

## Appendix 3

### Criteria for the identification and management of sites with significant indigenous biodiversity value for terrestrial, wetland, freshwater and marine environments

This appendix provides the criteria for assessing the ecological significance of ecosystems and habitats of indigenous species, along with explanations or guidelines for their application. Various terms are outlined in the definitions of this Appendix.

The criteria are grouped into:

1. **Identification criteria:** used to assess the significance of sites. Those sites found to be significant through the application of these criteria are identified through various means in accordance with the policies and methods contained in Volume 1, Chapter 8. Ecologically significant marine sites and significant wetlands are mapped in Volume 4.
2. **Management criteria:** used to assist the management of sites identified through the application of the identification criteria. In particular, the management criteria allow for significant sites to be prioritised in terms of implementing Policies 8.2.1 to 8.2.14 and non-regulatory methods contained in Volume 1, Chapter 8.

The scale at which significance is to be determined depends on the type of environment and the ecological context.

Rankings within each criterion are: **H** = High; **M** = Medium; **L** = Low. For a site to be considered significant, one or more of the four identification criteria (representativeness, rarity, diversity and pattern or distinctiveness) must rank **M** or **H**.

Each criterion has multiple attributes which are assessed individually rather than collectively. The site can be defined by the spatial aggregation of multiple criteria and attributes.

A site of significant indigenous biodiversity value makes a significant contribution to the maintenance or recovery of indigenous biological diversity within the relevant ecological district or marine biogeographic area, or in a regional or national context. For highly mobile fauna, a site of significant indigenous biodiversity value should be spatially delineated and based on ecological attributes that are important for the maintenance and/or recovery of a population of that species.

Marine ecosystems and habitats can remain moderately intact (in terms of their representativeness and ecological gradients) in many parts of the coastal marine area despite a long history of human modification. Marine characteristics extending over extensive areas of the marine biogeographic area (e.g., general cobble reef flanking much of the Marlborough Sounds and common offshore sediments) are unlikely to be considered significant when assessed against the representativeness and diversity criteria, unless they are associated with other ecological features or characteristics that otherwise meet the significant criteria.

The introduction to each set of criteria is included to provide context and assists to explain how the criteria should be applied. The introduction is not itself used in assessing ecological significance.

**Commented [ 1 ]:** Marine Farming Assn Inc & Aquaculture NZ  
ENV-2020-CHC-74  
Make consequential amendments from removal of buffers which overlay with a marine farm

**Commented [ 2 ]:** Sanford Limited  
ENV-2020-CHC-46  
Make consequential amendments from removal of buffers which overlay with a marine farm (with App 27)

The ecological criteria are to be used and applied by suitably qualified and experienced ecologists in their field of expertise.

General and specific exclusions to the criteria are included, to ensure identified sites are relevant for the maintenance and enhancement of biodiversity. Notwithstanding these exclusions, other provisions in the Marlborough Environment Plan which encourage protection, maintenance and restoration of biodiversity still apply, such as Policies 8.2.1, 8.2.3, 8.2.8C, 8.2.10-14 and Methods 8.M.6 and 8.M.7.

## Identification Criteria

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### Highly Mobile Fauna

In relation to the application of the rarity criterion to highly mobile fauna, where the fauna is transient, the expert judgment of suitably qualified and experienced ecologists as to whether a site is considered significant is required.

### General exclusions

For the purpose of identifying sites with significant indigenous biodiversity value, the following are to be excluded:

- buildings and their curtilage;
- other built structures, including infrastructure structures, aquaculture structures, irrigation and out-of-stream hydro-electric storage ponds, and canals;
- cultivated cropland (including land under vines or fruit trees), high producing exotic grassland, and gardens;
- in relation to the application of the rarity criterion to highly mobile fauna, where a fauna is present only fleetingly;
- the presence of a species in captivity.

### Representativeness

- Ecosystems or habitats of indigenous species that are representative, typical or characteristic of the natural diversity within the region or relevant ecological district or marine biogeographic area.

**H:** The site contains at least one highly representative example of the ecosystem type or habitat of indigenous species in the region or ecological district or marine biogeographic area, excluding marine characteristics extending over extensive areas of the marine biogeographic area unless they are associated with other ecological features or characteristics that otherwise meet the significance criteria.

