

8. Indigenous Biodiversity

Introduction

New Zealand's biodiversity gives our country a unique character and is internationally important. A large proportion of our species are endemic to New Zealand and if they become extinct they are lost to the world. About 90 percent of New Zealand insects, 80 percent of trees, ferns and flowering plants, 25 percent of bird species, all 60 reptile species, four frog species and two species of bat are endemic.

New Zealand's biodiversity has helped shape our national identity, with our distinctive flora and fauna contributing to our sense of belonging. The koru and kiwi are internationally recognised. Biodiversity also provides social and economic benefits through recreational opportunities, tourism, research, education, provision of ecosystem services and natural resources for primary industry and customary and medical uses.

The Resource Management Act 1991 (RMA) requires the Council to recognise and provide for as a matter of national importance the protection of areas of significant indigenous vegetation and significant habitats of indigenous fauna (Section 6(c)). The protection of these values, whether on land, in freshwater or coastal environments, also helps to achieve other matters of national importance, including landscape and natural character values and historic heritage. However, biodiversity values are also important components of amenity, kaitiakitanga, quality of the environment, and [the intrinsic values of ecosystems](#), ~~values~~ matters to which regard shall be had in terms of Section 7 of the RMA. For this reason there are important links between the provisions of this chapter and others in the Marlborough Environment Plan (MEP).

Comment [1]: Topic 6

In addition, there are specific roles and functions in relation to protecting significant natural areas and habitats and maintaining indigenous biological diversity. These functions enable the Council to:

- establish, implement and review objectives, policies and methods for maintaining indigenous biological diversity [Section 30(1)(ga)]; and
- control any actual or potential effects of the use, development or protection of land for the purpose of maintaining indigenous biological diversity [Section 31(1)(b)(iii)].

Marlborough's central location within New Zealand and its varied landforms, climate and rich human history combine to form an interesting and diverse area. The District has a range of important and unusual natural features, native plants and animals, a number of which are at their southern or northern limits of distribution. Part of south Marlborough has been identified as one of five areas of high biodiversity concentration within New Zealand.

Importantly, Marlborough's tangata whenua iwi have a significant interest in the protection, management and restoration of indigenous biodiversity, having developed relationships based on whakapapa, mahinga kai and kaitiakitanga developed over centuries of occupation, close interaction and use of natural resources. Whakapapa provides the links or connections between people and all things, including plants and animals. Mahinga kai is based on the sustainable gathering of food and resources, the places where they are gathered, the resources themselves and the passing on of knowledge about these resources. Kaitiakitanga is a responsibility to ensure that the mauri of natural resources is healthy and strong and that the life supporting capacity of these ecosystems is preserved.

Although the focus of the RMA is on indigenous biodiversity, it is important to recognise that some parts of Marlborough have been modified as a result of a variety of land uses over many years. As has occurred throughout New Zealand, Marlborough's natural environment has been highly modified from that which would have existed prior to human arrival. This has resulted in a range

of non-indigenous species, which have in their own right made a significant contribution to amenity values in both urban and rural environments as well as to the character and economy of Marlborough. This is recognised in other chapters of the MEP. However, it is important to acknowledge that the remaining areas of indigenous biodiversity still contribute significantly to Marlborough's heritage values.

Issue 8A – A reduction in the extent and condition of indigenous biodiversity in Marlborough.

Despite the original diversity and uniqueness of Marlborough's biodiversity and natural areas, human activities have been particularly severe on Marlborough's sensitive landscape and ecosystems, especially in the terrestrial and freshwater ecosystems of lowland south Marlborough. A continuation of past trends will result in further loss of or deterioration in the condition of Marlborough's indigenous biological heritage. For Marlborough's tangata whenua iwi, this will impact on the mauri of natural resources.

Terrestrial and freshwater environments

Centuries of fire have created the present pattern of small, isolated remnants of natural vegetation. The dry climate and easy contours of most of this land have meant that fires were very effective in clearing vegetation. Very few original areas of native forest remain in south Marlborough – most are secondary vegetation that has regenerated after the earliest fires. Further intensive clearance of shrub and tussock subsequently removed most of the remaining vegetation.

North Marlborough has a moister climate and steeper terrain than south Marlborough and has been less modified by human arrival. A significant amount of original forest cover remains and vigorous native regeneration is well underway on land that was cleared for pastoral farming from 1850 to 1940.

High populations of exotic wild animals and introduced plants have become well established in Marlborough because of the favourable climate, terrain and land-use. These introduced species have added further pressure on natural habitats. As a result of habitat loss and competition and predation from introduced animals, the original indigenous animals have also largely disappeared; only a few of these species remain in isolated remnant habitats. These habitats are often too small and too far from other sites in the locality to support significant and sustainable populations of native species, including birds, invertebrates and lizards.

The ecology of ground water is a relatively new area of investigation. Aquifers are now known to provide a habitat that can support a subterranean ecosystem. Species of crustaceans have adapted and evolved to live and complete their entire lifecycle underground. It is possible that these species may have a role in maintaining underground water quality. To date, little is known of the distribution of densities or even what species are present in our groundwater aquifers.

Many of the small streams and waterways on the Wairau Plain, including the largest river in Marlborough, the Wairau River, have been straightened, diverted and channelled over the last 150 years in order to control flooding and enable increased agricultural production. Native riparian or riverside vegetation has been largely replaced by exotic willows and shrubs. These modifications have resulted in the loss of native fish species that rely on native invertebrates falling onto the water for food.

With intensification of lowland land-use, particularly for viticulture, the demand for water for irrigation purposes has been significant. In the naturally dry landscape of these lowland areas, taking or diverting water from surface and groundwater sources can result in the loss of habitat as headwaters of spring-fed streams recede or waterways dry up altogether. The increasing use of dams to capture and store water also has the potential to have both negative (e.g. preventing fish passage) and positive effects (e.g. creation of new habitat) on natural areas and biodiversity.

Wetlands

The term wetland covers habitats where the land is covered in or wetted by water for most (but not necessarily all) of the time. Wetlands occur in areas where surface water collects or where groundwater seeps to the surface. They include swamps, bogs, coastal wetlands, lakes and some river edges.

Wetlands are highly productive environments that can support a diverse range of plants and animals (birds, fish, insects and micro-organisms). They support processes that provide environmental services such as water storage and flood control, nutrient removal, erosion control and water table maintenance. Wetland areas have always been highly valued by Māori as they provide a rich source of traditional resources like food (fish and birds), flax and medicinal plants. Wetlands therefore represent a significant part of Marlborough's natural heritage.

Between 1920 and 1980, most of New Zealand's wetlands were drained for pastoral land use. This has resulted in an approximately 85% reduction in wetland areas and many remaining wetlands are still under pressure from land development. Many remaining wetlands are small and their natural character and habitat quality have been degraded by partial drainage, damage by farm animals and weed invasion. Lowland wetlands have been worst affected and in some cases are still at risk.

The systematic draining of Marlborough's wetlands over the last 150 years has had a profound impact on aquatic ecosystems, especially in the lowland areas of the Wairau Plain. Less than one percent of the Wairau Plain wetlands that existed before Europeans arrived in New Zealand still exist. In addition, the taking of groundwater or surfacewater can affect the habitat and flow regimes of wetlands.

Marine environments

Marlborough supports a wide variety of marine habitats, ranging from exposed rocky shores to sheltered sandy bays. The coast is affected by a wide variety of physical and biological processes including tidal currents, wave energy, water clarity, substratum and temperature. Marlborough's geographic location influences these processes and as a result, our marine environment is one of the most interesting of any coastal areas in New Zealand, supporting a high diversity of species. Furthermore, Marlborough is an important part of the migratory route for several large marine mammals, including humpback and southern right whales. Other marine mammals live in Marlborough's marine environment, including the nationally endangered Hector's dolphin, which resides in Cloudy-Clifford Bays and Queen Charlotte Sound. Species such as dusky dolphins and orca regularly visit the Marlborough Sounds, while bottlenose dolphins are found here during most of the year.

