

## TAKAKA LOW PLAINS ECOSYSTEM NATIVE PLANT RESTORATION LIST

<b>Locality:</b>	Valley floors and extensive flood plains of the Takaka, Waingaro, Anatoki, Motupipi and Waikoropupu Rivers, as far inland as Upper Takaka.
<b>Topography:</b>	Low-lying, flat to gently sloping plains and valley floors. Localised sink-holes and springs with low-gradient meandering river courses. Cut-off meanders and flood channels in lower reaches of Takaka catchment. Extensive delta system at Takaka River mouth.
<b>Soils and Geology:</b>	Alluvial, sandy and silty loams of moderately high fertility. Recently derived from a range of sedimentary rocks, granites, marble and schist. Mostly over 1 metre deep where overlying gravels, but shallow in places where limestone bedrock is close to the surface. Mostly well-drained except where drainage is impeded in depressions and low-lying areas. Plains flood-prone. Not drought-prone.
<b>Climate:</b>	Moderately high to high sunshine hours; frosts moderate; mild annual temperatures; semi-humid. Rainfall 1600mm on coast increasing to 2600mm in the mid-Takaka River and then decreasing to 2200mm at Upper Takaka.
<b>Coastal Influence:</b>	Between Takaka River mouth and Motupipi estuary and up to ½ km inland.
<b>Original Vegetation:</b>	Mixed podocarp-broadleaf-beech forest on the youngest soils and mixed podocarp-beech-broadleaf forest elsewhere. Dominated by tōtara, mataī, and riparian black beech on well-drained sites, and by kāhikatea and pukatea on low-lying flats and slowly draining depressions. Wetlands in flood-plain channels and cut-off meanders. Newly created flood plains and deltas with various successional stages of kānuka and mixed broadleaf forests, including kōwhai, lacebarks and ribbonwood.
<b>Human Modification:</b>	No original vegetation remaining. A few small and isolated secondary forest patches, treeland remnants and isolated trees persist. Good successional delta forest at Takaka River mouth. Hydrology altered in places by drainage and river channelisation.

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

PLANT SPECIES FOR TAKAKA LOW PLAINS ECOSYSTEM		PLANTING RATIO - EARLY STAGE	PLANTING RATIO - LATER STAGE	PLANT PREFERENCES										Maximum Height (metres)	Food Type	
Botanical Names	Māori & Common Names			Wet	Moist	Dry	Sun	Shade	Frost	Saline	Coast Only	Inland Only	Freshwater Wetland Only			Riparian Mostly
<b>TREES</b>			2													
Alectryon excelsus	tītoki	0	2	0	1	1	0	1	0	0					15	FI
Aristotelia serrata	makomako, wineberry	1	1	½	1	0	0	1	½	0					10	FBI
Beilschmiedia tawa	tawa	0	1	0	1	0	0	1	0	0					20	FI
Carpodetus serratus	putaputāwētā, marbleleaf	1	2	1	1	0	1	½	1	0					10	FBI

