

## PART 50    RULE 50 - DEFINITIONS

### Appeals to Part 50 of the Operative District Plan:

#### Definitions

Rural Lot [973, 995, 994]

Development [1014]

Farm [1014]

Horticulture [1014]

Packing Shed [1014]

Glasshouses [1014]

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! **Modifications made to PART 50 by Proposed Plan Change 14 are as follows:**  
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**Amend** the definition of **ACTIVE RECREATION** by *inserting* (at the end of the definition) the following:

...and includes FESTIVALS AND EVENTS.

**Add** the following:

ADDITIONAL NATURAL CHARACTER AREA means land within the Manukau Harbour and Seabird Coast Management Areas encompassing the area between the landward boundary of the COASTAL PROTECTION SETBACK and a line measured 150 metres from Mean High Water Springs or within the Tasman Coast Management Area 90m landward of the boundary of the COASTAL PROTECTION SETBACK. The ADDITIONAL NATURAL CHARACTER AREA shall not apply to any land within a SPECIAL CHARACTER AREA. [993, 1006, 979]

(Refer Coastal Protection Setback, Additional Natural Character Area and Special Character Area Diagrams)

**Delete** the definition of **AGRICULTURAL ACTIVITIES**

**Add** the following:

AIRCRAFT means any machine for flying in the air.

**Add** the following:

AIRFIELD means an area of land set aside from other uses for the purpose of enabling AIRCRAFT to land and take off.

**Amend** the definition of **ANCILLARY ACTIVITY** by *inserting* the following at the end of the operative definition:

...unless the activity is separately listed in the activity status RULES for any zone.

**Add** the following:

BIODIVERSITY means the variability among living organisms and the ecological complexes of which they are a part, including diversity within species, between species and of ecosystems.

**Delete** the definition of **CAMPING GROUND** and **replace** with the following:

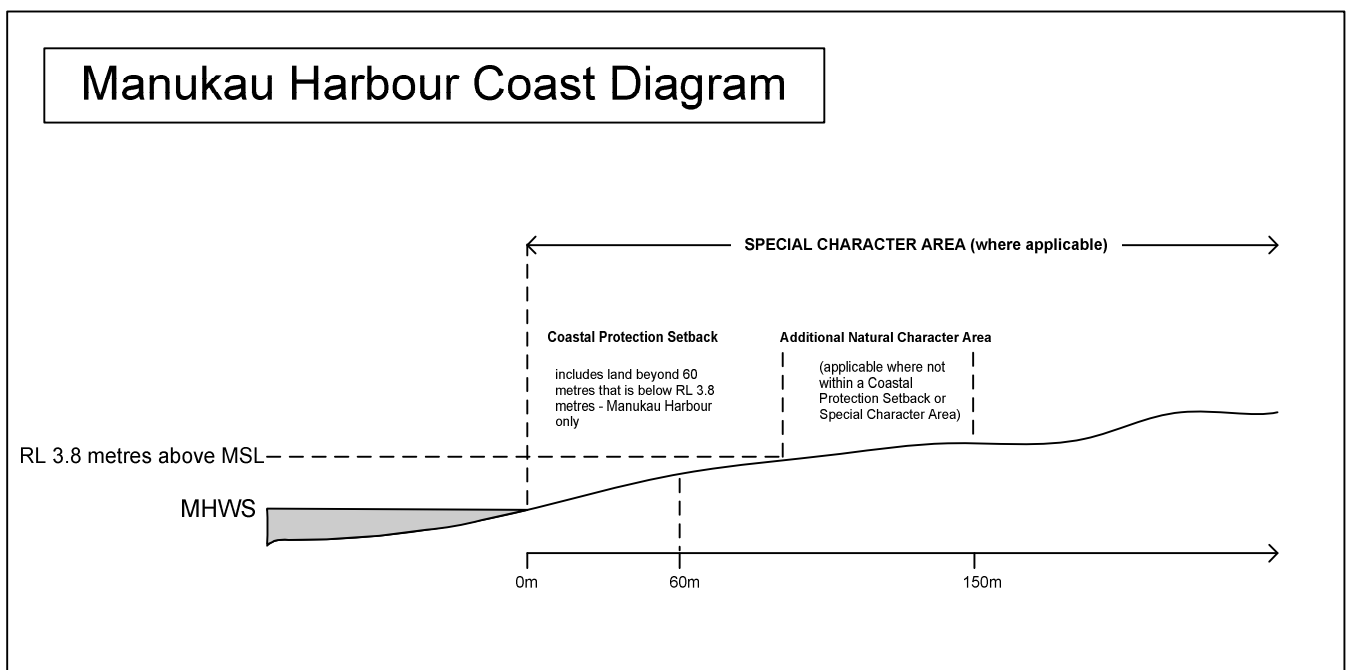
CAMPING GROUND or TEMPORARY LIVING PLACE means any area of land used or designed or intended to be used to provide temporary living places for rent, hire or reward for two or more HOUSEHOLDS for periods not exceeding 50 days in any continuous term of occupancy, and usually involves the use of tents, cabins, caravans or other vehicles, or other structures or shelters which would not normally comply with the New Zealand BUILDING Code applying to RESIDENTIAL BUILDINGS. Note: While HOUSEHOLDS would normally live separately they may enjoy the use in common of entrances, parking areas, recreation areas, water supplies, cookhouses, sanitary conveniences, or other premises and equipment. Any caravan located on a site must have a current Warrant of Fitness in order to be classified as temporary. Where the caravan etc. remains on site longer than 50 days, it is still within the definition of TEMPORARY LIVING PLACE if it is not occupied for more than 50 days continuously.

