

**Appendix 1 – Tracked Changes Version of Recommended Amendments to Proposed
One Plan – Chapters 7, 12 and Schedule E relating to the Biodiversity Hearing**

7 Living Heritage

7.1 Scope and Background

7.1.1 Scope

This chapter addresses three matters:

- (1) **Indigenous biological diversity** – The maintenance of indigenous biological diversity, the protection of areas of significant indigenous vegetation and significant habitats of indigenous fauna, and the division of responsibilities between the Regional Council and Territorial Authorities for managing indigenous biological diversity
- (2) **Landscapes and natural character** – The protection of outstanding landscapes and the management of the natural character of the coastal environment, wetlands, rivers, lakes and their margins
- (3) **Historic heritage** – The protection of historic places and archaeological sites.

7.1.2 Indigenous Biological Diversity

As discussed in Chapter 1, the decline of indigenous biological diversity ("biodiversity") is one of the four most critical issues addressed in this Plan.

Biodiversity in the Manawatu-Wanganui Region

The Manawatu-Wanganui Region now has only 23% of its original forest cover and 2% of its wetland habitat. The majority of the forest is found in the hillcountry and the ranges, with fragments scattered throughout the Region. Remaining natural habitat is small, fragmented and under pressure from pests and disturbance. Aquatic biodiversity is in a similar state of degradation with indigenous fish populations greatly reduced, poor habitat (loss of riparian margins and introduction of exotic fish and pest plants) and many barriers between coastal wetlands, streams and headwaters.

Much of the remaining indigenous biodiversity is in poor condition and health. Ecosystem processes are more often than not interrupted. The long-term viability of natural areas is further compromised by continued pressure from invasive species and surrounding land use. If such habitats and linkages between them are to survive they will require protection and ongoing management.

Future Approach

This Plan's approach to biodiversity management focuses primarily on habitats, rather than on individual species or genetic diversity. The Regional Council believes that by managing habitats it will most effectively sustain regional biodiversity into the future.

The Regional Council proposes to take a more active role around the coordination of biodiversity management within the Region. The Regional Council's overall biodiversity strategy is two-tiered, involving:

- (a) **Halting the decline** – Those habitats that are rare or threatened or at-risk (as shown in Schedule E of this Plan) will be given a high level of protection, through rules, from activities likely to cause any further loss or modification



- (b) **Active Management** – In addition, rare and threatened and at-risk habitats will be proactively managed through collaboration with landowners for work such as pest control and fencing, and provision of economic incentives such as grants and rates relief.

The protection and active management of sites on private land is crucial to maintaining indigenous biological diversity in the Region. Success in halting the biodiversity decline depends largely on the involvement and commitment of private landowners. This is a tall order for individuals, and the Regional Council recognises that the public good arising from maintaining indigenous biological diversity should not be solely at the expense of landowners. The Regional Council is therefore committed to seeking arrangements that adequately assist landowners and fairly apportion the costs of biodiversity management.

7.1.3

Landscapes and Natural Character

The protection of outstanding landscapes from inappropriate subdivision, use and development is a matter of national importance.

A number of outstanding or unique regional landscapes and their associated values are identified in Schedule F. Although the issue of landscape change and competing pressures is best dealt with at a territorial level, some policies giving guidance on the appropriate balance between important infrastructure, including renewable energy, and other values, such as landscape, are provided in Chapter 3.

Preservation of the natural character of the coastal environment, wetlands, rivers, lakes and their margins is also a matter of national importance. Natural character is a sliding scale and varies from a low degree of naturalness, such as urban environments, to a high degree of naturalness (for example, Tongariro National Park).

The approach of the One Plan is to maintain the current degree of naturalness of the natural character of the coastal environment, wetlands, rivers, lakes and their margins by:

- continuing to provide a regional policy on natural character to guide decision-making
- protecting and managing biodiversity, important wetlands, rivers and lakes as described elsewhere in this Plan.

The natural character of rivers, lakes and their margins can be adversely affected by activities, in particular structures and flood mitigation measures such as stop-banks. It is important that preservation of the natural character of rivers, lakes and their margins, where this is reasonable, is considered when making decisions on relevant activities. The natural character of wetlands can best be provided for by proactively managing the top 100 wetlands in the Region (as provided for in the sections of this chapter dealing with biodiversity).

The natural character of the coastal marine area is covered in Chapter 9. The natural character of the coastal environment landward of mean high water spring, wetlands, rivers, lakes and their margins is dealt with in this chapter.

The coastal environment has seen some change in the last 10 years. There has been an increase in residential subdivision on both the western and eastern coastlines. Within a 1-km inland coastal strip, however, this development accounts for only 4% of the area. Although residential development is expected to continue, it is unlikely to affect the natural character of the coast at a regional scale for some time beyond the life of this Plan. Nevertheless, it is important and



appropriate for local decision-making on land use, particularly residential subdivision, to continue to take into account the natural character of a particular area.

7.1.4 Historic Heritage

The protection of historic heritage from inappropriate subdivision, use and development is a matter of national importance. Some activities that are controlled by the Regional Council can have an adverse impact on historic heritage values. For example, earthworks can modify or destroy archaeological sites, and the discharge of sewage to land could have an adverse impact on the values of a particular site. The Regional Council can control these activities to ensure that adverse impacts are minimised.

Subdivision and land use can also have a negative effect on historic heritage values. This is particularly an issue in coastal areas which are rich in historic sites, including waahi tapu and archaeological sites. Subdivision and land development is controlled by Territorial Authorities.

7.2 Significant Resource Management Issues

Issue 7-1: Indigenous biological diversity

Indigenous biological diversity is not being maintained in the Manawatu-Wanganui Region. Only a small proportion of the original extent of indigenous habitats remains as a result of historical land development practices. The diversity within remaining areas is declining owing to their isolation and/or as a consequence of a range of activities, most notably:

- (a) pest plants and animals
- (b) stock access
- (c) land drainage, which impacts upon wetlands
- (d) perched culverts and other barriers to fish migration
- (e) run-off and discharges causing poor water quality
- (f) vegetation clearance*.

Issue 7-2: Landscapes and natural character

- (a) The Region's landscapes are at risk from the effects of development, particularly the Tararua and Ruahine ranges. Developments with the potential for greatest impact include wind farms, residential subdivision and other major structures.
- (b) The natural character of the coastal environment, wetlands, rivers, lakes and their margins is at risk from the effects of land-use activities and development, particularly new river works, drainage and subdivision in areas with a high degree of naturalness.

Issue 7-3: Historic Heritage

Historic heritage is at risk from the effects of land-use activities, particularly land disturbance*, activities in the beds of rivers and lakes, and discharges to land.

7.3

Objectives

Objective 7-1: Indigenous biological diversity

~~The existing level of indigenous biological diversity is maintained into the future by ensuring that:~~

- (a) rare and threatened habitats*, as defined in Schedule E, are protected from activities that may cause any more than minor loss or modification to the representativeness, distinctiveness or ecological context of the rare and threatened habitat*, as assessed in accordance with Table 7.1 of these areas
- (b) at-risk habitats*, as defined in Schedule E, are maintained by ensuring that activities do not cause any significant adverse effects on their to the representativeness, distinctiveness or ecological context of the at risk habitat*, as assessed in accordance with Table 7.1
- (c) the best representative examples of rare and threatened habitats* and at-risk habitats* are proactively managed in order to improve their function.

Whāinga 7-1: He kanorau kōiora taketake

Mea ake nei ka tiakina te taumata o nāianeī o te kanorau kōiora taketake kia hua ai:

- (a) *Ka whakamarumarutia ngā wāhi noho (e ai ki Schedule E) kua āhua onge, kua whakawetia hoki i ngā ngohe ka whakamate pea, ka whakarerekē rānei i te āhuatanga, te wehe kā, āhuatanga taupuhi kaiao rānei o ēnei wāhi*
- (b) *Ka tiakina ngā wāhi noho (e ai ki Schedule E) ka tāruke ki te mate kīa hua ai e kore e puta i ngā ngohe pānga kōaro ki ō rātou āhuatanga, wehe kā rānei, āhuatanga taupuhi kaiao rānei, ā*
- (c) *Ka tino whakahaeretia ngā tauira tino pai rawa atu o ngā wāhi noho kua āhua onge, kua whakawetia hoki, ka tāruke ki te mate hoki, hei whakapai ake i ā rātou mahi.*

Objective 7-2: Landscapes and natural character

- (a) The characteristics and values of the outstanding landscapes identified in Schedule F are protected as far as practicable.
- (b) Adverse effects, including cumulative adverse effects, on the natural character of the coastal environment, wetlands, and rivers, lakes and their margins are:
 - (i) avoided in areas with a high degree of naturalness.
 - (ii) avoided, remedied or mitigated in other areas.