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Botanical Names	Māori & Common Names			Wet	Moist	Dry	Sun	Shade	Frost	Saline	Coast Only	Inland Only	Freshwater Wetland Only			Riparian Mostly
Coprosma areolata	thin-leaved coprosma	1	2	0	1	½	½	½	½	0					5	FBI
Coprosma grandifolia	raureka	0	2	½	1	0	½	1	½	0					6	FB
Coprosma linariifolia	yellow-wood	1	1	0	1	½	1	1	½	0					6	F
Coprosma robusta	karamū	2	0	½	1	1	1	½	½	0					6	F
Coprosma rotundifolia	hairy coprosma	2	1	½	1	0	½	1	1	0					5	FB
Cordyline australis	tī kouka, cabbage tree	2	0	1	1	1	1	0	1	0					12	FNI
Coriaria arborea	tree tutu	2	2	½	1	1	1	0	½	0				R	6	F
Cyathea medullaris	mamaku, black treefern	0	2	½	1	0	0	1	0	0					16	I
Dacrycarpus dacrydioides	kāhikatea	1	0	1	1	0	½	½	1	0					60	FI
Dicksonia fibrosa	whekī ponga	0	1	½	1	0	½	1	1	0					7	I
Dicksonia squarrosa	whekī	0	2	½	1	0	0	1	1	0					7	I
Dodonaea viscosa	akeake	2	1	0	1	1	1	0	½	0					7	I
Elaeocarpus dentatus	hīnau	0	1	½	1	0	½	1	½	0					18	FNBI
Elaeocarpus hookerianus	pōkākā	1	1	1	1	0	½	½	1	0					12	FI
Fuchsia excorticata	kōtukutuku, tree fuchsia	1	1	½	1	0	½	1	½	0					10	FNBI
Griselinia littoralis	papauma, broadleaf	1	2	0	1	1	1	1	1	0					12	FBI
Griselinia lucida	puka	1	2	0	1	1	1	½	0	0					8	FBI
Hedycarya arborea	porokaiwhiri, pigeonwood	0	1	0	1	1	1	½	½	0					8	FBI
Hoheria angustifolia	narrow-leaved lacebark	2	1	½	1	1	1	0	1	0					10	FI
Hoheria ovata	limestone lacebark	1	0	½	1	1	1	½	1	0					10	FI
Kunzea ericoides	kānuka	2	2	0	½	1	1	0	1	0					15	NI
Laurelia novae-zelandiae	pukatea	0	0	1	½	0	0	1	½	0					35	BI
Leptospermum scoparium	mānuka	1	1	1	1	1	1	0	1	0			F		8	NI
Lophomyrtus obcordata	rōhutu	1	2	½	1	1	1	1	½	0					8	FI
Macropiper excelsum	kawakawa, pepperwood	0	2	½	1	1	1	1	0	0					6	FI
Melicope simplex	poataniwha	1	1	0	1	1	1	1	½	0					5	
Melicytus lanceolatus	māhoe wao, narrow-leaved māhoe	1	2	½	1	0	½	½	1	0			I		6	F
Melicytus ramiflorus	māhoe, whiteywood	0	1	½	1	1	½	1	½	0					10	FBI
Metrosideros robusta	northern rātā	1	0	½	1	½	½	0	½	0					30	N
Myoporum laetum	ngaio	2	1	0	1	1	1	0	0	½	C				10	FN
Myrsine australis	māpou	2	1	0	1	1	1	½	1	0					8	FI
Myrsine divaricata	weeping māpou	1	1	1	1	1	½	1	1	0			I		4	F
Neomyrtus pedunculata	rōhutu	1	2	1	1	0	½	1	1	0			I		6	F
Nothofagus menziesii	silver beech	1	2	1	1	1	½	½	1	0				R	30	F
Nothofagus solandri var. solandri	black beech	1	2	0	1	1	1	½	1	0				R	25	FNI
Pennantia corymbosa	kaikōmako	2	1	1	1	1	1	1	1	0					12	FNBI
Phyllocladus trichomanoides	tānekaha	0	1	0	1	1	1	½	½	0			I	R	20	I
Pittosporum eugenioides	tarata, lemonwood	2	1	½	1	1	1	½	1	0					12	FI
Pittosporum tenuifolium	kōhūhū	2	1	0	1	1	1	½	1	0					9	FBI
Plagianthus regius	manatū, lowland ribbonwood	2	2	½	1	1	1	0	1	0					15	FBI
Podocarpus totara	tōtara	2	2	0	1	1	1	½	1	0					30	FBI
Prumnopitys ferruginea	miro	0	1	½	1	0	½	½	1	0					25	FI
Prumnopitys taxifolia	mataī	1	1	0	1	1	1	½	1	0					25	FI
Pseudopanax arboreus	orihou, five finger	0	2	0	1	½	½	½	½	0					8	FNBI
Pseudopanax crassifolius	horoeaka, lancewood	2	1	½	1	1	1	1	1	0					10	FNI

