

OLDE'S QEII COVENANT

Survey no.	Q06/069
Survey date	6 March 1997
Grid reference	Q06 428 260
Area	209 ha (192 ha forest, 17 ha shrubland)
Altitude	20-143 m asl

Ecological unit

- (a) Tanekaha-kauri-rimu forest on hillslope
- (b) Tanekaha-taraire-towai forest on hillslope
- (c) Rimu-taraire forest on hillslope
- (d) Kanuka/manuka shrubland on hillslope
- (e) Taraire-towai forest on hillslope
- (f) Kanuka/manuka-totara forest on hillslope
- (g) Kauri forest on hillslope
- (h) Towai-puriri-rewarewa forest in gully
- (i) Kauri-tanekaha forest on hillslope
- (j) Totara forest in gully
- (k) Kanuka/manuka-totara-towai shrubland on hillslope

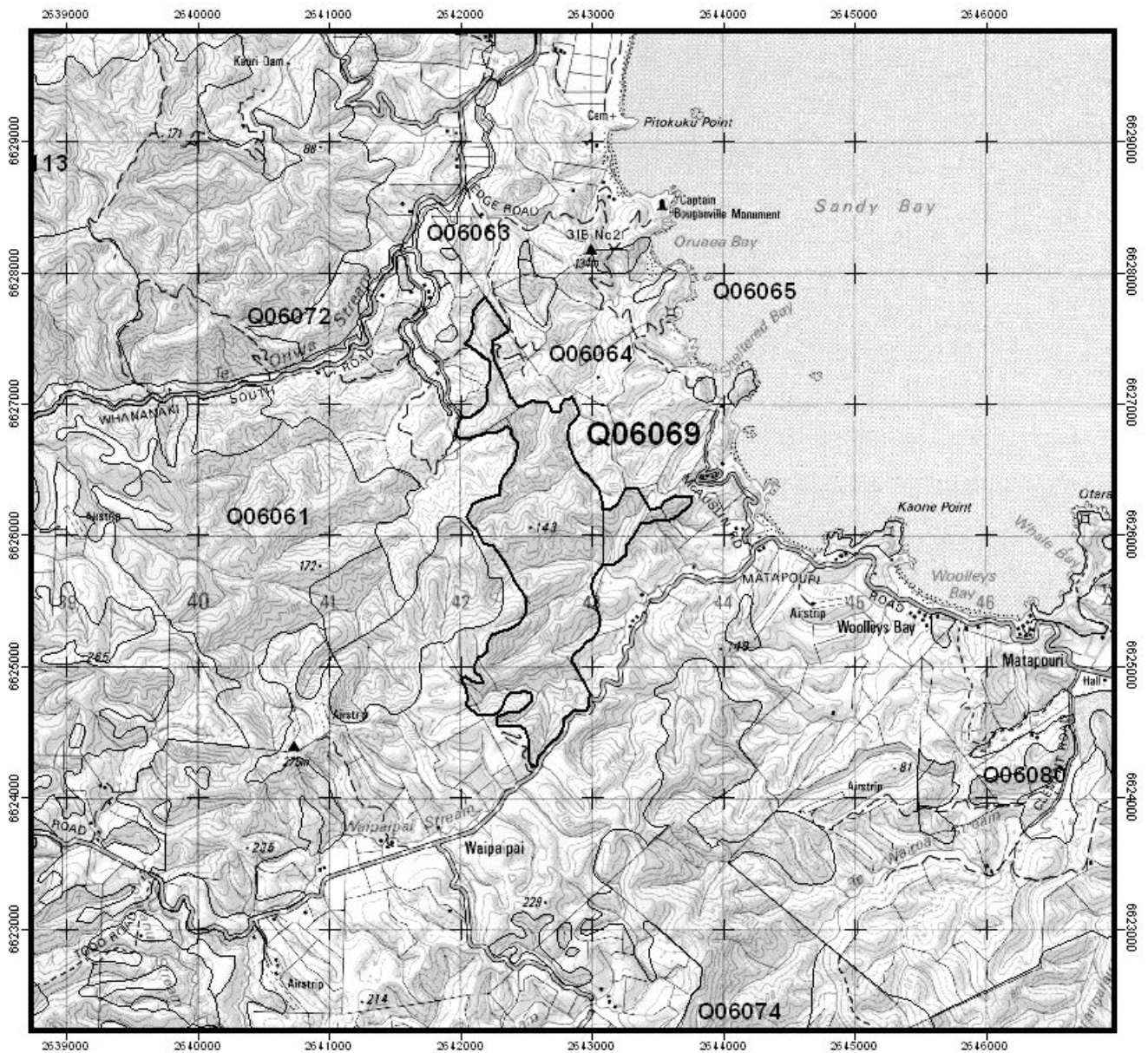
Landform/geology

Steeply dissected hillcountry in Waipapa Terrane greywacke.

Vegetation

Large forest area with a mosaic of vegetation types in Sandy Bay.

- (a) In the area north of the covenant, the northern tip is dominated by tanekaha, with rimu and kauri common, and rewarewa frequent.
- (b) The remainder of this area, as well as the majority of the covenant area, is dominated by taraire, tanekaha, and towai. Rimu, kauri, rewarewa, and puriri are frequent, with nikau, tree ferns, and northern rata rare.
- (c) At the south-eastern corner of the covenant, taraire and rimu are common, with frequent totara, kauri, rewarewa, nikau, and mamaku throughout. Kohekohe and tanekaha are also present, with several kahikatea on the edge of the stream.
- (d) To the south-east of this area is a shrubland area surrounded on three sides by pasture. Kanuka/manuka of 2-4 m height is abundant, with frequent emergent totara and tanekaha throughout.
- (e) To the west of the above area is a small piece of taraire-towai secondary forest. Kauri, puriri, and rimu are frequent, with rewarewa less common.
- (f) From this point, most of the area to the west is composed of kanuka/manuka-totara secondary forest. Associated species include puriri, mamaku, ti kouka, rimu, nukau, and *Pinus* sp., all in low numbers.
- (g) Within the above vegetation type is a small area of kauri forest. Rimu and rewarewa are also present.
- (h) To the south is an area dominated by towai, with puriri and rewarewa common. Taraire and tanekaha are frequent, with occasional kawaka, kauri, and rimu.



Olde's QE II Covenant Q06/069

Each grid is 1000m x 1000m

and = 100 ha

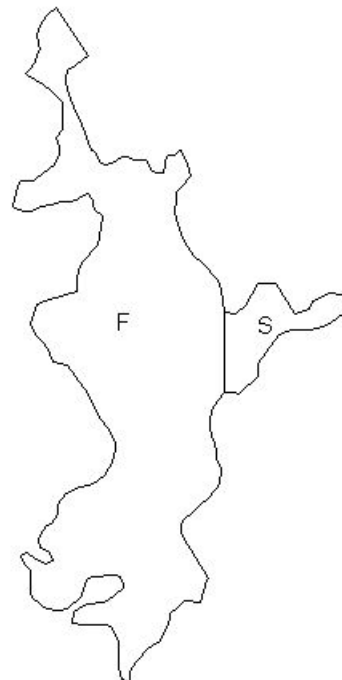
S = shrubland

F = forest

W = wetland

E = estuarine

D = duneland



- (i) The adjacent ridge is covered in kauri-tanekaha secondary forest, with some rimu also present.
- (j) This leads into a small gully dominated by totara secondary forest. Tanekaha and rewarewa are emergent in low numbers.
- (k) The southern boundary of the site contains an area of kanuka/manuka-totara-towai shrubland. Mamaku and emergent tanekaha are frequent, with kawaka, rewarewa, and some mature rimu less common.

Significant flora

Kawaka (Sparse).

Fauna

Kukupa (Gradual Decline), NI fantail, tui, welcome swallow.

Significance

Presence of kukupa and a threatened plant.

A large forest area which is contiguous with a forest remnant reported to contain NI brown kiwi, and which provides a potential corridor between managed populations in Ngunguru-Tutukaka and Mimiwhangata areas.

Representative site for type (a) tanekaha-kauri-rimu forest, type (b) tanekaha-taraire-towai forest, type (c) rimu-taraire forest, type (f) kanuka/manuka-totara forest, and type (h) towai-puriri-rewarewa forest. Only record of types (a), (b), (c), and (h) in the Ecological District.

57.2 ha at this site are protected by a Queen Elizabeth II National Trust covenant.