Whāinga 7-2: Ngā mata whenua me te āhuatanga māori

- (a) *Ka whakamarumarutia ngā āhuatanga me ngā uara o ngā mata whenua motuhake (e ai ki Schedule F) e tika ana.*
- (b) *Ko ngā pānga kōaro, ehara tonu ko ngā pānga kōaro hui kaiao, ki te āhuatanga māori o te taiao takuta moana, ngā papa waiwai, ngā awa, ngā roto hoki, me ō rātou takiwā.*



- (i) *Ka parea i roto i ngā wāhi nui te āhua māori, ā*
- (ii) *Ka parea, ka whakatikaina, ka whakangāwaritia i wāhi kē.*

Objective 7-3: Historic Heritage

Historic heritage is protected from activities that would significantly reduce heritage values.

Whāinga 7-3: Ngā taonga tuku iho o mua

Ka whakamarumarutia ngā taonga tuku iho o mua i ngā ngohe whakaiti i ngā ūara taonga tuku iho.

7.4 Policies

7.4.1 Indigenous Biological Diversity

Policy 7-1: Responsibilities for maintaining indigenous biological diversity

In accordance with s 62(1)(i) RMA, local authority responsibilities for controlling land use activities for the purpose of maintaining indigenous biological diversity in the Manawatu-Wanganui Region are apportioned as follows:

- (a) **The Regional Council shall be responsible for:**
 - (i) developing objectives, policies and methods for the purpose of establishing a region-wide approach for maintaining indigenous biological diversity
 - (ii) developing rules controlling land use activities for the purpose of maintaining biological diversity.
- (b) **Territorial Authorities shall be responsible for:**
 - (i) implementing the objectives and policies of this chapter when developing rules and making decisions on subdivision and land-use consent applications
 - (ii) retaining schedules of notable trees and amenity trees in their district plans and/or such other measures as they see fit for the purpose of recognising amenity and cultural values associated with indigenous biological diversity.

Policy 7-2: Activities in Rare and Threatened Habitats

- (a) Rare and threatened habitats* are identified in accordance with Schedule E.
- (b) Rare and threatened habitats* shall be protected by generally not allowing any of the following activities unless the provisions of subsection (c) or (d) or (e) apply:
 - (i) vegetation clearance* or land disturbance* within these areas
 - (ii) discharges of contaminants to land or water, or drainage or diversion of water, within or near these areas.
- (c) The activities described in subsection (b) will be allowed where they are for the purpose of pest control or habitat enhancement.
- (d) The activities described in subsection (b) may be allowed where the activity is for the purpose of providing or maintaining infrastructure of regional or national importance as identified in Policy 3-1 and



- (i) There will be no significant adverse effect on the factors which contribute to the significance of the area as assessed in accordance with table 7.1, and
 - (ii) Any more than minor adverse effects are avoided as far as practicable, or
 - (iii) Any more than minor (but less than significant) adverse effects are remedied or mitigated as far as practicable, or offset to result in a net biodiversity gain to the Region.
- (d)(e) The activities described in subsection (b) may be allowed for other purposes where there are no more than minor adverse effects on the representativeness, rarity and distinctiveness or ecological context of the rare and threatened habitat*, as assessed in accordance with Schedule E Table 7.1.

Note: Rare and threatened habitats identified in Schedule E are likely to constitute significant indigenous areas under Section 6(c) of the Act, but this can only be determined following an assessment in accordance with Table 7.1.



Policy 7-3: Activities in at-risk habitats

- (a) At-risk habitats* are identified in accordance with Schedule E.
- (b) At-risk habitats* shall be maintained by regulating the following activities, and by making consent decisions in accordance with subsections (c) and (d):
 - (i) vegetation clearance* and land disturbance* within these areas
 - (ii) discharges of contaminants to land or water, and drainage and diversion and takes of water, within ~~or near~~ these areas.
- (c) The activities described in subsection (b) will be allowed where they are for the purpose of pest control or habitat maintenance or enhancement.
- (d) Where the activities described in subsection (b) are carried out for other purposes including for the purpose of providing or maintaining infrastructure of regional or national importance as identified in Policy 3-1, consent decisions will be made on a case by case basis, having regard to an assessment of the ecological significance of the site based upon the site's representativeness, rarity and distinctiveness, and ecological context as assessed in accordance with Table 7.1 Schedule E. Consents will generally be granted in circumstances where:
 - (i) there will be no significant adverse effects on the factors which contribute to the significance of the area as assessed in accordance with Schedule E, or
 - (ii) any significant adverse effects can be adequately avoided, remedied or mitigated as far as practicable, or offset to result in a net biodiversity gain to the Region.
 - (iii) financial contributions can be used to adequately compensate for or offset significant adverse effects.

Note: At-risk habitats may or may not constitute significant indigenous areas under Section 6(c) of the Act. This can only be determined following an assessment in accordance with Table 7.1.

Policy 7-4: Proactive management of representative habitats

- (a) The Regional Council will aim to improve the health and function of the best representative examples of rare and threatened habitats* and at-risk habitats* by working in partnership with relevant landowners to establish a plan and incentive programme for the voluntary proactive management of each of these areas by 2016.
- (b) For the purposes of subsection (a), separate programmes will be established for wetlands, bush remnants, native fish communities and coastal ecosystems.
- (c) The management plans under subsection (a) will generally address the following matters as a minimum:
 - (i) fencing and prevention of stock access
 - (ii) pest control
 - (iii) planting
 - (iv) agreed land uses
 - (v) work and materials to be provided by the Regional Council or a third party
 - (vi) financial assistance to be provided by the Regional Council or a third party
 - (vii) monitoring

- (viii) legal options for ensuring longevity of the measures implemented.

Policy 7-5: Fostering an ethic of stewardship

The Regional Council will aim to equip landowners and others with the information they need to act as good stewards for biodiversity, and to act responsibly and proactively. These initiatives will be additional to the council-led programmes under Policy 7-4.

Policy 7-6: Pest plants and animals

- (a) To the extent that they relate to the maintenance of biodiversity, the plant and animal pest management functions of the Regional Council will primarily target pests threatening rare and threatened habitats* and at-risk habitats*.
- (b) When making decisions about subdivisions and land-use activities, the risks of introducing plant or animal pests into rare and threatened habitats*, at-risk habitats* and nearby areas shall be taken into account.

Table 7.1 Criteria used for assessing ecological significance

Criteria	Assessment
<u>Representativeness</u>	<ul style="list-style-type: none"> The site contains habitat type that is under-represented (20% or less known or likely former cover), assessed either at the national, regional, water management zone, or water management sub-zone, Ecological District or Ecological Region.
<u>Rarity and Distinctiveness</u>	<ul style="list-style-type: none"> The site supports one or more species that are classified as threatened (as determined by the New Zealand Threat Classification System); or The site supports a species that is endemic to the Manawatu-Wanganui Region, or any given Water Management Zone, or Water Management Sub-zone, or Ecological District or Ecological Region; or The site supports a species, or community of species, that is distinctive to the Manawatu-Wanganui Region. Distinctiveness describes the uncommon presence, or unique assemblage of species or habitat at any given geographical location.
<u>Ecological Context</u>	<ul style="list-style-type: none"> The site provides connectivity (physical connections) between two or more areas of indigenous habitat; or The site provides an ecological buffer (is a closely adjacent site of similar, degraded or exotic habitat that provides protection) to another area of indigenous habitat, including aquatic habitat; or The site is an area of indigenous habitat that forms part of an indigenous ecological sequence (connectivity between different habitat types across a gradient (eg. altitudinal or hydrological).
<u>Ecological Sustainability</u>	<ul style="list-style-type: none"> The inherent ecological viability/long-term sustainability of the site; The size and shape of the site (affecting the long-term viability of species, communities and ecosystems, and amount of diversity).
<u>Previously Assessed Sites</u>	<ul style="list-style-type: none"> Any site assessed at a previous time, or by a previous agency, on criteria in keeping with the policies, objectives and criteria of this plan, to be of ecological significance.



