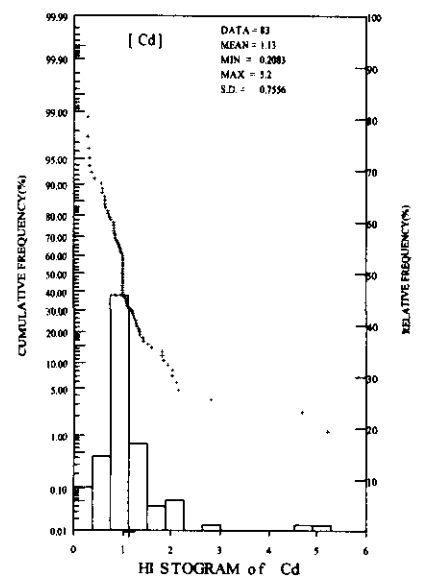
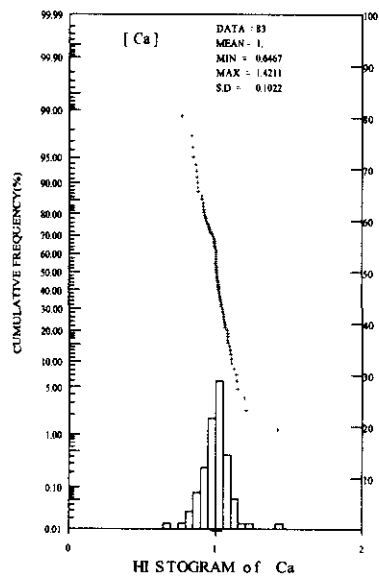
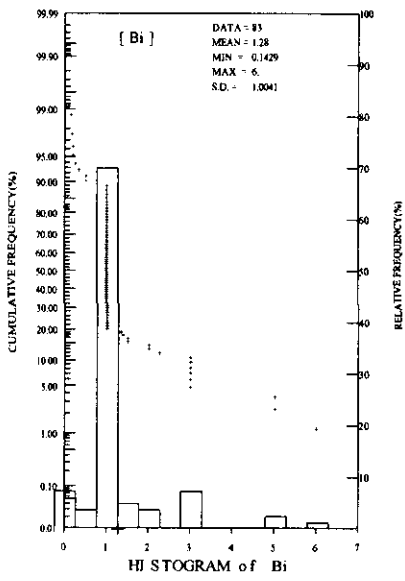
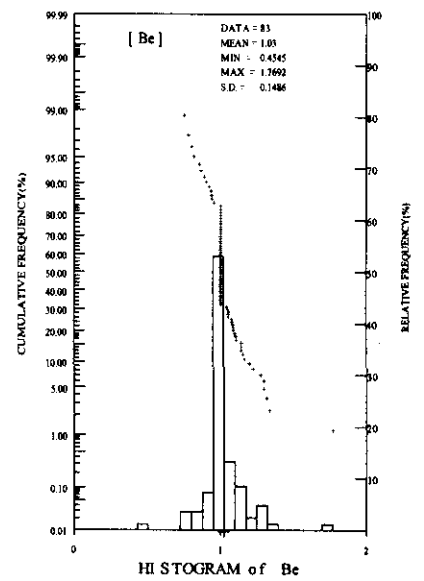
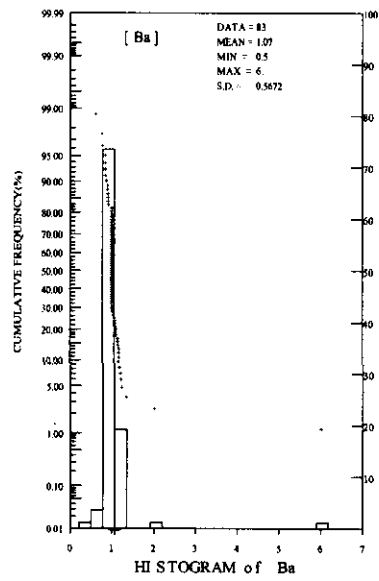
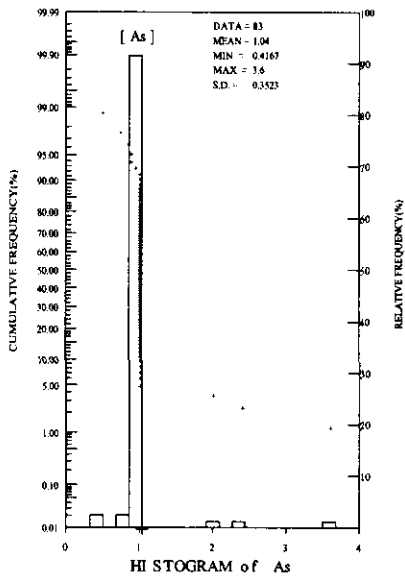
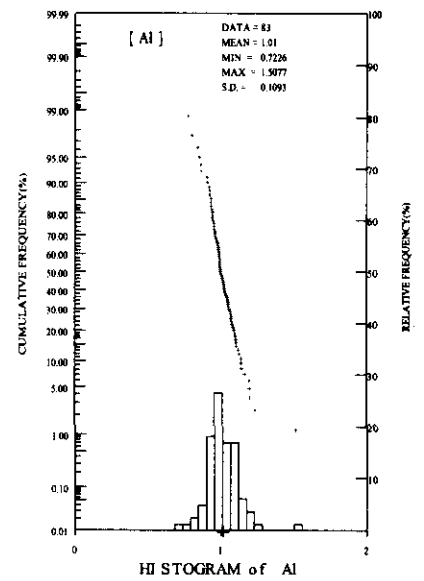
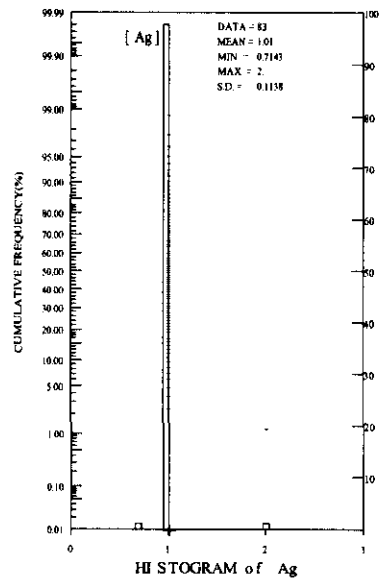
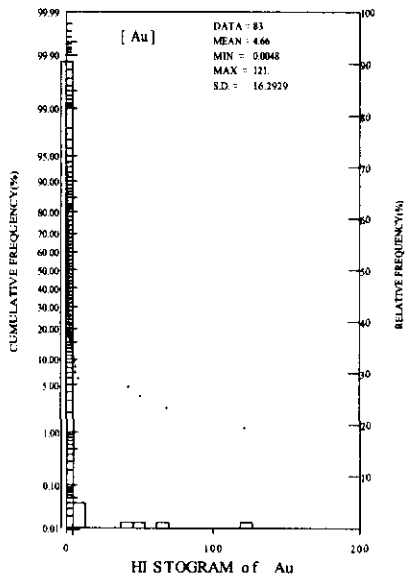
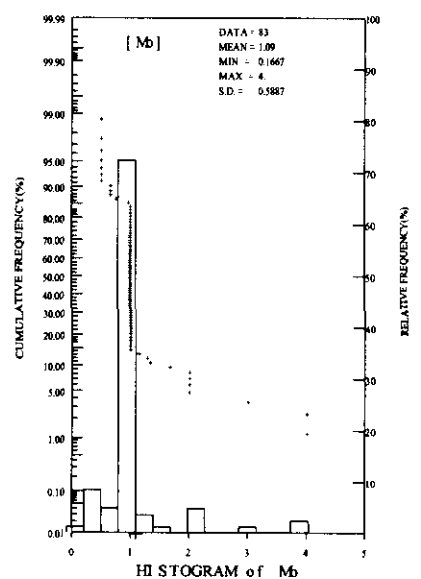
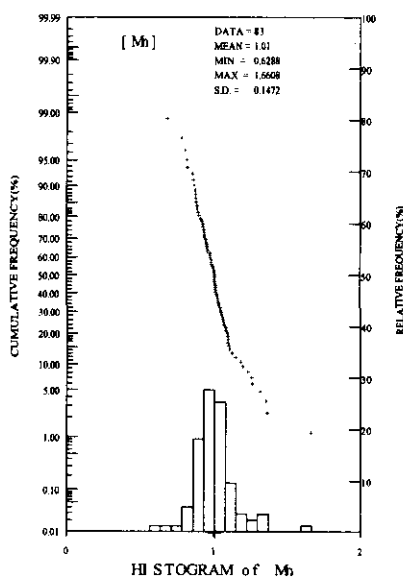
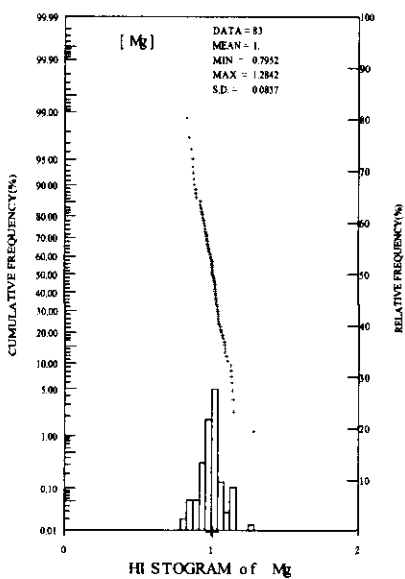
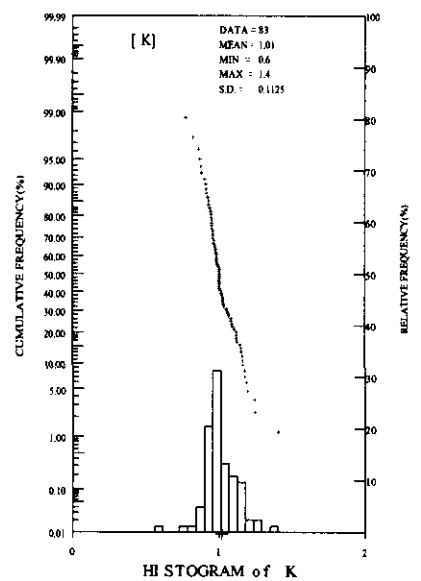
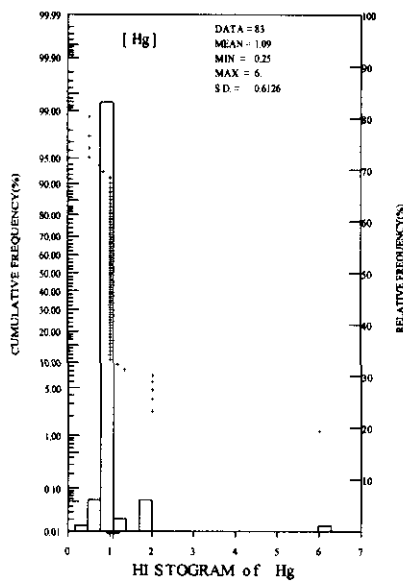
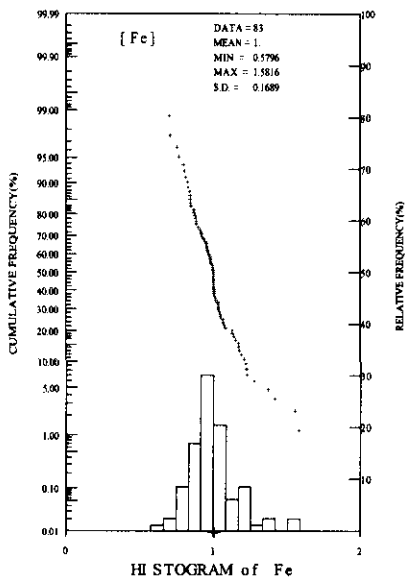
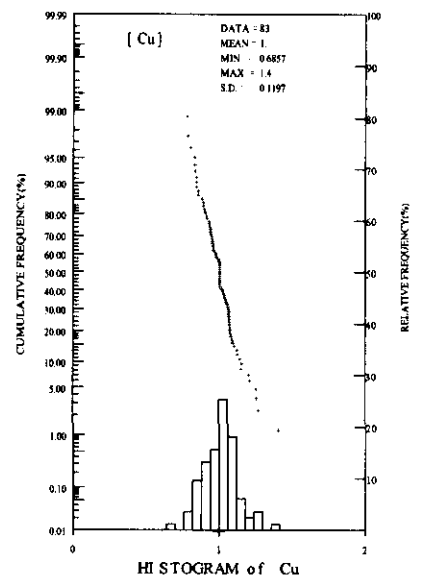
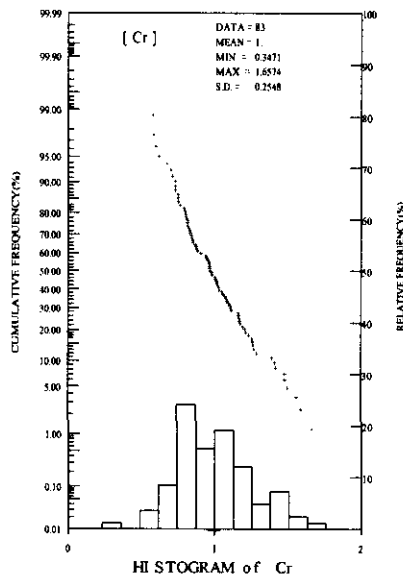
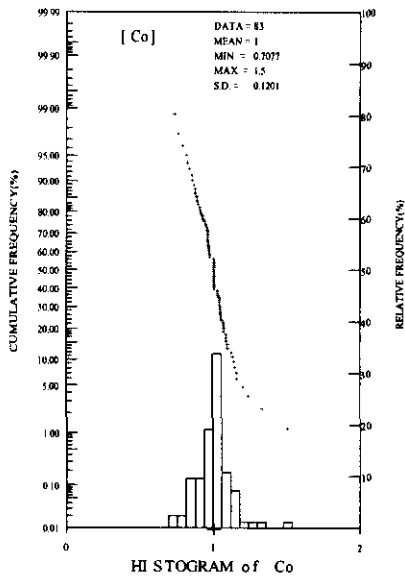


Appendix5 Chemical analysis data of stream sediment samples (11)

