# RP – SCHED6 – *Indigenous* biological diversity^*

**A *rare habitat**, *threatened habitat** or *at-risk habitat*** is an area of vegetation or physical substrate which:

1. is a habitat type identified in Table 45 as being “Rare”, “Threatened” or “At-risk” respectively,
2. meets at least one of the criteria described in Table 46 for the relevant habitat type, and
3. is not excluded by any of the criteria in Table 47.

Unless otherwise stated, the habitat types in Table 45 comprise vegetation that is *indigenous**. *Indigenous** is defined in the Glossary of the Plan for the purposes of RP-SCHED6 and means vegetation comprised predominantly of indigenous species, but which may include *scattered** exotic species.

It is recommended that a suitably qualified expert is engaged for assistance with interpreting and applying RP-SCHED6. This could:

1. a consultant ecologist, or
2. the Regional Council staff, who currently provide this service free of charge, including advice and a site visit where required in the first instance. It may be that following this initial provision of information, the proposal will require an Assessment of Ecological Effects to be provided as a component of the consent application. In such instances it is recommended that a consultant ecologist be engaged to conduct the assessment.

The Regional Council can, in all cases, provide any spatial data an existing information where available as relevant to the habitat and the proposed activity.

## Interpreting RP-SCHED6:

**Do I need a *resource consent^*?**

**YES IF:**

the area of vegetation or physical substrate is determined to be habitat type classified as “Rare”, “Threatened” or “At-risk” in Table 45 **AND** it meets any of the criteria in Table 46 **AND** it is not excluded by any of the criteria in Table 47.

**NO IF:**

the area of vegetation or physical substrate is determined to be habitat type that is not classified in Table 45,

OR

the area of vegetation or physical substrate is determined to be habitat type classified as “Rare”, “Threatened” or “At-risk” in Table 45 but **does not** meet any of the criteria in Table 46,

OR

the area of vegetation or physical substrate meets any of the criteria in Table 47.

**Table 45**

Table 45 describes characteristics of habitat types as they are expressed at the regional scale. The "Habitat Type Label" column is intended as a label only and is not intended as a habitat description. The "Defined As" column defines the meaning of the habitat type set out in the "Habitat Type Label" column. The "Further Description" column is to assist Plan users and is not definitive. Patches of any given habitat type may not exhibit all elements considered characteristic of that habitat type. Some species listed may not be present, or be present in different abundances than indicated. Other species not listed can also be present. *Sites** of the same habitat type can exhibit differences from each other. Further, there may be differences in predicted composition and actual composition on the ground, particularly as a result of *site** modification and pest impacts. Unless otherwise stated, the habitat types listed in Table 45 comprise vegetation that is *indigenous**.

*Water Management Areas** and *Sub-areas** are described in RP-SCHED1.

| Habitat Type Label | Defined As | Classification | Further Description |
|---|---|---|---|
| ***Forest** and **Treeland** Habitat Types Classified as Threatened* | | | |
| Hardwood/broadleaved forest or treeland | Tawa *forest** in *association** with other *indigenous** *broadleaved** species, or tawa *dominated** *treeland**. | Threatened | Kamahi, hinau and black maire are likely to be *common**. *Podocarp** species such as kahikatea, rimu or totara may be emergent above the *canopy**. Titoki, rewarewa or northern rata may also be a feature. The subcanopy is likely to comprise *common** *indigenous** *broadleaved** species.<br><br>This habitat type is found in hill country north of Whanganui and the east coast at elevations of 0 - 150 m asl. |
| Kahikatea-pukatea-tawa forest or treeland | Kahikatea *dominated** *forest** or *treeland** on lowland alluvium and floodplains commonly found in *association** with pukatea and tawa. | Threatened | This habitat type is likely to be characterised by the presence of the swamp *forest** species kahikatea and pukatea. Tawa will be *common** on the drier, better drained or raised areas. Matai, rimu and totara can be present but are restricted to areas of better-drained soils. Titoki is also likely to be *common**.<br><br>Kahikatea-pukatea-tawa forest is found on alluvial soils throughout the Region predominantly at elevations between 0 - 350 m but also up to 650 m asl. |
| Podocarp forest or treeland | *Podocarp** *forest** or *treeland** *dominated** by matai, kahikatea or totara. | Threatened | The dominance of any of these species is dependent on the drainage capability of the soil and history of past disturbance. Totara and matai are likely to be more *abundant** on free-draining soils, with kahikatea likely to be *dominant** on poorly-drained soils. *Indigenous** *broadleaved** species (for example titoki, tawa, maire and fuchsia) are likely to be found in *association** with the *podocarp** species, but will be less *abundant** than the *podocarp** species.<br><br>Podocarp forest is mostly confined to the Whanganui, Rangitikei and Ruapehu Districts, from sea level to 900 m asl. |
| Podocarp/broadleaf-fuchsia forest or treeland | *Podocarp** *dominated** *forest** over a subcanopy of broadleaf and fuchsia, or *podocarp** *dominated** *treeland**. | Threatened | This habitat type tends to favour adequately drained and reasonably fertile soils. Although typically a feature of this habitat type, fuchsia is favoured by possums and may be uncommon in many areas. Broadleaf (*Griselinia*), and *indigenous** climbers and epiphytes are also likely to be *common**. Kamahi may also be present but typical *indigenous** *broadleaved** species may be lacking. |

