Much of the dunefield near the coast has been planted for extensive commercial forestry production. A mix of scattered small-scale forests occur on the residual dunes while pastoral activities are undertaken on the low and inter-dunal areas.

The Lake Papaitonga scenic reserve is a significant habitat for indigenous flora and fauna. The remnant bush areas scattered throughout the area and the functioning wetland swamps also provide habitat for indigenous fauna.

Landuse

The domain includes extensive areas of pastoral grazing which tends to occur mainly on the inter-dunal flats. The dunes themselves are generally utilised for exotic forestry and for the location of dwellings associated with farming activities.

Although occurring on a more isolated basis the domain also includes horticulture activities and activities that are not generally conducive to rural-residential development such as the timber saw mill.

VISUAL QUALITY

Natural science factors

The diverse nature of this landscape domain, despite the modification that has occurred, results in a fairly high level of natural value. This is, of course, enhanced by sites such as Waiwiri - Lake Papaitonga and Waipunahau – Lake Horowhenua.

The dunes in the Coastal Lakes domain are parabolic and run in a linear fashion in a northwest-southeast direction, but do not extend as far inland as the older dunes. They are however still a distinctive and a dominant landscape characteristic of this domain.

Lake Papaitonga scenic reserve includes some 122 ha of protected indigenous flora together with a number of other significant natural habitats that support a wide range of indigenous flora and fauna. These include remnant areas of indigenous vegetation, such as kanuka/manuka forests and broadleaf remnants, as well as a number of significant wetlands.

Aesthetic values

Deforestation and drainage of the area has resulted in a major change to the 'look' of the area. The re-forestation of the dunes in a very limited number of species has lessened the diversity of the vegetation cover, although the result does create a strong contrast between the elevated areas and the grassed flats.

The reduction in the complexity of the landscape as well as the contrast between the two dominant topographical elements results in this landscape's ability to absorb change being low. New structures and roads on either land form will require careful location to avoid being overly prominent.

Waipunahau (Lake Horowhenua) and Waiwiri (Lake Papaitonga) both contribute significantly to the aesthetic values of the area. Amenity values provided by the water bodies themselves, together with the scenic reserve and park-like surrounds of Waipunahau – Lake Horowhenua are highly valued by the local community.

SENSITIVITY

The dune system in this domain, including the lakes, presents high value in landscape terms and therefore requires consideration as to the effects of development and changes to the landform.

Residential development already extends from Levin to within 1km from the eastern side of Waipunahau – Lake Horowhenua. Waiwiri - Lake Papaitonga is located in a more rural and currently less populated area to the south, although rural residential development is increasing in this vicinity. The reserve area surrounding Waiwiri - Lake Papaitonga acts as a visual and physical buffer between the lake and settlement areas, but the reserve itself requires protection from potential adverse visual and other effects of development.

The ongoing efforts to rehabilitate Waipunahau (Lake Horowhenua) require that serious consideration be given to any developments that could hinder efforts or exacerbate the existing ecological problems. Projects that encourage regeneration of indigenous flora and fauna at any scale will assist in providing ecological corridors and seed source for revegetation of the lake's margins, while storm water and waste water management will help reduce eutrophication.

Visual absorption capability

The presence of the significant dunes, Moutere Hill, as well as Waipunahau (Lake Horowhenua) and Waiwiri (Lake Papaitonga) in an otherwise flat environment results in the VAC for this area being low. The level of the landscape values in this area is high because of the natural character, amenity value and aesthetic values.

OPPORTUNITIES & CONSTRAINTS

This domain includes opportunities for development due to the very limited areas of high class soils and the potential to enhance natural values within this domain. The roading network provides a good level of connectivity within this domain.

The extensive areas of pine forestry offer the opportunity to provide visual integration of potential development within these areas.

Constraints to development include the sensitive ecological nature of the area. The existing natural values of the area (wetlands, streams and remnant bush areas) can provide opportunities where these values would benefit from rehabilitation and enhancement that could result from development or change in land use

Consideration should be given to the effects of building site location, effluent disposal design and location, earthworks and road construction on existing vegetation and waterways to avoid any visual or ecological adverse effects.

4. Moutoa-Opiki Plains

LANDSCAPE CHARACTER

The Moutoa-Opiki Plains landscape domain is situated in the northern portion of the Horowhenua, and includes the Manawatu River and its terraces and plains to the south.

