

Vegetation

The Payne Road Forest Remnants lie within the immediate catchment of the upper tidal part of the Topuni River. Ten remnants are spread out across a pastoral farming landscape, mostly in gullies. Many individual indigenous trees are dotted around the paddocks between the remnants. The entire landscape appears to be grazed, though some of the remnants may be fenced without this being obvious. A lot of the site was difficult to see from Payne Road, therefore some of the vegetation description has been extrapolated to include areas which were invisible, based on study of recent aerial photography (flown in 2002).

(a) The main forest type on general hillslope topography appears to be a mixture of totara with lesser quantities of puriri and kahikatea. Taraire and pukatea are frequent associates, while tarata, kauri, rewarewa, matai and kanuka are occasional.

(b) Next to Payne Road, a gully forest type comprises kanuka, totara and tanekaha with frequent five finger, tarata, kahikatea and pate, and occasional ti kouka and crack willow.

(c) Some of the forest remnants have totara and kahikatea dominant in the canopy with frequent tanekaha, and occasional kowhai, kauri, puriri, matai and kanuka.

(d) The upper part of the gully directly adjacent to Payne Road supports an unusual forest type for Otamatea ED Northland: tanekaha-dominant forest with a high diversity of secondary successional species in the 'frequent' category, including kanuka, tarata, ti kouka, mapou, mamaku, karamu, five finger, pate, lancewood and mahoe.

Fauna

Tui, kingfisher, fantail.

Significance

This site contains three representative ecological units: (a) totara-puriri-kahikatea forest on moderate to steep hillslope, (b) kanuka-totara-tanekaha forest in gully and (d) tanekaha forest in gully. Gully forests of type (b) and (d), which both have a lot of tanekaha associated with them, are particularly unusual in Otamatea ED Northland. This site is grazed and trampled by livestock, which reduces its value as a natural area.

