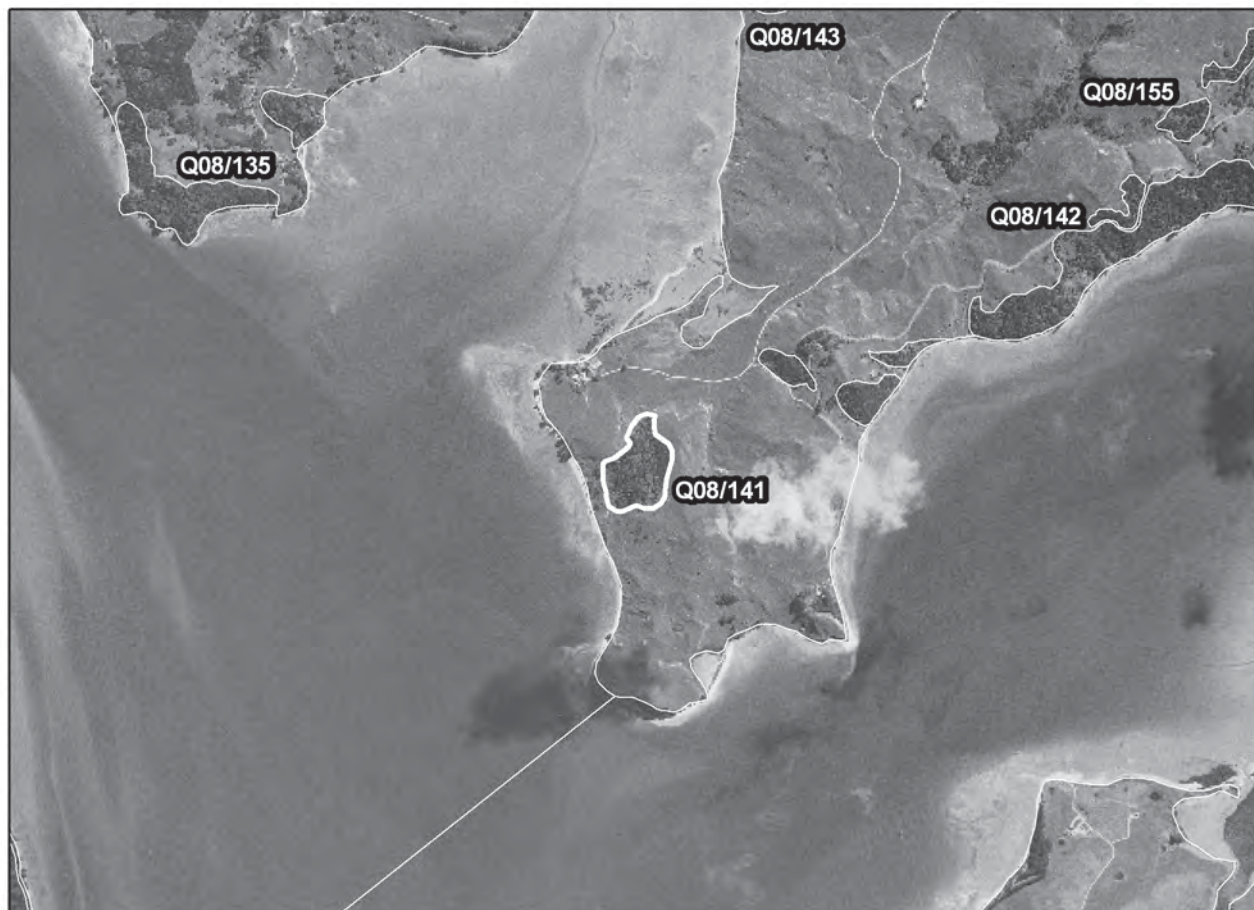


## NGAUIKO POINT FOREST REMNANT

Survey no. Q08/141  
Survey date 13 January 2006  
Grid reference Q08 286 528  
Area 4.9 ha  
Altitude 18-36 m asl

### *Ecological unit*

(a) Kanuka forest on gentle coastal margin (100%)



### Q08/141 Ngaupiko Point Forest Remnant

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

0 250 500 1,000 Metres



### ***Landform/geology***

Coastal hillside underlain by melange (undifferentiated Mangakahia & Motatau Complex lithologies), and Oligocene micritic limestone (Mahurangi Limestone, Motatau Complex).

