

5. Summary and conclusions

5.1 ANALYSIS OF EXISTING PROTECTED AREAS

5.1.1 Overview

The Protected Natural Areas network in Kaipara ED (Northland) is summarised in Table 8.

Kaipara ED (Northland) covers a land area of 87 700 ha. Natural areas in Kaipara ED (Northland) cover a total of 23 591 ha, of which 11 144 ha fall within the estuarine habitats of the Kaipara Harbour. Therefore, natural areas on land amount to a total of 12 447 ha or 14% of the total land extent of 87 700 ha. Approximately 54% (6721 ha) of the natural areas of Kaipara ED (Northland), excluding estuarine waters, are formally protected (Table 8), about 8% of the total extent of the ED.

TABLE 8: PROTECTED NATURAL AREAS NETWORK IN KAIPARA ECOLOGICAL DISTRICT (NORTHLAND CONSERVANCY) (AREAS IN HA)

Notes: The extent (ha) and type of protection status within each site is identified. CA = Conservation Area; SR = Scientific Reserve; WMR = Wildlife Management Reserve; HR = Historic Reserve; GP = Government Purpose; MS = Marginal Strip; QEII = Queen Elizabeth II National Trust Covenant.

PROTECTED AREA	SURVEY NO.	STATUS						TOTAL AREA PROTECTED	TOTAL SITE AREA
		CA	SR	WMR	HA	MS	QEII		
Waihaupai Stream MS	O07/012					2.9		2.9	87
Shag Lake MS	O07/014					1.3		1.3	17
Ureti CA (Camping Area)	O07/016	10.1						10.1	212.5
Ureti MS	O07/016, 025					90.6		90.6	217.5
Lake Waikere	O07/018							538 ¹	
Lake Taharoa	O07/022							538 ¹	
Lake Kai Iwi	O07/024							538 ¹	
Omamari GPWMR	P07/127			67.8				67.8	127.7
Maitahi Wetland SR	P07/133		237.1					237.1	323
Babylon MS	P07/138					1.2		1.2	2
Rehutai CA	P07/174a	8.5						8.5	5.2
Morris QEII Covenant	P07/142, 148						3.2	3.2	12.3
Harding QEII Covenant	P08/056						1.4	1.4	2.2
Rehutai MS	P08/061					31.7		31.7	833
Lendrum QEII Covenant	P08/067b						0.5	0.5	1.6

PROTECTED AREA	SURVEY NO.	STATUS						TOTAL AREA PROTECTED	TOTAL SITE AREA
		CA	SR	WMR	HA	MS	QEII		
Kidd QEII Covenant	P08/068b						1.6	1.6	3.7
Tikinui CA	P08/072	104.2						104.2	1000
Tangitiki CA	P08/101	158.4						158.4	166
Tangitiki Bay MS No 1	P08/101, P08/200, P08/213					12.2		12.2	11748
Tangitiki Bay MS No 2	P08/101, P09/003					6.8		6.8	666
Wairoa River MS No 7	P08/200					10.1		10.1	11480
Wairoa River MS No 8	P08/200					12.9		12.9	11480
Wairoa River MS No 9	P08/200					2.6		2.6	11480
Wairoa River MS No 10	P08/200					0.5		0.5	11480
Whakatu CA	P08/200	130.2						130.2	11480
Lucich Road MS	P08/200					0.1		0.1	11480
Matanginui CA	P08/200	3.1						3.1	11480
Kohatutahi MS	P08/200					2.6		2.6	11480
Koremoa MS	P08/200					0.1		0.1	11480
Wairoa River MS No 8	P08/200					32.7		32.7	11480
Ruawai CA	P08/200	7.0						7.0	11480
Black Lake CA	P08/207	0.9						0.9	0.9
Wainui Lake CA	P08/211	14.9						14.9	4.8
Tomb Point CA	P08/213	2.4						2.4	104
Tomb Point MS	P08/213					4.2		4.2	104
Kaipara North Head Lighthouse HR	P09/001				8.1			8.1	5798
Pouto CA	P09/001	3304.4						3304.4	5798
Pouto Lakes MS	P09/001					0.9		0.9	5798
Pouto North CA	P09/001	1398.9						1398.9	5798
Pouto North MS	P09/001					30.4		30.4	5798
Pukekura HA	P09/001, Q09/061				1.5			1.5	5861
Rototuna Lake CA	P09/002, 205	22.6						22.6	17.7
Punahaere Creek CA	P09/003			13				13	500
Punahaere GPWMR	P09/003			10.9				10.9	500
Rotopouua Creek CA	P09/014	40.3						40.3	49.5
Kanono CA	Q09/054, 060	239.5						239.5	322
Lake Humuhumu MS	Q09/054					6.4		6.4	268

PROTECTED AREA	SURVEY NO.	STATUS						TOTAL AREA PROTECTED	TOTAL SITE AREA
		CA	SR	WMR	HA	MS	QEII		
Tauhara Creek MS	Q09/056					5.0		5.0	35
Tauhara MS	Q09/056					18.1		18.1	35
Lake Kahuparere MS	Q09/058, 060					0.8		0.8	252
Lake Kanono MS	Q09/058					10.7		10.7	198
Kahuparere CA	Q09/060, 063	98.7						98.7	145
Total		5544.1	237.1	67.8	13.6	292.4	28	6721	

¹Total area of reserved land at the three lakes. Individual areas not available.

5.1.2 Ecological units protected

A summary of the protected vegetation types within protected areas is presented in Table 9. Proportions of different vegetation types represented in the protected natural areas network (Fig. 1) generally mirror those over the entire study area (Fig. 2).