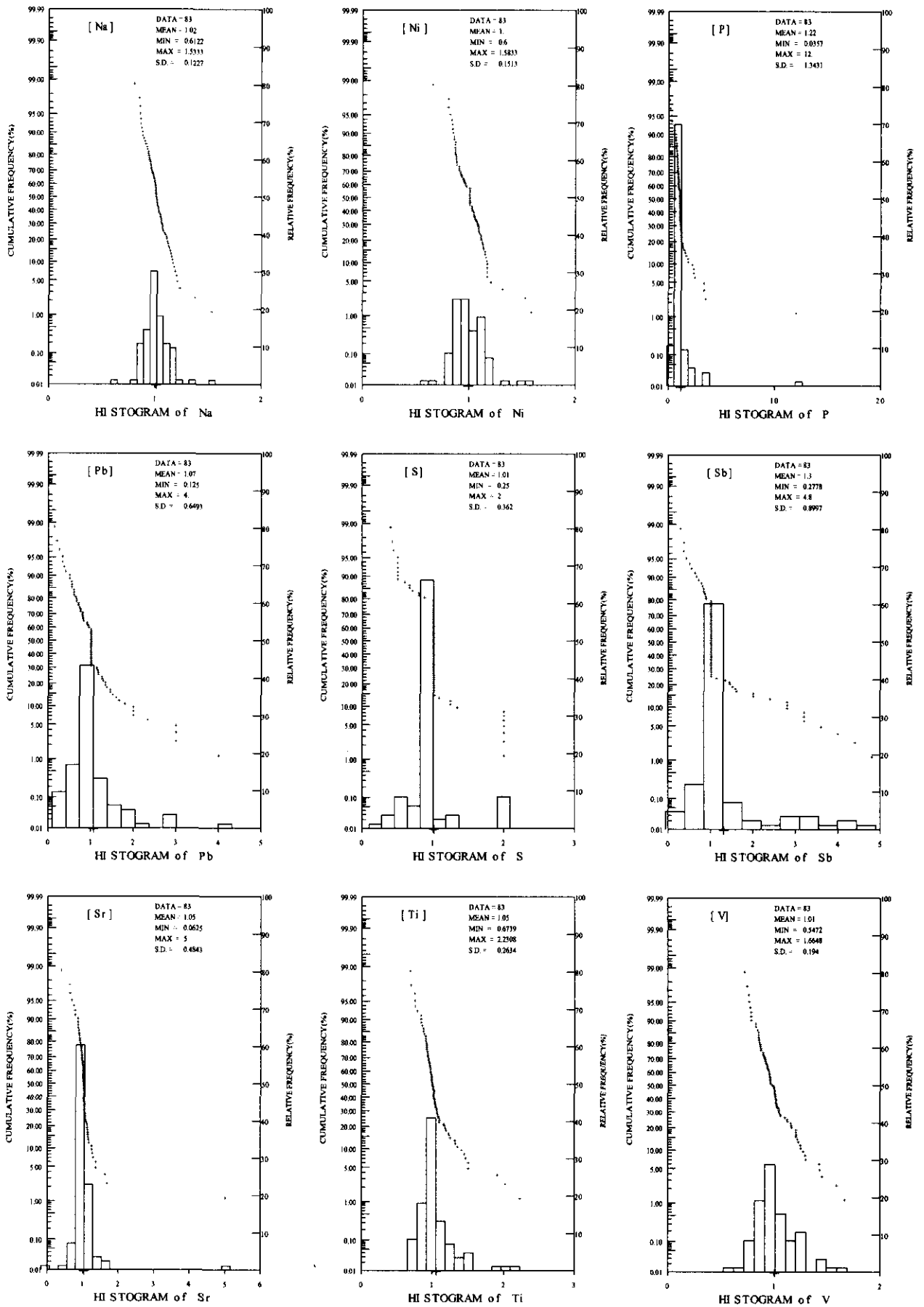
code element	Easting	Northing	system	Au-ICP21 Au ppm	Hg-CV41 Hg ppm	ME-ICP61 Ag ppm	ME-ICP61 Al %	ME-ICP61 As ppm	ME-ICP61 Ba ppm	ME-ICP61 Be ppm	ME-ICP61 Bi ppm	ME-ICP61 Ca %	ME-ICP61 Cd ppm	ME-ICP61 Co ppm	ME-ICP61 Cr ppm	ME-ICP61 Cu ppm	ME-ICP61 Fe %	ME-ICP61 K %	ME-ICP61 Mg %	ME-ICP61 Mn ppm	ME-ICP61 Mo ppm	ME-ICP61 Na %	ME-ICP61 Ni ppm	ME-ICP61 P ppm	ME-ICP61 Pb ppm	ME-ICP61 S %	ME-ICP61 Sb ppm	ME-ICP61 Sr ppm	ME-ICP61 Ti %	ME-ICP61 V ppm	ME-ICP61 W ppm	ME-ICP61 Zn ppm	
RN017	1930982	3882937	Navua	<0.001	0.01	<0.5	6.04	15	240	<0.5	15	2.18	3.8	51	54	132	20.3	0.69	1.86	2010	16	1.12	27	650	29	0.01	20	228	0.98	960	10	271	
RN018	1931023	3882799	Navua	<0.001	0.04	<0.5	4.65	18	160	<0.5	17	2.45	5.9	73	83	156	>25.0	0.29	2.92	2800	20	0.88	46	290	31	<0.01	18	180	1.06	1118	10	371	
RN019	1929915	3881912	Navua	<0.001	0.04	<0.5	7.16	15	260	<0.5	0.6	10	3.13	2.6	46	29	100	19.82	0.54	2.15	2690	16	1.61	17	750	29	0.01	19	441	1.16	949	10	329
RN020	1929538	3883413	Navua	<0.001	0.03	<0.5	6.42	12	240	<0.5		6	2.57	3.2	52	63	117	19.78	0.5	1.84	2210	17	1.21	25	470	24	0.01	15	269	0.74	686	10	282
RN021	1928754	3880822	Navua	0.015	0.02	<0.5	8.41	<5	190	<0.5	0.7	9	2.78	1.2	23	61	35	11.64	0.43	1.44	1765	9	1.72	15	320	22	0.01	12	440	0.68	203	10	182
RN022	1929295	3881667	Navua	0.002	0.05	<0.5	5.24	17	190	<0.5		17	2.62	6.6	64	31	103	>25.0	0.39	1.92	3790	23	1.36	21	690	39	<0.01	22	330	1.27	1198	10	476
RN023	1938626	3877731	Navua	0.01	0.01	<0.5	6.63	13	90	<0.5		6	0.79	2.7	38	33	105	20.1	0.33	1.03	2240	12	0.58	20	130	26	<0.01	15	19	0.74	553	10	394
RN023-1	1938626	3877731	Navua	<0.001	0.01	<0.5	6.59	11	90	<0.5		8	0.79	1.5	28	36	72	15.15	0.36	1.03	1800	9	0.61	16	200	19	<0.01	15	32	0.81	475	<10	283
RN024	1938394	3877300	Navua	0.002	0.01	<0.5	5.24	21	130	<0.5		15	2.25	5.4	79	86	127	>25.0	0.26	2.51	2420	21	0.69	42	130	31	<0.01	19	80	0.82	991	10	361
RN025	1938630	3876603	Navua	0.002	0.01	<0.5	5.63	11	50	<0.5		5	1.21	1.9	25	62	66	17.14	0.2	0.92	2550	9	0.36	14	30	20	<0.01	14	10	0.68	397	<10	297
RN026	1939756	3877822	Navua	0.005	0.01	<0.5	6.5	<5	190	<0.5		7	0.45	<0.5	18	74	66	12.95	0.97	0.81	1165	7	0.66	22	280	22	0.01	17	22	0.88	485	<10	190
RN027	1939812	3877831	Navua	0.388	0.01	<0.5	6.95	8	70	<0.5		6	0.74	0.5	19	105	53	11.1	0.44	1.07	1425	6	0.96	32	260	20	0.01	12	49	0.77	311	<10	215
RN028	1941175	3875304	Coastal	0.002	0.01	<0.5	8.7	<5	60	<0.5	<2	0.91	1.1	26	97	76	11.21	0.32	1.05	1935	7	0.86	33	310	21	0.01	10	39	0.63	361	<10	171	
RN029	1941609	3875201	Coastal	0.003	0.01	<0.5	7.19	7	70	<0.5	<2	1.03	0.7	15	46	37	8.08	0.49	0.98	1355	3	0.96	8	320	20	0.01	8	56	0.7	297	<10	150	
RN030	1941813	3875084	Coastal	0.001	0.01	<0.5	7.67	<5	60	<0.5	<2	1.02	1	17	43	45	8.47	0.41	0.99	1240	3	0.81	8	390	14	0.02	15	48	0.58	221	<10	145	
RN031	1942222	3874600	Coastal	<0.001	0.01	<0.5	7.47	8	60	<0.5	<2	0.46	<0.5	12	26	38	11.19	0.2	0.59	1510	4	0.57	5	300	20	0.01	10	40	0.72	228	<10	197	
RN033	1943954	3873381	Coastal	<0.001	0.02	<0.5	8.35	<5	60	<0.5	<2	1.16	0.6	20	55	46	8.21	0.22	1.02	1485	3	0.67	8	290	11	0.02	8	77	0.54	224	<10	134	
RN033-1	1943954	3873381	Coastal	0.004	0.02	<0.5	8.32	<5	60	<0.5	<2	1.17	0.9	21	56	43	8.51	0.22	0.97	1625	5	0.64	9	210	15	0.01	9	76	0.45	200	<10	137	
RN034	1919410	3877100	Navua	<0.001	0.01	<0.5	4.43	<5	100	0.7	<2	1.39	2.1	55	716	41	17.7	0.4	1.2	1899	<1	0.71	46	80	4	<0.01	8	130	0.64	573	20	223	
RN035	1919103	3878008	Navua	0.01	0.01	<0.5	4.6	<5	110	0.7	<2	1.41	2.2	68	663	49	21.7	0.39	1.37	2191	<1	0.63	42	130	6	0.01	8	178	0.74	807	30	264	
RN036	1891796	3877232	Navua	<0.001	<0.01	<0.5	8.06	<5	20	0.8	<2	5.39	1.3	33	776	33	11.3	0.09	1.69	2174	<1	2.1	45	210	6	0.04	<5	223	0.49	203	10	120	
RN037	1892181	3877281	Navua	<0.001	0.01	<0.5	9.3	<5	70	1.2	<2	2.39	<0.5	37	1650	35	11.45	0.36	1.68	2033	<1	1.77	46	500	11	0.01	<5	132	0.89	382	10	165	
RN038	1892869	3877007	Navua	<0.001	0.01	<0.5	8.22	<5	100	1.1	<2	1.44	0.7	35	537	35	11.7	0.72	2	1960	<1	1.53	26	450	10	0.01	7	80	0.8	363	20	194	
RN039	1892873	3876776	Navua	0.308	0.01	<0.5	8.32	<5	40	0.9	<2	4.62	<0.5	30	476	40	7.55	0.18	1.76	1313	<1	2.41	47	350	11	0.05	<5	210	0.72	273	10	106	
RN040	1894116	3876752	Navua	<0.001	0.01	<0.5	7.54	<5	80	0.9	<2	1.71	<0.5	31	1238	37	10	0.58	1.84	1831	<1	1.37	42	300	6	0.04	7	80	0.5	220	10	195	
RN041	1893986	3876731	Navua	<0.001	0.01	<0.5	7.73	<5	50	0.9	<2	3.67	<0.5	29	508	38	8.06	0.24	1.63	1432	<1	1.99	43	320	2	0.02	<5	167	0.8	295	10	127	



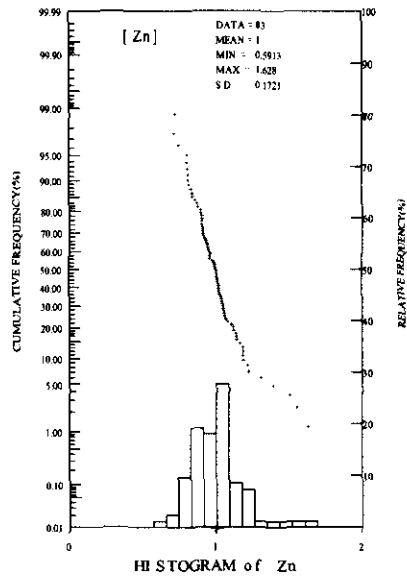
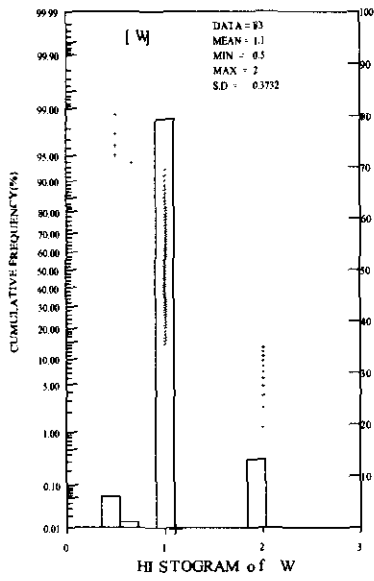
Appendix 6 Evaluation of duplicate stream sediment samples. Each probability plot shows distribution of proportion between stream sediment samples and its duplicate samples (1)



Appendix 6 Evaluation of duplicate stream sediment samples. Each probability plot shows distribution of proportion between stream sediment samples and its duplicate samples (2)



Appendix 6 Evaluation of duplicate stream sediment samples. Each probability plot shows distribution of proportion between stream sediment samples and its duplicate samples (3)



Appendix 6 Evaluation of duplicate stream sediment samples. Each probability plot shows distribution of proportion between stream sediment samples and its duplicate samples (4)

Appendix7 Preliminary list of terrestrial vertebrates of Waivaka-South (1)

Scientific Names	English Names	Fijian Names	Introduced, Endemic, Threat Status	Comments
鳥類(Birds:)				
<i>Egretta sacra</i>	Eastern Reef Heron	Belo		Not recorded. But doubtless a visitor along the creeks from tome to time.
<i>Ardea novaehollandiae</i>	White-faced Heron	Belo matavula		Not recorded but this recently-arrived bird on Viti Levu has been seen in the Rewa delta area and along the Navua River and so may well occur in the area.
<i>Anas superciliosa</i>	Pacific Black Duck	Ganiviti		Singletons or pairs seen several times on the Wainikatama and Waivaka Rivers
<i>Accipiter rufitorques</i>	Fiji Goshawk	Reba	Fiji Endemic	Uncommon only three seen.
<i>Circus approximans</i>	Pacific Harrier	Manu levu		Uncommon several seen over both forest and secondary habitats
<i>Falco peregrinus</i>	Peregrine Falcon	Ganivatu	At Risk in Fiji	Not recorded. A very rare species in Fiji which is known to nest on the cliff faces of the Korobasabasaga range from where they could hunt over the study area. No suitable rock faces were noted in the Waivaka area. Not a globally threatened species.
<i>Porzana cinereus</i>	White-browed Crake		Conservation Concern in Fiji	Not recorded. There would appear to be no suitable habitat in the Waivaka area for this species which inhabits freshwater swamps and ponds. Although threatened in Fiji this is not a globally threatened species.
<i>Porzana tabuensis</i>	Spotless Crake	Mo	Data Deficient in Fiji	Not recorded. There would appear to be no suitable habitat in the Waivaka area for this species which inhabits freshwater swamps ponds and thick wet vegetation. Although probably threatened in Fiji this is not a globally threatened species.
<i>Columba vitiensis</i>	White-throated Pigeon	Soqeloa		Uncommo nonly one seen.

Appendix7 Preliminary list of terrestrial vertebrates of Waivaka-South (2)

Scientific Names	English Names	Fijian Names	Introduced, Endemic, Threat Status	Comments
<i>Streptopelia chinensis</i>	Spotted Dove		Introduced	Not recorded but could be present along roadsides
<i>Gallicolumba stairii</i>	Friendly Ground-dove	Qilu	Vulnerable Endemic to Fiji Samoa and Tonga	Not recorded but may well occur. Uncommon on Viti Levu perhaps because of mongoose predation. Difficult to see but usually calls frequently. The forest appeared to be suitable for this species.
<i>Ducula latrans</i>	Barking Pigeon	Soqe	Endemic to Fiji	Commonly seen and more commonly heard because of its loud and distinctive call.
<i>Ptilinopus perousii</i>	Many-coloured Fruit-dove	Kuluvotu		Uncommon heard twice.
<i>Chrysoenas luteovirens</i>	Golden Dove	Bunako	Endemic to Viti Levu and offshore islands	Common although fewer than expected calling
<i>Phigys solitarius</i>	Collared Lory	Kula	Endemic to Fiji	Common seen or heard on several occasions every day
<i>Charmosyna amabilis</i>	Red-throated Lorikeet	Kulawai	Endangered Endemic to Fiji	Not recorded. A very rare species: none were seen in a dedicated 3-month survey in 2001/2. May be nomadic in response to flowering trees ? there were very few suitable trees (eg vuga) in flower during the survey - and it may occur at different times at Waivaka even if not recorded.
<i>Prosopeia personata</i>	Masked Shining Parrot	Kaka	Vulnerable Endemic to Viti Levu	Uncommon one or two heard or seen most days and a group of four observed.
<i>Cacomantis flabelliformis</i>	Fan-tailed Cuckoo	Todi		Uncommon heard once or twice on most days
<i>Eudynamis taitensis</i>	Long-tailed Cuckoo	Migrant		Not recorded. Unlikely to be seen in the area as it is a rare visitor to Viti Levu.
<i>Tyto alba</i>	Barn Owl	Belo		Not recorded. But doubtless present. No night surveys were undertaken.