### ***Vegetation***

This is a small forest remnant on the western side of Ngaupiko Point which has many canopy gaps as result of prolonged stock trampling and grazing. Kanuka is dominant, but the site is notable for its frequent stands of kauri rickers. Ti kouka is also frequent with occasional kahikatea.

### ***Fauna***

Not surveyed.

### ***Significance***

This remnant is small, in poor condition due to grazing/trampling effects, and therefore is not a good example of its type.

## **BATLEY ROAD COASTAL FOREST REMNANTS**

Survey no.	Q08/142
Survey date	29 November 2005
Grid reference	Q08 302 536 (7 remnants)
Area	25.4 ha
Altitude	5–60 m asl

### ***Ecological units***

- (a) Taraire–puriri forest on steep coastal margin (65%)
- (b) Kanuka forest on gentle hillslope (15%)
- (c) Totara–kanuka forest on gentle coastal margin (10%)
- (d) Kanuka–tree privet forest on gentle coastal margin (5%)
- (e) Taraire–totara–kanuka forest on gentle coastal margin (5%)

### ***Landform/geology***

Coastal hillsides and gullies in melange (undifferentiated Mangakahia & Motatau Complex lithologies), and Cretaceous thinly bedded mudstone (Whangai Fmn, Mangakahia Complex).

### ***Vegetation***

This site comprises seven remnants of coastal forest along the east coast of the peninsula culminating in Ngaupiko Point. Batley Road winds its way down the peninsula towards the former settlement and canning factory of Batley, skirting coastal forest on its lower side and pasture on the upper (two small forest remnants are on the upper side). The site is relatively sheltered from the predominant westerly winds, but it can be open to occasional gales and strong southwesterly winds coming through the Kaipara Harbour mouth and up the Otamatea River.

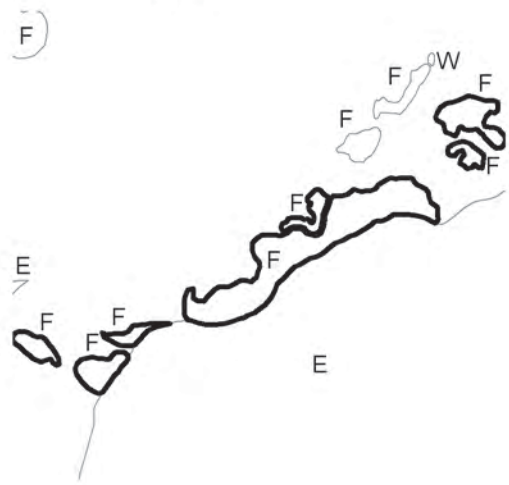
- (a) Most of the remnants have taraire–puriri forest with frequent totara, karaka, kahikatea, kowhai and kanuka, and occasional small-leaved milk tree, pate, kohekohe and ngaio.



## Q08/142 Batley Road Coastal Forest Remnants

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

0 250 500 1,000 Metres



(b) In the northeast, near Tanoa, the forest is dominated by kanuka, with frequent puriri and kahikatea, and occasional kohekohe and karaka.

(c) In several places there are degraded examples of totara and kanuka forest with frequent hawthorn.

(d) The most disturbed areas are dominated by a mixture of kanuka and tree privet with frequent hawthorn.

(e) On the western side, a short way up from the coast and on the far side of the road, the forest comprises equal quantities of taraire, totara and kanuka, with frequent kahikatea, and occasional nikau, ti kouka, mamangi, tree privet, hawthorn, woolly nightshade and loquat.

***Fauna***

Southern black-backed gull, pied stilt, kingfisher.

***Significance***

Clearance, grazing and weed invasion are strong negative pressures on these remnants and they are declining in condition. Possum browse was noted in the canopy. There is some fencing but it is not known whether these are stock-proof. A considerable diversity of habitat types is present, but none are good examples of their types, primarily for the reasons outlined above. This site is important as a protective vegetation buffer to the fringes of the Otamatea River (Q08/062).

**SOUTH HOKORAKO CREEK FOREST REMNANT**

Survey no.	Q08/143
Survey date	13 January 2006
Grid reference	Q08 290 544
Area	4.1 ha
Altitude	5-60 m asl

***Ecological unit***

(a) Taraire-puriri forest on steep coastal margin (100%)

***Landform/geology***

Coastal hillside underlain by melange (undifferentiated Mangakahia & Motatau Complex lithologies).