Figure 1: Proportions of the main vegetation types represented in existing protected natural areas in Kaipara ED (Northland), excluding fresh and estuarine waters.

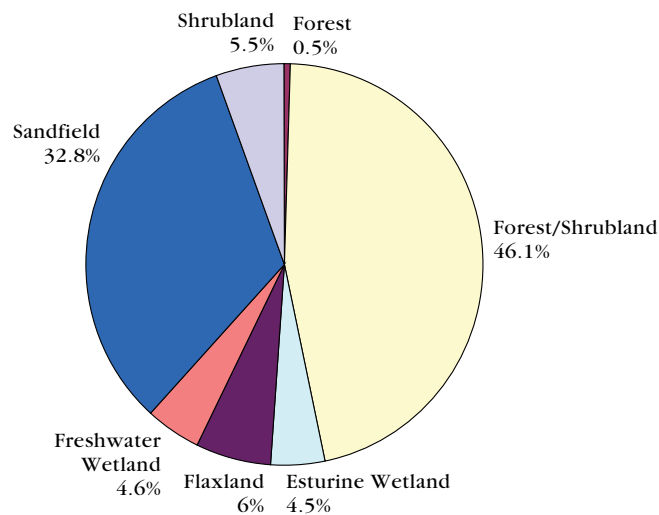


Figure 2: Proportions of the main vegetation types in all surveyed natural areas in Kaipara ED (Northland), excluding fresh and estuarine open waters of all sites.

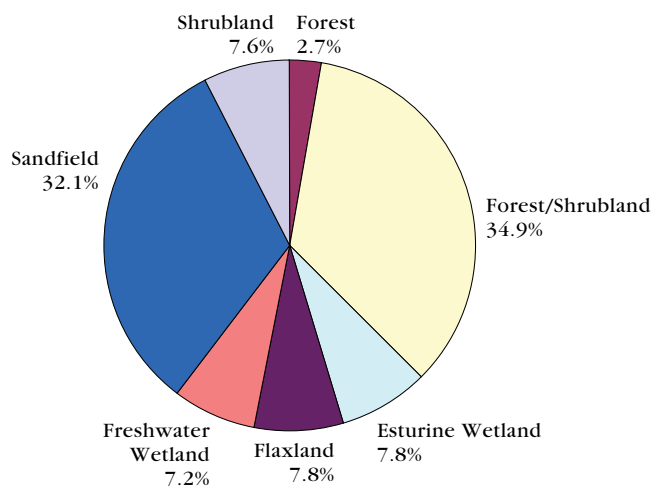


TABLE 9: VEGETATION TYPES WITHIN EXISTING PROTECTED AREAS IN KAIPARA ECOLOGICAL DISTRICT (NORTHLAND CONSERVANCY)

PROTECTED AREA	SURVEY NO.	VEGETATION TYPES WITHIN PROTECTED LAND STATUS
Shag Lake MS	O07/014	Open water
Babylon MS	P07/138	Raupo reedland, Open water
Black Lake CA	P08/207	Undescribed shrubland, Open water
Kahuparere CA	Q09/60, 063	Kanuka forest/shrubland, Raupo reedland
Kaipara North Head Lighthouse HR	P09/001	Kanuka forest/shrubland, Sandfield
Kanono CA	Q09/054, 058, 060	Raupo reedland, Kanuka forest/shrubland, Open water
Kohatutahi MS	P08/200	Oioi rushland, Mangrove shrubland
Koremoa MS	P08/200	Open water
Lake Humuhumu MS	Q09/054	Kanuka forest/shrubland
Lake Kahuparere MS	Q09/058, 060	Raupo reedland, Kanuka forest/shrubland, Open water
Lake Kanono MS	Q09/058	Raupo reedland, Kanuka forest/shrubland, Open water
Lake Rotootuauru MS	Q09/055	Raupo reedland, Open water
Lucich Road MS	P08/200	Open water
Mahuta Gap MS	P08/061	Spinifex sandfield, Flaxland
Maitahi Wetland SR	P07/133	Manuka shrubland, Raupo reedland, Flaxland
Matanginui CA	P08/200	Oioi rushland, Mangrove shrubland
Omamari GPWMR	P07/127	Manuka shrubland, <i>Baumea</i> sedgeland, Raupo reedland
Pouto CA	P09/001	Kanuka forest/shrubland/forest, Kanuka/manuka shrubland, Manuka shrubland, Raupo reedland, Raupo- <i>Baumea</i> reedland, <i>Baumea</i> sedgeland, Sandfield
Pouto Lakes MS	P09/001	Raupo- <i>Baumea</i> reedland, Open water
Pouto North CA	P09/001	Kanuka forest/shrubland, Kanuka/manuka shrubland, Manuka shrubland, Raupo reedland, Raupo- <i>Baumea</i> reedland, <i>Baumea</i> sedgeland, Spinifex sandfield, Sandfield
Pouto North MS	P09/001	Kanuka forest/shrubland, Kanuka/manuka shrubland, Manuka shrubland, Raupo reedland, Sandfield
Pukekura HA	P09/001, Q09/061	Sandfield, Kanuka forest
Punahaere Creek CA	P09/003	Kanuka forest/shrubland, Manuka shrubland Mangrove shrubland, Oioi rushland
Punahaere GPWM Reserve	P09/003	Kanuka forest/shrubland, Manuka shrubland Mangrove shrubland, Oioi rushland
Rehutai CA	P07/174a	<i>Eleocharis</i> reedland, Spinifex sandfield, Open water

