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ENVIRONMENT BOP P.O. BOX 364 WHAKATANE





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Wildland Consultants Ltd 2005: Digital maps of significant natural areas in Whakatane District. Wildland Consultants Ltd Contract Report No. 1198. Prepared for Environment Bay of Plenty.



1. INTRODUCTION

Environment Bay of Plenty commissioned Wildlands Consultants Ltd to prepare a digital map of significant natural areas (SNA) identified in 1996 in the Whakatane District in the Bay of Plenty Region. This project involved mapping the 2003 extent of significant natural areas in the Whakatane District identified in a 1996 report (Beadel *et al.* 1996a). This report drew on existing information on natural areas, desktop aerial mapping, and field inspections.

In terms of existing published information, the only Protected Natural Area Programme (PNAP) report that had been completed at the time the 1996 report was prepared was for Otanewainuku Ecological District (Beadel 1994). The sites identified in this PNAP that were within the Whakatane District were automatically included in the 1996 SNA report. Sites listed in the Bay of Plenty Conservation Management Strategy (Department of Conservation 1997) were assessed for significance and were included if they met the SNA significance criteria. Other natural areas in the District were evaluated during the SNA project. For some sites no information on natural values existed and these were identified using aerial photography (dated 1992-1994, at a scale of 1:25,000 – 1:50,000), then field checked and their values evaluated against the SNA criteria.

Unprotected significant natural areas were mapped and described in the 1996 report, whilst most protected areas were described, but not mapped. In the current project, unprotected site boundaries were digitised at a scale of 1:5,000 based on the extent of natural areas visible in 2003 digital aerial photographs. Protected areas were mapped based on digital cadastral data (Core Record System). Covenants, except ones administered by the Department of Conservation, were specifically excluded from the current project.

Environment Bay of Plenty's Resource Policy and Environmental Investigations sections initiated the current project as a first step in a wider project aiming to capture all SNA and sites identified as protected areas or Recommended Areas for Protection (RAPs) as part of protected natural area programme surveys for use in Council's Biodiversity Database.

OBJECTIVES

The project objective is to map at 1:5,000 the 2003 extent of each significant natural area (SNA) identified in the Whakatane Natural Heritage Report (Beadel *et al.* 1996a).

METHODS

All sites described in the 1996 SNA report (except open space covenants and covenants protected under section 224 of the Resource Management Act 1991) were mapped using the 2003 RDAM orthophotos as the mapping base. Each site was mapped on screen at 1:5,000 with reference to extent of the site as mapped on the 1:50,000 topographic maps and sketch maps (scale 1:20,000-1:50,000) presented in



the 1996 report. Protected sites were not mapped in the 1996 report and digital cadastral data (Core Record System) was used to map these sites.

Boundaries of protected sites were not adjusted. In a few instances the position of the protected area digital polygon were shifted slightly to fit the position of natural features visible on the aerial photographs, e.g. when straight line boundaries were offset to one side of the actual physical differentiation of vegetation cover.

Clearings that could be identified on the digital aerial photographs were excluded from unprotected sites. Main roads were also excluded from unprotected sites. Minor boundary changes were made to many of the unprotected sites to exclude small areas of pines, pasture, or dwellings, or to include indigenous vegetation. For a few unprotected sites, major areas were excluded for one of several reasons, e.g. newly established pine plantations; clearance of indigenous vegetation. Any sizeable areas of exotic vegetation (e.g. clearings, plantations) that could be discerned from the digital aerial photographs were also excluded from unprotected sites.

Significant sites in the Taneatua Ecological District (see Beadel *et al.* 1999) were not described in the 1996 SNA report (as they were to be covered in a separate project), however they were referred to in the 1996 document (see Page 247) and were implicity included as 'significant sites'. Therefore these sites have been included in the digital layer prepared in the current project.

The Whakatane District administrative boundary was changed in 2004 and 17 sites and parts of a further three sites, identified as significant in the Opotiki District Natural Area report (Wildlands *et al.* 1999), now lie in the Whakatane District. These sites were mapped as part of the Opotiki District mapping project (see Wildland Consultants Contract Report No. 1116) and are identified in the comments field in the attribute table of the Opotiki District 1999 SNA GIS layer.

Covenants administered by the Department of Conservation listed in the 1996 report are included in the current project, however other covenants were excluded from this project as the district council is currently undertaking a project to map these sites. Many additional areas within the Whakatane District have been covenanted since 1996, so for up-to-date information on covenants the relevant agencies, e.g. QEII and the District Council, should be contacted. Several sites identified in the 1996 report as being protected (based on information provided by the land managers at the time) were subsequently found to be not formally protected, and are mapped as unprotected in the current project. These sites are identified in the comments section of the GIS attribute table. For remaining sites the information on protection status in the attribute table was accurate in 1996, however some of the areas that were unprotected then may be partly or entirely protected now.

Details about each site were captured in the attribute table. There were 17 fields in the attribute table as provided by the client, and these are listed and defined in Table 1.



Table 1: Definitions of Fields in GIS Attribute Table Whakatane District Significant Natural Areas

Shape Refers to the GIS shapefile (i.e. polygon as oppose to line).

FID Feature ID (auto-generated field in ARC GIS).

Name of Significant Natural Area (SNA).

Site_no Unique site number of SNA in Bay of Plenty Region (yet to be

assigned).

Sna_unprot Number assigned to the unprotected SNA in relevant reference

document.

Unpsna ref Reference document(s) which details information on the

unprotected SNA and from which the SNA number originated.

Sna_prot Number assigned to the protected SNA in relevant reference

document.

Prosna_ref Reference document(s) which details information on the

protected SNA and from which the SNA number originated and digital data source from which the SNA boundary was

obtained.

Rap_no Number assigned to the Recommended Area for Protection

(RAP) in relevant reference document.

Rap_ref Reference document(s) which details information on the RAP

and from which the RAP number originated.

ED 1 50000 Ecological District (ED) in which the SNA is situated

(boundaries as determined in 1996 on topographic maps at a

scale of 1:50,000).

03 ha The area of the SNA as determined from Environment BOP

Regional Digital Aerial Mosaic (RDAM) (2003)

orthophotographs.

Dig_scale The scale at which the SNA has been mapped using RDAM

(2003) orthophotographs.

Base_map The base map onto which the SNA boundaries have been

drawn i.e., Environment BOP Regional Digital Aerial Mosaic

(RDAM) (2003) orthophotographs.

Lvl_confid Level of confidence held about the accuracy of the SNA

boundaries (high, medium or low).



Chng_xtnt Broad comments on any change in extent of the SNA apparent

on the Environment BOP Regional Digital Aerial Mosaic (RDAM) (2003) orthophotographs since the completion of the

reference document(s).

Field_chk Field check needed.

