

WAIMEA PLAINS ECOSYSTEM NATIVE PLANT RESTORATION LIST

Locality:	Extensive low-lying flats flanking both sides of the Waimea and Wairoa Rivers stretching inland from the Waimea River mouth to Brightwater and Wairoa gorge.
Topography:	Flat flood-plains and young fans with abandoned water courses.
Soils and Geology:	Free-draining alluvial silt loams of high fertility. Derived from sedimentary and ultramafic rocks. Up to 1 metre deep and overlying gravels. Sandiness increases close to river banks and along old stream channels, and clay content increases around Appleby. Stoniness is variable. Not usually drought-prone except where intensively drained.
Climate:	High sunshine hours; frosts moderate; mild annual temperatures; rainfall 890-1000mm.
Coastal influence:	Narrow semi-coastal strip along the Waimea Inlet north of the Moutere River mouth.
Original Vegetation:	Podocarp - mixed broadleaf forest. Wetlands in old and recent flood-plain channels, low-lying flats and depressions.
Human Modification:	No areas of native vegetation remaining. Hydrology extensively altered by drainage and river channelisation. Base water table has been lowered.

[Refer to the Ecosystem Restoration map showing the colour-coded area covered by this list.]

KEY

PLANTING RATIO	PLANT PREFERENCES	TYPE OF FOOD PROVIDED FOR BIRDS AND LIZARDS
<p>Early Stage plants are able to establish in open sites and can act as a nursery for later stage plants by providing initial cover.</p> <p>Later Stage plants need cover to establish.</p> <p>2 = plant commonly 1 = plant less commonly 0 = not suitable to plant at this stage</p>	<p>Wet, Moist, Dry, Sun, Shade, Frost</p> <p>1 = prefers or tolerates ½ = prefers or tolerates some 0 = intolerant of</p> <p>Plant in habitat types:</p> <p>C = coastal W = freshwater wetland R = river bank (riparian)</p>	<p>F = Fruit/seeds N = Nectar B = Buds/foilage I = Insects</p>

PLANT SPECIES FOR WAIMEA PLAINS ECOSYSTEM		EARLY STAGE PLANTING RATIO	LATER STAGE PLANTING RATIO	PLANT PREFERENCES								Maximum Height (metres)	Food Type	
Botanical Names	Māori & Common Names			Wet	Moist	Dry	Sun	Shade	Frost	Coastal Only	Freshwater Wetland Only			Riparian Mostly
TREES														
Alectryon excelsus	tītoki	0	2	0	1	1	0	1	0				15	FI
Aristotelia serrata	makomako, wineberry	1	2	½	1	0	0	1	½				10	FBI
Beilschmiedia tawa	tawa	0	2	0	1	0	0	1	0				20	FI
Carpodetus serratus	putaputāwētā, marbleleaf	1	1	1	1	0	1	½	1				10	FBI
Coprosma areolata	thin-leaved coprosma	1	2	0	1	½	½	½	½				5	FBI
Coprosma crassifolia	thick-leaved coprosma	2	0	0	½	1	1	½	1			R	5	FB
Coprosma grandifolia	raurekau	0	2	½	1	0	½	1	0				6	FB
Coprosma rotundifolia	hairy coprosma	2	2	½	1	0	½	1	1				5	FB
Coprosma rubra	lacy coprosma	2	1	½	1	½	1	½	1				4	FB
Coprosma virescens	dappled coprosma	2	1	0	1	1	1	½	½				5	FB
Cordyline australis	tī kouka, cabbage tree	2	0	1	1	1	1	0	1				12	FNI
Coriaria arborea	tree tutu	2	0	½	1	1	1	0	½				6	F