MATAPOURI COASTAL REMNANTS

Survey no.	Q06/070
Survey date	21 March 1997
Grid reference	Q06 474 257, Q06 479 247, Q06 452 259, Q06 483 248, Q06 456 252
Area	82 ha (81 ha forest, 1 ha shrubland)
Altitude	0-60 m asl

Ecological unit

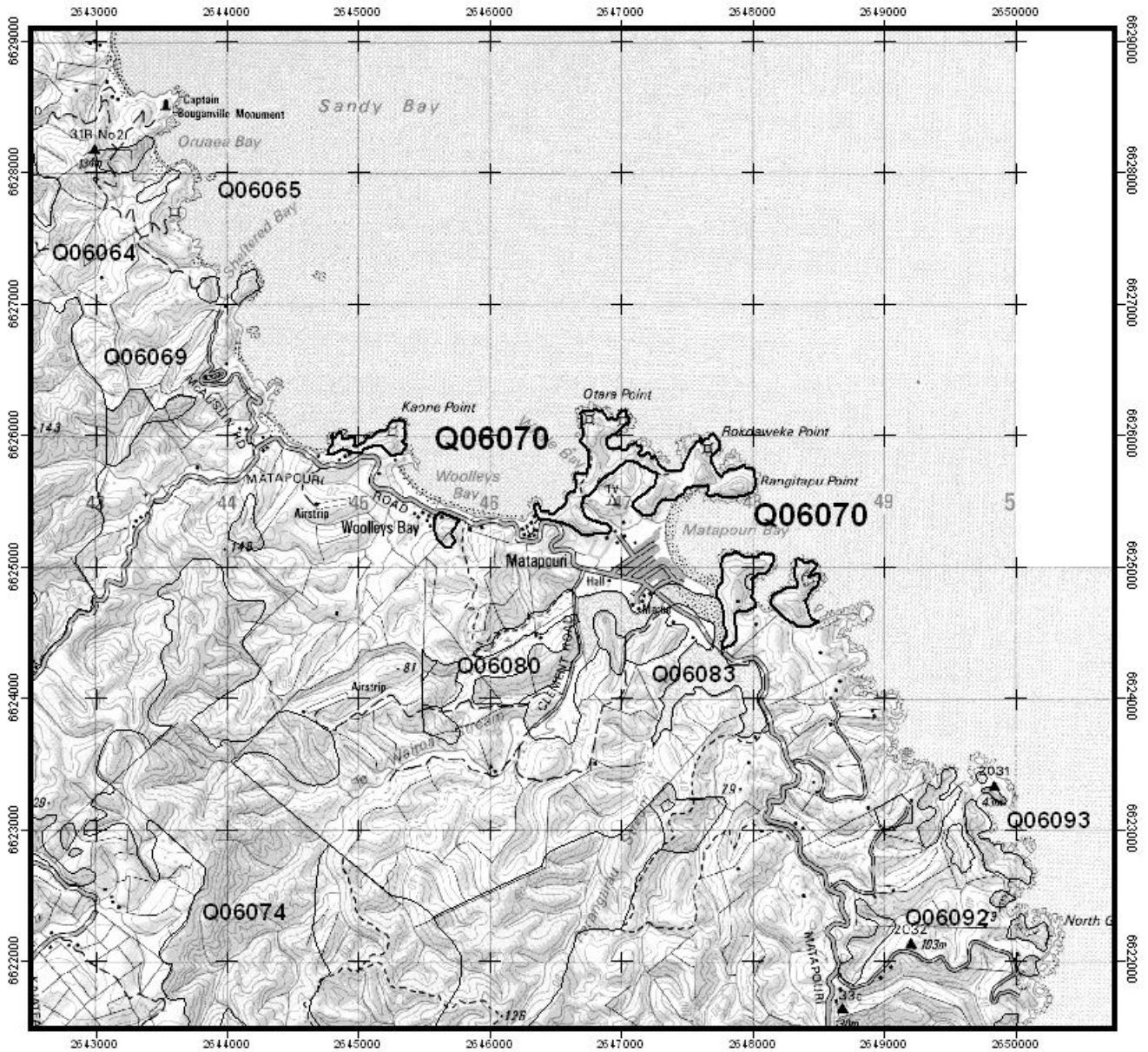
- (a) Pohutukawa-kanuka/manuka coastal forest on headland (10%)
- (b) Totara-pohutukawa coastal forest on hillslope (5%)
- (c) Pohutukawa-puriri coastal forest on headland (30%)
- (d) Pohutukawa-nikau coastal forest on headland (20%)
- (e) Kauri-rimu coastal forest on headland (5%)
- (f) Kauri-pohutukawa coastal forest on headland (5%)
- (g) Kanuka/manuka coastal shrubland on headland (5%)
- (h) Kauri-pohutukawa-rimu coastal forest on headland (5%)
- (i) Kowhai-pohutukawa-puriri coastal forest on headland (15%)

Landform/geology

Cliffed coastal headlands in Waipapa Terrane greywacke.

Vegetation

The site consists of a series of coastal remnants on headlands and hillslopes from Kaone Point to Horseshoe Bay.



Matapouri Coastal Remnants Q06/070

Each grid is 1000m x 1000m

and = 100 ha

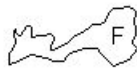
S = shrubland

F = forest

W = wetland

E = estuarine

D = duneland



(a) The coastal forest on the headland at Kaone Point is dominated by pohutukawa, with kanuka/manuka common, and kohekohe and nikau frequent. Occasional species include rimu, puriri, totara, kowhai, and mamaku in the canopy, with some rangiora and kawakawa in the subcanopy, and harakeke on the edges of the site. Introduced species include a small group of Norfolk pines and *Eucalyptus* sp. on the northern side, and one *Pinus* sp. near the point. The site also contains a small amount of pampas.

(b) To the south is a small coastal forest remnant adjacent to the road, dominated by totara, with pohutukawa common. Other species present are frequent puriri, and occasional rewarewa and kohekohe, as well as a small group of *Pinus* sp. on the northern boundary.

(c) The headland at Matapouri has the largest remnant in the site. On the western face of the headland, leading out to Otaru Point, the vegetation is dominated by pohutukawa and puriri, both of which are common. Totara, mamaku, and ti kouka are frequent, with kowhai, nikau, rimu, rewarewa, taraire, and karaka occasional.

(d) On the eastern face of the headland, leading out to Rokoaweke and Rangitapu Points, the canopy is dominated by pohutukawa, with nikau common. Frequent species include ti kouka, tree fern, pate, kawakawa, and *Coprosma* sp., with rimu, puriri, karaka, mapou, kowhai, and *Hebe* sp. occasional. Pampas is scattered throughout both sides of the headland.

(e) The headland on the southern side of Matapouri Bay contains an area of kauri-rimu coastal forest along the ridge.

(f) The remainder of the western side of the headland consists of kauri-pohutukawa forest. Frequent species within this area include tanekaha, rimu, totara, and kanuka/manuka. Less common species are kowhai, kohekohe, karaka, rewarewa, and ti kouka. Two large-leaved milk trees have been reported from this site.

(g) On the eastern side of the headland is a small area of kanuka/manuka shrubland, with frequent ti kouka, as well as emergent kauri and rimu. Tanekaha and pohutukawa occur occasionally.

(h) To the south of this site is a larger area of kauri forest, in which pohutukawa and rimu are common. Totara and kanuka/manuka are frequent, with kowhai, kohekohe, rewarewa, and ti kouka occasional. A small piece of this vegetation type also occurs just north of (b).

Type (a) vegetation is repeated at the tip of the headland. Nikau, kohekohe, and totara are frequent, with puriri, kowhai, mamaku, ponga, and *Pittosporum umbellatum* occasional.

(i) The canopy of the southern remnant is dominated by kowhai, pohutukawa, and puriri, all of which are common. Frequent species include totara, ti kouka, and houpara, with kahikatea, kohekohe, nikau, and wharangi occasional.

Significant flora

The fireweed *Senecio scaberulus* (Nationally Endangered), *Fuchsia procumbens* (Sparse), large-leaved milk tree (Sparse), *Hebe* "Whangarei" (Regionally Significant) and *Psilotum nudum* (Regionally Significant).

Fauna

Kukupa (Gradual Decline), Australasian harrier, NI fantail, grey warbler, tui, welcome swallow. A pied shag (Sparse) colony of 27 birds, including three birds

on nests, has been recorded at Whale Bay. Reports from Horseshoe Bay include a little shag roost site, breeding northern little blue penguin (Gradual Decline), and visiting NI kaka (Nationally Endangered) and bellbird (Regionally Significant). Pacific gecko (Gradual Decline), ornate skink (Regionally Significant) and common skink reported.

Significance

A high diversity of animal and plant species, several of which are threatened or regionally significant. An example of a habitat type which is rare nationally, with a relatively high diversity of coastal forest types.

Representative site for type (b) totara-pohutukawa coastal forest, type (c) pohutukawa-puriri coastal forest, type (d) pohutukawa-nikau coastal forest, type (e) kauri-rimu coastal forest, type (f) kauri-pohutukawa coastal forest, type (h) kauri-pohutukawa-rimu coastal forest, and type (i) kowhai-pohutukawa-puriri coastal forest. Only record of type (d), (e), and (i) in the Ecological District.

81.1 ha are protected at this site; 51.9 ha are administered by the Whangarei District Council and 29.2 ha are a Scenic Reserve administered by the Department of Conservation.

TE WAIRAHĪ/TAUPARI STREAM RIVERINE HABITAT

Survey no.	Q06/071
Survey date	18 June 2004
Grid reference	Q06 377 326, Q06 413 320
Area	61 ha (57 ha forest, 4 ha wetland)
Altitude	0-20 m asl

Ecological unit

- (a) Kanuka-totara secondary forest on alluvium (70%)
- (b) Kanuka secondary forest on alluvium (20%)
- (c) Giant umbrella sedge sedgeland on alluvium (5%)
- (d) Blackberry-Mexican devil association on alluvium (5%)

Landform/geology

Meandering streams on floodplains of Holocene alluvium.

Vegetation

Thin and patchy riparian strip generally meandering through pasture.

The site consists predominantly of type (a) vegetation, with the occasional puriri, taraire, kahikatea, titoki, ti kouka, and mahoe.