***Vegetation***

This site comprises a small, compact area of coastal forest on the southeast bank of the Hokorako Creek. On the seaward side it abuts extensive mudflats and shallow wading areas of the inner Kaipara Harbour, and on the landward side it is surrounded by grazed pasture. The forest comprises taraire and puriri, with frequent karaka and kanuka, and occasional ti kouka and kohekohe.

***Fauna***

Not surveyed.

***Significance***

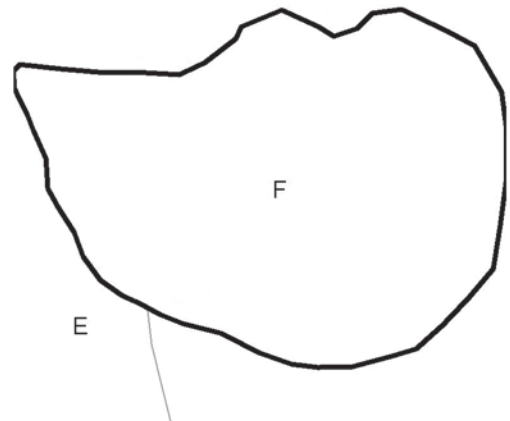
This site is relatively small and isolated, and appears to be accessible to livestock, which would reduce the quality of the understory. Whilst not a representative example of its type, it is still important as a habitat 'stepping stone' for mobile wildlife (e.g. birds), which use a number of forest remnants to meet their habitat needs.