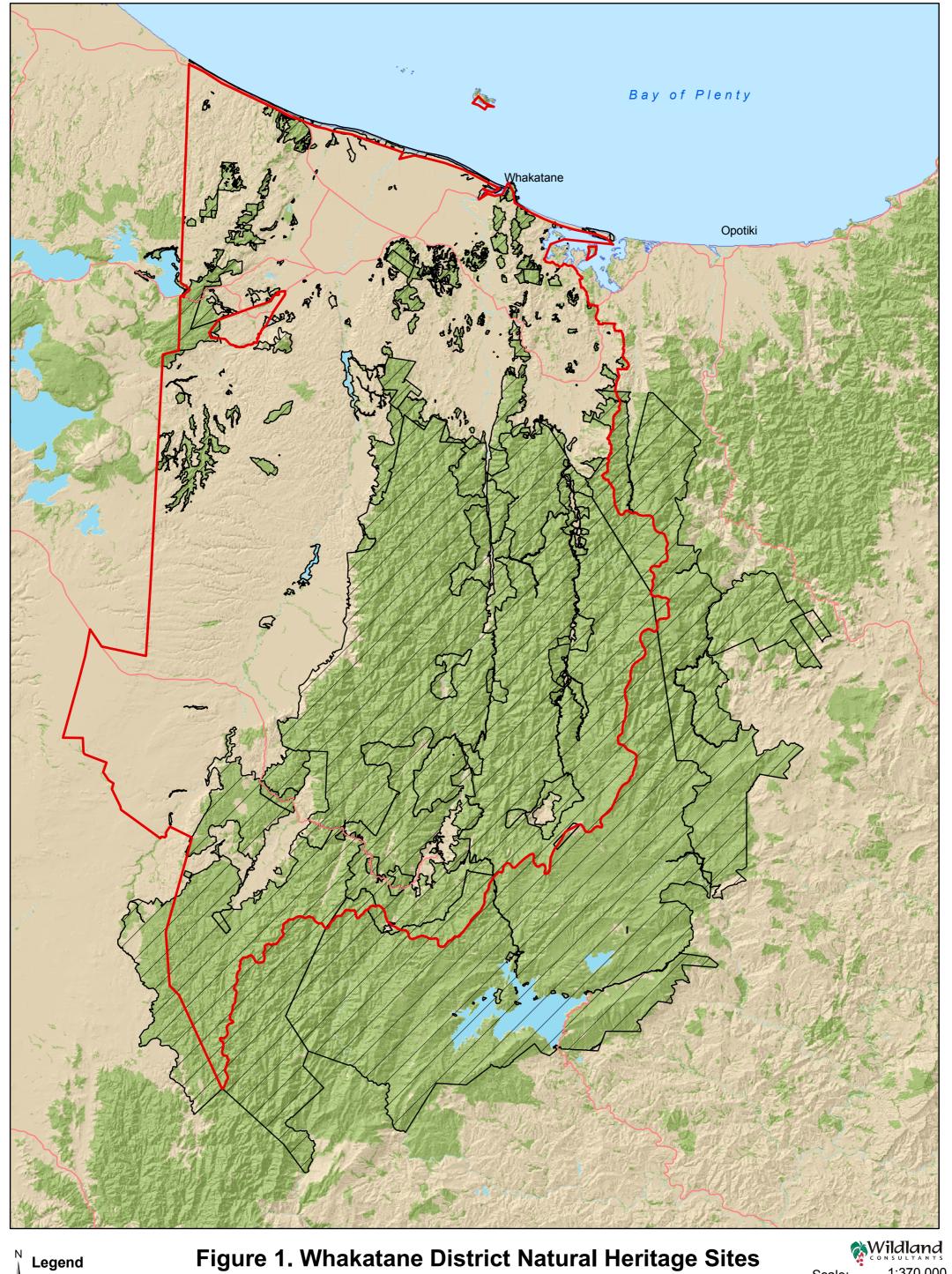
Comment Other relevant information.

4. OUTPUTS

195 sites were mapped. Some sites comprise more than on polygon. These are listed in Appendix 1 along with the completed attribute table. Sites are displayed at 1:370,000 in Figure 1. Most or all unprotected sites would require field checking to confirm site boundaries. Shadows on the digital aerial mosaic make it difficult to determine the boundaries in some places, particularly adjacent to pine plantations. Arc shape files were provided to Environment BOP along with the metadata (Appendix 2). The shape file name is Whakatane_Natural_Areas_1996_based_on_RDAM_2003_(Final_version). The metadata is presented in Appendix 2 and was also provided as a separate document to Environment BOP.

The 1996 study was undertaken using a combination of aerial photographs and other resources available at the time, including limited field assessments, and more detailed studies of these ecological districts would be likely to identify further significant sites. It cannot be presumed that natural areas not included in this digital layer do not have ecological values, or that they are not significant, or that they do not require protection and/or management.