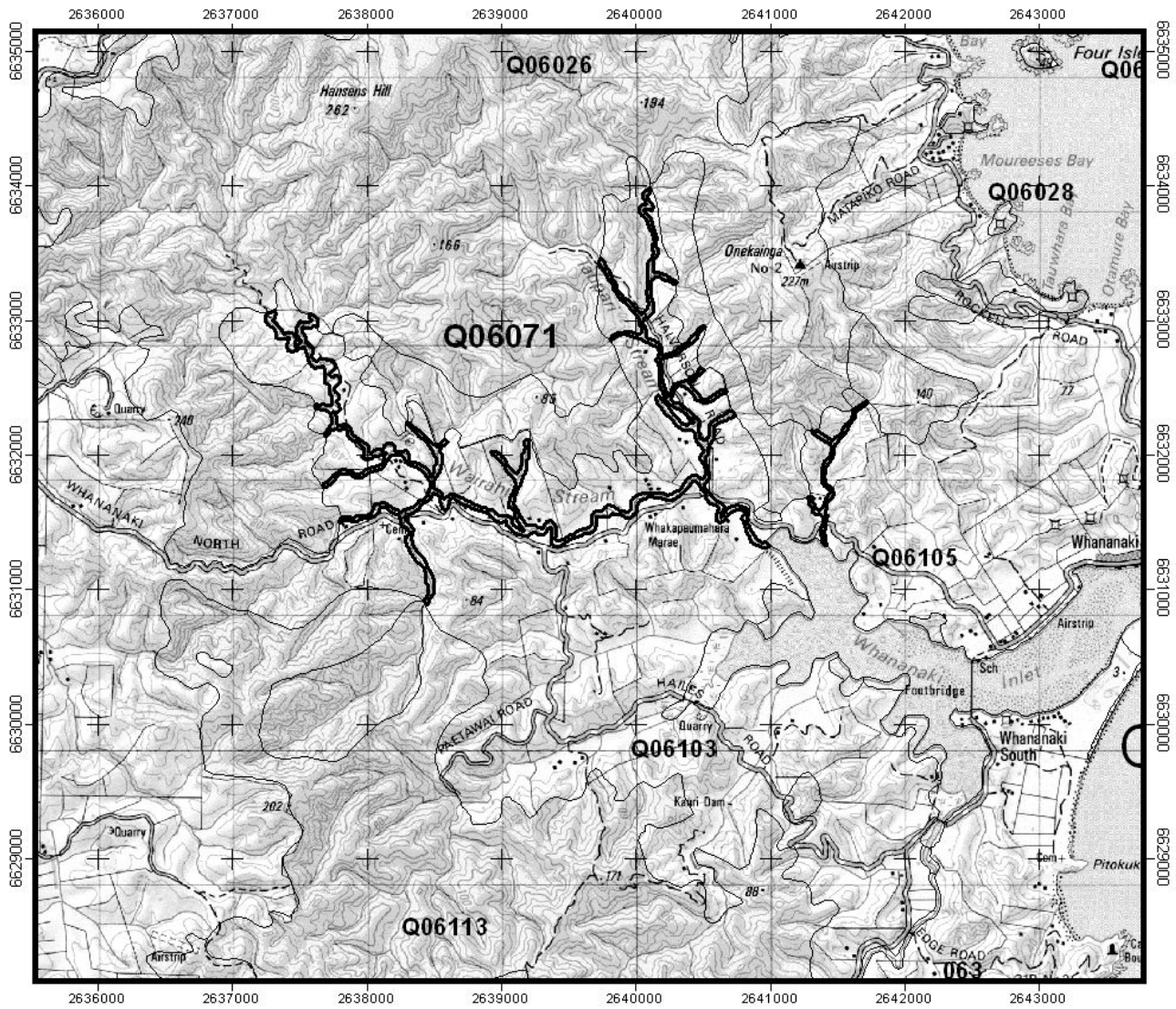
(b) Patches of kanuka forest occur along the site, with emergent kahikatea, totara, puriri, ti kouka, and titoki. Willows are also present in places.

(c) There is a small wetland area at the estuary end of the site; this is dominated by giant umbrella sedge, with some raupo. Mexican devil is common in this wetland.

(d) Blackberry and Mexican devil occur in small patches.

Fauna

Matuku (Nationally Endangered) and pateke (Nationally Endangered) use this catchment. Longfin eel (Gradual Decline), giant bully (Regionally Significant), inanga, cockabully, common smelt, and shortfin eel.



Te Wairahi/Taupari Stream Riverine Habitat Q06/071

Each grid is 1000m x 1000m

and = 100 ha

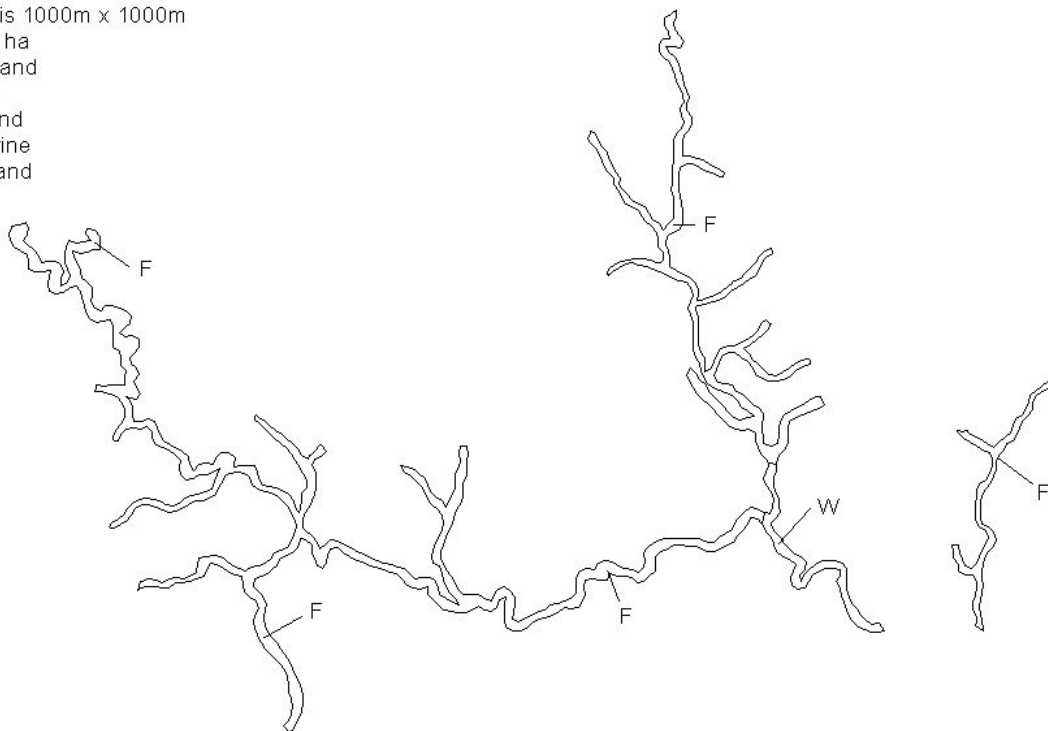
S = shrubland

F = forest

W = wetland

E = estuarine

D = duneland



Significance

This site is of critical importance to pateke, who use the stream banks and cavities created by tree roots as daytime roost sites.

Presence of other threatened and regionally significant species.

0.3 ha is administered at this site by the Department of Conservation.

TE ORIWA STREAM RIVERINE HABITAT

Survey no.	Q06/072
Survey date	18 June 2004
Grid reference	Q06 416 280
Area	37 ha (35 ha forest, 2 ha wetland)
Altitude	0-20 m asl

Ecological unit

- (a) Kanuka-totara secondary forest on hillslope and alluvium (90%)
- (b) Mexican devil-arum lily association on alluvium(9%)
- (c) Raupo reedland on alluvium(1%)

Landform/geology

Stream with headwaters in steep hillcountry of Waipapa Complex greywacke and lower reaches in Holocene floodplain.

Vegetation

Thin and patchy riparian strip adjoining forest in places, but generally meandering through pasture.

The site consists predominantly of type (a) kanuka-totara forest, with the occasional kahikatea, puriri, titoki, mahoe, ti kouka, and pukatea. Willows are also present in places.

(b) Mexican devil-arum lily association occurs in patches along the riverbank, with occasional giant umbrella sedge, kiokio, and blackberry.

(c) A small raupo wetland occurs adjacent to the estuary; this has some Mexican devil throughout.

Fauna

Pateke (Nationally Endangered) use this catchment.