**M:** The site contains at least one moderately representative ecosystem type or habitat of indigenous species in the region or ecological district or marine biogeographic area, excluding marine characteristics extending over extensive areas of the marine biogeographic area unless they are associated with other ecological features or characteristics that otherwise meet the significance criteria.

**L:** The site does not contain an example that is highly or moderately representative of the ecosystem type or habitat of indigenous species in the region or ecological district or marine biogeographic area, or the example is excluded for the reasons specified in H or M.

### Rarity

- An ecosystem that has been considerably reduced from its former extent.

- An ecosystem, community type, or indigenous species that is threatened or at risk nationally, regionally or within the ecological district or marine biogeographic area
- A naturally uncommon ecosystem at a national scale.
- A site containing an ecosystem that is endemic to Marlborough, or a habitat of a species which is endemic to Marlborough or at its distributional limit
- Important habitat (including refugia from browsing or predation or important habitat for feeding, breeding, or resting) for a population of a Threatened or At Risk indigenous species, either seasonally or permanently.

**H:**

- The site contains a nationally threatened indigenous ecosystem or naturally uncommon ecosystem.
- The site contains a nationally Threatened or nationally At Risk indigenous species of flora. Sites that meet the criterion solely because of the presence of species listed as Threatened or At Risk, are excluded if:
  - (i) the species is not rare within the relevant region or ecological district or marine biogeographic area; and
  - (ii) the species are common and widespread nationally or in at least three regions; and
  - (iii) protection at the place is not necessary for protecting the species.
- The site is important permanent or seasonal habitat for a nationally Threatened or nationally At Risk indigenous species of fauna (for highly mobile fauna, this is habitat with ecological attributes that are important for the maintenance and/or recovery of a population of that species).
- The site contains an indigenous species that is at the limit of its natural range, excluding vagrants.
- The site contains several threatened or rare indigenous species, regionally or in the ecological district or marine biogeographic area.
- The site contains several uncommon indigenous species or community types in the region or marine biogeographic area.

**M:**

- The site contains a threatened indigenous ecosystem regionally (not nationally), or in the ecological district, or in the marine biogeographic area.
- The site contains a regionally threatened or rare indigenous species of flora.
- The site is important permanent or seasonal habitat for a regionally Threatened or regionally At Risk indigenous species of fauna (for highly mobile fauna, this is habitat with ecological attributes that are important for the maintenance and/or recovery of a population of that species).
- The site contains an uncommon indigenous species or community type in the region, ecological district or marine biogeographic area.

**L:**

- The site is not known to contain indigenous species or ecosystems that are threatened, at risk or uncommon nationally, regionally, or in the ecological district or marine biogeographic area.
- The site is not important habitat for indigenous species, or community types, that are threatened, at risk or uncommon nationally, regionally, or in the ecological district or marine biogeographic area.

**Diversity**

- Sites that contain a high diversity of ecosystems, habitat types or indigenous species; or have changes in ecosystem or species composition reflecting the existence of diverse natural features or ecological gradients.

**H:** The site contains a high diversity of indigenous species, habitat types or ecosystems; or contains intact ecological gradients other than marine characteristics extending over extensive areas of the marine biogeographic area unless they are associated with other ecological features or characteristics that otherwise meet the significance criteria.

**M:** The site contains a moderate diversity of indigenous species, habitat types or ecosystems; or contains moderately intact ecological gradients other than marine characteristics extending over extensive areas of the marine biogeographic area unless they are associated with other ecological features or characteristics that otherwise meet the significance criteria.

**L:** The site contains a low diversity of indigenous species, habitat types or ecosystems; or lacks intact or moderately intact ecological gradients, or is excluded for the reasons specified in H or M.

**Distinctiveness**

- Ecosystems or communities that nationally, regionally or within the ecological district or marine biogeographical area, are unique, distinctive, notable, or of restricted occurrence.

**H:** The site contains any ecosystem or community that is unique nationally, in the region or in the ecological district or marine biogeographic area; or it contains several distinctive features in the region, ecological district or marine biogeographic area.