7.4.2

Landscapes and Natural Character

Policy 7-7: Outstanding landscapes

The landscapes listed in Schedule F shall be recognised as outstanding. All subdivision, use and development affecting these areas shall be managed in a manner which:

- (a) avoids or minimises to the extent reasonable any adverse effects on the characteristics and values specified in Schedule F for each landscape
- (b) takes into account and avoids any cumulative adverse effects
- (c) takes into account the policies in Chapter 3 when assessing activities involving renewable energy and infrastructure of regional importance.

Policy 7-8: Natural character

The natural character of the coastal environment, wetlands, rivers, lakes and their margins shall be preserved and protected from inappropriate subdivision, use and development, by encouraging the natural character of these areas to be restored where appropriate and by making decisions on resource consent applications that take into account whether the activity:

- (d) is compatible with the existing level of modification to the environment
- (e) is necessarily located in or near the wetland, river or lake and whether any alternatives exist
- (f) is of an appropriate form, scale and design to blend with the existing landforms, geological features and vegetation
- (g) does not significantly disrupt natural processes or existing ecosystems

Policy 7-9: Public access

- (a) Activities within or near rivers and lakes shall be established and operated in a manner which readily provides for public access, and public access may be restricted only where necessary for safety, cultural or conservation purposes.
- (b) Public access for recreational purposes shall recognise the need to protect rare and threatened habitats* and at-risk habitats*.

7.4.3

Historic Heritage

Policy 7-10: Historic heritage

Historic heritage is recognised as a matter of national importance and all resource-use activities controlled by the Regional Council shall be managed in a manner which protects historic and archaeological values and avoids, remedies or mitigates any adverse effects, including cumulative adverse effects, on historic heritage.

7.5

Methods

The main non-regulatory methods the Regional Council will pursue are outlined below as action plan summaries.



Project Name	Wetlands – Biodiversity
Project Description	<p>The Regional Council and other agencies will work with landowners to protect and enhance priority wetlands throughout the Region. Resources will be directed towards the most significant sites.</p> <p>Wetland owners will be provided advice and financial/project management assistance to carry out enhancement and protection measures including fencing, planting, and pest (plant and animal) control. The Regional Council will seek funding from third parties to assist with this project, and encourage the establishment of covenants.</p> <p>Monitoring of the effectiveness of the protection and enhancement works will be undertaken.</p> <p>The project will include publicity to increase public awareness about the importance of wetlands and indigenous biological diversity.</p>
Who	Regional Council, Territorial Authorities, Department of Conservation, non-government agencies including NZ Fish and Game, QEII Trust, NZ Wetland Trust, NZ Landcare Trust and relevant funding agencies including the He Tini Awa Trust, Biodiversity Condition Fund, Nga Whenua Rahui and Ducks Unlimited.
Links to Policy	This project links to Policy 7-4.
Targets	The top 100 wetlands in the Region are actively managed, including protection and/or enhancement measures, within 10 years of this Plan becoming operative.

Project Name	Bush Remnants – Biodiversity
Project Description	<p>The Regional Council and other agencies will work with landowners to protect and enhance priority bush remnants throughout the Region. Resources will be directed towards the most significant sites.</p> <p>Bush remnant owners will be provided with advice and financial/project management assistance to carry out enhancement and protection measures including fencing, planting, and pest (plant and animal) control. The Regional Council will seek funding from third parties to assist with this project, and encourage the establishment of covenants.</p> <p>Monitoring of the effectiveness of the protection and enhancement works will be undertaken.</p> <p>The project will include publicity to increase public awareness about the importance of bush remnants and indigenous biological diversity.</p>
Who	Regional Council, Territorial Authorities, Department of Conservation, non-government agencies including QEII Trust and NZ Landcare Trust, and relevant funding agencies including the He Tini Awa Trust, Biodiversity Condition Fund and Nga Whenua Rahui.
Links to Policy	This project links to Policy 7-4.
Targets	The top 200 bush remnants in the Region are being actively managed, including protection and/or enhancement measures, within 10 years of this Plan becoming operative.

Project Name	Sites of Significance – Aquatic
Project Description	The Regional Council and other agencies will work with landowners to protect and enhance waterways and parts of waterways that serve an important role in the lifecycle of the Region's rare and threatened native fish. Resources will



Project Name	Sites of Significance – Aquatic
	<p>be directed towards the most significant sites.</p> <p>Waterway owners will be provided advice and financial/project management assistance to carry out enhancement and protection measures including fencing, planting, replacement of perched culverts and pest (plant and animal) control. The Regional Council will seek funding from third parties to assist with this project.</p> <p>Monitoring of the effectiveness of the protection and enhancement works will be undertaken.</p> <p>The project will include publicity to increase public awareness about the importance of native fish and indigenous biological diversity.</p>
Who	Regional Council, Territorial Authorities, Department of Conservation and funding agencies including the He Tini Awa Trust, Biodiversity Condition Fund and Nga Whenua Rahui.
Links to Policy	This project links to Policy 7-4.
Targets	The top 100 sites of significance – aquatic are actively managed, including protection and/or enhancement measures, within 10 years of this Plan becoming operative.

Project Name	Inanga Spawning and Native Fishery Sites – Biodiversity
Project Description	<p>The Regional Council and other agencies will work with landowners to protect and enhance waterways and parts of waterways (wetlands and streams) that serve an important role in the lifecycle of the inanga and whitebait species. Resources will be directed towards the most significant sites.</p> <p>Waterway owners will be provided advice and financial/project management assistance to carry out enhancement and protection measures including fencing, planting, replacement of perched culverts and pest (plant and animal) control. The Regional Council will seek funding from third parties to assist with this project.</p> <p>Monitoring of the effectiveness of the protection and enhancement works will be undertaken.</p> <p>The project will include publicity to increase public awareness about the importance of native fish and indigenous biological diversity.</p>
Who	Regional Council, Territorial Authorities, Department of Conservation and funding agencies including the He Tini Awa Trust, Biodiversity Condition Fund and Nga Whenua Rahui.
Links to Policy	This project links to Policy 7-4.
Targets	The top 30 inanga spawning and native fishery sites are actively managed, including protection and/or enhancement measures, within 10 years of this Plan becoming operative.

Project Name	Biodiversity (Terrestrial and Aquatic) Research, Monitoring and Reporting
Project Description	The aim of this project is to develop an integrated research, monitoring and reporting programme that supports delivery and refinement of existing policies and methods, guides implementation planning, and allows implementation effectiveness to be assessed.
Who	Predominantly Horizons Regional Council, with assistance from research institutes, universities and non-government agencies and community groups as required.



Project Name	Biodiversity (Terrestrial and Aquatic) Research, Monitoring and Reporting
Links to Policy	This project links to Policy 7-4.
Targets	A research, monitoring and reporting programme that supports delivery and refinement of existing policies and methods, and guides and assesses implementation.

Project Name	Education in Schools – Biodiversity
Project Description	The aim of this project is to raise awareness amongst the youth of the Region of the significance of our indigenous biological diversity, the threats to it, and what they can do to protect/restore it. This will be achieved through various environmental education programmes/initiatives eg., Green RIG, EnviroSchools, Trees for Survival etc.
Who	Horizons Regional Council, Department of Conservation, and various national and local environmental education providers
Links to Policy	This project links to Policy 7-5.
Targets	The Regional Council develops and delivers a biodiversity-related environmental education programme

Project Name	District Planning – Natural Features, Landscapes and Habitats
Project Description	<p>The Regional Council will formally submit on resource consent applications received by Territorial Authorities for land use activities where there is potential for effects on outstanding natural features, landscapes or native habitats.</p> <p>The Regional Council will formally seek changes to district plans if required to ensure provisions are in place to provide an appropriate level of protection to natural features, landscapes and native habitats.</p> <p><u>The Regional Council will formally seek changes to district plans if required, to ensure district plan rules requiring protection of indigenous vegetation and the habitats of indigenous fauna do not duplicate One Plan rules on biodiversity.</u></p>
Who	Regional Council and Territorial Authorities.
Links to Policy	This project links to Policies <u>7-1</u> , 7-7 and 7-8.
Targets	<ul style="list-style-type: none"> • Submissions completed on consent applications. • District plan changes sought if necessary by 2008.



