



## Waiteti Stream

<b>Site Number:</b>	SNA 15
<b>Ecological District:</b>	Rotorua Lakes
<b>Source of Information:</b>	Shaw and Beadel 1998 (part); field inspection 2016 (part)
<b>Digital Scale:</b>	1:5,000
<b>Data Source:</b>	BOPLASS Ltd 2011
<b>Regional Council:</b>	Bay of Plenty
<b>1998 Site Number:</b>	NHS No. 13
<b>Current Tenure:</b>	Land Improvement Agreement; unprotected
<b>Site Area:</b>	137.64 ha
<b>Altitude Range:</b>	320-540 m
<b>Bioclimatic Zone:</b>	Lowland
<b>Grid Reference:</b>	NZTM E1876150, N5783789

VEGETATION		LANDFORM	EXTENT
CODE	TYPE		
1	Rewarewa-(rimu)/tawa-(tāwari)-(kamahi) forest (with scattered miro; and a sub-canopy of abundant whauwhaupaku, porokaiwhiri, māhoe, mamaku, and horoeka, rimu and miro). Radiata pines are emergent from the canopy within this type.	Gentle and steep hillslopes; stream margin	117.45 ha
2	Whēkī ponga-bracken fernland (with locally common mingimīngi, karamū, and <i>Muehlenbeckia australis</i> ).	Gentle and steep hillslopes; stream margin	13.58 ha
3	(Rewarewa)-(radiata pine)/kamahi forest (with local willow-leaved hakea; sub-canopy of kotukutuku, māhoe, karamū, and makomako).	Stream margins	5.17 ha
4	Clearing (rank pasture).	Gentle and rolling hillslopes	1.44 ha

**Indigenous Flora:** No threatened or at risk plant species as listed in de Lange *et al.* 2013 have been recorded from this site.

**Fauna:** No threatened or at risk bird species as listed in Robertson *et al.* 2013 have been recorded from this site.

**Notes on Overall Condition:** Modified podocarp-tawa forest remnant, previously logged for podocarps; isolated by clearance of surrounding land and its conversion to pasture.

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

**Threats/Modification/Vulnerability:** Only parts of this site were assessed in the field in 2016, one of which is partly protected under a land retirement agreement between the landowners and the Bay of Plenty Regional Council (landowner pers. comm. 2016).

In 1996, parts of this site were still grazed with cattle, and low numbers of feral goats and deer were present. The lower reaches of the stream are heavily infested with scrubby weed species including blackberry, Japanese honeysuckle, willow-leaved hakea, Himalayan honeysuckle, and gorse (Wildland Consultants 2009).

**Risk Assessment:** Grazing by stock (where unfenced): Risk to site - high; Timeframe - high.

Pest plants: Risk to site - medium; Timeframe - medium.

**Significance Level:** Regional (Appendix 8 - Table 1 - Criteria 1, 8, 9 and 10; Table 2 - Factor R4).

<b>Significance Justification:</b>	<p>This site is regionally significant because it contains indigenous vegetation of relatively large size and quality, most of which has been fenced to exclude stock, and which is representative of the original character of Rotorua Lakes Ecological District. Wildlife values were rated as moderate to high (1993 survey), but are likely to have declined since that date (Wildland Consultants 2009).</p> <p>The site includes a land type (undulating with knolls, 26 ha), which is under-represented in the existing reserve system. In addition, 2 ha of indigenous vegetation on high terraces is present. Although only a relatively small area, indigenous vegetation on this land type in Rotorua Lakes Ecological District is very rare with less than 1% remaining (Wildland Consultants 2009).</p>
<b>Field Work Required:</b>	No field work required to assess significance. For areas not surveyed in 2016, field work is required to update biodiversity and management information.
<b>Notes:</b>	<p>This site was identified as a “Recommended Area for Protection” (RAP No. 15) in the natural area survey of Rotorua Lakes ED (Beadel <i>et al.</i> 1998).</p> <p>Site inspections in 2016, requested by two landowners, did not cover the entire area included in this SNA (see attached site figure). One of these site inspections included assessing the boundaries of Vegetation Type 1 on one property. Only a very small part of this margin has been grazed. On another property (727 Oturoa Road), an area of plantation forest was inspected in July 2016 (see accompanying Figure). The area in question is a <i>Cupressus macrocarpa</i> stand planted around 1993 into what was previously pasture (mapped as Vegetation Type 2). Growth rates have been poor and in places there is a discontinuous canopy. Stock and feral deer have been excluded and there is a healthy understorey and subcanopy of kanono, mahoe, pate, wineberry, as well as individual tawa trees which would have stood previously in pasture. Weeds are generally confined to the track and margins. This area was removed from the SNA.</p>
<b>References:</b>	Shaw and Beadel (1998); Beadel <i>et al.</i> (1998).