**Add** the following:

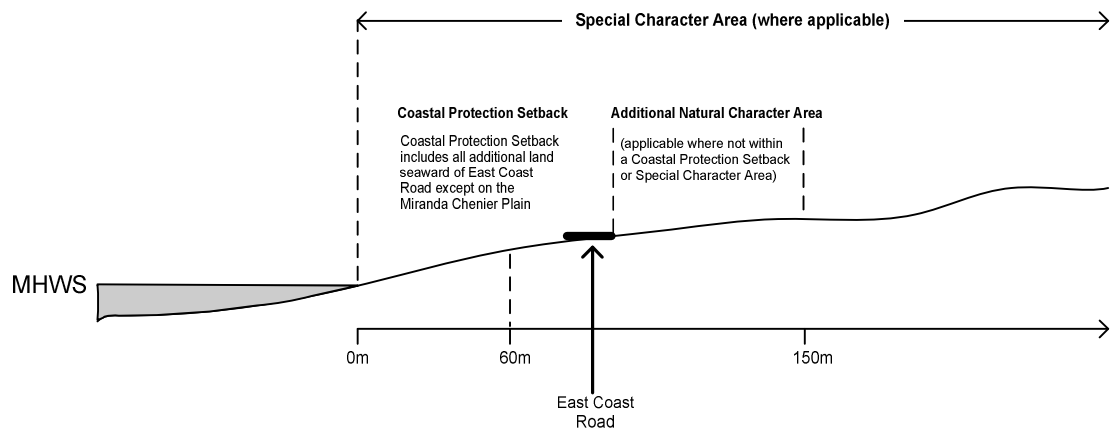
COASTAL PROTECTION SETBACK means either: **[993, Cutfield, 1006, 979]**

- (i) Land within the Tasman Coast Management Area encompassing the area between Mean High Water Springs and 60 metres landward from the top edge of the coastal escarpments or ridgelines; or
- (ii) Land within the Manukau Harbour Management Area and the Rural Zone encompassing the area within 60 metres from Mean High Water Springs and all additional land lying below RL 3.8 metres above mean sea level datum (or RL 6m above Chart Datum at Onehunga Wharf, this elevation being identical but measured with respect to a lower datum); or **[1014]**
- (iii) Land within the Seabird Coast Management Area encompassing the area within 60 metres from Mean High Water Springs and all additional land seaward of the East Coast Road except the Miranda Chenier Plain.

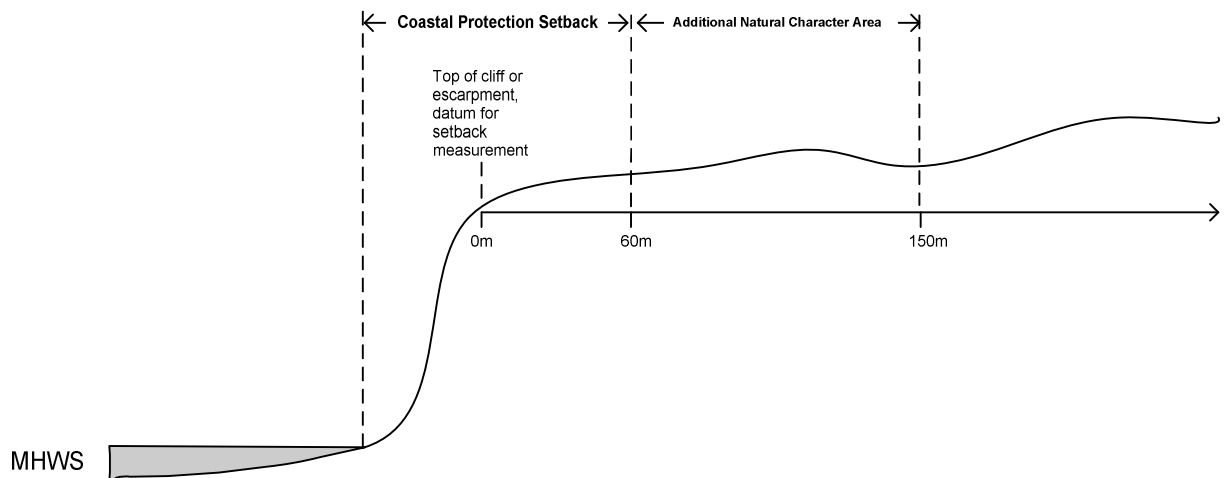
### Coastal Protection Setback, Additional Natural Character Area and Special Character Area Diagrams



## Seabird Coast Diagram



## Tasman Coast Diagram



**Add** the following:

CONSERVATION FORESTRY as defined under FORESTRY means the management of exotic or native forests primarily for soil CONSERVATION or water control or waste water disposal or purification purposes or aesthetic or scientific purposes including:

- (i) Landscape preservation or enhancement
- (ii) Preservation for particular historic or archaeological value
- (iii) CONSERVATION for scientific or ecological value
- (iv) Other non-logging purposes.

where, on any holding containing a conservation forest, logging of timber from that forest shall be for the sole purpose of maintaining the good ecological health of that forest.

**Add** the following:

CONTINUOUS COVER FORESTRY is defined as the use of silvicultural systems whereby the forest canopy is maintained at one or more levels without clearfelling. To achieve this, management, felling and regeneration of a forest is carried out continually or irregularly through the whole of the forest area and there is no clearfelling of trees when they reach some pre-determined age. As a general rule the clearfelling of areas wider than two tree heights is avoided which means that felling coupes are normally less than 0.25 hectare in area.

**Add** the following:

DEPENDENT RELATIVE/S means a person or people having a close relationship with the occupants of the principal dwelling on the site, either of which are largely dependent on the assistance of the other for their physical and / or emotional wellbeing and the maintenance and upkeep of their material possessions.

