

# RPS – ECO – Ecosystems and indigenous biodiversity

## Scope and background

### Scope

This chapter addresses 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.

### Background

As discussed in RPS-SRMR, the decline of indigenous biological diversity (“indigenous biodiversity”) is one of the four most critical issues addressed in this Plan.

#### Indigenous Biodiversity in the Region

The Region now has only 23% of its original forest cover and 3% of its *wetland*\* habitat. The majority of the forest is found in the hill country and the ranges, with fragments scattered throughout the lower-lying and coastal areas of the Region, where typically less than 10% of original habitat remains. Remaining natural habitat is small, fragmented and under pressure from pests and disturbance. Aquatic indigenous biodiversity is in a similar state of degradation with native fish populations greatly reduced, poor habitat (loss of riparian margins in most areas 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 indigenous 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 indigenous biodiversity into the future.

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

1. **Halting the decline** - Those habitats that are *rare habitats*\*, *threatened habitats*\* or *at-risk habitats*\* (as determined in accordance with RP-SCHED6 of this Plan) and that are recognised as being an area of significant indigenous vegetation or a significant habitat of indigenous fauna will be given a high level of protection, through rules, from activities likely to cause any further loss or modification.
2. **Active Management** - In addition, *rare habitats*\*, *threatened habitats*\* 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 indigenous 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 indigenous biodiversity management.

## Issues

### ECO-I1: Indigenous biological diversity

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

1. pest plants and pest animals
2. stock access
3. *land\** drainage, which impacts upon *wetlands\**
4. perched culverts and other barriers to fish migration
5. run-off and *discharges\** causing poor *water\** quality
6. *vegetation clearance\**.

## Objectives

### ECO-O1: Indigenous *biological diversity*<sup>^</sup>

Protect areas of significant indigenous vegetation and significant habitats of indigenous fauna and maintain indigenous *biological diversity*<sup>^</sup>, including enhancement where appropriate.

#### ***ECO-O1: Te kanorau koiora taketake***

*Ka whakamarumarū i ngā wāhi kei reira ētahi tipu taketake tino motuhake, ngā nohonga motuhake kei reira a ngai kīrehe taketake hoki, me te tiaki tonu i te kanorau koiora taketake, ka whai wāhi hoki ngā whakarākaitanga i ngā wā e tika ana.*

## Policies

### ECO-P1: Responsibilities for maintaining indigenous *biological diversity*<sup>^</sup>

In accordance with s62(1)(i) RMA, local authority responsibilities for controlling *land\** use activities for the purpose of managing indigenous *biological diversity*<sup>^</sup> in the Region are apportioned as follows:

1. **The Regional Council must be responsible for:**
  - a. developing objectives, policies and methods for the purpose of establishing a Region-wide approach for maintaining indigenous *biological diversity*<sup>^</sup>, including enhancement where appropriate
  - b. developing *rules*<sup>^</sup> controlling the use of *land\** to protect areas of significant indigenous vegetation and significant habitats of indigenous fauna and to

maintain indigenous *biological diversity*<sup>^</sup>, including enhancement where appropriate.

2. **Territorial Authorities\* must be responsible for:**
  - a. retaining schedules of notable trees and amenity trees in their *district plans*<sup>^</sup> or such other measures as they see fit for the purpose of recognising amenity, intrinsic and cultural values associated with indigenous *biological diversity*<sup>^</sup>, but not for the purpose of protecting significant indigenous vegetation and significant habitats of indigenous fauna as described in (1)(b) above.
3. **Both the Regional Council and Territorial Authorities\* must be responsible for:**
  - a. recognising and providing for matters described in s6(c) RMA and having particular regard to matters identified in s7(d) RMA when exercising functions and powers under the RMA, outside the specific responsibilities allocated above, including when making decisions on *resource consent*<sup>^</sup> applications.

## ECO-P2: Regulation of activities affecting indigenous *biological diversity*<sup>^</sup>

For the purpose of managing indigenous *biological diversity*<sup>^</sup> in the Region:

