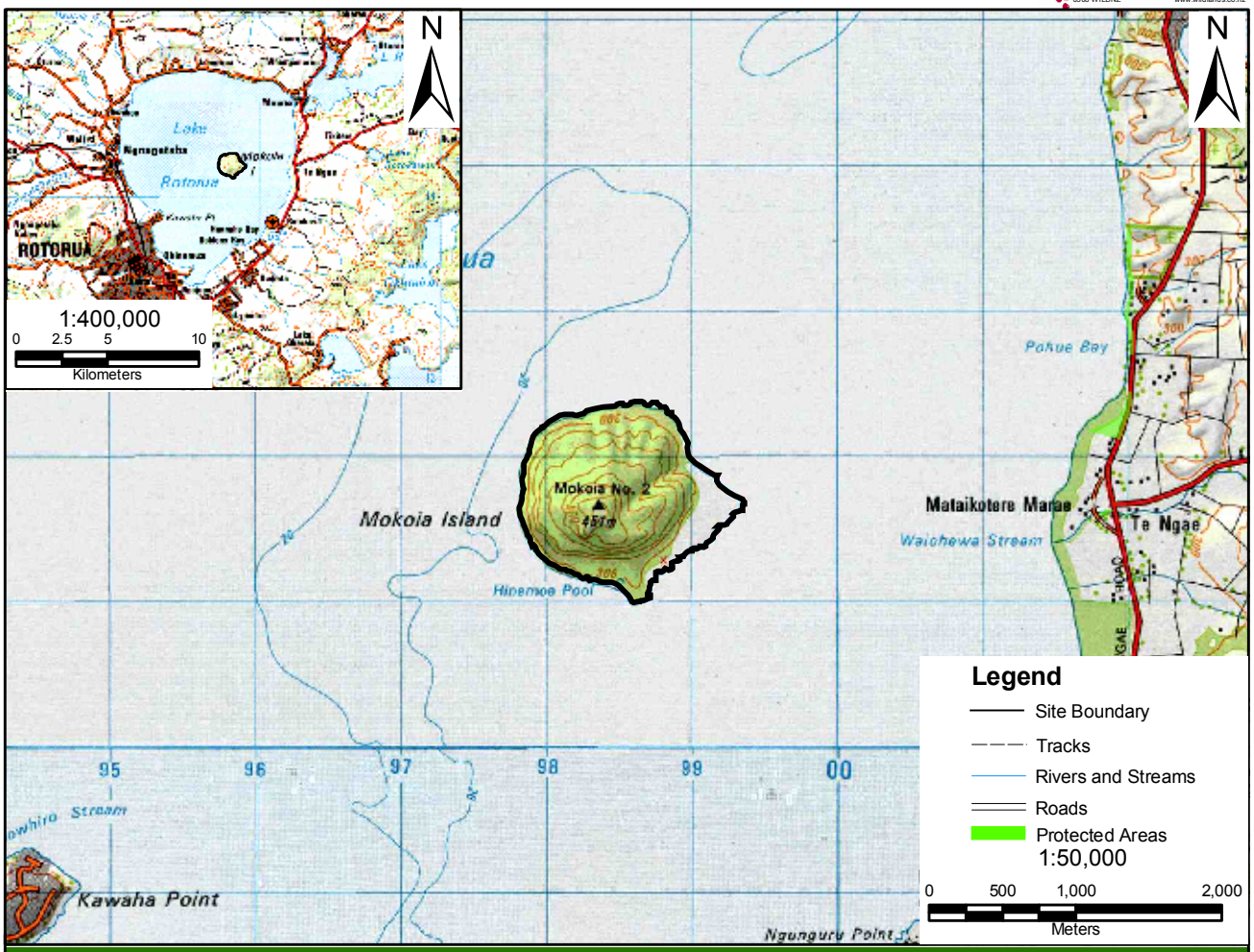
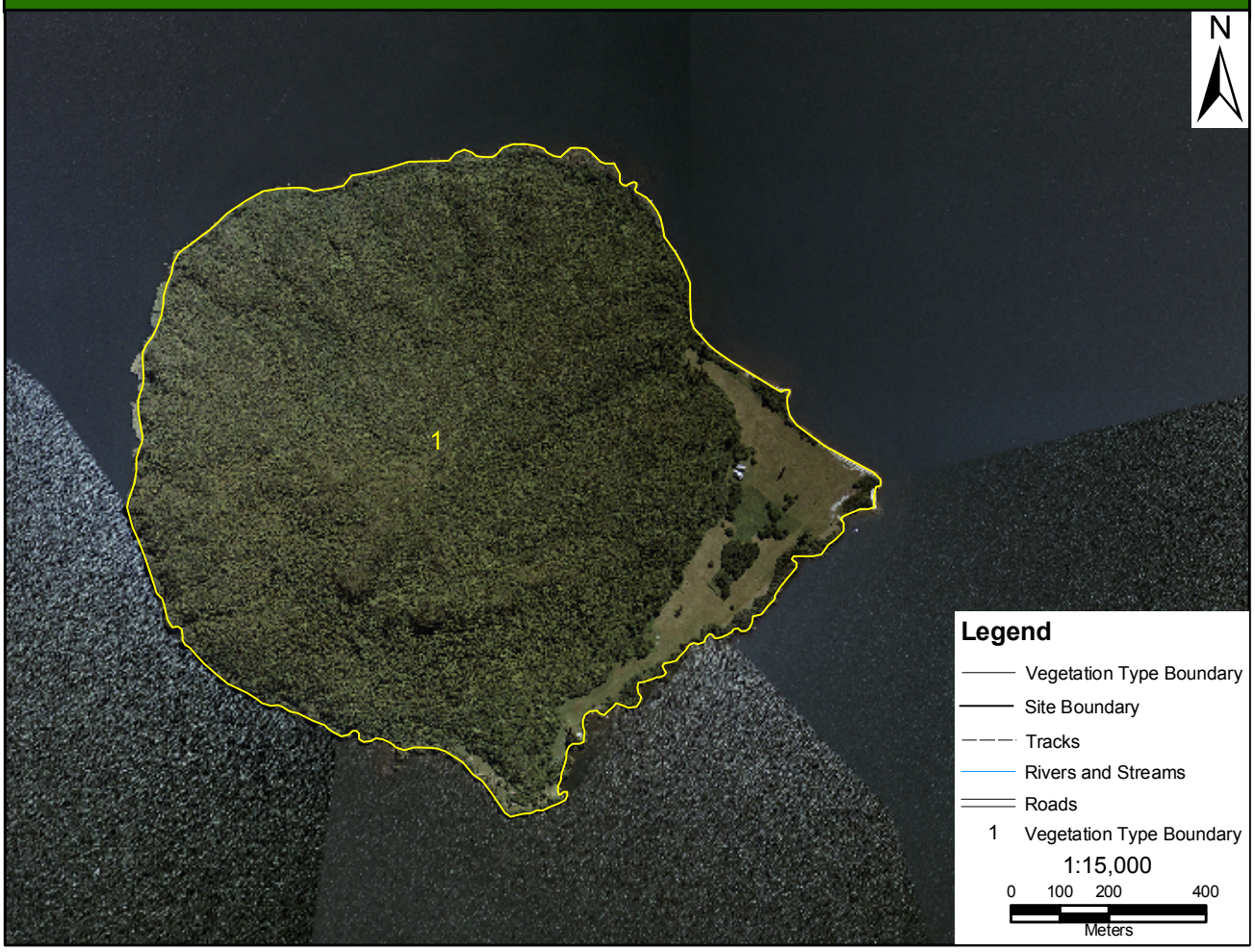
SNA 179