**Amend** the definition of **DWELLING HOUSE** by *inserting* the following after the definition:

and ACCESSORY BUILDINGS and ANCILLARY ACTIVITIES shall include:

- (i) Swimming pools
- (ii) Use of the site for AIRCRAFT only for the transportation of the residents of the DWELLING HOUSE to and from the property

This definition does not include:

- (i) Mobile home
- (ii) Campervan
- (iii) Tent
- (iv) Caravan
- (v) Cabin
- (vi) MOTEL
- (vii) Boarding-house
- (viii) Hotel
- (ix) TRAVELLERS' ACCOMMODATION
- (x) Hostel
- (xi) SPECIAL HOUSING DEVELOPMENTS

Amend the definition of EARTHWORKS in the Operative District Plan as follows:

**EARTHWORKS** means the disturbance of land surfaces by blading, contouring, ripping, moving, removing, excavating, placing or replacing soil or earth, or by cutting or filling operations (except any surface disturbance of soil (but not earthmoving) directly associated with cultivation and planting operations and with harvesting in respect of cropping and horticultural activities). **[1014]**

**Delete** the definition of **ECOSYSTEM** and *replace* with the following:

ECOSYSTEM means any interrelated and functioning assemblage of plants, animals, and substrates (including air, water, soil) on any scale, including the processes of energy flow and productivity.

**Delete** the definition of **ELITE LAND**.

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**Add** the following:

ENVIRONMENTAL DOMAINS means a method of classifying data layers that describe aspects of climate and landform known to influence the distributions of biota (plants and animals). The data is analysed and sites having similar environments are grouped together to form 'domains'. Classification results are then taken back into a GIS so that the geographic distribution of each of the resulting groups can be mapped.

**Add** the following:

FARM QUARRY or FARM QUARRIES means the extraction of MINERALS taken only for use ancillary to FARMING, HORTICULTURE, CONSERVATION FORESTRY and PRODUCTION FORESTRY and only used within the property of extraction. No extracted material (including any aggregate) shall be exported or removed from the property of origin and there shall be no retail or other sales of such material. For example, FARM QUARRIES include the extraction of material for farm and forestry tracks, access ways and hardstand areas on the property of origin.

**Amend** the definition of **FARM STAY ACCOMMODATION** by *inserting* 'HOME STAY' after 'FARM STAY ACCOMMODATION'.

**Add** the following:

FESTIVALS AND EVENTS means infrequent gatherings of people for short-term ACTIVE RECREATION or training events requiring no permanent structures, no mechanical EARTHWORKS and occurring with the consent of the landowner, and includes such activities as "Field Days", "Music Festivals", "Jamborees" and the like.

**Amend** the definition of **FORESTRY** by **deleting** the word 'FORESTRY' and **replacing** it with 'FORESTRY including PRODUCTION FORESTRY and CONSERVATION FORESTRY'.

Replace the definition of Glasshouse with a definition for Greenhouse:

GREENHOUSE means a BUILDING, within which plants are grown in a controlled environment, and includes a tunnel-house and shade-house, but does not include a BUILDING used for housing animals.  
**[1014]**

**Add** the following:

HABITAT TYPE means a similar unit of indigenous vegetation or habitat. Examples of HABITAT TYPE and their definitions are provided in 50.1 Vegetation and Habitat Type Definitions.

**Amend** the following:

**HAZARDOUS SUBSTANCE** means any inflammable, toxic, explosive, infectious, radioactive, or other substance which may impair human, plant or animal health and which includes, but is not limited to, any substance defined in section 2 of the Hazardous Substances and New Organisms Act 1996 (or any subsequent amendment thereof) as a hazardous substance.

**Delete** the definition of **HOME STAY** and **replace** with the following:

HOME STAY: see FARM STAY ACCOMMODATION

**Delete** the definition of **HOME OCCUPATION** and **replace** with the following: **[952]**

HOME OCCUPATION means an occupation, craft, profession, business, HOME STAY or FARM STAY ACCOMMODATION, or other service which complies with the definition of HOME ENTERPRISE and

which also complies with all additional standards specific to the zone. A HOME OCCUPATION may include but is not limited to hairdressing, clerical work, art or pottery studio, dressmaking, plan drawing, teaching of speech, drama, music or ballet, typing or word-processing, offering specialist health care or professional advice.

**Add** the following:

HYDROLOGICAL NEUTRALITY or HYDROLOGICALLY NEUTRAL means a type of system of stormwater management that produces no increase in quantity nor lowering of quality of stormwater discharged into a natural receiving environment. (Note: Refer to the Rural PLAN Change Background Report Section 5 for further explanation and background).

**Delete** the definition of **INDIGENOUS** and **replace** with the following:

INDIGENOUS means flora or fauna that has established in New Zealand without human assistance before or after the arrival of human beings, and includes species which are only found in New Zealand (endemic) as well as those found in New Zealand and also found else where in the world.

**Amend** the definition of **INTENSIVE FARMING** by **inserting** the following to the end of the operative definition:

...including boarding and breeding kennels or dog training grounds. Note: the keeping of dogs that assist in the management of a farm is also an ancillary activity to FARMING, AGRICULTURE, and other rural activities.

**INTENSIVE FARMING** means the intensive production of animals and/or fungi, carried out under BUILDING cover. It includes, but is not restricted to, ANIMAL FEEDLOTS, the farming of poultry, pigs, rabbits, and mushrooms and boarding and breeding kennels or catteries and dog training grounds but does not include DOMESTIC PIGS or DOMESTIC POULTRY. Note: the keeping of dogs that assist in the management of a farm is also an ancillary activity to FARMING and other rural activities. **[967]**

**Add** the following:

INTENSIVE HORTICULTURE means HORTICULTURE carried out within the confines of a BUILDING, such as a GREENHOUSE. **[1014]**

**Add** the following:

INTERNATIONALLY RECOGNISED NATURAL AREA is an area recommended for protection as a World Heritage Site or a Wetland of International Importance (RAMSAR site).