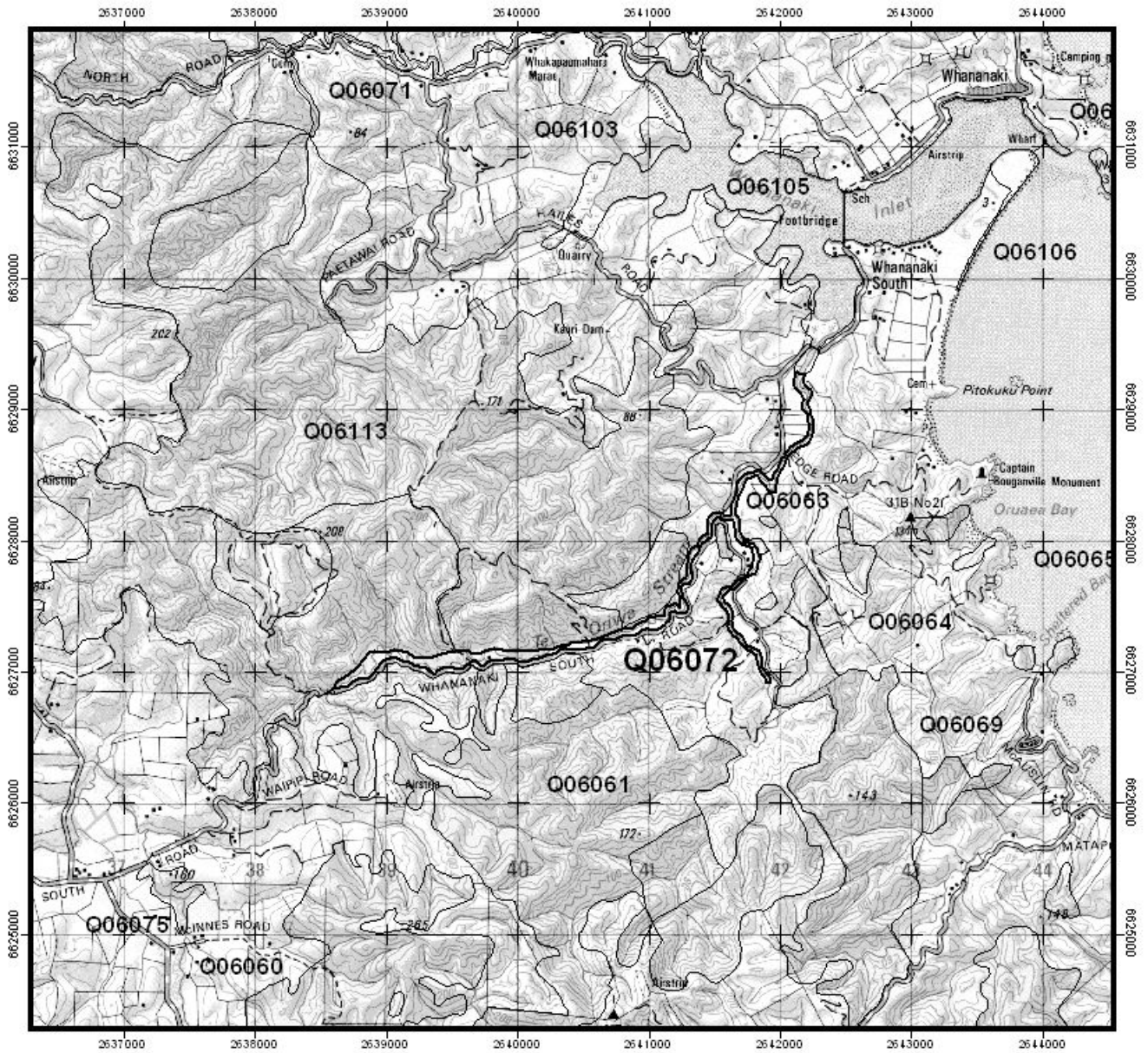
Significance

This site is of critical importance to pateke, who use the stream banks and cavities created by tree roots as daytime roost sites.

1.3 ha at this site is a reserve administered by the Department of Conservation.

MATAPOURI BUSH BLOCK

Survey no.	Q06/074
Survey date	6 March 1997
Grid reference	Q06 453 223, Q06 441 253
Area	834 ha (644 ha forest, 190 ha shrubland)
Altitude	0-200 m asl



Te Oriwa Stream Riverine Habitat Q06/072

Each grid is 1000m x 1000m

and = 100 ha

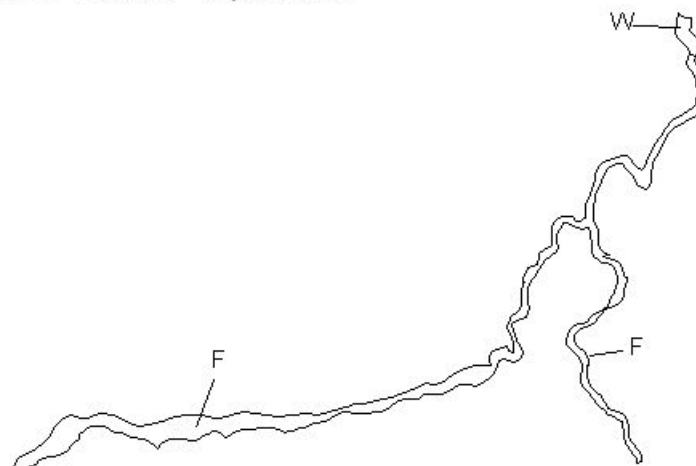
S = shrubland

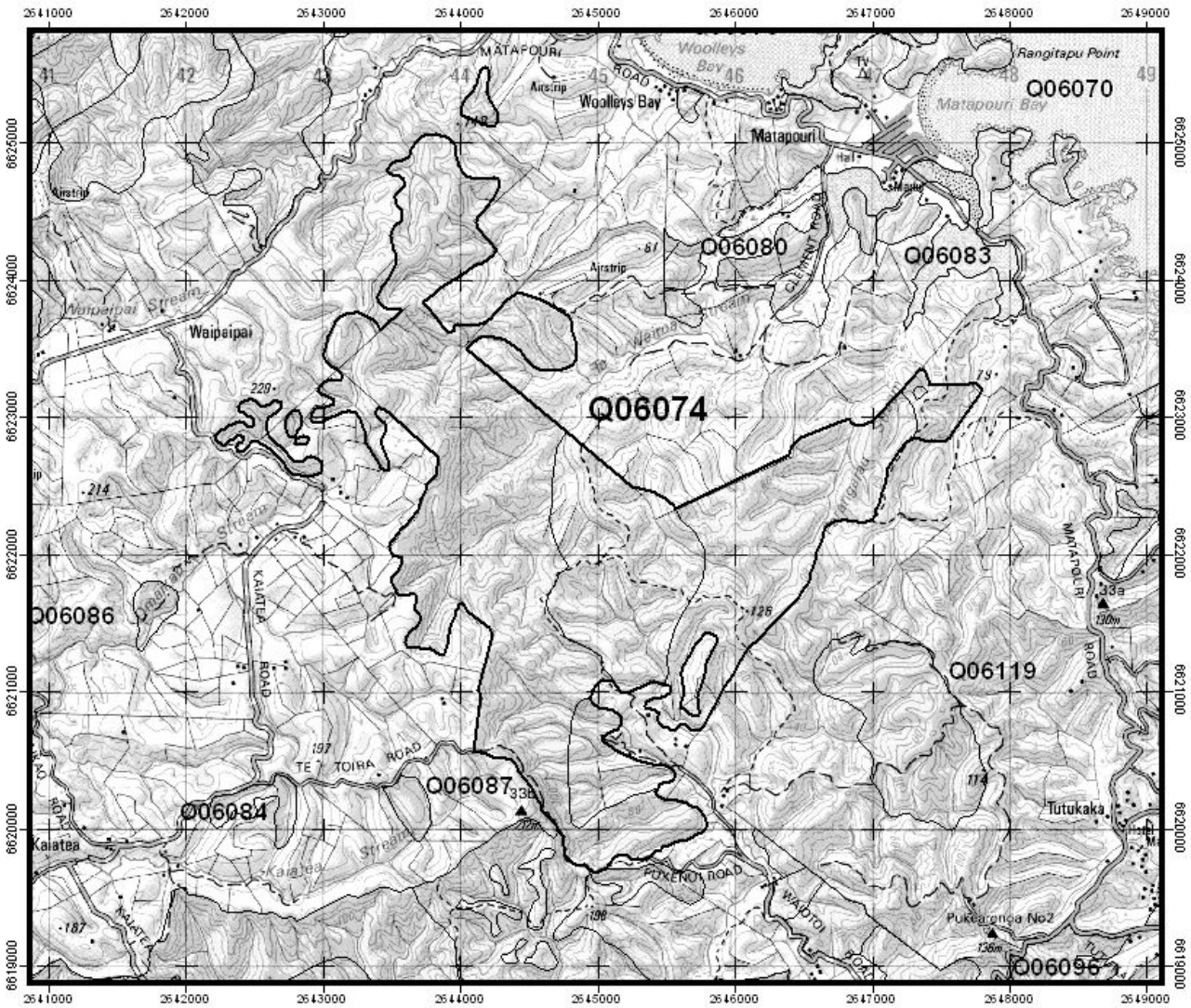
F = forest

W = wetland

E = estuarine

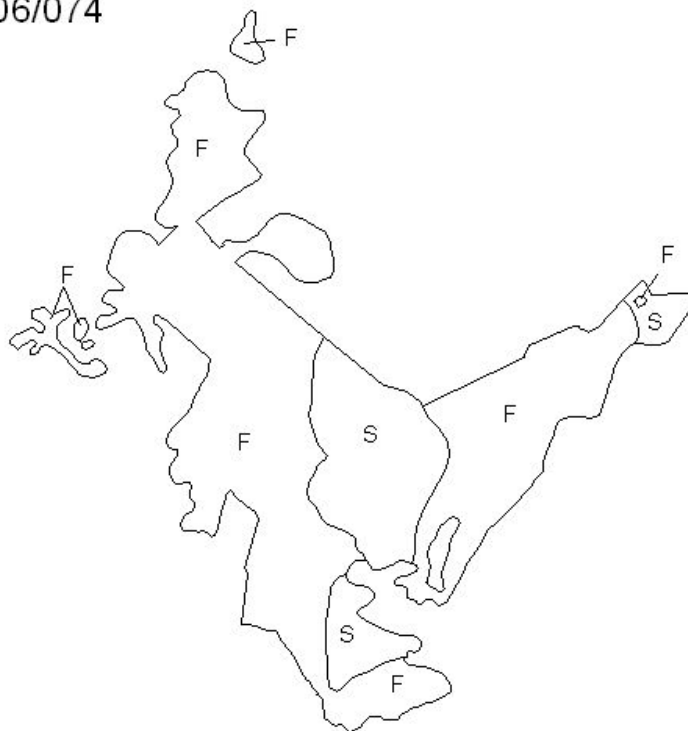
D = duneland





Matapouri Bush Block Q06/074

Each grid is 1000m x 1000m
 and = 100 ha
 S = shrubland
 F = forest
 W = wetland
 E = estuarine
 D = duneland



Ecological unit

- (a) Totara-kanuka/manuka forest on hillslope
- (b) Rimu-tanekaha-totara forest on hillslope
- (c) Totara forest on hillslope
- (d) Kauri-rimu-tanekaha forest on ridge
- (e) Kanuka/manuka shrubland on hillslope
- (f) Kanuka/manuka-kauri-rimu forest on hillslope
- (g) Kauri-kawaka-rimu forest on ridge
- (h) Kanuka/manuka-tanekaha-totara forest on hillslope
- (i) Kanuka/manuka-rimu forest on hillslope
- (j) Totara-taraire forest in gully
- (k) Taraire forest on hillslope
- (l) Tanekaha-taraire forest on hillslope
- (m) Kanuka/manuka-tanekaha-totara shrubland on hillslope
- (n) Kauri-rimu forest on ridge

Landform/geology

Steeply dissected hillcountry in Waipapa Terrane greywacke.