The domain's proximity to the river provides a character that results from the intense activity of the hydrological system, both above and below ground. Related to this is the imposition of flood management processes (the stop banks, canals and sluice gates) which provide an 'engineered' topography that, in its purpose, conflicts both visually and physically with the natural hydrological processes.

Landform

The landscape is comprised of extensive open plains with alluvial, clay-rich and relatively fertile soils and high water tables.

Wetland areas exist in remnant river locations. Their shapes reveal past oxbows and meandering patterns. The southern part of the domain forms part of the Manawatu flood plain where the peaty wet soils exist and through which deep drainage canals have been cut to allow the land to be used for agricultural purposes.

Landcover

Intense land use has resulted in the loss of indigenous vegetation cover and there are fewer shelter belts and exotic trees than in other domains. Prior to clearance the indigenous vegetation would have consisted of kahikatea and flax in the wetter area, with podocarp forest in the area further away from the river and in the more elevated areas to the east.

The soils within this area are predominantly Highly Versatile (Land Use Capability classification Class 1 or 2) and as a result the scale of the primary production activities is generally large and intensive with dairying, horticulture and cropping occurring throughout the domain.

Landuse

The fertile soils in this area support primary production at a range of scales. The 'patchwork' effect from this land use is a strong visual element; the grid patterning distorted by the river courses and flood plains. The use of land often varies as a result of seasonal changes with both horticulture and grazing activities interchanging.

The pattern of human settlement also reflects the productive character of the areas. Large functional accessory buildings, farm worker dwellings, and established rural dwellings associated with the properties are found either, as individual isolated structures or small clusters.

VISUAL QUALITY

Natural science factors

Within the plains area, very little of the original indigenous vegetation remains. The modification of the hydrological system has meant that a large proportion of the original habitat for fauna has been lost.

Where the topography remains unmodified, such as the meandering streams, their interesting formation contributes positively to the landscape values, despite the significance of these elements being heightened through the removal of vegetation.

Aesthetic values

Despite the reduction of natural values in this domain through deforestation and modification to landform and hydrology, the seasonal changes to this production based landscape creates a perceived level of aesthetic value

The expansive plains that characterise this domain would have not been of such visual significance when covered in their original vegetation. Similarly, the stream courses would have been in less contrast to these landforms when hidden within riparian vegetation.

SENSITIVITY

The presence of high class soils and long-established horticultural activities contributes to this domain's high level of sensitivity to change. The parcels are generally large and reflect the dominant productive land use, which is an essential component of the domain's character. Therefore, intensive subdivision and close-density development is not appropriate in this domain.

In visual terms, this landscape requires careful consideration of the location of buildings and roading, as these elements will be quite distinct within the open expanse of the plains.

Where possible and appropriate to land use, re-vegetation in indigenous species would reduce the sensitivity somewhat and raise the level of natural character, as would riparian management and rehabilitation of existing waterways.

OPPORTUNITIES & CONSTRAINTS

A significant constraint on development is the extent of high class soils within this domain. Issues of reverse sensitivity and connectivity are also apparent; the large parcel size for primary production land uses has restricted the need for secondary or connecting roads.

The limited amount of existing development and built structures, together with the wide open areas are significant influences on this domain's character. More intensity of development or a significant increase in the density or number of buildings could result in adverse effects on the strong rural character of this domain.

5. Tararua Terraces

LANDSCAPE CHARACTER

This domain as a transition zone between the plains and the Hill Country to the north of the District and a much smaller area of enclosed and elevated terrace plateaux within Manakau north valley.

Landform

Generally, this area is a combination of elevated plateaux dissected by gullies, some areas of steep erosion-prone faces to the east and flatter or gently sloping/undulating land towards the west.

Within this domain are some discrete areas sheltered from the prevailing winds by individual ridges that extend out beyond the general line of the foothills. These areas present a slightly different character because the climatic factors tend to be humid frost-free air, and significant cloud cover.

Landcover

The mainly pastoral nature of this area also contains a number of significant natural habitats, including remnant areas of indigenous vegetation of both forest and wetland types.

Vegetation in the sheltered 'alcove'-type areas also includes nikau palms and other vigorous species suited to the gentler environment. Volcanic soils found within the area also contribute to growth rates and vegetation types.

Landuse

Low intensity pastoral farming is the dominant land use in this area. The presence of horticulture_reflects the high class soils that extend in some areas to the base of the foothills. Associated dwellings and buildings reflect this dominant usage, however there are some smaller parcels that are either rural-residential or niche primary production activities.