**Add** the following:

INTRINSIC VALUES (AS DEFINED IN SECTION 2 OF THE RESOURCE MANAGEMENT ACT) in relation to ECOSYSTEMS, means those aspects of ECOSYSTEMS and their constituent parts which have value in their own right, including -

- (i) Their biological and genetic diversity; and
- (ii) The essential characteristics that determine the integrity, form, functioning, and resilience of the ECOSYSTEM.

MINERAL EXTRACTION AND PROCESSING means the excavation, blasting, processing (crushing screening, washing and blending), storage, distribution and sale of mineral products and includes ancillary activities such as earthworks, landscaping and rehabilitation works (including cleanfill) and treatment of stormwater and wastewater, together with ancillary buildings and structures (including caretaker's accommodation).

**Add** the following:

MUSTELLID FARMING means the keeping or FARMING of fitches, mustellids (including ferrets, weasels and stoats) or opossums within the confines of a BUILDING, DWELLING HOUSE or structure.

**Add** the following:

NATIONALLY CRITICAL OR NATIONALLY ENDANGERED, NATIONALLY VULNERABLE, SERIOUS DECLINE or GRADUAL DECLINE, SPARSE or RANGE RESTRICTED as defined in Molloy, B., Bell J.B., Clout, M., de Lange, P., Gibbs, G., Norton, D., Smith, N., Stephens, T. 2001. *Classifying species according to threat of extinction. A system for New Zealand*. Biodiversity Recovery Unit, Department of Conservation, Wellington.

**Delete** the definitions of  $L_{10}$  and  $L_{max}$  and **replace** with the following: **[1009]**

NOISE means sound which is unwanted by the person who hears it. Sound shall be measured in accordance with NZS 6801:1991 "Measurement of Sound", and assessed in accordance with NZS 6802:1991 "Assessment of Environmental Sound". The following definitions are adopted from NZS6801:1991:

"Exceedence level ( $L_n$ )" in decibels, defined in previous Standards as percentile or percentile exceeded level, is that sound level which is equalled or exceeded a given percentage of the total measurement time.

$L_n$  is expressed as a percent where n is a number, for example:  
 $L_{10}$  is the 10% exceedence level,  $L_{95}$  the 95% exceedence level.

"Maximum Weighted Sound Pressure Level, or Maximum Sound Level, ( $L_{max}$ )" is 10 times the logarithm, to the base 10, of the ratio of the square of the maximum sound pressure, obtained with a standardised A frequency weighting and a standardised exponential time weighting during a stated time period, to the square of the reference sound pressure. Unless otherwise stated the time weighting shall be F response.

"Day  $L_{10}$ " means the exceedence level (dBA  $L_{10}$ ) applying between 7am and 10pm every day.

"Night  $L_{10}$ " means the exceedence level (dBA  $L_{10}$ ) applying between 10pm on any one day and 7am on the day following.

"Night  $L_{max}$ " means the maximum sound level applying during night hours specified in the District PLAN.

"Decibel", (dB) is the term used to identify 10 times the logarithm to the base 10 of the ratio of two like quantities proportional to power or energy.

"Construction NOISE": where a condition of resource consent requires a standard for construction NOISE to be set, the following should be used:

Construction NOISE shall meet the limits recommended in Table 1 of NZS 6803:1999. The Measurement and Assessment of NOISE from Construction, Maintenance, and Demolition work, shall be measured and assessed in accordance with NZS 6803:1999. Adjustments provided in clause 6.1 of NZS 6803:1999 shall apply, and references in the Tables of NZS 6803:1999 to "NZS 6802" shall be read as references to clause 4.2.2 of NZS 6802:1991.

**Add** the following:

PAPAKAINGA HOUSING means residential occupancy on any ancestral land owned by Maori (see also MULTI-UNIT HOUSING)

**Add** the following:

POULTRY HATCHERY means only the hatching of POULTRY other than DOMESTIC POULTRY but does not include the laying of eggs on site or ancillary activities and buildings such as Breeder and Rearing sheds. [992]

**Add** the following:

PRODUCTION FORESTRY means the ongoing management of trees or areas for the production of timber as defined under FORESTRY

**Add** the following:

RURAL AIRSTRIP is any area of Rural zoned land used for take off and landing of aircraft including helicopters for the purpose of servicing rural land. Such servicing includes but is not limited to aerial topdressing, forestry, fencing, delivery of farm supplies and equipment and the collection of farm produce but excludes airstrips directly associated with commercial passenger transport and any activity located in the rural zone for which resource consent is required.

**Add** the following:

RURAL AERIAL SERVICE means any service associated with a business activity involving the take off and landing of light aircraft and helicopters for agricultural, horticultural and forestry activities and which includes a depot, base or storage area whether or not it is returned to each day or night, and from which the activity or service is normally commenced or performed. It includes but is not limited to aerial topdressing, spraying, forestry, fencing, delivery of supplies and equipment and the collection of produce but excludes services directly associated with passenger transport or tourist activities. [1014]

**Introduce** the following definition:

**RURAL INDUSTRY AND SERVICES** means a business activity or service that, as its principal function has a clear connection to or provides services to rural activities, marine farming and natural resources on the site (excluding the extraction of topsoil and AGGREGATE EXTRACTION ACTIVITIES), and may have some form of ancillary depot, base or storage area, from which the activity is normally commenced. It includes but is not limited to: [967, 1014]

- the servicing, assembling or repair of agricultural or marine farming machinery or equipment
- the services of a trencher, post rammers or fencing contractor
- Freight or transportation services
- Storage of vehicles or equipment for hire
- Stock yards
- Sawmills other than portable sawmills
- Contract or co-operative cool-stores and grading and PACKHOUSES for primary produce
- Grain Silos
- Marine Farming equipment storage or maintenance