Vegetation

Large forest and shrubland block inland from Matapouri.

Type (a) occurs in a small area at the northern tip of the site, which has been separated from the rest of the site by recent clearing. Totara is dominant, and occasional species include emergent kauri and rimu, as well as puriri, kohekohe, nikau and ti kouka.

Type (b) is found along the west-facing hillslope at the northern end of the site. Rewarewa, kauri, and kanuka/manuka are frequent throughout, with kahikatea, taraire, nikau, ti kouka, puriri, tree fern, towai, and northern rata occasional.

Type (c) is predominantly to the east of type (b) on the east-facing hillslope, but also continues over to the western side and southwards. Tanekaha and emergent kauri are frequent, while occasional species include rimu, ti kouka, mamaku, rewarewa, puriri, and kahikatea.

Moving southwards, type (d) is found on ridges in the headwaters of the Te Wairoa Stream. The small area to the north-east contains a dense stand of kawaka. Hillslopes in this area are dominated by type (c), with rimu, taraire, tanekaha, rewarewa, and kauri frequent, and kawaka, kahikatea, puriri, matai, and nikau occasional.

Towards the south-east is a large shrubland area (type e), which extends over the ridge to the driveway off the end of Waiotoi Road. Totara is a frequent emergent species throughout.

Type (f) occurs to the east of type (e), along the Parangarau Stream northern tributaries. Kanuka/manuka is dominant, with rimu common, and kauri concentrated on the ridges. Rewarewa, tanekaha, and totara are frequent, and puriri and northern rata occasional. Type (e) is repeated in the north-eastern corner adjacent to Parangarau Stream. Within this area are several small pockets of type (g), which are dominated by kauri. Rewarewa, totara, and tanekaha are frequent, and taraire occurs occasionally.

Type (h) occurs towards the south-west, in the headwaters of the Parangarau Stream. Puriri and taraire are frequent, with kahikatea, rewarewa, rimu, and

nikau occasional. This site merges into a small area of type (i), which has frequent totara, tanekaha, and rewarewa, and occasional kauri.

Type (j) is found in a gully to the north of the end of Waiotoi Road. Totara is dominant, with taraire common. Rewarewa and mamaku are frequent, with kahikatea, rimu, kauri, and puriri occasional.

Along the western side of the site and north of Te Toira Road is a large area, most of which was not sighted. Within this site is a small piece of type (k), with occasional rewarewa, rimu, and puriri.

Type (l) occurs to the west off the end of Waiotoi Road. Frequent species associated with this ecological unit are kauri, rimu, towai, and totara, with puriri, rewarewa, and northern rata occasional. Type (c) is repeated off the end of Waiotoi Road. Frequent species include puriri, tanekaha, rewarewa, and taraire, with rimu occasional.

Southwards there is a large area of type (m), with kanuka/manuka dominant, and tanekaha and totara both emergent. Type (c) is repeated south of this site. Frequent species are towai, puriri, tanekaha, rimu, ti kouka, rewarewa, mamaku, and nikau, with kauri concentrated on the ridges.

Bratty's Bush Scenic Reserve, to the north of Pukenui Road, has type (n) on the ridges, with kauri abundant and rimu common. Tanekaha occurs occasionally. Type (k) is repeated in the gullies of the reserve. Frequent species are mamaku, kohekohe, and emergent rewarewa. Puripuri, ti kouka, nikau, totara, kahikatea, karaka, and towai all occur occasionally. The edge of this site has been planted with *Eucalyptus* sp.

Significant flora

Brachyglottis kirkii (Serious Decline), willow-leaved maire (Gradual Decline), kawaka (Sparse), monoao (Sparse), *Schizaea dichotoma* (Sparse), *Adelopetalum tuberculatum* (Regionally Significant).

Fauna

Pateke (Nationally Endangered), matuku (Nationally Endangered), NI brown kiwi (Serious Decline), kukupa (Gradual Decline), NI tomtit (Regionally Significant), red-crowned kakariki (Regionally Significant), NI fantail, grey warbler, morepork, NZ kingfisher, shining cuckoo, tui. Fish include longfin eel (Gradual Decline) and banded kokopu (Regionally Significant).

NI fernbird (Sparse), spotless crane (Sparse) and bellbird (Regionally Significant) reported.

Significance

A large, diverse forest remnant, which contains significant threatened and regionally significant species. It is contiguous with the forest/shrubland area which runs through to Ngunguru Estuary. Contains one of the largest populations of NI brown kiwi in the District.

Representative site for type (b) rimu-tanekaha-totara forest, type (c) totara forest, type (e) kanuka/manuka shrubland, type (f) kanuka/manuka-kauri-rimu forest, type (g) kauri-kawaka-rimu forest, type (i) kanuka/manuka-rimu forest, type (j) totara-taraire forest, and type (l) tanekaha-taraire forest. Only record for types (f), (g), and (l).

128.9 ha at this site are protected; 1.3 ha by a Queen Elizabeth II National Trust covenant and 127.6 ha are a Scenic Reserve administered by the Department of Conservation.

MCINNES ROAD (B) FOREST

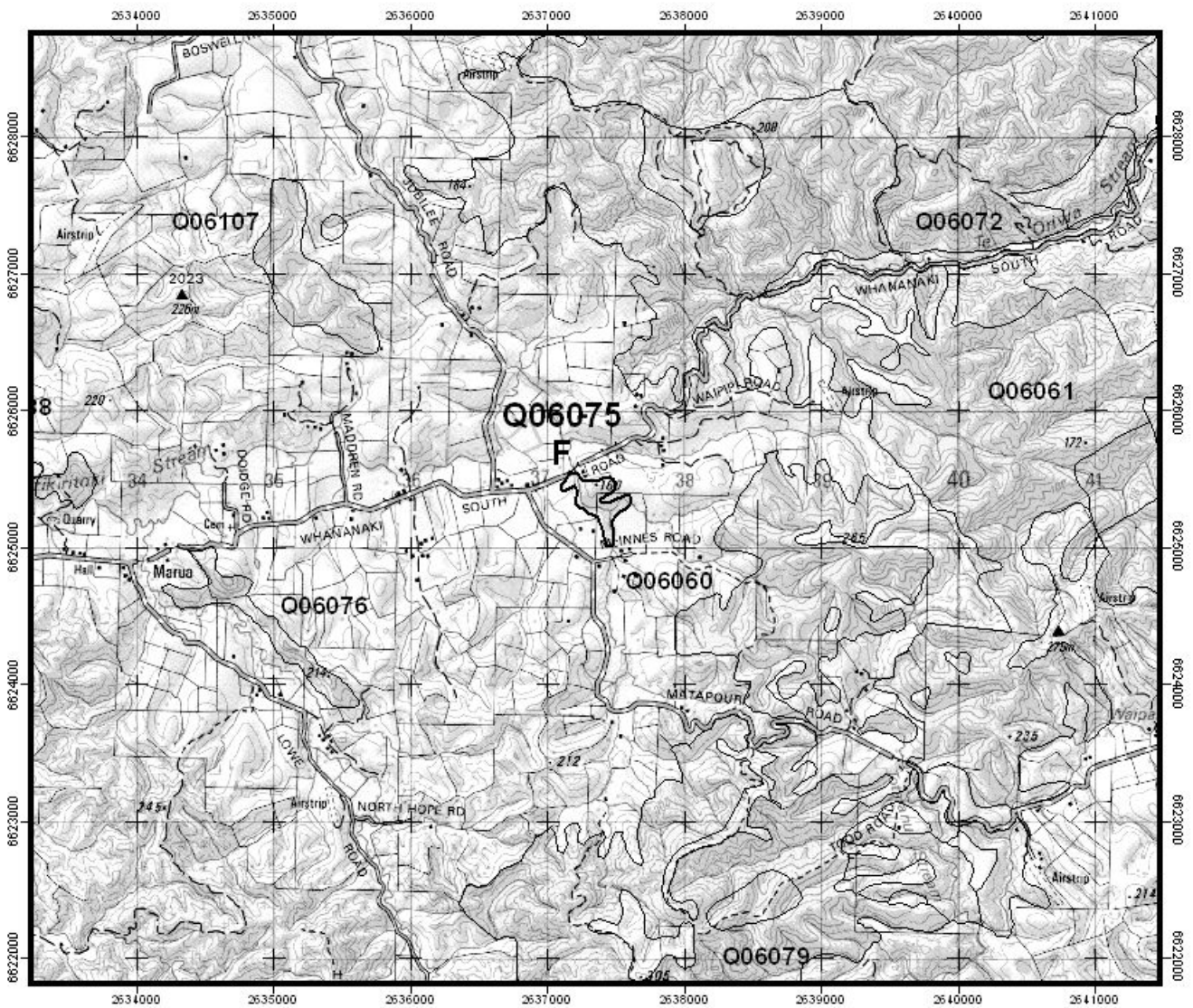
Survey no. Q06/075
 Survey date 10 August 1995
 Grid reference Q06 373 252
 Area 10 ha
 Altitude 140-160 m asl

Ecological unit

(a) Totara riverine forest on alluvium

Landform/geology

Valley-fill alluvium in hillcountry of Waipapa Terrane greywacke.



