



Tangatarua (Old Taupo Road Reserve)

Site Number: SNA113
Ecological District: Rotorua Lakes
Source of Information: Wildland Consultants (2005c) - Geothermal Site No. 11
Digital Scale: 1:2,000
Data Source: RDAM 2006
Regional Council: Bay of Plenty
1998 Site Number: NHS No. 113
Current Tenure: Road Reserve (geothermal feature and vegetation are not currently a key focus of the management of this road reserve)
Site Area: 1.6 ha
Altitude Range: 300-310 m
Bioclimatic Zone: Lowland
Grid Reference: NZTM E1884032, N5771171

VEGETATION		LANDFORM	EXTENT
CODE	TYPE		
1	Manuka-mingimingi- <i>Histiopteris incisa</i> -bracken shrubland This vegetation type occurs on the banks and scarp above the geothermal lake, mud pools, and steam vents. Manuka dominates this area with patches of <i>Histiopteris incisa</i> , bracken, blackberry, and gorse in cooler areas. Mingimingi becomes more dominant on heated soils. Scattered turutu occurs under manuka. Several small patches of kanuka trees are present. Other occasional tree species present include silver wattle, maritime pine, radiata pine, and eucalyptus. A small patch of <i>Baumea teretifolia</i> and several trees of ti kouka are present at the western end of the lake.	Plateau scarp, local very steep slope, gully with waterway	0.9 ha
2	Geothermal water Geothermally influenced lake.	Lake	0.6 ha
3	Nonvegetated raw-soilfield Geothermally altered clay, heated ground, mud, and sinter. mud pools. Several mingimingi plants are present.	Flat	0.1 ha

Indigenous Flora: No threatened or at risk species as listed in de Lange *et al.* (2009) have been recorded from this site. Indigenous species typical of geothermal vegetation are present including manuka, mingimingi, *Histiopteris incisa*, turutu, and kanuka.

Fauna: No threatened or at risk species as listed in Hitchmough *et al.* (2007) or Miskelly *et al.* (2008) have been recorded from this site. Common indigenous and exotic species typical of the habitats are present, including fantail, mallard, and blackbird.

Notes on Overall Condition: The site is in moderate condition with some indigenous geothermal vegetation present, but is threatened by continued pest plant invasion. Some minor damage has occurred by people walking through the geothermal area. Some litter on site.

Change Relative to Shaw and Beadel (1998): The extent and composition of this site appears to be similar to that recorded in 1996 (Beadel *et al.* 1996b).

Threats/Modification/Vulnerability: *Invasive Exotic Plants:* Invasive exotic plants are common and include blackberry (5-25% cover), gorse (1-5% cover), broom (1-5% cover),

maritime pine (several trees), silver wattle (several trees), radiata pine (several trees), and eucalyptus (several trees).

Human Impacts: Several tracks (formed and unformed) pass through the geothermal vegetation. Some dumping of organic garden waste material on margins of the site. Some litter amongst geothermal vegetation.

Grazing: Not a threat to this site.

Adjoining Land Use: Camping ground, residential, mown parkland.

Risk Assessment:	Pest plants: Risk to site - medium; Timeframe - medium.
Significance Level:	Regional. For ranking purposes this site was considered together with the Arikikapakapa (Golf Course) site as together they can be considered part of one geothermal habitat.
Significance Justification:	The Arikikapakapa and Tangatarua sites are of regional significance because together they comprise good quality examples of indigenous geothermal vegetation that is representative of Rotorua Lakes ED, and they contain a population of prostrate kanuka ('At Risk' - Naturally Uncommon').
Fieldwork Required:	No fieldwork is required.
Notes:	<p>Although the site is small and pest plants are present, it does have some conservation values. The site has some potential for restoration and is easily accessible to the public. This site was classed as Category 4 in Beadel <i>et al.</i> (1996b).</p> <p>This site is within 100 m of the Arikikapakapa (Golf Course site).</p> <p>This site was identified as a "Recommended Area for Protection" (RAP No. 113) in the natural area survey of Rotorua Lakes ED (Beadel <i>et al.</i> 1998).</p>
References:	Wildland Consultants (2005c); Beadel <i>et al.</i> (1996b); Beadel <i>et al.</i> (1998); Shaw and Beadel (1998).