

Landform/geology

Alluvium and marine deposits.

Vegetation

The area adjoins saltmarsh/mangrove associations which are suffering the effects of wetland drainage and unrestricted stock access. These estuarine associations are included under the Hokianga Harbour site.

Abundant raupo occurs with frequent ti kouka, and occasional manuka and saltmarsh ribbonwood.

Fauna

Not surveyed but this site provides ideal habitat for the nationally threatened banded rail and spotless crane (both Sparse).

Significance

A representative small freshwater wetland at the head of a tidal arm of the Tapuwae River, this raupo dominant freshwater wetland is an example of a habitat type which has become extremely rare due to pastoral development and unrestricted grazing within the Hokianga Ecological District. Examples of this fresh/brackish/saline interface are practically absent from the North Hokianga but are still present (in partly drained form) in the vicinity of the Waima River in the South Hokianga.

WAIRUPE FOREST REMNANT

Survey no.	O05/111
Survey date	20 June 1994
Grid reference	O05 559 490
Area	6 ha
Altitude	c. 10-40 m asl

Ecological unit

(a) Kowhai-puriri-totara forest on toeslope

Landform/geology

It is underlain by Mangakahia Complex sandstone.

Vegetation

Lowland forest of kowhai, puriri and totara with frequent kahikatea, titoki and manuka. White maire, kohekohe, rewarewa, ti kouka, kohuhu, and harakeke are occasional.

Fauna

Not surveyed.

Significance

Representative of a now rare transitional swamp-forest/hill-forest vegetation type, of which this is the only such example in this Ecological District. The swamp forest which would once have adjoined this remnant has long been replaced by pasture, but the lowland/swamp forest influence remains as evidenced by the presence of species such as kahikatea, titoki, manuka, white maire, kohuhu, kowhai, ti kouka and harakeke.

Representative site and only example in the Ecological District.



Wairupe Forest Remnant O05/111

Each grid is 1000m x 1000m
and = 100 ha

- S = shrubland
- F = forest
- W = wetland
- E = estuarine
- D = duneland

MOTUKARAKA REMNANT

Survey no. O05/112
 Survey date 20 June 1994
 Grid reference O05 573 474
 Area 7 ha
 Altitude 0-70 m asl

Ecological unit

(a) Kanuka/manuka-tanekaha-totara forest on coastal hillslope



Motukaraka Remnant O05/112

Each grid is 1000m x 1000m
and = 100 ha.

- S = shrubland
- F = forest
- W = wetland
- E = estuarine
- D = duneland

Landform/geology

Mangakahia Complex sandstone.

Vegetation

A small coastal forest remnant with emergent kahikatea but the dominant canopy species tend to be of a secondary nature, probably as a result of past logging. However, a strong coastal influence is suggested by the presence of nikau, kowhai, karaka, ngaio and *Coprosma propinqua*. Other canopy species include rewarewa, rimu, kohekohe, taraire, titoki and occasional puriri, kahikatea (some emergent), hinau, towai, houhere and harakeke.

Fauna

Common forest birds.

Significance

Representative site exhibiting a coastal forest type in relatively good condition. Some riparian functions are implied by the close proximity of the sea.

BLUE MOUNTAIN RD BUSH

Survey no.	O05/114
Survey date	20 June 1994
Grid reference	O05 572 497, O05 591 493
Area	187 ha (65 ha forest, 122 ha shrubland)
Altitude	40-220 m asl

Ecological unit

- (a) Kanuka/manuka-totara forest on hillslope
- (b) Tanekaha-totara forest on hillslope
- (c) Puriri-taraire forest on hillslope
- (d) Taraire forest on steep hillslope
- (e) Taraire-towai forest on hillslope
- (f) Kanuka forest on hillslope
- (g) Kahikatea-totara secondary forest on hillslope
- (h) Kanuka/manuka shrubland on hillslope

Landform/geology

Medium-sized cutover and secondary forest remnant on dissected hill country underlain by Mangakahia Complex sandstone.

Vegetation

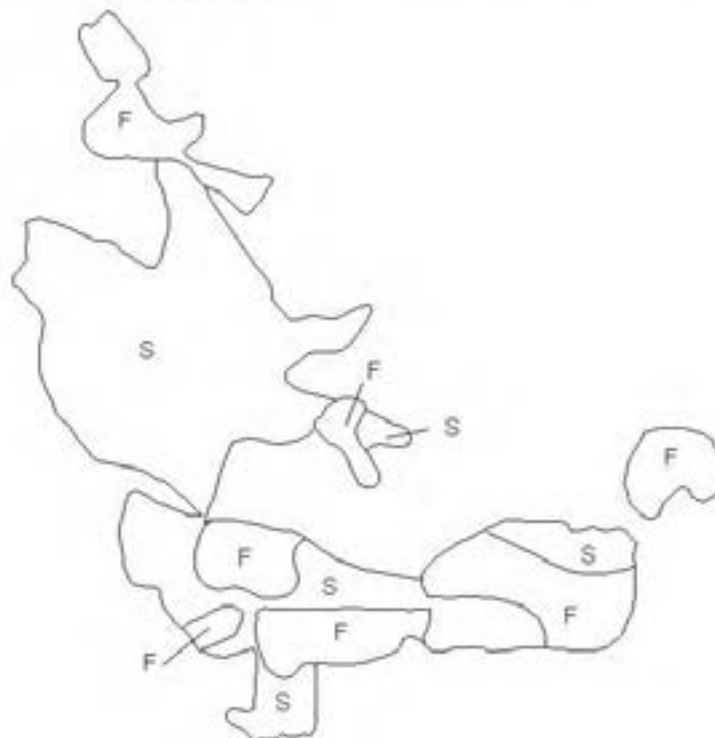
- (a) Kanuka/manuka is abundant with common totara and frequent kahikatea and tanekaha and occasional puriri, rimu and mamaku.
- (b) Tanekaha and totara forest with frequent kahikatea, and rewarewa. Puriri and rimu are occasional.
- (c) Puriri and taraire are associated with frequent towai, rewarewa, kahikatea and puka and occasional kohekohe, nikau, matai, miro and emergent pukatea, rimu and northern rata.
- (d) Taraire forest occurs in the remnant to the east of Rakautapu Rd. Towai, emergent northern rata, totara, rewarewa, puriri and kohekohe are frequent while rimu, pukatea, nikau, kahikatea, matai and miro are occasional. Smaller remnants occur in the gullies to the east of Rakautapu Rd, with frequent secondary kahikatea and occasional rewarewa.
- (e) Taraire and towai forest occurs in the north east of the site with occasional kahikatea, rewarewa, and mamaku. A stand of eucalypt, pine and macrocarpa occurs in this area.
- (f) Kanuka forest occurs on the northern side with frequent totara and occasional rimu and kahikatea.
- (g) Secondary kahikatea and totara forest occurs below the road on the northern side of the block.



Blue Mountain Rd Bush O05/114

Each grid is 1000m x 1000m
and = 100 ha.