PROTECTED AREA	SURVEY NO.	VEGETATION TYPES WITHIN PROTECTED LAND STATUS
Rehutai MS	P07/174a	Flaxland, Spinifex sandfield
Rotopouua Creek CA	P09/014	Kanuka forest/shrubland, Raupo reedland, Baumea sedgeland
Rototuna Lake CA	P09/002, P09/025	Raupo reedland, Pampas grassland, Open water
Ruawai CA	P08/200	Open water
Tangitiki Bay MS No 1	P08/101, P08/200, P08/213	Mangrove shrubland, Open water
Tangitiki Bay MS No 2	P08/101, P09/003	Kanuka forest/shrubland, Mangrove shrubland, Oioi rushland
Tangitiki CA	P08/101	Mangrove shrubland
Tauhara Creek MS	Q09/056	Oioi rushland, Open water
Tauhara MS	Q09/056	Kanuka forest/shrubland
Tikinui CA	P08/072	Manuka shrubland, Raupo reedland, Spinifex sandfield,
Tomb Point CA	P08/213	Mangrove shrubland
Tomb Point MS	P08/213	Manuka shrubland, Mangrove shrubland, Oioi rushland
Ureti CA (Camping Area)	O07/016	Manuka shrubland, Flaxland, Spinifex sandfield
Ureti MS	O07/016, 025	Pohutukawa forest, Manuka shrubland, Raupo reedland, Flaxland, Spinifex sandfield
Waihaupai Stream MS	O07/012	Manuka shrubland
Wainui Lake CA	P08/072	Manuka shrubland, Spinifex sandfield, Sandfield
Wairoa River MS No 7	P08/200	Mangrove shrubland, Oioi rushland, Open water
Wairoa River MS No 8	P08/200	Mangrove shrubland, Oioi rushland, Open water
Wairoa River MS No 9	P08/200	Mangrove shrubland, Open water
Wairoa River MS No 10	P08/200	Mangrove shrubland, Oioi rushland
Whakatu CA	P08/200	Mangrove shrubland, Oioi rushland
Harding QEII covenant	P08/056	Kahikatea forest
Kidd QEII covenant	P08/068c, 068e	Kahikatea forest
Kidd QEII covenant	P08/068b	Kahikatea forest, Puriri forest
Morris QEII covenant	P07/142, 148	Ti kouka-kahikatea forest, Totara forest
Lendrum QEII covenant	P08/067b	Kahikatea forest, Puriri forest

Forest

Only some 7% (34 ha) of the very small area of forest proper remaining in the Kaipara ED (Northland) is formally protected.

Of the five forest types:

- Pohutukawa forest is already protected at 1 site.
- Totara forest is already protected at 1 site.
- Kahikatea forest is already protected at 5 sites.
- Ti kouka-kahikatea forest is already protected at 1 site.
- Puriri forest is already protected at 2 sites.

Forest/shrubland

With nearly 60% (3098 ha) of the remaining area formally protected, kanuka forest/shrubland is already well protected in the existing reserve system.

- Kanuka forest/shrubland is already protected at 9 sites.

Shrubland

Nearly one-third of shrubland (370 ha) is already protected within the existing reserve network. However, Kanuka/manuka shrubland is only protected at one site.

Of the two shrubland types:

- Kanuka/manuka shrubland is already protected at one site.
- Manuka shrubland is already protected at 8 sites.

Flaxland

Only some 5% (403 ha) of flaxland is currently protected; this characteristic vegetation type of the ED is under-represented in the existing reserve system.

- Flaxland is already protected at 5 sites.

Freshwater wetland

Some 28% (309 ha) of the remaining area of freshwater wetland is already protected. One type, *Baumea articulata* reedland, is not currently protected at any site.

Of the five freshwater wetland types:

- Raupo reedland is already protected at 12 sites.
- Raupo-*Baumea articulata* reedland already protected at 3 sites.
- *Baumea arthropphylla* sedgeland is already protected at 3 sites.
- *Eleocharis sphacelata* reedland is already protected at 1 site.
- *Baumea articulata* reedland is not currently protected at any site.

Estuarine wetland

Just over one quarter of the area of estuarine wetland (302 ha) is already protected, with both rushland and shrubland well represented.

Of the two estuarine wetland types:

- Mangrove shrubland is already protected at 5 sites.
- Oioi rushland is already protected at 5 sites.

Sandfield

Sandfield is relatively well protected in Kaipara ED (Northland), with nearly half (2204 ha) of the area already protected.

Of the two sandfield types

- Spinifex sandfield is already protected at 5 sites.
- Sandfield is already protected at 3 sites.

5.2 Priority natural areas for protection in Kaipara Ecological District (Northland Conservancy)

Outlined below are the unprotected natural areas identified in this report that best supplement the existing protected areas network to make it more fully representative of the ecological diversity and character of the Kaipara ED (Northland). Since immediate protection of all sites identified as Level 1 sites is not feasible, priorities for protection have been identified (Table 10) that would provide the greatest immediate benefits for indigenous biodiversity. These priority areas have one or some of the following characteristics:

- They contain vegetation types/ecological units under-represented in the existing reserves network
- They contain substantial area of forest or flaxland (both under-represented in the current reserves network)
- They contain representative sequences of ecological units.

Excluding estuarine waters, these priority areas cover some 3960 ha, or 4% of the area of Kaipara ED (Northland). However, as several sites are already partly protected, the area recommended for protection is somewhat less.

A summary of Level 1 and Level 2 site evaluations according to their PNAP ecological criteria is presented in Table 11.