| Habitat Type Label | Defined As | Classification | Further Description |
|---|---|---|---|
| | The *podocarp** species matai, totara, kahikatea or rimu, will be present at varying levels of *abundance**. | | This habitat is largely confined to small isolated areas in high rainfall areas of the hill country in Ruapehu, Whanganui, Tararua and Manawatu Districts, from 400 - 900 m asl. |
| Podocarp/tawa-mahoe forest or treeland | Tawa and mahoe *dominated** *forest** or *treeland** with *scattered** emergent *podocarp** species. | Threatened | Kahikatea or matai trees are likely to be present in the *canopy** or as emergent trees. Rimu and totara may also be present in low numbers. Titoki, hinau, maire or pukatea may also be present. The subcanopy is likely to comprise *common** *indigenous** *broadleaved** species.<br><br>This habitat type is found on dry dune *land** and low hill country (from sea level to 750 m asl). |
| Rimu/tawa-kamahi forest or treeland | Tawa and kamahi *dominated** *forest** or *treeland** with *scattered** emergent rimu. | Threatened | Hinau, rewarewa or mahoe are likely to be *common**. Rimu may be a feature of this habitat type, although its frequency will be dependent on the history of disturbance of the *site**. Miro and totara may also be present with kahikatea and matai likely to be less *common**. Pukatea is commonly likely to be present, particularly in valleys. Black beech may be locally *common** on dry ridges in hill country (eg., inland from Whanganui). *Common** *indigenous** *broadleaved** species are also likely to be present in the understorey.<br><br>Rimu/tawa-kamahi forest can be found in all Districts of the Region from sea level to 800 m asl. |
| Podocarp/red beech-kamahi-tawa forest or treeland | Red beech, kamahi and tawa *dominated** *forest** or *treeland** occurring between 400 - 700 m asl. | Threatened | *Podocarp** species such as rimu, Hall's totara and miro may be present *scattered** through the *canopy** or as emergent trees. *Indigenous** *broadleaved** species may also be present in the subcanopy and understorey. At the higher altitudes of the range of this habitat type, silver beech becomes increasingly *dominant**.<br><br>Podocarp/red beech-kamahi-tawa forest is largely confined to the Rang_2b *Water Management Sub-area**. |
| Podocarp/black beech/mountain beech forest or treeland | Black beech and mountain beech *dominated** *forest** or *treeland** occurring between 400 - 1250 m asl. | Threatened | Emergent *podocarp** species (eg., matai, totara, kahikatea, rimu or miro) can be present as emergent trees, but are not *dominant**. Small *indigenous** broadleaf trees are also likely to be present.<br><br>This habitat type is found in dry climates, on free-draining, relatively fertile soils. |
| Hall's totara/silver beech-kamahi forest or treeland | Silver beech *dominant** *forest** or *treeland** in *association** with *abundant** kamahi occurring between 750 - 1400 m asl. | Threatened | *Indigenous** conifer species such as Hall's totara, pahautea, totara, rimu and miro are likely to be emergent at lower elevations where silver beech is less *dominant**. Northern rata may be *scattered** throughout, although its relative *abundance** is strongly influenced by the *effects** (current or historic) of possum.<br><br>This habitat type is found in the montane areas of the Rangitikei and Manawatu Districts. |
| Kowhai-broadleaved forest or treeland | *Forest** or *treeland** *dominated** by kowhai on *river** terraces, *river** risers or cliffs and bluffs associated with *rivers**.<br><br>This habitat type is found in the central area of the Region, within | Threatened | Kowhai-*broadleaved** *forest** is typically low-growing *forest** or *treeland**, often with a mixture of small *tree** species and *shrubs** including lacebark, ribbonwood, kanuka and *indigenous** divaricating *shrubs**.<br><br>The absence of a dense *canopy** of tawa or kamahi from this habitat type is notable. |