- S = shrubland
- F = forest
- W = wetland
- E = estuarine
- D = duneland



(h) Kanuka/manuka shrubland between 4–6 m tall covers about 50% of the area, with occasional mamaku, totara, kahikatea, puriri, tobacco weed and pampas.

Fauna

NI brown kiwi (Serious Decline) has been reported from this site.

Significance

A large site with a variety of age stages from recent regeneration, vigorous secondary forest to cutover old-growth forest, which performs an upper catchment and riparian protection function.

Presence of NI brown kiwi.

Representative site for type (b), only record in the Ecological District and type (c).

TAPUWAE FOREST & OUTLIERS

Survey no.	O05/115
Survey date	26 June 1994
Grid reference	O05 522 522
Area	1174 ha (655 ha forest, 519 ha shrubland)
Altitude	5–235 m asl

Ecological unit

- (a) Kahikatea–totara forest on hillslope
- (b) Nikau–puriri–towai forest on hillslope
- (c) Kanuka/manuka–totara forest on hillslope
- (d) Kahikatea–kanuka/manuka–totara forest on hillslope
- (e) Kanuka/manuka forest on hillslope
- (f) Taraire–towai forest on hillslope

Landform/geology

Occurs on dissected hill country underlain by Mangakahia Complex sandstone and siliceous mudstone.

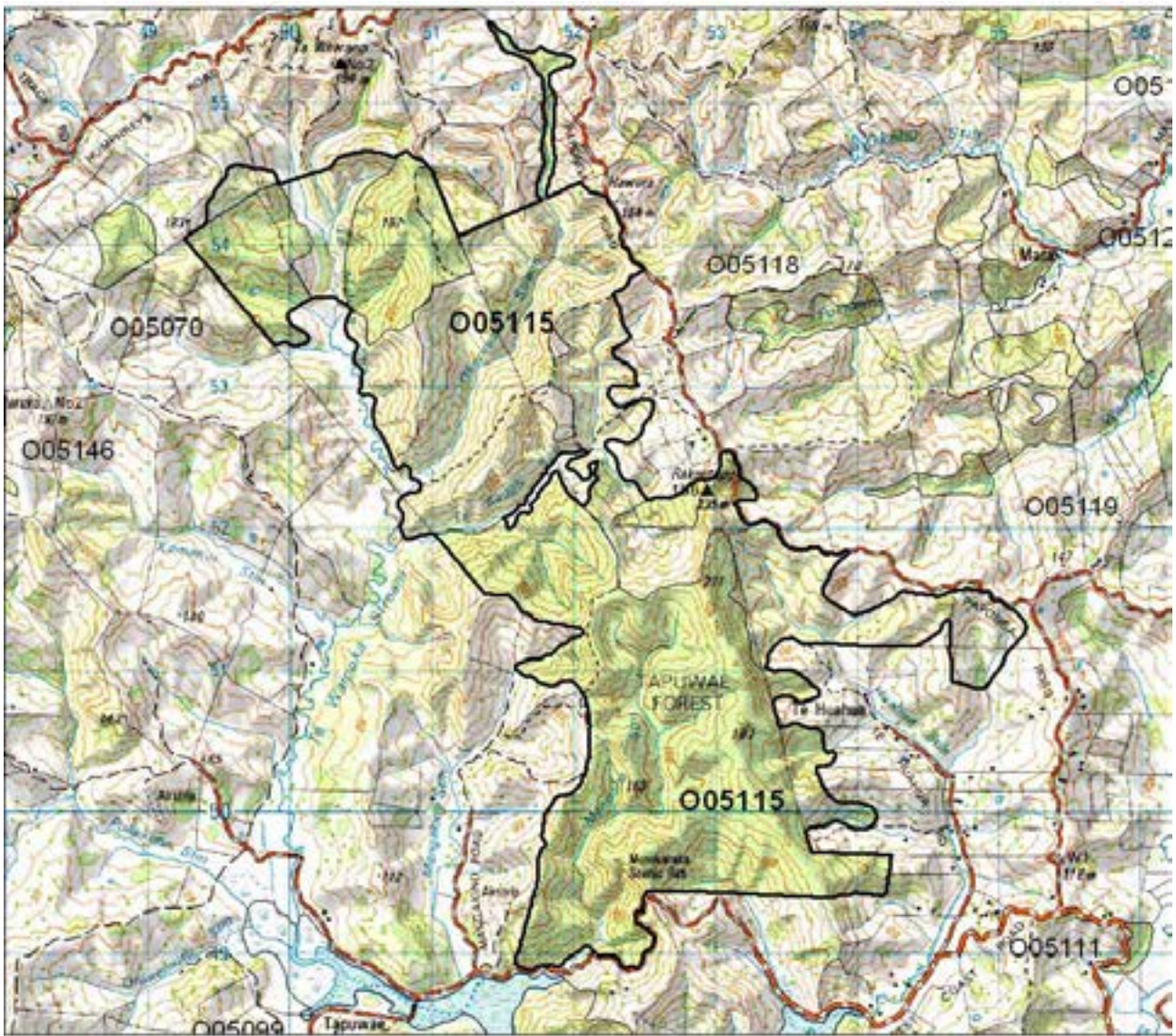
Vegetation

Young secondary forest dominates the central portion which provides a continuous forested link between the old-growth forest of the Motukaraka Scenic Reserve in the south to the remnant cutover forest at the north end of the site. This area has been adversely affected by logging which has removed the emergent element and broken up the canopy structure. Possum browse in this portion appeared to be particularly severe in 1994.

(a) Co-dominant kahikatea and totara occur beside the stream in the northern end of the site alongside Pamonga Rd. Taraire is frequent and pukatea, puriri, ti kouka, rewarewa and puka are occasional.

(b) In the northern end of the main body of forest and shrubland nikau, puriri and towai are common with a range of frequent species including taraire, kahikatea, towai, totara and tanekaha. Pukatea, kohekohe, matai, rimu, rewarewa and northern rata are also present.

Type (a), kahikatea and totara occurs in this area with frequent tanekaha, towai and puriri. Rimu and matai are occasional.



Tapuwae Forest & Outliers O05/115

Each grid is 1000m x 1000m
and = 100 ha

- S = shrubland
- F = forest
- W = wetland
- E = estuarine
- D = duneland



- (c) Larger areas of dominant kanuka/manuka and common totara occur with frequent towai and puriri. Kahikatea is sparse.
- (d) In the northwestern point of the main block kahikatea, kanuka/manuka and totara are associated with frequent puriri.
- (e) Around Okariro Stream and the northern side of Te Kauati Stream kanuka/manuka is abundant with frequent totara and occasional kahikatea and puriri.
- (f) At Motukaraka Scenic Reserve unlogged forest comprising taraire and towai occurs. Frequent species include emergent rimu and northern rata with kohekohe, puriri, and rewarewa. Occasional species include emergent kauri, kahikatea, matai and totara with miro, pukatea, tawa, hinau, kawaka, and swamp maire (gully).

Fauna

NI brown kiwi (Serious Decline) and kukupa (Gradual Decline).

