Appendix 5

Areas of Significant Indigenous Vegetation

AREAS OF SIGNIFICANT INDIGENOUS VEGETATION AND HABITAT OF INDIGENOUS FAUNA - PART I				
2A	5	Hunter River Delta	G38 270 557	WERI: A braided river used for fishing and recreational boating activities. An important site for bird breeding.
16A	10	Caspar Flat Bush	E40 669 936	SSWI: An area with mountain beech. Bird species present include yellow breasted tit, rifleman, grey warbler and silvereye. Reasonable canopy but low plant diversity (natural for environment).
17A	10	Left Branch bush	E40 665 925	SSWI: An area of mountain beech, mountain toatoa, small leaf *Coprosmas* and ferns. A very steep south facing habitat. Reasonable canopy but very little plant diversity (natural for environment). Bird species include yellow breasted tit, rifleman, silvereye and grey warbler. Some large slips.
18A	10	Butchers Gully Bush	E40 665 906	SSWI: An area with mountain beech and mountain toatoa. Bird species include grey warbler, rifleman and yellow breasted tit. A steep south facing habitat. Reasonable canopy but little plant diversity. Some slipping.
35A	10	Mount Aurum Remnants	S123 520 930	SSWI: An area with mountain beech, situated in gullies and on southern faces. Reasonable canopy, but low plant diversity. Yellow breasted tit, rifleman and grey warbler present.
38A	12	Moke Lake	S132 470 738	WERI, SSWI: A steep montane lake surrounded by tussock farmland. Brown trout fishery.
40A	12	Lake Isobel	S132 406 807	WERI: A lake with restiad bog and tussock land (*Chionochloa* species).
41A	12	Lake Kirkpatrick	S132 477 704	WERI, SSWI: A sub-alpine lake with *Carex* bog and surrounded by tussock farmland. Common native water-fowl present. More important as trout fishery.
42A	12, 38	Few Creek Bush (includes 127)	S132 440 675	SSWI: A moderate sized plain beech forest (red beech, mountain beech) with common forest birds, including brown creeper, fantail, bellbird, rifleman, grey warbler and yellow breasted tit.
43A	12, 38	Twelve Mile Bush	S132 420 655	SSWI: Reasonable sized bush with more diversity than usual, with red beech, mountain beech, broadleaf shrubbery, bracken and tussock surrounds. Good range of common forest birds, including brown creeper, fantail, bellbird, rifleman, grey warbler and yellow breasted tit. Very good lakeshore diversity.
57A	31	Lake Johnson	F41 735 695	WERI, SSWI: An eutrophied lowland lake, rush and sedge swamp (*Carex* species - Cyperaceae).
69A	13	Shadow Basin Tarn	F41 798 639	Montane lake and montane flush surrounded by steep slopes of snow tussock, cushion vegetation and herb fields.
71A	13	Lake Alta (adjoins 70)	F41 801 632	WERI: A montane lake surrounded by steep snow tussock slopes with extensive cushion vegetation and herb fields.
72A	13	Upper Wye Lakes	F41 812 612	WERI: Four montane lakes surrounded by scree and snow tussock. Cushion vegetation and herb fields.
91A	5	Dingle Lagoon	G39 220 347	WERI SSWI: A lagoon with a sloping edge with good plant communities and populations of paradise shelduck, mallard, grey duck and Canada geese.
114A	6, 9	Mt Earnslaw Forest and Bush Remnants	E40	SSWI: A healthy area of bush with red beech, totara, mountain beech, *Grisilinea,* fuchsia, wineberry, *Coprosma* sp., hard fern. Good numbers of bush birds present, including yellow breasted tit, rifleman, bellbird, grey warbler and silvereye.
126A	32	Gorge Road Wetland	S132 555 720	Significant site of insects and plants *(Carox socta).*

PART II CRITERIA

The purpose of this part of the appendix is to outline a process by which areas of significant indigenous vegetation and significant habitats of indigenous fauna can be identified and included in the District Plan.

The Council will adopt a five stage process which is to commence within 18 months of the District Plan becoming operative, as follows:

Stage 1 – Initial Identification

Initial identification of significant areas will involve:

(a) Review of existing environmental databases and information on the Districts biodiversity to identify potentially significant sites.

(b) Identification of information and data gaps on the district's biodiversity and those parts of the district where potentially significant sites may exist but which have not yet been studied or assessed.

Stage 2 – Consultation Process

Before commencing an assessment under Stage 3 the Council will:

(a) Initiate personal consultation with the affected landowner and occupier.

(b) Consult with the Department of Conservation and other interested parties regarding suitable ecological experts.

(c) Arrange in conjunction with the landowner and occupier for a professional ecological assessment of the site to be carried out.

(d) Discuss with the landowner and occupier, the Department of Conservation and other interested parties the scope and nature of the brief used to undertake the assessment and the sharing of information.

Having completed an assessment under Stage 3 the Council will:

(a) Discuss the results of any assessment with the landowner and occupier and where necessary, appropriate methods of management or protection.

(b) Make the outcomes of any ecological assessment part of the public record.