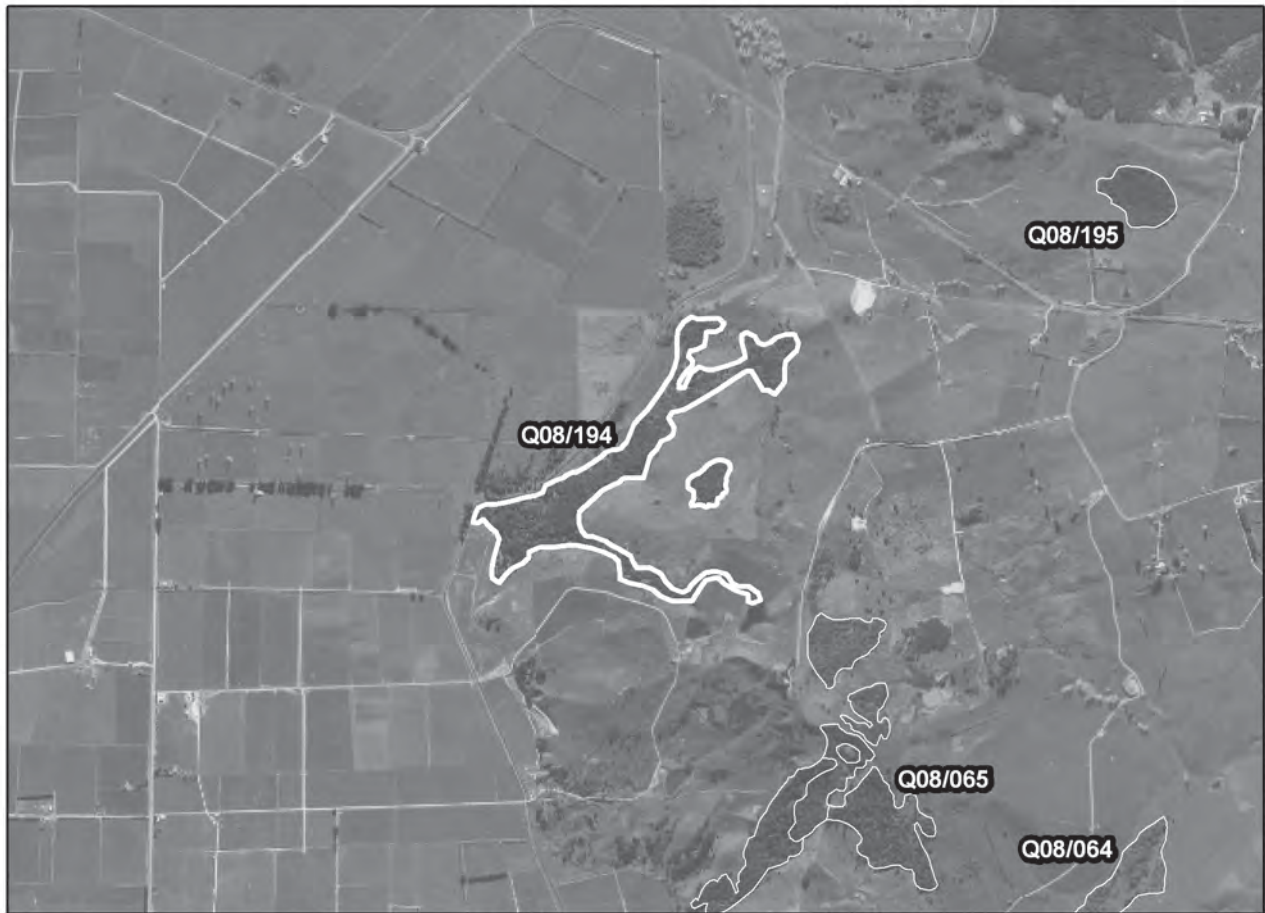
OTUHIANGA COASTAL FOREST REMNANTS

Survey no.	Q08/194
Survey date	14 December 2005
Grid reference	Q08 099 626 (2 remnants)
Area	20.9 ha
Altitude	20-102 m asl

Ecological units

(a) Totara-puriri forest on moderate to steep hillslope (80%)

(b) Totara-kahikatea forest on moderate hillslope (20%)



Q08/194 Otuhianga Coastal Forest Remnants

S = Shrubland
 F = Forest
 W = Wetland
 E = Estuarine

0 250 500 1,000 Metres



Landform/geology

Fossil seacliffs, hillslopes and gullies in Oligocene micritic limestone (Mahurangi Limestone, Motatau Complex).

Vegetation

This site comprises indigenous forest at the foot of the western side of Otuhianga Hill (spanning map sheets Q08 and P08) which would have once been continuous with coastal saltmarshes and mangroves. However, through

means of floodgating and canalisation of the tidal area for agricultural purposes, this site now lies roughly 3 km inland, next to the reclaimed 'Ruawai flats'.

(a) The main forest type is totara-puriri forest with frequent kowhai, kahikatea and karaka, and occasional ti kouka and nikau.

(b) The more sparse northern section is composed of totara-kahikatea forest with frequent ti kouka.

Fauna

Not surveyed.

Significance

This site contains the best example of totara-puriri forest occurring inland from the coast (type a).

KAITARA CREEK FOREST REMNANTS

Survey no.	Q08/196
Survey date	15 December 2005
Grid reference	Q08 382 565 (4 remnants)
Area	18.6 ha
Altitude	20-80 m asl

Ecological units

(a) Totara-kahikatea forest in gully (55%)

(b) Totara-kanuka forest in gully (30%)

(c) Kauri forest on gentle hillslope (10%)

(d) Totara forest on moderate hillslope (5%)

Landform/geology

Hillslopes and gullies underlain by melange (undifferentiated Mangakahia & Motatau Complex lithologies) and Miocene thick-bedded sandstone (Waitemata Group).

Vegetation

This site comprises four indigenous forest remnants in the upper Kaitara Creek catchment. Surrounding land is currently covered in pasture with occasional planted poplars, Tasmanian blackwoods, pines and other exotic trees used either as slope stabilisers or shelterbelts.