- Manufacturing of goods from produce or resources of the site

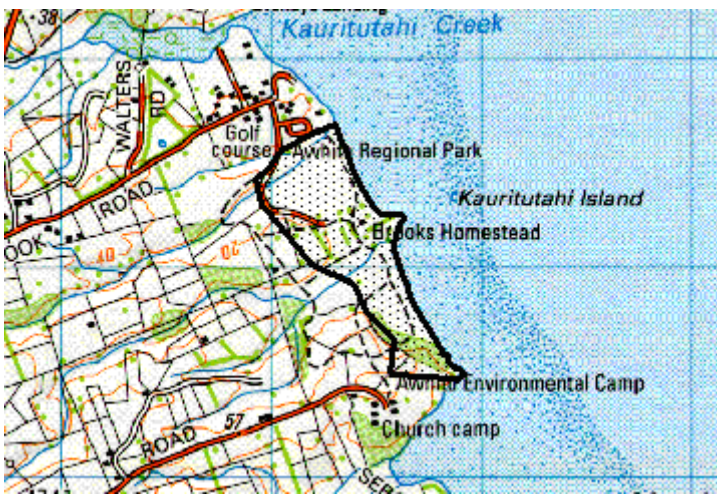
But does not include any activity which qualifies as a HOME OCCUPATION and excludes the sale or hire of goods, RURAL AIR SERVICE and the manufacturing of goods and products where raw materials are imported to the site.

**Add** the following:

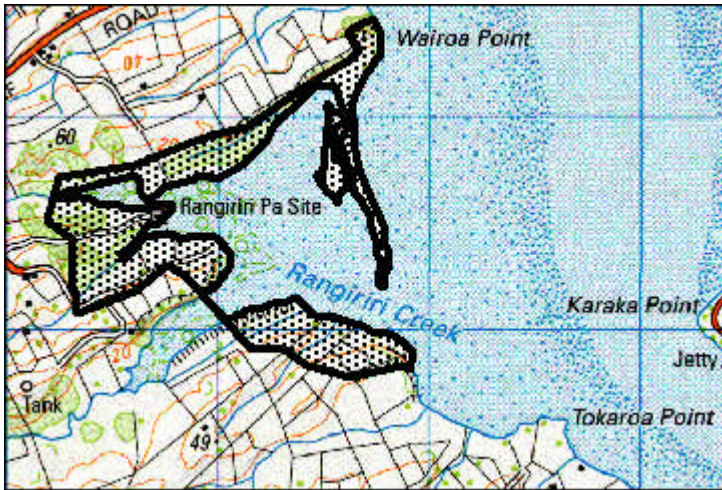
SPECIAL CHARACTER AREA means an area adjacent to the coast in a specific location which has a special coastal character which is particularly sensitive to change; as shown on the following maps.

(Refer **Coastal Protection Setback, Additional Natural Character Area and Special Character Area Diagrams**)