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Botanical Names	Māori & Common Names			Wet	Moist	Dry	Sun	Shade	Frost	Saline	Coast Only	Inland Only	Freshwater Wetland Only			Riparian Mostly
<i>Pseudopanax ferox</i>	fierce lancewood	1	1	0	½	1	1	½	½	0				R	8	FNI
<i>Pseudowintera axillaris</i>	lowland horopito	0	2	½	1	0	0	1	½	0					7	F
<i>Raukawa edgerleyi</i>	raukawa	0	1	½	1	0	½	1	½	0					10	FI
<i>Rhopalostylis sapida</i>	nīkau	0	2	½	1	0	0	1	0	0					10	FNI
<i>Schefflera digitata</i>	patē, seven-finger	0	2	½	1	0	½	1	½	0					8	FBI
<i>Sophora microphylla</i>	kōwhai	2	2	0	½	1	1	½	1	0					10	NBI
<i>Streblus heterophyllus</i>	milkwood	1		0	1	1	½	½	½	0					10	FB
<b>SHRUBS</b>			1													
<i>Carmichaelia australis</i> var. "flagelliformis"	whip broom	2	1	½	1	1	1	½	1	0				R	2	NB
<i>Carmichaelia odorata</i> var. "glabrata"	river broom	2	1	1	1	½	1	½	1	0				R	2	NB
<i>Coprosma obconica</i>	base coprosma	1	1	½	1	1	½	½	1	0				R	2	F
<i>Coprosma propinqua</i> ssp. <i>propinqua</i>	mikimiki	2	1	1	1	1	1	0	1	0				R	5	F
<i>Coprosma rigida</i>	streamside coprosma	2	2	½	1	½	1	½	1	0				R	3	F
<i>Coprosma rubra</i>	lacy coprosma	2	1	½	1	½	1	½	1	0					4	FB
<i>Coprosma tayloriae</i>	tier coprosma	1	0	1	1	1	1	½	1	0					2	F
<i>Coprosma tenuicaulis</i>	swamp coprosma	2	1	1	1	0	1	½	1	0		W			3	F
<i>Hebe leiophylla</i> (= <i>H. gracillima</i> )	arching koromiko	2	0	½	1	½	½	½	1	0				R	2	
<i>Hebe salicifolia</i>	South Island koromiko	2	0	½	1	0	1	½	1	0		I			2	NBI
<i>Hebe stenophylla</i> var. <i>stenophylla</i>	narrow-leaved hebe	2	0	0	½	1	1	½	1	0				R	2	NI
<i>Hebe stricta</i> var. <i>atkinsonii</i>	koromiko	2	0	½	1	½	1	½	½	0	C				2	NBI
<i>Helichrysum lanceolatum</i> var. "aggregatum"	niniaio	1	2	0	½	1	1	½	½	0				R	1	I
<i>Meliccytus micranthus</i>	manakura, swamp māhoe	1	0	1	1	0	½	1	½	0					2	F
<i>Olearia avicenniifolia</i>	grey tree daisy	1	0	0	½	1	1	0	1	0		I		R	4	I
<i>Ozothamnus leptophyllus</i>	tauhinu, cottonwood	2	1	0	½	1	1	0	1	0					2	I
<i>Raukawa anomalus</i>	stout netting bush	1	2	½	1	½	½	1	1	0					2	FN
<i>Teucrium parvifolium</i>	native germander	1		0	1	1	½	½	½	0				R	1	
<b>CLIMBERS</b>			1													
<i>Brachyglottis sciadophila</i>	climbing groundsel	0	1	0	1	½	½	½	½	0				R	2	
<i>Clematis foetida</i>	dainty clematis	0	1	0	1	1	½	½	½	0					5	
<i>Freycinetia banksii</i>	kiekie	0	1	½	1	½	0	1	½	0					10	FNI
<i>Fuchsia perscandens</i>	scrambling fuchsia	0	1	½	1	0	½	½	½	0				R	2	FNBI
<i>Metrosideros diffusa</i>	rātā vine	0	2	½	1	0	½	1	½	0					10	N
<i>Metrosideros perforata</i>	lowland rātā vine	0	2	0	1	½	½	1	½	0					15	N
<i>Passiflora tetrandra</i>	kōhia, native passionvine	0	2	0	1	0	½	½	0	0					15	FN
<i>Rhipogonum scandens</i>	kareao, supplejack	0	1	1	1	0	½	1	½	0					15	F
<i>Rubus australis</i>	swamp lawyer	0	1	1	1	0	1	½	1	0					5	F
<i>Rubus schmidelioides</i>	shrub lawyer	0		0	1	1	1	½	1	0					5	F
<b>GRASSES, SEDGES &amp; GROUND COVERS</b>			1													
<i>Acaena anserinifolia</i>	piripiri, bidibid	1	2	½	1	1	1	½	1	0					0.2	
<i>Anemanthele lessoniana</i>	gossamer grass	1	1	0	1	1	½	½	½	0					1	
<i>Arthropteris tenella</i>	jointed fern	0	2	0	1	½	0	1	0	0	C				5	
<i>Asplenium bulbiferum</i>	mauku, hen and chicken fern	0	1	½	1	0	0	1	½	0					0.5	B
<i>Asplenium oblongifolium</i>	shining spleenwort	0	2	0	1	1	½	1	0	0					0.5	

