



Lake Te Hapua

Site Number:	SNA31
Ecological District:	Rotorua Lakes
Source of Information:	Shaw and Beadel (1998); Pardy (1996)
Digital Scale:	1:2,000
Data Source:	RDAM 2006
Regional Council:	Bay of Plenty
1998 Site Number:	NHS No. 31
Current Tenure:	Unprotected
Site Area:	17.7 ha
Altitude Range:	280-320 m
Bioclimatic Zone:	Lowland
Grid Reference:	NZTM E1901575, N5785548

VEGETATION		LANDFORM	EXTENT
CODE	TYPE		
1	<ul style="list-style-type: none"> Manuka shrubland. Manuka-swamp coprosma/<i>Gleichenia dicarpa</i>-wire rush (<i>Empodisma minus</i>) shrubland. Raupo reedland. 	Wetland	7.1 ha
2	Lake (<i>Eleocharis sphacelata</i> , raupo, <i>Schoenoplectus tabernaemontani</i> , and <i>Baumea</i> form local reedlands and sedgeland along the lake margins).	Lake	4.5 ha
3	Kahikatea forest.	Flat	0.2 ha
4	(Rewarewa)-(kamahi)/whauwhaupaku-manuka-mahoe-kohuhu-hangehange-mingimingi-makomako shrubland, scrub and forest (other species present include mapou, koromiko and wheki; Spanish heath, blackberry, gorse and Japanese wineberry (<i>Rubus phoenicolasius</i>) occur locally; bracken and matata are locally common).	Hillslope	5.9 ha
5	Gorse shrubland (not mapped)	Flat	Not mapped
6	Sandy beach (narrow strip, not mapped).	Lake shore	Not mapped

Indigenous Flora: No threatened or at risk species as listed by de Lange *et al.* (2009) have been recorded from this site. Several species of interest occur in the mire at the south end of Lake Te Hapua. These include wire rush, which is not known from elsewhere in the ecological district, and *Epacris pauciflora*, which is known from only one other site in the ecological district. *Gleichenia dicarpa* and maru (burr reed; *Sparganium subglobosum*), both of limited distribution in the ecological district, also occur here.

Fauna: Several species of indigenous water birds have been recorded from the area (Rasch 1989), including some relatively uncommon species. Species include New Zealand dabchick ('Threatened - Nationally Vulnerable' in Miskelly *et al.* 2008), spotless crane ('At Risk - Relict' in Miskelly *et al.* 2008), Australasian bittern ('Threatened - Nationally Endangered' in Miskelly *et al.* 2008), North Island fernbird ('At Risk - Declining' in Miskelly *et al.* 2008), little shag ('At Risk - Naturally Uncommon' in Miskelly *et al.* 2008), and black shag ('At Risk - Naturally Uncommon' in Miskelly *et al.* 2008). Other common species include grey teal and pukeko.

Notes on Overall Condition: This site is on the shores of Lake Rotoiti and comprises a small lake and mire; it is surrounded by gentle hill country, most of which is in pasture.

However a small mosaic of secondary shrubland and forest on the eastern side of the lake, which has regenerated following disturbance, is included in the site. Based on study of aerial photographs, part of the western side of the site appears to have been cleared.

Change Relative to Shaw and Beadel (1998): Based on study of aerial photographs, part of the western side of the site appears to have been cleared.

Threats/Modification/Vulnerability: Fencing of this site was being undertaken by the owners in conjunction with Environment Bay of Plenty in 1996. Exclusion of stock will enhance the values of this site.

There are four or five small infestations of grey willow. Grey willow has the potential to dramatically alter the vegetation cover.

Risk Assessment: Grazing by stock (if still occurring): Risk to site - high; Timeframe - high. Grey willow: Risk to site - high; Timeframe - high.

Significance Level: National (Appendix 4 - Table 1 - Criteria 1, 2, 3, 5, 8, 9, 10, 11, 12, 13; Table 2 - Factors N5, N12).

Significance Justification: This site is of national significance as it comprises a wetland in relatively good condition. One of the dominant vegetation types (manuka-swamp coprosma/*Gleichenia dicarpa*-wire rush shrubland) presently does not occur elsewhere in Rotorua Lakes Ecological District.

Wetlands have been greatly reduced in extent in the ecological district and this type may have been more common in the district in the past. Wetlands are poorly represented in the existing reserve system. It is highly significant for wildlife values. The site is also an important ecological buffer to a nationally significant site - Lake Rotoiti. The site is also utilised by threatened bird species.

Fieldwork Required: No fieldwork required to assess significance, but fieldwork required to update biodiversity and management information.

Notes: This site was identified as a "Recommended Area for Protection" (RAP No. 31) in the natural area survey of Rotorua Lakes ED (Beadel *et al.* 1998).

Control of grey willow would enhance ecological values.

References: Beadel (1993b, 1996c); Pardy (1996); Shaw and Beadel (1998).