Legend

Natural Heritage Sites

Whakatane District Boundary

0 5 10 20

Scale: 1:370,000
Date: 29/08/05
Cartographer: RPB

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SIGNIFICANT NATURAL AREAS OF WHAKATANE DISTRICT – ATTRIBUTE TABLE



Accordinational	NAME	SITE NO	SNA UNPROT	UNPSNA REF	SNA PROT	PROSNA_REF	RAP NO	RAP_REF	ED_1_ 50000	03_HA	DIG_SCALE	BASE_MAP	FIELD_CHK	CHNG_XTNT	Comment
Page	Arawhatawhata	110						Beadel et al. 1999		92.97	1:5,000				
Page	Asplin Forest						37	Beadel et al. 1999	Taneatua	16.26	1:5,000	RDAM 2003	Field Check		
Part					4	B 11 (/ 0000 1 :				00.04	4.5.000				
1.	-				1a				те теко	69.94	1:5,000				
Booked 1907, Recided or at 1909 Contract Name Contract N					16				To Toko	0.16	1.5 000				
Autorition Aut					16				те теко	0.10	1.5,000				
A	vianagement ixeserve					al. 1996						Orthopholographs	required		
Valence Legislation Valence Legislation Valence Legislation	Awakeri Conservation Area				01	Beadel et al. 1999			Taneatua	414.55	1:5,000				
Page	Awakari Extansion						01	Poodel et al 1000	Tanaatua	F01 60	1.5 000				
Recognise (Night Foundament	Awaken Extension						01	beader et al. 1999	raneatua	561.06	1.5,000				
Amingament Roservo	Breaman Wildlife				45	Readel et al. 2003. Irving			Te Teko	8 67	1.5 000				
Procession Pro					75				TO TORO	0.07	1.5,000				
Deption Place 99 Beadel et al. 1999 Tamestus 1.5,000						and Deader 1332	20	Readel et al. 1999	Taneatua	306.48	1.5 000				
Components	Siosilarian 3						20	Bedder et al. 1999	Tancataa	300.40	1.0,000				
2	Clavton Place						89	Beadel et al. 1999	Taneatua	0.80	1:5.000				
2005/2005/2005/2005/2005/2005/2005/2005											-,				
Peacle et al. 1999 Seadel et al. 1999	Conservation Area (Raroa)				40	Beadel et al. 1999			Taneatua	122.60	1:5,000				
Beadel et al. 1998 Beadel et al. 200 Beadel et al. 200 Beadel et al. 2003 Te Teko 0.50 Tis.000 RDM/ 2003 Teled Check 1998 Tanestus 15.000 RDM/ 2003 Teled Check Teleptine Road Kahikatea Road Rahikatea	,										,	Orthophotographs			
Beadel et al. 20 Beadel	Cranswick Kahikatea		92	Beadel et al. 1999			92	Beadel et al. 1999	Taneatua	1.60	1:5,000	RDAM 2003	Field Check		
1996, Beadel et al. 2003 38 Beadel et al. 1999 Taneatua 3.24 1.5.000 RDAM 2003 Fleid Check Incurred Rod Kahikatae Rod Ka															
al. 2003 Beadel et al. 1999 Tanestus 3.24 1:5,000 RDAM 2003 Field Check required	Eivers' Wetland		20				20	Beadel et al. 2003	Te Teko	0.90	1:5,000		Field Check		
Sienholme Road Kahikatea												Orthophotographs	required		
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Hanamahihi 78 Beadel et al. 1996.	Siermenne Road Rammatou							Boador of all 1000	Tanoataa	0.21	1.0,000				
1996. 1996. 23 23 23 25 25 25 25 25	- Hanamahihi		78	Beadel et al.					Waimana	1083.63	1:5.000				
Florowera											-,				
12 Beadel et al. 1999 Taneatua 85.46 1.5000 Orthophotographs required re	Horowera						35	Beadel et al. 1999	Taneatua	23.29	1:5,000				
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South Sout	Kohi Point Scenic Reserve		43	Beadel et al. 1999					Taneatua	153.81	1:5,000				
Coputawhiti 26 Beadel 1995 9 Beadel et al. 2003 Te Teko 22.63 1:5,000 RDAM 2003 Field Check required Require															
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Wetland 1999, Beadel et Orthophotographs required Orthophotographs required			30				30	Beadel et al. 1999	Taneatua	2.18	1:5,000				



NAME	SITE NO	SNA UNPROT	UNPSNA REF	SNA PROT	PROSNA_REF	RAP NO	RAP_REF	ED_1_ 50000	03_HA	DIG_SCALE	BASE_MAP	FIELD_CHK	CHNG_XTNT	Comment
			al. 1996											
Matamanu		110	Beadel <i>et al.</i> 1996, Beadel 1994					Otanewainuku	41.14	1:5,000	RDAM 2003 Orthophotographs	Field Check required		
Matata Scenic Reserve				88	Beadel <i>et al.</i> 1996 , Beadel 1994			Otanewainuku	490.23	1:5,000	RDAM 2003 Orthophotographs	Field Check required		
Matata-Maungawhakamana Natural Area Corridor Exten		111	Beadel 1991, Beadel et al. 1996					Otanewainuku	980.64	1:5,000	RDAM 2003 Orthophotographs	Field Check required		
Maungapohatu I		79	Beadel et al. 1996		***************************************			Waimana	232.13	1:5,000	RDAM 2003 Orthophotographs	Field Check required		
AcLean's Forest		36	Beadel et al. 1999, Beadel et al. 1996					Taneatua	34.53	1:5,000	RDAM 2003 Orthophotographs	Field Check required		
Millar Bush		34	Beadel <i>et al.</i> 1999, Beadel <i>et al.</i> 1996 (pg 3 & 247)					Taneatua	7.25	1:5,000	RDAM 2003 Orthophotographs	Field Check required		
Minginui Stream		71	Beadel <i>et al.</i> 1996.					Whirinaki	26.50	1:5,000	RDAM 2003 Orthophotographs	Field Check required		
Mokorua Bush Scenic Reserve				44	Beadel et al. 1999			Taneatua	235.95	1:5,000	RDAM 2003 Orthophotographs	Field Check required		
Ohinekoao				89,90	Beadel 1994, Beadel <i>et</i> al. 1996			Taneatua	70.65	1:5,000	RDAM 2003 Orthophotographs	Field Check required		
Ohineteraraku Scenic Reserve					Beadel et al. 1999			Taneatua	9.67	1:5,000	RDAM 2003 Orthophotographs	Field Check required		
Dhinetewai		113	Beadel <i>et al.</i> 1996, Beadel 1994					Otanewainuku	47.03	1:5,000	RDAM 2003 Orthophotographs	Field Check required		
Ohiwa Harbour Wildlife Refuge					Beadel et al. 1999			Taneatua	28.36	1:5,000	RDAM 2003 Orthophotographs	Field Check required		
Ohope Scenic Reserve Extension				21	Beadel et al. 1999	21	Beadel et al. 1999	Taneatua	4.77	1:5,000	RDAM 2003 Orthophotographs	Field Check required		
Ohope Sand Dunes		93	Beadel et al. 1999					Taneatua	3.67	1:5,000	RDAM 2003 Orthophotographs	Field Check required		
Ohope Scenic Reserve				12	Beadel et al. 1999			Taneatua	491.27	1:5,000	RDAM 2003 Orthophotographs	Field Check required		
Onerahi Wetland		34	Beadel <i>et al.</i> 1996			15	Beadel et al. 2003	Te Teko	1.12	1:5,000	RDAM 2003 Orthophotographs	Field Check required		
Otuhepo		115	Beadel <i>et al.</i> 1996, Beadel 1994					Otanewainuku	45.72	1:5,000	RDAM 2003 Orthophotographs	Field Check required		
Paparoa Pa Historic Reserve				15	Beadel et al. 1999			Taneatua	1.05	1:5,000	RDAM 2003 Orthophotographs	Field Check required		
Parau Stream Headwaters						31	Beadel et al. 1999	Taneatua	150.19	1:5,000	RDAM 2003 Orthophotographs	Field Check required		
Parimahana extension		13	Beadel <i>et al.</i> 1996, Beadel <i>et</i> <i>al.</i> 1998					Rotorua Lakes	297.87	1:5,000	RDAM 2003 Orthophotographs	Field Check required		
Park Road Wetland		35	Beadel et al. 1996			14	Beadel et al. 2003	Te Teko	1.84	1:5,000	RDAM 2003 Orthophotographs	Field Check required		
Pohutukawa Remnant						24	Beadel et al. 1999	Taneatua	3.53	1:5,000	RDAM 2003 Orthophotographs	Field Check required		
Port Ohope Recreation Reserve				17	Beadel et al. 1996			Taneatua	177.16	1:5,000	RDAM 2003 Orthophotographs	Field Check required		
Pukehoko Forest						19	Beadel et al. 1999	Taneatua	81.34	1:5,000	RDAM 2003 Orthophotographs	Field Check required		
Rangitaiki River		60	Beadel et al. 1996.					Kaingaroa	26.04	1:5,000	RDAM 2003 Orthophotographs	Field Check required		
Richardson's Wetland		116	Beadel <i>et al.</i> 1996.			116		Otanewainuku	1.77	1:5,000	RDAM 2003 Orthophotographs	Field Check required		
Rotoehu Forest (Part)			1 330.	94	Beadel et al. 1996			Otanewainuku	74.04	1:5,000	RDAM 2003 Orthophotographs	Field Check required		
Rotoma				221	Beadel et al. 1998			Rotorua	2760.42	1:5,000	RDAM 2003	Field Check		