1. Habitats determined to be *rare habitats*<sup>\*</sup> and *threatened habitats*<sup>\*</sup> under RP-SCHED6 must be recognised as areas of significant indigenous vegetation or significant habitats of indigenous fauna.
2. *At-risk habitats*<sup>\*</sup> that are assessed to be significant under RP-ECO-P3 must be recognised as significant indigenous vegetation or significant habitats of indigenous fauna.
3. The Regional Council must protect *rare habitats*<sup>\*</sup>, *threatened habitats*<sup>\*</sup> and *at-risk habitats*<sup>\*</sup> identified in (1) and (2), and maintain and enhance other *at-risk habitats*<sup>\*</sup> by regulating activities through its regional plan and through decisions on *resource consents*<sup>^</sup>.
4. Potential adverse *effects*<sup>\*</sup> on any *rare habitat*<sup>\*</sup>, *threatened habitat*<sup>\*</sup> or *at-risk habitat*<sup>\*</sup> located within or adjacent to an area of *forestry*<sup>\*</sup> must be minimised.
5. When regulating the activities described in (3) and (4), the Regional Council must, and when exercising functions and powers described in RPS-ECO-P1, *Territorial Authorities*<sup>\*</sup> must:
  - a. allow activities undertaken for the purpose of pest plant and pest animal control or habitat *maintenance* or enhancement,
  - b. consider indigenous *biological diversity*<sup>^</sup> offsets in appropriate circumstances as defined in RP-ECO-P2,
  - c. allow the *maintenance*<sup>\*</sup>, *operation*<sup>\*</sup> and *upgrade*<sup>\*</sup> of existing *structures*<sup>\*</sup>, including *infrastructure*<sup>^</sup> and other physical resources of regional or national importance as identified in RPS-EIT-P1, and
  - d. not unreasonably restrict the existing use of *production land*<sup>^</sup> where the *effects*<sup>\*</sup> of such *land*<sup>\*</sup> use on *rare habitat*<sup>\*</sup>, *threatened habitat*<sup>\*</sup> or *at-risk habitat*<sup>\*</sup> remain the same or similar in character, intensity and scale.

## ECO-P3: Proactive management of indigenous *biological diversity*<sup>^</sup>

1. The Regional Council will aim to maintain or enhance indigenous *biological diversity*<sup>^</sup> by working in partnership with relevant landowners, other parties with a legal interest in the *land*<sup>\*</sup>, and relevant consent holders to establish a management plan and incentive programme for the voluntary proactive management of identified *sites*<sup>\*</sup> by 2016.

2. For the purposes of 1, separate programmes will be established for *wetlands\**, bush remnants, native fish communities and coastal ecosystems.
3. The management plans under 1 will generally address the following matters as a minimum:
  - a. fencing and prevention of stock access
  - b. pest plant and pest animal control
  - c. planting
  - d. agreed *land\** uses
  - e. work and materials to be provided by the Regional Council or a third party
  - f. financial assistance to be provided by the Regional Council or a third party
  - g. monitoring
  - h. legal options for ensuring longevity of the measures implemented.

## ECO-P4: Fostering an ethic of stewardship

The Regional Council will equip landowners and others with the information they need to act as good stewards for indigenous biodiversity, and to act responsibly and proactively. These initiatives will be additional to the Council-led programmes under RPS-ECO-P3.

## ECO-P5: Pest plants and pest animals

1. To the extent that they relate to the *maintenance* of indigenous biodiversity, the pest plant and pest animal management functions of the Regional Council will primarily target pests threatening *rare habitats\**, *threatened habitats\** and *at-risk habitats\**.
2. When exercising functions and powers as set out in RPS-ECO-P1, *Territorial Authorities\** must take into account the risks of introducing pest plants or pest animals into *rare habitats\**, *threatened habitats\**, *at-risk habitats\** and nearby areas.

## Methods

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

ECO-M1	<i>Wetlands*</i> - Biodiversity
<b>Description</b>	<p>The Regional Council and other agencies will work with landowners to protect and enhance priority <i>wetlands*</i> throughout the Region. Resources will be directed towards the most significant <i>sites*</i>.</p> <p><i>Wetland*</i> 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 method, and encourage the establishment of covenants.</p> <p>Monitoring of the effectiveness of the protection and enhancement works will be undertaken.</p> <p>This method will include publicity to increase public awareness about the importance of <i>wetlands*</i> and indigenous biological diversity.</p>
<b>Who</b>	<p>Regional Council, landowners, foresters, relevant consent holders, Federated Farmers, <i>Territorial Authorities*</i>, Department of Conservation, <i>hapū*</i> and <i>iwi*</i>, 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.</p>
<b>Links to Policy</b>	<p>This method implements RPS-ECO-P3.</p>

<b>ECO-M1</b>	<b>Wetlands* - Biodiversity</b>
<b>Targets</b>	The top 100 <i>wetlands*</i> in the Region are actively managed, including protection or enhancement measures, within 10 years of this Plan becoming operative.