Marlborough's marine environment supports a significant diversity of sea birds, most of which rely on the area for breeding, raising young or for feeding. Of particular note is the king shag, which is endemic to the Marlborough Sounds.

Tidal wetlands, although mostly small and widely spread throughout Marlborough, form an important network for mobile species of wetland bird. Larger estuaries do exist, including those at Whangarae (Croisilles Harbour), Havelock, Kaiuma and Wairau Lagoons. These larger estuaries provide habitat and feeding areas for a wide variety of fish, invertebrates and birds.

The condition and state of marine biodiversity can be affected by land or water based activities. Adverse impacts can arise from sedimentation, contamination and habitat disturbance. Effects can be temporary, but in particular circumstances can result in permanent loss or damage. Long term or cumulative smaller scale, localised effects from impacts such as contamination and physical disturbance can also have significant effects on the functioning of marine systems. Many activities, such as recreational swimming, do not affect or have an impact on marine biodiversity; however, other activities, including shipping (especially large and/or fast ships), reclamations or other coastal structures, marine farming and physical disturbance from certain fishing techniques can affect marine biodiversity.

There are also a variety of marine organisms that can be introduced by transport into our marine environment by ships (including the discharge of ballast water), oil rigs, barges and other boat. Regardless of whether or not these pest organisms are exotic, there is the potential for displacement of native species if the introduced organisms are not kept to a minimum. This could otherwise have a significant impact on Marlborough's indigenous biodiversity.

Despite the extensive length and physical size of Marlborough's coastline, many marine habitats and species are fragile and vulnerable to impact. The increasing use of the coastal environment for recreational, cultural and commercial activities leads to a corresponding increase in the potential for adverse effects on marine biodiversity. Unfortunately, it is difficult to determine all of the significant marine values due to the size of the area and difficulties associated with surveying subtidal marine areas, although techniques for assessing marine biodiversity are constantly improving and evolving.

[RPS, R, C, D]

Objective 8.1 – The intrinsic values of Marlborough's remaining indigenous biodiversity in terrestrial, freshwater and ~~coastal~~ marine environments ~~is~~ are protected.

As there has been considerable loss of indigenous biodiversity in Marlborough, it is important that remaining areas are protected and that their condition is maintained and improved where opportunities arise. This will ensure that the intrinsic values of the District's ecosystems, some of which are unique to Marlborough, are safeguarded. Intrinsic values in this context are defined in Section 2 of the RMA as "...those aspects of ecosystems and their constituent parts which have value in their own right, including -

(a) their biological and genetic diversity; and

(b) the essential characteristics that determine an ecosystem's integrity, form, functioning, and resilience.

Protection ~~in this context~~ should be considered in a broad sense and may include legal protection as well as fencing, active pest control, regulation and improved land management practices.

The inclusion of this objective ~~helps-gives effect to achieve~~ the National Policy Statement for Freshwater Management 2014 (NPSFM), where for both water quantity and quality reasons the protection of the significant values of wetlands is required. This objective also gives effect to ~~helps-to-achieve~~ Policy 11 of the New Zealand Coastal Policy Statement 2010 (NZCPS) where there is specific direction to protect biological diversity in the coastal environment.

This objective also ~~helps-sets out the intent~~ to protect indigenous biodiversity as an important component of Marlborough's natural heritage and gives recognition to central government's 'statement of national priorities' for protecting rare and threatened indigenous biodiversity on private land (June 2007). These priorities are:

National Priority 1:

To protect indigenous vegetation associated with land environments that have 20 percent or less remaining in indigenous cover.

National Priority 2:

To protect indigenous vegetation associated with sand dunes and wetlands; ecosystem types that have become uncommon due to human activity.

National Priority 3:

To protect indigenous vegetation associated with 'originally rare' terrestrial ecosystem types not already covered by priorities 1 and 2.

National Priority 4:

To protect habitats of threatened and declining indigenous species.

Comment [2]: Topic 6

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~~Matters of national importance in Section 6(a) and 6(c) of the RMA require the Council to recognise and provide for the preservation of the natural character of the coastal environment, wetlands, lakes, rivers and their margins, and the protection of areas of significant indigenous vegetation and significant habitats of indigenous fauna. These matters help to protect biodiversity as important components of Marlborough's natural heritage.~~

There is a relationship between this objective and Objective 6.2 in Chapter 6 in terms of the preservation of natural character under section 6(a) of the RMA and Policies 13 and 14 of the NZCPS within the coastal environment. This is because indigenous biodiversity is also a component determining natural character. For this reason, policies in this chapter that provide for the protection of indigenous biodiversity in the coastal environment also assist to give effect to NZCPS

Comment [5]: Topic 6

[RPS, R, C, D]

Objective 8.2 – An increase in area/extent of Marlborough's indigenous biodiversity and restoration or improvement in the condition of areas that have been degraded.

Comment [6]: Topic 6

While protection of remaining areas of indigenous biodiversity is important, so too is the restoration and re-establishment of some of what has been lost or degraded. Restoration means the active intervention and management of degraded biotic communities, landforms and landscapes to enhance biological character, ecological and physical processes. If restoration and re-establishment does not occur then indigenous biodiversity will remain seriously threatened and be vulnerable to further decline, especially in lowland southern Marlborough.

Given the important roles that wetlands can play and as many wetlands in Marlborough are in poor condition, it is important to improve their extent and condition. The creation of new wetlands will also help to increase the overall size and stock of wetland habitat in Marlborough.

It is acknowledged that in some hill country areas extensive natural regeneration has occurred and this has already helped to increase the extent of Marlborough's indigenous biodiversity. Although there is a natural ability of many species to regenerate given the right circumstances, some species cannot as they are too few in number, sometimes down to single individuals. In many cases, the propagation and replanting of plants is needed to establish a centre from which natural regeneration is possible.

Identification of sites, areas and habitats with significant indigenous biodiversity value

[RPS]

Policy 8.1.1 – When assessing whether terrestrial, wetlands, freshwater or marine ~~or terrestrial~~ ecosystems, habitats and areas have significant indigenous biodiversity value, the following criteria will be used:

Comment [7]: Topic 6

Comment [8]: Topic 6

Identification Criteria

- (a) representativeness;
- (b) rarity;
- (c) diversity and pattern;
- (d) distinctiveness;

Management Criteria

- (e) size and shape;
- (f) connectivity/ecological context;
- (g) sustainability; and

(h) adjacent catchment modifications.

For a site to be considered significant, one of the first four criteria (representativeness, rarity, diversity and pattern or distinctiveness/special ecological characteristics) must rank medium or high.

To determine whether a site is significant for the purposes of Section 6(c) of the RMA, an assessment needs to be made by the Council or others against consistently applied criteria. The criteria identified in this policy (further explained in Appendix 3), have been used by the Council previously to identify and encourage opportunities for the conservation of natural features on private land in Marlborough and will enable assessments to be made in the future where none have occurred to date. The same criteria have also been used in identifying wetlands of significance in Marlborough and in identifying areas in the coastal marine area with significant indigenous biodiversity value.

[\[RPS\]](#)

Policy 8.1.2 – Sites in the coastal marine area and natural wetlands assessed as having significant indigenous biodiversity value will be specifically identified in the Marlborough Environment Plan.

Significant wetlands have been identified in the MEP because these small and fragmented areas are all that remain of the once vast areas of wetland that covered lowland Marlborough. It is important to ensure the values of the significant wetlands are protected. Areas that meet the RMA's definition of a wetland but do not have significant values in terms of the criteria in Policy 8.1.1 have not been identified in the MEP and therefore are not subject to wetland rules.

