Covenants east of Waitahanui River

This survey and species list occurred in April 2001 by R Whyman

Vegetation description

68001 Waitahanui River

Tall kanuku/scrub, mixed broadleave/shrub, monoao frostflats and scattered wildings. Along the river mixed ferns shrubs and native grasses.

The largest covenant within the area c.10 km long and varying between 0.1-0.5 km wide. The vegetation type throughout the majority of the Waitahanui River covenant is similar with only a few varying pockets.

At the southern end within the basin *Kunzea ericoides* and *Erica lusitanica* are abundant on the flats There is a small area of silver poplars. Out of the basin *Kunzea ericoides*, *Pittosporum tenuifolium* var. *colensoi* and *Hebe stricta* are common there are areas of dominant kunuka on some faces. Directly along side the river there are varieties of carex's and ferns. Pockets of *Dracophyllum subulatum*, *Poa laevis* and kanuku are common throughout the middle of the covenant

68002 Mangeamutu Stream

Kanuka scrub land, conifer pines/poplar, mesotrophic mire

The covenant area of the gully is c.2.5km long and c.0.1-0.3km wide. Kunzea ericoides, Pteridium esculentum, Hebe stricta and Cyathodes juniperina dominate the vegetation of the steep scarps. Within the basin there is a variety of vegetation types Pittosporum tenuifolium var. tenuifolium, Hebe stricta and Kunzea ericoides is common at the eastern end, within the centre there is a large infestation 100+ of large silver poplar trees underneath these the vegetation is sparse with few ferns and Astelia's. At the western end the gully is wider and the habitat is wetland with grassy flats incl. Dicksonia fibrosa, Cordyline australis, Phormium tenax and Carex sp. Wilding pines incl. Douglas fir p.pinaster, p.radiata are common throughout notably along the tops, few contorta were noted.

68003 Ruahakune Bush

Broadleave / regen podocarps miro, rimu and kahikatea. Kamahi / Broadleaf. Kamahi / kanuka.

The road dissects this area of bush with similar vegetation on both sides. The bush is prevalent Carpodetus serratus Pittosporum sp and Coprosma sp with pockets dominanted with Weinmannia racemosa and Kunzea ericoides there were few emergent Dacrydium cupressinum, Podocarpus totara and Nothofagus fusca a number of seedlings noted. Along the roadside Hebe stricta is common and there are many weed species with Douglas fir being common along the edge and

within the covenant, contorta was common on the east side and there was a old stand of pinaster within the block 883 595.

There are large old lancewoods throughout the forest and a few old lemonwoods, a possibility of *Dactylanthus taylorii* being present, more likely in the southside of the bush alongside an old track. A quick searched was done but no plants were located.

A variety of forest birds were noted bellbirds, grey warbler, harrier, tui and robins. No deer sign was noted small amount of possum browse and sign.

68004 Wairango Lookout / Bush

Mixed broadleave/Podocarp - Kamahi, remaining emergent red beech & miro

A steep road cuts through the bush up to the lookout at 937m. Broadleave species including a variety of pittosporum's and pseudopanax are prevalent there are plenty of small shrubs including coprosma's, koromiko and pepperwood. Among the emergent and canopy trees are *Weinmannia racemosa Nothofagus fusca* and *Prumnopitys ferruginea*.

At the lookout the majority of the native has been cleared and is replaced by grass. Around the edges the vegetation is shrubby with *Olearia arborescens*, snowberry and kanuka. There are many weed species: gorse, broom and Spanish heath are abundant within local patches, individual cotoneaster plants are scattered throughout, along the road edge there are low infestations of buddleia and Himalayan honeysuckle. Wilding Douglas fir seedlings and mature trees are abundant along the road edge and throughout the covenant.

68005 Pukerimu Bush

Tall podocarp beech/ rimu, miro over broadleave kamahi, putaputaweta, mtn mahoe & kohuhu

A small pocket of bush on a hill, at present the entire surrounding area has been milled. Previously *Dactylanthus taylorii* had been caged in this bush and monitored but the plants had been stolen. Pukerimu Bush is dominated by *Nothofagus fusca*, with fewer *Prumnopitys ferruginea*, *Dacrydium cupressinum* emergents. *Carpodetus serratus –Pittosporum tenuifolium var. tenuifolium – Melicytus lanceolatus* dominated the sub-canopy. Seedlings represent the forest floor with few ferns.

Small amount of possum sign noted and one deer heard and sign seen. Douglas fir had been planted up to the bush edge there were many wilding seedlings noted around the covenant and damaged had been done to vegetation around the fringe. Douglas fir is noted in varies stages within the covenant. Three *Pinus radiata* had been felled within Pukerimu Bush.