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Botanical Names	Māori & Common Names			Wet	Moist	Dry	Sun	Shade	Frost	Saline	Coast Only	Inland Only	Freshwater Wetland Only			Riparian Mostly
Astelia fragrans	ground lily	0	2	0	1	0	½	1	½	0					1.5	F
Blechnum filiforme	climbing hardfern	0	2	0	1	1	0	1	0	0	C				5	
Blechnum minus	swamp kiokio	2	0	1	1	0	1	½	1	0			W		0.5	
Blechnum novae-zelandiae	kiokio	2	0	1	1	1	½	1	1	0					2	I
Bolboschoenus caldwellii	pūrua grass	2	0	1	½	0	1	0	½	½	C		W		1	I
Carex forsteri	forest sedge	2	0	0	1	1	½	½	½	0	C				1	
Carex geminata	toetoe rautahi	2	0	1	1	0	1	½	1	0			W		1.5	I
Carex "geminata wide leaf"	swamp rautahi	2	1	1	½	0	1	½	½	0	C		W		1.5	I
Carex lambertiana	coastal forest sedge	2	0	1	1	0	1	½	½	0	C				1	
Carex lessoniana	peat rautahi	2	1	1	½	0	1	½	½	0			W		1	I
Carex secta	pūrei	2	1	1	½	0	1	½	1	0			W		2	I
Carex solandri	droop sedge	1	1	0	1	½	½	½	1	0					1	
Carex testacea	bootstrap sedge	1	0	0	1	1	1	½	1	0					0.6	
Carex virgata	pukio	2	1	1	½	0	1	½	1	0			W		1.5	I
Chionochloa conspicua	hunangāmoho, streambank snow-tussock	2	0	½	1	0	1	½	1	0		I		R	2	I
Cortaderia richardii	South Island toetoe	2	2	1	1	1	1	0	1	0					2	I
Diplazium australe	herringbone fern	0	0	0	1	0	½	½	½	0					0.5	
Eleocharis acuta	spike rush	1	0	1	½	0	1	½	1	0			W		1	
Eleocharis sphacelata	kuta	2	0	1	0	0	1	0	1	0			W		2	I
Hierochloa redolens	karetū, holy grass	2	0	1	½	0	1	½	1	0			W		0.5	
Hypolepis ambigua	hypolepis	2	0	½	1	0	1	½	1	0					1	
Isolepis polifer	multiplying sedge	1	0	1	½	0	1	0	1	0			W		0.2	
Juncus australis	wiwi	1	0	½	1	0	1	0	1	0					1	
Juncus pallidus	tall swamp rush	2	0	1	1	0	1	0	½	0			W		2	
Juncus sarophorus	blue wiwi	2	2	½	1	0	1	0	1	0					1	
Lasteopsis microsora ssp. pentangularis	creeping five-angle fern	0	1	0	1	½	0	1	0	0	C				0.3	
Libertia ixioides	native iris	1	2	0	1	½	½	½	½	0					0.3	
Microlaena avenacea	bush ricegrass	1	1	½	1	½	½	1	1	0					0.5	
Microlaena polynoda	bamboo grass	0	1	0	1	1	½	½	½	0					2	
Microsorium pustulatum	hounds tongue fern	1	1	0	1	1	½	1	½	0					0.2	B
Pellaea aff. falcata	large button fern	0	0	½	1	½	0	1	½	0					0.3	
Phormium tenax	harakeke, swamp flax	2	2	1	1	½	1	0	1	0			W		2	N
Pneumatopteris pennigera	pākau, gully fern	0	2	0	1	0	0	1	½	0					1	I
Polystichum neozelandicum ssp. zerophyllum (=P. richardii)	lowland shield fern	0	1	0	1	½	0	1	½	0					0.5	
Polystichum vestitum	prickly shield fern	0	1	½	1	0	½	1	1	0		I			1	I
Ranunculus macropus	waoriki	0	0	1	½	0	½	½	½	0	C		W		0.5	
Schoenoplectus tabernaemontani	kāpungawhā, lake clubrush	2	2	1	½	0	1	0	½	½	C		W		2	I
Scutellaria novae-zelandiae	shovel mint	0	0	0	1	1	0	½	½	0					0.1	
Typha orientalis	raupō	2	1	1	½	0	1	0	1	0			W		3	
Uncinia laxiflora	tussock hookgrass	0	2	0	1	½	½	½	½	0					0.7	
Uncinia uncinata	hookgrass	1	2	½	1	½	½	1	1	0					0.5	