VISUAL QUALITY

Natural Science Factors

The variation within this domain results in a range of indigenous species in a range of microenvironments. This results in bio-diversity having the potential to be of a high level, despite the extensive modification and clearance through farming activities on the lower terrace areas.

Aesthetic values

Varied landscapes have their own particular attractiveness, with the presence of streams, dense vegetation, lush grass and undulating landform usually appealing to most people.

Additionally, the nearby ranges and the steep elevation of some terraces is exaggerated by the contrast to the plains areas to the west, providing further aesthetic interest.

SENSITIVITY

The variation within this domain calls for recognition that 'one size will *not* fit all' despite the elements all being components of a particular landscape character. Development needs to respond directly to the types of landform and acknowledge the high or potentially high biodiversity and ecological value.

The domain's close proximity to the Tararua Ranges also affects the level of sensitivity; and requires care as to the location, height and visibility of structures to avoid adverse visual or landscape effects on the landscape.

Visual absorption capability

The variable landscape does provide a range of site-types that differ in their ability to absorb built structures and roads. The open plains of this landscape require careful consideration of the location of buildings and roading, as these elements will be quite distinct within the open expanses and against the backdrop of the highly visible Tararua Range.

OPPORTUNITIES & CONSTRAINTS

Close to the Shannon and Tokomaru townships, this domain's location presents some opportunities for development in response to this connectivity. The presence of high class soils places constraints on both the type and location of development.

Land instability on the terraces also presents constraints, and the high visibility of these areas could pose problems with adverse visual effects should building sites be located on the elevated sites.

The variation of the domain's topography, particularly to the west, does provide opportunities for sites that do not have the same constraints as those discussed above. Where these areas also contain high natural values (such as remnant areas of vegetation or wetland) or have potential for ecological enhancement, development should respond to this.

The enclosed and relatively screened areas behind the extending ridges provide opportunities for development that can be undertaken without being as visually obtrusive as the same level of development in more prominent parts of this domain.

6. Levin-Koputaroa

LANDSCAPE CHARACTER

The landscape character of the Levin-Koputaroa domain is a direct result of flooding processes. Situated north of Levin, the domain displays the range of variation in topography.

Landform

The domain's location results in the topography that is a product of both flood processes and loess, and includes fertile alluvial plains, low lying peat swamps, elevated areas and deeply incised gullies.

The low lying peat areas also are affected by rises in the water table which results in ponding at various times. The dynamic streams within this domain and the influences of fluvial processes mean that areas within the domain are under threat from flooding.

Landcover

The original landcover has been reduced to remnant patches as a result of deforestation and drainage for primary production activities with pasture grasses, agricultural plant species and exotic shelterbelts becoming the dominant vegetation.

The remnant bush areas, as well as the remaining significant wetland areas provide habitats for a range of indigenous flora and fauna.

Landuse

The land use in this domain reflects the varied topography, with soil fertility, climate, aspect and proximity to water (above and below ground) promoting a range of activities. In general, the high class soils result in primary production activities including horticulture as being the most dominant land use, with a number of orchards and some smaller-scale production activities also present.

The location and density of dwellings tends to be that associated with primary production and rural lifestyle settlement. Both State Highway 1 and 57 cross this domain, resulting in the rural areas being better connected than some other domains.

VISUAL QUALITY

Natural Science Factors

The variation in topography and the large number of gullies and streams reveals the remnant natural representation of the complex environmental processes of this area. The modified elements of the regular geometry of pastures, shelterbelts and drains results in a multi-patterned and visually dynamic landscape.

Aesthetic values

The sense of this area being an intermediate zone is heightened by the ability to obtain views of both the beginning and end of the catchment process. These views tend to be either framed by landforms and vegetation, or unobstructed and expansive across open pasture.

Alternatively, the undulating landscape can also result in a sense of enclosure within localised areas, particularly towards the elevated terrace and foothill areas.

SENSITIVITY

The level of sensitivity depends largely on the part of the domain in question. In terms of ecological sensitivity, the areas in which the hydrological system dominates require consideration of any adverse impacts – particularly where it is unmodified.

Maintaining view shafts across the plains and the ability to capture a view extending from the ranges to the sea are important characteristics of the domain.

Visual absorption capability

Because of the reasons above, the open expansive areas maintain a lower level of VAC, although the existence of mature shelter belts will provide a level of absorption for appropriate development. The more complex, undulating areas containing the gullies provides a higher level of VAC, however these also tend to be within or close to the more elevated areas so a clustered approach to development would be more appropriate than large lots containing isolated large dwellings.

