

Appendix 3

Ecological Significance Criteria for terrestrial, wetland and coastal environments

The following provides explanations or guidelines for the application of ecological significance criteria in the assessment of sites.

Rankings within each criterion are: **H** = High; **M** = Medium; **L** = Low. They collectively contribute to an overall ranking, indicating the degree of significance. For a site to be considered significant, one of the first four criteria (representativeness, rarity, diversity and pattern or distinctiveness) must rank **M** or **H**.

Representativeness

1. Indigenous vegetation or habitat of indigenous fauna that is representative, typical or characteristic of the natural diversity of the relevant ecological district. This can include degraded examples where they are some of the best remaining examples of their type, or represent all that remains of indigenous biodiversity in some areas.
2. Indigenous vegetation or habitat of indigenous fauna that is a relatively large example of its type within the relevant ecological district.
3. Additionally for the coastal marine area the site is significant if it contains biological features (habitat, species, community) that represent a good example within the biogeographic area.

H: The site contains one of the best examples of the characteristic ecosystem types in the region or ecological district or biogeographic area for sites within the coastal marine area.

M: The site contains one of the better examples, but not the best, of the characteristic ecosystem types in the region or ecological district or biogeographic area for sites within the coastal marine area.

L: The site contains an example, but not one of the better or best, of the characteristic ecosystem types in the region or ecological district or biogeographic area for sites within the coastal marine area.

Rarity

4. Indigenous vegetation or habitat of indigenous fauna that has been reduced to less than 20% of its former extent in Marlborough, or relevant land environment, ecological district, or freshwater environment.
5. Indigenous vegetation or habitat of indigenous fauna that supports an indigenous species that is threatened, at risk, or uncommon, nationally or within the relevant ecological district or biogeographic area for sites within the coastal marine area.
6. The site contains indigenous vegetation or an indigenous species that is endemic to Marlborough or that are at distributional limits within Marlborough.

H: The site contains nationally threatened or rare flora, fauna or communities; or the site contains several examples of regionally or locally threatened or rare flora, fauna or communities.

M: The site contains one or a few regionally or locally (but not nationally) threatened or rare flora, fauna or communities.

L: The site is not known to contain flora, fauna or communities that are threatened or rare in the ecological district or biogeographic area, regionally or nationally.

Diversity and pattern

7. Indigenous vegetation or habitat of indigenous fauna that contains a high diversity of indigenous ecosystem or habitat types, indigenous taxa, or has changes in species composition reflecting the existence of diverse natural features or ecological gradients.

H: The site contains an unusually high diversity of species and ecosystem types.

M: The site contains a moderate diversity of species and ecosystem types.

L: The site contains a relatively low diversity of species and ecosystem types.

Distinctiveness

8. Indigenous vegetation or an association of indigenous species that is distinctive, of restricted occurrence, occurs within an originally rare ecosystem, or has developed as a result of an unusual environmental factor or combinations of factors.

H: The site contains any ecological feature that is unique nationally, in the region or in the ecological district; or it contains several such features that are outstanding regionally or in the ecological district or biogeographic area.

M: The site contains ecological features that are notable or unusual but not outstanding or unique nationally, in the region or in the ecological district or biogeographic area.

L: The site contains no ecological features that are outstanding or unique nationally, in the region or in the ecological district or biogeographic area; i.e. the ecological features are typical rather than distinctive or special.

Size and shape

9. The site is significant if it is moderate to large in size and is physically compact or cohesive.

H: The site is large in size for the region or ecological district and is compact in shape.

M: The site is moderate in size for the region or ecological district and is compact in shape; or the site is relatively large but not very compact or cohesive.

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

Connectivity/ecological context

10. 1Vegetation or habitat of indigenous fauna that provides or contributes to an important ecological linkage or network, or provides an important buffering function.

11. A wetland which plays an important hydrological, biological or ecological role in the natural functioning of a river or coastal system.

12. Indigenous vegetation or habitat of indigenous fauna that provides important habitat (including refuges 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 area or several other natural areas.

M: The site is in the vicinity of other natural areas but only partially connected to them or at an appreciable distance.

L: The site is very isolated from other natural areas.

Sustainability

13. The site is significant if it is ecologically resilient, i.e. its natural ecological integrity and processes (functioning) are largely self-sustaining.

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.

Adjacent catchment modification in respect of significant sites within the coastal marine area

14. Catchments that drain large tracts of land can lead to high sediment loading into adjacent marine areas. A site in the coastal marine area is significant if the adjacent catchment is >400 ha and clad in relatively mature native vegetative cover resulting in a long term stable environment with markedly reduced sediment and contaminant run-off compared to developed or modified catchments.

H: The site is dominated by an adjacent land catchment area with stable and relatively mature native vegetation (>400ha) that is legally protected.

M: The site is dominated by an adjacent land catchment area with stable and relatively mature native vegetation (>400ha) with partial or no legal protection.

L: The site is surrounded by an adjacent land catchment area (>400ha) that is farmed, highly modified or has limited relatively mature vegetative cover.