NAME	SITE NO	SNA UNPROT	UNPSNA REF	SNA PROT	PROSNA_REF	RAP NO	RAP_REF	ED_1_ 50000	03_HA	DIG_SCALE	BASE_MAP	FIELD_CHK	CHNG_XTNT	Comment
								Lakes			Orthophotographs	required		
Rust Forest						54	Beadel et al. 1999	Taneatua	15.98	1:5,000	RDAM 2003 Orthophotographs	Field Check required		
Sisam Forest Remnant 1						87	Beadel et al. 1999	Taneatua	5.81	1:5,000	RDAM 2003 Orthophotographs	Field Check required		
Sisam Forest Remnant 2						88	Beadel et al. 1999	Taneatua	14.11	1:5,000	RDAM 2003	Field Check		
Sisam Wetland 1						57	Beadel et al. 1999	Taneatua	2.33	1:5,000	Orthophotographs RDAM 2003	required Field Check		
Sisam Wetland 2						58	Beadel et al. 1999	Taneatua	1.68	1:5,000	Orthophotographs RDAM 2003	required Field Check		
Sisam Wetland 3						25	Beadel et al. 1999	Taneatua	2.56	1:5,000	Orthophotographs RDAM 2003	required Field Check		
Sisam Wetland 4									1.91	1:5,000	Orthophotographs RDAM 2003	required Field Check		
						63	Beadel et al. 1999	Taneatua		,	Orthophotographs	required		
Sisam Wetland 5						66	Beadel et al. 1999	Taneatua	0.73	1:5,000	RDAM 2003 Orthophotographs	Field Check required		
Sisam's "Discing Reserve"						59	Beadel et al. 1999	Taneatua	23.94	1:5,000	RDAM 2003 Orthophotographs	Field Check required		
Sisam's "Office" and "Gums" Reserves						56	Beadel et al. 1999	Taneatua	43.65	1:5,000	RDAM 2003 Orthophotographs	Field Check required		
Sisam's Round Bush						04	Beadel et al. 1999	Taneatua	117.05	1:5,000	RDAM 2003	Field Check		
Sisam's Trig Bush						07	Beadel et al. 1999	Taneatua	145.45	1:5,000	Orthophotographs RDAM 2003	required Field Check		
Stanley Falls Scenic				31	Beadel et al. 1999			Taneatua	25.61	1:5,000	Orthophotographs RDAM 2003	required Field Check		
Reserve Stewardship Area				48	Beadel <i>et al.</i> 1996			Kaingaroa	139.08	1:5,000	Orthophotographs RDAM 2003	required Field Check		
(Unnamed, near Fort Galatea)				40	Beader et al. 1990			Kaiiigaioa	139.00	1.5,000	Orthophotographs	required		
Tahora P.F. Olsen						70	Beadel et al. 1999	Taneatua	53.22	1:5,000	RDAM 2003 Orthophotographs	Field Check required		
Tahuna Road		61	Beadel <i>et al</i> . 1996.					Kaingaroa	79.01	1:5,000	RDAM 2003 Orthophotographs	Field Check required		
Tait's Forest			1330.			60	Beadel et al. 1999	Taneatua	32.31	1:5,000	RDAM 2003 Orthophotographs	Field Check required		
Tarawera Cut Wildlife				19	Irving 1992, Beadel et al.			Te Teko	14.36	1:5,000	RDAM 2003	Field Check		
Management Reserve Tarawera Road Wetland		36	Beadel et al. 1996		1996, Beadel et al. 2003	17	Beadel et al. 2003	Te Teko	6.18	1:5,000	Orthophotographs RDAM 2003	required Field Check		
Tauwhare						44	Beadel 1999	Taneatua	4.43	1:5,000	Orthophotographs RDAM 2003	required Field Check		
Tauwhare Pa Scenic				19	Beadel 1999			Taneatua	11.38	1:5,000	Orthophotographs RDAM 2003	required Field Check		
Reserve					Deader 1333	00	D 11 / / 1000				Orthophotographs	required		
Te Kooti Road Tawa Forest						82	Beadel et al. 1999	Taneatua	3.30	1:5,000	RDAM 2003 Orthophotographs	Field Check required		
Te Paripari Pa Historic Reserve				20	Beadel 1999			Taneatua	1.03	1:5,000	RDAM 2003 Orthophotographs	Field Check required		
Te Pohue		72	Beadel et al. 1996					Whirinaki	627.28	1:5,000	RDAM 2003 Orthophotographs	Field Check required		
Te Rereoterangi						33	Beadel <i>et al.</i> 1996.	Taneatua	39.77	1:5,000	RDAM 2003 Orthophotographs	Field Check required		
Te Urewera National Park				66,39	Beadel <i>et al.</i> 1996, Beadel <i>et al.</i> 1999			Ikawhenua, Waimana, Kaingaroa, Taneatua, Whirinaki	216536.95	1:5,000	RDAM 2003 Orthophotographs	Field Check required		
Te Whaiti 'B'			-			74	Beadel et al. 1996	Whirinaki	1704.34	1:5,000	RDAM 2003 Orthophotographs	Field Check required		
Titoki						37	Beadel et al. 1999	Te Teko	1.68	1:5,000	RDAM 2003 Orthophotographs	Field Check required		
Tuhoe Forest 1						67	Beadel et al. 1999	Taneatua	9.92	1:5,000	RDAM 2003 Orthophotographs	Field Check required		