OPPORTUNITIES & CONSTRAINTS

This domain has extensive areas of high class soil but the mixed nature of the landform provides the potential to enhance natural values. The roading network in this domain provides a good level of connectivity.

The extensive areas of pine forestry also provide the opportunity to reduce the visual impact of potential development within this area.

Constraints to development include the sensitive ecological nature of the area. There are opportunities through land use change to benefit the existing natural values of the area (wetlands, streams and remnant bush areas) through rehabilitation and enhancement.

The effects of building site location, effluent disposal design and location, earthworks and road construction on existing vegetation and waterways need consideration to avoid adverse visual or ecological impacts.

7. Levin-Ohau

LANDSCAPE CHARACTER

The domain's rather varied character is influenced by its location in the volcanic lowland terrace area of the district. The domain's character is strongly influenced by the hydrological system.

Landform

Terracing is a dominant landscape element in the eastern part of this domain and is clearly influenced by Ohau River and its tributaries. Flooding and sediment deposition has created the terracing and the wide expanses of river-plain in the central part of the domain.

Landcover

The original vegetation cover in this domain has been heavily modified or destroyed though farming activities. The dominant cover is now pasture grasses, crops, exotic shelter belts and some areas of pine forest. The volcanic and alluvial soils provide a high level of fertility,

with cultivated species becoming a dominant part of this domain as a result of large and small scale horticulture activities in this domain.

Remnant areas of indigenous vegetation occur generally in close proximity to the river. Some of these areas are public reserves, the largest of these reserves being the Kimberley Scenic Reserve.

Land use

The high class soils in this domain result in farming and horticulture being the dominant land uses. The exception to the wide distribution of high quality soils is an elevated band of sandstone just north of Muhunoa East and West Roads. The land parcels within this band are smaller, and reflect the general change in land use towards Levin itself, where it becomes progressively residential in nature. Around the south western urban edge of the Levin a number of industrial activities have extended beyond the Industrial zone and are being undertaken in the Rural zone

A number of properties adjacent to State Highway 1 take advantage of passing traffic to sell produce grown onsite from small retail shops also onsite. Other significant growers in this domain are key providers to local supermarkets and restaurants.

Although associated with the Ohau township, the introduction of vineyards to Ohau reflects a broadening of productive land uses in this area.

VISUAL QUALITY

Natural Science Factors

The hydrological system is the main contributing element to natural landscape values in the area; with the land form's distinctive shape a result of the paths of the river and streams. The high class soils are a result of alluvial matter. High water tables and/or uncontrolled streams and springs are responsible for the remnant wetlands.

Aesthetic values

The most influential factor in terms of aesthetic values is probably the rural amenity created by the existing land uses. The reserves in the area contribute examples of 'naturalness' to the area, as do views of the Tararua Ranges (located outside this domain) however, naturalness is not a dominant element.

SENSITIVITY

The high level of modification to this area lowers its sensitivity to activities, except, where it may impact on rural character/amenity.

Further modification to the hydrological system is to be avoided, as the formation created through river and stream movement is a strong characteristic of the area. Development that enhances and rehabilitates waterways is desirable in this area.

Visual absorption capability

Despite the high levels of modification, the overall topography of this domain combined with the lack of extensive or densely vegetated areas means that the VAC is not particularly high. The elevated and visible nature of the terraces reduces the VAC of these terrace areas.

The relatively high density of the area of the domain located near Levin (north of Muhunoa East Road) does present a higher level of VAC, because there is already a visible level of activity in terms of built structures and landscape modification that could be increased without negative impact.

OPPORTUNITIES & CONSTRAINTS

Proximity to both state highways, fairly comprehensive roading network and a mix of parcel sizes presents opportunities for effective development in this domain. However, the varied landscape character and strong hydrological presence provide constraints on how this should be approached.

The geomorphological processes of this domain result in areas of high class soils separated by bands of uplifted sandstone, rock outcrops, waterways and peaty swamps. These areas of non high class soils would be more appropriate for future development that encourages environmental enhancement and riparian rehabilitation, with the areas of high class soil retained for primary production purposes.

Consideration of adverse visual effects resulting from development of prominent sites on elevated terraces or uplands will also be required.

8. Kuku

LANDSCAPE CHARACTER

This domain has many of the same components that make up the character of the Levin-Ohau domain. The domain is located south of the Ohau settlement and extends to the southern boundary of the district.