Areas or habitats assessed as having significant ecological values within the coastal marine area have been specifically identified in the MEP and are referred to as 'ecologically significant marine sites'. This is because the coastal marine area is comprised of resources in public ownership, with the Council having a more direct role in managing these resources including in relation to areas with significant biodiversity value in terms of Section 6(c) of the RMA.

[A buffer is also identified around all category A and B ecologically significant marine sites. A buffer recognises that habitats on the sea bed are vulnerable to disturbance from activities conducted in the coastal marine area. Those activities cannot necessarily be undertaken in a precise manner to avoid the adverse effects of seabed disturbance, particularly given the physical separation between the sea surface and seabed. In these circumstances, a buffer represents a precautionary approach to the protection of the Ecologically Significant Marine Sites.](#)

Regulation and education will be the Council's main approach in protecting marine biodiversity.

[\[RPS\]](#)

Policy 8.1.3 – ~~Continue to gather~~ Having adequate information on the state of biodiversity in terrestrial, freshwater and ~~coastal-marine~~ environments in Marlborough to enable decision makers to assess the impact on biodiversity values from various activities and uses.

Survey work on private land through programmes run by the Council and Department of Conservation has provided an overview of biodiversity in Marlborough. However, while many landowners have had their land surveyed as part of these programmes, not all land has been surveyed. Having adequate information about biodiversity values of waterbodies is equally important for decision makers when assessing the impacts of various activities and uses within waterbodies, as well as activities and uses on adjoining land.

For the coastal marine area, the Council has undertaken a review of published and unpublished reports to provide an overview of Marlborough's marine biodiversity. This information is available to the public but it is acknowledged that there are significant gaps in our knowledge. The Council will undertake surveys to improve knowledge of biodiversity patterns and condition.

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Continuing to add to the knowledge of the extent, condition and use of biodiversity in Marlborough will be important in assisting decision making on resource consent or plan change applications, as well as for general awareness of the state of Marlborough's environment.

Protecting and enhancing indigenous biodiversity

[RPS]

Policy 8.2.1 – A variety of means will be used to assist in the protection, maintenance and enhancement of areas and habitats with indigenous biodiversity value, ~~including partnerships, support and liaison with landowners, regulation, pest management, legal protection, education and the provision of information and guidelines.~~

A variety of methods are necessary to achieve the protection and enhancement of areas and habitats with indigenous biodiversity value. These methods include partnerships; support for and liaison with landowners, resource users, community groups and Marlborough's tangata whenua iwi; pest management; legal protection; education; and the provision of information and guidelines.

Sometimes, simply fencing an area is the most effective means of protection and in this case, it is the Council's role to support landowners (including financially). In other cases, it may be appropriate that regulation is used. It is important to acknowledge, however that rules on their own do not protect important areas. The Council can also take an active role in enhancement activities, again through supporting landowners with education, the provision of information and guidelines and through working in partnerships.

[RPS]

Policy 8.2.2 – Use a voluntary partnership approach with landowners, enabling a 10 year transition to both expand the SNA programme to other areas and to assess its effectiveness for achieving protection of significant indigenous biodiversity, as the primary means for achieving the protection of areas of significant indigenous biodiversity on private land, except for areas that are wetlands.

Since 2000, the Council has undertaken a programme to identify and protect significant natural areas and indigenous biodiversity on private land in Marlborough. The Council has worked on the principle of a partnership approach, with landowners to achieve improvements in the protection of remaining significant natural areas. The rate of participation in this programme reflects the fact that most landowners want to protect unique ecosystems and species where they occur on their properties.

The programme includes support through a landowner assistance programme operating alongside the field survey work. The programme is funded by the Council, ~~central government's biodiversity fund~~ and landowners. This approach has allowed for property-based surveys to be carried out in cooperation with landowners.

However, not all landowners have chosen to participate in the SNA programme and other areas are yet to be surveyed as part of the programme. This policy provides for a 10 year transition to expand the SNA programme to areas yet to be surveyed, but also provides the opportunity for the Council and the community to assess the effectiveness of the voluntary partnership in achieving Objective 8.1. In this regard, Policy 8.2.8 and Method 8.M.5 will be particularly relevant.

The exception for wetlands reflects that these significant sites will be subject to a regulatory regime. This helps give effect to the NPSFM, where for both water quality and quantity purposes the significant values of wetlands are to be protected (Objective A2(b) and Objective B4). This approach also assists in recognising and providing for the preservation of natural character of wetlands as required by Section 6(a) of the RMA.

[RPS, R, C]

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Comment [19]: Topic 6

Policy 8.2.3 – Priority for Council funding and partnership resources will be given to the protection, maintenance and restoration of habitats, ecosystems and areas that have significant indigenous biodiversity values, particularly those that are legally protected.

Those ecosystems, habitats and areas assessed as having significant indigenous biodiversity value are to be given priority in terms of their protection, maintenance and restoration. This policy recognises that a targeted approach to indigenous biodiversity is appropriate given that resources to assist landowners are limited. If the Council has to make decisions about which sites should be supported financially for protection works, those sites that have been legally protected through mechanisms such as covenants will be prioritised for funding support.

This policy also gives recognition to central government's 'statement of national priorities' for protecting rare and threatened indigenous biodiversity on private land as set out in Objective 8.1. These priorities will potentially have a significant influence on the Council's future policy and programmes. A significant area of lowland Marlborough (i.e. the Wairau and Awatere Plains) and coastal south Marlborough will fall under Priority 1. A number of specific areas will fall into Priorities 2 and 3, for example wetlands, the stony beach ridges at Rarangi and the coastal limestone cliffs. In terms of Priority 4 habitats, in Marlborough bird species such as the [king shag](#), New Zealand falcon, weka and rifleman and plant species such as pingao, *Muehlenbeckia astonii* and native broom species are either acutely or chronically threatened.

[\[RPS, R\]](#)

Policy 8.2.4 – Priority will be given to encouraging the re-establishment and enhancement of indigenous biodiversity in Marlborough's ~~lowland~~ most threatened environments including lowland and marine habitats.

In Marlborough's lowland environments (the Wairau and Awatere Plains) some ecosystem types are extremely depleted and have been fragmented over time. In these areas fully functioning ecosystems are not common as many native bush birds and insects are present in low numbers (for instance, very few tui can be found in south Marlborough). Lack of habitat caused by lack of fauna prevents natural functions such as seed dispersal and pollination, meaning that without active intervention by humans, some sites are, or will become unviable in the long term. Although there are challenges in natural regeneration and assisted revegetation, it is important that efforts are made to re-establish indigenous biodiversity in these areas, particularly as there is little public conservation land in south Marlborough. This policy will also help to address central government's national priorities for protecting indigenous vegetation on private land.

[\[RPS, R\]](#)

Policy 8.2.5 – Encourage the legal protection of sites with significant indigenous biodiversity value through covenanting.

An important aspect of covenanting is that it is voluntary. To assist with the implementation of Policy 8.2.2, the Council will actively work with landowners to register covenants over sites with significant indigenous biodiversity value, resulting in important sites being protected in perpetuity. Covenants, such as those available under the Queen Elizabeth II National Trust, mean that land ownership and management of land remains with the landowner, but ongoing advice and support can be received for the site covenanted.

[\[RPS, D\]](#)

Policy 8.2.6 – Where areas of significant indigenous biodiversity value are known to exist in riparian margins of rivers, lakes or in the margins of a significant wetland, consideration will be given to acquiring or setting aside these areas to help protect their values.

Land along the margins of rivers, lakes and significant wetlands may have significant natural value and serve as important habitats. There is strong emphasis given to the enhancement of these areas under Section 6 of the RMA. Esplanade reserves or esplanade strips can be taken for the purposes set out in Section 229 of the RMA, including where this will contribute to the protection of conservation values. The reason for this policy therefore is to signal that where areas of significant indigenous biodiversity value occur in riparian margins, then land may be taken or set aside upon subdivision, or as a financial contribution on activities not requiring

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subdivision consent. The Council may also negotiate with landowners outside of these more formal processes if the values are significant enough to warrant protection.