| Habitat Type Label | Defined As | Classification | Further Description |
|---|---|---|---|
| | the following *Water Management Sub-areas**: Akit_1a, Akit_1b, Akit_1c, Mana_1a, Mana_1b, Mana_1c, Mana_7a, Mana_7b, Mana_7c, Mana_7d, Mana_12d, Rang_2b, Rang_2e, Rang_2f, Rang_2g, Rang_3a, Rang_3b, Rang_4c, Whai_6, Whai_7a, Whai_7c, Whai_7d, Whau_2, Whau_3a, Whau_3e, Tura_1a, Tura_1b. | | |
| Kanuka forest or treeland | Kanuka *forest** or *treeland** is *dominated** by almost pure stands of well-developed kanuka. This habitat type is differentiated from kanuka *scrub** by size (greater than 4.5 m tall or 20 cm diameter measured at 1.4 metres above the ground. | Threatened | Manuka and typical *indigenous** *broadleaved** species can also be present *scattered** through the *canopy** or understorey but will not be *dominant**. |
| ***Forest**, *Treeland**, *Scrub** or *Shrubland** Habitat Types Classified as At-risk** | | | |
| Podocarp/kamahi forest or treeland | *Podocarp** *forest** or treeland* *dominated** by rimu, miro, kahikatea, matai or totara in varying dominance over *abundant** kamahi. | At-risk | The degree of dominance of each of the *podocarp** species will be dependent on soil drainage and past disturbance history. Totara, miro and matai are likely to be more *abundant** on free-draining soils, with kahikatea likely to be *dominant** on poorly-drained soils. Rimu will likely be *dominant** in areas of high rainfall. Tawa, northern rata, hinau, black and white maire, fuchsia and/or mahoe may also be present.<br><br>Podocarp/kamahi forest can be found throughout the Region, excluding the western lowland area, predominantly at elevations between 150 - 900 m asl. However, Podocarp/kamahi forest can also be found between 50 - 1100 m asl. |
| Hall's totara/broadleaf forest or treeland | Hall's totara and broadleaf *dominant** *forest** or *treeland** in montane *sites** lacking beech. | At-risk | Pahautea can be co-*dominant** in this habitat type, but is absent from the northern Tararua Ranges, where mountain toatoa is likely to be locally *common**. Matai and miro can be present at the lower altitudes in this habitat type. Kamahi can also be a component of this habitat type, and will be more *common** in wetter climates. Rimu is not a feature of this habitat type as Hall's totara/broadleaf forest is mostly found above the altitudinal limit of rimu.<br><br>Hall's totara/broadleaf forest is the *dominant** habitat type above 800 m asl where beech is absent, but can also be found to elevations as low as 450 m asl. |

| Habitat Type Label | Defined As | Classification | Further Description |
|---|---|---|---|
| Mountain beech forest or treeland | Mountain beech *dominated** *forest** or *treeland**. | At-risk | This habitat type often occurs without many other *tree** species, although upland conifers (eg., Hall's totara, pahautea, and mountain toatoa) and other species (eg., silver beech, broadleaf) may be present (but not *common**) in places, especially at lower elevations or where rainfall is higher. The understorey of mountain beech *forest** is typically sparse. Mountain beech can tolerate cold temperatures, dry winds, and low fertility soils.<br><br>Mountain beech forest can be the predominant habitat type at higher altitudes (650 - 1450 m asl), especially on eastern *sites** and in areas with harsh environmental conditions. |
| Indigenous forest, treeland or scrub on alluvial terrace, floodplains, shingle fans or sand dunes supporting divaricating plant species | *Indigenous** *forest**, treeland*, or *scrub** on alluvial terraces or floodplains in areas prone to summer drought and water-logging and frost during winter, that provides habitat for any of the following:<br>Gardners tree daisy (*Olearia gardnerii*),<br>heart-leaved kohuhu (*Pittosporum obcordatum*),<br>*Coprosma obconica,*<br>*Coprosma wallii*,<br>*Melicytus flexuosus*,<br>fierce lancewood (*Pseudopanax ferox*),<br><br>OR<br><br>*Indigenous** *forest**, treeland*, or *scrub** on freely draining shingle fans, *river** terraces and sand dunes that provides habitat for matagouri (*Discaria toumatou*). | At-risk | This habitat type supports threatened or regionally uncommon divaricating plant species.<br><br>This habitat type may be the result of disturbance (naturally or human induced), contain exotic species, or other *indigenous** divaricating species than those listed here, or be found in *association** with another habitat type (eg., Podocarp-broadleaf forest).<br><br>Although these species may occur together or in isolation throughout the Region, this habitat type is mostly found in the Middle Rangitīkei *Water Management Area** (Rang_2), with matagouri mostly found on sand country of the west coast of the Region, the East Coast Management Area (East_1) and the Upper Whangaehu (Whau_1). |

