Appendix 4 - Criteria for identifying areas that qualify as Significant Natural Areas - ECO-APP

This appendix sets out the criteria for identifying significant *indigenous vegetation* or significant habitats of indigenous fauna in a specific area, so that the area qualifies as an *SNA*.

1. What qualifies as an *SNA*

(1) An area qualifies as an *SNA* if it meets any one of the attributes of the following four criteria:

(a) representativeness:

(b) diversity and pattern:

(c) rarity and distinctiveness:

(d) ecological context.

(2) If an area would qualify as an SNA solely on the grounds that it provides habitat for a single indigenous fauna species that is At Risk (declining), and that species is widespread in at least three other regions, the area does not qualify as an SNA unless:

(a) the species is rare within the region or ecological district where the area is located; or

(b) the protection of the species at that location is important for the persistence of the species as a whole.

(3) If an area would qualify as an SNA solely on the grounds that it contains one or more indigenous flora species that are Threatened or At Risk declining), and those species are widespread in at least three other regions, the area does not qualify as an SNA unless:

(a) the species is rare within the region or ecological district where the area is located; or

(b) the protection of the species at that location is important for the persistence of the species as a whole.

2. Context for assessment

(1) The context for an assessment of an area is:

(a) its ecological district; and

(b) for the rarity assessment only, its ecological district, its region and the national context.

3. Manner and form of assessment

(1) Every assessment must include at least:

(a) a map of the area; and

(b) a general description of its significant attributes, with reference to relevant criteria (as specified below); and

(c) a general description of the indigenous vegetation, indigenous fauna, habitat, and ecosystems present; and

(d) additional information, such as the key threats, pressures, and management requirements; and

(e) for SNAs in areas of Crown-owned land referred to in clause 3.8(8), the conservation management strategy or plan or national park management plan that applies to the area.

(2) An assessment under this appendix must be conducted by a suitably qualified ecologist (which, in the case of an assessment of a geothermal ecosystem, requires an ecologist with geothermal expertise).

Criterion

A. Representativeness criterion

(1) Representativeness is the extent to which the indigenous vegetation or habitat of indigenous fauna in an area is typical or characteristic of the indigenous biodiversity of the relevant ecological district.

Key assessment principles

(2) Significant indigenous vegetation has ecological integrity typical of the indigenous vegetation of the ecological district in the present-day environment. It includes seral (regenerating) indigenous vegetation that is recovering following natural or induced disturbance, provided species composition is typical of that type of indigenous vegetation.

(3) Significant indigenous fauna habitat is that which supports the typical suite of indigenous animals that would occur in the present-day environment. Habitat of indigenous fauna may be indigenous or exotic.

(4) Representativeness may include commonplace indigenous vegetation and the habitats of indigenous fauna, which is where most indigenous biodiversity is present. It may also include degraded indigenous vegetation, ecosystems and habitats that are typical of what remains in depleted ecological districts. It is

not restricted to the best or most representative examples, and it is not a measure of how well that indigenous vegetation or habitat is protected elsewhere in the ecological district.

(5) When considering the typical character of an ecological district, any highly developed land or built-up areas should be excluded.

(6) The application of this criterion should result in identification of indigenous vegetation and habitats that are representative of the full range and extent of ecological diversity across all environmental gradients in an ecological district, such as climate, altitude, landform, and soil sequences. The ecological character and pattern of the indigenous vegetation in the ecological district should be described by reference to the types of indigenous vegetation and the landforms on which it occurs.

Attributes of representativeness

(7) An area that qualifies as an SNA under this criterion has at least one of the following attributes:

(a) indigenous vegetation that has ecological integrity that is typical of the character of the ecological district:

(b) habitat that supports a typical suite of indigenous fauna that is characteristic of the habitat type in the ecological district and retains at least a moderate range of species expected for that habitat type in the ecological district.

B. Diversity and pattern criterion

(1) Diversity and pattern is the extent to which the expected range of diversity and pattern of biological and physical components within the relevant ecological district is present in an area.

Key assessment principles

(2) Diversity of biological components is expressed in the variation of species, communities, and ecosystems. Biological diversity is associated with variation in physical components, such as geology, soils/substrate, aspect/exposure, altitude/depth, temperature, and salinity.

(3) Pattern includes changes along environmental and landform gradients, such as ecotones and sequences.

(4) Natural areas that have a wider range of species, habitats or communities or wider environmental variation due to ecotones, gradients, and sequences in the context of the ecological district, rate more highly under this criterion.

Attributes of diversity and pattern

(5) An area that qualifies as a significant natural area under this criterion has at least one of the following attributes:

(a) at least a moderate diversity of indigenous species, vegetation, habitats of indigenous fauna or communities in the context of the ecological district:

(b) presence of indigenous ecotones, complete or partial gradients or sequences.

C. Rarity and distinctiveness criterion

(1) Rarity and distinctiveness is the presence of rare or distinctive indigenous taxa, habitats of indigenous fauna, indigenous vegetation or ecosystems.

Key assessment principles

(2) Rarity is the scarcity (natural or induced) of indigenous elements: species, habitats, vegetation, or ecosystems. Rarity includes elements that are uncommon or threatened.

(3) The list of Threatened and At Risk species is regularly updated by the Department of Conservation. Rarity at a regional or ecological district scale is defined by regional or district lists or determined by expert ecological advice. The significance of nationally listed Threatened and At Risk species should not be downgraded just because they are common within a region or ecological district.

(4) Depletion of indigenous vegetation or ecosystems is assessed using ecological districts and land environments.

(5) Distinctiveness includes distribution limits, type localities, local endemism, relict distributions, and special ecological or scientific features.

Attributes of rarity and distinctiveness

(6) An area that qualifies as an SNA under this criterion has at least one of the following attributes:

(a) provides habitat for an indigenous species that is listed as Threatened or At Risk (declining) in the New Zealand Threat Classification System lists:

(b) an indigenous vegetation type or an indigenous species that is uncommon within the region or ecological district:

(c) an indigenous species or plant community at or near its natural distributional limit:

(d) indigenous vegetation that has been reduced to less than 20 per cent of its prehuman extent in the ecological district, region, or land environment:

(e) indigenous vegetation or habitat of indigenous fauna occurring on naturally uncommon ecosystems:

(f) the type locality of an indigenous species:

(g) the presence of a distinctive assemblage or community of indigenous species:

(h) the presence of a special ecological or scientific feature.

D. Ecological context criterion

(1) Ecological context is the extent to which the size, shape, and configuration of an area within the wider surrounding landscape contributes to its ability to maintain indigenous biodiversity or affects the ability of the surrounding landscape to maintain its indigenous biodiversity.

Key assessment principles

(2) Ecological context has two main assessment principles:

(a) the characteristics that help maintain indigenous biodiversity (such as size, shape, and configuration) in the area; and

(b) the contribution the area makes to protecting indigenous biodiversity in the wider landscape (such as by linking, connecting to or buffering other natural areas, providing 'stepping stones' of habitat or maintaining ecological integrity).

Attributes of ecological context

(3) An area that qualifies as an SNA under this criterion has at least one of the following attributes:

(a) at least moderate size and a compact shape, in the context of the relevant ecological district:

(b) well-buffered relative to remaining habitats in the relevant ecological district:

(c) provides an important full or partial buffer to, or link between, one or more important habitats of indigenous fauna or significant natural areas:

(d) important for the natural functioning of an ecosystem relative to remaining habitats in the ecological district.