[D]

Policy 8.2.7 - To require where appropriate (as part of the subdivision consent process) the creation of esplanade reserves and esplanade strips to maintain or enhance aquatic habitats.

The RMA specifically provides for esplanade areas as one method of maintaining or enhancing aquatic habitats. The RMA provides two tiers of esplanade areas in this context: esplanade reserves and esplanade strips. Esplanade reserves or esplanade strips can be taken in accordance with Part 10 of the RMA (Subdivision and Reclamation). The appropriateness of doing so will be determined through the subdivision consent process.

Comment [25]: Topic 13

[RPS, R, C]

Policy 8.2.78 – A strategic approach to the ~~containment/eradication~~management of undesirable animals and plants that impact on indigenous biodiversity values will be developed and ~~implemented~~maintained.

Comment [26]: Topic 6

The wide range of pest species present in Marlborough, their location, characteristics and spread, means that a range of responses is necessary to deal with them and protect indigenous biodiversity. This can occur through rules in the Council's regional pest management plan, national pest management strategies, provision of information and advice to landowners, consent holders and the public, biological and physical control, monitoring and surveillance and at times, direct funding to landowners to help protect significant sites from pests. It is important to acknowledge that landowners (including statutory organisations) have a significant responsibility for controlling and managing pest animals and plants.

Often the resources required (technologically or financially) to effectively manage pests with physical control methods across the entire District are not available. The most effective and efficient approach will be to target pests at sites of high ecological value where they can be realistically managed to protect particular values or areas. This approach will rely on strong partnerships with landowners.

To date the Council has had limited involvement or experience in dealing with pests in the coastal marine area, but what work has been done has focussed on managing pests for economic reasons, especially for the marine farming industry in the Marlborough Sounds. Part of the Council's strategic approach for the coastal marine area has seen the establishment of a collaborative partnership to help build capability and put in place a framework to manage future biosecurity threats.

[RPS]

Policy 8.2.89 – Where monitoring of ecosystems, habitats and areas with significant indigenous biodiversity value shows that there is a loss of or deterioration in condition of these sites, then the Marlborough District Council will review the approach to protection.

Comment [27]: Topic 6

Ongoing monitoring of the condition of sites with significant indigenous biodiversity value will be necessary to determine if the methods in the MEP are helping to improve the overall condition of significant indigenous biodiversity in Marlborough. Where state of the environment monitoring shows a loss of or deterioration in the condition of significant sites as a result of the voluntary approach to protection, then the Council will review the voluntary approach to determine whether increased use of regulation should be pursued. Any changes to the MEP as a result of this review would only occur through the First Schedule process of the RMA.

[R, C, D]

Comment [28]: Topic 6

Policy 8.2.910 – Promote the maintenance, enhancement or restoration of ~~Maintain, enhance or restore~~ ecosystems, habitats and areas of indigenous biodiversity even where these are not identified as significant in terms of the criteria in Policy 8.1.1, but are important for:

- (a) the continued functioning of ecological processes;
- (b) providing connections within or corridors between habitats of indigenous flora and fauna;
- (c) cultural purposes;
- (d) providing buffers or filters between land uses and wetlands, lakes or rivers and the coastal marine area;
- (e) botanical, wildlife, fishery and amenity values;
- (f) biological and genetic diversity; and
- (g) water quality, levels and flows.

This policy identifies a range of factors that are important for the overall functioning of ecological processes. However, it is important to recognise that not all areas with indigenous biodiversity value will be considered significant. Nonetheless, these areas still add to the overall sustainable management purpose of the RMA, particularly when having regard to the following Section 7 matters of the RMA:

- (c) *The maintenance and enhancement of amenity values.*
- (d) *Intrinsic values of ecosystems.*
- (f) *Maintenance and enhancement of the quality of the environment.*
- (g) *Any finite characteristics of natural and physical resources.*

The importance of areas of indigenous biodiversity for cultural purposes could include a range of associations and uses of indigenous biodiversity, including taonga species, māhinga kai, underlying cultural values of a place, presence of resources used for rongoā, weaving, food sources, or ceremonial uses.

[R, C]

Policy 8.2.4011 – Promote to the general public and landowners the importance of protecting and maintaining indigenous biodiversity because of its intrinsic, conservation, social, economic, scientific, cultural, heritage and educational worth and for its contribution to natural character.

Increasing awareness about the unique and diverse biodiversity of Marlborough is important. The policy recognises contributions towards protecting and maintaining biodiversity will see the Council continuing to work closely with the community. This approach has been fundamental to improving biodiversity to date, because to protect biodiversity on private land, the Council relies heavily on voluntary participation and proactive protection activity from landowners. Within the coastal environment this role is particularly important as the resources comprised in the coastal marine area are in public ownership. Coupled with imperatives in the RMA requiring the preservation of the natural character of the coastal environment, wetlands, lakes and rivers, the Council recognises that informing the public about Marlborough's biodiversity is essential in helping to protect the values identified in the policy.

[R]

Policy 8.2.4412 – Promote corridors of indigenous vegetation along waterbodies to allow the establishment of native ecosystems and to provide wildlife habitat and linkages to other fragmented bush or wetland remnants.

Riparian areas are the interface between land and water resources and provide important habitat for unique flora and fauna, including swamp nettle and whitebait spawning sites. Vegetation

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within the riparian area also contributes to freshwater habitat through the provision of refuge and the input of food and shade. For example, many native fish species are dependent on native terrestrial insects as a food source and these insects are often only found in indigenous riparian vegetation. Promoting ecological corridors on both public and private land therefore plays an important part in protecting ecosystems and maintaining and enhancing the quality and diversity of remaining natural areas.

The opportunity already exists to improve biodiversity on Council-owned land along a number of waterways on the Wairau Plain, as well as alongside rivers in other catchments (e.g. Wakamarina, Rai, Onamalutu and Pelorus), despite these riparian areas being maintained for flood hazard mitigation. These river margins may not presently have particular value for biodiversity, but they could have in future with enhancement work such as the removal of plant pests and planting with native species.

[\[R, C\]](#)

Policy 8.2.4213 – Encourage and support private landowners, [Marlborough’s tangata whenua iwi](#), [community and industry groups](#), [central government agencies](#) and others in their efforts to protect, restore or re-establish areas of indigenous biodiversity.

Not all of the responses to protecting, restoring or re-establishing indigenous biodiversity need to be achieved through the RMA or by regulation. For example, voluntary agreements can be put in place by various groups to protect species or habitats. There are also provisions in other statutes that can be used by various agencies to protect particular values and these may extend to also protecting important biodiversity values, e.g. the Marine Reserves Act 1971. The Council has also established programmes to assist landowners and community groups to protect and restore natural areas and ecosystems. This includes financial assistance to landowners willing to protect ecologically important areas on their properties.

[\[R, D\]](#)

Policy 8.2.4314 – When re-establishment or restoration of indigenous vegetation and habitat is undertaken, preference should be given to the use of native species of local genetic stock.

Plants within the same species can adapt to local conditions to become genetically separate (and sometimes physically distinctive). Local plants are therefore well adapted and are best used for propagation, as they provide the best chance of survival and good growth within the District. These plants also protect genetic diversity within local populations and prevent the character of local ecosystems from being swamped by imported varieties from other areas. Therefore, where feasible, seed should be collected from within a catchment or ecological district as close as possible to the specific site of a planting project.