Mokoia Island





Mokoia Island

Site Number: SNA179
Ecological District: Rotorua Lakes
Source of Information: Shaw and Beadel (1998); Wildland Consultants 2005
Digital Scale: 1:2,000
Data Source: RDAM 2006
Regional Council: Bay of Plenty
1998 Site Number: PNA No. 212
Current Tenure: Protected as a Wildlife Refuge/private land.
Site Area: *c.*137.6 ha
Altitude Range: *c.*280 - 451 m
Bioclimatic Zone: Lowland
Grid Reference: NZTM E1888298, N5780218

VEGETATION		LANDFORM	EXTENT
CODE	TYPE		
1	• Whauwhaupaku-mahoe-kohuhu-mamaku forest • Mamaku forest • Ti kouka/whauwhaupaku-mahoe-kohuhu-mamaku forest • Pohutukawa forest (S.M Beadel pers obs. 1990) • Rank exotic grassland • Pohutukawa treeland (Wildland Consultants 2005)	Hillslope, Flat	*c.*137.6 ha

Indigenous Flora: *Rorippa divaricata* (ranked as 'At Risk - Naturally Uncommon' in de Lange *et al.* 2009) is present on Mokoia Island (Beadel 1990; Cashmore 2001). A small population of *Hypolepis dicksonioides* is present at the geothermal hot springs. *H. dicksonioides* is ranked as 'At Risk - Naturally Uncommon' in de Lange *et al.* 2009.

Fauna: Common indigenous and exotic species typical of the habitats are present. North Island saddleback and North Island brown kiwi have been introduced to the island. North Island saddleback are ranked as "At Risk - Recovering" and North Island brown kiwi are ranked as "Threatened - Nationally Vulnerable" in Miskelly *et al*. (2008).

Notes on Overall Condition: Most of the vegetation on the island is regenerating forest which is in an excellent condition, providing significant habitat for threatened plant and animal species. Unlike most of the "mainland" indigenous vegetation of the Rotorua District, the vegetation and indigenous fauna on Mokoia Island are not subject to browsing and predation pressure from possums, pigs, rats, and mustelids.

Most pest animals (rats, goats and sheep were eliminated from the island in the 1990s. Except for mice and horses no introduced mammals have been recorded on the island since. The absence of possums on the island, means that the pohutukawa forest provides a unique contrast with the browsed stands at Lake Tarawera, Lake Okataina, and Lake Rotoiti (Wallace 1993a).

Change Relative to Shaw and Beadel (1998): No significant change.

Threats/Modification/ Vulnerability:	Threat of re-invasion of eradicated pest animals, and spread of exotic pest plants are the key threats to the vegetation and fauna .
Risk Assessment:	Invasion of pest animals: Risk to site - medium; Timeframe - high. Invasion of pest plants: Risk to site - medium; Timeframe - high.
Significance Level:	National (Appendix 5 - Table 1 - Criteria 1, 2, 3, 4 (geothermal habitat only), 7, 8, 11, 12, 13; Table 2 - Factors N5 (Geothermal habitat only), N12, N14, N15.
Significance Justification:	This site is of national significance because it is the best example of indigenous vegetation in Rotorua Lakes Ecological District in the absence of pest animals (other than mice). A small example of geothermal vegetation is present; a naturally uncommon vegetation/habitat type. The island has populations of threatened bird and plants species, being particularly important habitat for threatened indigenous bird introductions.
Fieldwork Required:	No field work required to assess significance or ecological values present.
Notes:	A narrow fringe of pohutukawa forest is present on the margins of the island.
References:	Shaw and Beadel (1998); Beadel *et al*. (1998); Cashmore (2001); Beadel (1995a); Cameron *et al.* (1995); Wallace (1993a); Wildland Consultants (2005c).