TABLE 10: LEVEL 1 SITES IN KAIPARA ECOLOGICAL DISTRICT (NORTHLAND CONSERVANCY) WITH PRIORITY FOR PROTECTION

LEVEL 1 SITES (PARTLY OR FULLY UNPROTECTED) *=ALREADY PARTLY PROTECTED	1. ECOLOGICAL UNIT UNDER-REPRESENTED IN THE EXISTING RESERVE NETWORK	2. SUBSTANTIAL AREA OF FOREST OR FLAXLAND	3. REPRESENTATIVE SEQUENCE OF ECOLOGICAL UNITS
Western Coast A: Aranga Beach North Coastal Communities O07/011	✓	✓	✓
* Western Coast B: Aranga Beach South Coastal Communities O07/016	✓	✓	✓
Te Kawa Stream Forest P07/121a	✓	✓	
Frith Road Northern Dairylands Forest P07/135		✓	✓
Rotu Stream Forest P07/141	✓	✓	
*Opanake Road Morris Forest P07/142	✓	✓	
Opanake Road Davidson Forest and Shrubland P07/150	✓	✓	✓
Kaihu Valley West Shrubland P07/157a	✓		
Opanake Road Shrubland and Forest P07/158	✓	✓	✓
Aoroa Road Forest P08/056		✓	
*Western Coast C: Glinks Gully north Grassland, Flaxland and Forest P08/061	✓	✓	✓
*Newsham Road South Forest P08/067b	✓	✓	
Western Coast D: Glinks Gully South Grassland, Wetland and Shrubland P08/072	✓		✓
Mapau Bush P08/094a		✓	
*Kaipara Harbour, Shrubland and Wetland P08/200			✓
*Kelly's Bay/Punahaere Creek Estuary, Shrubland and Forest P09/003	✓		✓
Upper Okaro Bush P09/008	✓	✓	
Tapu Bush P09/011		✓	✓
Okaro Creek/Waikere Creek Duneland, Wetland and Forest Q09/051			✓
Wetland East of Lake Rotopouua Q09/053	✓		
*Lake Humuhumu, Wetland and Forest Q09/054		✓	✓

**TABLE 11: SUMMARY OF SITE EVALUATIONS IN KAIPARA ECOLOGICAL DISTRICT
(NORTHLAND CONSERVANCY)**

Note: e.u.= ecological unit.

LEVEL 1 SITES (62) SITE NAME SURVEY NO.	REPRESENT- ATIVENESS	RARITY/ SPECIAL FEATURES	DIVERSITY & PATTERN	NATURALNESS	BUFFER/LINKAGE/ CORRIDOR	SIZE & SHAPE
Western Coast A: Aranga Beach North Coastal Communities O07/011	Site for 3 rep. e.u.s	2 threatened bird species, 1 threatened plant species.	4 e.u.s	Despite some stock access, in relatively good condition. Minor woody weed invasion.	Bordered by pasture on the inland side.	13.9 ha; long and narrow
Shag Lake and Wetland O07/014		6 threatened bird species, 1 threatened fish species.	e.u.s	Grazed to the water's edge.	Surrounded by pasture	17 ha; one single block
Western Coast B: Aranga Beach South Coastal Communities O07/016	Site for 4 rep. e.u.s	3 threatened bird species.	4 e.u.s	Despite some stock access, some is still in relatively good condition. Minor woody weed invasion.	Bordered by pasture on the inland side.	212.5 ha; long and narrow
Lake Waikere Wetland and Shrubland O07/018	Site for 2 rep. e.u.s	5 threatened bird species, 3 threatened fish and crustacean species, 2 threatened plant species.	4 e.u.s	Substantial woody weed invasion of shrubland.	Surrounded by pasture, but connected by a narrow tongue of shrubland to nearby Lake Taharoa.	35 ha
Lake Taharoa, Wetland and Shrubland O07/022	Site for 1 rep. e.u.	8 threatened bird species, 4 threatened fish and crustacean species, 2 threatened plant species	4 e.u.s.	Substantial woody weed invasion of shrubland.	Surrounded by exotic plantation, but connected by narrow strips of predominantly native vegetation with adjacent sites.	197 ha
Lake Kai Iwi Wetland and Shrubland O07/024	Site for 1 rep. e.u.	8 threatened bird species, 1 threatened crustacean species, 2 threatened plant species.	2 e.u.s	Substantial woody weed invasion of shrubland.	Largely surrounded by predominantly native vegetation, and connected with	52 ha
Te Kawa Stream Forest P07/121a	Site for 1 rep. e.u.		2 e.u.s	Grazed but free of woody weeds.	Largely surrounded by pasture, but with pine plantation on the western side.	2.9 ha; one single block.
Omamari Wildlife Reserve Wetland and Shrubland P07/127	Site for 4 rep. e.u.s	3 threatened bird species, 3 threatened plant species.	6 e.u.s	Not grazed. Locally significant woody weed invasion .of hillslope shrubland.	Although surrounded by pasture, the site is fenced. Much of the wetland is well buffered by hillslope shrubland.	177.5 ha; one single block
Omamari Road Grassland and Wetland P07/130	Site for 1 rep. e.u.	1 threatened invertebrate species.	3 e.u.s	Locally significant woody weed invasion.	Bordered by pasture and Babylon Coast Rd on the eastern side, and only partly fenced.	115.9 ha; long and narrow