(a) The most common forest type is totara-kahikatea forest. Some kahikatea are older, mature trees, which are emergent above the forest. Kauri and pukatea are frequent with occasional puriri.

(b) The northernmost forest remnant comprises mainly totara and kanuka. Kahikatea occurs frequently with occasional mamaku and tanekaha.

(c) In the easternmost forest remnant, there are dense stands of kauri rickers on a gentle slope above the river. Totara is a frequent associate, and tall kahikatea and rimu spars occur occasionally.

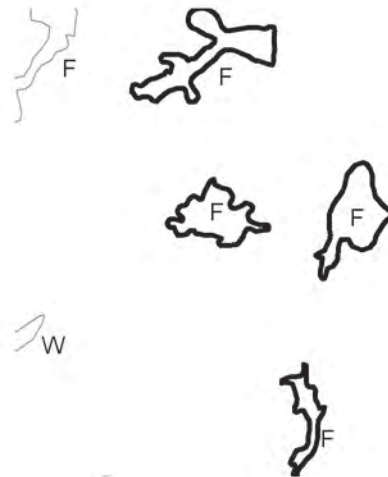
(d) A small area of totara-dominant forest with frequent tanekaha and rewarewa is present on a moderate hillslope above a gully in the middle, western remnant.



Q08/196 Kaitara Creek Forest Remnants

S = Shrubland
 F = Forest
 W = Wetland
 E = Estuarine

0 250 500 1,000 Metres



Fauna

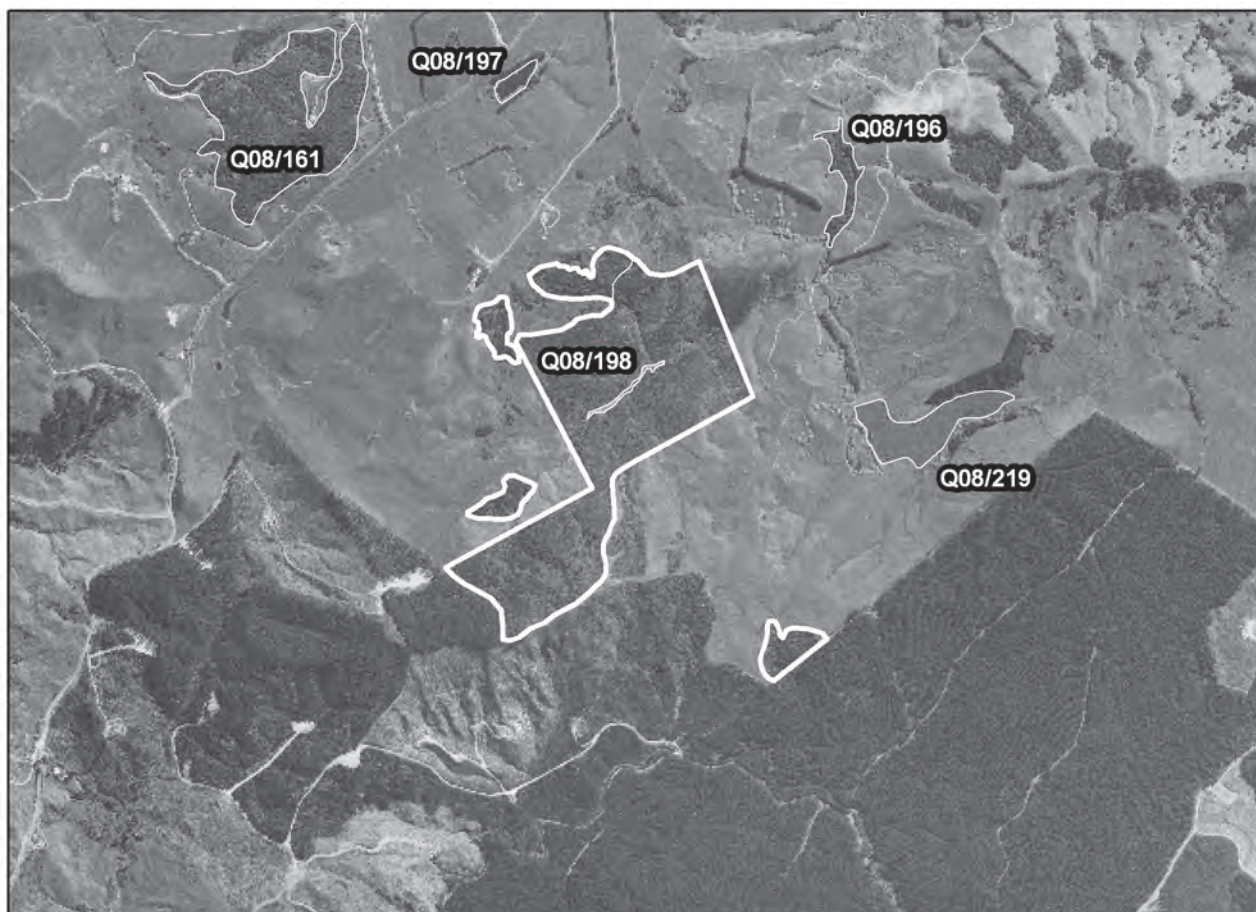
Kukupa (Gradual Decline).