Appendix7 Preliminary list of terrestrial vertebrates of Waivaka-South (3)

Scientific Names	English Names	Fijian Names	Introduced, Endemic, Threat Status	Comments
<i>Tyto longimembris</i>	Eastern Grass Owl			Not recorded. This is known from only four specimens taken in the nineteenth century but all from south east Viti Levu. It is presumed extinct but the comparatively extensive grasslands at the confluence of the Wainivuga and the Waivaka rivers could be suitable habitat. Further work would be required to confirm this.
<i>Collocalia spodiopygius</i>	White-rumped Swiftlet	Kakabace		Common seen flying over forest and secondary habitats at all times of the day.
<i>Todiramphus chloris</i>	White-collared Kingfisher	Lesi		Common seen or heard several times each day.
<i>Hirundo tahitica</i>	Pacific Swallow			Not recorded. May be found along the larger rivers.
<i>Artamus mentalis</i>	Fiji Woodswallow	Vukase	Endemic to Fiji	Locally fairly common in open areas and forest openings.
<i>Aplonis tabuensis</i>	Polynesian Starling	Vocea		Uncommon or rare seen on only three occasions.
<i>Acridotheres tristis</i>	House Mynah	Maina	Introduced	Not recorded.
<i>Acridotheres fuscus</i>	Jungle Mynah	Maina ni veikau	Introduced	Locally abundant especially near the camps and main road and where cattle were present.
<i>Pycnonotus cafer</i>	Red-vented Bulbul	Ulurua	Introduced	Abundant around the camps and fairly common along drilling access roads and the open area on the Waivaka River.
<i>Turdus poliocephalus</i>	Island Thrush	Tola		Uncommon Only a few heard singing each day and so uncommonly encountered but more likely to have been revealed by more walks through the forest rather than on roads and drilling access tracks.

Appendix7 Preliminary list of terrestrial vertebrates of Waivaka-South (4)

Scientific Names	English Names	Fijian Names	Introduced, Endemic, Threat Status	Comments
<i>Trichocichla rufa</i>	Long-legged Warbler		Data Deficient Endemic to Fiji	Not recorded. A rare species which is very difficult to see although it has a distinctive song. Its habitat requirements are poorly-known but there was some forest at Waivaka that was believed to be suitable. Areas of suitable habitat such as this should be surveyed at dawn ideally using tape-recordings of the species.
<i>Cettia ruficapilla</i>	Fiji Bush-warbler	Manu	Endemic to Fiji	Commonly heard but rarely seen.
<i>Petroica multicolor</i>	Scarlet Robin	Diriqwala		Common many fledglings recorded.
<i>Rhipidura spilodera</i>	Streaked Fantail	Sasaira		Common
<i>Mayrornis lessoni</i>	Slaty Monarch	Sasaira	Endemic to Fiji	Common but less common than in many forest areas.
<i>Clytorhynchus vitiensis</i>	Lesser Shrikebill	Digisau		Common
<i>Clytorhynchus nigrogularis</i>	Black-faced Shrikebill	Kiro	Vulnerable Endemic to Fiji	Uncommon. A vociferous pair at the Wainikatama camp; two others heard calling and one seen.
<i>Myiagra vanikorensis</i>	Vanikoro Broadbill	Matayalo		Common more common than expected although mostly seen along roads and around openings
<i>Myiagra azureocapilla</i>	Blue-crested Broadbill	Batidamu	Endemic to Fiji	Common
<i>Pachycephala pectoralis</i>	Golden Whistler	Ketedromo		Common
<i>Lalage maculosa</i>	Polynesian Triller	Manusa		Common
<i>Zosterops explorer</i>	Fiji White-eye	Qiqi	Endemic to Fiji	Abundant throughout forest areas.

Appendix7 Preliminary list of terrestrial vertebrates of Waivaka-South (5)

Scientific Names	English Names	Fijian Names	Introduced, Endemic, Threat Status	Comments
<i>Zosterops lateralis</i>	Silvereye	Qiqi		Uncommon except in more open habitats - roadsides and along the Waivaka River.
<i>Erythrura pealii</i>	Fiji Parrotfinch	Qiqikula	Endemic to Fiji	Common
<i>Erythrura kleinschmidti</i>	Pink-billed Parrotfinch	Sitibatitabua	Endangered Endemic to Viti Levu	Uncommon One or two seen on three occasions and singles heard or seen flying overhead on eight occasions; all within 500m of camp. More research is needed to clarify its habitat preferences: birds were seen both in old-growth forest and roadside bushes.
<i>Amandava amandava</i>	Red Avadavat	Siti	Introduced	Not recorded. Inhabits grasslands and not likely to be present.
<i>Padda oryzivora</i>	Java Rice Sparrow	Manumanu ni Raisi	Vulnerable Introduced	Not recorded. Inhabits grasslands and not likely to be present.
<i>Myzomela jugularis</i>	Orange-breasted Myzomela	Delakula	Endemic to Fiji	Common
<i>Foulehaio carunculata</i>	Wattled Honeyeater	Kikau		Abundant
<i>Gymnomyza viridis</i>	Giant Forest Honeyeater	Sovau	Vulnerable Endemic to Fiji	Commonly heard although overall density difficult to assess because of the strength of their call.
爬虫類(Reptiles)				
<i>Brachylophus fasciatus</i>	Banded Iguana	Vokai	Endangered	Not encountered or reported but probably occurs at very low density because of predation by the Mongoose and feral cats.
<i>Candoia bibronii</i>	Pacific Boa	Gata		Not encountered but reported by landowners. As elsewhere on Viti Levu probably occurs at a low density because of predation by the Mongoose and feral cats.
<i>Ogmodon vitiensis</i>	Fiji Burrowing Snake	Bolo	Endemic to Viti Levu Vulnerable	Not encountered but reported by landowners. The Namosi area is the only place where this species appears to persist at a reasonable density.
<i>Gehyra vorax</i>	Giant Forest Gecko			Not encountered. A very secretive species and difficult to find.

Appendix7 Preliminary list of terrestrial vertebrates of Waivaka-South (6)

Scientific Names	English Names	Fijian Names	Introduced, Endemic, Threat Status	Comments
<i>Gehyra oceanica</i>	Oceanic Gecko		?Introduced	Not encountered but almost certainly occurs. Usually a common forest gecko.
<i>Gehyra mutilata</i>	Stump-toed Gecko		Introduced	Not encountered. A recently introduced species confined to buildings or their near vicinity.
<i>Lepidodactylus lugubris</i>	Mourning or Pacific Gecko		Introduced	Not encountered. An introduced species confined to buildings or their near vicinity.
<i>Lepidodactylus manni</i>	Mann's Forest Gecko		Endemic	Not encountered but probably occurs. Usually a rare forest gecko.
<i>Hemiphyllodactylus typus</i>	Tree Gecko			Not encountered. A rare introduced species.
<i>Hemidactylus frenatus</i>	House Gecko		Introduced	Not encountered. An introduced species confined to buildings or their near vicinity.
<i>Hemidactylus garnotti</i>	Fox Gecko			Not encountered but probably occurs. An apparently declining gecko but not confined to forest.
<i>Nactus pelagicus</i>	Slender-toed Gecko			Recorded
<i>Emoia mokosariniveikau</i>	Turquoise Forest Skink		Endemic	Unidentified Skink - Recorded. This tree skink was seen on three occasions a voucher specimen was collected. Currently <i>Emoia mokosariniveikau</i> is known only from Vanua Levu and so if the identification is confirmed it will be a new record for Viti Levu. If this is not <i>Emoia mokosariniveikau</i> then it will be a new species.
<i>Emoia campbelli</i>	Campbell's Skink		Endemic to Viti Levu	Not encountered. Currently only known from higher altitudes (Monasavu) and not yet recorded in the Namosi area.

Appendix7 Preliminary list of terrestrial vertebrates of Waivaka-South (7)

Scientific Names	English Names	Fijian Names	Introduced, Endemic, Threat Status	Comments
<i>Emoia concolor</i>	Green tree Skink		Endemic	Not encountered. Usually a common tree skink but found mainly in disturbed habitats.
<i>Emoia impar</i>	Blue-tailed Copper-striped Skink			Not encountered a ground skink which is unlikely to occur in upland forested areas.
<i>Emoia cyanura</i>	Brown-tailed Copper-striped Skink			Not encountered a ground skink which is unlikely to survive in upland forest areas because of predation by the Mongoose and feral cats.
<i>Emoia parkeri</i>	Bronze-headed Skink		Endemic	Recorded. An arboreal skink which was comparatively commonly recorded.
<i>Lipinia noctua</i>	Moth Skink			Not encountered but probably occurs. A secretive but usually quite common skink which is not confined to forest.
<i>Cryptoblepharus eximius</i>	Pacific Snake-eyed Skink		Endemic	Not encountered a ground skink of coastal areas but one which has been found way inland up along major rivers and so may occur.
両生類(Amphibians)				
<i>Bufo marinus</i>	Cane Toad	Boto	introduced	Common around the camp
<i>Platymantis vitiensis</i>	Fiji Tree Frog	Ula	Endemic	Opportunistic searching revealed the presence on three occasions
哺乳類(Mammals:Native)				
<i>Pteropus tonganus</i>	Pacific Flying Fox	Beka		No day time roosting camps were encountered in the limited area surveyed. This bat was surprisingly uncommon only 10-20 being seen flying around each evening.

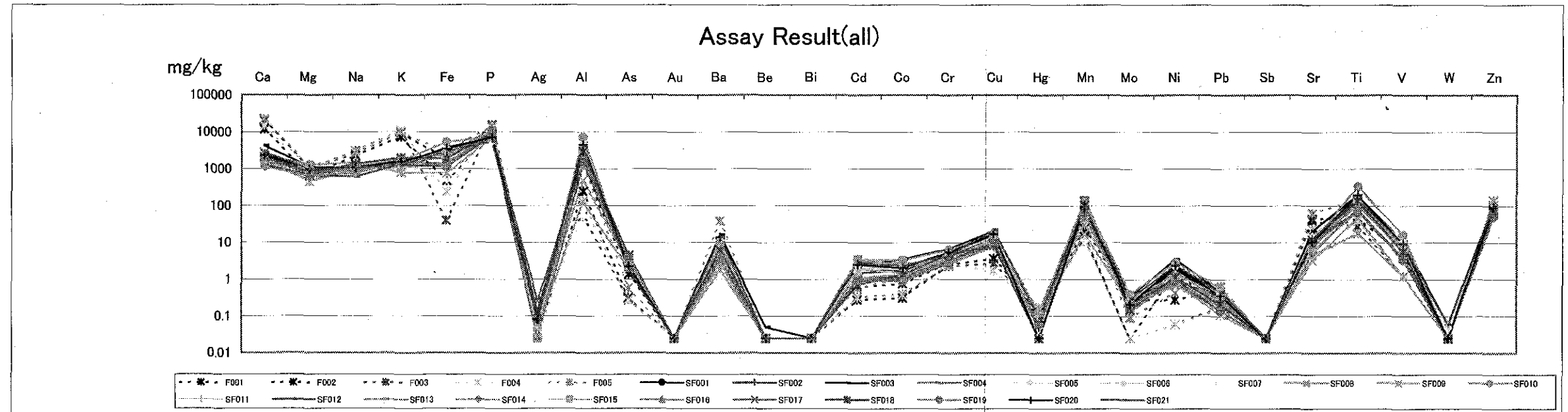
Appendix7 Preliminary list of terrestrial vertebrates of Waivaka-South (8)

Scientific Names	English Names	Fijian Names	Introduced, Endemic, Threat Status	Comments
<i>Pteropus samoensis</i>	Samoaan Flying Fox	Beka ni Siga	Vulnerable	A few seen flying around the forest each day
<i>Notopterus macdonaldi</i>	Long-tailed Fruit Bat			Not recorded. This is a nocturnal cave-roosting species. No caves were visited during this preliminary survey and no landowner discussions were held to locate the whereabouts of any caves.
<i>Emballonura semicaudata</i>	Sheath-tailed Bat	Bekabeka		Not recorded. This is a nocturnal cave-roosting species. No caves were visited during this preliminary survey and no landowner discussions were held to locate the whereabouts of any caves.
哺乳類(Mammals:Introduced)				
<i>Rattus rattus</i>	Black Rat			6 rats were caught on 146 'corrected trap-nights', providing a standard index of 4.1 . This is a relatively low index.
<i>Herpestes auropunctatus</i>	Mongoose			Observed
<i>Felis domesticus</i>	Feral cat			Not captured in the live traps used.
	Feral pigs			Sign of feral pigs was observed in the forest.