LEVEL 1 SITES (62) SITE NAME SURVEY NO.	REPRESENT- ATIVENESS	RARITY/ SPECIAL FEATURES	DIVERSITY & PATTERN	NATURALNESS	BUFFER/LINKAGE/ CORRIDOR	SIZE & SHAPE
Newlove Airstrip Wetland P07/131			4 e.u.s	Substantial invasion by alligator weed.	Surrounded by pasture but effectively fenced by the surrounding ditch.	5.8 ha
Maitahi Wetland Scientific Reserve and Surrounds P07/133	Site for 2 rep. e.u.s	2 threatened bird species, 1 threatened fish species, 1 threatened reptile species, 8 threatened plant species.	4 e.u.s	Not grazed.	Part of a catchment, effectively internally buffered by its large size.	323 ha; part of a catchment
Frith Road Northern Dairylands Forest P07/135	Site for 2 rep. e.u.s		3 e.u.s	Currently unfenced and grazed.		70 ha; one single block
Mangakahia Forest Wetland P07/140	Site for 1 rep. e.u.		1 e.u.	In excellent condition.	Buffered by pine plantation on three sides.	7 ha; long and narrow
Rotu Stream Forest P07/141	Site for 1 rep. e.u.		1 e.u.	Grazed. Extensively invaded by tradescantia and alligator weed.	Largely bordered by waterways.	10.1 ha.
Opanake Road Morris Forest P07/142	Site for 1 rep. e.u.		2 e.u.s	Grazed. Extensively invaded by tradescantia.	Bordered by the Kaihu River in the west and pasture in the east.	10.3 ha
Babylon Smith Wetland P07/145		2 threatened bird species.	1 e.u.	Some weed invasion.	Effectively protected from grazing by topography.	5.5 ha
NRC Opanake Road Reserve Forest P07/148	Site for 1 rep. e.u.	1 threatened plant species.	1 e.u.	Fully fenced.	Largely buffered by other forest patches.	2 ha
Opanake Road Davidson Forest and Shrubland P07/150	Site for 4 rep. e.u.s		4 e.u.s	Largely intact.	Bordered by the Kaihu River and Opanake Rd.	5 ha
Long Gully Wetland and Shrubland P07/153	Site for 2 rep. e.u.s		6 e.u.s	Relatively little weed invasion except at the eastern end.	Surrounded by pasture and pine woodlots.	38 ha; long and narrow
Kaihu Valley West Shrubland P07/157a	Site for 1 rep. e.u.		4 e.u.s	Some pampas invasion.	Partly buffered by pine plantation.	1.5 ha
Opanake Road Shrubland and Forest P07/158	Site for 2 rep. e.u.s		4 e.u.s	Not fenced.	Largely buffered by Opanake Rd and the Kaihu River.	9.3 ha
Hoanga Alluvial Forest P07/162	Site for 1 rep. e.u.		1 e.u.	Not grazed. Apart from some margins, relatively weed-free.	Surrounded by pasture.	5.3 ha; one single block

LEVEL 1 SITES (62) SITE NAME SURVEY NO.	REPRESENT- ATIVENESS	RARITY/ SPECIAL FEATURES	DIVERSITY & PATTERN	NATURALNESS	BUFFER/LINKAGE/ CORRIDOR	SIZE & SHAPE
Lower Kaihu River Forest Fragments P07/169			1 e.u.	Partly fenced. Substantially weed-infested.	Surrounded by pasture.	5 ha; in three patches
Hokianga Road Railway Treeland P07/169a		3 threatened bird species.	2 e.u.s	Grazed and substantially weed-invaded.	Surrounded by pasture.	9 ha
Freidrich's Lake and Wetland P07/171		6 threatened bird species, 1 threatened plant species.	2 e.u.s	Significant weed invasion at the margins.	Surrounded by pasture.	7 ha
Dargaville Bridge Forest P07/173			1 e.u.	A portion is fenced.	Surrounded by pasture.	1.8 ha; small and compact
Lake Rehutai and Wetland P07/174a	Site for 1 rep. e.u.	7 threatened bird species.	2 e.u.s	Not grazed and relatively weed-free.	Largely surrounded by pasture.	5.2 ha; one single block
Aoroa Road Forest P08/056			1 e.u.	Not grazed and relatively weed-free.	In a pastoral setting.	2.2 ha.
Western Coast C: Glinks Gully North Grassland, Flaxland and Forest P08/061	Site for 2 rep. e.u.s	1 threatened bird species, 1 threatened invertebrate species, 1 threatened plant species.	4 e.u.s	Largely ungrazed and only limited weed invasion.	Mostly bordered by pasture on the inland side.	833 ha in one linear patch.
Newsham Road North Forest P08/067a			1 e.u.	Not grazed.	Surrounded by pasture.	1.4 ha; in one block
Newsham Road South Forest P08/067b			2 e.u.s	Mostly fenced.	Surrounded by pasture.	1.6 ha
Kidds Creamery Road Corner Forest P08/068a	Site for 1 rep. e.u.		1 e.u.	Not grazed and relatively weed-free.	Surrounded by pasture.	0.9 ha; one single block
NRC Creamery Road Reserve P08/068b	Site for 3 rep. e.u.s		4 e.u.s	Not grazed and relatively weed-free.	Surrounded by pasture.	5.9 ha
Kidds Creamery Road Middle Forest P08/068c			1 e.u.	Not grazed but with significant woody weed invasion.	Surrounded by pasture.	0.9 ha; one single block
Western Coast D: Glinks Gully South Grassland, Wetland and Shrubland P08/072	Site for 2 rep. e.u.s	8 threatened bird species.	4 e.u.s	Although accessible to stock in places and widely invaded by weeds, plant communities are still predominantly native.	Bordered by pasture on the inland side.	1000 ha; long and narrow
Mapau Bush P08/094a			1 e.u.	Some weed invasion around the margins.	Surrounded by pasture.	6.3 ha.