| Habitat Type Label | Defined As | Classification | Further Description |
|---|---|---|---|
| Indigenous forest or scrub containing *Powelliphanta* land snails | Indigenous* forest* or scrub* habitat containing *Powelliphanta traversi traversi* or *Powelliphanta traversi tararuaensis* land snails.<br><br>This habitat type is found in Lake Papaitonga (West_8), Lake Horowhenua (Hoki_1a), Kahuterawa (Mana_11c) and Mangaore (Mana_13d) *Water Management Sub-areas**. | At-risk | *Powelliphanta traversi traversi* may be found under leaf litter of *forest** comprising pukatea, kahikatea and maire tawake in wet *sites**, and tawa, kohekohe, karaka, and totara in drier *sites** located in the *Water Management Sub-areas** referred to which are found on the Horowhenua Plains.<br><br>*Powelliphanta traversi tararuaensis* may be found under leaf litter and bush rice grass in *forest** comprising rimu and miro with rewarewa and pigeonwood in *sites** with seepages, and where fertile alluvial soils or litter have accumulated, or in *scrub** *dominated** by wheki.<br><br>Either species of land snail may be present in even small and modified fragments of this habitat type. |
| Riparian margin | Any *indigenous** or exotic *woody vegetation** that is *forest**, *treeland**, *scrub**, or *shrubland**, that is not classified elsewhere in RP-SCHED6 as *rare** or *threatened**, within 20 m landwards from the top of the *river** bank adjacent to a *site** identified in RP-SCHED2 as being a Site of Significance - Aquatic. | At-risk | Riparian margin vegetation comprises *indigenous** *woody vegetation**, exotic *woody vegetation**, or a combination of both *indigenous** and exotic *woody vegetation**. This habitat type varies greatly between *sites** in both structure and composition, and might be highly modified, contain artificial assemblages of species or include deliberately planted woody species (*indigenous** or exotic). |
| ***Tussockland**** **Habitat Type Classified as At-risk** | | | |
| Indigenous tussockland below the treeline | Red tussock (*Chionochloa rubra* subsp. *rubra* var. *rubra*) *dominated** *tussockland** below the treeline in areas with natural or human induced disturbance regimes, high *water** tables or temperature inversions.<br><br>This habitat type is found in Rang_1, Rang_2a, Rang_2b, Rang_2c, Rang_2d, Rang_2e, and Rang_2f, *Water Management Sub-areas**.<br><br>This habitat type located within the beds* or rivers* is excluded. | At-risk | Red tussock is particularly *dominant** in humid climates on moist soils. Other tussock species that can be present include silver tussock and blue tussock. Silver tussock will be more important on higher fertility disturbed areas. Blue tussock may be uncommonly present as an inter-tussock species amongst red tussock.<br><br>*Indigenous** and exotic woody species (eg., heather, monoao, *Hebe*, manuka and kanuka) are likely to be increasingly present as natural successional processes advance. |
| ***Wetland**** **Habitat Types Classified as Rare or Threatened** | | | |

| Habitat Type Label | Defined As | Classification | Further Description |
|---|---|---|---|
| Dune slack *wetland** | Dune slack *wetlands** support low-growing *indigenous** *herbfield** and occur in topographically low *sites** where wind has eroded hollows or depressions in raw sand, or where *water** is permanently or seasonally ponded. | Rare | Dune slack *wetlands** are found close to the sea on sand country, and can comprise a mosaic of *indigenous** vegetation and bare sand. Exotic species are frequently present. |
| Ephemeral *wetland** | Ephemeral *wetlands** support indigenous* turf (<3 cm tall) species, indigenous* rushland* and indigenous* scrub*, are most frequently found in depressions lacking a surface outlet, and are characterised by a marked seasonal ponding and drying. | Rare | Ephemeral *wetlands** are of moderate fertility, neutral pH and fed by groundwater or an adjacent *waterbody**. Seasonal variations in rainfall and evaporation result in seasonal variation in *water** level. Ephemeral *wetlands** may experience complete drying in summer months or dry years.<br><br>Ephemeral *wetlands** are found on sand country (although they also occur elsewhere), and may comprise a mosaic of *indigenous** vegetation and bare sand. Fluctuations between aquatic and terrestrial plant species often occur and exotic species are frequently present. |
| Bog and fen *wetland** | Bog *wetlands** support *indigenous** mosses, lichens, cushion plants, sedges, grasses, restiads, ferns, *shrubs** and *trees** and are formed on peat with rainwater the only source of *water**.<br><br>Fen *wetlands** support *indigenous** restiads, sedges, ferns, tall herbs, tussock grasses and *scrub** and are on predominantly peat. Fen *wetlands** receive inputs from groundwater and nutrients from adjacent mineral soils. | Threatened | Bog *wetlands** can be found on relatively level or gently sloping ground including hill crests, basins, terraces and within other *wetland** classes. Bog *wetlands** are nutrient poor, poorly drained and aerated, and usually acid. The *water** table is often close to or just above the ground surface.<br><br>Fen *wetlands** can be found on slight slopes (eg., fans), toes of hillsides, or on level ground without much accumulation of peat. Fen *wetlands** can grade into swamp *wetland**. Fen *wetlands** are of low to moderate acidity and fertility and the *water** table is usually close to or just below the surface.<br><br>Bog *wetlands** and fen *wetlands** are often found in *association** with each other and are *dominated** by *indigenous** species, but exotic species can also be present. |
| Pakihi *wetland** | Pakihi *wetlands** support *indigenous** restiads, sedges, *fernland**, *shrubland** and *heathland**. Pakihi *wetlands** are rain-fed systems on mineral or peat, or mature, skeletal soils. | Rare | Pakihi *wetlands** can be found on level to rolling or sloping *land** in areas of high rainfall. Pakihi *wetlands** are of very low fertility and low pH and are frequently saturated, but can be seasonally dry.<br><br>Pakihi *wetlands** are often found in *association** with bog and fen *wetlands**. Exotic species can also be present. |
| Seepage and spring *wetland** | Seepage *wetlands** support *indigenous** *sedgeland**, | Rare | Seepage and spring *wetlands** can be found at the point of change of slopes and places where the *water** table is raised. Seepage *wetlands** are often also fed by surface *water** including where groundwater has percolated |