Awhitu Regional Park



Pollok Spit



Clarks Beach to Seagrove



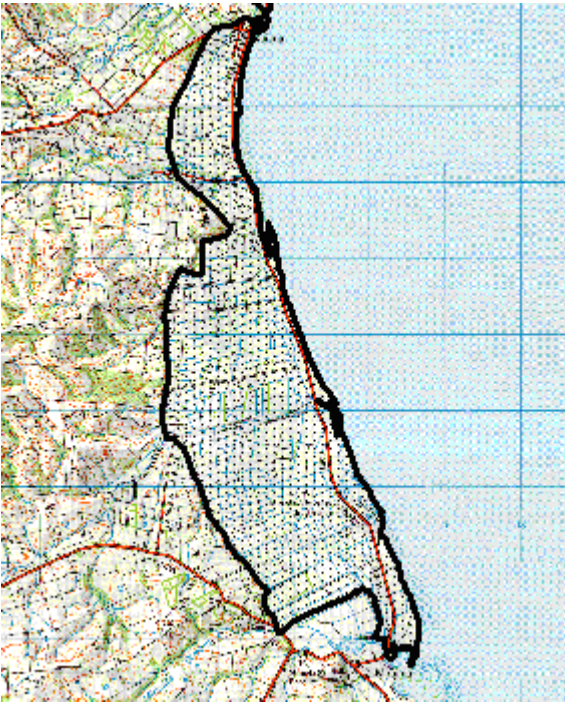
Ellets Beach



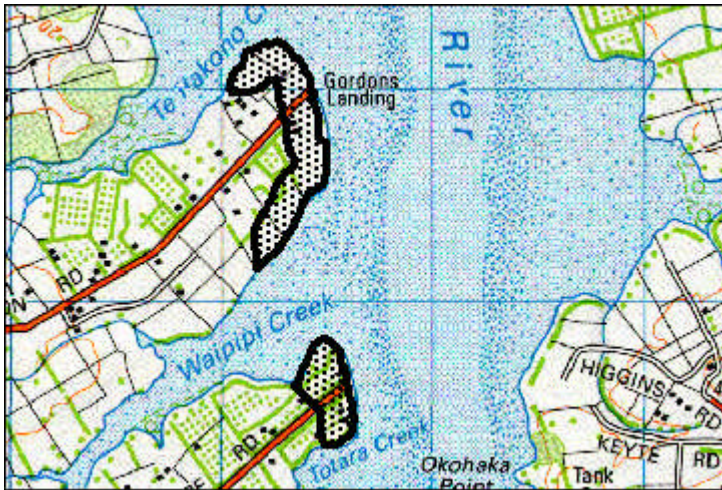
Whakatiwai Gravels



Miranda Chenier Plain



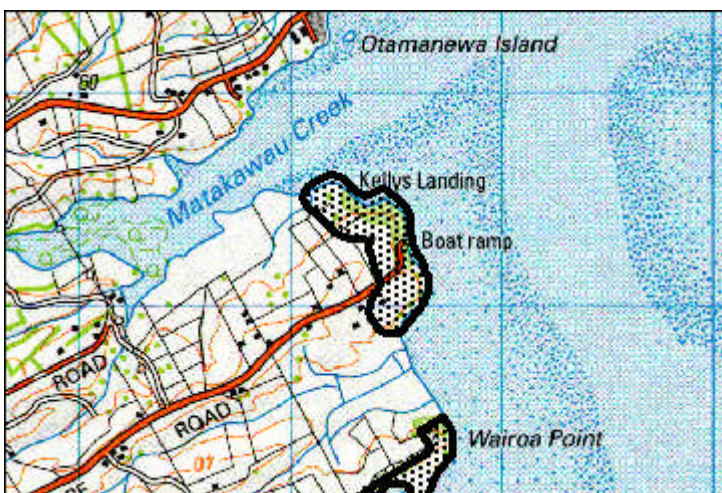
Waipipi Creek Roosts



The Western Needles Promontory



Kelly's Landing Headland



Dickey's Landing Headland / Kauri Road Headland



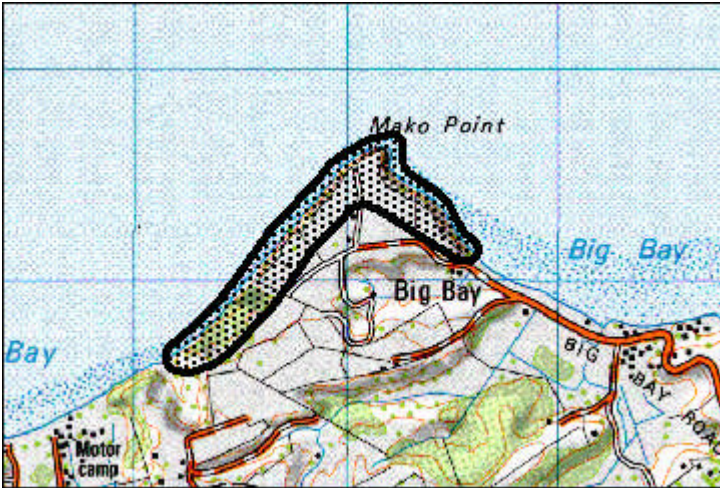
Andrew Pye Road Headland



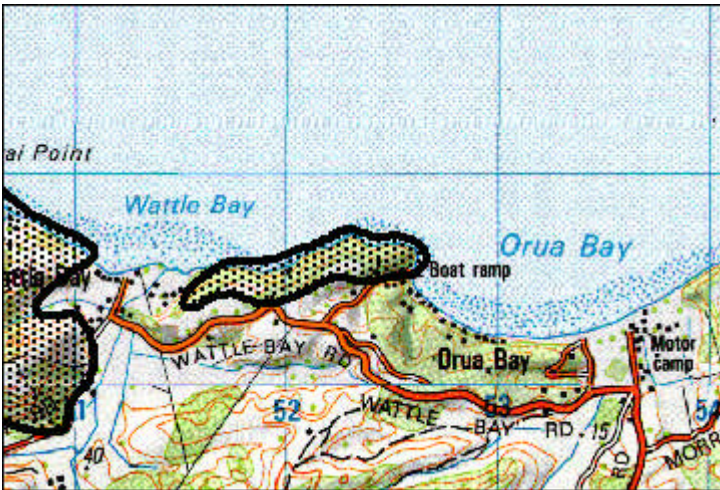
Kauri Point Headland



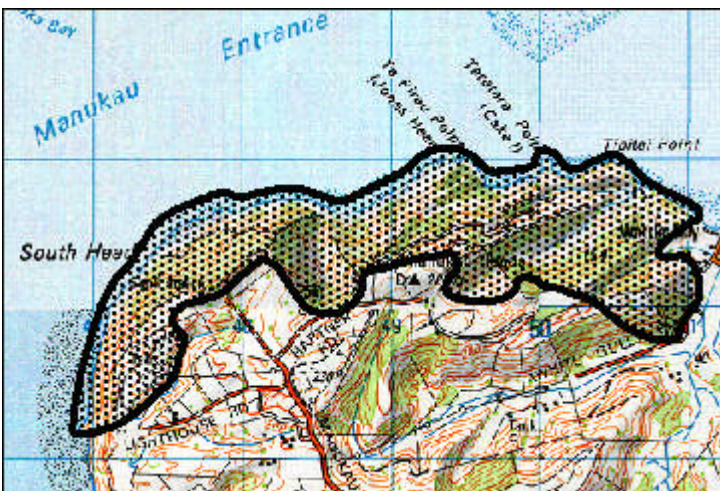
Mako Point Headland [979, 982, 983, 969]



Headland between Wattle Bay and Orua Bay



The Manukau Heads, Tipitai Point, Taratara Point and Te Pirau Point



**Add** the following:

SPECIFIED BUILDING AREA (or IDENTIFIED BUILDING SITE or SPECIFIED HOUSE SITE) means a particular type of nominated BUILDING SITE applying to a DWELLING HOUSE (or other specific type of BUILDING) and its ACCESSORY BUILDINGS. A Specified BUILDING Area may arise out of considerations of safety, flooding, visibility, rural amenity, separation from INDIGENOUS vegetation within an Environment LOT, or other site-specific criteria relating to the suitability of the SITE for a DWELLING HOUSE and BUILDINGS. A Specified BUILDING Area may be recorded on a consent notice attaching (as a condition of subdivision consent) to a title, and may be shown on Structure Plans under this District PLAN.

**Add** the following:

SUBSIDIARY DWELLING means a second or subsequent dwelling established on a lot for use by Farm Employees or Dependent Relatives and for which a Resource Consent is required in order to create a dwelling right. **[1014]**

**Add** the following:

TEMPORARY LIVING PLACE: see CAMPING GROUND

**Add** the following:

THREATENED with extinction species means indigenous species that have been evaluated and placed within any of the Threatened categories under the New Zealand Threatened Classification System (Molloy, B., Bell J.B., Clout, M., de Lange, P., Gibbs, G., Norton, D., Smith, N., Stephens, T. 2001. *Classifying species according to threat of extinction. A system for New Zealand*. Biodiversity Recovery Unit, Department of Conservation, Wellington).