68006 Rotuakui Bush

Broadleave: broadleaf, kohuhu, five finger with few emergent red beech. Forest floor: regenerating podocarps miro and rimu with broadleaf seedlings

A near continuation of Ruahakune bush with a very similar vegetation (there is exotics of 500m between the too). The bush is abundant with broadleaf *Pseudopanax's & Pittosporum's* a perfect environment for *Dactylanthus taylorii*. There are fewer emergent podocarps 2 *Nothofagus fusca* was noted and *Dacrydium cupressinum* and *Prumnopitys ferruginea* were only noted as seedlings, there is a small area of dominant kamahi. There are many wildings with Douglas fir being common, most notable along the old track and scattered within the covenant. There are a few large contorta within and along side the covenant.

Serve damage has been done to the covenant due to development of the old track to access the skip, the development of the skip has also created immense damage. Felling of the pines directly behind the covenant is to start soon.

A variety of forest birds were noted grey warbler, harrier, robin, tomtit and Tui. No deer or possum sign were noted.

68007 Mangakahakaha

Mixed broadleave with regen. Podocarp. Ferns and native grasses along the stream edge.

Otherwise known as pitchfork creek, a steep sided gully with the source of the spring at the northern part of the covenant. Pines planted to the edge at the top with only a few wildings down within the covenant. The vegetation included a variety of Coprosma's Pittosporum's and Pseudopanax's with kanuka Cyathodes & Leucopogon.

68008 Waioratene

Kanuka, kohuhu, koromiko / wildings incl. Douglas fir P.radiata, p.pinaster & p.contorta and exotic grasslands

The most northern part of this covenant is the area that had a fire 5-7 years ago, evidence of the fire is still visible, exotic grassland has covered the area. Further down the gully narrows the vegetation becomes shrubby with Kanuka, kohuhu, koromiko and five fingers being the most common with bracken and wildings throughout.

Historically goats have been prolific within this area. No serve damage of any pest animal was noted a small amount of browse on a five finger and some possum sign were noted. There seemed to be a will used track down into the basin possibly a hunter's track. Wetas were visible within the kanuka trunks, and there were many large spiders

Key

Presence of species was only identified.

• = adventive

Species	Common name	68001	68002	68003	68004	68005	68006	68007	68008
Gymnosperm trees									
Dacrycarpus dacrydioides	Kahikatea			P					
Dacrydium cupressinum	rimu			P	P	P	P		
*Pinus contorta	logpole pine	P	P	P	P		P		
*Pinus pinaster		P	P	P				P	P
*Pinus radiata		P	P	P	P	P	P		P
Podocarpus totara	totara			P					
Prumnopitys ferruginea	miro			P		P	P		
*Pseudotsuga menziesii	Douglas fir	P	P	P	P	P	P	P	P
Monocot trees and liannes									
Cordyline australis	cabbage tree	P	P	P	P		P	P	P
Ripogonum scandens	supple jack			P	P				
Dicot trees and shrubs									
Aristotelia serrata	makomao, wineberry	P		P	P	P	P		
Brachyglottis repanda	rangiora	P			P	P	P		
*Buddleja davidii	buddleia			P	P				
Carmichaelia arborea	native broom		P						
Carpodetus serratus	putaputaweta			P	P	P	P		
Coprosma grandifolia	kaono	P		P	P		P		
Coprosma lucida		P				P	P		
Coprosma robusta	karamu	P	P	P					
Coprosma sp. t: "taylorae" (Eagle, 1982)				P	P			P	
Coprosma tenuifolia		P	P	P		P	P	P	
Coriaria arborea	tutu		P	P	P	P		P	P

