



Lake Rotoehu

Site Number:	SNA117
Ecological District:	Rotorua Lakes
Source of Information:	None - based on aerial photographs
Digital Scale:	1:2,000
Data Source:	RDAM 2006
Regional Council:	Bay of Plenty
1998 Site Number:	Not identified as a site in Shaw and Beadel (1998)
Current Tenure:	Unprotected
Site Area:	800.3 ha
Altitude Range:	300-330 m
Bioclimatic Zone:	Lowland
Grid Reference:	NZTM E1909544, N5785838

VEGETATION		LANDFORM	EXTENT
CODE	TYPE		
1	Open water.	Open water	800.3 ha

Indigenous Flora: *Stuckenia pectinata* ('At Risk - Naturally Uncommon' in de Lange *et al.* 2009) was recorded in shallow water (<1 m depth) of this lake in 1988.

Emergent plant species occupied approximately 10% of the total shoreline in 1988, but were located primarily in the northern arms of the lake. *Schoenoplectus tabernaemontani* was the most common indigenous emergent species, although raupo and *Baumea articulata* were also present. Indigenous plant diversity within the littoral zone was low with *Myriophyllum triphyllum* and *Potamogeton ochreatus* the most common species.

(from Clayton *et al.* 1989)

Fauna: Provides habitat for threatened and at risk indigenous bird species including black-billed gull ('Threatened - Nationally Endangered' in Miskelly *et al.* 2008), red-billed gull, New Zealand dabchick (both Threatened - Nationally Vulnerable'), pied stilt ('At Risk - Declining'), black shag, little black shag, and little shag (all 'At Risk - Naturally Uncommon'). Grey duck ('Threatened - Nationally Endangered') are known to occasionally utilise the lake and its margins, but this site is not important for their protection on a nation-wide basis.

Notes on Overall Condition: Subject to algal blooms. A high quality habitat for indigenous avifauna. Current Trophic Level Index (TLI) is 4.6, which indicates a eutrophic state.

Change Relative to Shaw and Beadel (1998): Unknown. Probably little change.

Threats/Modification/Vulnerability: *Invasive Exotic Plants:* *Lagarosiphon major*, *Elodea canadensis*, and *Egeria densa* were common within the littoral zone of the lake in 1988 often covering large areas of lake bed up to 8 m water depth (Clayton *et al.* 1989). However, the current abundance of these pest plants is not known.

Human impacts: Threatened by nutrient input from farmland and urban development in its catchment.

Risk Assessment:	Unknown
Significance Level:	National (Appendix 4 - Table 1 - Criteria 1, 2, 3, 5, 7, 8, 9, 10, 11, 12, 13; Table 2 - Factors N9, N12, N15).
Significance Justification:	This site is of national significance as it is a relatively large lake providing significant habitat to threatened and at risk bird species.
Fieldwork Required:	No fieldwork is required to assess ecological values of this site.
Notes:	None
References:	Innes <i>et al.</i> (1999); Clayton <i>et al.</i> (1989); Environment Bay of Plenty (2008c).