| Habitat Type Label | Defined As | Classification | Further Description |
|---|---|---|---|
| | *cushionfield**, *mossfield** or *scrub**, occur on slopes, and are fed by groundwater.<br><br>A spring *wetland** occurs at the point that an underground stream emerges at a point source. | | to the surface. Substrates (ranging from raw or well-developed mineral soil to peat), nutrient levels and pH vary from *site** to *site**.<br><br>Seepage and spring *wetlands** are often small and can occur as isolated systems or in *association** with other *wetland** types. The volume of *water** within a seepage system is less than that within a spring system.<br><br>Seepage and spring *wetlands** are *dominated** by *indigenous** species but exotic species can also be present. |
| Swamp and marsh *wetland** | Swamp and marsh *wetlands** support *indigenous** sedges, rushes, reeds, *flaxland**, tall herbs, *herbfield**, *shrubs**, *scrub** and *forest**.<br><br>Swamp *wetlands** are generally of high fertility, receiving nutrients and sediment from surface run-off and groundwater.<br><br>Marsh *wetlands** are mineral *wetlands** with good to moderate drainage that are mainly groundwater or surface *water** fed and characterised by fluctuation of the *water** table. | Threatened | Substrates within swamp and marsh *wetlands** are generally a combination of peat and mineral substrates. Standing *water** and surface channels are often present, with the *water** table either permanently, or periodically, above much of the ground surface.<br><br>Swamp and marsh *wetlands** can usually be found on plains, valley floors and basins. Marsh *wetlands** can be differentiated from swamp *wetlands** by having better drainage, generally a lower *water** table and usually a more mineral substrate and higher pH. Exotic species are frequently present in both *wetland** types. |
| Saltmarsh *wetland** | Saltmarsh *wetlands** support *herbfield**, *rushland** and *scrub**, form within areas of tidal intertidal zones, and are fed from groundwater and estuary *waters**. Saltmarsh *wetlands** occur in *association** with mudflats. | Threatened | *Water** within a saltmarsh *wetland** can be saline or brackish. Substrates are typically mineral.<br><br>Saltmarsh *wetland** can comprise a mosaic of *indigenous** species and bare substrate (mudflats). Exotic species can be present. In some places the mudflats can be extensive and are characteristic of estuarine *wetland** systems. |
| *Lakes** and lagoons and their margins | *Lakes** and lagoons support *indigenous** aquatic plants (emergent, floating, submerged or rafted), and *indigenous** rushes, reeds, sedges, *sedgeland**, *flaxland**, *reedland** turf (< 3 cm tall), | Threatened | *Lakes** and lagoons in the Region are associated with dune, *river**^, and volcanic landforms and include dune lakes, ox-bow lakes and tarns.<br><br>*Lakes** and lagoons can exist in isolation, be entirely within, or have elements of, other *wetland** habitat types.<br><br>Exotic species (aquatic, *wetland** or terrestrial) may also be present. |