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		Cyathea dealbata	ponga, silver fern	0	1	0	1	½	0	1	½			
Cyathea medullaris	mamaku, black treefern	0	2	½	1	0	0	1	0				10	I
Dacrycarpus dacrydioides	kāhikatea	1	2	1	1	0	½	½	1				60	FI
Dicksonia fibrosa	whēkī ponga	0	2	½	1	0	½	1	1				6	I
Dicksonia squarrosa	whēkī	0	1	½	1	0	0	1	1				6	I
Dodonaea viscosa	akeake	2	0	0	1	1	1	0	½				7	I
Elaeocarpus dentatus	hīnau	0	1	½	1	0	½	1	½				18	FNBI
Elaeocarpus hookerianus	pōkākā	1	1	1	1	0	½	½	1				12	FI
Fuchsia excorticata	kōtukutuku, tree fuchsia	0	1	½	1	0	½	1	½				10	FNBI
Griselinia littoralis	papauma, broadleaf	1	1	0	1	1	1	1	1				12	FBI
Griselinia lucida	puka	1	2	0	1	1	1	½	0				8	FBI
Hedycarya arborea	porokaiwhiri, pigeonwood	0	2	0	1	1	1	½	½				8	FBI
Hoheria angustifolia	narrow-leaved lacebark	2	2	½	1	1	1	0	1				10	FI
Kunzea ericoides	kānuka	2	0	0	½	1	1	0	1				15	NI
Laurelia novae-zelandiae	pukatea	0	1	1	½	0	0	1	0				35	BI
Lophomyrtus bullata	ramarama, blisterleaf	0	1	1	1	0	½	1	½			R	5	FN
Lophomyrtus obcordata	rōhutu	1	1	½	1	1	1	1	½				8	FI
Macropiper excelsum	kawakawa, pepperwood	0	2	½	1	1	1	1	0				6	FI
Melicope simplex	poataniwha	1	2	0	1	1	1	1	½				5	
Melicytus ramiflorus	māhoe, whiteywood	0	2	½	1	1	½	1	½				10	FBI
Metrosideros umbellata	southern rata	1	0	0	1	½	½	½	1			R		N
Myoporum laetum	ngaio	2	0	0	1	1	1	0	0				10	FN
Myrsine australis	māpou	2	1	0	1	1	1	½	1				8	FI
Nestegis lanceolata	white maire	0	1	½	1	½	0	1	½				15	FI
Nestegis montana	narrow-leaved maire	0	1	½	1	½	0	1	½				10	FI
Olearia paniculata	akiraho	1	0	0	½	1	1	0	½			R	6	I
Pennantia corymbosa	kaikōmako	2	2	1	1	1	1	1	1				12	FNBI
Pittosporum eugenioides	tarata, lemonwood	2	1	½	1	1	1	½	1				12	FI
Pittosporum tenuifolium	kōhūhū	2	0	0	1	1	1	½	1				9	FBI
Plagianthus regius	manatū, lowland ribbonwood	2	2	½	1	1	1	0	1				15	FBI
Podocarpus totara	tōtara	1	2	0	1	1	1	½	1				30	FBI
Prumnopitys taxifolia	mataī	1	2	0	1	1	1	½	1				25	FI
Pseudopanax arboreus	orihou, five finger	1	1	0	1	½	½	½	½				8	FNBI
Pseudopanax ferox	fierce lancewood	1	1	0	½	1	1	½	½				8	FNI
Pseudowintera axillaris	lowland horopito	0	1	½	1	0	0	1	½				7	F
Rhopalostylis sapida	nīkau	0	2	½	1	0	0	1	0				10	FNI
Schefflera digitata	patē, seven-finger	0	2	½	1	0	½	1	½				8	FBI
Sophora microphylla	kōwhai	2	2	0	½	1	1	½	1				10	NBI
Streblus heterophyllus	milkwood	1	2	0	1	1	½	½	½				10	FB
SHRUBS														
Carmichaelia australis var. "flagelliformis"	whip broom	2	1	½	1	1	1	½	1			R	2	NB
Coprosma obconica	base coprosma	1	1	½	1	1	½	½	1			R	2	F
Coprosma propinqua	mikimiki	2	1	1	1	1	1	0	1				5	F
Coprosma rigida	streamside coprosma	2	1	½	1	½	1	½	1				5	F
Coprosma robusta	karamū	2	1	½	1	1	1	½	½				6	F
Hebe divaricata	shrub koromiko	1	0	½	1	1	1	½	1			R	2	