Landform

The flat fertile plains are the dominant topographical element, of this domain which also includes a series of former river terraces from the Ohau River, Waikawa Stream and Manakau Stream. The active hydrological system in this area results in flood risks from these waterways, and this is exacerbated by the elevated water table in the area which are subject to ponding in prolonged wet weather.

Landcover

The presence of the fertile soil has resulted in a predominantly pastoral and horticulture environment. The original land cover of flax, kahikatea and other forest species found in areas of inundation has almost completely been cleared. Some isolated remnant areas of indigenous vegetation remain, which together with a number of significant wetlands support a wide range of indigenous flora and fauna.

Landuse

Land uses in this domain are a mix of dairying, pastoral farming and horticulture, at a range of scales, including some smaller and more intensive than in the other domains of similar character. Rural dwellings including farm worker accommodation associated with these production activities also occur within this domain.

This domain also accommodates sizeable non-production based activities such as the aggregate extraction operation.

VISUAL QUALITY

Natural Science Factors

The hydrology of the area is important to the character in visual terms as well as ecological. It underpins the land form, land use and land cover. The combination of these provides a particular visual quality, different from that existing prior to the cultivation of the area.

The remnant bush and functioning wetlands are of high quality. The Ohau River functions as a valuable ecological corridor despite the scale of primary productive land use which commonly impacts negatively on waterways. Rehabilitation projects are progressing well, however, mainly as a result of the reasonably healthy ecological networks in place.

Aesthetic values

The presence of primary production activities and in particular horticulture activities in this domain help create a varied, yet aesthetically pleasing landscape .

The naturalness of the high quality remnant bush stands and wetlands is also important.

SENSITIVITY

The waterways and remnant bush require protection, as does the productive/rural amenity of the area which is so important to the landscape character of this domain.

Visual absorption capability

The potential insertion of highly visible structures or groups of structures on the flat expansive plains and elevated terraces reduces the VAC of this domain. It is important that the location and design of structures is carefully considered, and that parcel sizes in this domain remain similar to the existing sizes, in appearance at least.

OPPORTUNITIES & CONSTRAINTS

In this domain there is a strong sense of an established culture of local productivity which requires protection and encouragement, but does not necessarily preclude complementary residential development.

The intensification of ecological processes, driven by the narrowing of the catchment between the Tararua Range and the coastal edge, provides both constraints in terms of the presence of high natural values but also the potential to use development as a means for enhancement and rehabilitation of those values.

Enhancement and rehabilitation could involve the streams, swamps and 'engineered' or modified waterways running through the catchment, which are at risk through stock activity and nitrification.

Care is required so that development is located to avoid visually prominent sites on the terraces to the east, and that existing vegetation and shelterbelts are utilised to screen and/or integrate structures in the more open areas to the west.

9. Manakau Downlands

LANDSCAPE CHARACTER

Varied landform and particular cultural/economic qualities make up this domain, which wraps around the eastern side of Manakau village. The village of Manakau has its own distinct character which is different from any other settlement in the district. It seems as if this character has permeated through into the environment beyond the village boundaries. The informal nature of the residential streets with no kerb or channel and narrow seal width within the Manakau village is an important element of the unique character of this rural village settlement.

Landform

The landform is a mix of types with discrete areas of more varied topography, particularly on the eastern side of the domain. Here, where the catchment is at its narrowest, the proximity of the foothills provides small enclosed areas, similar but more distinct to those found in the Tararua Terraces domain.

Landcover

Within the foothills the vegetation is mainly pine forest except in some areas where indigenous forest is regenerating. Otherwise, cover in this domain is predominantly pastoral grass and exotic trees, including shelter belts. There are some small isolated remnant bush stands within the pastoral areas.

Landuse

Pastoral farming is the most dominant of the land uses, ranging from small to large scale farms. Small scale horticultural activities also occur in this domain, reflecting the presence of high class soil around the fringes of the adjoining Kuku domain. More recently, lifestyle development has been occurring, in addition to the established small settlements or isolated buildings associated with the rural activities.

VISUAL QUALITY

Natural Science Factors

Natural values in the area are restricted to the remnant bush and wetland areas, as well as the regenerating bush on the foothills. Modification of the hydrological system through farm drains has reduced the visual quality of the waterways.

Aesthetic Value

The high level of rural character provides a 'picturesque' aesthetic. This results in the domain being vulnerable to development that is not in keeping with the current character or that would adversely affect the character of this domain and that of the Manakau village.