Appendix 8 Assay results of the fish and shellfish samples

No.	Sample No	Items	Locality	Easting(m)	Northing(n)	Ca	Mg	Na	K	Fe	P	Ag	Al	As	Au	Ba	Be	Bi	Cd	Co	Cr	Cu	Hg	Mn	Mo	Ni	Pb	Sb	Sr	Ti	V	W	Zn
1	F001	Fish	Namosi, Lower stream of Waidina	1941300	3888270	20200	1040	2570	9540	1780	13700	<0.05	1250	1.39	<0.05	10.5	<0.05	<0.05	0.62	0.77	2.73	11.7	0.09	24.1	0.28	0.28	0.49	<0.05	44.3	48.3	4.9	<0.05	73.6
2	F002	Fish	Namosi, Waisoi	1940080	3888200	11800	646	2260	7220	475	9600	<0.05	247	0.31	<0.05	10.6	<0.05	<0.05	0.28	0.31	2.53	3.69	0.13	14.3	<0.05	1.51	0.21	<0.05	17	48	<2.5	<0.05	81.1
3	F003	Fish	Namosi, Upper stream of Waidina	1938500	3885170	20900	1020	3030	11100	40	15500	0.06	51	0.3	<0.05	4.71	<0.05	<0.05	0.33	0.39	2.3	2.7	0.12	12	<0.05	0.06	0.18	<0.05	38.6	28.1	<2.5	<0.05	78
4	F004	Fish	Namosi, Waivaka	1940240	3884570	14700	969	2850	11000	246	13300	<0.05	138	0.27	<0.05	3.66	<0.05	<0.05	0.32	0.38	2.74	1.69	0.18	10.4	<0.05	0.06	0.16	<0.05	23.3	39.3	<2.5	<0.05	83.7
5	F005	Fish	Namosi, Wainavuga	1940280	3882440	22500	1180	2590	9780	2890	14500	<0.05	1230	0.56	<0.05	38	<0.05	<0.05	0.59	1.09	3.52	10	0.11	51.6	0.09	0.45	0.66	<0.05	62.7	147	11	<0.05	89.2
6	SF001	Shellfish	Rewa River	1963740	3898560	2430	842	879	1140	2550	7460	<0.05	3040	1.83	<0.05	9.73	<0.05	<0.05	1.85	1.69	5.39	14.4	0.06	75.7	0.2	1.96	0.3	<0.05	11.3	128	7.2	<0.05	84.8
7	SF002	Shellfish	Rewa River	1968520	3894630	2220	829	843	1350	2930	6720	0.06	3300	2.01	<0.05	11.2	<0.05	<0.05	1.49	1.77	4.37	13.2	0.05	87.6	0.2	2.17	0.31	<0.05	10.3	147	8.2	<0.05	78
8	SF003	Shellfish	Rewa River	1975680	3891870	4200	1100	1040	1220	3790	6490	0.08	4880	2.22	<0.05	15.9	0.05	<0.05	2.33	3.57	6.67	20.7	0.1	129	0.34	3.51	0.46	<0.05	20.7	192	10.9	0.06	108
9	SF004	Shellfish	Rewa River	1976350	3885850	1740	796	903	1370	2830	7930	0.07	3490	3.31	<0.05	11.6	<0.05	<0.05	0.82	1.44	3.86	12.8	<0.05	165	0.18	1.57	0.29	<0.05	8.29	151	7.7	<0.05	85.5
10	SF005	Shellfish	Rewa River	1980380	3880170	2810	953	1110	1190	3610	5680	0.07	4850	2.67	<0.05	11.6	<0.05	<0.05	1.62	2.28	4.77	14.5	0.06	93.1	0.27	2.28	0.43	<0.05	14.6	179	10.7	0.05	91
11	SF006	Shellfish	Coastal River	1951400	3873350	1460	616	1130	1090	3050	7370	0.07	2810	3.75	<0.05	3.78	<0.05	<0.05	1.79	2.66	3.42	11.3	0.1	53.7	0.21	0.72	0.26	<0.05	4.62	190	8.6	<0.05	97.9
12	SF007	Shellfish	Coastal River(Nabukabesi)	1946840	3871180	1640	430	1000	874	522	8910	0.06	52.3	2.22	<0.05	1.64	<0.05	<0.05	2.48	2.88	2.48	8.43	0.13	11.5	0.21	0.62	0.33	<0.05	3.75	17.6	<2.5	<0.05	124
13	SF008	Shellfish	Coastal River(Nabukabesi)	1946660	3871760	1610	443	941	1100	1310	9460	0.06	494	2.81	<0.05	1.79	<0.05	<0.05	3.44	2.51	2.41	10.5	0.11	17.5	0.2	0.7	0.19	<0.05	3.32	45.2	<2.5	<0.05	109
14	SF009	Shellfish	Navua River	1937100	3862260	2050	450	1290	777	762	6790	0.05	128	1.96	<0.05	2.59	<0.05	<0.05	3.01	2.83	2.52	10.4	0.15	30.8	0.3	0.79	0.11	<0.05	4.56	17.9	<2.5	<0.05	143
15	SF010	Shellfish	Navua River	1937460	3865160	2160	1280	1450	1620	5290	7280	0.07	7120	2.57	<0.05	9.29	<0.05	<0.05	3.55	3.32	6.31	17.5	0.13	128	0.4	2.94	0.58	<0.05	9.84	337	16.6	<0.05	107
16	SF011	Shellfish	Sigatoka River	1874150	3880280	1680	955	983	1830	2580	9240	0.05	3730	1.97	<0.05	6.75	<0.05	<0.05	1.95	1.49	3.65	12.7	0.06	104	0.29	1.35	0.39	<0.05	8.41	157	7.9	0.06	62.8
17	SF012	Shellfish	Sigatoka River	1874600	3878650	1260	653	606	1310	1140	7600	<0.05	1510	2.14	<0.05	3.51	<0.05	<0.05	1.12	1.01	3.17	10.4	0.06	63.4	0.16	1.05	0.14	<0.05	5.41	82	3.4	<0.05	64.1
18	SF013	Shellfish	Sigatoka River	1872500	3879300	1520	917	868	1970	2250	11700	<0.05	3180	1.83	<0.05	5.39	<0.05	<0.05	1.05	1.35	3.2	8.31	0.05	93.3	0.13	1.03	0.3	<0.05	7.79	127	6.7	<0.05	54.1
19	SF014	Shellfish	Sigatoka River	1872200	3878100	1140	620	756	1460	1370	9710	<0.05	1870	1.98	<0.05	3.46	<0.05	<0.05	0.89	0.91	2.73	7.75	0.08	54	0.16	0.82	0.2	<0.05	5.42	75.8	4.1	<0.05	50
20	SF015	Shellfish	Sigatoka River	1872340	3876460	1820	894	1070	1930	2190	10200	<0.05	3200	2.4	<0.05	6.71	<0.05	<0.05	1.11	1.36	3.9	11.4	<0.05	61.1	0.14	1.13	0.23	<0.05	7.86	157	6.8	<0.05	73
21	SF016	Shellfish	Sigatoka River	1872760	3875220	2470	790	1090	1650	1940	10000	<0.05	2690	2.58	<0.05	5.53	<0.05	<0.05	0.98	1.11	2.98	10.5	0.06	105	0.18	1.1	0.26	<0.05	9.62	107	5.8	<0.05	60.4
22	SF017	Shellfish	Sigatoka River	1871320	3874760	2720	702	1140	1570	1280	8160	0.26	1820	3.7	<0.05	3.77	<0.05	<0.05	0.94	1.15	3.16	9.02	0.07	66.7	0.2	1.16	0.21	<0.05	11.9	70.6	3.8	<0.05	68.9
23	SF018	Shellfish	Sigatoka River	1869850	3874740	2050	814	1320	1960	1890	8920	0.13	2940	4.44	<0.05	6.16	<0.05	<0.05	0.71	1.38	4.69	8.34	<0.05	107	0.15	1.16	0.21	<0.05	12.1	138	5.8	<0.05	78.8
24	SF019	Shellfish	Sigatoka River	1868800	3873580	2070	648	1070	1660	1160	10300	0.08	1600	3.84	<0.05	3.46	<0.05	<0.05	0.93	0.89	2.79	10.9	0.06	62.8	0.19	0.84	0.14	<0.05	9.67	71.6	3.4	<0.05	63.1
25	SF020	Shellfish	Rewa River	1966650	3897000	2280	987	1050	1520	3420	6950	0.08	4410	2.24	<0.05	13.8	<0.05	<0.05	2.52	2.06	5.4	17.1	<0.05	93.9	0.21	2.35	0.36	<0.05	10.6	194	9.5	<0.05	90.3
26	SF021	Shellfish	Rewa River	1969760	3890560	2740	981	1040	1250	2980	5500	0.08	4120	1.8	<0.05	13.9	<0.05	<0.05	2.82	2.38	4.44	22.2	0.09	95.2	0.3	2.43	0.45	<0.05	12.5	152	9.1	0.06	96.6

(LOR: Ca Mg Na K Fe:5mg/kg, P:50mg/kg, Al:2.5mg/kg, Ti:0.1mg/kg, V:2.5mg/kg, Other elements:0.05mg/kg)
 (All Assay Results are shown by mg/kg)



Appendix 9 Rare and endangered plants of South Viti Levu (Namosi, Serua, Naitasiri, Navosa and Rewa) (1)

Checklist Legend:

Distribution Status (Dist/St):

E=endemic; I=indigenous

Conservation Status and its Basis (CSB):

CE=critically endangered; EN=endangered; TH=threatened; DD=data deficient.

TC=plant known from type collection, holotype collection and type locality only; 1L= one locality; 2L= two localities; 3L three localities; 1C=a single collection; 2C=two collections; 3C=three collections; *= inadequately known.

Location - Province:

Cak= Cakaudrove; Lom=Lomaiviti; Mac=Macuata; Nad=Nadroga; Nai= Naitasiri; Nam=Namosi; Nav=Navosa; Rew=Rewa; Ser=Serua

Species	Dist/St	CSB		Locality	Province
<i>Acmopyle sahniana</i> Buchh. & N. E. Gray	E	CE		Mt. Vakarogasau, Waisoi – Korobasabasaga range	Nam
<i>Agathis macrophylla</i>	I	E		Threatened from Logging	
<i>Agrostophyllum megalurum</i> Reichenb.	I	TH	1C	Namosi Village vicinity	Nam
<i>Alyxia erythrosperma</i> Gillespie	E	DD	TC	Between Naqarawai and Saliadrau- Wainikoroluva	Nam
<i>Angiopteris opaca</i> Copel.	E	TH	TC	Nadarivatu	Ba
<i>Appendicula bracteosa</i> Reichenb.	I	DD	TC	Namosi Village vicinity	Nam
<i>Asplenium induratum</i> Hook.	E	DD	1L	Mt. Voma	Nam
<i>Astronidium floribundum</i> A. C. Sm.	E	DD	TC	Mt. Korobaba upper south east slopes	Rew
<i>Astronidium pallidiflorum</i> A. C. Sm.	E	DD	TC	Hills west Waivunu creek between Galoa & Korovou	Ser
<i>Astronidium saulae</i> A. C. Sm.	E	DD	1L	Mt. Korababa south slopes	Rew
<i>Atuna elliptica</i> (Kostermans) Kostermans	E	TH	2L	Saru vicinity, Tamanua creek, Vatukarasa, Viria	Nad-Nav, Nai
<i>Balaka macrocarpa</i> Burret	E	CE	4L	Along the Nabukavesi - Namosi road.	Ser, Nam, Cak, Mac
<i>Balaka microcarpa</i> Burret	E	E	1L	Wailoku water catchment, Savura reserved forest	Nai
<i>Blechnum gibbum</i> (Labill.) Mett.	I	DD	1L	Maybe grown as an ornamental	
<i>Bulbophyllum polypodioides</i> Schltr.	I	TH	1C		
<i>Bulbophyllum samoanum</i> Schltr.	I	TH	2C	Nadarivatu vicinity & Namosi village, waisoi	Ba, Nam
<i>Bulbophyllum sessile</i> (Koen) J.J. Sm.	I	TH		Near Suva, waisoi	Rew, Nam
<i>Calophyllum amblyphyllum</i>	E	E		Waisoi	Nam
<i>Carruthersia macrantha</i> A. C. Sm.	E	TH	2C	Waisoi, Lomaivuna	Nam, Nai
<i>Casearia fissistipula</i> A. C. Sm.	E	TH	TC	Naivucini, Waisale creek junction with Wainimala river	Nai
<i>Cleistanthus micranthus</i> Croizat	E	TH	3C	Hills between Wainigere & Waisese	Ser
<i>Cleistocalyx seemanii</i> (A. Gray) Merr. & Perry var. <i>punctatus</i> Merr. & Perry	E	DD	TC	vicinity of Namosi,	Nam

Appendix 9 Rare and endangered plants of South Viti Levu (Namosi, Serua, Naitasiri, Navosa and Rewa) (2)

Species	Dist/St	CSB		Locality	Province
<i>Coelogyne lycastoides</i>	I	DD		Waisoi	Nam
<i>Cryptocarya laucifolia</i> A. C. Sm.	E	TH	2C	Nasinu	Nai
<i>Ctenopteris vodonaivalui</i> Brownlie	E	DD	TC		Nam
<i>Ctenopteris vomaensis</i> Brownlie	E	DD	TC	Mt. Voma track	Nam
<i>Cyathea affinis</i>	I	E		Waisoi	Nam
<i>Cyathea plagiostegia</i> Copel.	E	DD	TC	Mt. Naitaradamu	Nam
<i>Cyphosperma "naboutini"</i>	E	CE		North of Naboutini village in Mahogany forest	Ser
<i>Cyrtandra cyathibracteata</i> Gillet	E	TH	TC	Matawailevu, Wainano crk- Wainimala river	Nai
<i>Dennstaedtia flaccida</i>	I	E		Waisoi	Nam
<i>Diospyros elliptica</i> var. <i>opaca</i> A. C. Sm.	E	DD	TC	Uper Navua River	Ser
<i>Discocalyx amplifolia</i> A. C. Sm.	E	TH		Upper Wainimala	Nai
<i>Discocalyx crinita</i> A. C. Sm.	E	TH	1L	Tawavulu creek, inland from Naboutini, Galoa	Ser
<i>Elaeocarpus ampliflorus</i> A. C. Sm.	E	TH	TC	Waibue creek, upper Waimanu river	Rew
<i>elaecarpus pittosporoides</i> A. C. Sm.	E	DD	TC	Hills east of Navua river	Nam
<i>Elaphoglossum basitruncatum</i> Brownlie	E	DD	TC		Nam
<i>Elaeocarpus chionanthus</i> A. C. Sm.	E	DD	TC	Hills west of Waivunu creek between Galoa & Korovou	Ser
<i>Flacourtia mollipila</i> Sleumer	E	TH	TC	Lami quarry	Rewa
<i>Flickingeria comata</i> (Bl.) A. Hawkes	I	TH	1C	Lami quarry, Suva, Waisoi	Rew, Nam
<i>Freycinetia vitiensis</i> Seem.	E	TH	4C	Mt. Voma	Nam
<i>Garnoti villosa</i> Swallen	E	DD	TC	Korobasabasaga range rock cliffs	Nam
<i>Glochidion atalotrichum</i>	E	CE	1L	Waisoi	nam
<i>Grammitis vitiensis</i> Brownlie	E	DD	TC	Mt. Voma	Nam
<i>Gulubia microcarpa</i> Essig	E	V	2L	Galoa road to Namuamua village, Raciba rd to Mt Sorolevu	Nam, Mac
<i>Heterospathe phillipsii</i> Sp. Nov. Fuller & Dowe	E	E	1L	Nakavu forest (NFMPP Reserve)	Nam
<i>Lindsaea gueriniana</i> (Gaud.) Desv.	I	DD	1L	Mt. Korobaba	Rew
<i>Lindsaea moorei</i> (Hook.) Fourn.	I	DD	1L	Mt. Korobaba	Rew
<i>Lunathyrium gillespiei</i> (Copel.) Brownlie	E	DD	1C; 1L	Stream banks in dense forest	Nam
<i>Lycopodium serratum</i> Thunb.	I	TH	1L	Waisoi – Korabasabasaga Range	Nam
<i>Malaisia scandens</i> (Lour.) Planch.	I	TH		Waidina river above Naqali	Nai
<i>Malaxis platychila</i>	E	DD		Waisoi	Nam,
<i>Mapania parvibractea</i> (C. B. Clarke) T. Koyama	I	TH	1C	Wainadoi river	Nam
<i>Memecylon inseparatum</i> A. C. Sm.	E	DD	TC	Near Nabua Village	Nai
<i>Metroxylon vitiense</i> (H.A. Wendl.) H.A. Wendl. ex Hook.	E	V	5L	Naduruloulou, Deuba, Galoa swamps.	Nai, Ser, Nam, Cak

Appendix 9 Rare and endangered plants of South Viti Levu (Namosi, Serua, Naitasiri, Navosa and Rewa) (3)