<b>ECO-M2</b>	<b>Bush Remnants - Biodiversity</b>
<b>Description</b>	<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 <i>sites*</i>.</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 method, and encourage the establishment of covenants.</p> <p>Monitoring of the effectiveness of the protection and enhancement works will be undertaken.</p> <p>This method will include publicity to increase public awareness about the importance of bush remnants and indigenous biological diversity.</p>
<b>Who</b>	Regional Council, landowners, foresters, relevant consent holders, Federated Farmers, <i>Territorial Authorities*</i> , Department of Conservation, <i>hapū*</i> and <i>iwi*</i> , 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.
<b>Links to Policy</b>	This method implements RPS-ECO-P3.
<b>Targets</b>	The top 200 bush remnants in the Region are being actively managed, including protection or enhancement measures, within 10 years of this Plan becoming operative.

<b>ECO-M3</b>	<b>Sites of Significance - Aquatic</b>
<b>Description</b>	<p>The Regional Council and other agencies will work with landowners to protect and enhance <i>waterbodies*</i> and parts of <i>waterbodies*</i> that serve an important role in the lifecycle of the Region's rare and threatened native fish. Resources will be directed towards the most significant <i>sites*</i>.</p> <p>Owners of <i>land*</i> adjacent to <i>waterbodies*</i> 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 method.</p> <p>Monitoring of the effectiveness of the protection and enhancement works will be undertaken.</p> <p>This method will include publicity to increase public awareness about the importance of native fish and indigenous biological diversity.</p>
<b>Who</b>	Regional Council, landowners, foresters, relevant consent holders, Federated Farmers, <i>Territorial Authorities*</i> , Department of Conservation, <i>hapū*</i> and <i>iwi*</i> and funding agencies including the He Tini Awa Trust, Biodiversity Condition Fund and Nga Whenua Rahui.
<b>Links to Policy</b>	This method implements RPS-ECO-P3.
<b>Targets</b>	The top 100 Sites of Significance - Aquatic are actively managed, including protection or enhancement measures, within 10 years of this Plan becoming operative.

<b>ECO-M4</b>	<b>Inanga Spawning and Native Fishery Sites - Biodiversity</b>
<b>Description</b>	The Regional Council and other agencies will work with landowners to protect and enhance <i>waterbodies*</i> and parts of <i>waterbodies*</i> ( <i>wetlands*</i> and streams) that serve an

	<p>important role in the lifecycle of the inanga and <i>whitebait</i>* species. Resources will be directed towards the most significant <i>sites</i>*.</p> <p>Owners of <i>land</i>* adjacent to <i>waterbodies</i>* 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 method.</p> <p>Monitoring of the effectiveness of the protection and enhancement works will be undertaken.</p> <p>This method will include publicity to increase public awareness about the importance of native fish and indigenous biological diversity.</p>
<b>Who</b>	Regional Council, landowners, foresters, relevant consent holders, Federated Farmers, <i>Territorial Authorities</i> *, Department of Conservation, <i>hapū</i> * and <i>iwi</i> * and funding agencies including the He Tini Awa Trust, Biodiversity Condition Fund and Nga Whenua Rahui.
<b>Links to Policy</b>	This method implements RPS-ECO-P3.
<b>Targets</b>	The top 30 inanga spawning and native fishery <i>sites</i> * are actively managed, including protection or enhancement measures, within 10 years of this Plan becoming operative.

<b>ECO-M5 Biodiversity (Terrestrial and Aquatic) Research, Monitoring and Reporting</b>	
<b>Description</b>	The aim of this method 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.
<b>Who</b>	Predominantly the Regional Council, with assistance from research institutes, universities, non-government agencies and community groups as required.
<b>Links to Policy</b>	This method implements RPS-ECO-P3.
<b>Targets</b>	A research, monitoring and reporting programme that supports delivery and refinement of existing policies and methods, and guides and assesses implementation.

<b>ECO-M6 Education in Schools – Biodiversity</b>	
<b>Description</b>	The aim of this method is to raise awareness amongst the youth of the Region of the significance of 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 and Youth Environment Forum.
<b>Who</b>	Regional Council, Department of Conservation and various national and local environmental education providers.
<b>Links to Policy</b>	This method implements RPS-ECO-P4.
<b>Targets</b>	The Regional Council develops and delivers a biodiversity-related environmental education programme.