		NA PROT	UNPSNA REF	SNA PROT	PROSNA_REF	RAP NO	RAP_REF	ED_1_ 50000	03_HA	DIG_SCALE	BASE_MAP	FIELD_CHK	CHNG_XTNT	Comment
Tuhoe Forest 2						68	Beadel et al. 1999	Taneatua	23.77	1:5,000	RDAM 2003 Orthophotographs	Field Check required		
Tuhoe Forest 3						69	Beadel et al. 1999	Taneatua	44.92	1:5,000	RDAM 2003 Orthophotographs	Field Check required		
Tuhoe Forest Wetlands						6	Beadel et al. 1999	Taneatua	12.45	1:5,000	RDAM 2003 Orthophotographs	Field Check required		
Tuhua Wetland	1	118	Beadel <i>et al.</i> 1996.					Otanewainuku	5.73	1:5,000	RDAM 2003 Orthophotographs	Field Check required		
Tuketoromiro	(62	Beadel <i>et al.</i> 1996.					Kaingaroa	25.23	1:5,000	RDAM 2003 Orthophotographs	Field Check required		
Tunanui Stream Inlet			1330.			72	Beadel et al. 1999	Taneatua	10.48	1:5,000	RDAM 2003 Orthophotographs	Field Check required		
Wahieroa Wetland						10	Beadel et al. 2003	Te Teko	3.86	1:5,000	RDAM 2003 Orthophotographs	Field Check required		
Waikokopu Stream	7	77	Beadel <i>et al.</i> 1996.					Ikawhenua	1792.93	1:5,000	RDAM 2003 Orthophotographs	Field Check required		Exact boundary difficult to locate because of shading from pines along boundary
Waimana Gorge Scenic Reserve				32	Beadel et al. 1999			Taneatua	239.12	1:5,000	RDAM 2003 Orthophotographs	Field Check required		
Waiohau Conservation Area				2	Beadel et al. 1999.			Kaingaroa	1346.36	1:5,000	RDAM 2003 Orthophotographs	Field Check required		
Waiohau Extension	2	26	Beadel 1995, Beadel <i>et al.</i> 1999			26	Beadel 1999	Taneatua	181.41	1:5,000	RDAM 2003 Orthophotographs	Field Check required		
Waiohau Wetland	6	63	Beadel <i>et al</i> . 1996.					Kaingaroa	7.33	1:5,000	RDAM 2003 Orthophotographs	Field Check required		
Waioho Stream						65	Beadel et al. 1999	Taneatua	0.04	1:5,000	RDAM 2003 Orthophotographs	Field Check required		
Waiotahi Conservation Area Extension						11	Beadel et al. 1999	Taneatua	237.88	1:5,000	RDAM 2003 Orthophotographs	Field Check required		
Waiotane Scenic Reserve				24	Beadel et al. 1999			Taneatua	254.78	1:5,000	RDAM 2003 Orthophotographs	Field Check required		
Waiotane Stream						73	Beadel et al. 1999	Taneatua	4.93	1:5,000	RDAM 2003 Orthophotographs	Field Check required		
Waioweka Conservation Area				120	Beadel et al. 1996			Waioweka	47046.57	1:5,000	RDAM 2003 Orthophotographs	Field Check required		
West End						23	Beadel et al. 1999	Taneatua	8.71	1:5,000	RDAM 2003 Orthophotographs	Field Check required		
Whakatane Estuary					Beadel et al. 1996.			Te Teko	127.57	1:5,000	RDAM 2003 Orthophotographs	Field Check required		
Whakatane Heads						43	Beadel et al. 1999	Taneatua	37.15	1:5,000	RDAM 2003 Orthophotographs	Field Check required		
Whakatane River Oxbow						61	Beadel et al. 1999	Taneatua	4.58	1:5,000	RDAM 2003 Orthophotographs	Field Check required		
Whakatane River Stewardship Area				38	Beadel et al. 1999			Taneatua	12.05	1:5,000	RDAM 2003 Orthophotographs	Field Check required		
Wheao	45	5,64	Beadel <i>et al.</i> 1996		DOC GIS			Kaingaroa	47.81	1:5,000	RDAM 2003 Orthophotographs	Field Check required		
Whirinaki				67	Beadel et al. 1996			Whirinaki, Kaingaroa, Ikawhenua, Kaimanawa	55404.41	1:5,000	RDAM 2003 Orthophotographs	Field Check required		
White Pine Bush Scenic Reserve				28	Beadel et al. 1999			Taneatua	5.19	1:5,000	RDAM 2003 Orthophotographs	Field Check required		
Wordsworth Covenant Extension						90	Beadel et al. 1999	Taneatua	7.73	1:5,000	RDAM 2003 Orthophotographs	Field Check required		
Young Wetlands						6c	Beadel et al. 2003	Te Teko	26.30	1:5,000	RDAM 2003 Orthophotographs	Field Check required		
Matuku Wildlife Management Reserve				6b	Beadel et al. 2003			Te Teko	11.62	1:5,000	RDAM 2003 Orthophotographs	Field Check required		
Old Rangitaiki River Channel				30a	Beadel et al. 2003			Te Teko	18.03	1:5,000	RDAM 2003 Orthophotographs	Field Check required		