Significance

The second largest remnant forest block in the Hokianga Ecological District and the largest on the north side of the harbour, Tapuwae Forest and its associated outliers is also one of the most diverse.

Representative site for type (a) kahikatea-totara forest, type (c) kanuka/manuka-totara forest, type (e), kanuka /manuka forest, type (f), taraire-towai unmodified forest occurring at Motukaraka Scenic Reserve and type (b) nikau-puriri-towai forest which is the only example of this type recorded in the Ecological District. Type (d) is also unrecorded elsewhere in the Ecological District.

Presence of threatened species.

A total of 812 ha (69%) of this site is protected by Stewardship Land and Scenic Reserve both administered by the Department of Conservation.

Motukaraka Scenic Reserve is a New Zealand soil site of regional importance for good examples of White Cone soils which are uncommon (Arand et al. 1993).

TE KARAE STATION REMNANTS

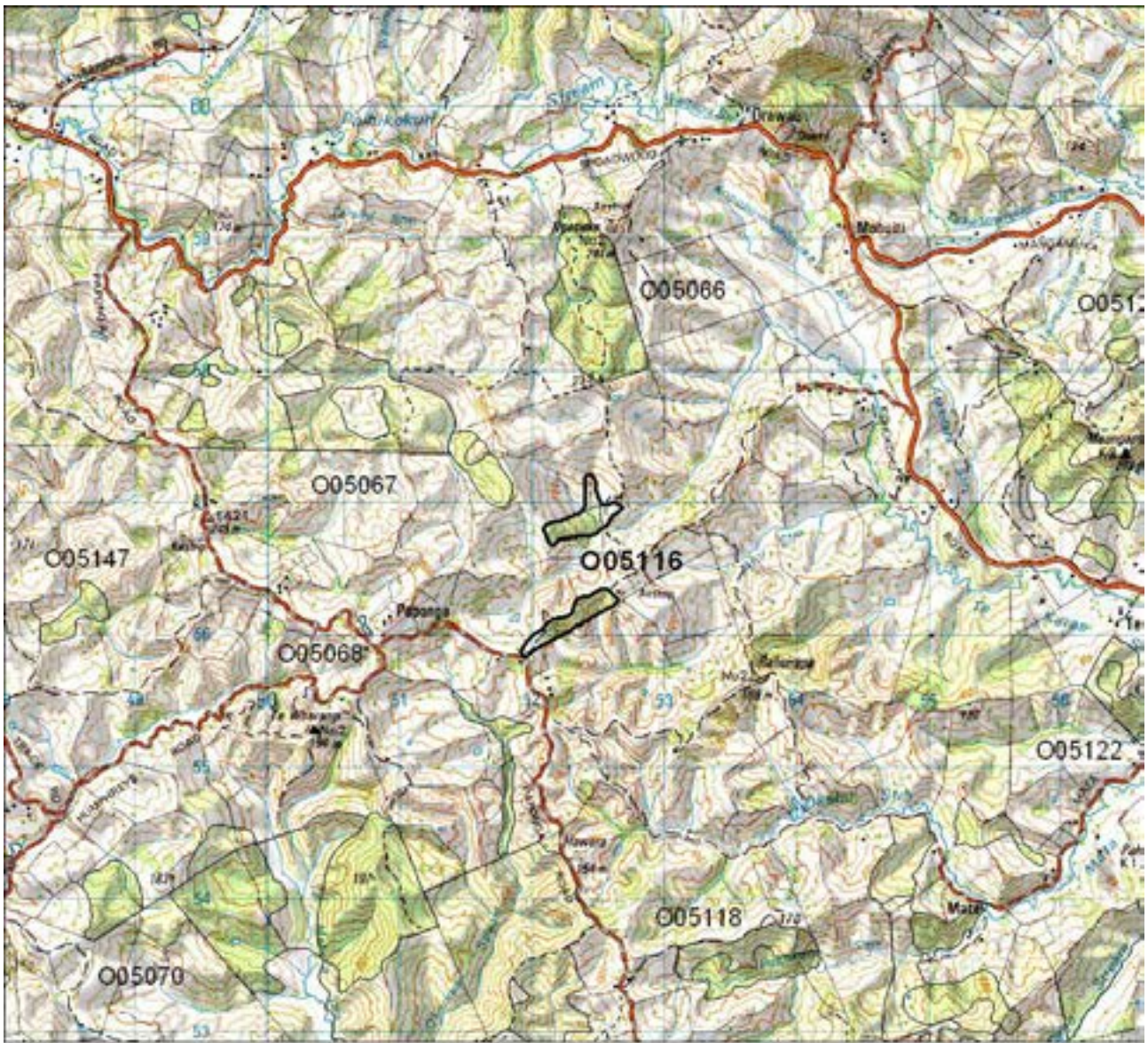
Survey no.	O05/116
Survey date	23 June 1994
Grid reference	O05 522 560, O05 525 569
Area	22 ha (18 ha forest, 4 ha shrubland)
Altitude	60-150 m asl

Ecological unit

- (a) Taraire forest on hillslope
- (b) Kahikatea-taraire-totara forest on hillslope
- (c) Kanuka/manuka shrubland on hillslope
- (d) Puriri-taraire-towai forest on hillslope
- (e) Kanuka/manuka-tanekaha-towai forest on hillslope

Landform/geology

Two small remnants c. 350 m apart on dissected hill country underlain by Mangakahia Complex sandstone and siliceous mudstone.



Te Karae Station Remnants O05/116

Each grid is 1000m x 1000m
and = 100 ha

- S = shrubland
- F = forest
- W = wetland
- E = estuarine
- D = duneland



Vegetation

The southernmost site is fenced and exhibiting good regeneration of canopy and understorey species.

(a) Abundant taraire occurs in the northern block and contains frequent puriri and rewarewa with occasional towai, titoki, pukatea, tawa and kohekohe.

(b) Kahikatea, taraire and totara are commonly associated in both blocks. Frequent species include puriri, nikau and tanekaha while titoki, towai, kohekohe, rimu, rewarewa and houhere are occasional.

(c) Kanuka/manuka shrubland occurs in the northern block.

(d) Puriri, taraire and towai are common in the southern block with frequent rewarewa and totara and occasional miro, tawari and tawa.

(e) Kanuka/manuka, tanekaha and towai are also represented in the southern block with frequent totara and occasional mamaku and puriri.

Significant flora

Tawari (Regionally significant species).

Fauna

Kukupu and kauri snail (both Gradual Decline).

Significance

Both forest remnants may have a role in linking the Tapuwae Forest site with the large forest tract of Raetea/Mangamuka.

Representative site for type (a), (b), (d) and (e). It is one of only two sites in the Ecological District where type (b) and (e) have been recorded.

Presence of two threatened and one regionally significant species.