7.6 Anticipated Environmental Results

Anticipated Environmental Result	Link to Policy	Indicator	Data Source
<u>Except for change because of natural processes, or change authorised by a resource consent, By 2017, the area of each habitat type identified as rare, threatened or at-risk is the same as that estimated prior to this Plan becoming operative, and no "not threatened" habitat types have fallen into the at-risk category.</u>	Living Heritage Policies: 7-1, 7-2, 7-3, 7-5, 7-6 and 7-8 Administration Policies: 2-1, 2-2, 2-3 and 2-5 Water Policies: 6-1, 6-2, 6-3, 6-4, 6-5, 6-7, 6-10, 6-17, 6-18, 6-19, 6-26 and 6-28	<ul style="list-style-type: none"> Area of each habitat type compared to former extent Number of rare and threatened and at-risk habitat sites damaged by unauthorised activities 	<ul style="list-style-type: none"> Landcare Research: Land Environments NZ Tool, Ecosat tool and Landcover Database 2 tool Horizons' incidents database
By 2017, the Region's top 100 wetlands and top 200 bush remnants will be in better condition than that measured prior to this Plan becoming operative.	Living Heritage Policies: 7-1, 7-4, 7-5, 7-6 and 7-8 Administration Policies: 2-1, 2-2, 2-3 and 2-5 Water Policies: 6-1, 6-2, 6-3, 6-4, 6-5, 6-7, 6-10, 6-17, 6-18, 6-19, 6-26 and 6-28	<ul style="list-style-type: none"> Number of top 100 wetlands and top 200 bush remnants under proactive management Habitat condition measure(s) 	<ul style="list-style-type: none"> Horizons' identification and assessment of significant indigenous aquatic, coastal and terrestrial habitat types Horizons' progress reports on results of proactive management of top wetland and bush remnant habitats
Except for change because of natural processes, at 2017 the characteristics/values of all outstanding landscapes and natural features identified in the Region (Schedule F) will be in the same state as assessed prior to this Plan becoming operative.	Living Heritage Policies: 7-7 and 7-8 Administration Policies: 2-1, 2-2, 2-3 and 2-5	<ul style="list-style-type: none"> Number of Schedule F outstanding landscapes and natural features where identified characteristics/values have been damaged Level of protection afforded to Schedule F outstanding landscapes and natural features in Territorial Authority district plans Ratio of successful submissions versus total submissions made on outstanding landscapes and natural features to Territorial Authority consent planning processes 	<ul style="list-style-type: none"> Outstanding landscapes and natural features characteristics/values assessment survey Horizons' incidents database Horizons' SED (Subdivision Enquiry Database) database Territorial Authority district plans Territorial Authority consent decisions

7.7 Explanations and Principal Reasons

Biodiversity

Rare and threatened habitats* are made up of habitats that are either naturally rare in the Region, (that is, there was never a large number of that type of habitat) or have been reduced to level of less than 20% of their original extent in the



Region. At this level they cannot sustain themselves without intervention. Even a small loss of, or small amount of damage to, these habitats may lead to the total loss of this habitat type in the Region.

At-risk habitats* are made up of habitats that have been reduced to a level of less than 33% of their original extent in the Region. These habitats are at risk of falling into the threatened category (described above) in the lifetime of this Plan if something is not done to prevent that habitat loss. At-risk habitats* also include those areas which provide a habitat for a rare or threatened species.

The objectives, policies and methods adopted here aim to prevent the further deliberate loss of rare and threatened habitats and to control activities which may have an adverse effect on the unique characteristics of at-risk habitats*. Also included are objectives, policies and methods to actively manage, improve and protect the best examples.

Landscapes

The protection of outstanding natural features and landscapes from inappropriate subdivision, use and development is a matter of national importance. While this issue is best dealt with at a territorial level, it is considered important that this document should continue to provide a list of outstanding natural features and landscapes and their associated values. The objectives, policies and methods adopted here are to provide guidance and direction in the protection of these values.

Natural character

Preservation of the natural character of the coastal environment, wetlands, rivers, lakes and their margins is a matter of national importance. The approach of the One Plan is to maintain the current degree of naturalness of the natural character of the coastal environment, wetlands, rivers, lakes and their margins. The objectives, policies and methods adopted in this document aim to achieve this by providing policy guidance on natural character to be taken into account when making decisions on applications which may affect natural character and by actively protecting and managing biodiversity.

12 Land-Use Activities and Land-Based Biodiversity

Policies

Policy 12-5: Consent decision-making regarding rare and threatened habitats, and at-risk habitats

The Regional Council will make decisions on resource consent applications involving rare and threatened habitats*, and at-risk habitats* in accordance with the [Objectives 7-1](#) and [pPolicies 7-2, 7-3, 7-4, 7-5 and 7-6](#) in Chapter 7, [and the objectives and policies in Chapter 3](#).

Rules – Vegetation Clearance and Land Disturbance

Rules – Land-based Biodiversity Including Wetlands

Rule	Activity	Classification	Conditions/Standards/Terms	Control/Discretion Non-Notification
12-7 <u>Activities within rare and threatened habitat* or at-risk habitat* where they occur as treeland*:</u>	<p>Any of the following activities within a rare and threatened habitat* or at-risk habitat* where they occur as treeland*:</p> <p>(a) <u>vegetation clearance*</u></p> <p>(b) <u>land disturbance*</u></p> <p>This rule does not apply to the activities described in subsections (a) to (b) in circumstances where:</p> <p>(c) <u>they are carried out for the purposes of controlling pests pursuant to a pest management strategy prepared under the Biosecurity Act 1993, or</u></p> <p>(d) <u>they are carried out for the purposes of protecting, maintaining or enhancing an at-risk habitat*, or</u></p> <p>(e) <u>the activity is a discharge of fertiliser in accordance with the permitted activity conditions in Rule 13-2</u></p> <p>(f) <u>they are classified as a discretionary, non-complying or prohibited activity under another rule.</u></p> <p><u>In which case the other rules of this Plan relevant to the activities apply.</u></p>	<u>Restricted discretionary</u>		<p><u>Discretion is reserved over:</u></p> <p>(a) <u>the nature, scale, timing and duration of activity</u></p> <p>(b) <u>effects on any nearby rare and threatened habitat* or at-risk habitat* for which the treeland is acting as a buffer.</u></p> <p>(c) <u>effects of removing trees which are providing or contributing to a riparian buffer.</u></p> <p>(d) <u>effects of removing trees which are providing crucial life supporting habitat to a threatened species.</u></p> <p>(e) <u>effects on the ecological significance of the site, as assessed in accordance with Table 7.1</u></p> <p>(f) <u>revegetation requirements</u></p> <p>(g) <u>procedures in the event of discovering or disturbing an archaeological site, waahi tapu or kōwhiri remains</u></p> <p>(h) <u>duration of consent</u></p> <p>(i) <u>review of consent conditions.</u></p> <p>(j) <u>compliance monitoring.</u></p>

Rule	Activity	Classification	Conditions/Standards/Terms	Control/Discretion Non-Notification
12-78 Activities within at-risk habitats	<p>Any of the following activities within an at-risk habitat:</p> <p>(a) vegetation clearance*</p> <p>(b) land disturbance*</p> <p>(c) discharges of contaminants into water, or into or onto land</p> <p>(d)(c) diversions of water:</p> <p>This rule does not apply to the activities described in subsections (a) to (bd) in circumstances where:</p> <p>(e)(d) they are carried out for the purposes of controlling pests pursuant to a pest management strategy prepared under the Biosecurity Act 1993, or</p> <p>(f)(e) they are carried out for the purposes of protecting or enhancing an at-risk habitat*, or</p> <p>(g)(f) they are carried out on for the purposes of military training using live ammunition under the Defence Act 1990</p> <p>(h)(g) they are classified as a discretionary, non-complying or prohibited activity under another rule</p> <p>in which case the other rules of this Plan relevant to the activities apply.</p>	Restricted discretionary (d)		<p>Resource consent applications under this rule will not be notified and written approval of affected persons will not be required (notice of applications need not be served on affected persons).</p> <p>Discretion is reserved over:</p> <p>(a) the nature, scale, timing and duration of activity</p> <p>(b) effects on the ecological significance of the site, as assessed in accordance with Table 7.1</p> <p>(c) revegetation requirements</p> <p>(d) mitigation of effects on biodiversity, including offsets</p> <p>(e) procedures in the event of discovering or disturbing an archaeological site, wahi taou or kōwhiri remains</p> <p>(f) duration of consent</p> <p>(g) review of consent conditions.</p> <p>(h) compliance monitoring.</p> <p>Resource consent applications under this rule will not be notified and written approval of affected persons will not be required (notice of applications need not be served on affected persons).</p>
12-89 Activities within	Any of the following activities within a rare or threatened habitat:	Discretionary (h)		

