



## Lake Rotoma

**Site Number:** SNA118  
**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 in Shaw and Beadel (1998)  
**Current Tenure:** Unprotected  
**Site Area:** 1,103.5 ha  
**Altitude Range:** 320-340 m  
**Bioclimatic Zone:** Lowland  
**Grid Reference:** NZTM E1914163, N5782039

VEGETATION		LANDFORM	EXTENT
CODE	TYPE		
1	Open water	Open water	1103.5 ha

**Indigenous Flora:** Emergent vegetation (*Eleocharis acuta* and *Juncus acuminatus*) occupied c.5% of the lake shoreline in 1988 and was only present in protected areas of the Matutu Basin, southwest arm, and southern shoreline. Other common species present included *Lilaeopsis ruthiana*, *Myriophyllum propinquum*, and *M. triphyllum* and extensive charophyte meadows were present up to water depths of 16 m (Clayton *et al.* 1989).

No threatened or at risk species as listed in de Lange *et al.* (2009) have been recorded from this site.

**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:** Unknown. Subject to algal blooms. A high quality habitat for indigenous avifauna. The current Trophic Level Index is 2.6, indicating an oligotrophic status (Environment Bay of Plenty 2008e).

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

**Threats/Modification/Vulnerability:** *Invasive Exotic Plants:* *Lagarosiphon major* was common and still expanding its range within the littoral zone of Lake Rotoehu in 1989. Where *Elodea canadensis* was present it dominated submerged vegetation to 4.5 m water depth, although its spread was restricted to one area of the lake.

(from Clayton *et al.* 1989)

**Risk Assessment:** Unknown

<b>Significance Level:</b>	National (Appendix 4 - Table 1 - Criteria 1, 2, 3, 5, 7, 8, 9, 10, 11, 12, 13; Table 2 - Factors N9, N12, N15).
<b>Significance Justification:</b>	This site is of national significance as it is a relatively large lake providing significant habitat to threatened and at risk bird species.
<b>Fieldwork Required:</b>	No fieldwork is required to assess ecological values of this site.
<b>Notes:</b>	A relatively high proportion (41%) of the catchment of Lake Rotoma is covered in indigenous forest (Environment Bay of Plenty 2008e) which probably contributes to its oligotrophic status.
<b>References:</b>	Innes <i>et al.</i> (1999); Environment Bay of Plenty (2008e); Clayton <i>et al.</i> (1989).