Significance

This site is significant for the presence of a threatened bird species (kukupa) and well as for being a representative example of type (c) kauri forest on gentle hillslope.

NATHAN ROAD FOREST AND SHRUBLAND

Survey no. Q08/198
Survey date 15 December 2005
Grid reference Q08 375 550 (4 remnants)
Area 57.3 ha (5.1 ha forest, 51.9 ha shrubland,
0.3 ha wetland)
Altitude 44-135 m asl



Q08/198 Nathan Road Forest and Shrubland

S = Shrubland
F = Forest
W = Wetland
E = Estuarine

0 250 500 1,000 Metres



Ecological units

- (a) Kanuka-mamaku shrubland on gentle hillslope (90%)
- (b) Totara forest on moderate hillslope (9%)
- (c) Raupo reedland in gully (1%)

Landform/geology

Hillslopes and gullies of Miocene thick-bedded sandstone (Waitemata Group).

Vegetation

This site comprises a large block of mixed indigenous-exotic shrubland, with smaller amounts of indigenous forest and wetland, situated at the end of Nathan Road on Oneriri Peninsula. The southern part of the block borders a large radiata pine plantation, and the rest is surrounded by pastoral farmland. The long straight edges imply that the shrubland is fenced from neighbouring paddocks and has regenerated since livestock exclusion, perhaps only over the last few decades.

(a) Kanuka is abundant and mamaku is common in the shrublands. Woolly nightshade and gorse are frequent. These two exotic weeds and mamaku appear to be concentrated in the small valleys and depressions, while kanuka is more dense on the drier parts of the landscape. Occasional species recorded include ti kouka, nikau, puriri and kahikatea.

(b) At the northern end of the site there are three separate areas of indigenous forest dominated by totara, which have frequent kahikatea and occasional rimu, matai, lancewood and tanekaha.

(c) A small raupo reedland occurs in a gully bottom (part of a Kaitara Creek tributary) surrounded by regenerating shrubland.

Fauna

Not surveyed.

Significance

This site contains the second largest area of indigenous shrubland (after Pakaurangi Forest and Shrubland Q08/185) remaining in Otamatea ED Northland. Ecological unit (a), kanuka-mamaku shrubland on gentle hillslope, is a representative type.