Rule	Activity	Classification	Conditions/Standard's/Terms	Control/Discretion Non-Notification
rare and threatened habitats including wetlands	<p>(a) vegetation clearance*</p> <p>(b) land disturbance*</p> <p>(c) discharges of contaminants into water, or into or onto land</p> <p>(d)(c) diversions of water, including for the purpose of wetland drainage.</p> <p>This rule does not apply to the activities described in subsections (a) to (b) in circumstances where:</p> <p>(e)(d) they are carried out for the purposes of controlling pests pursuant to a pest management strategy prepared under the Biosecurity Act 1993, or</p> <p>(e)(e) they are carried out for the purposes of protecting or enhancing a rare or threatened habitat*, or</p> <p>(e)(f) they are carried out on for the purposes of military training using live ammunition under the Defence Act 1990</p> <p>(e)(g) they are classified as a non-complying or prohibited activity under another rule.</p> <p>In which case the other rules of this Plan relevant to the activities apply.</p>			

16. APPENDIX 4: REDRAFTED SCHEDULE E

Schedule E: Indigenous Biological Diversity

Rare or Threatened or At Risk habitat types are areas of indigenous vegetation of a type identified in Table E1 as being "Rare" or "Threatened" or "At Risk" and which meets any of the criteria described in Table E2(a) for determining whether an area of indigenous vegetation constitutes a "habitat" for the purposes of this Plan and does not meet any of the criteria for in Table E2(b) for excluding the area from consideration as "habitat".

Indigenous vegetation refers to an assemblage of species that co-exist together and which provide resources for other species. Indigenous habitat is habitat comprised primarily of indigenous species, but which can include exotic species.

It is recommended that a suitably qualified expert is engaged for assistance with implementing Schedule E. This could be:

- a) a consultant ecologist
- b) Horizons staff (who will provide this service, including advice and a site visit where required in the first instance. It may be that following this initial provision of information, the proposal will require an Assessment of Ecological Effects to be provided as a component of the consent application. In such instances it is recommended that a consultant ecologist be engaged to conduct the assessment).

Horizons can in all cases, provide any spatial data and existing site information where available as relevant to the site and the proposed activity.

Interpreting Schedule E:

Q.1 Do I need a resource consent?

YES IF:

A. The area of vegetation is determined to be habitat type classified as 'Rare', 'Threatened' or 'At Risk' as described in Table E.1 **AND** meets any criteria in section (a) of Table E.2.

NO IF:

A. The area of vegetation is determined to be habitat type that is not classified in Table E.1
OR

B. The area of vegetation is determined to be habitat type classified as 'Rare', 'Threatened' or 'At Risk' in Table E.1 but **does not** meet any criteria in section (a) of Table E.2, or **does** meet any criteria in section (b) of Table E.2.

Q.2 What rule stream classification will my proposal be assessed under?

Does the proposed activity impact on habitat type that is classified (Table E.1) as any of the following?

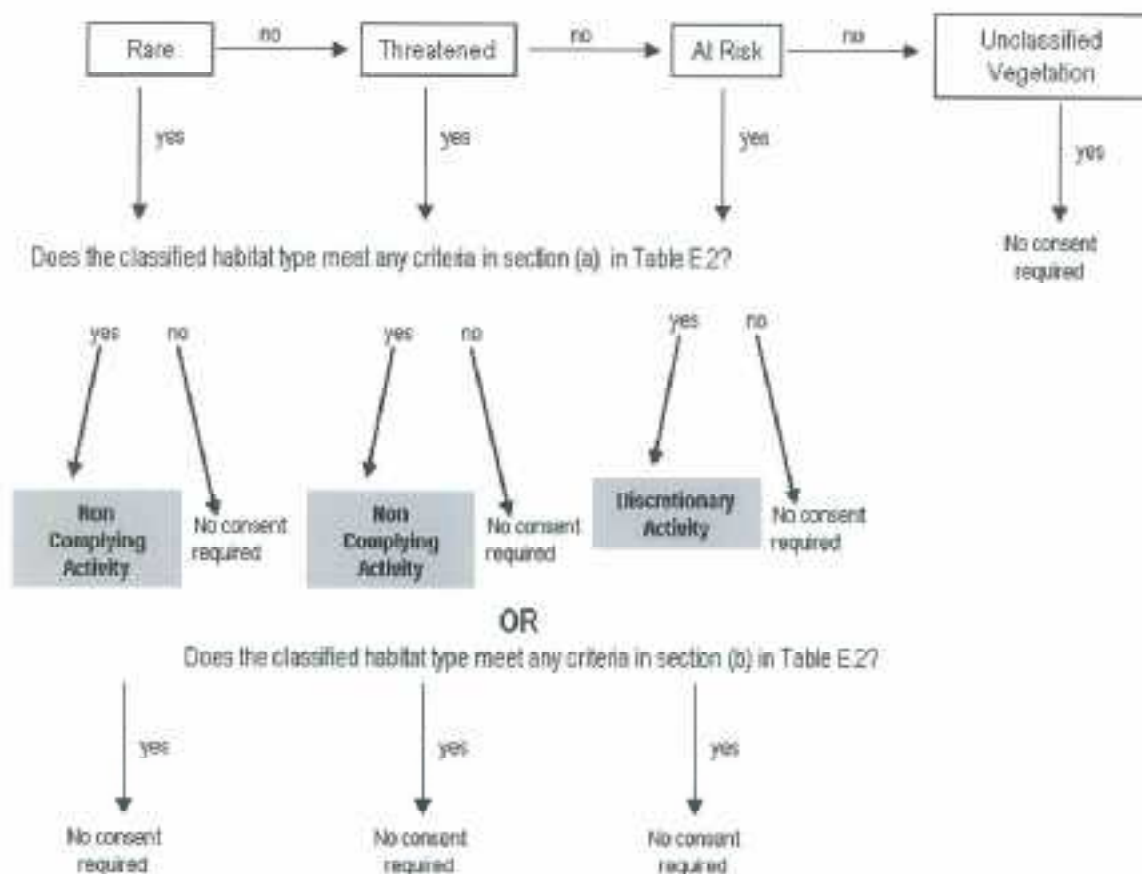


Table E.1:

Habitat Type Name	Defined As	Rule Stream Classification	Indicative Description ²
Hall's totara/silver beech-kamahi forest	Hall's totara/silver beech-kamahi-southern rata As per Leathwick <i>et al.</i> , 2005 ¹	Threatened	This habitat type is found at higher elevations and is dominated by a canopy of silver beech, commonly in association with a high abundance of kamahi. Podocarp species such as Hall's totara, totara, rimu and miro can be emergent at lower elevations where the silver beech is less dominant. Northern rata may be scattered throughout, although its presence will be strongly influenced by the presence (current or historic) of possum.
Hardwood/broadleaf forest	Kauri/tairāke-kōhekehe-tawa forest As per Leathwick <i>et al.</i> , 2005 ¹	Threatened	The hardwood/broadleaf forest is dominated by tawa with kamahi, hinau, black maire, and northern rata also typically present. Kahikatea, rimu and/or totara may be emergent. Titoki and rewarewa may also be a feature. The subcanopy is likely to comprise common broadleaved species.
Kahikatea-pukatea-tawa forest	Kahikatea-pukatea-tawa forest As per Leathwick <i>et al.</i> , 2005 ¹	Threatened	This habitat type is likely to be characterised by the presence of the swamp forest species kahikatea and pukatea in association with tawa in the drier, better drained or raised areas. Matai, rimu and totara can be present but are restricted to better-drained soils. In areas where soils are poorly drained, titoki may be locally abundant in the drier areas of these soils. This habitat type can be found on lowland alluvium and floodplains.
Podocarp forest	Matai-kahikatea-totara forest As per Leathwick <i>et al.</i> , 2005 ¹	Threatened	Podocarp forest is likely to be dominated by the podocarp species matai, kahikatea or totara. The dominance of any of these species is dependant on the drainage capability of the soil and history of past disturbance. Totara and matai are likely to be more abundant on free-draining soils, with kahikatea likely to be dominate on poorly-drained soils. Broadleaved species (for example titoki, tawa, maire and fuchsia) are likely to be found in association with the podocarp species, but will be less common than the podocarp species.
Podocarp/black beech/mountain beech forest	Matai-totara/black beech/mountain beech forest As per Leathwick <i>et al.</i> , 2005 ¹	Threatened	This habitat type comprises black and mountain beech forest. Emergent podocarp species (eg. matai, totara, kahikatea, rimu or miro). Small broadleaved trees are also likely to be present. This habitat type can be found at mid-altitudinal zones in dry climates, on free draining, relatively fertile soils.