MAUNGAPOHATU BUSH

Survey no.	O05/117
Survey date	14 June 1994
Grid reference	O05 570 570, O05 562 565
Area	321 ha (168 ha forest, 153 ha shrubland)
Altitude	0-202 m asl

Ecological unit

(a) Kanuka/manuka shrubland on hillslope (65%)

(b) Kanuka/manuka-towai forest on hillslope (5%)

(c) Kanuka/manuka-tanekaha-totara forest on hillslope (10%)

(d) Kanuka/manuka-totara forest on hillslope (15%)

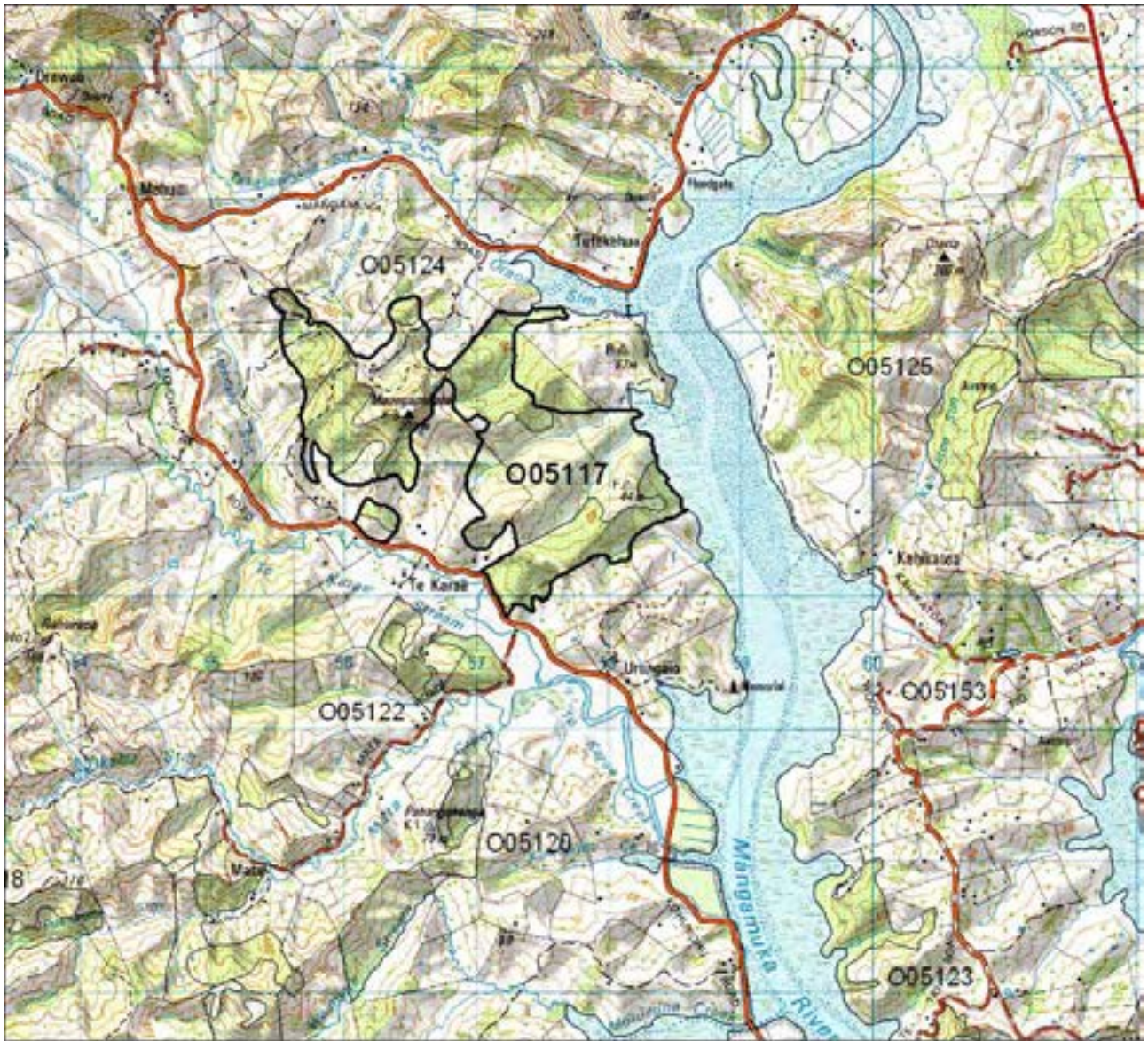
(e) Taraire forest on hillslope (5%)

Landform/geology

This large secondary forest and shrubland remnant is sited on dissected hill country running down to an estuarine portion of the lower Mangamuka River. It is underlain by Mangakahia Complex sandstone.

Vegetation

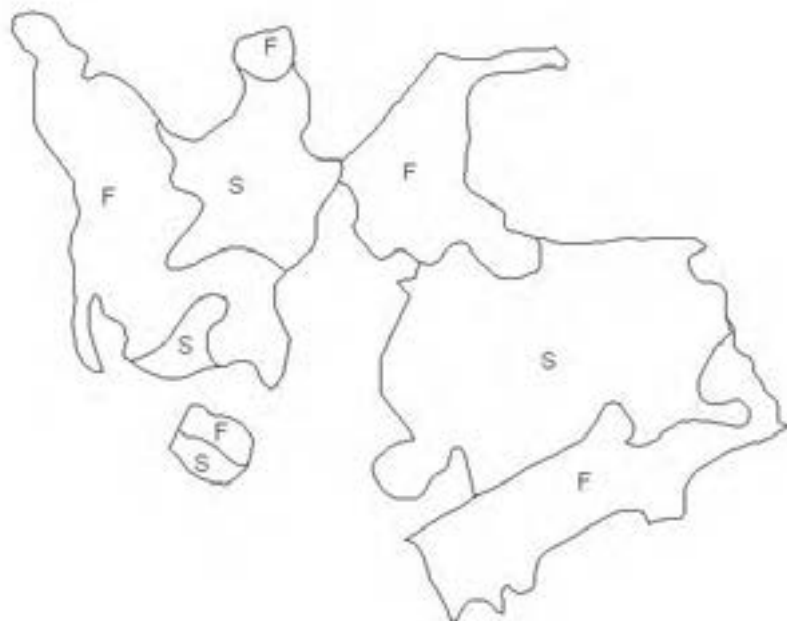
Generally young seral forest and shrubland with cutover old-growth forest in gully sites.



Maungapohatu Bush O05/117

Each grid is 1000m x 1000m
and = 100 ha.

- S = shrubland
- F = forest
- W = wetland
- E = estuarine
- D = duneland



- (a) Kanuka/manuka shrubland dominates the site with frequent puriri, totara, and ti kouka. Kahikatea and towai are occasional.
- (b) Over half of this site is abundant kanuka/manuka with common towai. Occasional species include puriri, mahoe, kahikatea and totara.
- (c) Kanuka/manuka, tanekaha and totara are commonly associated with the occasional mamaku, rewarewa and towai.
- (d) Kanuka/manuka and totara are common with frequent kahikatea and occasional puriri.
- (e) A small area of taraire forest occurs with towai, kahikatea, totara and rewarewa with occasional puka, nikau, rimu and emergent northern rata.