Species	Dist/St	CSB		Locality	Province
<i>Neovitchii storckii</i> (H.A. Wendl.) Becc.	E	E	2L	Naduna near Waidradra crk, Near Nagali village	Rew, Nai
<i>Octarrhena oberonioides</i> (Schltr.) Schltr.	I	DD	1C	Mt. Korobalevu slopes, near the Naitasiri-Rewa boundary	Nai-Rew
<i>Pandanus sonicola</i> A. C. Sm.	E	DD	TC	Bay of Islands	Rew
<i>Parkia parri</i> Horne ex Baker	E	DD	Ex	Parr's coffee plantation;	Rew, Bua
<i>Passiflora barclayi</i> (Seem) Mast.	I	TH		Nukulau Is, Levuka	Rew, Lom
<i>Peperomia namosiana</i> Yuncker	E	DD	TC	Wainabua creek near Mt. Naitaradamu	Nam
<i>Pleocnemia elagans</i> (Copel.) Holtt.	E	TH	1L	Wet lowland forest of Vanua Levu & eastern Viti Levu	Nam, Cak
<i>Pleocnemia leuzeana</i> (Gaud.) Presl	I	TH	1L		Nai
<i>Podocarpus affinis</i> Seem.	E	EN	1L	Mt. Tuvutau,, Mt. Voma, Mt. Naitaradamu, near its summit, Korobasabasaga, Monasavu	Nam, Ser, Ba
<i>Pomatocalpa vaupelii</i> (Schltr.) J. J. Sm.	I	TH		Veinuqa creek, Navua tributary	Nam
<i>Psychotria bullata</i> A. C. Sm.	E	TH	3L	Veinuqa creek, Galoa	Nam, Ser
<i>Psychotria magnifica</i> (Gillespie) Forsberg	E	TH	3C	Mt. Naitaradamu; Hills north of Wainavidrau creek,.	Nam
<i>Psychotria scitula</i> A. C. Sm.	E	DD	TC	Mt. Voma	Nam
<i>Psychotria valleculata</i> A. C. Sm.	E	TH	TC	Nausori highland south slopes, Namosi creek drainage	Nad-Nam
<i>Psychotria vomensis</i> Gillespie	E	TH	3C;1L	Mt. Voma; Mt. Naitaradamu	Nam
<i>eris vittata</i> L.	I	TH	1L	South east Viti Levu	Nam, Nai, Ser
<i>Schizaea fistulosa</i> Labill.	I	DD	1L	Mt. Vuimasia – Korobasabasaga range	Nam
<i>Schoenus achaetus</i> (T. Koyama) T. Koyama	I	CE	1C	Mt. Nabui track, Waisoi	Nam
<i>Serianthes melanesica</i> var. <i>meeboldii</i> Fosberg	E	DD	*1L	Lami	Rew
<i>Syzygium simillimum</i> Merr. & Perry	E	TH	2C	Summit Mt. Korababa	Rew
<i>Tapeinosperma babuscense</i> Mez.	E	TH	TC	Naboubuco creek headwaters, upper Wainimala	Nai
<i>Tarenna joskei</i> (Horne ex Baker) A. C. Sm.	E	TH	2C	Navesi, east of Naikorokoro creek	Rew
<i>Terminalia capitanea</i>	E	V		Waisoi	nam
<i>Tmesipteris truncata</i> (R. Br.) Desv.	I	TH	2L	Waisoi – Korobasabasaga range	Nam
<i>Zeuxine vieillardii</i> (Reichenb) Schltr.	I	TH		Veisari river	Rew

Appendix 10 Preliminary checklist of the flora of Waivaka South, Namosi, Viti Levu. (1)

Family	Botanical name (collection #)	Distribution	Abundance
Adiantaceae	<i>Coniogramme fraxinea</i> (107)	Indigenous	Locally common
Adiantaceae	<i>Taenitis pinnata</i> (83)	Indigenous	Common
Annonaceae	<i>Cyathocalyx insularis</i> (125, 120, 211)	Endemic	Uncommon
Annonaceae	<i>Richella monosperma</i> (116)	Endemic	Uncommon
Annonaceae	<i>Xylopia pacifica</i> (57, 183, 194)	Endemic	Common
Apocynaceae	<i>Alstonia montana</i> (22)	Endemic	Common
Apocynaceae	<i>Alstonia vitiense</i> (169)	Endemic	Common
Apocynaceae	<i>Cerbera manghas</i> (20)	Indigenous	Common
Apocynaceae	<i>Pagiantha thurstonii</i> (193)	Endemic	Common
Araliaceae	<i>Pterandra grayi</i> (207)	Endemic	Common
Araliaceae	<i>Pterandra insolita</i> (77)	Endemic	Common
Araliaceae	<i>Schefflera seemanniana</i> (111)	Endemic	Common
Araucariaceae	<i>Agathis macrophylla</i> (147)	Indigenous	Locally common
Arecaceae	<i>Veitchia vitiense</i> (29, 64, 65, 217)	Endemic	Common & widespread
Asclepiadaceae	<i>Hoya australis</i> (167)	Indigenous	Uncommon
Asclepiadaceae	<i>Hoya diptera</i> (92)	Endemic	Common
Aspleniaceae	<i>Asplenium amboinense</i> (49, 82, 137)	Indigenous	Common
Aspleniaceae	<i>Asplenium australasicum</i> (165)	Indigenous	Common
Aspleniaceae	<i>Asplenium bipinnatifidum</i> (43, 141)	Indigenous	Common
Aspleniaceae	<i>Asplenium cuneatum</i> (149)	Indigenous	Common
Aspleniaceae	<i>Asplenium tenerum</i> (16)	Indigenous	Uncommon
Burseraceae	<i>Canarium vitiense</i> (226)	Indigenous	Common
Burseraceae	<i>Haplolobus floribundus</i> (134, 179)	Indigenous	Common
Caesalpiniaceae	<i>Maniltoa grandiflora</i> (206)	Indigenous	Uncommon
Casuarinaceae	<i>Gymnostoma vitiense</i> (219)	Endemic	Locally common
Chrysobalanaceae	<i>Parinari insularum</i> (173, 176)	Indigenous	Very common
Clusiaceae	<i>Calophyllum amblyphyllum</i> (177)	Endemic	Uncommon
Clusiaceae	<i>Calophyllum cerasiferum</i> (44, 199)	Endemic	Uncommon
Clusiaceae	<i>Calophyllum vitiense</i> (51)	Endemic	Common
Clusiaceae	<i>Garcinia myrtiflora</i> (98, 182, 186, 208)	Indigenous	Uncommon
Clusiaceae	<i>Garcinia pseudoguttifera</i> (95, 215)	Indigenous	Common
Cunoniaceae	<i>Geissois ternata</i> (222)	Endemic	Uncommon
Cunoniaceae	<i>Weinmannia affinis</i> (26)	Endemic	Uncommon
Cyatheaceae	<i>Culcita straminea</i> (163)	Indigenous	Locally common
Cyatheaceae	<i>Cyathea alata</i> (67)	Indigenous	Uncommon
Cyatheaceae	<i>Cyathea hornei</i> (156)	Indigenous	Common
Cyatheaceae	<i>Cyathea lunulata</i> (164)	Indigenous	Common
Cyatheaceae	<i>Dicksonia brackenridgei</i> (47)	Indigenous	Common
Cyperaceae	<i>Carex graeffeana</i> (13)	Indigenous	Common
Cyperaceae	<i>Gahnia Vitiensis</i> (61)	Indigenous	Uncommon
Cyperaceae	<i>Hypolytrum nemorum</i> (132)	Indigenous	Common & widespread
Davalliaceae	<i>Oleandra neriiformis</i> (55)	Indigenous	Common
Davalliaceae	<i>Scyphularia pycnocarpa</i> (34)	Endemic	Common
Degeneriaceae	<i>Degeneria vitiensis</i> (150)	Endemic	Uncommon
Dilleniaceae	<i>Dillenia biflora</i>	Indigenous	Common
Euphorbiaceae	<i>Acalypha insulana</i> (90)	Indigenous	Uncommon
Euphorbiaceae	<i>Acalypha rivularis</i> (101)	Endemic	Locally common
Euphorbiaceae	<i>Baccaurea pulvinata</i> (81)	Endemic	Common
Euphorbiaceae	<i>Endospermum macrophyllum</i> (86, 201)	Endemic	Common
Euphorbiaceae	<i>Glochidion seemannii</i> (80)	Endemic	Uncommon
Euphorbiaceae	<i>Macaranga graeffeana</i> (88)	Endemic	Common
Euphorbiaceae	<i>Macaranga magna</i> (136)	Endemic	Common
Flacourtiaceae	<i>Elaeocarpus chionanchus</i> (12)	Endemic	Uncommon, rare
Flacourtiaceae	<i>Homalium nitens</i> (108)	Endemic	Uncommon

Appendix 10 Preliminary checklist of the flora of Waivaka South, Namosi, Viti Levu. (2)

Family	Botanical name (collection #)	Distribution	Abundance
Flagellariaceae	<i>Flagellaria gigantea</i> (227)	Endemic	Common
Gesneriaceae	<i>Cyrtandra anthropophagorum</i> (131)	Endemic	Common
Gesneriaceae	<i>Cyrtandra cf. Pritchardii</i> (36)	Endemic	Uncommon
Gesneriaceae	<i>Cyrtandra cyathibracteata</i> (119)	Endemic	Uncommon, rare
Gesneriaceae	<i>Cyrtandra jugalis</i> (121)	Endemic	Common
Gesneriaceae	<i>Cyrtandra victoriae</i> (37)	Endemic	Common
Gnetaceae	<i>Gnetum gnemon</i> (168)	Indigenous	Common & widespread
Gonystylaceae	<i>Gonystylus punctatus</i> (178)	Endemic	Common
Hernandiaceae	<i>Hernandia olivacea</i> (214)	Endemic	Uncommon
Hymneophyllaceae	<i>Trichomanes apiifolium</i>	Indigenous	Locally common
Lauraceae	<i>Cryptocarya fusca</i> (166)	Endemic	Uncommon
Lauraceae	<i>Endiandra gillespiei</i> (185, 209)	Endemic	Uncommon
Lauraceae	<i>Litsea vitiana</i> (129)	Endemic	Uncommon
Liliaceae	<i>Collospermum montanum</i> (226)	Endemic	Common
Lomariopsidaceae	<i>Elaphoglossum imthurnii</i> (48)	Endemic	Common
Lycopodiaceae	<i>Lycopodium cernuum</i> (11)	Indigenous	Locally common
Lycopodiaceae	<i>Lycopodium foliosum</i> (54,72, 78, 151)	Endemic	Common
Lycopodiaceae	<i>Lycopodium phlegmaria</i> (31)	Indigenous	Common
Lycopodiaceae	<i>Lycopodium squarrosus</i> (139)	Indigenous	Uncommon
Lycopodiaceae	<i>Lycopodium subtrifoliatum</i> (30, 89, 138)	Endemic	Common
Marattiaceae	<i>Angiopteris evecta</i> (4)	Indigenous	Common
Marattiaceae	<i>Marattia smithii</i> (10)	Indigenous	Common & widespread
Melastomataceae	<i>Astronidium confertiflorum</i> (212)	Endemic	Common
Melastomataceae	<i>Astronidium robustum</i>	Endemic	Locally common
Melastomataceae	<i>Medinilla subviridis</i> (6)	Endemic	Common
Meliaceae	<i>Aglaia greenwoodii</i>	Endemic	Common
Meliaceae	<i>Aglaia vitiensis</i> (14)	Endemic	Common
Moraceae	<i>Ficus bambusifolia</i> (106)	Endemic	Locally common
Moraceae	<i>Ficus masonii</i> (40)	Endemic	Common
Moraceae	<i>Ficus pritchardii</i> (5)	Endemic	Common
Moraceae	<i>Ficus pulvo-pilosa</i> (8)	Endemic	Common
Moraceae	<i>Ficus smithii</i> (9)	Indigenous	Common
Moraceae	<i>Ficus theophrastoides</i> (53)	Endemic	Locally common
Moraceae	<i>Ficus vitiense</i> (143)	Endemic	Common & widespread
Myristicaceae	<i>Myristica castaneifolia</i> (223)	Endemic	Very common
Myristicaceae	<i>Myristica chartacea</i> (6, 17, 59, 191, 223)	Endemic	Very Common
Myristicaceae	<i>Myristica gillespieana</i> (7, 184, 213)	Endemic	Common
Myristicaceae	<i>Myristica grandifolia</i> (187)	Endemic	Uncommon
Myristicaceae	<i>Myristica macrantha</i> (58)	Endemic	Common
Myrsinaceae	<i>Maesa insularis</i> (84)	Endemic	Locally common
Myrsinaceae	<i>Tapeinosperma hornei</i> (79)	Endemic	Uncommon
Myrtaceae	<i>Cleistocalyx eugenioides</i> (210)	Endemic	Common
Myrtaceae	<i>Decaspermum vitiense</i> (174)	Endemic	Locally common
Myrtaceae	<i>Syzygium sp.</i> (203)		Uncommon
Myrtaceae	<i>Syzygium effusum</i> (197, 202)	Indigenous	Common
Myrtaceae	<i>Syzygium fijiense</i> (190, 195)	Endemic	Common
Myrtaceae	<i>Syzygium gracilipes</i> (175)	Endemic	Uncommon
Myrtaceae	<i>Syzygium grayi</i> (198)	Endemic	Uncommon
Nyctaginaceae	<i>Pisonia umbellifera</i> (148)	Endemic	Uncommon
Orchidaceae	<i>Agrostophyllum aristatum</i> (41)	Indigenous	Common
Orchidaceae	<i>Appendicula bracteosa</i> (128)	Endemic	Uncommon
Orchidaceae	<i>Appendicula reflexa</i> (68)	Indigenous	Common
Orchidaceae	<i>Calanthe ventilabrum</i> (52, 81)	Indigenous	Common
Orchidaceae	<i>Coelogyne macdonaldii</i> (71)	Indigenous	Uncommon

Appendix 10 Preliminary checklist of the flora of Waivaka South, Namosi, Viti Levu. (3)

Family	Botanical name (collection #)	Distribution	Abundance
Orchidaceae	<i>Cryptostylis arachnites</i> (142)	Indigenous	Common
Orchidaceae	<i>Dendrobium macrophyllum</i> (27)	Indigenous	Common
Orchidaceae	<i>Diplocaulobium tipuliferum</i> (24, 33)	Endemic	Common
Orchidaceae	<i>Earina valida</i> (170)	Indigenous	Common
Orchidaceae	<i>Eria robusta</i> (28)	Indigenous	Uncommon
Orchidaceae	<i>Eria rostriflora</i> (34)	Indigenous	Common
Orchidaceae	<i>Flickingeria comata</i> (46b)	Indigenous	Common
Orchidaceae	<i>Malaxis platychila</i> (145)	Endemic	Uncommon & rare
Orchidaceae	<i>Oberonia equitans</i> (153,154)	Indigenous	Common
Orchidaceae	<i>Phreatia micrantha</i> (146)	Endemic	Uncommon
Orchidaceae	<i>Robiquetia bertholdii</i> (87)	Indigenous	Uncommon
Orchidaceae	<i>Spathoglottis pacifica</i> (225)	Indigenous	Locally common
Orchidaceae	<i>Taeniophyllum smithii</i> (97)	Endemic	Uncommon
Pandanaceae	<i>Freycinetia caudata</i> (8, 127)	Endemic	Common
Pandanaceae	<i>Freycinetia imparvida</i> (25, 29, 162)	Indigenous	Common
Pandanaceae	<i>Freycinetia pritchardii</i> (23, 32)	Indigenous	Common
Pandanaceae	<i>Freycinetia storckii</i> (35)	Indigenous	Common
Pandanaceae	<i>Freycinetia urvilleana</i> (24, 161)	Indigenous	Common
Pandanaceae	<i>Pandanus</i> sp. (196)		Locally common
Peperomiaceae	<i>Peperomia lasiostigma</i> (143)	Endemic	Common
Piperaceae	<i>Piper aduncum</i> (56)	Adventive	Locally common
Piperaceae	<i>Piper insectifugum</i> (144)	Endemic	Common
Pittosporaceae	<i>Pittosporum rhytidocarpum</i> (171)	Endemic	Common
Podocarpaceae	<i>Dacrycarpus imbricatus</i> (188)	Indigenous	Common
Podocarpaceae	<i>Dacrydium nidulum</i> (218)	Indigenous	Locally common
Podocarpaceae	<i>Decussocarpus vitiensis</i> (192)	Indigenous	Uncommon
Podocarpaceae	<i>Podocarpus affinis</i> (119)	Endemic	Locally uncommon
Podocarpaceae	<i>Podocarpus neriifolius</i> (7)	Indigenous	Common
Polypodiaceae	<i>Microsorium linguaeforme</i> (60, 160)	Indigenous	Common & widespread
Proteaceae	<i>Turrillia ferruginea</i> (157)	Endemic	Common & widespread
Proteaceae	<i>Turrillia ferruginea</i> (189)	Endemic	Very common
Psilotaceae	<i>Psilotum complanatum</i> (1)	Indigenous	Uncommon
Rosaceae	<i>Rubus moluccanus</i> (172)	Indigenous	Common
Rubiaceae	<i>Calycosia petiolata</i> (76)	Endemic	Uncommon
Rubiaceae	<i>Dolicholobium latifolium</i> (221)	Endemic	Common
Rubiaceae	<i>Gardenia gordonii</i> (15)	Endemic	Common
Rubiaceae	<i>Gardenia storckii</i> (205)	Endemic	Uncommon
Rubiaceae	<i>Ixora carewii</i> (113, 159)	Endemic	Uncommon
Rubiaceae	<i>Ophiorrhiza leptantha</i> (3)	Indigenous	Common
Rubiaceae	<i>Psychotria</i> sp. (63,85)		Uncommon
Rubiaceae	<i>Psychotria amoena</i> (130)	Endemic	Common
Rubiaceae	<i>Psychotria broweri</i> (2)	Endemic	Common
Rubiaceae	<i>Psychotria parvula</i> (69)	Endemic	Common
Rubiaceae	<i>Psychotria st. johnii</i> (50)	Endemic	Uncommon
Rubiaceae	<i>Psychotria tephrosantha</i> (126)	Endemic	Common
Rubiaceae	<i>Sukunia longipes</i> (155)	Endemic	Uncommon
Rubiaceae	<i>Xanthophytum calycinum</i> (70)	Indigenous	Uncommon
Rutaceae	<i>Melicope vitiense</i> (102)	Endemic	Uncommon
Sapotaceae	<i>Burckella fijiensis</i> (19)	Endemic	Uncommon
Sapotaceae	<i>Palaquium vitilevuense</i> (216)	Endemic	Uncommon
Sapotaceae	<i>Palaquium fidjiense</i> (133)	Endemic	Common
Sapotaceae	<i>Palaquium hornei</i> (38)	Endemic	Common & widespread
Sapotaceae	<i>Palaquium porphyreum</i> (117,158, 185)	Endemic	Uncommon
Saurauiceae	<i>Saurauia rubicunda</i> (204)	Endemic	Common