HUARAU RIDGE FOREST REMNANTS

Survey no.	Q08/200
Survey date	16 December 200
Grid reference	Q08 289 647 (4 remnants)
Area	44.7 ha
Altitude	40-120 m asl

Ecological units

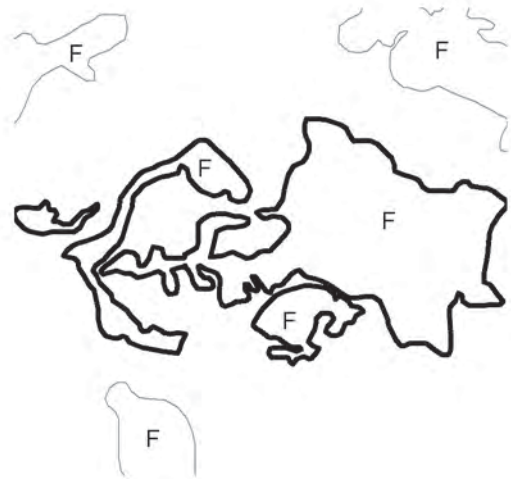
- (a) Totara-kanuka forest on moderate to steep hillslope (40%)
- (b) Taraire-kahikatea forest on moderate to steep hillslope (30%)
- (c) Totara forest in gully (25%)
- (d) Kahikatea-totara forest in gully (5%)



Q08/200 Huarau Ridge Forest Remnants

S = Shrubland
 F = Forest
 W = Wetland
 E = Estuarine

0 250 500 1,000 Metres



Landform/geology

Hillslopes and gullies underlain by Cretaceous sandstone and mudstone (Mangakahia Complex), and melange (undifferentiated Mangakahia & Motatau Complex lithologies).

Vegetation

Located to the east of Huarau on a prominent ridge on the skyline, directly adjacent to Barton's Hill Forest (Q08/137), this site comprises remnants of indigenous forest on the ridge and in gullies descending westwards from it,

which protect part of the headwaters of the Pahi River. A mixture of pastoral farmland and radiata pine plantation forest surrounds the site.

(a) Totara-kanuka forest dominates in drier areas towards the eastern side of the ridge. Here mamaku and kahikatea are frequent, with occasional kauri, ponga and ti kouka.

(b) Forest in which taraire is abundant and emergent kahikatea is common occurs in wetter places on the ridge. Rewarewa and totara are frequent, with occasional puriri, matai, mamaku, pukatea and radiata pine.

(c) The main forest type in the gullies on the western side is dominated by totara. Kanuka frequently occurs on the edges, and occasional nikau, taraire, kahikatea, tawa, puriri, ti kouka and rimu are also present.

(d) The small remnant at the bottom of the gully is composed mainly of kahikatea and totara with frequent kowhai, karaka and matai, and occasional titoki and pukatea.

Fauna

Not surveyed.

Significance

This site is one of the largest areas of indigenous forest in Otamatea ED Northland and is an important extension of forest habitat to nearby Level 1 site Barton's Hill Forest (Q08/137). This site is representative for (b) taraire-kahikatea forest on moderate to steep hillslope, which is one of the best of its type within Otamatea ED Northland, and is also a rare forest type in the Northland Region (Wendy Holland, pers. comm.).

HILLSTONE ROAD FOREST REMNANTS 3

Survey no.	Q08/208
Survey date	20 December 2005
Grid reference	Q08 310 577 (8 remnants)
Area	14.5 ha (12.2 ha forest, 2.3 ha shrubland)
Altitude	40-120 m asl