LEVEL 1 SITES (62) SITE NAME SURVEY NO.	REPRESENT-ATIVENESS	RARITY/ SPECIAL FEATURES	DIVERSITY & PATTERN	NATURALNESS	BUFFER/LINKAGE/ CORRIDOR	SIZE & SHAPE
Russell Wetland P08/096			1 e.u.	Grazed and substantially weed-infested.	Surrounded by pasture.	1 ha
Tangitiki Estuary, Wetland and Shrubland P08/101	Site for 2 rep. e.u.s	5 threatened bird species, 1 threatened fish species.	3 e.u.s	Some weed invasion.	Surrounded by pasture.	4.8 ha
Kaipara Harbour, Shrubland and Rushland P08/200	Site for 2 rep. e.u.s	8 threatened bird species.	3 e.u.s	Mostly ungrazed and only limited weed invasion.	Bordered by pasture on the landward side.	11480 ha. One huge block.
Clarke's Lake and Wetland P08/208		6 threatened bird species	2 e.u.s	Apparently still grazed.	Surrounded by pasture.	8 ha
Greville's Lagoon and Wetland P08/209		5 threatened bird species	2 e.u.s	Recently fenced and restoration planted. Alligator weed present.	Buffered by riparian reserve.	2.5 ha
Lake Kapoai and Wetland P08/210		5 threatened bird species, 1 threatened plant species.	2 e.u.s	Almost completely fenced. Pest fish species present.	Surrounded by plantation.	18 ha; long and narrow
Lake Wainui and Wetland P08/211		5 threatened bird species, 1 threatened plant species.	2 e.u.s	Grazed and with some weed invasion.	Surrounded by pasture.	6.3 ha; one single block
Waimamaku Estuary, Shrubland and Rushland P08/213		5 threatened bird species.	3 e.u.s	Significantly invaded by weeds in places.	Surrounded by pasture.	9 ha; fragmented
Western Coast E: Pouto Dune System P09/001	Site for 5 rep. e.u.s	18 threatened bird species, 2 threatened fish and mollusc species, 4 threatened plant species.	14 e.u.s	Rear dunes widely invaded by pampas. Some herbaceous weeds in the wetlands. Otherwise largely intact.	Bordered mostly by plantation and pasture in places on the inland side. Much is effectively internally buffered by its large size.	5798 ha; one single block
Kelly's Bay/ Punahaere Creek Estuary, Shrubland and Forest P09/003	Site for 4 rep. e.u.s	8 threatened bird species, 1 threatened lizard species, 1 threatened plant species.	5 e.u.s	Some woody weed invasion around the margins.	Bordered variously by pasture and plantation. Part of a catchment, effectively internally buffered by its large size.	500 ha; several blocks
Upper Okaro Bush P09/008	Site for 1 rep. e.u.	1 threatened bird species	2 e.u.	Fragmented and weedy at the margins, but the core is remarkably intact.	Surrounded by pasture.	34 ha; part of a catchment
Tapu Bush P09/011	Site for 3 rep. e.u.s	1 threatened bird species.	2 e.u.s	Except for the sandfield, largely weed-free beyond the margins.	Bordered variously by pasture and plantation.	210 ha

LEVEL 1 SITES (62) SITE NAME SURVEY NO.	REPRESENT-ATIVENESS	RARITY/SPECIAL FEATURES	DIVERSITY & PATTERN	NATURALNESS	BUFFER/LINKAGE/CORRIDOR	SIZE & SHAPE
Lake Rotopouua, Wetland and Forest P09/014	Site for 3 rep. e.u.s	6 threatened bird species, 1 threatened fish species, 1 threatened plant species.	4 e.u.s	Largely intact.	Bordered by exotic plantation on three sides, pasture on the fourth.	49.5 ha; one single block
Lake Rototuna and Wetland P09/205		9 threatened bird species, 1 threatened fish species	3 e.u.s	Recently fenced and restoration planted. Pest fish and weeds (sweet grass) are present.	Buffered by riparian reserve.	8.7 ha
Okaro Creek/ Waikere Creek Duneland, Wetland and Shrubland Q09/051	Site for 5 rep. e.u.s	9 threatened bird species, 2 threatened plant species.	9 e.u.s	Extensive woody weed invasion of the kanuka hillslopes; otherwise largely intact.	Bordered by exotic plantation and pasture.	555 ha; one dispersed block
Wetland East of Lake Rotopouua Q09/053	Site for 1 rep. e.u.	1 threatened bird species.	2 e.u.s	Effectively free from grazing because of ring drain.	Surrounded by pasture.	20 ha; one single block
Lake Humuhumu, Wetland and Forest Q09/054	Site for 3 rep. e.u.s	9 threatened bird species, 1 threatened fish species, 3 threatened plant species.	6 e.u.s	Some woody weed invasion on the island. Grazed to the water's edge in places on the eastern side.	Bordered by exotic plantation and pasture	268 ha; one single block
Lake Rotootuauru, Wetland and Forest Q09/055		2 threatened fish species, 3 threatened bird species.	3 e.u.s	Grazed to the water's edge.	Surrounded by pasture.	21 ha; one single block.
Tauhara Creek Sandfield, Wetland and Shrubland Q09/056		5 threatened bird species.	7 e.u.s	Widely degraded by stock access and weed invasion.	Surrounded by pasture.	35 ha in several blocks.
Lake Rotokawau and Wetland Q09/057		7 threatened bird species, 1 threatened plant species.	3 e.us	Grazed to the water's edge for much of the shoreline.	Surrounded by pasture and plantation..	36 ha
Lake Kanono, Wetland and Forest Q09/058	Site for 3 rep. e.u.s	1 threatened fish species, 9 threatened bird species.	3 e.u.s	Grazed to the water's edge on the eastern side.	Bordered by exotic plantation and pasture.	198 ha; one single block
Lake Kahuparere Wetland and Shrubland Q09/060		1 threatened fish species, 6 threatened bird species.	3 e.u.s	Grazed to the water's edge on the eastern side.	Bordered by exotic plantation and pasture	54 ha; one single block
Pretty Bush Q09/061	Site for 2 rep. e.u.s	1 threatened plant species.	3 e.u.s	Largely weed-free beyond the margins	Bordered by open sand dunes and exotic plantation.	63 ha; one single block
Pouto Point Wildlife Reserve Sandfield, Wetland and Shrubland Q09/063	Site for 3 rep. e.u.s	4 threatened bird species, 3 threatened plant species.	4 e.u.s	Some weed invasion.	Bordered by exotic plantation and pasture on the landward side.	91 ha; long and narrow

