

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</p> <p>N = Nectar</p> <p>B = Buds/foilage</p> <p>I = Insects</p>

PLANT SPECIES FOR WAIMEA PLAINS ECOSYSTEM		PLANTING RATIOS		PLANT PREFERENCES									HEIGHT AND FOOD	
Botanical Names	Māori & Common Names	EARLY STAGE PLANTING RATIO	LATER STAGE PLANTING RATIO	Wet	Moist	Dry	Sun	Shade	Frost	Coastal Only	Freshwater Wetland Only	Riparian Mostly	Maximum Height (metres)	Food Type
TREES														
Alectryon excelsus	tītoki	0	2	0	1	1	0	1	0				15	FI
Aristolelia 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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Botanical Names	Māori & Common Names			Wet	Moist	Dry	Sun	Shade	Frost	Coastal Only	Freshwater Wetland Only	Riparian Mostly		
Cyathea dealbata	ponga, silver fern	0	1	0	1	½	0	1	½				7	I
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
<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			
<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	