Ecological units

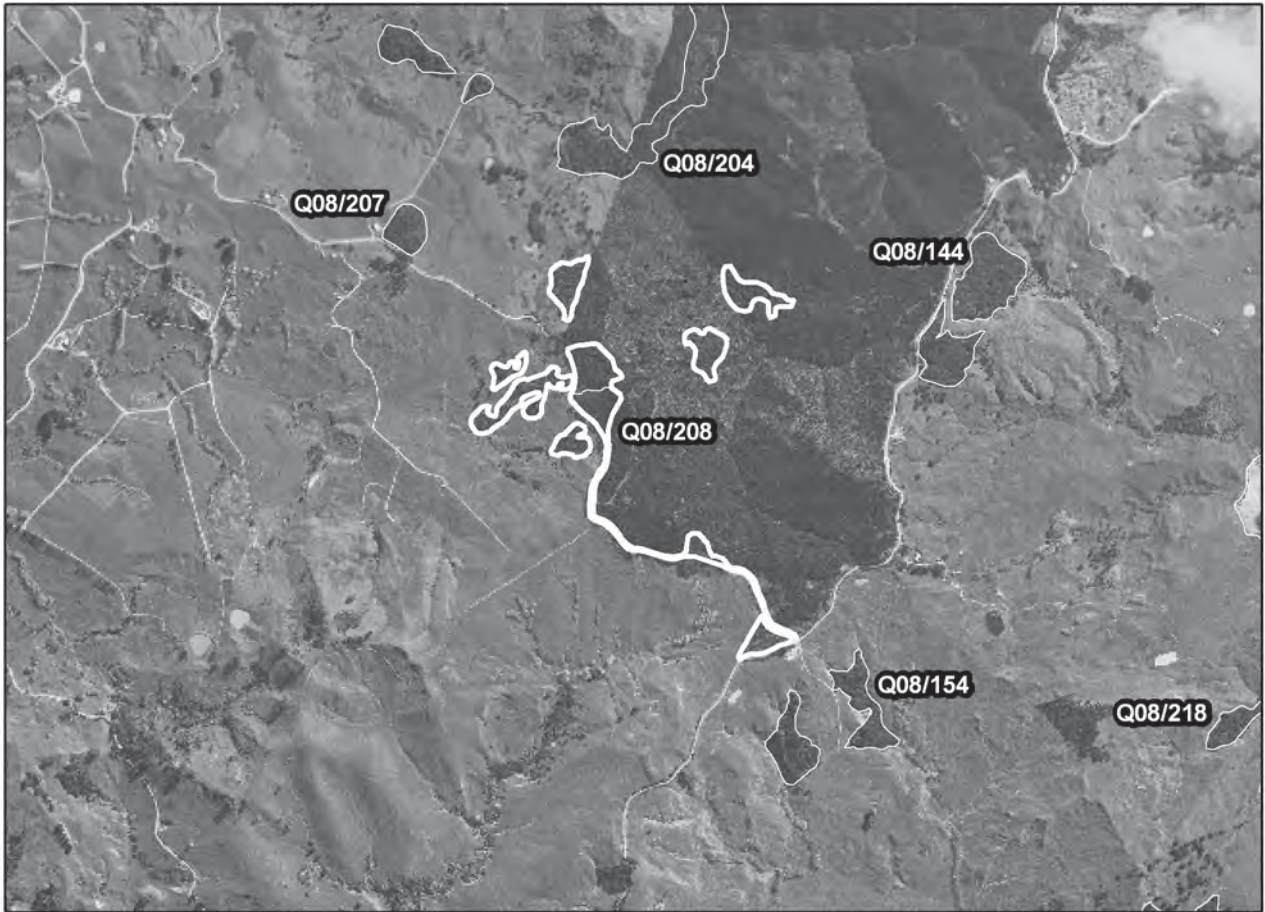
- (a) Totara-kahikatea forest on moderate hillslope (40%)
- (b) Puriri-taraire-karaka forest on moderate hillslope (20%)
- (c) Kanuka-manuka-rimu forest on moderate to steep hillslope (15%)
- (d) Kanuka-totara forest on moderate hillslope (10%)
- (e) Manuka shrubland on moderate hillslope (10%)
- (f) Harakeke-manuka shrubland on moderate hillslope (5%)

Landform/geology

Hillslopes and gullies underlain by Cretaceous sandstone and mudstone (Mangakahia Complex).

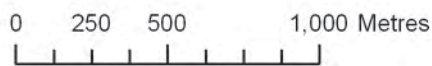
Vegetation

This site comprises a range of different shapes and sizes of remnants of indigenous forest and shrubland at the intersection of Hillstone Road and



Q08/208 Hillstone Road Forest Remnants 3

S = Shrubland
 F = Forest
 W = Wetland
 E = Estuarine



Bickerstaffe Road. A large radiata pine plantation lies directly north of the road, and pastoral farmland lies directly south.