Appendix 10 Preliminary checklist of the flora of Waivaka South, Namosi, Viti Levu. (4)

Family	Botanical name (collection #)	Distribution	Abundance
Selaginellaceae	<i>Selaginella breynioides</i> (5)	Endemic	Common
Selaginellaceae	<i>Selaginella viridangula</i> (6)	Endemic	Locally common
Simaroubaceae	<i>Amaroria soulameoides</i> (220)	Endemic	Common & widespread
Smilacaceae	<i>Smilax vitiensis</i> (96)	Indigenous	Common
Sterculiaceae	<i>Heritiera ornithocephala</i> (21)	Indigenous	Uncommon
Tiliaceae	<i>Trichospermum calyculatum</i> (91)	Endemic	Uncommon
Tiliaceae	<i>Trichospermum richii</i> (74)	Indigenous	Common
Ulmaceae	<i>Gironniera celtidifolia</i> (94, 180)	Endemic	Very common
Urticaceae	<i>Dendrocnide harveyi</i> (99)	Indigenous	Locally common
Urticaceae	<i>Elatostema humile</i> (135)	Endemic	Uncommon
Urticaceae	<i>Elatostema vitiense</i> (73)	Endemic	Uncommon
Verbenaceae	<i>Premna serratifolia</i> (181)	Indigenous	Common
Vittariaceae	<i>Antrophyum alatum</i> (103)	Indigenous	Common
Vittariaceae	<i>Vittaria elongata</i> (140, 152)	Indigenous	Common

Appendix 11-(1) Vegetation structure(forest profile diagram in site 1. ridge top forest – high elevation (520m asl))

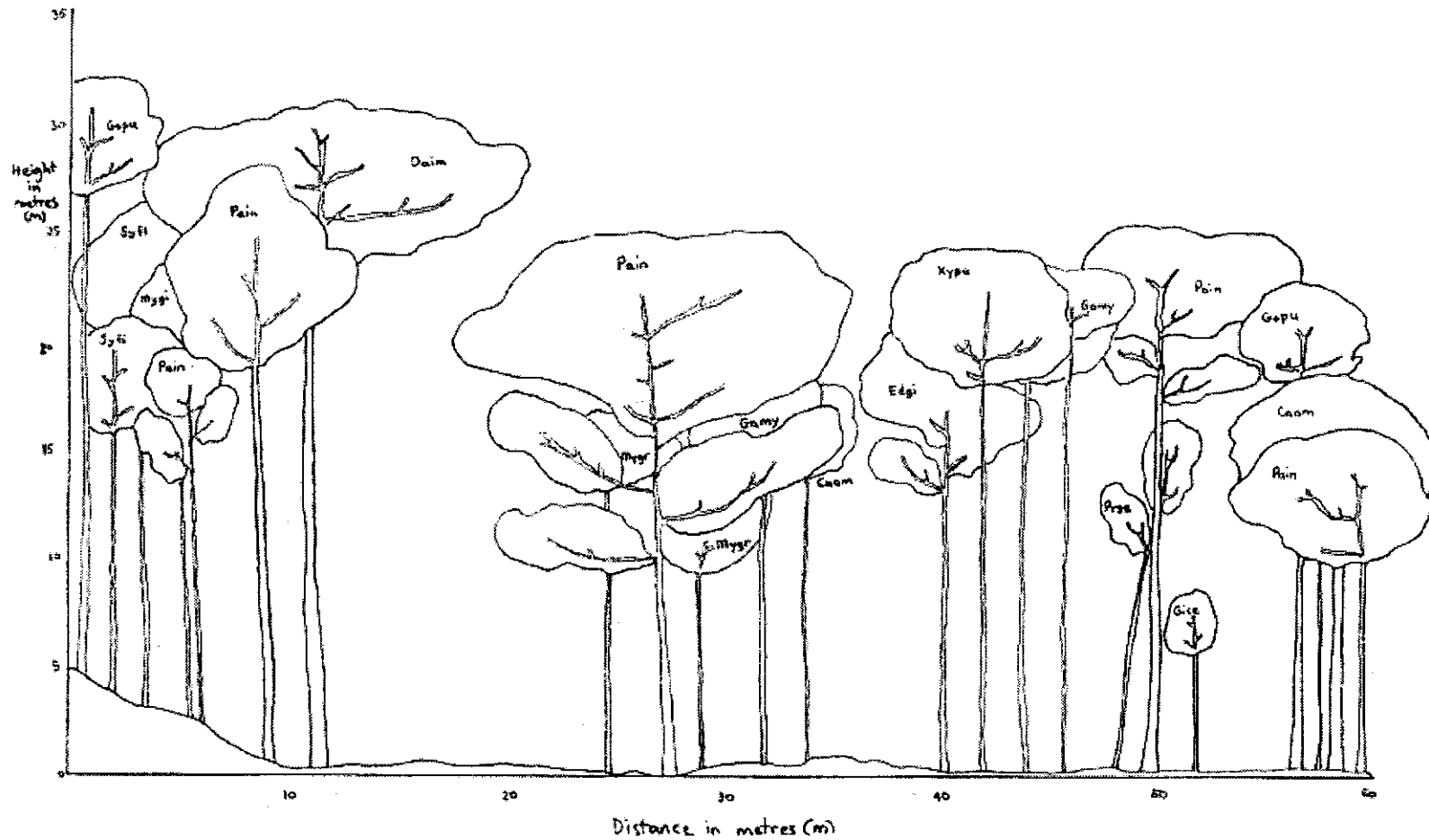


A-97

Figure 2 Vegetation structure. Forest profile diagram of a lowland rainforest high elevation ridge top. (site 1 - 420m asl) near Drill #3, Waivaka South, Namosi Province. Belt transect was 60x6m.

Symbols of tree over 10cm dbh: Agma. *Agathis macrophylla*; Bufl. *Burckella fijiensis*; Caam. *Calophyllum amblyphyllum*; Cavi. *Calophyllum vitiense*; Cavi. *Canarium vitiense*; Daim. *Dacrycarpus imbricatus*; Devi. *Decussocarpus vitiensis*; Engl. *Endiandra gillespiei*; Gamy. *Garcinia myrsifolia*; Gice. *Gironniera celtidifolia*; Gagn. *Gneton gnemon*; Gocu. *Gonystylus punctatus*; Hafl. *Haplolobus floribundus*; Mygl. *Myristica gillespieana*; Mygr. *Myristica grandifolia*; Pahu. *Palaquium hornei*; Pasp. *Pandanus sp.*; Pain. *Parinari insularum*; Pone. *Podocarpus neriifolius*; Syef. *Syzygium effusum*; Syfl. *Syzygium fijiense*

Appendix11-(4) Vegetation structure(forest profile diagram in site 4. creek-flat forest (250m asl.))



A-100

Figure 5 Vegetation structure. Forest profile diagram of a lowland rainforest on a creek flat (Site 4 250m asl) near Wainavuga creek in Waivaka South, Namosi Province. Belt transect was 60x6m.

Symbols of tree over 10cm dbh: Caam. *Calophyllum amblyphyllum*; Daim. *Dacrycarpus imbricatus*; Devi. *Decussocarpus vitiensis*; Engl. *Endiandra gillespiei*; Gamy. *Garcinia myrtifolia*; Gice. *Gironniera celtidifolia*; Gopu. *Gonystylus punctatus*; Halfl. *Haplolobus floribundus*; Mygl. *Myristica gillespieana*; Mygr. *Myristica grandifolia*; Pain. *Parinari insularum*; Path. *Pagiantha thurstonii*; Prse. *Premna serratifolia*; Syfl. *Syzygium fijense*; Tuvi. *Turrillia vitiensis*; Xypa. *Xylopa pacifica*

Appendix 12 List of archaeological sites (1)

No.	Name	Easting(m)	Northing(m)	Location	Site type	Map Reference	Map Name
1	Nadoi	1905746.25	3900240.91	Nukuilau village	Combination	M28	Keiyasi
2	Navauvau Nakoro	1909201.97	3891403.86	Nadadara Creek	Combination	M28	Keiyasi
3	Saroi	1908899.41	3891603.79	Nadadara Creek	Combination	M28	Keiyasi
4	Togalevu	1906208.92	3900242.79	Sigatoka River	Combination	M28	Keiyasi
5	Vusu Nakoro	1910502.54	3893119.02	Vusu Creek	Combination	M28	Keiyasi
6	Wasivaro	1898309.33	3898702.00	Sawene village	Combination	M28	Keiyasi
7		1900012.70	3900318.24	Talenalewa trig	Combination	M28	Keiyasi
8		1897797.03	3901013.33	Natuatuacoko village	Combination	M28	Keiyasi
9	Drenabukete	1896929.70	3896624.39	Sawene	Hill fort	M28	Keiyasi
10	Malua	1901065.60	3898632.73	Korovou village	Hill fort	M28	Keiyasi
11	Busabusa	1901846.86	3894491.92	Busabusa Creek	Koromakawa	M28	Keiyasi
12	Muawai	1899045.88	3900616.06	Sawene	Koromakawa	M28	Keiyasi
13	Sawene	1897662.25	3899524.15	Sawene village	Koromakawa	M28	Keiyasi
14	Tawaleka	1898885.77	3900414.25	Sigatoka River	Koromakawa	M28	Keiyasi
15	Wala	1899115.86	3898242.60	Korovou	Koromakawa	M28	Keiyasi
16	Nanagana	1898807.50	3899870.78	Sawene village	Naga	M28	Keiyasi
17	Tunu	1898704.96	3900353.16	Sawene	Naga	M28	Keiyasi
18	Vatureba	1907624.97	3898297.27	Sigatoka River	Naga	M28	Keiyasi
19	Wasivaro	1898309.33	3898702.00	Sawene village	Naga	M28	Keiyasi
20	Kurimalawai	1899213.67	3898926.96	Korovou village	Ring ditch	M28	Keiyasi
21	Lavatumali	1894472.98	3902186.74	Nawamagi	Ring ditch	M28	Keiyasi
22	Matalevu terrace	1897326.06	3898094.51	Matalevu Creek	Ring ditch	M28	Keiyasi
23	Waibasaga	1903302.52	3897656.11	Lato Creek	Ring ditch	M28	Keiyasi
24		1908077.28	3900853.85	Vitula Creek	Ring ditch	M28	Keiyasi
25		1886027.94	3901267.36	Nagorosa Creek	Stone flaking floor	M28	Keiyasi
26	Erege	1886501.44	3908430.95	Nasivikoso village	Unknown	M28	Keiyasi
27	Matawalu	1900803.49	3903741.23	Tuwalu Creek	Unknown	M28	Keiyasi
28	Nabourewa	1894126.66	3888405.37	Nasogosewa Creek	Unknown	M28	Keiyasi
29	Nadruku	1923783.83	3891966.16	Lase Creek	Unknown	M28	Keiyasi
30	Nakoto	1892027.98	3909841.33	Nakoto Creek	Unknown	M28	Keiyasi
31	Nalaba	1909745.84	3906090.77	Namoli village	Unknown	M28	Keiyasi
32	Nalesutale	1907364.03	3893206.82	Lato Creek	Unknown	M28	Keiyasi
33	Natubarara	1897227.90	3887613.37	Nasogolevu Creek	Unknown	M28	Keiyasi
34	Naviti	1906886.18	3901895.06	Savua Creek	Unknown	M28	Keiyasi
35	Nubutolu	1898324.69	3894920.16	Nasikawa Creek	Unknown	M28	Keiyasi
36	Qalisaivene	1888306.74	3884961.71	Tawa Creek	Unknown	M28	Keiyasi
37	Ratalevulevu	1896791.00	3886223.54	Nasogolevu Creek	Unknown	M28	Keiyasi
38	Ratidai	1902254.10	3898235.23	Koroinadoko trig	Unknown	M28	Keiyasi
39	Vunivuga	1905852.27	3903862.25	Korolevu village	Unknown	M28	Keiyasi
40		1905260.27	3891126.29	Burotu Creek	Unknown	M28	Keiyasi
41		1908725.30	3904758.99	Lolo Creek	Unknown	M28	Keiyasi
42		1909359.04	3897298.50	Nasa Creek	Unknown	M28	Keiyasi
43		1910177.50	3893903.22	Navakaruku Creek	Unknown	M28	Keiyasi
44		1897703.79	3899202.46	Sawene village	Unknown	M28	Keiyasi
45		1910341.62	3893118.37	Vusu Creek	Unknown	M28	Keiyasi
46		1892109.18	3865282.86	Korolevu	Graves	M29	Korolevu
47		1897528.12	3863474.66	Namatakula village	Hill fort	M29	Korolevu
48	Namahara	1891706.01	3865482.37	Korolevu Bay	Koromakawa	M29	Korolevu
49		1894696.78	3867104.07	Naicobocobo Creek	Koromakawa	M29	Korolevu
50		1902704.36	3861967.23	Somosomo Bay	Koromakawa	M29	Korolevu
51	Korolevuiwai	1891264.19	3865299.49	Solosolo Creek	Ring ditch	M29	Korolevu
52	Naggau	1894124.01	3864526.76	Naggau Creek	Ring ditch	M29	Korolevu
53		1886464.84	3868075.92	Korolevu	Ring ditch	M29	Korolevu
54		1893512.21	3866535.91	Naqara	Ring ditch	M29	Korolevu
55		1892971.30	3865990.52		Ring ditch	M29	Korolevu
56	Nabotini	1910115.86	3864753.83	Korovisilou Creek	Unknown	M29	Korolevu
57	Tubarara	1894137.90	3870923.95	Tubarara Creek	Unknown	M29	Korolevu
58		1909914.70	3864752.90	Toka Creek	Unknown	M29	Korolevu
59		1894885.19	3870202.83	Tutumana Creek	Unknown	M29	Korolevu
60	Navuniivi	1934475.25	3884567.18	Namosi village	Agricultural	N28	Namosi
61	Noco	1934877.55	3884568.82		Agricultural	N28	Namosi
62		1934274.92	3884365.21	Namosi	Agricultural	N28	Namosi
63		1934274.92	3884365.21	Namosi	Agricultural	N28	Namosi
64		1934464.57	3887182.08	Tavua	Agricultural	N28	Namosi
65	Navunimolau	1934677.22	3884366.86	Namosi	Cave/Rockshelter	N28	Namosi
66	Nasalia	1934149.30	3885571.60		Combination	N28	Namosi
67		1914701.13	3899472.59	Monavatu trig	Combination	N28	Namosi
68		1914499.97	3899471.78	Monavatu trig	Combination	N28	Namosi
69	Lomaivuna	1958279.54	3902243.98	Lomaivuna farm	Hill fort	N28	Namosi
70		1959770.25	3901686.82	Lomaivuna farm	Hill fort	N28	Namosi
71	Korotabu	1931942.39	3889082.71	Wainaqare	Ring ditch	N28	Namosi
72		1953378.42	3890678.67	Nabukaluka village	Ring ditch	N28	Namosi
73		1952391.35	3891036.71	Nabukaluka village	Ring ditch	N28	Namosi
74	Bulibulinikuro	1932652.98	3887476.41	Wainimala River	Unknown	N28	Namosi
75	Nabasau	1912173.97	3897631.79	Wainimosi Creek	Unknown	N28	Namosi
76	Naduruloulou-i-colo	1958086.80	3895223.47	Korovou village	Unknown	N28	Namosi
77	Naduta	1912293.93	3897813.32	Wainimosi Creek	Unknown	N28	Namosi
78	Naibili	1928979.61	3901139.71	Waisomo Creek	Unknown	N28	Namosi
79	Naiteqeteqe	1930064.40	3910698.78	Wainivono Creek	Unknown	N28	Namosi
80	Nakuruvakatini	1929786.66	3904763.71	Matawailevu village	Unknown	N28	Namosi
81	Nalia	1928718.88	3890316.70	Wainikoroiuva river	Unknown	N28	Namosi
82	Naloka	1917034.56	3899482.06	Wainivau Creek	Unknown	N28	Namosi
83	Naqara	1926129.94	3908671.40	Wainisavulevu Creek	Unknown	N28	Namosi
84	Nasau	1928509.29	3892387.71	Wainikoroiuva river	Unknown	N28	Namosi
85	Nataubale	1931373.39	3905353.46	Nakorokoroyawa village	Unknown	N28	Namosi
86	Natodre	1956345.07	3893204.99	Lomai village	Unknown	N28	Namosi
87	Navicila	1955899.69	3893907.17	Vanuakula village	Unknown	N28	Namosi
88	Navisigasiga	1928238.09	3884903.75	Wainikoroiuva river	Unknown	N28	Namosi
89	Ninive	1928432.51	3891482.22	Naqarawai village	Unknown	N28	Namosi
90	Ronawa	1928133.40	3885909.08	Wainikoroiuva river	Unknown	N28	Namosi
91	Rukuruku	1929434.07	3887583.96	Wainikoroiuva river	Unknown	N28	Namosi
92	Tavua	1942902.96	3909443.08	Naitavoli village	Unknown	N28	Namosi
93	Vunibau	1934594.71	3884869.39	Nacokula village	Unknown	N28	Namosi
94	Waikalou	1949710.84	3902229.41	Waiwatu Creek	Unknown	N28	Namosi
95		1912077.50	3901574.12	Monavatu trig	Unknown	N28	Namosi