<b>ECO-M7 District Planning Indigenous Biological Diversity</b>	
<b>Description</b>	<p>The Regional Council will formally submit on resource consent applications received by <i>Territorial Authorities</i>* for <i>land</i>* use activities where there is potential for <i>effects</i>* on indigenous biological diversity.</p> <p>The Regional Council will formally seek changes to district plans if necessary to ensure provisions are in place to provide an appropriate level of protection to indigenous biological diversity.</p>

ECO-M7	District Planning Indigenous Biological Diversity
	The Regional Council will formally seek changes to district plans if necessary to ensure district plan rules requiring protection of significant indigenous vegetation and the significant habitats of indigenous fauna do not contradict rules on indigenous biodiversity in this Plan.
Who	Regional Council and <i>Territorial Authorities</i> .*
Links to Policy	This method implements RPS-ECO-P1, RPS-ECO-P3, RPS-ECO-P4, RPS-NFL-P1, RPS-NATC-P1 AND RPS-NATC-P2
Targets	<ul style="list-style-type: none"> <li>• Submissions completed on consent applications.</li> <li>• District plan changes sought if necessary after this Plan becomes operative.</li> </ul>

ECO-M8	Indigenous Biodiversity Advice and Information
Description	The aim of this method is to provide landowners and other parties with an interest in biodiversity with advice and information about the state of biodiversity in the Region, information about the rules and methods contained within this Plan to manage indigenous biodiversity, and advice about how these methods and rules will be implemented. This includes providing guidance on the rules contained within this Plan so that they can be easily understood and used by landowners.
Who	Regional Council, with assistance from landowners and community groups as required.
Links to Policy	This method implements RPS-ECO-P3 and RPS-ECO-P4.
Targets	An education and advice programme that is freely available and allows those interested to understand and use the methods and rules provided for in this Plan.

## Principal reasons

### ECO-PR1

*Rare habitats\** 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 a level of 20% or less 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 50% 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 aim to prevent the further loss of *rare habitats\** 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 identified habitats.

## Anticipated environmental results

Anticipated Environmental Result	Link to Policy	Indicator	Data Source
<p><b>ECO-AER1</b>                      Except for change because of natural processes, or change authorised by a resource consent, by 2017, the extent of <i>rare habitat*</i>, <i>threatened habitat*</i> or <i>at-risk habitat*</i> is the same as (or better than) that estimated prior to this Plan becoming operative, and the number of <i>at-risk habitats*</i> has not increased.</p>	<p>Indigenous biological diversity, landscape and <i>historic heritage*</i>                      RPS-ECO-P1, RPS-ECO-P2, RPS-ECO-P3, RPS-ECO-P4, RPS-ECO-P5 and RPS-NATC-P1</p> <p>Administration Policies:                      RP-IP-P4, RP-IP-P5, RP-IP-P6, and RP-IP-P8</p> <p>Water Policies: RPS-LF-FW-P4, RPS-LF-FW-P5, RPS-LF-FW-P6, RPS-LF-FW-P7, RPS-LF-FW-P8, RPS-LF-FW-P11, RPS-LF-FW-P19, RPS-LF-FW-P20, RPS-LF-FW-P21, RPS-LF-FW-P26</p>	<ul style="list-style-type: none"> <li>• Extent of each habitat type compared to former extent</li> <li>• Number of <i>rare habitats*</i>, <i>threatened habitats*</i> and <i>at-risk habitats*</i> damaged by unauthorised activities</li> </ul>	<ul style="list-style-type: none"> <li>• Landcare Research: Land Environments NZ Tool, EcoSat tool and Land Cover Database 2 tool</li> <li>• Regional Council's incidents database</li> </ul>
<p><b>ECO-AER2</b>                      By 2017, the Region's top 100 <i>wetlands*</i> and top 200 bush remnants will be in better condition than that measured prior to this Plan becoming operative.</p>	<p>Indigenous biological diversity, landscape and <i>historic heritage*</i>                      RPS-ECO-P1, RPS-ECO-P2, RPS-ECO-P3, RPS-ECO-P4, RPS-ECO-P5 and RPS-NATC-P1</p> <p>Administration Policies:                      RP-IP-P4, RP-IP-P5, RP-IP-P6, and RP-IP-P8</p> <p>Water Policies: RPS-LF-FW-P4, RPS-LF-FW-P5, RPS-LF-FW-P6, RPS-LF-FW-P7, RPS-LF-FW-P8, RPS-LF-FW-P11, RPS-LF-FW-P19, RPS-LF-FW-P20, RPS-LF-FW-P21, RPS-LF-FW-P26</p>	<ul style="list-style-type: none"> <li>• Number of top 100 <i>wetlands*</i> and top 200 bush remnants under proactive management</li> <li>• Habitat condition measure(s) which, where possible, will be consistent with those used by the Department of Conservation</li> </ul>	<ul style="list-style-type: none"> <li>• Regional Council's identification and assessment of significant indigenous aquatic, coastal and terrestrial habitat types</li> <li>• Regional Council's progress reports on results of proactive management of top <i>wetland*</i> and bush remnant habitats</li> </ul>