**Add** the following:

TITLE RELOCATION LOT: see TRANSFERRABLE RURAL LOT RIGHT

**Add** the following:

TRANSFERRABLE RURAL LOT RIGHT means a right to transfer an existing RURAL LOT from a property in any Rural or Coastal Zone to a specified receiver area. It means a RURAL LOT is rescinded from a property and created as a new title or titles in a receiver area, and "title relocation LOT" has a corresponding meaning (i.e. it is the LOT that can be created by the exercise of this right)

**Add** the following:

UNDER-REPRESENTED means indigenous vegetation or HABITAT TYPE of which 10 percent or less of its known or likely original extent remains in an Ecological District, or an Ecological Region or in Lands Environmental analysis or nationally.

**Add** a new definition

UPGRADE (for the purpose of flood protection, land drainage and erosion control works)  
Upgrading of existing flood protection, land drainage and erosion control works means the maintenance, replacement or increase in protection provided by the existing or similar structure or structures

**Delete** the definition of **VERSATILITY (VERSATILE LAND)** and **replace** with the following: **[956, 1014]**

VERSATILE SOILS means land classified as Land Use Capability I, II or IIIe, on the New Zealand Land Inventory Worksheets (as amended in the 1986 Second Edition), provided that land classified as Class IIIe is further described by a soil scientist qualified and experienced in soil and land classification as containing well drained and moderately well drained soil.

VERSATILITY AND VERSATILE LAND shall have a corresponding meaning as VERSATILE SOILS.

**Delete** the definition of **WETLAND** and **replace** with the following:

WETLAND means the same as the definition in the definitions section (section 2) of the Resource Management Act.

**Add** the following:

## 50.1 VEGETATION AND HABITAT TYPE DEFINITIONS

Vegetation units as far as possible should follow descriptions contained within Auckland Regional Council. 2004. Awhitu and Manukau Ecological Districts: Indigenous Vegetation Survey, Volume I. These are as follows:

### 50.1.1 CONIFER FOREST

Advanced secondary forest dominated by pole conifers (totara, rimu, tānekaha, kahikatea, mataī, miro). Some areas are pure stands, but a mixture of two or more podocarps is more common. Broadleaved species including puriri, tawa, karaka, mangleao, kohekohe and pukatea also contribute to the canopy.

(i) *Totara forest*

Totara is the dominant conifer. Broadleaved species and other conifer species may also be present but only as minor components.

(ii) *Kahikatea forest*

Kahikatea is the dominant conifer. Broadleaved species and other conifer species may be present but only as minor component.

(iii) *Conifer forest*

Conifer-dominated forest with mixtures of two or more podocarp species. Broadleaved species and other conifer species may be present but only as minor components.

(iv) *Conifer/ broadleaved forest L*

Broadleaved species make up most of the canopy with plentiful emergent conifers including rimu, mataī, miro, kahikatea, and totara.

(v) *Broadleaved-conifer*

Broadleaved species dominate the canopy, with frequent pole conifers throughout.

(vi) *Kanuka-conifer*

Kanuka-dominant canopy, with scattered pole conifers emerging as well as having scattered emergent rewarewa.

### 50.1.2 TARAIRE FOREST

Logged primary taraire-dominated forest. Broadleaved species present include puriri, tawa, karaka, mangeao, kohekohe and pukatea in varying mixtures and densities, ranging from a small component of the canopy to co-dominance. Regenerating conifer species (totara, kahikatea, rimu, tānekaha, mataī) are present in some areas, ranging from scattered to common. Emergent rewarewa is a dominant visual feature, but only makes up a small component of the canopy.

(i) *Taraire forest*

Taraire-dominated forest with other scattered broadleaved and conifer species in the canopy.

(ii) *Conifer/ taraire*

Forest with abundant emergent pole conifer over a mainly taraire canopy. Some other broadleaved species are scattered throughout the canopy.

(iii) *Conifer/ broadleaved-taraire*

Abundant pole conifers emergent over a broadleaved and taraire canopy.

(iv) *Taraire-broadleaved*

Taraire-dominated forest with other broadleaved species common. Small numbers of pole conifers scattered throughout.

(v) *Taraire-broadleaved-conifer*

Taraire-dominated forest with other broadleaved species a major component. Pole conifers also occur in the canopy.

### 50.1.3 TAWA FOREST

Consists of the residue left after selective removal of conifers to leave a largely tawa-dominant residue, i.e. logging of rimu-tawa forest, some rimu-matai-broadleaved forest types or some steep land conifer-broadleaved forest types. Tawa is generally dominant with lesser amounts of kamahi, northern rata, hinau, rewarewa and maire, interspersed with dense regrowth of shrubs such as *Pseudopanax* spp., putaputaweta, wineberry etc. on old skids and logging tracks.

### 50.1.4 KAURI FOREST

Logged primary and advanced secondary forest with kauri as either the dominant species, or as a component of the canopy. Kauri can be abundant, forming dense pole stands of rickers, with small amounts of other species, mainly conifers (totara, kahikatea, rimu, tānekaha, mataī, miro), present. Forests dominated by taraire or broadleaved species (puriri, tawa, karaka, mangeao, kohekohe, pukatea) with kauri as a component are also included here, the mixtures varying considerably. No primary kauri forest remains in the district, only very occasional large trees.

(i) *Kauri-(conifer)*

Kauri-dominated forest with other conifer species (totara, kahikatea, rimu, tānekaha, mataī, miro) frequent in the canopy. Some broadleaved species occur but only as a minor component, usually in the sub canopy or under storey.