McInnes Road (b) Forest Q06/075

Each grid is 1000m x 1000m
 and = 100 ha
 S = shrubland
 F = forest
 W = wetland
 E = estuarine
 D = duneland

Vegetation

A small riverine forest remnant lying between Whananaki South Road and McInnes Road.

(a) Totara is the dominant species, with frequent titoki, and occasional kahikatea and kanuka.

Fauna

Not surveyed.

Significance

An example of riverine forest, which is a rare habitat type in the Ecological District.

Representative site.

HUGH CRAWFORD MEMORIAL SCENIC RESERVE

Survey no.	Q06/077
Survey date	6 March 1997
Grid reference	Q06 451 177, Q06 457 181, Q06 427 187
Area	783 ha (375 ha forest, 406 ha shrubland, 2 ha wetland)
Altitude	0 - 212 m asl

Ecological unit

- (a) Tanekaha-totara-towai forest on hillslope
- (b) Kauri-tanekaha-totara forest on hillslope
- (c) Mamaku fernland on hillslope
- (d) Kanuka/manuka-tanekaha shrubland on hillslope
- (e) Taraire forest on hillslope
- (f) Kauri-rimu-tanekaha forest on hillslope
- (g) Kanuka/manuka shrubland on hillslope
- (h) Kanuka/manuka-totara shrubland on hillslope
- (i) Harakeke-kanuka/manuka-raupo association on alluvium
- (j) Kanuka/manuka-kauri forest on ridge
- (k) Kanuka/manuka-totara forest on hillslope
- (l) Taraire-rewarewa forest on hillslope
- (m) Kauri-tanekaha-taraire-totara forest on hillslope
- (n) Kauri-rimu forest on ridge
- (o) Rimu-tanekaha-totara-towai forest on hillslope
- (p) Kanuka/manuka-totara-towai shrubland on hillslope
- (q) Kanuka/manuka-towai shrubland on hillslope

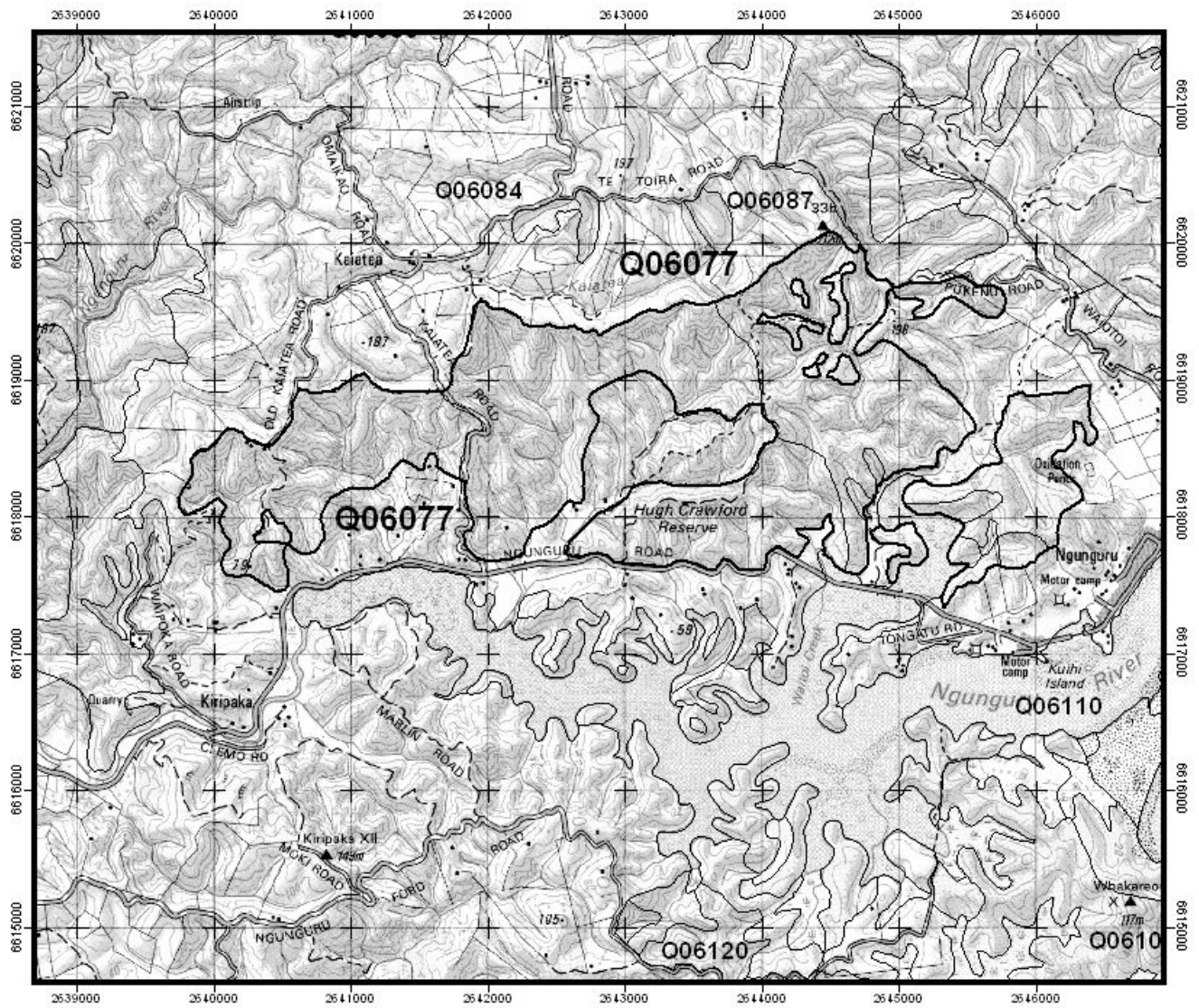
Landform/geology

Steeply dissected hillcountry in Waipapa Terrane greywacke.

Vegetation

A large forest and shrubland area adjacent to the Ngunguru Estuary.

(a) The small area to the east of the Ngunguru Estuary is composed predominantly of shrubland. At the southern side of this area is a small piece of tanekaha-totara-towai secondary forest with frequent emergent rewarewa, rimu, kauri, and kawaka. Occasional species include puriri, kohekohe, ti kouka, and nikau.



Hugh Crawford Memorial Scenic Reserve Q06/077

Each grid is 1000m x 1000m

and = 100 ha

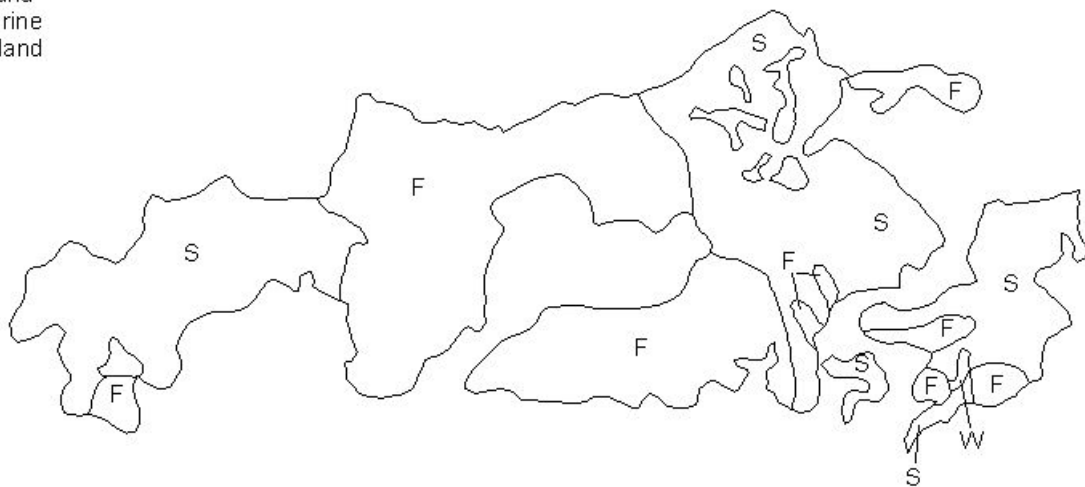
S = shrubland

F = forest

W = wetland

E = estuarine

D = duneland



(b) To the west of this area is a tongue of bush sticking out into the Ngunguru Estuary. Vegetation is dominated by kauri, tanekaha, and totara, with frequent taraire and rewarewa. Puriri and rimu are occasional species.

(c) Between the above two sites is an area of shrubland, part of which is dominated by mamaku with emergent totara and tanekaha, and the rest of which has (d) kanuka/manuka and tanekaha as the main species.

(e) There is also a small area of taraire forest in this area, with frequent puriri, and emergent rewarewa and rimu. Emergent matai, kauri, and tanekaha are present in low numbers.

In the north-west corner of the site is another tongue of land which extends out into the estuary. The southern side of this area is dominated by type (f) vegetation, with totara, towai, and rewarewa also present. Type (g) is repeated on the northern side of this area.

(h) Moving eastwards is a large area of shrubland, most of which can be seen from Waiotoi Road. Kanuka/manuka of up to 4 m in height is the dominant species, with emergent totara common throughout. There is also the occasional emergent rimu and kauri.