## Q08/143 South Hokorako Creek Forest Remnant

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

0 250 500 1,000 Metres

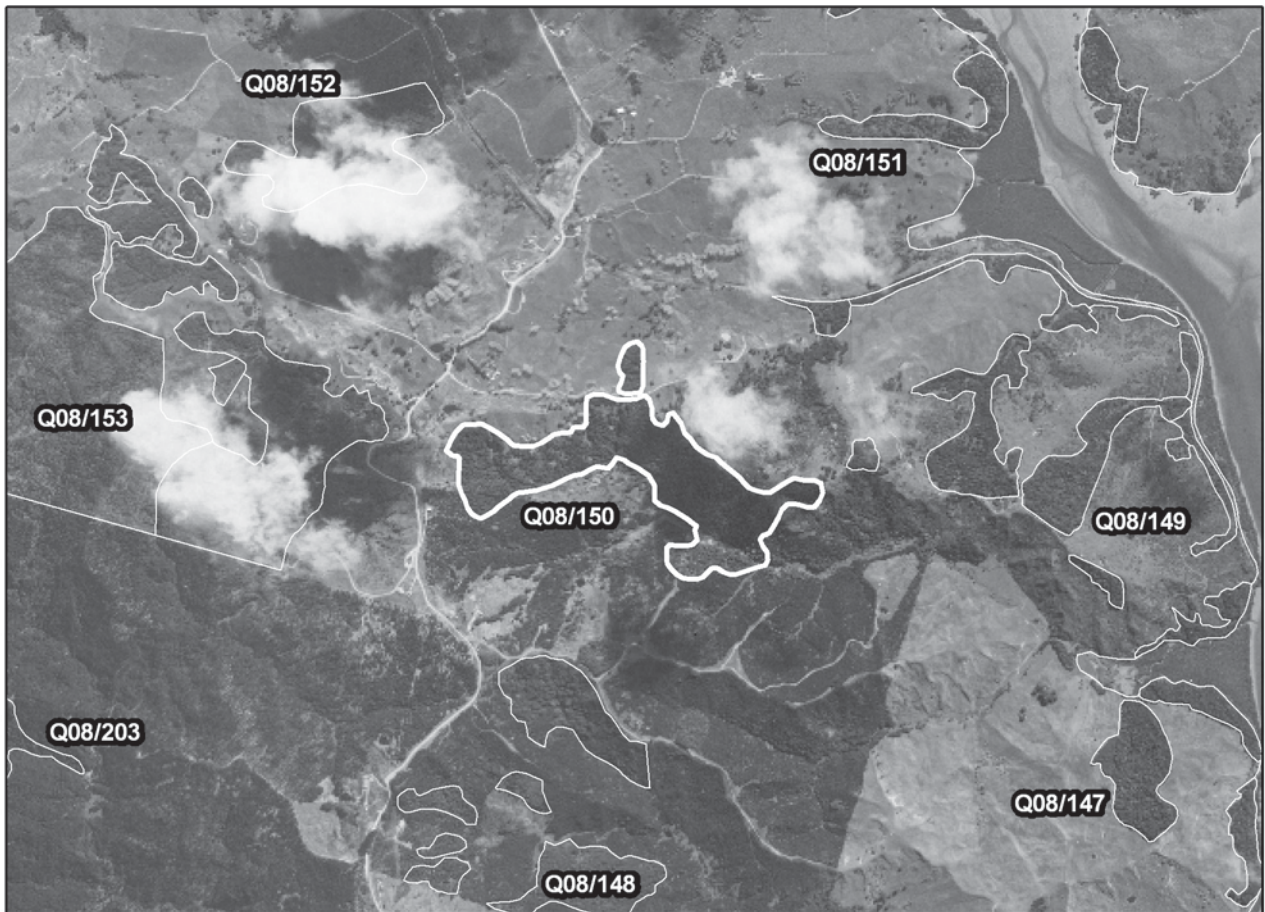


### BICKERSTAFFE ROAD FOREST 1

Survey no.	Q08/150
Survey date	29 November 2005
Grid reference	Q08 331 611 (2 remnants)
Area	29.1 ha
Altitude	20-104 m asl

#### *Ecological units*

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



## Q08/150 Bickerstaffe Road Forest 1

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

0 250 500 1,000 Metres



(b) Taraire-puriri forest on moderate to steep hillslope (15%)

(c) Totara-kahikatea forest on moderate to steep hillslope (5%)

### ***Landform/geology***

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

### ***Vegetation***

This forest remnant follows the true left bank of a small creek flowing out to the Otamatea River (Q08/062). It extends almost to the top of the catchment (at Bickerstaffe Road) and is c. 80 m wide on a moderate to steep south-facing slope. Radiata pine plantations are present on the south side of the remnant, but

otherwise it is surrounded by pasture, and occasional willows and poplars. There was some difficulty viewing all areas from public roads and coastal areas, therefore there has been some extrapolation through study of recent aerial photography (flown in 2002).

(a) The majority of the site is covered by totara forest.

(b) Near to the watercourse, clearly visible in the upper catchment from Bickerstaffe Road, there is taraire-puriri forest with frequent rewarewa, and occasional kohekohe and pukatea. This type probably continues down the watercourse in more humid, shady, sheltered areas.

(c) In the upper catchment hillslope there are stands of totara with common emergent kahikatea, frequent nikau and puriri, and occasional kanuka.

### ***Fauna***

Not surveyed.

### ***Significance***

There is insufficient information to determine whether this site merits a higher significance level. None of the ecological units appear to be representative, using current information.

## **BICKERSTAFFE AIRSTRIP FOREST**

Survey no.	Q08/154
Survey date	29 November 2005
Grid reference	Q08 317 567 (2 remnants)
Area	5.5 ha
Altitude	40-62 m asl

### ***Ecological unit***

(a) Taraire-puriri forest on moderate to steep hillslope (100%)

### ***Landform/geology***

Hillslopes and gullies underlain by melange (undifferentiated Mangakahia & Motatau Complex lithologies).

### ***Vegetation***

This site comprises two small remnants of forest on both sides of an airstrip near Bickerstaffe Road. The westernmost remnant is sheltered by a row of tall macrocarpas on its western side. A few constructed ponds with breeding paradise shelducks are present in the surrounding landscape of pasture. The forest is dominated by taraire and puriri, with frequent karaka and rewarewa, and occasional ti kouka, mamaku, nikau, kohekohe and emergent kahikatea. Parts of the site are fenced.

### ***Fauna***

Paradise shelduck.

### ***Significance***

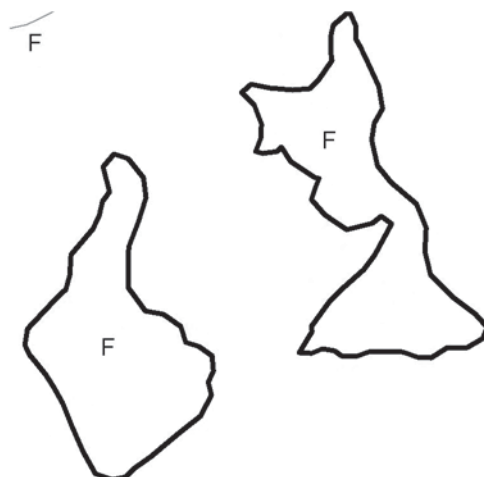
These remnants are quite small, and are not representative examples of their types, but they are locally important as habitat 'stepping stones' for wildlife in a landscape where indigenous forest is now much reduced.