Managing effects of subdivision, use and development on indigenous biodiversity

[\[R, C, D\]](#)

Policy 8.3.1 – Manage the effects of subdivision, use or development in the coastal environment by:

- (a) avoiding adverse effects where the areas, habitats or ecosystems are those set out in Policy 11(a) of the New Zealand Coastal Policy Statement 2010;
- (b) avoiding adverse effects where the areas, habitats or ecosystems are mapped as significant wetlands or ecologically significant marine sites in the Marlborough Environment Plan; or
- (c) avoiding significant adverse effects and avoiding, remedying or mitigating other adverse effects where the areas, habitats or ecosystems are those set out in Policy 11(b) of the New Zealand Coastal Policy Statement 2010 ~~or are not identified as significant in terms of Policy 8.1.1 of the Marlborough Environment Plan.~~

Comment [32]: Topic 6

Comment [33]: Topic 6

Comment [34]: Topic 6

Comment [35]: Topic 6

Comment [36]: Topic 6

(d) creating a buffer to manage activities in proximity to an Ecologically Significant Marine Site in order to avoid adverse effects on the Ecologically Significant Marine Site.

Comment [37]: Topic 6

Policy 11 of the New Zealand Coastal Policy Statement 2010 (NZCPS) defines a range of priorities so that indigenous biodiversity in the coastal environment is protected. Policy 8.3.1 of the MEP reflects the priority approach of the NZCPS to subdivision, use and development activities within the coastal environment.

[R, D]

Comment [38]: Topic 6

Policy 8.3.2 – ~~Where subdivision, use or development requires resource consent, Outside the coastal environment~~ the adverse effects on areas, habitats or ecosystems with indigenous biodiversity value shall be:

- (a) avoided where it is a significant site in the context of Policy 8.1.1; and
- (b) **managed to ensure that**~~avoided, remedied or mitigated where~~ indigenous biodiversity values **are retained in areas that** have not been assessed as being significant in terms of Policy 8.1.1.

This policy sets up a hierarchy for decision makers to use when assessing the effects of subdivision, use or development activities on areas, habitats or ecosystems with indigenous biodiversity value. For those sites identified as being significant in terms of Policy 8.1.1, it is important that adverse effects are avoided. This recognises that there are few significant sites remaining on private land, especially in southern Marlborough. Where sites have not been identified as significant through Policy 8.1.1, decision makers can also consider remediation or mitigation options to address adverse effects.

[R, C, D]

Policy 8.3.3 - Provide for the construction, maintenance, or upgrade of National Grid infrastructure, that adversely affects the values and attributes associated with the areas identified in Policies 8.3.1 and 8.3.2, provided that:

- (a) There are no practical alternative locations or routes: and**
- (b) The avoidance of effects required within Policies 8.3.1 and 8.3.2 is not possible: and**
- (c) The adverse effects that cannot be avoided are remedied or mitigated.**

Comment [39]: Topic 6

Operating, maintaining, upgrading and/or developing the National Grid have the potential to result in unavoidable adverse effects on indigenous biodiversity values. Reflecting the national significance of the National Grid for electricity transmission, this policy directs that, despite of Policies 8.3.1 and 8.3.2, it is important to provide for these critical activities to occur. However, the policy also places limits on the ability to adversely affect indigenous biodiversity values. The National Grid operator will have to demonstrate that the circumstances in both (a) and (b) apply. Where they can do so, the national Grid operator will be required to remedy or mitigate any adverse effects.

The policy assists to give effect to Policies 2, 5 and 8 of the NPSET.

[R, C, D]

Policy ~~8.3.5~~ 8.3.4 – In the context of Policy 8.3.1 and Policy 8.3.2, adverse effects to be avoided or otherwise remedied or mitigated may include:

- (a) fragmentation of or a reduction in the size and extent of indigenous ecosystems and habitats;
- (b) fragmentation or disruption of connections or buffer zones between and around ecosystems or habitats;

- (c) changes that result in increased threats from pests (both plant and animal) on indigenous biodiversity and ecosystems;
- (d) the loss of a ~~rare or~~ threatened or at risk species or ~~their~~^{its} habitats and species that are rare within the region or biogeographic area;
- (e) loss or degradation of wetlands, dune systems or coastal forests;
- (f) loss of mauri or taonga species;
- (g) impacts on habitats important as breeding, nursery or feeding areas, including for birds;
- (h) impacts on habitats for fish spawning or the obstruction of the migration of fish species;
- (i) impacts on any marine mammal sanctuary, marine mammal migration route or breeding, feeding or haul out area;
- (j) a reduction in the abundance or natural diversity of indigenous vegetation and habitats of indigenous fauna;
- (k) loss of ecosystem services;
- (l) effects that contribute to a cumulative loss or degradation of habitats and ecosystems;
- (m) loss of or damage to ecological mosaics, sequences, processes or integrity;
- (n) effects on the functioning of estuaries, coastal wetlands and their margins;
- (o) downstream effects on significant wetlands, rivers, streams and lakes from hydrological changes higher up the catchment;
- (p) natural flows altered to such an extent that it affects the life supporting capacity of waterbodies;
- (q) a modification of the viability or value of indigenous vegetation and habitats of indigenous fauna as a result of the use or development of other land, freshwater or coastal resources;
- (r) a reduction in the value of the historical, cultural and spiritual association with significant indigenous biodiversity held by Marlborough's tangata whenua iwi;
- (s) a reduction in the value of the historical, cultural and spiritual association with significant indigenous biodiversity held by the wider community; and
- (t) the destruction of or significant reduction in educational, scientific, amenity, historical, cultural, landscape or natural character values.

Comment [40]: Topic 6

The policy identifies a range of adverse effects that may result from subdivision, use and development, and which may need to be avoided to protect indigenous biodiversity values. The effects can occur in terrestrial, freshwater or coastal environments or be specific to one environment. Therefore in determining whether these adverse effects may occur and potentially affect indigenous biodiversity values, a case-by-case assessment will be necessary. Depending on the environment within which the subdivision, use or development is to take place and the particular values associated with the site and degree of effect likely to result from the proposed activity, a determination can be made as to whether the effects should be avoided in terms of Policies 8.3.1 and 8.3.2 or can otherwise be remedied or mitigated.

[C]

[Policy 8.3.5 – Take into account that king shag could feed in the coastal marine area within 25km of the breeding sites recorded as Ecologically Significant Marine Sites 1.6, 2.11, 2.14, 2.21, 3.3 and 3.9.](#)

[King shag are endemic to the outer Marlborough Sounds. The breeding and roosting sites of king shag are recognised as Ecologically Significant Marine Sites within the Plan \(sites 1.6, 2.11, 2.14,](#)

Comment [41]: Topic 6

[2.21, 3.3 and 3.9 in Volume 4](#)). [The limited number of king shag and the restricted breeding sites make king shag vulnerable.](#)

[King shag leave the breeding and roosting sites to forage for food in the coastal marine area. The foraging can occur up to 25km from sites. It is therefore important to consider the potential for adverse effect on king shag feeding as part of the exercise of assessing the actual or potential adverse effects of activities in the coastal marine area. However, such an assessment is only necessary within 25km of sites 1.6, 2.11, 2.14, 2.21, 3.3 and 3.9. It will also be important to take into account that land topography can limit the ability of king shag to access some areas of the coastal marine area within such a distance.](#)

[\[P\]](#)

~~Policy 8.3.6 – Where taking or diversion of water from waterbodies is proposed, water levels and flows shall remain at levels that protect the natural functioning of those waterbodies.~~

~~This policy sets an environmental bottom line to protect biodiversity values in waterbodies (including in streams that are spring fed) where the taking of water is proposed. Regard will be had to the policy in establishing environmental flow and level limits and when considering resource consent applications where no such regime has been established. This policy recognises that all waterbodies are important and that protecting the natural functioning of these environments will at least maintain biodiversity values. In some cases, prohibited activity rules have been applied to protect the values of waterbodies. [\(Deleted\)](#)~~

[\[R, C, D\]](#)