(i) On the southern side of the site is a small wetland, which has kanuka/manuka, harakeke, and raupo as the dominant species. Cabbage trees are frequent, and *Hebe* sp. occasional.

(j) The remainder of the site is to the west of the estuary, and is composed of a mixture of secondary forest and shrubland. To the south off the end of Pukenui Road is an area of kanuka/manuka-kauri secondary forest. Rimu and totara are also present.

(k) The adjacent gully contains kanuka/manuka-totara secondary forest. Frequent species in the gully are tanekaha, rewarewa, taraire, puriri, rimu, and mamaku, with lancewood, kawaka, karaka, nikau, kauri, kohekohe, and kahikatea occurring occasionally. There are also scattered flame trees and some pampas on the edge of this area.

Moving south-west from the trig at the end of Te Toira Road, type (k) vegetation is repeated over a large area which extends south to the Ngunguru Estuary. Kanuka/manuka is dominant, with emergent totara common. Frequent species are mamaku, puriri, towai, and tanekaha, with occasional emergent rimu, rewarewa and kauri.

(l) Within this area is a small patch of taraire-rewarewa forest, which also contains puriri and tanekaha.

(m) The Hugh Crawford Memorial Scenic Reserve, bordering the Ngunguru Road, consists predominantly of kauri-tanekaha-taraire-totara secondary forest, with kauri concentrated on the ridges. Frequent species are rimu, rewarewa, towai, and kanuka/manuka, with occasional ti kouka, puriri, kahikatea, and nikau. To the north of this reserve is a large area of *Pinus* sp.

(n) To the west of the reserve, between Ngunguru and Kaiatea Road, is an area of kauri-rimu secondary forest. A few northern rata are also present.

(o) Rimu-tanekaha-totara-towai secondary forest is present on the adjacent hillslopes, with rimu, rewarewa, puriri, and kahikatea frequent, and kawaka occasional.

The northern side of the site, from east of Kaiatea Road to the eastern end of Hugh Crawford Memorial Scenic Reserve, was not sighted during the survey, and was assumed to consist of secondary forest.

(p) To the west of Kaiatea Road is a large area of kanuka/manuka-totara-towai shrubland, with puriri and tanekaha frequent. Kahikatea, rewarewa, rimu, and kauri all occur occasionally.

(q) The south-west corner of the site consists of kanuka/manuka-towai shrubland, with frequent totara and tanekaha. There are also a few mature *Pinus* sp. within this area. Also in this area, a small patch of type (b) vegetation is repeated, with rewarewa and towai frequent, and rimu, puriri, and kahikatea occurring occasionally.

Significant flora

Kawaka (Sparse), *Adelopetalum tuberculatum* (Regionally Significant).

Fauna

NI brown kiwi (Serious Decline), kukupa (Gradual Decline) grey warbler, NZ kingfisher, tui. Longfin eel (Gradual Decline), banded kokopu (Regionally Significant), koura, shortfin eel. The snail *Amborhytida dunni* (Gradual Decline).

Significance

This is a large forest/shrubland remnant, which contains several threatened and regionally significant species, including relatively high numbers of NI brown kiwi, and a high diversity of ecological units. It is contiguous with the Ngunguru Estuary at the eastern end of the site, and acts as a buffer for this estuarine area. It is also contiguous with the large area of forest to the north-east.

Representative site for type (c) mamaku fernland, type (d) kanuka/manuka-tanekaha shrubland, type (h) kanuka/manuka-totara shrubland, type (i) harakeke-kanuka/manuka-raupo association, type (l) taraire-rewarewa forest, type (m) kauri-tanekaha-taraire-totara forest, type (o) rimu-tanekaha-totara-towai forest, and type (q) kanuka/manuka-towai shrubland. Only record of types (i), (l), (m), and (o) in the Ecological District.

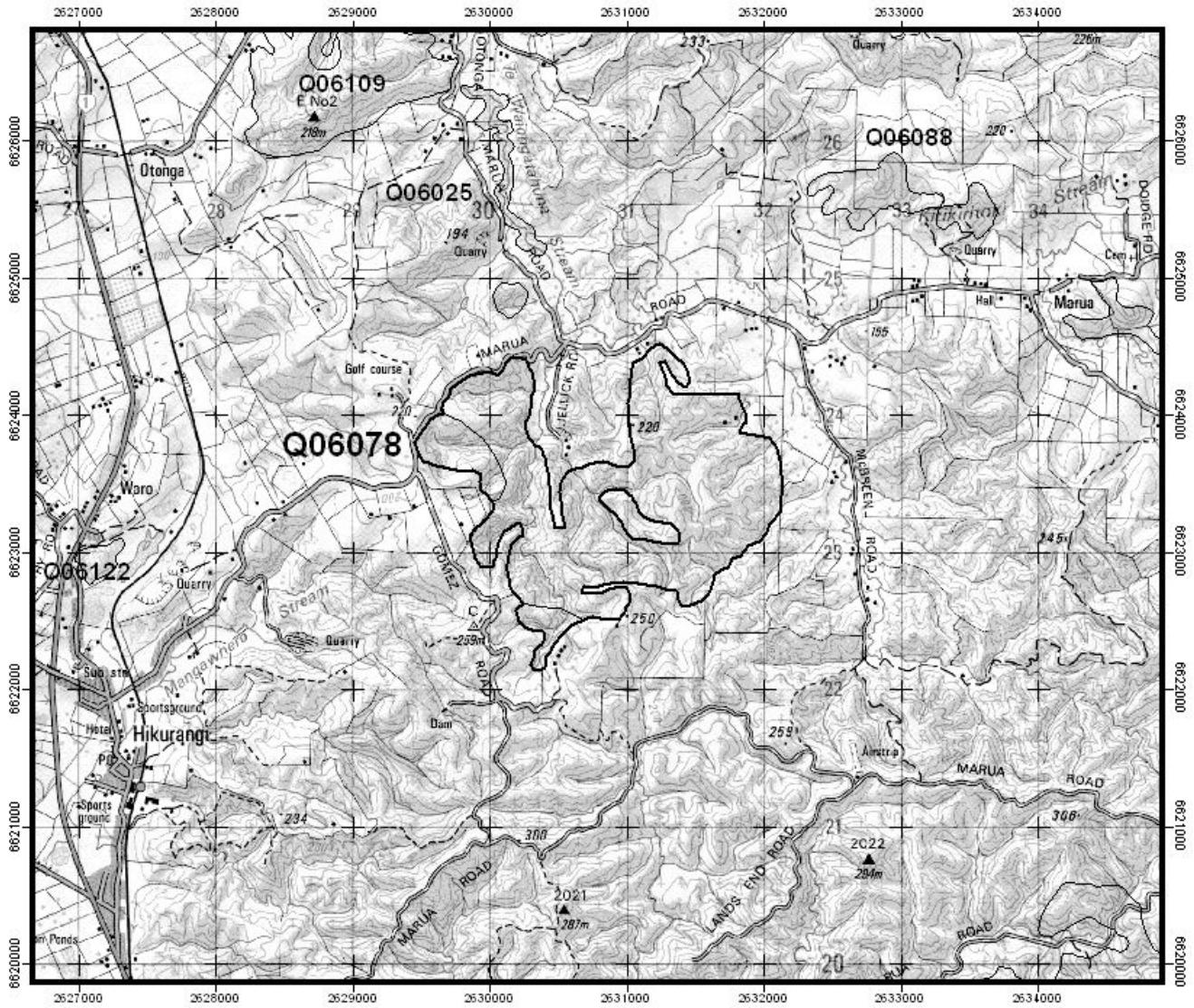
160.9 ha at this site are protected; 2.7 ha by a Queen Elizabeth II National Trust covenant, 53.6 ha are administered by the Whangarei District Council and 104.6 ha are a Scenic Reserve administered by the Department of Conservation.

GOMEZ ROAD BUSH

Survey no.	Q06/078
Survey date	14 March 1997
Grid reference	Q06 307 233
Area	294 ha (264 ha forest, 30 ha shrubland)
Altitude	160-220 m asl

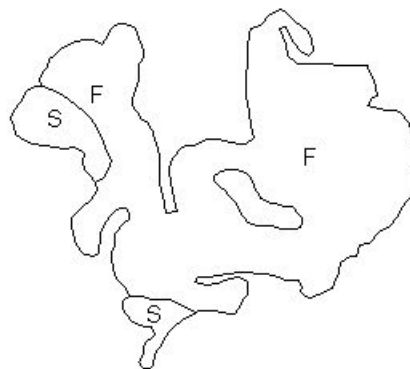
Ecological unit

- (a) Towai forest on hillslope (90%)
- (b) Kanuka/manuka shrubland on hillslope (10%)



Gomez Road Bush Q06/078

Each grid is 1000m x 1000m
 and = 100 ha
 S = shrubland
 F = forest
 W = wetland
 E = estuarine
 D = duneland



Landform/geology

Steeply dissected hillcountry in Waipapa Terrane greywacke with overlying undifferentiated Te Kuiti Group sedimentary units along the western margin.

Vegetation

(a) The majority of the site is composed of towai secondary forest, with kauri, rewarewa, tanekaha, and mamaku frequent, and rimu, miro, and ti kouka occasional.

(b) Along the western side of the site are two small pieces of kanuka/manuka shrubland of up to 4 m in height.

Significant flora

Toatoa (Regionally Significant).

Fauna

NI brown kiwi (Serious Decline) present.

Significance

Presence of a threatened bird species and a Regionally Significant plant species.