Significant flora

The green mistletoe *Ileostylus micranthus* (Regionally significant species) is present on scattered totara adjoining this site.

Fauna

NI brown kiwi (Serious Decline), kukupa (Gradual Decline), and kauri snail (Gradual Decline).

Significance

This site plays a major connecting role in the linkage which exists between Tapuwae Forest and the large forests of Raetea and Omahuta. Additionally, it provides riparian protection and ecological gradation from mangrove forest to more than 200 m asl.

Representative site for type (a) kanuka/manuka shrubland and type (b) kanuka/manuka-towai forest.

Presence of threatened and regionally significant species.

PUKEKOHE STREAM BUSH

Survey no.	O05/118
Survey date	23 June 1994
Grid reference	O05 536 535
Area	38 ha (18 ha forest, 20 ha shrubland)
Altitude	50-170 m asl

Ecological unit

- (a) Kanuka/manuka-totara forest on hillslope (20%)
- (b) Towai forest on hillslope (20%)
- (c) Taraire-towai forest on hillslope (20%)
- (d) Kanuka/manuka shrubland on hillslope (40%)

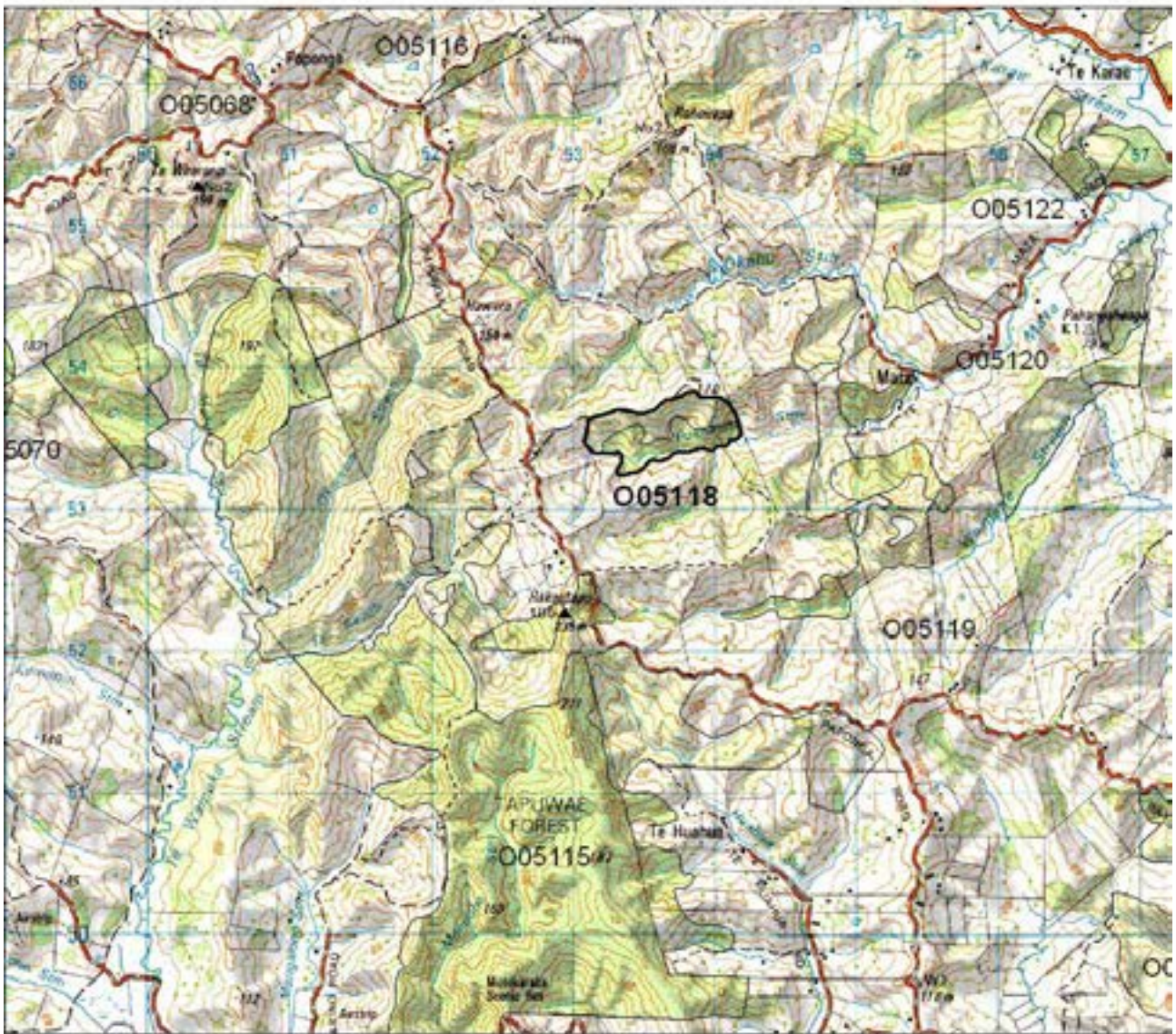
Landform/geology

This moderately sized site is lying amongst dissected hill country which is underlain by Mangakahia Complex sandstone.

Vegetation

A combination of cutover, secondary forest and shrubland. It is entirely fenced but stock are given access periodically.

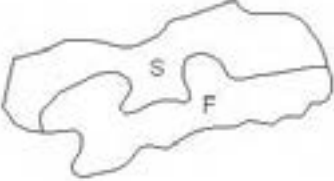
- (a) Kanuka/manuka and totara occur with frequent kahikatea and occasional towai, hinau, rewarewa and rimu.



Pukekohe Stream Bush O05/118

Each grid is 1000m x 1000m
and = 100 ha

- S = shrubland
- F = forest
- W = wetland
- E = estuarine
- D = duneland



- (b) Towai is dominant and kahikatea, tanekaha, puriri and totara are occasional.
- (c) Taraire and towai are co-dominant while rewarewa is frequent and pukatea, puriri, tawa, puka and emergent rimu, kahikatea and northern rata are occasional.
- (d) The shrubland area is defined by kanuka/manuka with frequent totara and occasional kahikatea.

Fauna

NI brown kiwi (Serious Decline) and kukupa (Gradual Decline).

Significance

This site is one of several forest remnants forming a stepping stone linkage from the Tapuwae Forest through to the larger forests to the north. It contains a considerable element of emergents.

Representative site for type (c) taraire-towai forest.

Presence of threatened species.

The site also contributes to water and soil protection in the catchment, and is particularly important for its riparian values.

PAPONGA–MATA RD ASSOCIATION

Survey no.	O05/119
Survey date	24 June 1994
Grid reference	O05 548 534, O05 555 545
Area	126 ha (76 ha forest, 50 ha shrubland)
Altitude	c. 20-160 m asl

Ecological unit

- (a) Totara secondary forest on hillslope
- (b) Kanuka/manuka-totara forest on hillslope
- (c) Puriri-taraire forest on hillslope
- (d) Kanuka/manuka shrubland on hillslope

Landform/geology

One large remnant and one small remnant on dissected hill country underlain by Mangakahia Complex sandstone.