~~Policy 8.3.88.3.6 – With the exception of areas with significant indigenous biodiversity value, w~~Where indigenous biodiversity values will be adversely affected through land use or other activities, a biodiversity offset can be considered to ~~mitigate~~[offset significant](#) residual adverse effects. Where a biodiversity offset is proposed, the following criteria will apply:

- (a) [Residual adverse effects](#): the offset will only compensate for [significant](#) residual adverse effects that cannot otherwise be avoided, remedied or mitigated;
- (b) [Limits to offsetting](#): [offsetting should not be applied to justify impacts on vulnerable or irreplaceable biodiversity.](#)
- (~~b~~c) [No net loss](#): the residual adverse effects on biodiversity are capable of being offset and will be fully compensated by the offset to ensure no net loss of biodiversity;
- (~~c~~) ~~where the area to be offset is identified as a national priority for protection under Objective 8.1, the offset must deliver a net gain for biodiversity;~~ [\(Deleted\)](#)
- (~~d~~) ~~there is a strong likelihood that the offsets will be achieved in perpetuity;~~ [\(Deleted\)](#)
- (~~e~~) ~~where the offset involves the ongoing protection of a separate site, it will deliver no net loss and preferably a net gain for indigenous biodiversity protection; and~~ [\(Deleted\)](#)
- (~~f~~d) [Like for like](#) offsets should re-establish or protect the same type of ecosystem or habitat that is adversely affected, unless an alternative ecosystem or habitat will provide a net gain for indigenous biodiversity [in the same area.](#)
- (e) [Proximity](#): [the proposal should be located close to the application site, where this will achieve the best ecological outcomes.](#)
- (f) [Timing](#): [the delay between the loss of biodiversity through development and the gain or maturation of ecological outcomes is minimized.](#)

Comment [42]: Topic 6

Comment [43]: Topic 6

Comment [44]: Topic 6

Comment [45]: Topic 6

(g) Any offsetting proposal will include biodiversity management plans prepared in accordance with good practice.

Comment [46]: Topic 6

Biodiversity offsets are the final step in a hierarchical process in which adverse effects on indigenous biodiversity are first avoided, then remedied, and finally mitigated. Only after these approaches have been exhausted is it appropriate to consider biodiversity offsets to deal with unavoidable residual adverse effects. Policy 8.3.8-6 makes clear that biodiversity offsets should not be considered in areas that have been assessed as having significant biodiversity value and where adverse effects on these values are to be avoided.

The goal of a biodiversity offset is to achieve no net loss and preferably a net gain of biodiversity with respect to species composition, habitat structure and ecosystem functions. It is therefore important that offsets are appropriate compensation. There is a preference for the re-establishment or protection of the same type of ecosystem or habitat to avoid the difficulty of assessing relative values of different ecosystems or habitats of different species. Trade-offs involving different species will not always adequately compensate for the loss of the originally threatened species. However, the policy does recognise that where significant indigenous biodiversity benefits can be achieved, the protection of other habitats may be appropriate.

There will be cases where the indigenous biodiversity at risk is so significant that it should not be significantly modified or destroyed under any circumstances (other than when necessary for avoiding risks to human condition and safety). There are also situations where residual effects cannot be fully compensated because the biodiversity is highly vulnerable or irreplaceable; for example, where the vegetation or habitat is so rare or reduced that there are few or no opportunities to deliver an offset. In such cases, offsetting cannot be considered as a means of environmental compensation for adverse effects.

There also needs to be certainty that the proposed offsets will occur. Offset measures such as indigenous planting will take a long time to establish and become useful in a biodiversity role. There should be an overall improvement in indigenous biodiversity as a result of the project and its biodiversity offsets.

~~[R, D]~~

Comment [47]: Topic 6

Policy 8.3.38.3.7 – Control indigenous vegetation clearance activities to retain ecosystems, habitats and areas with indigenous biodiversity value.

Although the Council has adopted an approach of voluntary partnerships with private landowners to identify and protect areas of significant indigenous biodiversity, it is important there is a “backstop” measure in place to control activities that involve the removal of indigenous vegetation. The difference in approach recognises that rules in themselves will not improve the overall condition of significant natural areas; only by working with landowners can that occur. However, control through both permitted activity rules (with conditions) and discretionary activity rules for vegetation clearance is also necessary to assist in minimising the loss of ecosystems, habitats and areas with indigenous biodiversity value. It is important to note that there may be some circumstances where the clearance of indigenous vegetation will be excluded from rules, such as that which occurs under plantation forestry or on existing roads. The policy will also contribute to achieving outcomes for the protection of outstanding natural features and landscapes and the maintenance of high amenity areas (see Chapter 7 - Landscape, Volume 1 of the MEP).

~~[C]~~

Comment [48]: Topic 6

Policy 8.3.78.3.8 – Within an identified vulnerable ecologically significant marine sites, fishing activities using techniques that disturb the seabed must be avoided.

Some ~~fishing~~ activities use techniques or practices that result in disturbance of the seabed. Depending where this occurs, there is the potential for adverse effects on marine biodiversity. The policy seeks to specifically avoid ~~the use of these techniques~~ activities that disturb the seabed to ensure areas identified as having significant biodiversity value in the coastal marine area and which are identified as being vulnerable to such disturbance are protected. This will help to give

Comment [49]: Topic 6

effect to Policy 11 of the NZCPS. [Ecologically Significant Marine Sites evaluated to be vulnerable to seabed disturbance are identified as Category A and Category B sites in Appendix 27.](#)

[R]

Policy 8.3.48.3.9 — Improve the management of drainage channel **network** maintenance activities to mitigate the adverse effects from these activities on the habitats of indigenous freshwater species.

The Council operates and maintains a historic network of drainage channels on the Wairau Plain. This network reduces groundwater levels and improves the productive potential of the rural land resource. Some of the drainage channels are modified rivers, while others are artificial watercourses. The drainage channels often provide habitat to indigenous freshwater fauna, including eel (tuna) and other freshwater fish and kōura. These species are a source of mahinga kai to Marlborough's tangata whenua iwi and contribute to Marlborough's overall biodiversity.

The maintenance of the drainage **channel** network involves the control and/or removal of aquatic plants, wetland plants and accumulated sediment from the bed of the channels that would otherwise reduce the efficiency of water flow and increase water levels. Such maintenance can adversely affect aquatic animals within the channel, either through direct removal or a reduction of habitat. While it is difficult to completely avoid the adverse effects of drainage channel maintenance on aquatic biodiversity, it is possible, using good environmental practice guidelines, to mitigate the nature and degree of effect from maintenance activities.

[R, C, D]

Policy 8.3.10 - Enable customary harvest in accordance with tikanga.

[Customary harvesting is essential in enabling Marlborough's tangata whenua iwi to exercise kaitiakitanga and to provide for their relationship with their culture, lands, water and other taonga. Cultural harvest may be for different reasons, including but not limited to, medicinal uses, ceremonial uses, weaving or for consumption. It is important that taonga and other species can be accessed by iwi throughout the District, including from sites and areas that retain significant indigenous biodiversity value. As described here, customary harvest is unlikely to involve indigenous vegetation clearance and the rules identified in Method 8.M.2 would not apply. Where particular resources are available on private land, access agreements or case by case permissions from the landowner are essential before entry onto the property is allowed.](#)

Methods of implementation

The methods listed below are to be implemented by the Council unless otherwise specified.

[R, C]

8.M.1 Regional rules

Resource consent will be required to modify waterbodies and for any activity that would result in the draining or modification of a wetland (excluding artificially created ponds). The term 'modification' applies in the context of a physical change to the waterbody or in terms of alteration to flow (including the taking of water). Regard must be had to the values of waterbodies identified in Appendix 5.

Permitted activity rules will enable some activities to be carried out in wetlands and rivers where there is no more than minor adverse effect. These rules will specify certain standards that have to be met for the activity to remain as permitted. In some cases where significant wetlands have been least modified by humans, prohibited activity rules have been applied to ensure the values of the significant wetlands are maintained.