(ii) *Kauri/ taraire*

Kauri over a taraire-dominant canopy. Broadleaved trees and conifers are scattered throughout.

(iii) *Kauri/ broadleaved-(conifer)*

Pole kauri is emergent over a broadleaved-dominated canopy. Young conifer species are scattered amongst the canopy but are not emergent. Occasional kanuka occur around the edges of some remnants.

(iv) *Kanuka-kauri*

Advanced secondary forest with kanuka and kauri as the dominant canopy species (or at least major components). Broadleaved and conifer species are scattered throughout the canopy but are not a major component.

#### **50.1.5 POHUTUKAWA FOREST**

Primary or advanced secondary forest with pohutukawa either the dominant species of the canopy or a major component. Broadleaved species (puriri, tawa, karaka, mangeao, kohekohe, pukatea, rewarewa) are always present in the canopy, ranging from infrequent to co-dominant. Conifer species (totara, kahikatea, rimu, tānekaha, mataī, miro) are present in some remnants and range from being scattered to abundant.

(i) *Pohutukawa*

Pohutukawa-dominated forest with a small component of broadleaved species scattered throughout the canopy.

(ii) *Broadleaved-pohutukawa*

Broadleaved species (puriri, tawa, karaka, mangeao, kohekohe, pukatea, rewarewa) dominate the canopy; they vary in composition, with pohutukawa as a component.

(iii) *Conifer/pohutukawa*

Abundant emergent pole conifer, over a canopy dominated by pohutukawa with broadleaved species as a minor component.

(iv) *Broadleaved-conifer-(pohutukawa)*

Broadleaved species (puriri, tawa, karaka, mangeao, kohekohe, pukatea, rewarewa) dominate the canopy with frequent pole conifers throughout. Pohutukawa is present but makes up a small component of the canopy.

#### **50.1.6 BROADLEAVED FOREST**

Logged primary forest or advanced secondary broadleaved forest with puriri, tawa, karaka, mangeao, kohekohe, pukatea and rewarewa dominating the canopy. The patterns of dominance vary considerably throughout the district.

(i) *Broadleaved forest*

Broadleaved species (puriri, tawa, karaka, mangeao, kohekohe, pukatea, rewarewa) dominate the canopy. Scattered pole conifers are sometimes present.

(ii) *Swamp forest*

Broadleaved species, especially pukatea and including swamp maire, dominate the canopy, often with adventive weed species (e.g., willow (*Salix* spp.)) co-dominant.

#### **50.1.7 KANUKA SCRUB/ FOREST**

Young secondary vegetation dominated by kanuka; either low forest or scrub. Typically pure kanuka with few other species. Broadleaved species tend to be more common in older vegetation or in gullies.

(i) *Kanuka*

Kanuka-dominated forest and/ or scrub, with small amounts of either broadleaved or conifer species.

(ii) *Kanuka-broadleaved*

Forest with kanuka dominant or a major component, and broadleaved species forming a substantial component of the canopy.

#### **50.1.8 WETLANDS**

(i) *Salt water*

Mangrove is generally the only woody plant in the strongly saline estuarine areas.

(ii) *Freshwater*

Raupo, *Juncus* spp., flax, *Baumea* spp., and/ or *Typha orientalis* dominate the sedgeland, with scattered willow (*Salix* spp.) stands and cabbage tree, often surrounding small lakes.

#### **50.1.9 FLAXLAND**

Flax-dominated vegetation on steep slopes with occasional coastal five-finger emergent. Open areas are dominated by hard fern and bracken.

#### **50.1.10 EXOTIC FRESHWATER WETLANDS**

Resulted from the invasion generally by grey and/or crack willow of any of the freshwater wetland units. The composition is variable, depending on the composition of the original wetland, but as time progresses is drastically altered as a dense, even canopy of willow develops. Crack willow usually dominates alongside river channels where there is more water movement and higher nutrient status, and grey willow is more common where fertility is lower, eg in backwaters and on areas of peat accumulation. Extensive stands containing alder as well as willow are found in the lowermost reaches of the Waikato River.

#### **50.1.11 COASTAL CLIFF**

Flax dominates with pohutukawa co dominant on lower slopes, and coastal five-finger, kawakawa, hangehange, māhoe and tree lupin common. On upper slopes flax is dominant, with few woody species present. Hard fern, bracken, tree lupin, pōhuehue and *Isolepis nodosa* dominate open areas. Cliffs are very unstable with scattered vegetation.

#### **50.1.12 LAKE**

Freshwater dune lakes and associated aquatic vegetation.

#### **50.1.13 MIXED NATIVE/ EXOTIC**

Has generally arisen after partial clearing of forest for agriculture Areas of vegetation dominated by adventive species including gorse, woolly nightshade, radiata pine and *Tradescantia*. These areas typically have only a small component of young secondary native vegetation.

#### **50.1.14 TREEFERN 'SCRUB'**

Consists of scattered tree ferns emergent over a layer of shrubby species such as rangiora, mahoe, manuka and fivefinger, with varying amounts of pasture species.

#### **50.1.15 PRIMARY TUSSOCKLAND**

*Spinifex Tussockland.*

Spinifex occurring on dunes. Pingao occurs very locally, but species such as *Coprosma acerosa*, *Muehlenbeckia complexa*, *Calystegia soldanella*, and a range of adventure herbs are locally abundant.

#### **50.1.16 EXOTIC TUSSOCKLAND**

*Marram Tussockland.*

**OCCURS ON UNSTABLE COASTAL DUNES, MAINLY ON THE WEST COAST. MARRAM IS THE DOMINANT SPECIES, BUT SPINIFEX MAY ALSO BE PRESENT, AS MAY OTHER SPECIES AS LISTED UNDER SPINIFEX TUSSOCKLAND.**