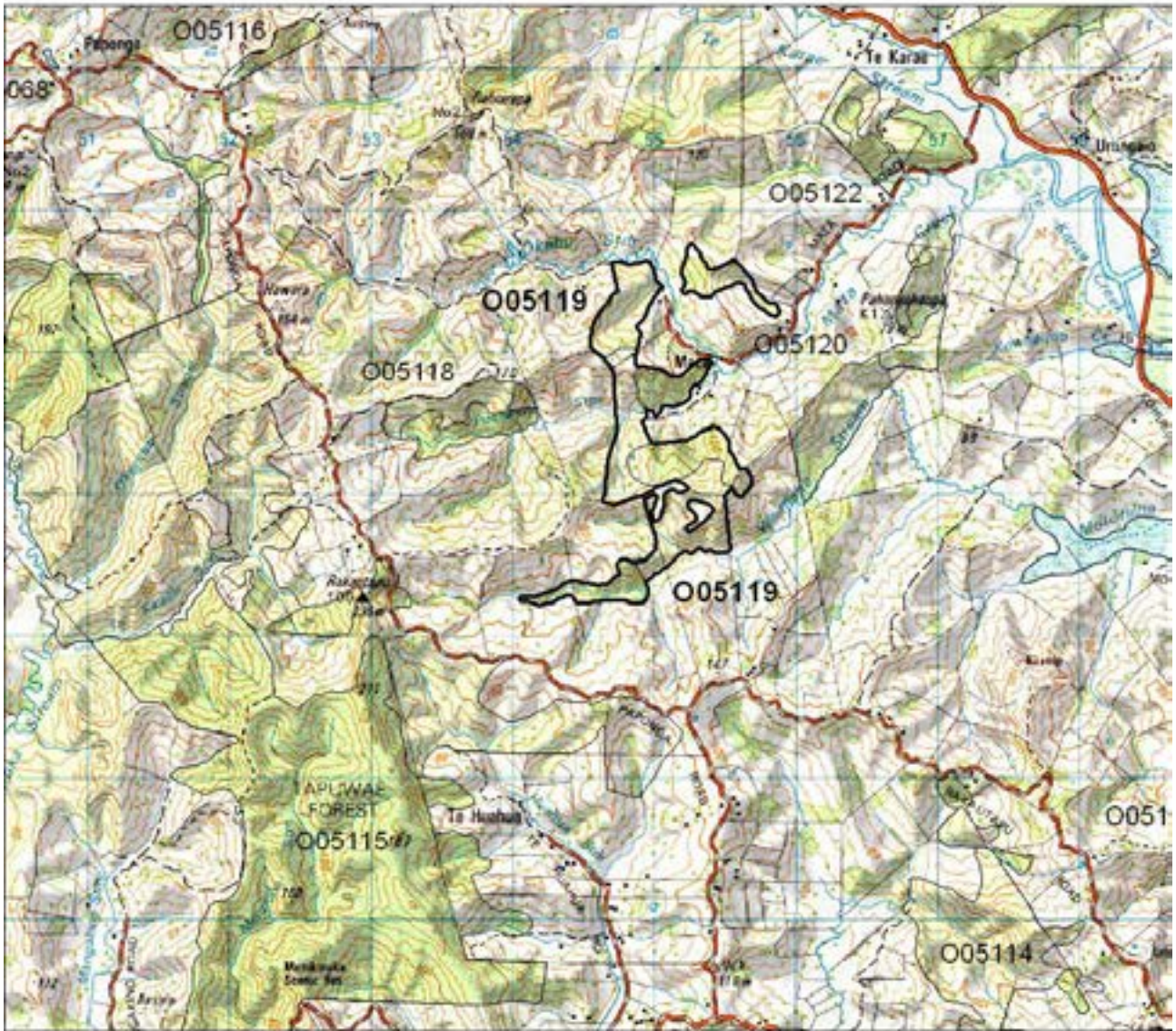
Vegetation

This site comprises a secondary forest/shrubland and cutover forest mosaic.

- (a) Abundant totara with occasional rimu, tanekaha and miro.
- (b) Kanuka/manuka and totara are associated with frequent nikau, towai, taraire and rewarewa and occasional kahikatea, miro, puriri and rimu.
- (c) Cutover puriri and taraire are common while kohekohe, totara and nikau are frequent. Occasional species include tawa, towai, hinau, karaka and emergent kahikatea and miro.
- (d) Kanuka/manuka occurs in the shrubland area with the occasional totara.

Fauna

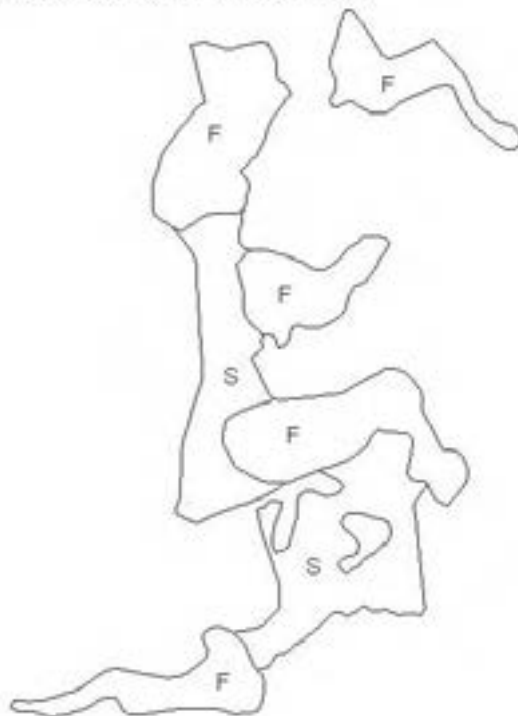
NI brown kiwi (Serious Decline) reported by southern block owner, kukupa (Gradual Decline). Northland tusked weta (Sparse), and forest gecko (*Hoplodactylus granulatus*) reported by the southern block owner.



Paponga-Mata Rd Association O05/119

Each grid is 1000m x 1000m
and = 100 ha

- S = shrubland
- F = forest
- W = wetland
- E = estuarine
- D = duneland



Significance

The Paponga-Mata Rd association is also a crucial element in the chain of natural areas which together link the forests of Tapuwae with Raetea and Puketi - Omahuta Forests.

Representative site for type (a), totara forest and type (c), puriri-taraire forest.

Presence of three threatened species.

The site provides some upper catchment water and soil protection functions.

PAHANGAHANGA REMNANT

Survey no.	O05/120
Survey date	20 June 1994
Grid reference	O05 565 539
Area	64 ha (38 ha forest, 26 ha shrubland)
Altitude	c. 20-160 m asl

Ecological unit

(a) Kanuka/manuka shrubland on hillslope (60%)

(b) Kahikatea forest on alluvium (10%)

(c) Kanuka/manuka-ti kouka swamp shrubland on alluvium (2%)

(d) Kahikatea-totara forest on hillslope (28%)

Landform/geology

Alluvial flats in the Waimahe and Te Karae Creek valleys and on adjoining dissected hill country. It is underlain by Mangakahia Complex sandstone.