LEVEL 2 SITES (51) SITE NAME SURVEY NO.	REPRESENT-ATIVENESS	RARITY/ SPECIAL FEATURES	DIVERSITY & PATTERN	NATURALNESS	BUFFER/LINKAGE/ CORRIDOR	SIZE & SHAPE
Ongange Creek Wetland, Shrubland and Forest Q09/201		1 threatened bird species.	5 e.u.s	Some woody weed invasion of hillslope kanuka, and pampas of wetland.	Mostly bordered by pasture with some exotic plantation.	126 ha
Finlayson's Lake and Wetland Q09/150		7 threatened bird species	2 e.u.s	Apparently grazed to the water's edge.	Surrounded by pasture. Connected to Lake Kanono (Q09/058).	3.5 ha
Total Level 1 Sites						22797 ha
Waihaupai Stream Shrubland and Forest O07/012		1 threatened fish species, 2 threatened bird species.	3 e.u.s	Grazed throughout and widely invaded by weeds.	Surrounded by pasture.	87 ha; in several blocks
Ngakiriparauri Stream Shrubland and Wetland O07/015			3 e.u.s	Grazed, with significant woody weed invasion.	Surrounded by pasture.	18 ha
Bruce Clear's Wetland O07/017			1 e.u.	Grazed, with significant weed invasion.	Surrounded by pasture.	2 ha; one single block
North Kai Iwi Stream Wetland And Forest O07/025			3 e.u.s	Largely grazed.	Surrounded by pasture.	5 ha
Lower Kai Iwi Stream Wetland, Shrubland and Forest O07/026		1 threatened plant species.	6 e.u.s	Largely grazed, with significant weed invasion in places.	Surrounded by pasture.	12 ha; ;long, narrow, and fragmented
Kai Iwi Lakes South Shrubland O07/027			1 e.u.	Mostly ungrazed but significant woody weed invasion.	Surrounded by pasture.	52 ha; in several blocks
Airstrip Road Wetland 1 P07/120a			2 e.u.s	Grazed and significantly invaded by weeds.	Surrounded by pasture.	2.2 ha
Airstrip Road Wetland 2 P07/120b			2 e.u.s	Grazed and significantly invaded by weeds.	Surrounded by pasture.	2.3 ha
Upper Te Kawa Stream Shrubland P07/121			1 e.u.	Grazed.	Bordered by plantation on southern side and pasture on northern side.	1.3 ha; long and narrow
Rehutai Road Wetland P07/124a			2 e.u.s	Grazed and significantly invaded by weeds.	Surrounded by pasture.	1.3 ha
Omamari Station North Shrubland and Wetland P07/125			2 e.u.s	At least partly grazed and substantially invaded by weeds in places.	Surrounded by pasture.	23 ha; fragmented

LEVEL 2 SITES (51) SITE NAME SURVEY NO.	REPRESENT-ATIVENESS	RARITY/SPECIAL FEATURES	DIVERSITY & PATTERN	NATURALNESS	BUFFER/LINKAGE/CORRIDOR	SIZE & SHAPE
Omamari Station Wetland and Shrubland P07/132			3 e.u.s	At least partly grazed and substantially invaded by weeds in places.	Surrounded by pasture.	15 ha
Arnesen Farm Shrubland P07/134			2 e.u.s	Partly drained, grazed, and substantially weed-infested.	Bordered by pine plant Surrounded by plantation and pasture.	11 ha; one single block
Opanake Road Forest Fragments P07/136a			2 e.u.s	Grazed and invaded by weeds in places.	Surrounded by pasture.	7 ha
Peter Kelly's Lake and Wetland P07/138			1 e.u.	Grazed.	Surrounded by pasture.	2 ha
Woodcock's Forest P07/141a			1 e.u.	Grazed and weed-infested.	Surrounded by pasture.	0.6 ha
Opanake Road Swamp Forest P07/149			1 e.u.	Apparently not grazed. Some weed invasion.	Partly surrounded by pasture.	4 ha
Babylon Coast Roadside Shrubland P07/154			1 e.u.	Substantial woody weed invasion.	Surrounded by pasture.	3 ha
Woodcock's Wetland P07/157			1 e.u.	Substantial weed invasion at the margins.	Bordered by SH12 and pasture.	1.5 ha
Basin Road Shrubland 1 P07/160			1 e.u.	Substantial weed invasion.	Surrounded by pasture.	10 ha
Basin Road Shrubland 2 P07/161			1 e.u.	Grazed and with substantial weed invasion.	Surrounded by pasture.	12 ha
Hokianga Road Forest P07/164			2 e.u.s	Grazed.	Surrounded by pasture.	0.9 ha; one single block
Hoanga Road Forest 2 P07/165			1 e.u.	Grazed and fragmented, with substantial weed invasion.	Surrounded by pasture.	8 ha; one single block
Scotty's Camp Road Shrubland P07/167			2 e.u.s	Partly drained and substantially weed-infested.	Surrounded by pasture.	26 ha
Bayly's Coast Road Wetland and Shrubland P07/171 a			2 e.u.s	Grazed and significantly weed-invaded.	Surrounded by pasture.	12 ha
Bayly's Basin Road Wetland 1 P07/171b		2 threatened bird species.	1 e.u.	Grazed and significantly weed-invaded.	Surrounded by pasture.	8 ha
Bayly's Coast Road Wetland P07/172			1 e.u.	Grazed.	Surrounded by pasture.	4 ha