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Awaiti Conservation Area				36	Beadel et al. 2003, Beadel et al. 1996, Irving 1992			Te Teko	2.98	1:5,000	RDAM 2003 Orthophotographs	Field Check required		
Orini Wildlife Management Reserve				08	Beadel et al. 2003			Te Teko	11.02	1:5,000	RDAM 2003 Orthophotographs	Field Check required		
Earnest Pukatea	***************************************	c ·				24	Beadel et al. 2003	Te Teko	0.24	1:5,000	RDAM 2003 Orthophotographs	Field Check required		
Waioho Kahikatea		-				25	Beadel et al. 2003	Te Teko	1.17	1:5,000	RDAM 2003 Orthophotographs	Field Check required		
Braemar Road						27	Beadel et al. 2003	Te Teko	1.36	1:5,000	RDAM 2003 Orthophotographs	Field Check required		
Needham Ponds						28	Beadel et al. 2003	Te Teko	2.28	1:5,000	RDAM 2003 Orthophotographs	Field Check required		
Orini Stream						29	Beadel et al. 2003	Te Teko	4.49	1:5,000	RDAM 2003 Orthophotographs	Field Check required		
Tarawera River B						31	Beadel et al. 2003	Te Teko	2.30	1:5,000	RDAM 2003 Orthophotographs	Field Check required		
Park Road Kanuka						33	Beadel et al. 2003	Te Teko	5.63	1:5,000	RDAM 2003 Orthophotographs	Field Check required		
Kawerau Road Kanuka						34	Beadel et al. 2003	Te Teko	0.50	1:5,000	RDAM 2003	Field Check		
Port Ohope Wharf						94	Beadel et al. 1999	Taneatua	2.09	1:5,000	Orthophotographs RDAM 2003	required Field Check		
Murphy Road						78	Beadel et al. 1999	Taneatua	17.74	1:5,000	Orthophotographs RDAM 2003	required Field Check		
Waimana Gorge Scenic						10	Beadel et al. 1999	Taneatua	153.12	1:5,000	Orthophotographs RDAM 2003	required Field Check		
Reserve Extension Lake Tahuna Wetland	,					30	Beadel et al. 2003	Te Teko	43.67	1:5,000	Orthophotographs RDAM 2003	required Field Check		
Stewardship Area ("Matahina				46	Beadel 1993, Beadel et			Kaingaroa	274.82	1:5,000	Orthophotographs RDAM 2003	required Field Check		
Forest") Pekepeke Stream		58	Beadel et al.		al. 1996			Kaingaroa	28.36	1:5,000	Orthophotographs RDAM 2003	required Field Check		
Te Kooti Road Block			1996.			16	Beadel et al. 1999	Taneatua	110.77	1:5,000	Orthophotographs RDAM 2003	required Field Check		
Waiotane Scenic Reserve						17	Beadel et al. 1999	Taneatua	340.59	1:5,000	Orthophotographs RDAM 2003	required Field Check		
Extension Waingarara Stream						53	Beadel et al. 1999	Taneatua	89.95	1:5,000	Orthophotographs RDAM 2003	required Field Check		
Lake Taikehu						21	Beadel et al. 2003	Te Teko	5.45	1:5,000	Orthophotographs RDAM 2003	required Field Check		
Waimana Forest Farms						91	Beadel et al. 1999	Taneatua	58.00	1:5,000	Orthophotographs RDAM 2003	required Field Check		
Rotoehu Extension		117	Beadel et al.					Otanewainuku	50.54	1:5,000	Orthophotographs RDAM 2003	required Field Check		
			1996, Beadel 1994							,	Orthophotographs	required		
Awakaponga		107	Beadel et al. 1996					Otanewainuku	175.63	1:5,000	RDAM 2003 Orthophotographs	Field Check required		
Oldham Covenant Extension		114	Beadel <i>et al.</i> 1996, Beadel 1994					Otanewainuku	189.53	1:5,000	RDAM 2003 Orthophotographs	Field Check required		
Lake Pupuwharau		29	Beadel 1992, Beadel <i>et al.</i> 1996			19	Beadel et al. 2003	Te Teko, Kaingaroa	89.03	1:5,000	RDAM 2003 Orthophotographs	Field Check required		
Tukiri Block		38	Beadel et al. 1996					Te Teko	54.52	1:5,000	RDAM 2003 Orthophotographs	Field Check required		
Wekanui		69	Beadel <i>et al.</i> 1996.					Whirinaki	39.13	1:5,000	RDAM 2003 Orthophotographs	Field Check required		The riparian strips in the gullies are protected with a Landcorp covenant, an agreement subject to the passing of the land into private ownership from



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														Crown Land
Hauone Stream Wetland		108	Beadel <i>et al.</i> 1996, Beadel 1994					Otanewainuku	1.70	1:5,000	RDAM 2003 Orthophotographs	Field Check required		
Kaihua			1001			2	Beadel et al. 1999	Taneatua	494.90	1:5,000	RDAM 2003 Orthophotographs	Field Check required		
Tebutt Kahikatea						29	Beadel et al. 1999	Taneatua	1.37	1:5,000	RDAM 2003 Orthophotographs	Field Check required		
McGougan Kahikatea						28	Beadel et al. 1999	Taneatua	0.67	1:5,000	RDAM 2003 Orthophotographs	Field Check required		
Williams Wetland						46	Beadel et al. 1999	Taneatua	5.33	1:5,000	RDAM 2003 Orthophotographs	Field Check required		
Taneatua Foothills						55	Beadel et al. 1999	Taneatua	91.55	1:5,000	RDAM 2003 Orthophotographs	Field Check required		
Arawaputana Stream						71	Beadel et al. 1999	Taneatua	7.09	1:5,000	RDAM 2003 Orthophotographs	Field Check required		
Rotoehu Forest (Eastern Outlier)				95	Beadel et al. 1996			Otanewainuku	275.83	1:5,000	RDAM 2003 Orthophotographs	Field Check required		
Pokairoa Road Wetlands		59	Beadel et al. 1996.					Kaingaroa	35.10	1:5,000	RDAM 2003 Orthophotographs	Field Check required		
Waipapa Stream		119	Beadel <i>et al.</i> 1996.					Otanewainuku	518.12	1:5,000	RDAM 2003 Orthophotographs	Field Check required		
Awahou Kahikatea			1996.			27	Beadel et al. 1999	Taneatua	1.26	1:5,000	RDAM 2003 Orthophotographs	Field Check required		
Maawhai						41	Beadel et al. 2003	Te Teko	1.55	1:5,000	RDAM 2003	Field Check		
Watchorn's Quarry						80	Beadel et al. 1999	Taneatua	70.63	1:5,000	Orthophotographs RDAM 2003	required Field Check		
Waikarewhenua		83	Beadel et al.					Waimana	159.56	1:5,000	Orthophotographs RDAM 2003	required Field Check		
Tumurau Extension		39	1996. Beadel 1992, Beadel <i>et al.</i> 1996			6a	Beadel et al. 2003	Te Teko	7.62	1:5,000	Orthophotographs RDAM 2003 Orthophotographs	required Field Check required		
Ridge Road			Beader et al. 1990			77	Beadel et al. 1999	Taneatua	90.32	1:5,000	RDAM 2003 Orthophotographs	Field Check required		
Rewatu Road						22	Beadel et al. 1999	Taneatua	337.68	1:5,000	RDAM 2003 Orthophotographs	Field Check required		
Raroa-Matatere						09	Beadel et al. 1999	Taneatua	511.72	1:5,000	RDAM 2003 Orthophotographs	Field Check required		
Te Rake						73	Beadel <i>et al.</i> 1996.	Whirinaki	56.27	1:5,000	RDAM 2003	Field Check		
Tauwharemanuka						81	Beadel et al. 1999	Waimana	813.78	1:5,000	Orthophotographs RDAM 2003 Orthophotographs	required Field Check required		
Ohinekoao B		112	Beadel <i>et al.</i> 1996, Beadel					Otanewainuku	84.74	1:5,000	RDAM 2003 Orthophotographs	Field Check required		
Puhikoko			1994			03	Beadel et al. 1999	Taneatua	616.38	1:5,000	RDAM 2003 Orthophotographs	Field Check required		
Lake Aniwhenua		54	Beadel <i>et al.</i> 1996.					Kaingaroa	266.21	1:5,000	RDAM 2003	Field Check		
Ngati Awa			1330.			18	Beadel et al. 1999	Taneatua	121.01	1:5,000	Orthophotographs RDAM 2003 Orthophotographs	required Field Check required		
Mitchell Property						64	Beadel et al. 1999	Taneatua	54.20	1:5,000	RDAM 2003 Orthophotographs	Field Check required		
Moetahanga Stream		57	Beadel <i>et al</i> . 1996.					Kaingaroa	95.94	1:5,000	RDAM 2003 Orthophotographs	Field Check required		
Maungapohatu II		80	Beadel <i>et al.</i> 1996.					Waimana	1880.30	1:5,000	RDAM 2003 Orthophotographs	Field Check required		
Heruiwi		70	Beadel <i>et al.</i> 1996					Whirinaki	204.95	1:5,000	RDAM 2003 Orthophotographs	Field Check required		
Kiwinui Foothills						76	Beadel et al. 1999	Taneatua	134.20	1:5,000	RDAM 2003	Field Check		
Lake Otumahi		28	Beadel et al. 1996			22	Beadel et al. 1999	Te Teko,	31.80	1:5,000	Orthophotographs RDAM 2003	required Field Check		
								Kaingaroa			Orthophotographs	required		