Vegetation

This site consists of alluvial forest and shrubland, secondary forest and advanced shrubland. The forest area is unfenced.

(a) Kanuka/manuka shrubland comprises around half of the site with occasional kahikatea.

(b) Abundant kahikatea occurs with occasional rewarewa, totara and titoki.

(c) A small wetland area in which kanuka/manuka and ti kouka are dominant. Raupo and *Juncus* sp. are frequent.

(d) Kahikatea and totara with frequent puriri and occasional ti kouka, pukatea and titoki.

Fauna

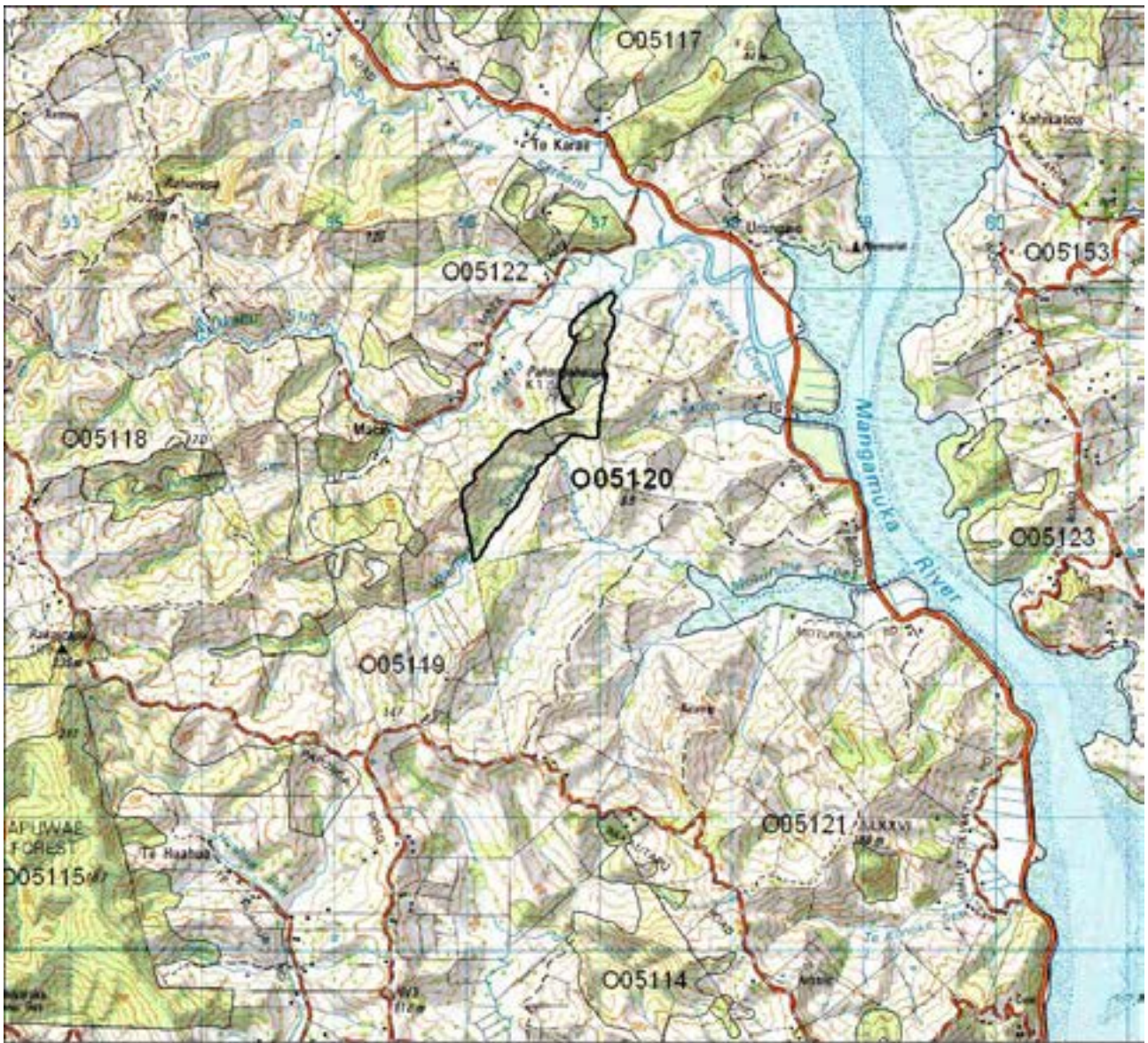
NI brown kiwi (Serious Decline) and Northland tusked weta (Sparse).

Significance

The location and diversity of forest/wetland types make it an important component of the remnant forest link joining Tapuwae Forest to Raetea/Puketi-Omahuta Forests.

It also provides suitable habitat for two threatened species. The site contributes to riparian water and soil protection.

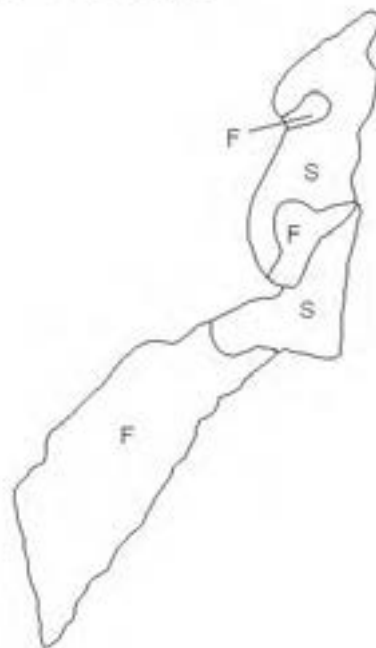
Representative site for type (c), kanuka/manuka-ti kouka swamp shrubland, which is also the only example of its type recorded in the Ecological District.



Pahangahanga Remnant O05/120

Each grid is 1000m x 1000m
and = 100 ha

- S = shrubland
- F = forest
- W = wetland
- E = estuarine
- D = duneland



MATA RD INTERSECTION REMNANT

Survey no.	O05/122
Survey date	20 June 1994
Grid reference	O05 570 555
Area	34 ha (25 ha forest, 9 ha shrubland)
Altitude	< 20–80 m asl

Ecological unit

- (a) Kanuka/manuka-tanekaha-totara forest on hillslope (20%)
- (b) Tanekaha-taraire-totara forest on hillslope (40%)
- (c) Kanuka/manuka shrubland on hillslope (40%)
- (d) Raupo reedland in swamp (<1%)

Landform/geology

On dissected hill country underlain by Mangakahia Complex sandstone.

Vegetation

This site is composed of a range of secondary forest and wetland types.