**M:** The site contains an ecosystem or community that is distinctive in the region or in the ecological district or marine biogeographic area; or it contains several features which are notable or unusual but not distinctive nationally, in the region or in the ecological district or marine biogeographic area.

**L:** The site contains no ecosystems or communities that are distinctive, notable or unusual nationally, in the region or in the ecological district or marine biogeographic area.

**Management Criteria**

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**Size and cohesiveness**

- Size and is physical cohesiveness compared to similar types of sites regionally or within the ecological district or marine biogeographic area .

**H:** The site is large in size for the region or ecological district or marine biogeographic area and is cohesive.

**M:** The site is moderate in size for the region or ecological district or marine biogeographic area and is cohesive; or the site is relatively large but not very cohesive.

**L:** The site is small in size for the region or ecological district or marine biogeographic area, or the site is moderate in size but not at all cohesive.

**Connectivity/ecological context**

- Ecosystems or habitats of indigenous species that provide or contribute an important biophysical linkage or network; an important buffering function; or to the natural functioning of ecosystems.

- Sites that provide important habitat (including refugia from predation, or key habitat for feeding, breeding, or resting) for indigenous species, either seasonally or permanently.

**H:** The site is close or well connected to a large natural or significant terrestrial, freshwater or marine site, or to several natural or significant terrestrial, freshwater or marine sites; and/or the site provides an important physical or ecological function for an indigenous species or neighbouring area or another significant site.

**M:** The site is in the vicinity of other natural or significant terrestrial, freshwater or marine sites, but is only partially connected to them or at an appreciable distance; and/or the site provides moderate physical or ecological function for an indigenous species or neighbouring area or another significant site.

**L:** The site is very isolated from other natural or significant terrestrial, freshwater or marine sites; and/or the site provides low physical or ecological function for an indigenous species or neighbouring area or another significant site.

#### **Sustainability**

- The site is ecologically resilient, i.e. its natural ecological integrity and biological processes are largely functional and self-sustaining. Sensitivity and threats should be considered when assessing a site's ecological resilience. Sustainability recognizes the interconnectedness between and across terrestrial, freshwater and marine domains.

**H:** The site can maintain its ecological integrity and processes with minimal human assistance.

**M:** The site requires some but not much human assistance to maintain its ecological integrity and processes.

**L:** The site requires much human assistance to maintain its ecological integrity and processes.

#### **Definitions for Appendix 3**

**Ecological District:** a local part of New Zealand where the topographical, geological, climatic, soils and biological features produce a characteristic landscape and range of biological communities (see map).

**Ecosystem:** a naturally occurring and interacting system of living and non-living parts including species, communities and habitats, and associated biological, physical and chemical processes. For the purposes of the criteria, assessment of ecosystems are applied at a scale which is appropriate for the ecological district or marine biogeographic area. Some ecosystems in highly modified areas may contain a high proportion of exotic species but may still contain significant indigenous ecological values.

**Flora:** includes vascular plants, non-vascular plants, fungi, algae, and lichens.

**Highly Mobile Fauna:** Fauna that moves from one habitat to another to complete its life cycle, including in search of food, better conditions or reproductive needs.

**Marine Biogeographic Area:** A marine geographical area of similar ecology and habitats where the community structure and grouping of indigenous species is distinct (see map).

**Site:** A spatially defined area or habitat assessed against the significance criteria.

**Species:** A group of living organisms consisting of similar individuals capable of freely exchanging genes or breeding, and includes subspecies and varieties.

**Threatened or At Risk species:** When applying these criteria they will be assessed against the New Zealand Threat classification system and/or the IUCN Red List.

**Commented [ 3]:** RESOLVED:  
 Friends of Nelson Haven & Tasman Inc  
 ENV-2020-CHC-33  
 Minister of Conservation  
 ENV-2020-CHC-42  
 Manawa Energy Limited (previously Trustpower Limited)  
 ENV-2020-CHC-50  
 Royal Forest and Bird Protection Society of New Zealand  
 Incorporated  
 ENV-2020-CHC-64  
 Marine Farming Assn Inc & Aquaculture NZ  
 ENV-2020-CHC-74