| Habitat Type Label | Defined As | Classification | Further Description |
|---|---|---|---|
| | *herbfield**, *scrub** and *shrubs** on the margins. *Indigenous** terrestrial vegetation (such as *scrub**, *shrub** species, *shrubland**, *treeland** and *forest**) can also be found in *association** with lake and lagoon margins.<br><br>*Lakes** are areas of standing (non-flowing) *water**. Lagoons are shallow *lakes**, connected to, or independent of, a *river**, *lake** or the sea. | | |
| **Naturally Uncommon Habitat Types Classified as Rare** | | | |
| Coastal rock stacks, cliffs, scarps and tors | Where bare substrate, or *indigenous** *lichenfield**, *tussockland**, *herbfield**, *shrubland** or *scrub**, occurs on rock stacks, cliffs, scarps or tors in the coastal climatic zone.<br><br>OR<br><br>Where bare substrate or *herbfield** *dominated** by *indigenous** species occurs on flat *land** at the top of coastal cliffs. | Rare | Vegetation types typically found in this habitat include *indigenous** lichen species, non-woody or low-growing semi-woody herbs, tussocks, *shrubs** and *scrub**. Species characteristic of these vegetation types include, for example, *Pimelea*, sea primrose, *Selliera*, *Myosotis*, shore puha, flax, toetoe, *Astelia*, *Hebe*, daisy species, kawakawa, mahoe and broadleaf. Exotic species may also be present.<br><br>This habitat type may be of any rock type including basic, calcareous, quartzose, acidic and ultrabasic rocks. It is found only in the coastal climatic zone, usually within 1km of the coast and less than 300m asl. |
| Cliffs, scarps, and tors of acidic rock | *Where bare substrate or indigenous* lichenfield*, tussockland*, herbfield*, shrubland* or scrub*, occur* on cliffs, scarps or tors of acidic rock.<br><br>Acidic rock types include mudstone (papa), sandstone, greywacke, rhyolite, granite and schist. | Rare | Vegetation types typically found in this habitat include *indigenous** lichen species, non-woody or low-growing semi-woody herbs, tussocks, *shrubs** and *scrub**. Species characteristic of these vegetation types include, for example, Pimelea, Myosotis, flax, toetoe, Astelia, Hebe, daisy and tree-daisy species, *Gaultheria, Dracophyllum,* mahoe and broadleaf. Exotic species may also be present.<br><br>In-situ bedrock and other bare substrate is an important part of these habitats and occurs in a mosaic of vegetation communities representing different times since disturbance. |

| Habitat Type Label | Defined As | Classification | Further Description |
|---|---|---|---|
| Cliffs, scarps and tors of quartzose rock | Where bare substrate or *indigenous* lichenfield*, tussockland*, herbfield*, shrubland** or *scrub**, occur on cliffs, scarps or tors of quartzose rock.<br><br>Quartzose rock types include quartzite and soft quartzitic sediments. | Rare | Vegetation types typically found in this habitat include *indigenous** lichen species, non-woody or low-growing semi-woody herbs, tussocks, *shrubs** and *scrub**. Species characteristic of these vegetation types include, for example, *Pimelea, Myosotis*, flax, toetoe, *Astelia, Hebe*, daisy and tree-daisy species, *Gaultheria, Dracophyllum*, mahoe and broadleaf. Exotic species may also be present.<br><br>In-situ bedrock and other bare substrate is an important part of these habitats and occurs in a mosaic of vegetation communities representing different times since disturbance. |
| Cliffs, scarps and tors of basic and calcareous rock | Where bare substrate or *indigenous* lichenfield**, *tussockland*, herbfield*, shrubland** or *scrub**, occur on cliffs, scarps or tors of basic and calcareous rock.<br><br>Calcareous rocks include limestone, marble, dolomite and calcareous mudstone. Basic rocks include tuffaceous mud- and sandstone, andesite, diorite, basalt and gabbro. | Rare | Vegetation types typically found in this habitat include *indigenous** lichen species, non-woody or low-growing semi-woody herbs, tussocks, *shrubs** and *scrub**. Species characteristic of these vegetation types include, for example, *Pimelea, Myosotis,* flax, toetoe, *Astelia, Hebe*, daisy and tree-daisy species, ferns, *Gaultheria*, *Dracophyllum*, mahoe and broadleaf. Exotic species may also be present.<br><br>In-situ bedrock and other bare substrate is an important part of these habitats and occurs in a mosaic of vegetation communities representing different times since disturbance. |
| Karst systems | Bare substrate or *indigenous* shrubland**, *tussockland**, *flaxland**, or *herbfield**, occurring in sinkholes, cave entrances, caves and cracks in karst systems. | Rare | Karst systems are found on limestone, marble, dolomite or calcareous rock, and can be subterranean or semi-subterranean.<br><br>Karst systems provide habitat for highly specialised *indigenous** species (often *endemic**) that are adapted to subterranean environments.<br><br>Karst systems are known in the Region from the Whanganui and Pohangina Valleys. |