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Te Kairere Wetland						81	Beadel <i>et al.</i> 1999.	Taneatua	2.56	1:5,000	RDAM 2003 Orthophotographs	Field Check required		
Mangaone Scenic Reserve Extension	,	109	Beadel <i>et al.</i> 1996, Beadel 1994					Otanewainuku	142.33	1:5,000	RDAM 2003 Orthophotographs	Field Check required		
Waiwhero Road Wetland		44	Beadel <i>et al.</i> 1996.					Kaingaroa	6.56	1:5,000	RDAM 2003 Orthophotographs	Field Check required		
Waikanapiti	5	5,14	Beadel <i>et al.</i> 1996, Beadel <i>et al.</i> 1998					Rotorua Lakes	903.87	1:5,000	RDAM 2003 Orthophotographs	Field Check required		
Ruatahuna (Part)		76	Beadel <i>et al.</i> 1996.					Ikawhenua	17129.56	1:5,000	RDAM 2003 Orthophotographs	Field Check required		
Maungawhakamana		5	Beadel <i>et al.</i> 1996, Beadel <i>et al.</i> 1998					Rotorua Lakes	234.55	1:5,000	RDAM 2003 Orthophotographs	Field Check required		Listed as protected in Beadel <i>et al.</i> 1996 (based on info provided by land manager). Subsequently found not to be currently formally protected
Mangawhio Stream		51	Beadel et al. 1996					Kaingaroa	2016.16	1:5,000	RDAM 2003 Orthophotographs	Field Check required		formally protected Listed as protected in Beadel et al. 1996 (based on info provided by land manager). Subsequently found not to be currently formally protected
Puhipuhi Road		6	Beadel et al. 1996					Rotorua Lakes	84.64	1:5,000	RDAM 2003 Orthophotographs	Field Check required		Listed as protected in Beadel et al. 1996 (based on info provided by land manager). Subsequently found not to be currently formally protected
Tarawera Scarp		8	Beadel <i>et al.</i> 1996, Beadel <i>et al.</i> 1998					Rotorua Lakes	169.20	1:5,000	RDAM 2003 Orthophotographs	Field Check required		Listed as protected in Beadel et al. 1996 (based on info provided by land manager). Subsequently found not to be currently formally protected
Waiaute Stream Wetlands		10	Beadel <i>et al.</i> 1996, Beadel <i>et al.</i> 1998					Rotorua Lakes	61.80	1:5,000	RDAM 2003 Orthophotographs	Field Check required		Listed as protected in Beadel et al. 1996 (based on info provided by land manager). Subsequently found not to be currently formally protected
Putauaki		52	Beadel et al. 1996					Kaingaroa	472.96	1:5,000	RDAM 2003 Orthophotographs	Field Check required		Listed as protected in Beadel et al. 1996 (based on info provided by land manager). Subsequently found not to be currently formally protected
Tumutara Road Wetland		9	Beadel <i>et al.</i> 1996, Beadel <i>et al.</i> 1998					Rotorua Lakes	3.33	1:5,000	RDAM 2003 Orthophotographs	Field Check required		Listed as protected in Beadel <i>et al.</i> 1996 (based on info provided by land



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														manager). Subsequently found not to be currently formally protected
Rimu Forest Remnant		122	Beadel et al. 1996					Kaingaroa	0.97	1:5,000	RDAM 2003 Orthophotographs	Field Check required		Listed as protected in Beadel et al. 1996 (based on info provided by land manager). Subsequently found not to be currently formally protected
Matai Road covenant				50	Beadel et al. 1996			Kaingaroa	289.64	1:5,000	RDAM 2003 Orthophotographs	Field Check required		
Otamarakau-Matata- Whakatane Dunes		23	Irving and Beadel 1992, Beadel et al. 1996, Beadel et al. 2003			7j	Beadel et al. 2003	Te Teko	0.01	1:5,000	RDAM 2003 Orthophotographs	Field Check required		
Waimana River		84	Beadel et al. 1996					Waimana	1474.11	1:5,000	RDAM 2003 Orthophotographs	Field Check required		
Tarepe Stream						79	Beadel et al. 1999	Taneatua	31.76	1:5,000	RDAM 2003 Orthophotographs	Field Check required		
Tawhana		82	Beadel <i>et al.</i> 1996.					Waimana	257.78	1:5,000	RDAM 2003 Orthophotographs	Field Check required		
Taiarahia						08	Beadel et al. 1999	Taneatua	1785.23	1:5,000	RDAM 2003 Orthophotographs	Field Check required		A small part of this site extends into the Waimana ED and this part was also identified as part of site no. 85 (Whakatane River) in the 1996 Natural Heritage of the Whakatane District report.
Whakatane River		85	Beadel et al. 1996					Waimana	7431.79	1:5,000	RDAM 2003 Orthophotographs	Field Check required		Small parts of this site extends into the Taneatua ED and these are consequently also included as parts of 2 sites (Te Urewera Extension (Tuhoe Forest) and Taiarahia))
Te Urewera Extension (Tuhoe Forest)						5	Beadel et al. 1999	Taneatua	954.79	1:5,000	RDAM 2003 Orthophotographs	Field Check required		A small part of this site extends into the Waimana ED and this part was also identified as part of site no. 85 (Whakatane River) in the 1996 Natural Heritage of the Whakatane District report.
Kapu Te Rangi Historic Reserve				51	Beadel et al. 1999			Taneatua	4.95	1:5,000	RDAM 2003 Orthophotographs	Field Check required		



METADATA FOR WHAKATANE DISTRICT SNA'S 1996 BASED ON 2003 RDAM



INTERIM METADATA FORM – ENVIRONMENT BAY OF PLENTY

Created from a subset of metadata categories listed in ArcCatalogue

1. IDENTIFICATION INFORMATION

Data Set Name:

Whakatane_Natural_Areas_1996_based_on_RDAM_2003_(Final_version)

Data Set Abstract: [Briefly describes the "what" aspects of the data. For example, what information is in the data set? What area is covered?]