Species	Common name	68001	68002	68003	68004	68005	68006	68007	68008
Coriaria kingiana		P	P		P			P	
Cyathodes juniperina	prickly mingimingi	P	P		•			P	P
*Cytisus scoparius	broom	P	•	P	P			•	•
Dracophyllum subulatum	monoao	P	P	-	-				
Elaeocarpus dentatus	hinau	-	-	P					
*Erica lusitanica	spanish heath	P	P	P	P				P
Gaultheria antipoda	snowberry	P	P	P	P	P	P	P	P
Griselinia littoralis	broadleaf	P	P	P	P	P	P	P	
Hebe stricta	koromiko	P	P	P	P		P	P	P
Kunzea ericoides	kanuka	P	P	P	P	P	P	P	P
Leptospermum scoparium	manuka	P	P	P	P	P	P	P	P
Leucopogon fasciculatus	mingimingi	P	P					P	P
Melicytus lanceolatus	mahoe wao					P			
Melicytus ramiflorus subsp. ramiflorus	mahoe			P		P			
Myrsine australis	mapau					P			
Nestegis cunninghamii	maire			P	P	P			
Neomyrtus pedunculatus	rohutu			P		P			
Nothofagus fusca	red beech			P	P	P	P		
Olearia arborescens		P			P				
Pennantia corymbosa	kaikomako, ducks feet			P					
Pittosporum eugenioides	tarata			P		P	P		
Pittosporum tenuifolium var. colensoi				P	P		P		
Pittosporum tenuifolium var. tenuifolium	kohuhu	P	P		P	P	P		
Pomaderris phylicifolia var.ericifolia	tauhinu	P		P	P		P		
Populus alba	silver poplar	P	P						P
Pseudopanax arboreus	fivefinger	P	P	P	P	P	P	P	
Pseudopanax crassifolius	lancewood		P	P	P		P		
Pseudowintera colorata	horopito			P	P	P			
*Salix cinerea	grey willow								
Schefflera digitata	pate	P	P	P	P		P		
Solanum aviculare	poroporo								

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*Ulex europaeus	gorse	P		P	P	P	_		
Weinmannia racemosa	kamahi			P	P	P	P		
Dicot liannes									
Clematis forsteri	clematis	P	P		P		P		
Muehlenbeckia australis	pohuehue			P	P	P			
Parsonsia capsularis	NZ jasmine			P	P		P		
Passiflora tetrandra	kohia, native passionfruit								
Rubus cissoides	bush lawyer	P		P	P	P	P		
*Rubus sp. (R. fruticosus agg.)	blackberry	P		P	P	P	P		
Rubus schmideloides	bush lawyer	P		P					
Ferns									
Asplenium bulbiferum subsp. bulbiferum			P	P	P		P		
Asplenium flaccidum				P					
Asplenium polyodon				P					
Blechnum chambersii				P					
Blechnum discolor				P		P			
Blechnum fluviatile		P	P	P		P	P		
Blechnum novae-zelandiae		P	P	P		P	P		
Blechnum pennamarina		P	D	D					
Blechnum procerum Cyathea medullaris		P	P	P					
Cyainea meauitaris Dicksonia fibrosa		P P	P			P	P		
Dicholita jioi osa		1	1			1	1		

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Dicksonia squarrosa		P							
Grammitis billardierii				P		P			
Histiopteris incisa	waterfern			P					
Hypolepis ambigua									
Hymenophyllum sanguinolentum				P			P		
Lastreopsis glabella									
Lastreopsis hispida									
Leptopteris hymenophylloides									
Leptolepia novae –zelandiae									
Leptopteris superba				P		P	P		
Microsorm pustulatum									
Paesia scaberula	lace fern		P	P			P		
Phymatosorus pustulatus	hounds tongue	P			P				
Pneumatopteris pennigera	gully fern								
Polystichum vestitum	shield fern	P	P	P	P	P			
Pteridium esculentum	bracken	P	P	P					
Pyrrosia eleagnifolia	leather leaf fern				P	P	P		
Rumohra adiantiformis	leathery shield fern								
Sticherus cunninghamii	·		P	P			P		
Orchids									
Earina autumnalis						P			
Earina mucronata	bamboo orchid								
Winika cunninghamii	ladies slipper orchid								
Monocot herbs and grasses									
Astelia fragrans	astelia	P	P	P		P			
Astelia solandri		ъ	ъ						
Carex dissita		P	P						

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Collospermum microspermum						P	P	
Cortaderia fulvida	toitoi	P	P	P				
Dactylis glomeratus	cocks foot							
Phormium tenax	NZ flax	P	P					
Poa anceps			P	P				
Uncinia uncinata			P	P				
Composite herbs								
Agrostis capillaris	brown top							
*Conyza albida	Canadian fleabane							
*Cirsium arvense	Californian thistle							
*Cirsium vulgare	Scotch thistle							
*Holcus lanatus	yorkshire fog							
*Senecio bipinnatisectus	ragwort			P	P			
*Senecio jacobaea	fireweed							
*Senecio minimus								
Dicot herbs								
Acaena anserinifolia		P		P		P		
Geranium robertianum	herb robert							
Hypericum perforatum	St John's wort							
*Lotus pedunculatus	lotus							
*Mycelis muralis	wall lettuce			P	P	P		
Orobanche minor	broom rape							
*Plantago lanceolata	plantain							
*Trifolium pratense	red clover							
*Trifolium repens	white clover							
Urtica incisa	nettle							
Wahlenbegia gracilis	blue bell							