55.5 ha at this site are administered by the Department of Conservation.

TODD ROAD FOREST

Survey no.	Q06/079
Survey date	19 March 1997
Grid reference	Q06 385 220
Area	553 ha (515 ha forest, 38 ha shrubland)
Altitude	140-305 m asl

Ecological unit

- (a) Towai-totara forest on hillslope
- (b) Kanuka/manuka shrubland on hillslope
- (c) Totara shrubland on hillslope
- (d) Towai forest on hillslope
- (e) Totara forest in gully
- (f) Kauri forest on ridge
- (g) Taraire forest in gully

Landform/geology

Steeply dissected hillcountry in Waipapa Terrane greywacke.

Vegetation

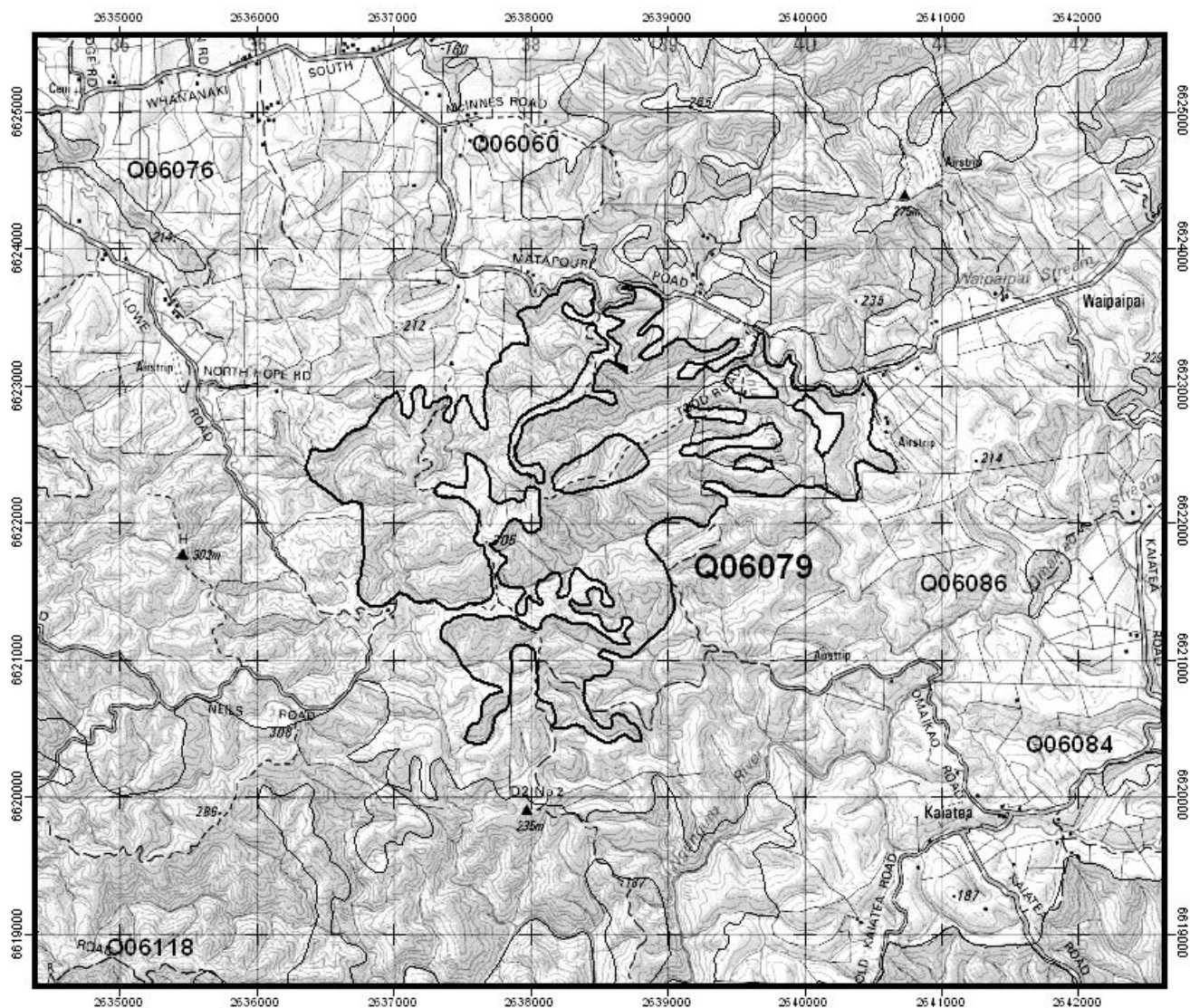
A large forest/shrubland block with some modified enclaves.

(a) In the north-west corner of the site, as seen from Matapouri Road, towai is abundant, with totara common. Frequent species include rimu, puriri, tanekaha, and emergent rewarewa. Rimu and tanekaha are concentrated on the ridges. Kauri, kahiaktea, ti kouka and tree fern occur occasionally.

(b) Within this area are two small pieces of shrubland. One is composed of kanuka/manuka, with no associated species.

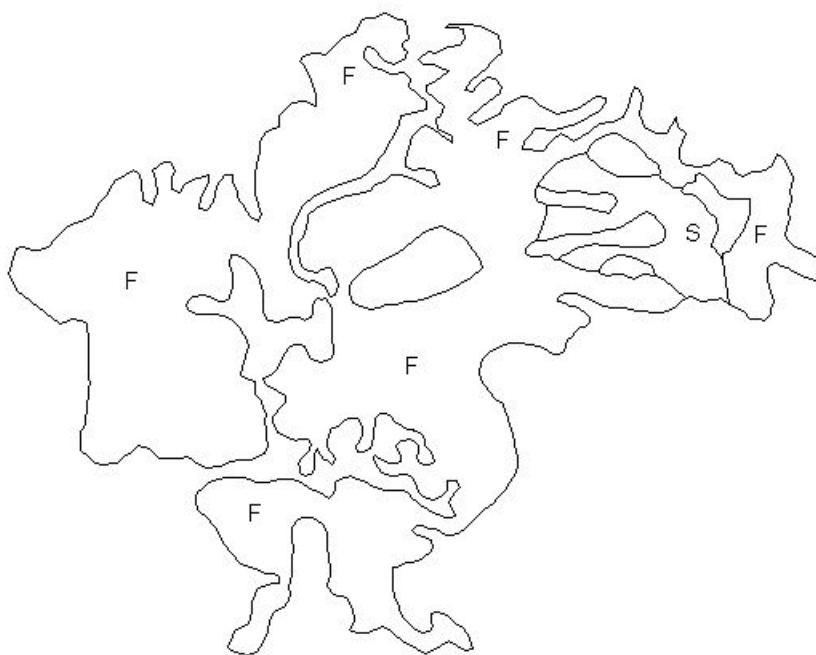
(c) The other is dominated by regenerating totara, with frequent tree fern and ti kouka.

Type (a) is repeated on the eastern side of the site, alongside the Totaranui Stream.



Todd Road Forest Q06/079

Each grid is 1000m x 1000m
 and = 100 ha
 S = shrubland
 F = forest
 W = wetland
 E = estuarine
 D = duneland



(d) On the western side of this stream, the vegetation is dominated by towai secondary forest, with rewarewa and rimu frequent, and kauri, totara, and tanekaha occasional. Type (b) is also repeated on the hillslopes.

(e) The gullies in this area are dominated by totara, with tanekaha and towai frequent, and rimu, rewarewa, and ti kouka occasional.

The southern side of the site extends in part into the Glenbervie Forest, and is dominated by type (d) vegetation on the hillslopes. Associated species include taraire, totara, tanekaha, rimu, rewarewa, kauri, kahikatea, and northern rata.

(f) Within this area are some small patches of kauri, predominantly on the ridges, which also contain frequent rimu and tanekaha.

(g) Gullies on the southern side of the site are dominated by taraire. Other species include kohekohe, karaka, kauri, totara, rimu, puriri, kahikatea, and nikau.

Fauna

Australasian harrier, grey warbler, tui. NI brown kiwi (Serious Decline) reported. Longfin eel (Gradual Decline).

Significance

Possible NI brown kiwi habitat. Provides linkage between the Glenbervie Forest remnants and forest in the Matapouri/Whananaki area.

Representative site for type (c) totara shrubland.

CLEMENT ROAD REMNANTS

Survey no.	Q06/080
Survey date	21 March 1997
Grid reference	Q06 471 244, Q06 464 242, Q06 456 240
Area	52 ha (34 ha forest, 18 ha shrubland)
Altitude	0-80 m asl

Ecological unit

- (a) Kauri-rimu forest on hillslope (25%)
- (b) Kanuka/manuka shrubland on ridge (5%)
- (c) Rimu-kauri-tanekaha forest on hillslope (40%)
- (d) Totara forest on hillslope (15%)
- (e) Kanuka/manuka-tanekaha-totara shrubland on hillslope (15%)

Landform/geology

Hillcountry of Waipapa Terrane greywacke adjoining the Matapouri Estuary.

Vegetation

Three small forest and shrubland remnants bordering the Matapouri Estuary.

(a) Of the two small forest remnants on the western side of the Matapouri Estuary, the western remnant is composed mainly of kauri-rimu secondary forest, with occasional rewarewa, puriri, and tanekaha. (b) A small area of kanuka/manuka shrubland occurs at each end of the remnant.

(c) The eastern remnant is adjacent to the Matapouri Estuary. Rimu is abundant, with kauri and tanekaha common. Frequent species include totara, kahikatea, rewarewa, taraire, and ti kouka. Matai, puriri, and nikau occur occasionally.