Habitat Type Name	Defined As	Rule Stream Classification	Indicative Description ²
Podocarp/broadleaf-fuchsia forest	Matai-totara-kahikatea-rimu/broadleaf-fuchsia forest As per Leathwick <i>et al.</i> , 2005 ¹		Podocarp/broadleaf-fuchsia forest is dominated by common broadleaved species over which matai, totara, kahikatea or rimu may be present to varying degrees. Climbers and epiphytes are likely to be common. This habitat type tends to favour adequately drained and reasonably fertile soils. Although typically a feature of this habitat type, fuchsia is favoured by possums and may be uncommon in many areas.
Podocarp/red-beech-kamahi-tawa forest	Rimu-miro/tawari-red beech-kamahi-tawa forest As per Leathwick <i>et al.</i> , 2005 ¹	Threatened	Red beech, kamahi and tawa tend to dominate this mid-altitudinal habitat type. Podocarp species such as rimu and miro may be present scattered through the canopy, or as emergent trees. Broadleaved species may also be present in the subcanopy and understorey.
Podocarp/tawa-mahoe forest	Kahikatea-matai/tawa-mahoe forest As per Leathwick <i>et al.</i> , 2005 ¹	Threatened	Podocarp/tawa-mahoe forest is dominated by tawa and mahoe. Kahikatea and/or matai trees are likely to be present in the canopy or as emergent trees. Rimu and totara may also be present in low numbers. Tawa, mahoe, titoki, hinau, mairi or pukatea may also be present. The subcanopy is likely to comprise common broadleaf species. This habitat type is found on dry dune land and low hill country.
Rimu/tawa-kamahi forest	Rimu/tawa-kamahi forest As per Leathwick <i>et al.</i> , 2005 ¹	Threatened	This habitat type is dominated by tawa and kamahi with hinau, rewarewa and/or mahoe common. Rimu may be a feature of this habitat type, although its frequency will be dependent on the history of disturbance of the site. Miro and totara may also be present with kahikatea and matai likely to be less common. Pukatea is commonly likely to be present, particularly in valleys. Black beech may be locally common (eg. inland from Wanganui). Common broadleaved species are also likely to be present in the understorey.
Hall's totara/broadleaf forest	Hall's totara/broadleaf forest As per Leathwick <i>et al.</i> , 2005 ¹	At Risk	Hall's totara is a dominant component of this habitat type and may be emergent above the more common broadleaved species. Kamahi can also be a component of this habitat type, with matai and miro also likely to be present at lower altitudes. This habitat type is the dominant habitat type above 800 m asl and can be found in sites where beech is absent.

Habitat Type Name	Defined As	Rule Stream Classification	Indicative Description ³
Mountain beech forest	Mountain beech forest As per Leathwick <i>et al.</i> , 2005 ¹	At Risk	Mountain beech forest is dominated by mountain beech, often occurring without many other tree species although mountain conifers and other species may be present in places. The understorey is typically sparse. Mountain beech forest is a common habitat type of the mountains (especially on eastern slopes), occurring at higher altitudes where soils are thinner and less fertile. Mountain beech can tolerate cold temperatures and dry winds and mountain beech forest can be dominant in these areas.
Podocarp/kamahi forest	Rimu-matai-miro-totara/kamahi forest And Rimu-miro-totara/kamahi forest As per Leathwick <i>et al.</i> , 2005 ¹	At Risk	Podocarp/kamahi forest is characterised by podocarp species (rimu, miro, kahikatea, matai or totara) in varying dominance over abundant kamahi. The degree of dominance of each of the podocarp species will be dependent on soil drainage. Tawa, northern rata, hinau, manie, fuchsia and/or mahoe may also be present.
Kanuka forest	Kanuka forest is dominated by almost pure stands of kanuka. Kanuka forest can be differentiated from kanuka scrub by size (greater than 2 m tall or 20 cm diameter (diameter at breast height (dbh) taken at 1.5 m above the ground).	Threatened	Manuka and common broadleaved species can also be present scattered through the canopy or comprising the understorey.
Lichenfield, tussockland, herbfield, shrubland, scrub ³ on Silicic-intermediate rock	Where lichenfield, tussockland, herbfield, shrubland or scrub occurs on coastal cliffs of silicic-intermediate rock. Silicic rock is igneous rock that is rich in silica (SiO ₂). Silicic-intermediate rock has a silica content of between 52-63%. As per Williams <i>et al.</i> , 2006 ⁴	Rare	Vegetation types typically found in this habitat include lichen species, non-woody or low-growing semi woody herbs, tussocks, shrubs and scrub. Species characteristic of these vegetation types include, for example, <i>Pimelea</i> , sea primrose, <i>Selliera</i> , flax, toetoe, <i>Astelia</i> , <i>Hebe</i> , daisy species, kawakawa, mahoe and broadleaved.
Grassland, sedgeland ³ on active dunelands.	Where grassland or sedgeland occurs on active dunelands formed on raw coastal sand. As per Williams <i>et al.</i> , 2006 ⁴	Rare	Active dunelands are characterised by unstable sands. This continual instability of sand prevents the formation of soil and therefore the vegetation type that an active duneland can support is limited. Examples are <i>Spinifex</i> grassland and pingao sedgeland. Other indigenous species can also be present eg. sand convolvulus and sand <i>Carex</i> .

Habitat Type Name	Defined As	Rule Stream Classification	Indicative Description ²
Grassland, tussockland, herbfield, shrubland ³ on stable dunelands	Where grassland, tussockland, herbfield, or shrubland occurs on stable dunelands formed on recent coastal sand. As per Williams <i>et al.</i> , 2006 ⁴	Rare	Vegetation types typically found on stable duneland include; tussocks, low-growing or semi-woody herbs and shrubs. These vegetation types characteristically support, for example, toetoe, <i>Selliera rotundifolia</i> , sand <i>Gunnera</i> , native spinach, sand <i>Coprosma</i> , sand daphne, coastal tree daisy, pohuehue, tauhinu, <i>Coprosma</i> species and hangehange. Exotic invasive species are also a feature of stable duneland.
Tussockland, herbfield, scrub, forest ² on inland duneland	Where scrub, tussockland, herbfield or forest occurs on inland dunelands formed on raw or recent sands inland. As per Williams <i>et al.</i> , 2006 ⁴	Rare	Vegetation types typically found on inland duneland include; tussock, low-growing or semi-woody herbs, shrubs, small trees and forest trees. These vegetation types characteristically support, for example, toetoe, flax, native spinach, manuka, kanuka, mahoe, lancewood, five-finger, hangehange, cabbage trees, titoki, akeake, ngaio, tawa, pigeonwood and mahoe.
Dune slack wetland	Dune slack wetlands are found in areas where wind has eroded hollows or depressions, or a topographically low area where water is permanently or seasonally ponded. As per Johnson and Gerbeaux, 2006 ⁵ and Williams <i>et al.</i> , 2006 ⁴	Rare ⁶	Dune slack wetlands typically support herbfields ³ .
Ephemeral wetland	Ephemeral wetlands are usually of moderate fertility, and neutral pH, characterised by a marked seasonal high water table, ponding and drying. Change in water levels can be very dramatic to the point of complete drying and fluctuations between aquatic and terrestrial plant species can occur. Ephemeral wetlands are feed by ground water or an adjacent water body. As per Johnson and Gerbeaux, 2006 ⁵ and Williams <i>et al.</i> , 2006 ⁴	Rare ⁶	Ephemeral wetlands typically support turf habitat (generally < 3 cm tall). Turf habitat contains 62% of New Zealand's threatened or uncommon plants. Ephemeral wetlands can also sometimes support rushland ² scrub.