Stage 3 – Assessment

In determining whether an area is significant in terms of section 6(c) of the Resource Management Act 1991 the Council will use the following ecological criteria as the basis for determining ecological significance:

Primary Criteria

A The Ecological Values of the Area – the values of the place itself

(i) Representativeness – Whether the area contains one of the best examples of an indigenous vegetation type, habitat or ecological process which is typical of its Ecological District.

(ii) Rarity – Whether the area supports or is important for the recovery of, an indigenous species, habitat or community of species which is rare or threatened within the Ecological District or is threatened nationally.

(iii) Diversity and Pattern – the degree of diversity exhibited by the area in:

- vegetation,
- habitat types,
- ecotones,
- species,
- ecological processes.

(iv) Distinctiveness/Special ecological character – the type and range of unusual features of the area itself and the role of the

area in relationship to other areas locally, regionally and nationally, including:

- presence of indigenous species at their distribution limit,
- levels of endemism, eg the presence of endemic species,
- supporting protected indigenous fauna for some part of their life cycle (eg breeding, feeding, moulting, roosting), whether on a regular or infrequent basis,
- Playing a role in the life cycle of migratory indigenous fauna,
- containing one of the best examples of an intact sequence, or substantial part of an intact sequence of ecological features or gradients,
- supporting predominantly intact habitats with evidence of healthy natural ecosystem functioning

Other Criteria

B The Ecological Context of the Area including its relationship with its surroundings

(v) Size and Shape – the degree to which the size and shape of an existing area is conducive to it being, or becoming ecologically self sustaining.

(vi) Connectivity – the extent to which the area has ecological value due to its location and functioning in relation to its surroundings. An area may be ecologically significant because of its connections to a neighbouring area, or as part of a network of areas of fauna habitat. For example an area may act as a corridor or stepping stone for movement/migration of species between or to areas of important habitat.

C The Future Ecological Value of the Area

(vii) Long Term Sustainability – the degree to which an area is likely to maintain itself, taking into consideration:

- extent to which criteria in paragraphs A and B above are met
- degree of historic modification to the area and its surroundings which affects its future
- degree of resilience of species and habitats present
- the effects of current management on identified ecological values
- the extent to which the area has achievable potential, with management input, for restoration of ecological values which are significant in the Ecological District.

The fact that a particular area satisfies one or more of the above criteria does not necessarily mean the area is significant.

The Council will give particular consideration to the ecological criteria in paragraphs (i) to (vii) along with any other relevant considerations in deciding whether or not an area should be included in Part I of the Appendix.

Stage 4 – Final Consideration

Before deciding whether or not to adopt any area identified in Stage 3 as being significant into the District Plan the Council will have regard to the following matters:

(a) existing land use and the degree of modification associated with the site

(b) the economic effect on the landowner including development costs and lost potential (If these are relevant under section 7(b) of the Act)

(c) consideration of non regulatory and regulatory methods which ensure the identified values and their needs are recognised and protected

(d) presence and level of animal pests and weeds

(e) resources required to implement effective protection

(f) whether or not identified values are under threat

(g) the extent to which values are or are not protected elsewhere

(h) any other relevant factor.

Stage 5 – Adoption into the District Plan

This process will include a Plan Change to the District Plan. That process is outlined in Part 1.6 Introduction of the District Plan.

Glossary of Terms:

Endemic: Refers to species of plants and animals which are unique to an area or animals which may migrate but only to breed in the area.

Ecological District: One of the major levels used for the ecological classification of land. New Zealand has been divided up into 85 ecological regions and 269 ecological districts according to geological, topographical, climatic and biological features and processes. This reflects the small scale variability of New Zealand's ecological patterns. An ecological district is a land where topographical, climatic, soils and biological features and broad cultural patterns produce a characteristic landscape of biological communities. An ecological region compromises adjacent ecological districts with closely related characteristics, or may only include one ecological district with very distinct features.

Habitat: The environment in which a particular species or group of species live. It includes the physical and biotic characteristics that are relevant to the species concerned. For example, the habitat of whio/blue duck consists of swift water with an abundance of freshwater insects.

Ecotone: A transitional zone between two habitats, which has distinct species or ecological characteristics of its own.

Resilience: The ability of a community or species to recover quickly (return to its original state) from perturbation, disturbance or displacement.

Community: The species that occur together in the same place at the same time.

Population: A group of individuals of one species in an area.

Ecosystem: A biological system comprising a community of living organisms and its associated non-living environment (such as sunlight, air, water, minerals and nutrients), interacting as an ecological unit.

Rare: Species with small world populations that are not at present endangered or vulnerable but are at risk of extinction. The species are usually localised within restricted geographical areas or habitats, or thinly scattered over a more extensive range.

Endangered: Species in danger of extinction and whose survival is unlikely if the factors causing their decline continue to operate.

Vulnerable: Species likely to move into the endangered category in the near future if the factors causing their decline continue to operate.

Threatened species: A species or community that Is vulnerable or endangered.

Biological diversity: The variability among living organisms from all sources, this includes diversity within species, between species and ecosystems. Components include genetic diversity, species diversity and ecosystem diversity.