Environment Bay of Plenty commissioned Wildlands Consultants Ltd to undertake mapping of the Natural Heritage of the Whakatane District. This project involved taking hard copy maps from a 1996 report (Beadel *et al.* 1996) and capturing the data in digital form to show the extent of significant indigenous vegetation. The extent of indigenous vegetation for 195 sites has been mapped.

Dataset Purpose: [Describes the "why" aspects. For example, why was the data set created? Recommendations on the types of uses to which the data may or may not be applied should be described in this element]

This mapping project captures the spatial extent of significant indigenous vegetation at 195 sites in 1996 in a digital form that can be used as a benchmark for future studies.

Supplemental Information:

Access Constraints: [Restrictions or legal prerequisites for accessing the data. If there are no access constraints the value of the element should be "None".]

None

Use Constraints: [Any legal prerequisites for using the data after access is granted. If there are no access constraints the value of the element should be "None".]

None

Data Set Credit:

Data Set Originator: [The name of the organization or individual who developed the data; for example, authors would be the originators of a book.]

Wildland Consultants 2005

Publication Date and Edition: [Publication date should be a year, a year and month, or a year, month, and day. Dates should be provided in the format YYYYMMDD, for example 20000921 for the date September 21, 2000. If dates are provided in a different format, searching against this date will produce poor results. The publication date can also be "Unknown" or "Unpublished material". If appropriate, you should also provide information about the edition, the series name and issue]

20050621

Currentness Record: [Need to know the currentness of the data in relation to the "ground condition"; that is, when the real world looked the way it is described by the data. For example, for a remotely sensed image the currentness reference would be "ground condition" and the time period would be the date the image was created. Other types of data might be collected on several different dates or over an extended period of time.]

Based on Beadel et al 1996, and the RDAM 2003 orthophotographs

Progress: [The current state of the data; this element's value must be one of the choices below.]

Complete



Update Frequency: [The frequency with which changes and additions are made to the data after it is initially completed. This element's value can be one of the choices below or you can type in text describing when the data is updated.]

None planned

Key Words for:

Theme: [Describe the subject of the data, such as pipes or vegetation.] Significant Natural Areas

Place: [Describe the geographic location of the data, such as Essex County or Yellowstone National Park.]

Whakatane District

Stratum: [Describe the vertical location of the data, such as seafloor or stratosphere.] Terrestrial

Temporal: [Provide a time reference for the data, such as pre-Columbian or World War II.] 1996

2. DATA SET CONTACT DETAILS

Contact Organisation: Wildland Consultants Limited

Contact Position: Sarah Beadel, Director

Programme: Environment Bay of Plenty Geothermal Vegetation

Contact Address:

Ph.: 07 3439017 Fax.: 07 3439018

Email: ecology@wildlands.co.nz

3. DATA QUALITY

Logical Consistency Report: [Logical consistency describes the topological integrity of the data. For example, do lines intersect only where intended? Are there any duplicate lines? Are any polygons too small? You may want to report the software used to test and verify the topological integrity of the data.

Completeness Report: [Completeness includes information about omissions, selection criteria, generalization, definitions used, and other rules used to derive the data. For example, you may want to include information about thresholds such as the minimum area for polygons.]

Accuracy Report:

Positional Accuracy: Based on the accuracy of the RDAM 2003 orthophotographs provided by Environment Bay of Plenty. The hard copy maps in the 1996 report were presented at a range of scales 1:12,500-1:78,000.

Data Integrity: e.g. how accurately it represents what is actually on the ground. No fieldwork was undertaken.

In terms of existing published information, the only Protected Natural Area Programme (PNAP) report that had been completed at the time the 1996 report was prepared was for Otanewainuku Ecological District (Beadel 1994). The sites identified in this PNAP that were within the Whakatane District were automatically included in the 1996 SNA report. Sites listed in the Bay of Plenty Conservation Management Strategy (Department of Conservation 1997) were assessed for significance and were included if they met the SNA significance



criteria. Other natural areas in the District were evaluated during the SNA project. For some sites no information on natural values existed and these were identified using aerial photography (dated 1992-1994, at a scale of 1:25,000 – 1:50,000), then field checked and their values evaluated against the SNA criteria.

Shadows on the digital aerial mosaic make it difficult to determine the boundaries in some places, particularly adjacent to pine plantations.

Limitations: No fieldwork was undertaken for this mapping project

Source Information:

Source scale: 1:5,000

Type of source material: RDAM 2003 orthophotographs

Source citation: RDAM 2003 orthophotographs

Time period of source material: 2003

Data Acquisition Method(s):

4. ATTRIBUTE INFORMATION

Attribute titles, values and descriptions: [Add a description of the attribute title as well as the values contained by each attribute]

- 1. DATE: The Date of digital mapping (for future reference) (NOT DONE YET)
- 2. NAME: Name (most appropriate name if sites has had different names in the past)
- 3. SITE_NO: Unique identifier (site number) (this would be a new number so each site throughout the region would have a unique number)
- 4. SNA_UNPROT: SNA unprotected (state type and number in report)
- 5. UNPSNA_REF: Source (report)
- 6. SNA_PROT: SNA protected (state type and number in report)
- 7. PROSNA_REF: Source
- 8. RAP_NO: RAP number
- 9. RAP REF: Source
- 10. ED_1_50000: Ecological District
- 11. 03_Ha: Area (ha)
- 12. DIG_SCALE: Digitised Scale
- 13. BASE_MAP: Base Map
- 14. FIELD CHK: Field check needed



- 15. CHNG_XTNT: Extent (broad comment on any change in extent since reference document completed)
- 16. COMMENTS: Any additional comments
- 17. LVL_CONFID: Level of confidence held about the accuracy of the SNA boundaries (high, medium or low).

5. METADATA REFERENCE

Metadata date:

20050623

Contact Organisation:

Wildland Consultants Limited

Contact Position: [The party who is responsible for the metadata must be included as the metadata contact; they should be able to answer questions about or receive reports about errors in the metadata.]

Sarah Beadel, Director

Contact Address:

Ph.: 07 3439017 Fax.: 07 3439018

Email: ecology@wildlands.co.nz

6. FURTHER METADATA INFORMATION

Related Information:

General Notes:

Document Links:

Beadel S.M.; Townsend A.J. and Shaw W.B. 1996: Natural heritage of the Whakatane District. *Wildland Consultants Ltd Contract Report No. 140*. Prepared for Whakatane District Council. 280 pp plus maps.