Where appropriate, regional rules will enable pest management activity for biodiversity outcomes.

~~Dredging, bottom trawling, deposition, reclamation and anchoring~~ ~~Fishing activities using techniques or methods that disturb the seabed~~ ~~in~~ within the areas identified as ~~an~~ vulnerable ecologically significant marine site will be prohibited. Resource consent is required for most uses

Comment [50]: Topic 6

Comment [51]: Clause 16

Comment [52]: Topic 2

Comment [53]: Topic 6

or activities within the coastal marine area and an assessment of the effects of the activity on indigenous biodiversity will be undertaken, including whether there are any significant biodiversity values.

[D]

8.M.2 District rules

Resource consent will be required for land disturbance or vegetation clearance activities where certain species or habitats with indigenous biodiversity value are to be modified. [This includes clearance of indigenous vegetation in areas that have 20 percent or less remaining indigenous cover, as identified in the Threatened Environments Overlay Maps.](#)

[RPS]

8.M.3 Marlborough's Significant Natural Areas Programme

The Council's Marlborough Significant Natural Areas programme involves the collection of information about natural ecosystems on private land, with the aim of working with landowners to help protect significant sites. An ecological survey is undertaken with property reports prepared that summarise the ecological values found and suggest management options to ensure their long term survival.

The Department of Conservation has also identified significant sites on private land through its Protected Natural Areas survey programme. There is no duplication in effort as the Council and Department programmes have surveyed different areas of Marlborough.

Although a good proportion of private land in Marlborough has been surveyed, some landowners have not allowed the Council onto their property, therefore the programme of identifying sites is incomplete and ongoing. If a landowner changes their mind or a property changes ownership and a new landowner wishes to have their property surveyed, then the Council will undertake the survey work.

[The Plan adopts a voluntary partnership approach with landowners enabling a 10 year transition to both expand the SNA programme to other areas and to assess its effectiveness for achieving protection of significant indigenous biodiversity.](#)

[RPS]

8.M.4 Identification of areas with significant biodiversity value

Identification of the values of various waterbodies within Marlborough is included in Appendix 5. The natural and human use values include ecological, habitat, recreational and natural character values.

The Council has ~~also identified in the resource management plan~~ significant wetlands and ecologically significant marine sites [on maps in Volume 4. In the case of ecologically significant marine sites, buffer areas are also identified for all Category A and B sites. The extent of the buffer area is determined by the vulnerability of the site to sea bed disturbance and is 50, 100 or 200m. The extent of the buffer area is identified in Appendix 27.](#)

[Whale migration routes and dolphin distribution in Marlborough's coastal marine area are depicted on maps in Volume 4.](#)

[RPS]

8.M.5 Monitoring

The Council has gathered a significant amount of information about indigenous biodiversity in Marlborough through the Significant Natural Areas programme. The Council has established a monitoring programme that will be ongoing to determine if support programmes are helping to improve the overall condition of indigenous biodiversity in Marlborough.

Comment [54]: Topic 6

Comment [55]: Topic 6

Comment [56]: Topic 6

Comment [57]: Topic 6

Comment [58]: Topic 6

Comment [59]: Topic 6

Comment [60]: Topic 6

The Council will establish baseline monitoring programmes that provide a benchmark for determining the ongoing condition of habitats, ecosystems and areas that have significant indigenous biodiversity values. Where appropriate, the Council will also require resource consent holders to monitor the effects of their activity on marine biodiversity.

The Council is aware that its knowledge on areas with biodiversity value is incomplete and is therefore committed to carrying out and supporting research, and undertaking state of the environment monitoring to gain a better understanding of Marlborough's biodiversity.

[\[R_C\]](#)

Comment [61]: Topic 6

8.M.6 Support

The Council will support, including financially, the protection and/or restoration of areas with biodiversity value in the following ways:

- through the established landowner assistance programme, which provides both practical and financial help with work such as pest and weed control and fencing;
- by the waiving of resource consent application fees for activities that would assist in the protection of significant areas;
- through the annual planning process, consider granting reductions in rating for properties where sites are protected through conservation covenants;
- from funding made available by central government for the protection of areas of significant indigenous vegetation and habitats of indigenous fauna;
- by prioritising available funds for significant sites where sites are subject to protective covenants;
- through appropriate investigations to improve our understanding of the nature and state of indigenous biodiversity in Marlborough; and
- through supporting initiatives developed by community, [resource users](#), [Marlborough's tangata whenua iwi](#) and industry groups to promote protection and restoration of indigenous biodiversity.

Comment [62]: Topic 6

[\[R_C\]](#)

Comment [63]: Topic 6

8.M.7 Information

Increasing the knowledge and understanding of landowners and the public of the occurrence of significant areas of ecological value not only leads to greater appreciation of those values, but can motivate voluntary action to maintain and enhance indigenous biodiversity. The type of information already available or to be provided includes:

- information to individual landowners through the 'Marlborough Significant Natural Areas' programme and the Department of Conservation 'Protected Natural Areas' survey programme on sites of significant indigenous biodiversity on private land, on the issues affecting the sites and suggestions for future management of the sites;
- based on knowledge through the survey programmes, a summary overview of significant natural areas in south and north Marlborough;
- newsletters for the public about the achievements being made on private land to protect and/or enhance biodiversity in Marlborough;
- web-based information on Marlborough's indigenous biodiversity, the various programmes of support available and guidelines on various issues;
- on specific issues affecting indigenous biodiversity through groups such as the Sounds Advisory Group;
- through maintenance of a database that records studies of marine areas undertaken by a variety of science providers. (This database is available on the Council's website.) The studies undertaken include those for resource consent applications or

other scientific investigation, e.g. those undertaken on dusky dolphins in Admiralty Bay;

- encouraging the implementation of regimes such as voluntary retirement of land from farming, Queen Elizabeth II National Trust and other covenants, the establishment of reserves and voluntary restoration to achieve the protection of areas of significance;
- state of the environment reporting on the extent and condition of Marlborough's biodiversity; and.
- fact sheets on effective methods to control undesirable plants and animals and opportunities for private land to be covenanted.

[\[R, C\]](#)

Comment [64]: Topic 6

8.M.8 Guidelines

Guidelines have already been developed by the Council and other agencies for a range of aspects concerning biodiversity, including:

- to help interested landowners identify and clarify both production and ecological values on private property and develop practical and specific management strategies to balance these;
- which species are suitable for planting in south Marlborough, including for different areas and ecosystems. The guide (produced in conjunction with the Department of Conservation) provides advice and information for small and larger scale plantings and restoration projects;
- approaching marine mammals from land, sea and air and on minimising acoustic disturbance to mammals from seismic survey operations (both produced by the Department of Conservation);
- the benefits of and how to eco-source plants for restoration projects; and
- for the restoration/creation of wetlands.

The Council will prepare guidelines to assist developers on options available for enhancing indigenous biodiversity.

The Council will investigate and document best practice guidelines to assist when planning for and undertaking drainage channel maintenance activities. The practices will vary between drainage channels, depending on the circumstances. Marlborough's tangata whenua iwi and others with an interest in aquatic biodiversity will be provided the opportunity to assist in the development of the guidelines.

As the need arises, the Council will develop further guidelines in an endeavour to enhance overall biodiversity in Marlborough.