| Habitat Type Label | Defined As | Classification | Further Description |
|---|---|---|---|
| *Screes** of acidic rock | Bare substrate or *indigenous* lichenfield*, tussockland*, herbfield*, shrubland** or *scrub** occurring on screes* of acidic rock.<br><br>Acidic rock types include silicic (rhyolite, granite and gneiss) and silicic intermediate (mudstone, sandstone, greywacke, schist, other sedimentary, ignimbrite and andesite) types. | Rare | Includes slopes covered in shingle, cobbles of acidic rock which may or may not support vegetation. Bare substrate is a characteristic feature of this habitat type.<br><br>Screes may be found associated with a boulderfield, cliff or scarp. They provide habitat for a range of plants, invertebrates and lizards including the threatened small scaled skink (*Oligosomia microlepis*).<br><br>Exotic species may also be present. |
| *Screes** of calcareous rock | Bare substrate or *indigenous* lichenfield*, tussockland*, herbfield*, shrubland** or *scrub** occurring on screes* of calcareous rock.<br><br>Calcareous rocks include limestone, marble, dolomite ad calcareous mudstone. | Rare | Includes slopes covered in shingle, gravel or cobbles of calcareous rock which may or may not support vegetation. Bare substrate is a characteristic feature of this habitat type.<br><br>Screes may be found associated with a larger cliff or scarp. They provide habitat for a range of plants, invertebrates and lizards, including the threatened small-scaled skink *(Oligosomia microlepis).*<br><br>Exotic species may also be present. |
| *Boulderfields** of acidic rock | Bare substrate or *indigenous* lichenfield*, tussockland*, herbfield*, shrubland** or *scrub** occurring on *boulderfields** of acidic rock.<br><br>Acidic rock types include silicic (rhyolite, granite and gneiss) and silicic intermediate (mudstone, sandstone, greywacke, schist, and other sedimentary) types. | Rare | Includes slopes covered in boulders of acidic rock which may or may not support vegetation. Bare substrate is a characteristic feature of this habitat type.<br><br>*Boulderfields** may be found associated with a larger cliff or scarp. They provide habitat for a range of plants, invertebrates and lizards, including the threatened small-scaled skink (*Oligosomia microlepis).*<br><br>Exotic species may also be present. |
| *Boulderfields** of volcanic rock | Bare substrate or *indigenous* lichenfield*, tussockland*, herbfield*, shrubland** or *scrub** occurring on *boulderfields** of volcanic rock.<br><br>Volcanic rock types include ignimbrite, andesite, and basalt. | Rare | Includes slopes covered in boulders of volcanic rock which may or may not support vegetation. Bare substrate is a characteristic feature of this habitat type.<br><br>*Boulderfields** may be found associated with a larger cliff or scarp. They provide habitat for a range of plants, invertebrates and lizards, including the threatened small-scaled skink (*Oligosomia microlepis).*<br><br>Exotic species may also be present. |

| Habitat Type Label | Defined As | Classification | Further Description |
|---|---|---|---|
| *Boulderfields** of basic and calcareous rock | Bare substrate or *indigenous** *lichenfield*, tussockland*, herbfield*, shrubland** or *scrub** occurring on *boulderfields** of basic or calcareous rock.<br><br>Calcareous rocks include limestone, marble, dolomite and calcareous mudstone. Basic rocks include tuffaceous mud- and sandstone, andesite, diorite, basalt and gabbro. | Rare | Includes slopes covered in boulders of basic or calcareous which may or may not support vegetation. Bare substrate is a characteristic feature of this habitat type.<br><br>*Boulderfields** may be found associated with a larger cliff or scarp. They provide habitat for a range of plants, invertebrates and lizards, including the threatened small-scaled skink (*Oligosomia microlepis).*<br><br>Exotic species may also be present. |
| Active duneland | *Indigenous** *grassland** or *sedgeland** occurring on active *duneland** formed on raw coastal sand. | Rare | Active *duneland** is characterised by unstable sands. This continual instability of sand prevents the formation of soil and therefore the vegetation type that an active *duneland** can support is limited. Examples are Spinifex *grassland** and pingao *sedgeland**. Other *indigenous** species can also be present e.g., Sand convolvulus and sand Carex. Exotic species will also be present.<br><br>The instability of the sand provides constant disturbance and therefore creates environmets within which species can establish. Continual change of the mosaic of bare sand and vegetation is an important component of active *duneland**. |
| Stable duneland | *Indigenous** *grassland**, *tussockland**, *herbfield** (including *Pimelea actea* and *P. arenaria*), or *shrubland** occurring on stable *duneland** formed on recent coastal sand. | Rare | Vegetation types typically occurring on stable *duneland** include tussocks, low-growing or semi-woody herbs and *shrubs**. These vegetation types characteristically support, for example, toetoe, *Selliera rotundifolia*, sand Gunnera, native spinach, sand Coprosma, sand daphne, coastal tree daisy, pohuehue, tauhinu, Coprosma species and hangehange. Exotic invasive species are also a feature of stable *duneland**.<br><br>The threatened species *Pimelea actea* is known from the Tura_1b, West_5, and Whau_4 *Water Management Areas**. |
| Inland duneland | *Indigenous** *scrub**, *tussockland**, *herbfield** or *forest** occurring on inland *duneland** formed on raw or recent sands inland. | Rare | Vegetation types typically found on inland *duneland** include tussock, low-growing or semi-woody herbs, *shrubs**, and *trees**. These vegetation types characteristically support, for example, toetoe, flax, native spinach, manuka, kanuka, mahoe, lancewood, five-finger, hangehange, cabbage trees, titoki, akeake, ngaio, tawa, pigeonwood and mahoe. Exotic species may also be present. |

**Table 46**

An area of any habitat type described in Table 45 must meet at least one of the following criteria that apply to the relevant habitat type before it qualifies as a *rare habitat**, *threatened habitat** or *at-risk habitat** for the purposes of this Plan.