SENSITIVITY

The distinct character of this domain requires consideration of location, design and size of any development.

Developments adjacent to the Manakau village through insensitive design or by connecting to the existing roading network of the village could have a detrimental effect on the character of the village and in turn the overall character of this domain

Care should also be taken that no negative effects of development impact on the backdrop and views of the Tararua Range.

Visual absorption capability

The varied topography, and in particular the enclosed areas, provide a reasonably high level of VAC, as does the backdrop of dense forestry. Building on top of the elevated inland areas should be avoided so views of the Tararua Range are not compromised.

OPPORTUNITIES AND CONSTRAINTS

The particular character of this domain presents both opportunities and constraints in terms of development. So far, subdivision of parcels has been executed in a way that this domain retains its scale, which reflects that of the village itself. It is important that this character is maintained, as the domain is small and the particular characteristics could easily be overwhelmed by inappropriate development.

Development immediately adjacent to the Manakau village could be constrained by the existing village roading network as increased levels of traffic could adversely affect this important characteristic of the Manakau village.

The narrowing of the catchment in the southern part of the district means that the existing ecological and hydrological systems are intense and distinct and require protection and enhancement where possible. The limited presence of high class soil is not seen as a constraint.

The topography and existing vegetation provide opportunities for the integration and screening of future development. Adverse impacts from locating structures in prominent sites, or in such a way that the integrity of the Tararua Range is affected are possible if inappropriate development occurs.

10. Hill Country

LANDSCAPE CHARACTER

The Hill Country extends the full length of the western side of the district and is characterised by its consistent elevated nature. The character is influenced by the climate of the area. The range and its proximity to the Cook Strait produce a very high rainfall and north westerly winds up to gale force which sweep up over the lower parts of the area.

Landform

The domain contains land where the gradient of the hills typically becomes noticeably steeper and includes the taller of the foothills as well as the highest peaks of the Tararua mountain range at some 1570msl (metres above sea level).

The range consists of parallel ranges interspersed with deep river valleys. It covers some 3,168 square kilometres, stretching from the Manawatu Gorge approximately 100 kilometres to the south.

Landcover

On the western side of the ranges themselves, the vegetation is predominantly conifers, ferns, shrubs and vines, largely due to the approximate 5,000 millimetres of rain received annually.

On the lower levels of the ranges and on the foothills, the vegetation is largely scrub species resulting from areas reverting to bush after being farmed. Species include manuka, kamahi, tauhinu and bracken.

Landuse

Landuse in this domain very much depends on the elevation of the site. The highest levels form part of Tararua Forest Park, and the foothills contain large scale forestry, pastoral farming as well as remnant and regenerating areas of indigenous bush and scrub.

This domain contains the headwaters of many of the hydrological catchments in the district and therefore influences, to some degree, all of the other landscape domains. The significant natural habitats found often form one 'end' of the ecological corridors in this area and are important for any future remediation work within these catchments.

Exotic vegetation and fauna are also dominant features in this area.

Residential, or indeed rural, living is not a strong feature of this domain however this area does afford a range of recreation opportunities, which in their limited number are not inappropriate to this landscape.

This domain includes major infrastructure such as the reservoirs and dams associated with the Mangahao Hydro Electric Power Station.

VISUAL QUALITY

Natural Science Factors

The natural unmodified landscape of the Tararua Range is a dominant factor in the level of quality in this domain. Additionally, the areas that are reverting to indigenous bush cover are adding to the level of biodiversity in the area.

Aesthetic values

The Tararua Range has 'iconic' qualities. The foothills, with the gentle undulating form and the rural character of the farming activities have a different aesthetic quality that contributes to the amenity of this domain.

SENSITIVITY

This domain has a high level of sensitivity for all the reasons discussed above and below, and in general, development should be discouraged.

Visual absorption capability

The range provides limitations on the ability of this landscape to absorb change. It is important that views of this element are not affected by the insertion of structures above a certain level.

Lower down in the foothill area, there is a greater ability, through the undulating topography and the presence of forestry; however care still needs to be taken that visual effects of any development in this area maintain the rural amenity values and do not adversely impact on the outstanding landscape area.

OPPORTUNITIES & CONSTRAINTS

This landscape is highly sensitive. It is important that the amenity, landscape and natural values that result in the domain's iconic value be enhanced, or at the very least, maintained.

Residential or other inappropriate development should be severely restricted because of issues of high visibility and the level of landscape values in this domain.

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