Habitat Type Name	Defined As	Rule Stream Classification	Indicative Description ²
Pakihi wetland	<p>Pakihi wetlands are often found in association with bogs and fens.</p> <p>Pakihi wetlands are rain-fed systems on mineral or sometimes peat substrate of very low fertility and low pH and can be seasonally dry.</p> <p>As per Johnson and Gerbeaux, 2006³ and Williams <i>et al.</i>, 2006⁴</p>	Rare ⁵	Pakihi can be found on level to rolling or sloping land in areas of high rainfall and old soils. Pakihi can support restiads, sedges, fernland, heathland and shrubland ³ .
Seepage and Spring wetlands	<p>These wetlands are represented by areas of water that have percolated to the surface, with the volume of water present at seepages being less than that at springs. Substrates, nutrient levels and pH can vary from site to site.</p> <p>As per Johnson and Gerbeaux, 2006³ and Williams <i>et al.</i>, 2006⁴</p>	Rare ⁶	Seepages and springs can be found at the point of change of slopes, and places where the water table is raised. These wetlands can support sedgeland, cushionfield, mossfield or scrub. ³
Swamp wetlands	<p>Swamp wetlands are generally of high fertility receiving nutrients and sediment from surface water and groundwater. Substrates are generally a combination of peat and mineral. Standing water and surface channels are often present, with the water table either permanently, or periodically, above much of the ground surface.</p> <p>As per Johnson and Gerbeaux, 2006⁵</p>	Threatened	Swamp wetland can be found on plains, valley floors and basins. Swamps can support sedges, rushes, reeds, flaxland, tall herbs, shrubs scrub and forest ³ .

Habitat Type Name	Defined As	Rule Stream Classification	Indicative Description ²
Bog and fen wetlands	<p>These wetland classes are often found in association with each other.</p> <p>Bogs are formed on peat with rainwater the only source of water. Bogs are nutrient poor, poorly drained and aerated and usually acid. The water table is usually close to or just above the ground surface.</p> <p>Fens are wetlands of low to moderate acidity and fertility with a substrate of predominantly peat. Receives ground water and nutrients from adjacent mineral soils. The water table is usually close to or just below the surface.</p> <p>As per Johnson and Gerbeaux, 2006⁵</p>	Threatened	<p>Bogs can be found on relatively level or gently sloping ground including hill crests, basins, terraces and within other wetland classes. Bogs can support mosses, lichens, cushion plants, sedges, grasses, restiads, ferns, shrubs and trees.</p> <p>Fens can be found on slight slopes (eg. fans), toes of hillsides, on level ground where peat hasn't accumulated much and can grade into swamp. Fens support restiads, sedges, ferns, tall herbs, tussock grasses and scrub.</p>
Saltmarsh wetlands	<p>Saltmarsh occurs within areas of tidal and saline influences. Water sources come from ground water and adjacent saline or brackish waters.</p> <p>As per Johnson and Gerbeaux, 2006⁵</p>	Threatened	Saltmarsh can support herbfield, rushland, and scrub ¹ . Saltmarsh wetlands can also include areas of mudflats.
Lakes and Lagoons and their margins (including dune lakes)	<p>The lakes in the Manawatu-Wanganui Region are associated with dune, river (including ox-bow lakes) and volcanic activities.</p> <p>As per Johnson and Gerbeaux, 2006⁵</p>	Threatened	Lakes can exist entirely within a swamp, or have elements of wetland habitat on the lake margins. Lakes can also be associated with terrestrial habitat on the lake margins.
Riparian margin	<p>Any vegetation (whether indigenous or not, and including classified elsewhere in Schedule E) within 20 m of an area as identified in Schedule D as being a Site of Significance-Aquatic.</p>	At Risk	<p>Riparian margin vegetation can comprise indigenous vegetation, exotic vegetation or a combination of both and of any structure¹. This habitat type will vary greatly between patches in both structure and composition, and might be highly modified, contain artificial assemblages of species or include deliberately planted species (indigenous or exotic).</p>
Habitat type containing species	<p>Any vegetation (whether indigenous or not, and including vegetation that has not been classified elsewhere in Schedule E) that contains, or could be reasonably known to contain, any species as listed in Table E.3 of this Schedule.</p>	At Risk	<p>Riparian margin vegetation can comprise vegetation of any structure¹, indigenous vegetation, exotic vegetation or a combination of both.</p> <p>This habitat type is likely to vary greatly between patches in both structure and composition and might be highly modified.</p>

² Leathwick, J., McGlone, M., Walker, S. and Briggs, C. 2005, *Predicted Potential Natural Vegetation of New Zealand* (poster), Landcare Research Ltd, Lincoln New Zealand. Manatiki Whenua Press. See also the accompanying paper: Leathwick, J., McGlone, M. and Walker, S. (unpublished). *New Zealand's Potential Vegetation Pattern*. Landcare

Research, Lincoln New Zealand. Some habitat type names have been modified in this plan for clarity and to make them more applicable to the Manawatu-Wanganui Region.

² Some species listed are likely to not be present, or be present in different abundances than indicated. Other species not listed here are also likely to be present. There will be differences in predicted composition and actual composition on the ground, particularly as a result of site modification and pest impacts.

³ Vegetation structure is defined in Atkinson, I.A.E. 1985. Derivation of vegetation mapping units for an ecological survey of Tongariro National Park, North Island, New Zealand. *New Zealand Journal of Botany* 23:361-378.

⁴ Williams, P.A., Wiser, S., Clarkson, B., Stanley, M. 2006. A physical and physiognomic framework for defining and naming originally rare terrestrial ecosystems: first approximation. *Landcare Research Internal Report: LCO506/185*. Landcare Research New Zealand Ltd.

⁵ Johnson, P. and Gerbeaux, P., 2004. *Wetland Types in New Zealand*. Department of Conservation, Wellington.

⁶ Wetland habitat found on active, stable or inland dunelands have been identified as Rare habitat type according to Williams *et al.*, 2006.

Table E.2: - THIS TABLE, IN PARTICULAR THE LIST UNDER (a), REQUIRES AMENDMENT TO REMOVE INCONSISTENCIES, AND TO PROVIDE CLARITY

(a) An area of any habitat type described in Table E.1, is also required to meet one of the following criteria to be considered habitat for the purposes of this plan	
i.	Areas of indigenous tussockland, grassland or sedgeland (as defined in Table E.1) covering at least 0.2 ha.
ii.	Areas of lichenfield, herbfield or mossfield (as defined in Table E.1) covering at least 0.1 ha. Or
iii.	Open water associated with wetland habitat, excluding stock ponds less than 0.5 ha in area. Or
iv.	Areas of naturally occurring indigenous wetland habitat either in association with open water (fresh or estuarine), or excluding open water, covering at least 0.1 ha. Or
v.	Areas of continuous indigenous vegetation covering at least 0.25 ha within any Water Management Sub-zone coded red (Figure E.1). Or
vi.	Areas of continuous indigenous vegetation covering at least 1 ha within any Water Management Sub-zone coded orange or yellow (Figure E.1). Or
vii.	Areas of Threatened habitat type where it occurs as treeland over at least 1 ha. Or
viii.	Areas of treeland over at least 1 ha within any Water Management Sub-zone coded red (Figure E.1) Or
ix.	Areas of treeland over at least 2 ha within any Water Management Sub-zone coded orange or yellow (Figure E.1) Or
x.	Areas of continuous indigenous vegetation covering at least 0.5 ha, where one or more other areas of indigenous habitat (covering at least 0.5 ha), is present up to 500 m away. Or
xi.	Areas of continuous indigenous vegetation covering at least 0.5 ha that support indigenous understorey vegetation. Or
xii.	Discontinuous indigenous vegetation present within 50 m of an area of continuous indigenous vegetation covering at least 0.5 ha. Or
xiii.	Areas of indigenous covering at least 0.5 ha in gully systems. Or
xiv.	Areas of continuous indigenous vegetation within 5 m of a river bed and covering at least 0.1 ha and extending at least 100 m along the length of the river. Or
xv.	Areas of indigenous scrub or shrubland covering at least 0.2 ha on stable inland duneland within any Water Management Sub-zone coded red (Figure E.1), or on coastal cliffs of silicic-intermediate rock. Or
xvi.	Areas of indigenous vegetation that have been established for the purpose of habitat manipulation including habitat creation, restoration and buffering, where such an area covers at least 1 ha as a discrete site or at least 0.5 ha where it is adjacent to an existing area of indigenous habitat. Or
xvii.	Areas of indigenous habitat created at some time in the course of dune habitat restoration (including dune stabilisation). Or
xviii.	Areas of indigenous vegetation that have been established in the course of wetland habitat restoration. Or
xix.	Areas of artificially created wetland habitat covering at least 0.5 ha (excepting areas that met criteria (b)vi, (b)vii, (b)viii or (b)ix. Or
xx.	An area of vegetation of any size or species composition (including exotic vegetation, but excluding exotic pasture) within 20 m of an area identified in Schedule D as being a Site of Significance – Aquatic. Or
xxi-xx.	An area of vegetation that of any size or species composition (including exotic vegetation, but excluding production forestry and pasture that contains or is known to contain a species as listed in Table E.3.