***Forest**, *Treeland**, *Scrub** or *Shrubland** Habitat Types Classified as Threatened or At-risk**

1. Areas of *continuous** *indigenous** vegetation where:
   a. if it is habitat type classified as Threatened then the habitat must cover at least 0.25 ha, or
   b. if it is habitat type classified as At-risk then the habitat must cover at least 0.5 ha where:
      i. it supports *indigenous** understorey vegetation, or
      ii. it is present within a gully system, or
   c. if it is habitat type classified as At-risk the habitat must cover at least 1 ha unless (b) above applies.

   Or
2. Areas of *discontinuous** *indigenous** vegetation where:
   a. if it is habitat type classified as Threatened where it occurs as *treeland** it covers at least 1 ha, or
   b. if it is habitat type classified as At-risk where it occurs as *treeland** it covers at least 2 ha, or
   c. if it is habitat type classified as either Threatened or At-risk other than *treeland** it covers at least 1 ha except if it is present within 50 m of an area of *continuous** *indigenous** vegetation it covers at least 0.5 ha.

   Or
3. Areas containing *Olearia gardnerii, Pittosporum obcordatum, Coprosma obconica, Coprosma wallii, Melicytus flexuosus, Pseudopanax ferox* or *Discaria toumatou* covering at least 0.1 ha.

   Or
4. An area of *indigenous** vegetation of any size containing *Powelliphanta* land snails.

   Or
5. An area of *woody vegetation** of any size or species composition (including exotic vegetation) within 20 m landwards from the top of the *river** bank adjacent to an area identified in RP-SCHED2 as being a Site of Significance - Aquatic.

   Or
6. Areas of *indigenous** vegetation that have been established for the purpose of habitat manipulation including habitat creation, restoration and buffering, where such an area covers at least 1 ha as a discrete *site** or at least 0.5 ha where it is adjacent to an existing area of *indigenous** habitat.

   Or

***Tussockland** Habitat Type Classified as At-risk**

7. An area of *indigenous** *tussockland** covering at least 0.5 ha.

   Or

***Wetland** Habitat Types Classified as Threatened**

8. Areas of naturally occurring *indigenous** *wetland** habitat covering at least 0.1 ha.

   Or
9. Areas of *indigenous** vegetation that have been established in the course of *wetland** habitat restoration.

   Or
10. Areas of artificially created *indigenous** *wetland** habitat covering at least 0.5 ha.

    Or

**Naturally Uncommon Habitat Types and *Wetland** Habitat Types Classified as Rare**

11. Habitat type that is classified as Rare that covers at least 0.05 ha.

    Or
12. Areas of *indigenous** habitat created at some time in the course of dune habitat restoration (including dune stabilisation).

**Table 47:**

If an area of any habitat type described in Table 45 meets any of the following criteria it must not be *rare habitat**, *threatened habitat** or *at-risk habitat** for the purposes of this Plan.

***Forest**, *Treeland**, *Scrub**, or *Shrubland** Habitat Types Classified as Threatened or At-risk**

1. Areas of *indigenous** *tree** species planted for the purposes of timber harvest.

   Or

2. *Indigenous** vegetation planted for landscaping, horticultural, shelter belts, gardening or amenity purposes.

   Or

***Wetland** Habitat Types Classified as Rare or Threatened**

3. Damp gully heads, or paddocks subject to regular ponding, *dominated** by pasture or exotic species in *association** with *wetland** sedge and rush species.

   Or

4. Ditches or drains supporting raupo, flax or other *wetland** species (eg., *Carex* sp., *Isolepis* sp.), or populations of these species in drains or slumps associated with *road** reserves or rail corridors.

   Or

5. Areas of *wetland** habitat specifically designed, installed and maintained for any of the following purposes:
   a. stock watering (including stock ponds), or
   b. *water** storage for the purposes of fire fighting or irrigation (including old gravel pits), or
   c. treatment of animal effluent (including pond or barrier ditch systems), or
   d. *wastewater** treatment, or
   e. sediment control, or
   f. any hydroelectric power generation scheme, or
   g. *water** storage for the purposes of *public water supplies**.

   Or

6. Areas of *wetland** habitat maintained in relation to the implementation of any *resource consent*^ *conditions*^ or agreements relating to the *operation** of any hydroelectric power scheme currently lawfully established.

   Or

7. Open *water** and associated vegetation created for landscaping purposes or amenity values where the planted vegetation is predominately exotic, or includes assemblages of species not naturally found in *association** with each other, on the particular landform, or at the geographical location of the created *site**.

***Tussockland** Habitat Type Classified as At-risk**

8. Red tussock regenerating through pasture dominated by exotic grass species.