- (a) Kanuka/manuka, tanekaha and totara occurs with frequent kahikatea and rewarewa. Rimu, matai, tawa, kowhai and emergent kauri and northern rata are occasional.
- (b) Tanekaha, taraire and totara are common while towai, puriri and rewarewa are frequent. Occasional species include miro, hinau, karaka, kowhai, rimu and kohuhu.
- (c) Kanuka/manuka shrubland occurs over c. 40% of the site.
- (d) There is a small raupo-dominant wetland.

Fauna

Kukupa (Gradual Decline) and common forest birds.

Significance

Forms another component of the remnant link running SW-NE from secondary hill-forest to freshwater wetland.

A representative site for type (a) kanuka/manuka-tanekaha-totara forest and type (b), tanekaha-taraire-totara forest, which is also unrecorded elsewhere in this Ecological District.

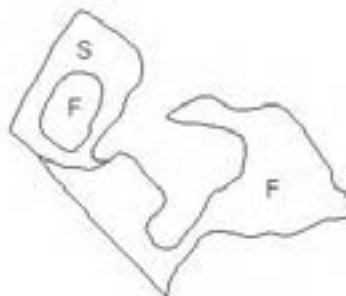
Habitat for the threatened kukupa.



Mata Rd Intersection Remnant O05/122

Each grid is 1000m x 1000m
and = 100 ha

- S = shrubland
- F = forest
- W = wetland
- E = estuarine
- D = duneland



TE TIO RD BUSH

Survey no.	O05/123
Survey date	20 June 1994, 1997
Grid reference	O05 600 535 O05 606 527
Area	40.5 ha
Altitude	0-80 m asl

Ecological unit

- (a) Kanuka forest on coastal hillslope (70%)
- (b) Kanuka-tanekaha-totara forest on coastal hillslope (20%)
- (c) Puriri-tanekaha-taraire-totara forest on coastal hillslope (10%)

Landform/geology

Dissected hill country adjoining estuarine mangrove forest, this site is underlain by Mangakahia Complex sandstone.

Vegetation

- (a) The northern remnant is mostly kanuka forest with occasional totara and tanekaha.
- (b) The remaining area is kanuka, tanekaha and totara dominant with towai, kahikatea, rewarewa and puriri which are frequent. Kowhai, lancewood and taraire are occasional.
- (c) The southern remnant has a puriri, tanekaha, taraire, and totara canopy with occasional kahikatea. Nikau, kohekohe, kowhai, lancewood, houhere, karaka, pigeonwood, mapou and *Coprosma* spp. occur in the sub-canopy.

Fauna

Kukupa (Gradual Decline) and common forest birds have been recorded from the southern remnant. NI brown kiwi (Serious Decline) has been reported from the northern remnant.

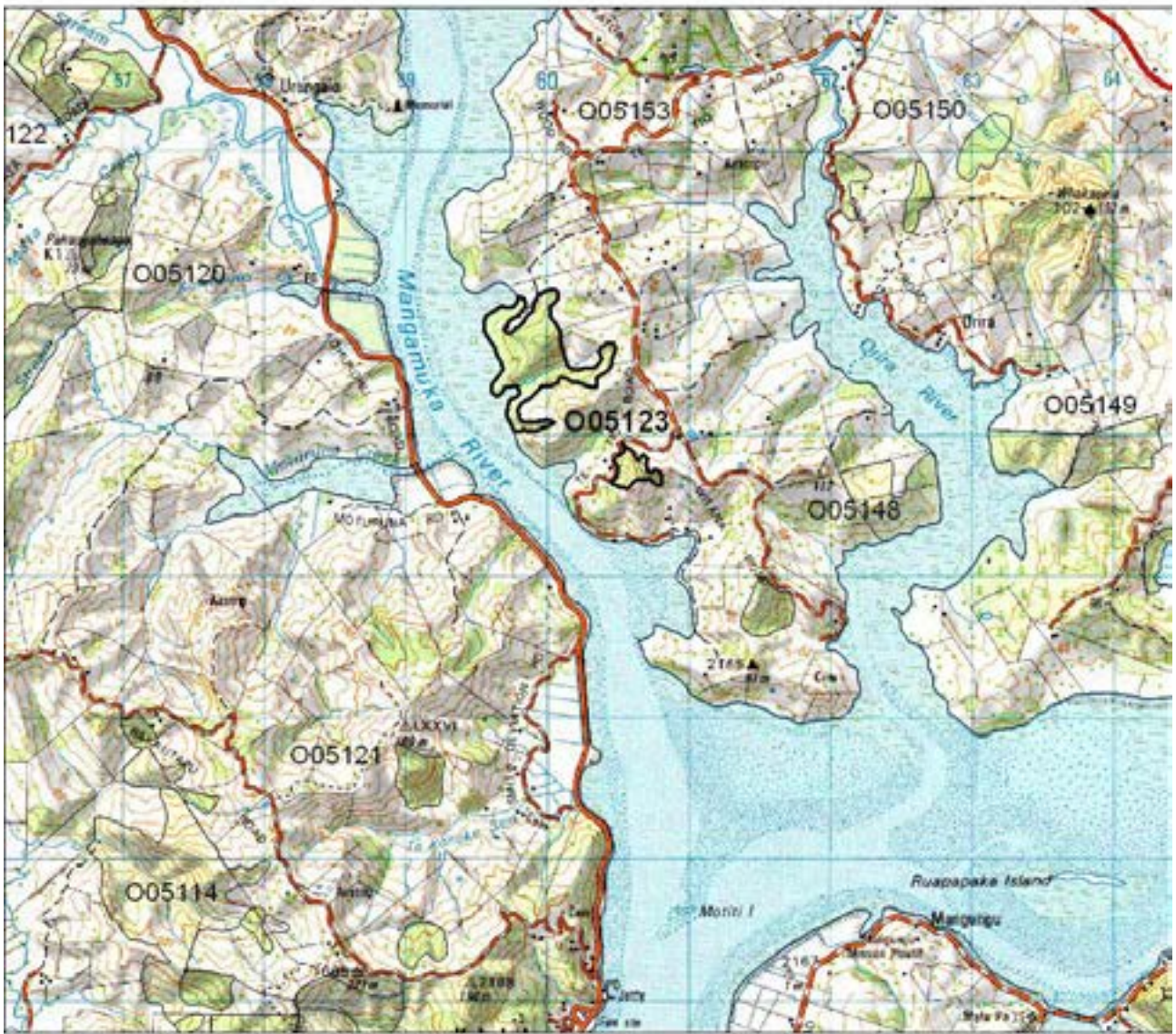
Significance

The significance of this site is largely due to its riparian nature. Riparian sites such as this are very rare alongside the Hokianga Harbour, especially where the upper tidal margin adjoins flat alluvial land.

Representative site for all ecological units and the only record of type (b) and type (c) recorded in the Ecological District.

Approximately one hectare of this site is protected Stewardship Land administered by the Department of Conservation. The Queen Elizabeth II National Trust protects 3.8 ha of the southern remnant.

Presence of two threatened species.



Te Tio Rd Bush O05/123

Each grid is 1000m x 1000m
and = 100 ha

- S = shrubland
- F = forest
- W = wetland
- E = estuarine
- D = duneland