## Q08/154 Bickerstaffe Airstrip Forest

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

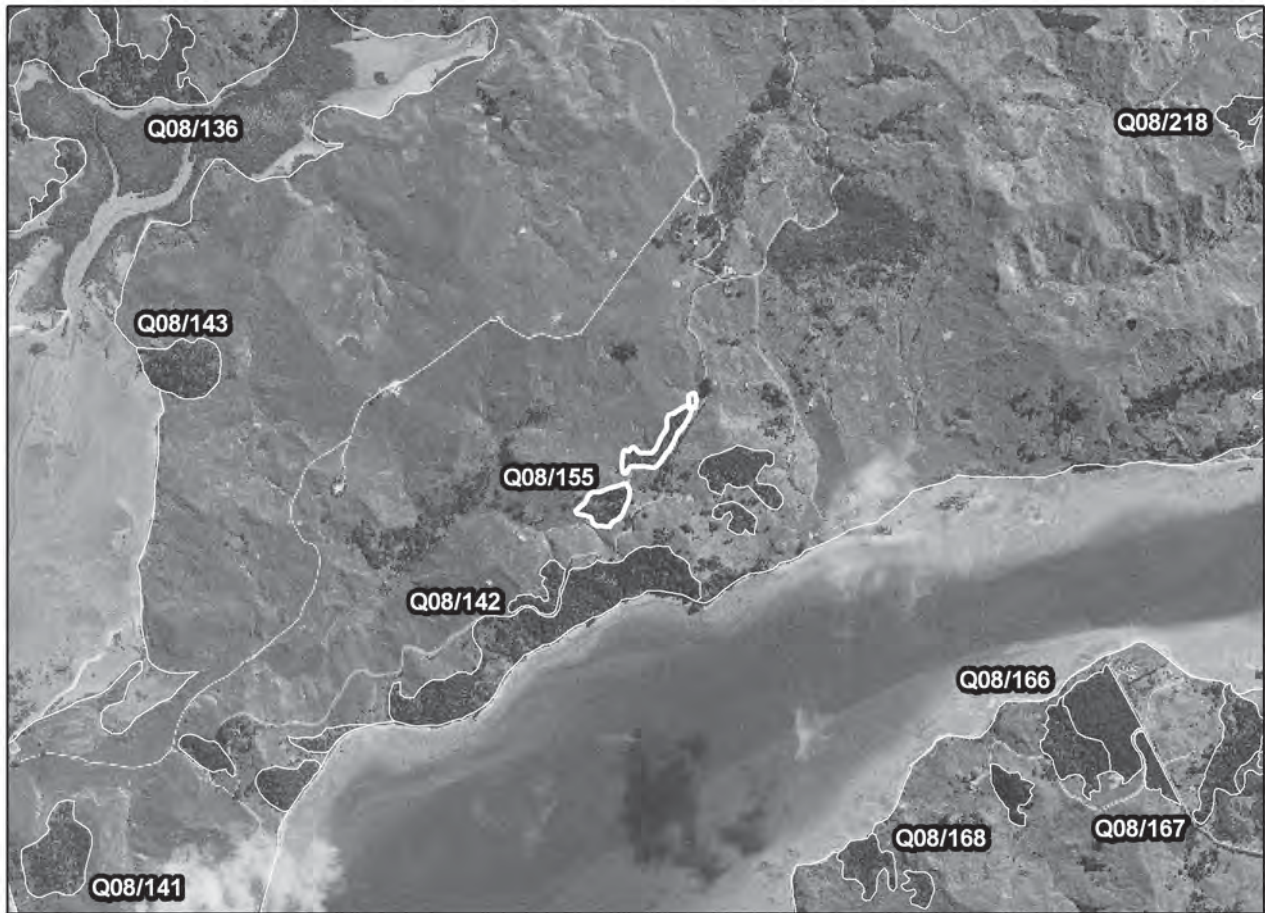
0 250 500 1,000 Metres



### BATLEY ROAD RIPARIAN FOREST REMNANTS

Survey no.	Q08/155
Survey date	29 November 2005
Grid reference	Q08 306 542 (3 remnants)
Area	3.1 ha (3.0 ha forest, 0.1 ha wetland)
Altitude	40-60 m asl