(b) An area of any habitat type described in Table E.1, is **not** be considered habitat for the purposes of this plan if it meets **one** of the following criteria:

- i. Areas of treeland excluding sites that meet any of the criteria vii – ix in section (a) of Table E.2. Or
- ii. Woodlots of indigenous tree species planted for the purposes of timber harvest. Or
- iii. Stock ponds less than 0.5 ha created for the purposes of stock watering, or water storage for the purposes of irrigation, (including old gravel pits but excluding lakes and areas of open water associated with wetland habitat).
- iv. Damp paddocks, or paddocks subject to regular ponding, dominated by pasture species in association with wetland sedge and rush species. Or
- v. Ditches or drains supporting raupo, flax or other wetland species (eg. *Carex* sp., *Isolepis* sp.), or areas of these species in drains or slumps associated with road reserves or rail corridors. Or
- vi. A pond and/or barrier ditch system specifically designed and installed for the purpose of treatment of animal effluent. Or
- vii. Habitat created and maintained for the purposes of waste water treatment. Or
- viii. Habitat created and maintained in association with hydro electric power generation. Or
- ix. Open water and associated vegetation created for landscaping purposes or amenity values where the planted vegetation is predominately exotic or includes assemblages of species not naturally found in association with each other, on the particular landform or at the geographical location of the created site. Or
- x. Indigenous vegetation planted for landscaping, horticultural (including shelter belts) or private gardening purposes.

[MAP]

Figure E.1: Map of the Manawatu-Wanganui Region with Water Management Sub-zones coloured according to habitat type classification. Red coloured WMS indicate that where habitat exists within that WMS it is predominately Threatened habitat type. Orange coloured WMS indicate that where habitat exists within that WMS it is predominately Threatened or At Risk habitat type. Yellow coloured WMS indicate that where habitat exists within that WMS it is predominately vegetation not classified by this Schedule. This map is to be read in conjunction with criteria in Table E.2. SUBJECT TO AMENDMENTS MADE TO TABLE E.2. THIS FIGURE SHOULD BE DELETED.

Any vegetation (whether indigenous or not, but with the exception of production forest and pasture) is considered to be At Risk habitat type for the purposes of this plan if it contains, or could be reasonably known to contain, a species listed in Table E.3.

When determining ecological assessment of a site through a resource consent process, threatened species classification should in all cases be determined by current national threatened species lists as per the current New Zealand Threat Classification System.

It is noted that the habitat type which the threatened species is utilising or reliant on, will be the focus of the consideration during the resource consent process, not management of the species *per se*. Species management of threatened species remains the mandate of the Department of Conservation.

Table E.3: Table E.3 lists a sub-set of threatened species listed in threatened species lists (Hitchmough, *et al.*, 2005) and is not an exhaustive list of threatened species that occur in the

Manawatu-Wanganui Region. The species listed here are threatened species that occur in habitat type that is not adequately protected elsewhere in Schedule E or where populations in the Manawatu-Wanganui Region provide national strongholds for that species. The exclusion of a given species from this table does not indicate that species is not considered to be threatened.

Common Name	Scientific Name	Description	Status ¹	Water Management Zones Sub-zones where these species may occur
Vascular plants				
Gardners tree daisy	<i>Olearia gardneri</i>	Divaricating shrub-small tree found (up to 3 m) in Podocarp forest on alluvial terraces, associated with other divaricating shrubs and trees.	Nationally Critical	Rang_2f, Rang_2g
Sand daphne	<i>Pimelea "Turakina"</i>	A low growing, grey-green shrub of sand dunes.	Nationally Critical	Tura_1b, West_5, Whau_4
(none known)	<i>Myosotis pygmaea</i> var. <i>minutiflora</i>	Low growing short lived herb of coastal shingle habitats.	Nationally Vulnerable	Hoki_1a, Hoki_1b, Mana_12c, Mana_13a, Mana_13f, Ohau_1b, Rang_4a, Rang_4b, Rang_4d, Tura_1b, West_1, West_2, West_3, West_4, West_5, West_6, West_7, West_8, West_9, Whai_7b, Whau_4
Sand daphne Autetaranga Toroheke Sand pimelea	<i>Pimelea arenaria</i>	Prostrate coastal shrub (less than 30 cm) found on the landward side of the fore dunes, back hollows and blowouts. Small white flowers on the ends of the branches.	Gradual Decline	Mana_13a, Rang_4b, Rang_4b, West_5, West_6
(none known)	<i>Seddera rotundifolia</i>	A prostrate coastal mat-forming herb (up to 700 mm in diameter), growing in dune fields in seasonally damp swales (ephemeral wetlands) and occasionally found along the margins of slow flowing tidal streams.	Gradual Decline	Mana_13a, Rang_4b, Rang_4b, West_5, West_6
New Zealand sow thistle Puha Shore puha	<i>Sonchus oleraceus</i>	Biennial to perennial herb up to 1m tall of coastal habitat, usually on cliff faces in or around damp seepages.	Gradual Decline	Akit_1b, Akit_1c, East_1, Hoki_1a, Hoki_1b, Mana_12c, Mana_13a, Mana_13f, Ohau_1b, Ohau_1, Rang_4a, Rang_4b, Tura_1b, West_1, West_2, West_3, West_4, West_5, West_6, West_7, West_8, West_9, Whai_7b, Whau_4

¹ Follows Hitchmough, 2002. New Zealand Threat Classification System lists. Biodiversity Recovery Unit, Department of Conservation, Wellington.

Appendix 2 – District Plan Rules relating to Vegetation Clearance

Territorial Authority District Plan	Biodiversity Rule Type	Rule Reference
Ruapehu District Plan	<p>Set criteria for indigenous vegetation (30cm diameter at breast height and over 1.0 in hectare, provided for under a Sustainable Forest Management Plan, set aside by a national statute or covenant, protected by the Department of Conservation, listed "threatened plant" species listed in Schedule 1 of the plan).</p> <p>Discretionary Activity to modify indigenous fauna that triggers one of the criteria</p> <p>Non-Complying Activity to remove indigenous fauna that triggers one of the criteria</p>	<p>IV 3.3</p> <p>IV 3.4</p>
Rangitikei District Plan	<p>Set criteria for permitted activities of not more than 1.0 hectare, with tree height and breadth triggers. If triggers exceeded, activity status becomes Discretionary</p> <p>Mapped ecological /protected areas</p>	<p>15.1(b)</p> <p>15.6</p> <p>Planning Maps</p>
Manawatu District Plan	<p>Classification of clearance, modification or harvesting of indigenous vegetation is determined by Appendix 1J.</p> <p>Need consent if clearance is in a wetland or coastal vegetation area, or if permitted standards cannot be complied with- basically areas more than one hectare with tree height and breadth triggers</p>	<p>3.1.1A (xxvii)</p> <p>Appendix 1J</p>
Palmerston North City District Plan	Vegetation listed in Appendix 17 (Schedule of notable trees, groups of trees and specific areas of significant indigenous vegetation remnants) requires consent as a Controlled or Discretionary Activity.	17.7.1 and 17.9.1
Wanganui District Plan	<p>No vegetation clearance is permitted within 20m of any waterway</p> <p>No more than 0.5 hectares of indigenous forest in one contiguous area or clearance of smaller areas where the total is greater than 0.5 hectares can be removed in one calendar year</p>	<p>25. 5</p> <p>25. 6</p>
Taranaki District Plan	Consent required if vegetation is listed in Appendix 3. Control in Appendix 3 is Maintenance of Trees (Permitted), Modification of Trees (Discretionary) and Damage or Destruction (Non-Complying)	5.5.3 and Appendix 3
Horowhenua District Plan	Conditions prohibiting clearance in certain locations, height, and amount of clearance (0.5 or 1 hectare depending on location), otherwise permitted.	19.1(c) and 19.2.21

Note: there are three other districts that are partly in the Horizons region (Waikato District, Taupo District, Stratford District). These have not been considered in this research.