[\[R, C\]](#)

Comment [65]: Topic 6

8.M.9 Regional Pest Management Plan for Marlborough

~~The Regional Pest Management Plan for Marlborough (prepared under the Biosecurity Act 1993) classifies a range of plant and animal species as pests because they cause or have the potential to cause significant adverse effects on Marlborough's economy and/or environment. Individual pests are placed in one of three categories. The management regime, which includes rules for each pest, applies mostly to terrestrial environments but does include aquatic plant and animal pests. The plan also lists plant and animal species that pose potential threats to ecological values in Marlborough. These species do not have a specific regime for control because they do not pass the required cost benefit tests set out in the Biosecurity Act. However, control of these pests will likely be based on a 'site led' approach, targeted to sites with significant ecological value where the reduction of a range of pests would be effective in protecting those values.~~

The Council will consider the development of strategies to guide the management of invasive species threatening indigenous biodiversity in Marlborough. Such strategies can guide the use of a

combination of regulatory and non-regulatory mechanisms. They will also recognise the role of Council under other statutes such as the Biosecurity Act 1993 to manage new and emerging threats, and other initiatives to manage the immediate threats from established species. An underlying principle will be the recognition of the important role that landowners play in this regard.

Comment [66]: Topic 6

[R, D]

Comment [67]: Topic 6

8.M.10 Works

The Council will undertake planting of riparian margins and other land with indigenous species on land owned or administered by the Council where appropriate.

[R, C, D]

Comment [68]: Topic 6

8.M.11 Partnership/Liaison

The Council works closely with the Queen Elizabeth II National Trust, an independent organisation that assists landowners to formally protect their land through a covenant on the property title. The Council also works closely with the Department of Conservation in providing information for landowners, resource users, community groups and Marlborough's tangata whenua iwi and the public in general and in on-the-ground work to assist in enhancing biodiversity in Marlborough.

Comment [69]: Topic 6

Focussed projects to enhance indigenous biodiversity are supported and promoted by the Council. This can include projects such as landcare groups set up to restore areas such as the Grovetown Lagoon and Rarangi foreshore, working with nurseries to ensure locally-sourced native plants are available for restoration projects, establishing the Tui to Town project to entice native birds across the Wairau Plain from the Northbank forests and working with resident groups on local projects.

Through its role in biosecurity the Council also acts in a liaison capacity with the Ministry for Primary Industries (MPI) Biosecurity New Zealand in the management of a range of undesirable animals and plants. Equally important in the control and management of pest animals and plants is the partnership role between the Council and private landowners and between the Council and Department of Conservation/Land Information New Zealand with respect to Crown land.

The Council has a partnership role with the Minister of Conservation in managing Marlborough's coastal marine area. The Minister is responsible for approving regional coastal plans and also administers the NZCPS. For this reason, maintaining a strong partnership with the Department of Conservation through its area and local offices will be very important in looking after Marlborough's marine biodiversity.

The Council has entered a collaborative partnership with Top of the South councils (Tasman, Marlborough and Nelson), MPI Biosecurity New Zealand, marine farming industries and iwi to help build capability and put in place a framework to manage future marine biosecurity threats. The Department of Conservation will also be involved in the consideration of biosecurity threats where these may affect marine biodiversity.

Many residents, resident groups and other community based groups have an interest in how Marlborough's coastal marine areas are to be managed into the future. Maintaining a strong relationship with these individuals and groups will help to achieve the outcomes sought for maintaining marine biodiversity. This will extend to supporting community initiatives and advocating to government departments to set up protected marine areas and working with industry groups to promote sustainable use of marine resources.

There are a number of Crown agencies with statutory responsibilities that influence the management of the indigenous biodiversity of the Marlborough Sounds, including the fishery resources that exist in the coastal marine area. The Council will take steps to encourage discussions between these agencies to facilitate a discourse on the respective management roles of each agency and how they could be better integrated to achieve Objectives 8.1 and 8.2.

Comment [70]: Topic 11

[Marlborough's tangata whenua iwi have a particularly strong interest as kaitiaki in the protection, maintenance and enhancement of indigenous biodiversity. The Council will seek to partner with iwi in its efforts to protect the remaining indigenous biodiversity in Marlborough's terrestrial, freshwater and coastal environments.](#)

[R, D]

Comment [71]: Topic 6

8.M.12 Acquisition of land

The Council may consider acquiring sites with outstanding ecological values where land purchase is the only means available for protection of the values and that land is available for purchase. The Council will also encourage other agencies to do this.

Anticipated environmental results and monitoring effectiveness

The following table identifies the anticipated environmental results of the indigenous biodiversity provisions of the MEP. The anticipated environmental results are ten year targets, unless otherwise specified. For each anticipated environmental result, a series of indicators will be used to monitor the effectiveness of the indigenous biodiversity provisions.

| Anticipated environmental result | Monitoring effectiveness |
|--|--|
| <p>8.AER.1</p> <p>An increase in the number and extent of ecosystems, habitats and areas with indigenous biodiversity value that are formally protected or covenanted (where practicable).</p> | <p>There is an increase in the area of land covered in indigenous vegetation (including in riparian margins) in those parts of Marlborough defined as acutely or chronically threatened in the Threatened Environment Classification (National Priority One in "Statement of National Priorities for Protecting Rare and Threatened Biodiversity on Private Land).</p> <p>The number of sites with significant indigenous biodiversity value under formal protection by either a landowner agreement with the Council or a Queen Elizabeth II National Trust covenant or similar has increased.</p> <p>There is an increase in the number of marine protected areas.</p> |

| Anticipated environmental result | Monitoring effectiveness |
|--|--|
| <p>8.AER.2</p> <p>Maintenance and enhancement of the condition of ecosystems, habitats and areas with indigenous biodiversity value.</p> | <p>Monitoring of sites identified through the Significant Natural Areas programme shows an improvement in the values of those sites. there is increased protection of the indigenous biodiversity values.</p> <p>Baseline monitoring programmes established in 2010 for a representative sample of terrestrial, river and wetland sites and progressively for intertidal areas and in 2014/15 for ecologically significant marine sites shows no loss of <u>indigenous biodiversity</u> these values over the life of the MEP.</p> <p><u>Measured against baseline monitoring programmes established for ecologically significant marine sites in 2015/2016, there is no loss of indigenous biodiversity values over the life of the MEP.</u></p> <p>There is no increase in the extent or distribution of known aquatic pest species identified as declared pests in the Regional Pest Management Plan for Marlborough.</p> <p><u>The area of indigenous vegetation land cover is maintained over the life of the MEP, using the data derived from the New Zealand Land Cover Database.</u></p> |
| <p>8.AER.3</p> <p>There is no loss in wetland area.</p> | <p>Measured against a baseline monitoring programme established for wetlands in 20102016, there is no loss in the overall area of wetlands in Marlborough.</p> |
| <p>8.AER.4</p> <p>Widespread community involvement in looking after Marlborough’s indigenous biodiversity.</p> | <p>Continuation of community involvement in projects and initiatives such as ‘Tui to Town,’ Grovetown Lagoon restoration, landcare groups, planting of riparian areas, etc.</p> <p>The number of landowners protecting private land with indigenous biodiversity values (through formal protection or active management) increases.</p> <p>A voluntary partnership approach with landowners continues to be the primary means of protecting terrestrial areas of significant indigenous biodiversity.</p> |

Comment [72]: Topic 6

Comment [73]: Topic 13

Comment [74]: Topic 6

Comment [75]: Topic 6

Comment [76]: Topic 6

Comment [77]: Topic 6

| Anticipated environmental result | Monitoring effectiveness |
|--|--|
| <p>8.AER.5</p> <p>An increase in knowledge of Marlborough's indigenous biodiversity.</p> | <p>Use of scheduled criteria to identify ecosystems, habitats or areas present with significant indigenous biodiversity value through resource consent applications or where future survey work may be undertaken.</p> <p>The number of private properties over which ecological assessments to determine if there are ecosystems, habitats or areas present with significant indigenous biodiversity value, <u>continues to increase</u>, s (albeit at a low level) as the active SNA survey has been completed. Any increase in properties surveyed is most likely to arise through resource consent processes.</p> <p>Knowledge and understanding of indigenous biodiversity in Marlborough's coastal marine area is enhanced through maintenance of the marine database of information and from supporting research in areas where little is known about marine biodiversity.</p> |

Comment [78]: Topic 6