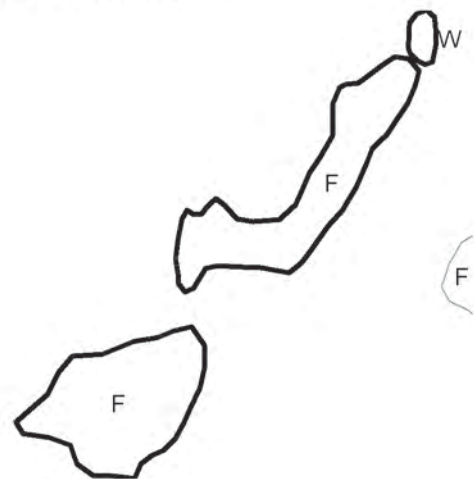




## Q08/155 Batley Road Riparian Forest Remnants

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

0 250 500 1,000 Metres



### ***Ecological units***

- (a) Kahikatea-kanuka-taraire-totara forest in gully (96%)
- (b) Raupo reedland in small depression (4%)

### ***Landform/geology***

Gully in Cretaceous siliceous mudstone (Whangai Fmn, Mangakahia Complex).

### ***Vegetation***

This site comprises two forest remnants and a small raupo-dominant wetland along the riparian margin of a small creek parallel with Batley Road. The four

main species in the canopy are kahikatea (some relatively old), taraire, kanuka and totara. Frequent species include mahoe, mapou, ti kouka, karaka, nikau, mamaku and kawakawa. Occasional species include matai, tarata, karamu, titoki, rimu, rewarewa, mamangi, *Coprosma areolata* and woolly nightshade.

### ***Fauna***

A spotless crane tape was played in close proximity to the wetland, but elicited no response.

### ***Significance***

The site shows evidence of prolonged grazing and trampling in its general poor condition, lack of understorey and sparseness of canopy trees. It is not a good example of riparian forest, but does provide a small amount of riparian protection.

## **UPPER RAEPARE CREEK FOREST REMNANTS**

Survey no.	Q08/160
Survey date	2 December 2005
Grid reference	Q08 371 580 (6 remnants)
Area	25.6 ha
Altitude	0–67 m asl

### ***Ecological units***

- (a) Kanuka-totara-kowhai forest on gentle coastal margin (45%)
- (b) Taraire forest in gully (20%)
- (c) Totara-kowhai forest in gully (20%)
- (d) Totara-kanuka-kahikatea forest on moderate hillslope (10%)
- (e) Kahikatea-pukatea forest in gully (5%)