LEVEL 2 SITES (51) SITE NAME SURVEY NO.	REPRESENT-ATIVENESS	RARITY/SPECIAL FEATURES	DIVERSITY & PATTERN	NATURALNESS	BUFFER/LINKAGE/CORRIDOR	SIZE & SHAPE
Mangatara Flat Shrubland P07/177			1 e.u.	Grazed, partly drained, and weed-infested.	Surrounded by pasture.	3 ha.
Turiwiri Forest Remnants P07/182		1 threatened bird species recorded as a visitor.	e.u.s	Grazed.	Surrounded by pasture.	3 ha; in two patches
Dargaville Domain Forest P07/185			1 e.u.	Substantially invaded by weeds.	In an urban area.	2.2 ha
Bayly's Basin Road Wetland 2 P07/206		3 threatened bird species.	2 e.u.s	Grazed.	Surrounded by pasture.	1.2 ha
Sills Road Forest Remnants P08/060			1 e.u.	Grazed.	Surrounded by pasture.	8 ha in four patches
Upper Aratapu Creek Shrubland P08/062			1 e.u.		Surrounded by pasture.	44 ha; one dispersed block.
Reed's Farm Forest P08/063			1 e.u.	Grazed.	Surrounded by pasture.	2 ha
Glinks Gully Wetland and Grassland P08/073		2 threatened bird species.	3 e.u.s	Invaded by weeds and used as a rubbish dump.	Surrounded by pasture.	7 ha; long and narrow
Lucich Wetland P08/080			2 e.u.s	Grazed to the water's edge.	Surrounded by pasture.	1 ha.
Kernot's Shrubland P08/081		1 threatened bird species.	1 e.u.	Substantially invaded by weeds.	Surrounded by pasture.	1 ha.
Pinaki Road South Wetland and Shrubland P08/087		1 threatened bird species.	3 e.u.s	Grazed. Shrublands significantly invaded by woody weeds.	Surrounded by pasture.	13 ha.
Burgess Road South Shrubland P08/088		1 threatened bird species.	1 e.u.	Grazed and invaded by woody weeds.	Surrounded by pasture.	9 ha.
Barfoot's Shrubland P08/092			2 e.u.s	Grazed, weed-infested, and degraded locally by rubbish dumping.	Surrounded by pasture.	9 ha.
Barfoot's Gully Shrubland P08/095			2 e.u.s	Substantially invaded by weeds.	Surrounded by plantation.	13 ha.
Harrison Wetland P08/096a			1 e.u.	Major weed (pampas) invasion.	Surrounded by pasture.	14 ha
Mosquito Gully Wetland P08/099		2 threatened bird species, 1 threatened plant species.	1 e.u.	Significantly invaded by weeds.	Surrounded by pasture.	13 ha
Black Lake and Shrubland P08/207			2 e.u.s		Surrounded by plantation.	13 ha

LEVEL 2 SITES (51) SITE NAME SURVEY NO.	REPRESENT- ATIVENESS	RARITY/ SPECIAL FEATURES	DIVERSITY & PATTERN	NATURALNESS	BUFFER/LINKAGE/ CORRIDOR	SIZE & SHAPE
Lake Parawanui and Wetland P08/212		6 threatened bird species	2 e.u.s	Apparently grazed. Pest fish species present.	Surrounded by pasture and plantation.	102 ha
Lower Lake Rototuna Wetland P09/002		3 threatened bird species	1 e.u.	Substantially invaded by weeds.	Surrounded by pasture and plantation.	9 ha
Phoebe's Lake and Wetland P09/011a		5 threatened bird species.	2 e.u.s	Grazed to the water's edge.	Surrounded by pasture.	1.8 ha
Pukemiro Wetland And Forest P09/020		2 threatened bird species.	4 e.u.s	Grazed and with some weed invasion.	Surrounded by pasture and plantation.	39 ha
The Spectacles Lakes and Wetland Q09/202		6 threatened bird species	2 e.u.s	At least one of the lakes is fenced.	Surrounded by pasture.	4.9 ha
Swan Egg Pond and Wetland Q09/203		5 threatened bird species	5 e.u.s	Grazed to the water's edge.	Surrounded by pasture.	3 ha.
Lake Waingata Q09/204		4 threatened bird species, 1 threatened fish species	2 e.u.s	Grazed to the water's edge. Pest fish species present.	Surrounded by pasture.	13 ha.
Total Level 2 Sites						660.2 ha