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<i>Hebe stenophylla</i> var. <i>stenophylla</i>	narrow-leaved hebe	1	0	0	½	1	1	½	1			R	2	NI
<i>Hebe stricta</i> var. <i>atkinsonii</i>	koromiko	2	0	½	1	½	1	½	½			R	2	NBI
<i>Melicytus micranthus</i>	manakura, swamp māhoe	0	2	1	1	0	½	1	½				2	F
<i>Olearia avicenniifolia</i>	grey tree daisy	1	0	0	½	1	1	0	1			R	5	I
<i>Ozothamnus leptophyllus</i>	tauhinu, cottonwood	2	0	0	½	1	1	0	1				2	I
<i>Teucrium parvifolium</i>	native germander	1	2	0	1	1	½	½	½			R	1	
<i>Urtica ferox</i>	ongaonga, tree nettle	1	1	½	1	1	½	½	½				2	
CLIMBERS														
<i>Brachyglottis sciadophila</i>	climbing groundsel	0	2	0	1	½	½	½	½			R	2	
<i>Clematis foetida</i>	dainty clematis	0	1	0	1	1	½	½	½				5	
<i>Freycinetia banksii</i>	kiekie	0	2	½	1	½	0	1	½				10	FNI
<i>Fuchsia perscandens</i>	scrambling fuchsia	0	1	½	1	0	½	½	½			R	2	FNBI
<i>Metrosideros colensoi</i>	limestone rātā vine	0	1	0	1	1	0	1	½				8	N
<i>Metrosideros diffusa</i>	rātā vine	0	1	½	1	0	½	1	½				10	N
<i>Metrosideros perforata</i>	lowland rātā vine	0	2	0	1	½	½	1	½				15	N
<i>Passiflora tetrandra</i>	kōhia, native passionvine	0	1	0	1	0	½	½	0				15	FN
<i>Rhipogonum scandens</i>	kareao, supplejack	0	2	1	1	0	½	1	½				15	F
<i>Rubus australis</i>	swamp lawyer	0	1	1	1	0	1	½	1				5	F
<i>Rubus schmidelioides</i>	shrub lawyer	0	1	0	1	1	1	½	1				5	F
GRASSES, SEDGES, RUSHES & GROUND COVERS														
<i>Acaena anserinifolia</i>	piripiri, bidibid	1	1	½	1	1	1	½	1				0.2	
<i>Anemanthele lessoniana</i>	gossamer grass	2	1	0	1	1	½	½	½				1	
<i>Arthropteris tenella</i>	jointed fern	0	1	0	1	½	0	1	0	C			5	
<i>Asplenium bulbiferum</i>	mauku, hen and chicken fern	0	2	½	1	0	0	1	0				0.5	B
<i>Asplenium oblongifolium</i>	shining spleenwort	0	1	0	1	1	½	1	0				0.5	
<i>Astelia fragrans</i>	ground lily	0	2	0	1	0	½	1	½				1.5	F
<i>Baumea articulata</i>	stout jointed sedge	2	0	1	½	0	1	0	½	C	W		3	
<i>Blechnum filiforme</i>	climbing hardfern	0	2	0	1	1	0	1	0	C			5	
<i>Blechnum minus</i>	swamp kiokio	2	2	1	1	0	1	½	1		W		0.5	
<i>Bolboschoenus caldwellii</i>	pūrua grass	2	0	1	½	0	1	0	½	C	W		2	
<i>Carex comans</i>	maurea	2	0	0	1	1	1	0	1				0.3	
<i>Carex geminata</i>	toetoe rautahi	2	0	1	1	0	1	½	1		W		1.5	I
<i>Carex "geminata wide leaf"</i>	swamp rautahi	2	0	1	½	0	1	½	½	C	W		1.5	I
<i>Carex lambertiana</i>	coastal forest sedge	1	1	½	1	½	½	½	½				1	
<i>Carex lessoniana</i>	rautahi	2	0	1	½	0	1	½	½		W		1	I
<i>Carex raoulii</i>	coast sedge	1	0	0	1	1	1	½	½	C			0.5	
<i>Carex secta</i>	pūrei	2	1	1	½	0	1	½	1		W		2	I
<i>Carex solandri</i>	droop sedge	1	1	0	1	½	½	½	1				1	
<i>Carex virgata</i>	pukio	1	1	1	½	0	1	½	1		W		1.5	I
<i>Cortaderia richardii</i>	South Island toetoe	2	0	1	1	1	1	0	1				3	I
<i>Cyperus ustulatus</i>	upoko tangata	2	0	½	1	½	1	0	½	C	W		1	F
<i>Diplazium australe</i>	herringbone fern	0	2	0	1	0	½	½	½				0.5	
<i>Eleocharis acuta</i>	spike rush	1	0	1	½	0	1	½	1		W	R	1	
<i>Hypolepis ambigua</i>	hypolepis	1	0	½	1	0	1	½	1				1	
<i>Juncus pallidus</i>	tall swamp rush	2	0	1	1	0	1	0	½		W		2	
<i>Libertia ixioides</i>	native iris	1	1	0	1	½	½	½	½				0.3	

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<i>Libertia mooreae</i>	native iris	0	1	0	1	½	½	½	½				0.3	
<i>Microlaena avenacea</i>	bush ricegrass	1	2	½	1	½	½	1	1				0.5	
<i>Microlaena polynoda</i>	bamboo grass	0	2	0	1	1	½	½	½				2	
<i>Microsorium pustulatum</i>	hounds tongue	1	1	0	1	1	½	1	½				0.2	B
<i>Pellaea aff. falcata</i>	large button fern	0	2	½	1	½	0	1	½				0.2	
<i>Phormium cookianum</i>	wharariki, coastal flax	1	0	0	1	1	1	0	1			R	1.5	N
<i>Phormium tenax</i>	harakeke, swamp flax	2	0	1	1	½	1	0	1				2	N
<i>Pneumatopteris pennigera</i>	pākau, gully fern	0	2	0	1	0	0	1	½				1	I
<i>Ranunculus macropus</i>	waoriki	0	1	1	½	0	½	½	½	C	W		0.5	
<i>Schoenoplectus tabernaemontani</i>	kāpungawhā, lake clubrush	2	0	1	½	0	1	0	½	C	W		2	I
<i>Scutellaria novae-zelandiae</i>	shovel mint	0	1	0	1	1	0	½	½				0.1	
<i>Typha orientalis</i>	raupō	2	0	1	½	0	1	0	1		W		3	
<i>Uncinia laxiflora</i>	tussock hookgrass	1	2	0	1	½	½	½	½				0.7	
<i>Uncinia uncinata</i>	hookgrass	1	1	½	1	½	½	1	1				0.5	