(a) It appears that the forest type of greatest extent is totara-kahikatea forest. Frequent associates of this type at this location are puriri, rimu, karaka and kanuka, while kohekohe, titoki, taraire and matai occur only occasionally. The two remnants in the northeast, which are entirely within the pine plantation, were obscured from view at the time of the survey and were assumed to be of this type.

(b) The western remnants below the road contain a lush, broadleaved forest of puriri, taraire and karaka with frequent kohekohe, nikau, rimu, kahikatea, totara, kanuka and occasional matai, mamaku, lancewood, mahoe, titoki, koromiko and Japanese honeysuckle.

(c) Directly opposite type (b) on the northern side of the road, there is an area of secondary kanuka–manuka forest with common emergent rimu, and frequent tanekaha and rewarewa. Occasional kauri ricker, lancewood, ti kouka and puriri are dotted throughout this type.

(d) At the southern end, by the road intersections, there is a triangle of young kanuka–totara forest with frequent mapou, tarata, tanekaha, ti kouka and harakeke, and occasional akepiro, mamangi, hangehange, rimu and karamu.

(e) The most extensive shrubland type, which lies on the northwestern side, is dominated by manuka with frequent karamu, ti kouka and tanekaha, and occasional harakeke, hangehange and mapou. Pampas and Japanese honeysuckle make up a small proportion of the composition.

(f) In the southwestern strip, the shrubland has equal amounts of manuka and harakeke, and frequent bracken, but otherwise is similar to type (e).

Fauna

Australasian harrier, tui.

Significance

This site contains a high diversity of vegetation types for its size, and is representative for three ecological units: (c) kanuka–manuka–rimu forest on moderate to steep hillslope, (e) manuka shrubland on moderate hillslope and (f) harakeke–manuka shrubland on moderate hillslope. Detractors to its value include the small size of the remnants, degradation and the effects of livestock grazing and trampling in parts.

ORUAWHARO ROAD STREAM

Survey no.	Q08/209
Survey date	13 November 2002 (Wildland Consultants 2004)
Grid reference	Q08 423 527
Area	0.5 ha (0.4 ha shrubland, 0.1 ha wetland)
Altitude	20 m asl

Ecological units

(a) *Coprosma propinqua* shrubland in gully (80%)

(b) Raupo reedland in gully (20%)

Landform/geology

Valley floor wetland on Holocene alluvium.

Vegetation

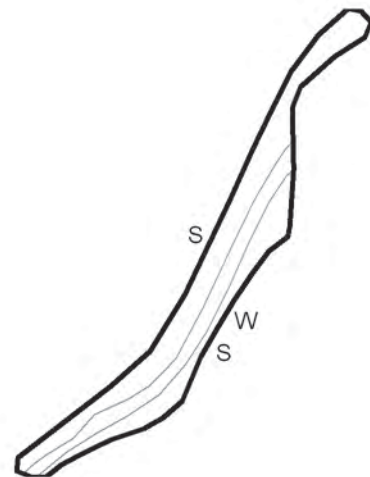
This site comprises a narrow convoluted stream gully, up to 20 m wide, next to Oruawhoro Road, in which raupo reedland grows. Shrubs of *Coprosma propinqua* associated with frequent harakeke, mahoe, bracken, karamu, mapou and scattered ti kouka occur on either side of the stream. Gorse, pampas, blackberry and crack willow are frequent exotic weed species in the mixture.



Q08/209 Oruawharo Road Stream

S = Shrubland
 F = Forest
 W = Wetland
 E = Estuarine

0 250 500 1,000 Metres



Fauna

Fantail, kingfisher.

Significance

This site contains potential habitat for threatened avifauna associated with freshwater wetland, such as the NI fernbird and spotless crane, though none were detected here at the time of the survey. This site is considered to be representative for ecological unit (a) *Coprosma propinqua* shrubland in a gully system. The site is poorly buffered as it occurs next to the continual disturbance of a road. It is potentially threatened by the eventual felling of pines around it.