Appendix 12 List of archaeological sites (2)

No.	Name	Easting(m)	Northing(m)	Location	Site type	Map Reference	Map Name
96		1913102.89	3896750.47	Nakaumama Creek	Unknown	N28	Namosi
97		1914776.97	3910556.70	Solikana Creek	Unknown	N28	Namosi
98		1928337.99	3909826.87	Wainisavulevu Creek	Unknown	N28	Namosi
99		1960270.24	3902392.83	Lomaivuna settlement	Yavu	N28	Namosi
100		1959684.25	3903054.21	Lomaivuna settlement	Yavu	N28	Namosi
101	Nabou village	1986378.91	3882365.76	Rewa Delta	Agricultural	O28	Nausori
102		1974488.38	3888149.93	Navuso agriculture school	Agricultural	O28	Nausori
103		1961195.24	3902456.90	Navolau village	Cave/Rockshelter	O28	Nausori
104		1984500.00	3893000.00	Kubuna islet	Combination	O28	Nausori
105		1974488.38	3888149.93	Navuso agriculture school	Combination	O28	Nausori
106	Nakovekovevou	1960990.35	3903381.32	Veidrodro trig	Hill fort	O28	Nausori
107		1968877.99	3892753.13	Nakini village	Hill fort	O28	Nausori
108		1968965.71	3895911.29	Natoaika village	Hill fort	O28	Nausori
109		1964197.67	3897641.78	Viria village	Hill fort	O28	Nausori
110		1976117.99	3883128.31	Koronivia Agricultural Station	Ring ditch	O28	Nausori
111		1976318.71	3883229.70	Koronivia Agricultural Station	Ring ditch	O28	Nausori
112		1976338.01	3883430.91	Koronivia Agricultural Station	Ring ditch	O28	Nausori
113		1967674.90	3881987.55	Marshall mountain	Ring ditch	O28	Nausori
114		1980330.68	3895716.07	Nadaro village	Ring ditch	O28	Nausori
115		1980330.68	3895716.07	Nadaro village	Ring ditch	O28	Nausori
116		1969936.68	3879784.34	Naigatugatu minor trig	Ring ditch	O28	Nausori
117		1971892.56	3883513.30	Nasinu Cemetery	Ring ditch	O28	Nausori
118		1971992.79	3883594.17	Nasinu cemetery	Ring ditch	O28	Nausori
119		1976126.48	3881056.70	Naulu Road	Ring ditch	O28	Nausori
120		1975421.86	3882365.76	Naulu Road	Ring ditch	O28	Nausori
121		1976325.30	3881620.68	Naulu Road	Ring ditch	O28	Nausori
122		1976606.80	3881641.95	Naulu Road	Ring ditch	O28	Nausori
123		1976224.32	3881720.84	Naulu Road	Ring ditch	O28	Nausori
124		1975289.22	3889058.29	Navuso	Ring ditch	O28	Nausori
125		1975296.61	3887248.14	Rewa River	Ring ditch	O28	Nausori
126		1976558.81	3888460.07	Verata	Ring ditch	O28	Nausori
127		1971876.93	3887334.76	Vuniniudrovu village	Ring ditch	O28	Nausori
128		1975011.32	3888152.06	Waimanu River	Ring ditch	O28	Nausori
129		1975291.84	3888414.68	Waimanu River	Ring ditch	O28	Nausori
130		1974888.18	3888754.96	Waimanu River	Ring ditch	O28	Nausori
131		1972886.22	3889456.89	Waisaravu	Ring ditch	O28	Nausori
132		1974845.90	3889257.61		Ring ditch	O28	Nausori
133	Matanikoroiwalu	1973218.00	3893900.00	Dreketi Creek	Unknown	O28	Nausori
134	Motonoko	1962173.68	3899262.80	Navutu village	Unknown	O28	Nausori
135	Nabulula	1969500.70	3902852.56	Wainabua Creek	Unknown	O28	Nausori
136	Nakorokoroloka	1973431.95	3900615.78	Sote village	Unknown	O28	Nausori
137	Nalolowa	1972716.89	3903348.28	Sote village	Unknown	O28	Nausori
138	Natavo	1984000.00	3901500.00	Kumi village	Unknown	O28	Nausori
139	Navuga	1975663.45	3915810.16	Sawani Creek	Unknown	O28	Nausori
140	Nukudamu	1970322.66	3903519.62	Nadrasavu Creek	Unknown	O28	Nausori
141	Suva	1968286.00	3901140.00		Unknown	O28	Nausori
142	Teyanuca	1977602.01	3913907.21	Navitau trig	Unknown	O28	Nausori
143	Vatugunu	1978344.98	3914211.89	Lauci Island	Unknown	O28	Nausori
144	Vuna	1966863.84	3913280.76	Dakuivuna village	Unknown	O28	Nausori
145		1973588.62	3886828.91	Davuilevu minor trig	Unknown	O28	Nausori
146		1982500.00	3910699.00	Matacaucau village	Unknown	O28	Nausori
147		1978704.77	3885049.02	Nadali village	Unknown	O28	Nausori
148		1973023.56	3887299.21	Vuniniudrovu village	Unknown	O28	Nausori
149	Vuniivivi	1976607.25	3886448.97	Nausori	Yavu	O28	Nausori
150	Narerega Naqavatauv	1932670.66	3883151.75	Namosi	Cave/Rockshelter	N29	Navua
151		1935283.14	3883765.89	Navurai	Cave/Rockshelter	N29	Navua
152	Namaramara	1935285.60	3883162.45	Namosi Gorge	Hill fort	N29	Navua
153	Narerega Yavu	-	-	Narerega Naqarataurukusara	Hill fort	N29	Navua
154		1946084.07	3869267.33	Mau trig	Hill fort	N29	Navua
155	Nabukavesi	1946033.25	3871841.77	Queen's Road	Ring ditch	N29	Navua
156	Nayavuinaimalo	1934881.66	3883563.10	Namosi Gorge	Ring ditch	N29	Navua
157		1935869.50	3863452.25	Navua Delta	Ring ditch	N29	Navua
158		1926829.73	3860498.14	Karobo Bay	Stratified site	N29	Navua
159	Daviko	1924424.65	3882816.27	Nadoli village	Unknown	N29	Navua
160	Laselase	1928747.05	3883417.31	Wainikoroiuva River	Unknown	N29	Navua
161	Nadurumuqa	1917759.47	3864886.01	Waivunu Creek	Unknown	N29	Navua
162	Nasautate	1918709.06	3863884.15	Waivunu	Unknown	N29	Navua
163	Nukutabua	1929453.55	3882816.74	Nakorowaiwai village	Unknown	N29	Navua
164	Ratanui	1931938.84	3875203.31	Wainikovu Creek	Unknown	N29	Navua
165	Veinuqa	1917247.51	3881781.11	Veinuqa Creek	Unknown	N29	Navua
166	Wainiyavu	1924465.62	3882635.40	Korovou village	Unknown	N29	Navua
167		1914446.60	3863363.63	Yarawa sawmill	Unknown	N29	Navua
168		1940484.10	3871215.49		Unknown	N29	Navua
169	Koroimalu	1879732.43	3890941.73	Koronisagana	Agricultural	L29	Sigatoka
170	Koroigara	-	-	Volivoli valley	Cave/Rockshelter	L29	Sigatoka
171	Uluvatu	1864157.84	3872067.76	Yadua village	Cave/Rockshelter	L29	Sigatoka
172		1881541.18	3891391.69	Sigatoka Valley	Cave/Rockshelter	L29	Sigatoka
173	Nabouciwa	1879250.68	3890678.24	Toga village	Hill fort	L29	Sigatoka
174	Naruku	1866110.77	3871713.69	Volivoli village	Hill fort	L29	Sigatoka
175	Nokonoko	1870926.90	3879599.61	Nakalavo village	Hill fort	L29	Sigatoka
176	Qoroqorovakatini	1880438.83	3890381.32	Tawatawadi village	Hill fort	M28	Sigatoka
177	Tavuni	1871832.36	3874654.35	Naroro village	Hill fort	L29	Sigatoka
178	Mahevu	1872599.22	3878982.82	Nawamagi	Koromakawa	L29	Sigatoka
179	Nalovo	1860289.56	3873419.86	Rukulevu village	Koromakawa	L29	Sigatoka
180	Togovere	-	-		Koromakawa	L29	Sigatoka
181	Naqarai	1868000.00	3870400.00	West of Sigatoka Sand dunes	Lapita	L29	Sigatoka
182	Sand Dunes	1867000.00	3870400.00	Kulukulu Village	Lapita	L29	Sigatoka
183	Koro ni velo	1873363.30	3880821.99	Naduri village	Ring ditch	L29	Sigatoka
184	Lomolomo	1869999.26	3875230.23	Lawai village	Ring ditch	L29	Sigatoka
185	Baunisole	1882197.61	3878438.83	Viro Creek	Unknown	L29	Sigatoka
186	Naimasi	1859850.27	3887360.03	Tuva River	Unknown	L29	Sigatoka
187	Qereqere	1871427.86	3880084.49	Nakalavo village	Unknown	L29	Sigatoka
188	Vatutoka	1863916.20	3891802.64	Vevelutu Creek	Unknown	L29	Sigatoka
189		1967098.71	3875347.75	Nauluvatu	Cave/Rockshelter	O29	Suva
190		1967307.29	3873538.40	Flagstaff	Combination	O29	Suva

Appendix 12 List of archaeological sites (3)

No.	Name	Easting(m)	Northing(m)	Location	Site type	Map Reference	Map Name
191		1965499.96	3872826.99	Botanical Gardens Suva	Combination	O29	Suva
192		1967193.91	3876655.52	Flagstaff	Combination	O29	Suva
193		1973217.22	3879294.95	Laqere Bridge	Ring ditch	O29	Suva
194		1970614.45	3876367.85	Laucala Beach	Ring ditch	O29	Suva
195		1971514.19	3877678.91	Nasinu	Ring ditch	O29	Suva
196		1973300.90	3883418.49	Nasinu	Ring ditch	O29	Suva
197		1972695.45	3883918.85	Nasinu	Ring ditch	O29	Suva
198		1967688.91	3878568.33	Princes Road	Ring ditch	O29	Suva
199		1968287.29	3879797.70	Tamavua hospital	Ring ditch	O29	Suva
200		1966759.98	3879469.63	Tamavua River	Ring ditch	O29	Suva
201		1966281.37	3878461.99	Tamavua Road	Ring ditch	O29	Suva
202		1972193.68	3883655.33		Ring ditch	O29	Suva
203		1972374.04	3883816.97		Ring ditch	O29	Suva
204		1971116.05	3876671.61	Kinoya Power Station	Unknown	O29	Suva
205		1970792.99	3876971.98	Kinoya Power Station	Unknown	O29	Suva
206		1932785.81	3879591.86	Laqere bridge	Unknown	O29	Suva
207		1974860.69	3885637.31	Sarava village	Unknown	O29	Suva
208		1966712.57	3871424.03	Suva Grammar School	Unknown	O29	Suva
209		1966410.45	3871523.36	Theological College, Suva Point	Unknown	O29	Suva
210		1966309.47	3871623.51	Theological College, Suva Point	Unknown	O29	Suva
211		1971413.62	3877678.48	Nasinu	Yavu	O29	Suva
212		1971413.62	3877678.48	Nasinu	Yavu	O29	Suva
213		1971413.62	3877678.48	Nasinu	Yavu	O29	Suva

Naga Site - stone wall formation (enclosure) associated with the Naga religion.

Ring ditch - fortification built in low lying areas using a ring formation. This is particularly prevalent in damp, marshy areas.