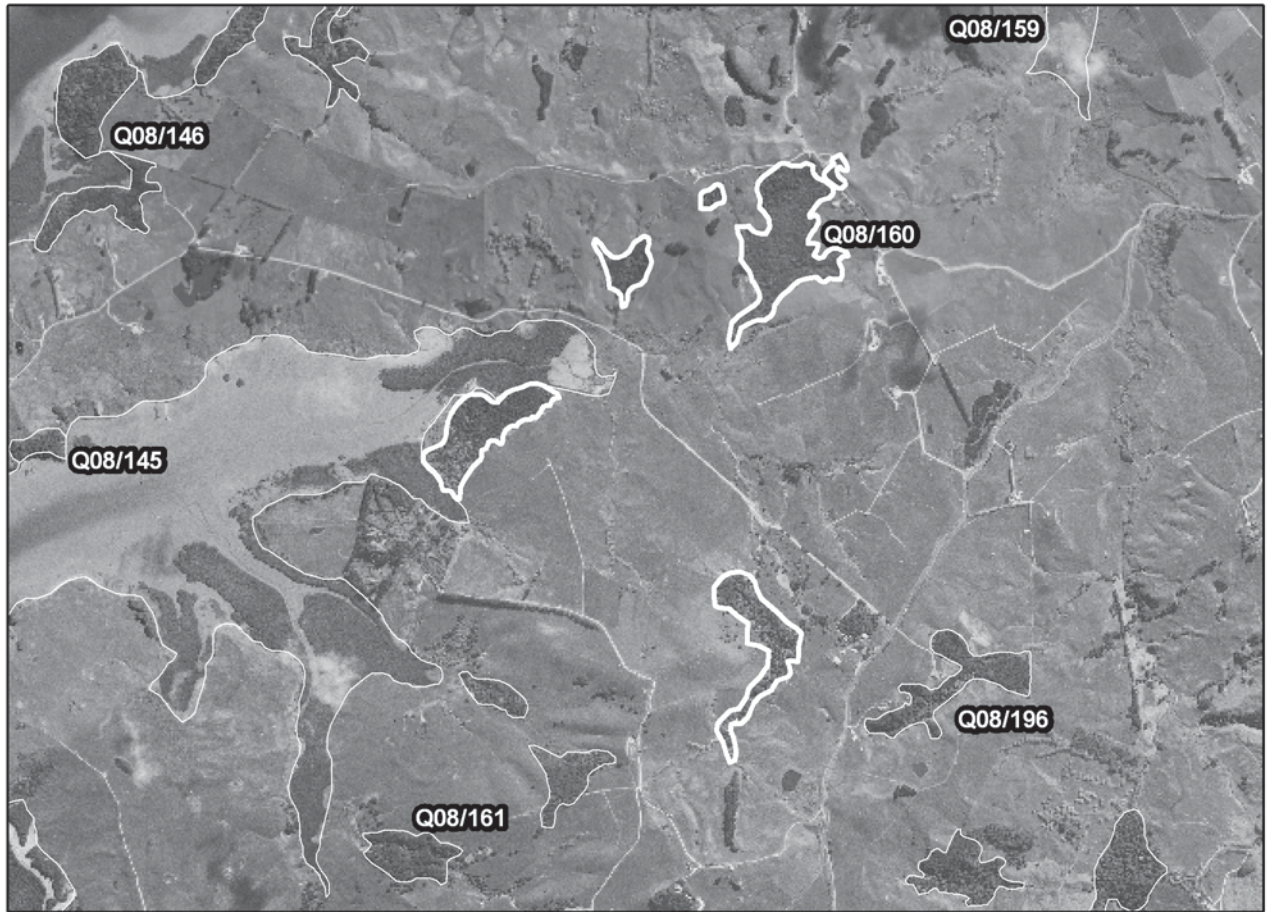
### ***Landform/geology***

Coastal hillslopes underlain by Oligocene micritic limestone (Mahurangi Limestone, Motatau Complex), melange (undifferentiated Mangakahia & Motatau Complex lithologies), and Miocene thinly interbedded sandstone and mudstone (Waitemata Group).

### ***Vegetation***

This site comprises six remnants of indigenous forest spread across the exotic pastoral landscape of the upper Raepare Creek, from the creek margin up to Ranganui Road. Though one remnant is 700 m distant from the rest, these remnants would all once have formed continuous forest cover, hence they have been united in one site.

- (a) The largest forest remnant, directly on the coastal margin, has a canopy composed of equal proportions of kanuka, totara and kowhai, with frequent ti kouka and occasional kahikatea, kauri, mamaku, harakeke, woolly nightshade and hawthorn. The edges of this particular remnant are quite sparse and open, and exotic grassland is present underneath the canopy.
- (b) In the gully of the northeastern remnant, the forest is dominated by taraire, with frequent karaka and rewarewa, and occasional nikau and kanuka.
- (c) The gully of the southernmost remnant has a canopy of totara and subdominant kowhai with frequent kahikatea.



## Q08/160 Upper Raepare Creek Forest Remnants

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

0 250 500 1,000 Metres



(d) Some of the small remnants and edges of larger remnants in the upper catchment (near Ranganui Road) comprise totara, kanuka and emergent kahikatea. Mamaku, pukatea and rewarewa are frequent, and a range of species are occasionally present, including emergent rimu and kauri, nikau, titoki, tawa, mamangi, puriri and Tasmanian blackwood.

(e) Small parts of the gully in the north are dominated by dense kahikatea and pukatea.

### ***Fauna***

Not surveyed.

**Significance**

This site is quite heavily degraded (grazing, trampling, clearance), but it provides a partial protective buffer to the estuarine habitats of the Raepare Creek.

**AWAROA CREEK COASTAL FOREST REMNANTS**

Survey no.	Q08/162
Survey date	Not surveyed
Grid reference	Q08 350 559 (2 remnants)



**Q08/162 Awaroa Creek Coastal Forest Remnants**

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