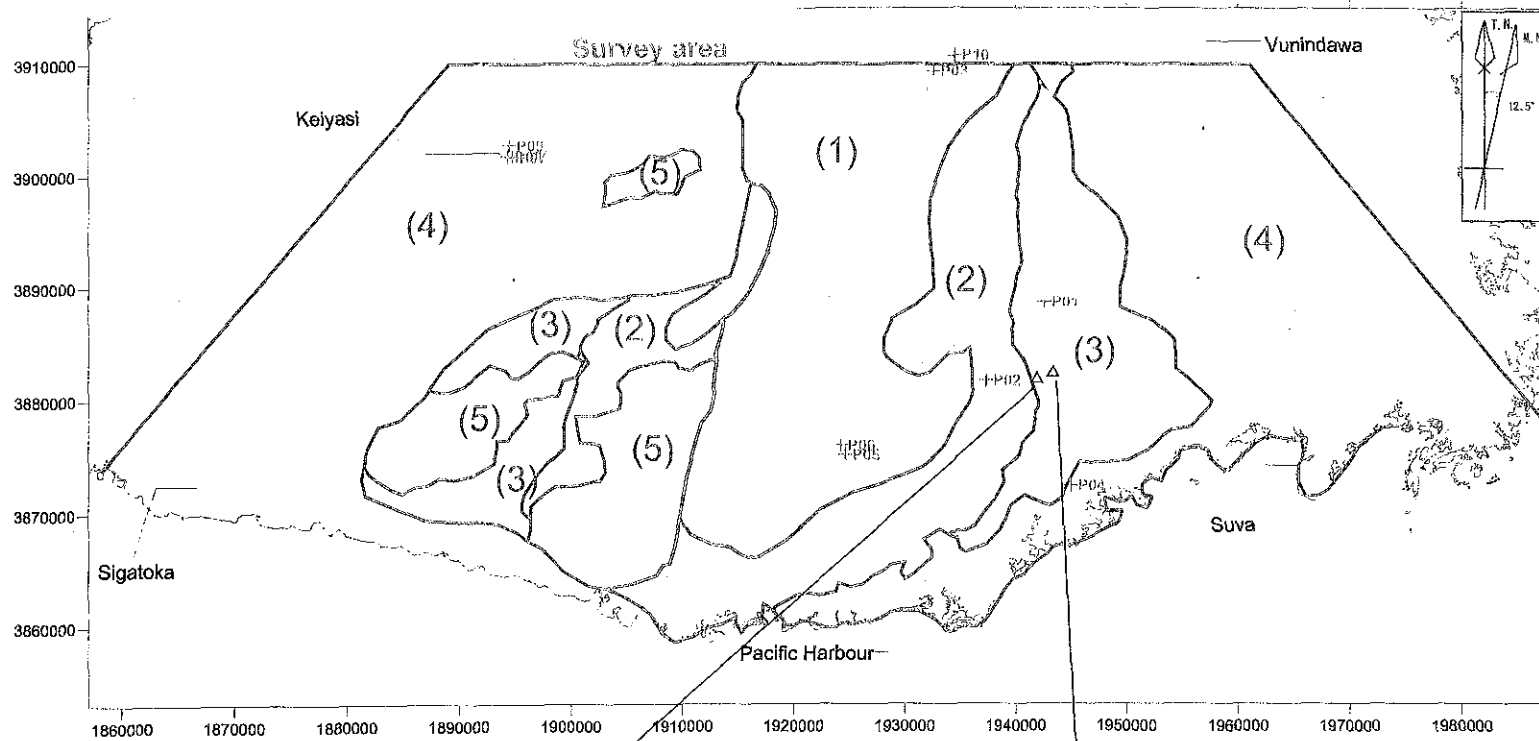
Yavu - old house mound

Hill Fort - fortification common in mountainous or hilly ridges.

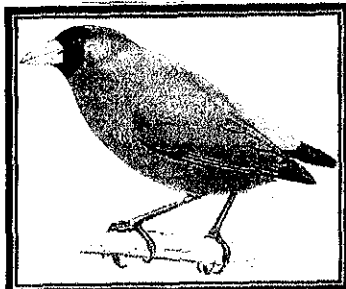
Koromakawa - old Fijian village site.

Appendix 13 Field data and chemical composition of the surface water(wet season)

	atoms.	water	pH	Electric	DO	Turb.	Flow rate	TDS	Hardness	Ca	Mg	Na	K	CO3	HCO3	SO4	Cl	B	Fe	Se	Ag	Al	As	Ba	Cr	Cu	Mn	Mo	Ni	Pb	Sb	Zn	Hg	T-GN	F	N(Ammonia)	N(Nitrite)	N(Nitrate)	P	Sulphide	COD	
	Wet	Wet	Wet	Wet	Wet	Wet	Wet	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
1W	29.0	27.0	7.33	5.2	8.71	9	24.433	40	18	5	2	6	<1	<1	24	3	4	<0.1	0.05	<0.01	<0.001	0.02	0.003	0.004	<0.001	<0.001	0.013	<0.001	<0.001	<0.001	<0.001	0.062	<0.0001	<0.001	<0.1	0.05	<0.01	<0.01	<0.01	<0.1	3	
2W	29.0	27.3	7.12	5.7	7.95	7	47.15	41	22	6	2	6	<1	<1	30	3	4	<0.1	0.06	<0.01	<0.001	<0.01	0.003	0.005	<0.001	<0.001	0.019	<0.001	<0.001	<0.001	<0.001	0.033	<0.0001	<0.001	<0.1	0.03	<0.01	<0.01	0.01	<0.1	3	
3W	28.0	26.5	6.85	5.9	7.65	15	31.668	42	23	6	2	5	<1	<1	28	4	5	<0.1	0.08	<0.01	<0.001	0.08	<0.001	0.007	0.001	0.004	0.03	<0.001	<0.001	<0.001	<0.001	0.489	<0.0001	<0.001	<0.1	0.02	<0.01	<0.01	0.06	<0.1	2	
4W	26.5	24.3	6.70	3.4	7.51	12	0.26	53	12	3	1	4	<1	<1	16	1	5	<0.1	0.14	<0.01	<0.001	2.27	0.003	0.005	0.01	0.004	0.005	<0.001	0.007	0.013	<0.001	0.008	<0.0001	<0.001	<0.1	0.02	<0.01	<0.01	0.05	<0.1	2	
5W	28.5	24.6	7.40	5.0	8.10	2	0.2	31	16	4	1	5	<1	<1	20	1	5	<0.1	0.05	<0.01	<0.001	0.03	<0.001	0.008	<0.001	0.001	0.002	<0.001	<0.001	0.003	<0.001	0.003	<0.0001	<0.001	<0.1	0.02	<0.01	<0.01	0.02	<0.1	<1	
6W	28.7	25.5	7.40	11.0	9.50	5	1.33	64	36	10	3	7	<1	<1	40	9	5	0.1	0.05	<0.01	<0.001	<0.01	0.002	0.007	<0.001	<0.001	0.011	<0.001	<0.001	<0.001	<0.001	0.002	<0.0001	<0.001	<0.1	0.02	<0.01	0.01	0.03	<0.1	2	
7W	28.9	24.7	6.90	7.3	7.60	6	1.43	47	26	7	2	6	<1	<1	33	4	5	<0.1	0.07	<0.01	<0.001	0.03	<0.001	0.004	<0.001	0.001	0.002	<0.001	<0.001	0.003	<0.001	0.009	<0.0001	<0.001	<0.1	0.02	<0.01	0.02	0.07	<0.1	16	
8W	29.0	24.6	7.00	6.2	7.60	30	6.26	42	23	6	2	6	<1	<1	30	4	4	<0.1	0.03	<0.01	<0.001	0.02	0.002	0.003	0.001	0.001	0.002	<0.001	<0.001	<0.001	<0.001	0.006	<0.0001	<0.001	<0.1	0.01	<0.01	<0.01	0.03	<0.1	12	
9W	31.0	25.0	5.87	4.9	6.10	7	0.79	49	19	5	2	4	<1	<1	15	7	4	<0.1	0.04	<0.01	<0.001	0.02	0.003	0.005	0.002	0.005	0.005	0.001	<0.001	0.001	<0.001	0.002	<0.0001	<0.001	<0.1	0.02	<0.01	<0.01	0.03	<0.1	5	
10W	32.0	25.2	6.20	5.6	5.30	41	4.23	41	22	6	2	5	<1	<1	29	3	4	<0.1	0.35	<0.01	<0.001	0.02	0.002	0.009	0.002	0.001	0.024	<0.001	<0.001	0.003	<0.001	0.002	<0.0001	<0.001	<0.1	0.02	<0.01	<0.01	0.03	<0.1	8	
11W	29.0	24.8	7.64	9.8	7.86	5	1.3353	53	30	8	3	6	<1	<1	33	8	5	<0.1	0.05	<0.01	<0.002	<0.01	0.001	0.005	<0.001	0.001	0.005	<0.001	<0.001	<0.001	0.076	<0.0001	<0.001	<0.1	0.02	<0.01	<0.01	0.03	<0.1	5		
12W	35.0	25.7	4.37	4.1	7.20	1	0.77	27	13	3	1	4	<1	<1	13	3	4	<0.1	0.03	<0.01	<0.001	0.02	<0.001	0.003	<0.001	0.005	0.003	<0.001	<0.001	0.003	<0.001	0.002	<0.0001	<0.001	<0.1	0.1	<0.01	<0.01	0.01	<0.1	5	
13W	32.0	25.4	7.26	7.3	8.31	1	0.4814	46	24	6	7	7	<1	<1	29	6	3	<0.1	0.05	<0.01	<0.001	0.02	<0.001	0.006	<0.001	0.001	0.004	<0.001	<0.001	0.008	<0.001	0.003	<0.0001	<0.001	<0.1	0.03	<0.01	<0.01	0.04	<0.1	9	
14W	29.5	23.0	7.35	6.5	7.88	4	0.122	35	21	4	2	7	<1	<1	25	3	4	<0.1	0.03	<0.01	<0.001	0.01	0.001	0.006	0.001	0.001	0.003	<0.001	<0.001	<0.001	0.003	<0.0001	<0.001	<0.1	0.03	<0.01	<0.01	0.04	<0.1	2		
15W	25.0	22.2	7.05	9.4	8.32	45	0.3287	45	24	6	2	6	<1	<1	23	9	4	<0.1	3.37	<0.01	<0.001	2.8	0.004	0.02	<0.001	0.037	0.058	<0.001	0.001	0.003	<0.001	0.241	<0.0001	<0.001	<0.1	0.02	<0.01	<0.01	0.13	<0.1	17	
16W	26.0	24.2	7.43	8.1	8.11	0	0.872	45	24	6	2	6	<1	<1	26	7	3	<0.1	0.05	<0.01	<0.001	<0.01	0.003	0.007	<0.001	<0.001	0.009	<0.001	<0.001	<0.001	<0.001	0.286	<0.0001	<0.001	<0.1	0.02	<0.01	<0.01	0.01	<0.1	5	
17W	27.0	24.0	7.70	4.6	7.80	2	0.5638	33	16	4	1	5	<1	<1	26	<1	4	<0.1	0.01	<0.01	<0.001	0.03	0.001	0.009	0.008	<0.001	0.001	<0.001	<0.001	0.002	<0.001	0.003	<0.0001	<0.001	<0.1	0.01	<0.01	<0.01	<0.01	<0.1	8	
18W	29.0	26.4	7.86	8.8	7.34	3	1.2066	53	30	7	3	8	<1	<1	31	5	4	<0.1	0.11	<0.01	<0.001	0.01	0.002	0.001	<0.001	0.001	0.011	<0.001	<0.001	<0.001	0.021	<0.0001	<0.001	<0.1	0.02	<0.01	<0.01	0.01	<0.1	17		
19W	30.0	26.9	7.89	9.7	7.40	2	7.6954	55	32	8	3	7	<1	<1	43	3	4	<0.1	0.04	<0.01	<0.001	0.03	0.002	0.001	<0.001	0.001	0.004	<0.001	<0.001	<0.001	0.015	<0.0001	<0.001	<0.1	0.02	<0.01	<0.01	0.02	<0.1	11		
20W	29.0	24.1	7.94	9.9	7.62	2	2.7184	62	37	10	3	8	<1	<1	47	3	<1	<0.1	0.02	<0.01	<0.001	0.03	0.003	0.008	<0.001	0.002	0.002	<0.001	0.002	<0.001	0.03	<0.0001	<0.001	0.1	0.02	<0.01	0.07	0.03	<0.1	12		
21W	30.0	25.0	7.57	7.0	7.59	1	2.1453	42	23	5	2	7	<1	<1	33	2	2	<0.1	0.04	<0.01	<0.003	<0.01	0.004	0.001	<0.001	<0.001	0.002	<0.001	<0.001	<0.001	0.037	<0.0001	<0.001	<0.1	0.02	<0.01	<0.01	0.01	<0.1	3		
22W	28.0	26.1	7.83	8.3	7.43	2	7.5253	54	32	8	3	8	<1	<1	42	3	3	<0.1	0.02	<0.01	<0.001	<0.01	0.002	0.002	<0.001	<0.001	0.003	<0.001	<0.001	<0.001	0.015	<0.0001	<0.001	<0.1	0.01	<0.01	<0.01	<0.01	<0.1	9		
23W	29.0	24.2	7.90	11.1	9.70	44	29.1	41	40	10	4	6	<1	<1	49	2	4	<0.1	0.05	<0.01	<0.001	0.02	0.002	0.002	<0.001	<0.001	0.017	<0.001	<0.001	<0.001	0.002	<0.0001	<0.001	<0.1	0.02	<0.01	0.01	0.02	<0.1	26		
24W	29.0	24.3	7.81	8.9	8.70	50	43.7	66	39	10	4	7	<1	<1	48	2	3	<0.1	0.1	<0.01	<0.001	0.51	0.002	0.002	0.15	0.002	0.017	<0.001	0.008	<0.001	0.003	<0.0001	<0.001	<0.1	0.02	<0.01	0.03	0.03	<0.1	19		
25W	26.0	24.3	7.65	7.1	8.12	97	142.47	55	31	7	3	6	<1	<1	28	13	2	<0.1	0.09	<0.01	<0.001	0.1	0.002	0.004	0.002	0.001	0.018	<0.001	0.003	0.002	0.053	<0.0001	<0.001	<0.1	0.03	<0.01	<0.01	0.05	<0.1	23		
26W	25.0	23.7	7.79	6.8	8.41	70	18.564	50	30	7	3	5	<1	<1	38	2	1	<0.1	2.48	<0.01	<0.001	2.36	0.002	0.008	0.003	0.004	0.047	<0.001	0.004	0.005	<0.001	0.087	<0.0001	<0.001	<0.1	0.02	<0.01	0.04	0.04	<0.1	16	
27W	27.0	23.9	7.74	7.0	8.26	93	106.28	52	30	7	3	6	<1	<1	28	10	3	0.2	0.19	<0.01	<0.001	0.75	0.006	0.003	0.18	0.002	0.014	<0.001	0.009	0.026	<0.001	0.134	<0.0001	<0.001	<0.1	0.02	<0.01	0.09	0.04	<0.1	33	
28W	25.0	23.0	7.73	9.1	8.09	12	26.928	66	41	9	4	7	<1	<1	52	2	3	0.2	0.06	<0.01	<0.001	0.04	0.002	0.002	0.004	0.001	0.007	<0.001	<0.001	<0.001	0.11	<0.0001	<0.001	<0.1	0.02	<0.01	0.03	0.01	<0.1	6		
29W	27.0	24.2	7.65	9.8	7.66	13	9.4352	74	46	11	5	7	<1	<1	57	2	4	0.2	0.04	<0.01	<0.001	0.02	<0.001	0.002	<0.001	0.001	0.006	<0.001	0.001	<0.001	0.02	<0.0001	<0.001	<0.1	0.02	<0.01	0.03	0.04	<0.1	2		
30W	27.0	24.3	7.58	7.7	7.66	2	0.7527	55	29	5	4	8	<1	<1	32	7	7	0.1	0.02	<0.01	<0.001	0.06	0.002	0.001	0.005	<0.001	0.003	<0.001	<0.001	0.038	<0.0001	<0.001	<0.1	0.02	<0.01	<0.01	<0.01	<0.1	2			
31W	27.0	24.3	7.28	7.4	8.09	5</																																				



- (1) Upland rain forest cloud forest
Lowland rain forest
- (2) Lowland rain forest
- (3) Grassland vegetation
- (4) Grassland vegetation
Fresh water werland vegetation
- (5) Cloud



Pink-billed Parrotfinch
(*Enythrura kleinschmidti*)



Fotted skink
(*Emoia mokosariniveikan*)

Appendix 14 Vegetation distribution map of the survey area indicating the location of fauna and flora survey.

