## **Catchpool Restoration Project – Revised Planting Plan – 2018**

#### **Plant sources**

The Trust has recognised that eco-sourcing cannot be guaranteed through local nurseries, and has since gained a permit from DOC to collect seed within the park and set up its own nursery. The plants used in enrichment and revegetation planting efforts will be sourced from seed collected within the Remutaka Forest Park and grown in the Trust's nursery. Plants grown will be held at the nursery on site until planting, hardening them to the local conditions.

#### **Planting framework**

Originally, a 5 year planting regime was proposed as a guide to planting with approximate yearly number-allocations for each species to be planted. It has been recognised that species-specific, quantity-specific planting plans are difficult to adhere to due to the time required to source plants with a Trust-run nursery. This revision instead proposes a framework for revegetation, with lists of plants suitable for each planting zone and successional stage within the valley that can be used to guide progressive revegetation throughout the valley based on seed-source availability. This framework can be used to guide seed sourcing, operations in the nursery, and to plan plantings. Seed sourcing and plantings should be guided by the proposed area and species suitable to it.

In any area primary species should be planted first, with secondary species planted in following efforts for enrichment when shade and shelter is sufficient. This will take several years to occur (Davis, 2001). Plants tolerant of wet feet should be planted in areas closely bordering water in the riparian and wetland zones, where soils will be the wettest.

#### **Planting list**

Following is a revised planting list for the revegetation framework for this restoration plan. The original plan's list consisted of 35 species for planting based on local vegetation and Wellington Regional Council guidelines. The revised list comprises 61 candidate species suitable for planting in the respective microsite classes. The selections are based on recommendations by Jonathan Bussell, refined from a botanical inventory developed by three reconnaissance surveys carried out in the park. These surveys were carried out along the Orongorongo and Five-Mile tracks by the Wellington Botanical Society (2009 and 2016), and B, J. Mitcalfe and J. C. Horne (2009), centred approximately 1.5km east-north-east of the valley carpark. Thus, the species are well-suited to the valley and seed sources are available very locally. Species have been refined from the resulting list of trees, shrubs, lianas, orchids, ferns, sedges and grasses. Species present in the inventory but not included in this list are either not suitable for growth in nurseries, or likely and best-left to self-propagate.

# **Plant List – Revised Catchpool Restoration Project Plan**

### Primary Species – Trees and Shrubs

**Table 1** List of candidate species for planting efforts in the Catchpool Valley restoration project and where they will be planted.VS = Valley Slopes; VF = Valley Floor; RI = Riparian Margins; WE = Wetland. Asterisks (\*) denote plants tolerant of wet feet.

Species	Common/Māori name	VS	VF	RI	WE
Aristotelia serrata	Makomako/wineberry		$\checkmark$	√*	
Coprosma areolata	Thin-leaved coprosma	$\checkmark$			
Coprosma grandifolia	Kānono	$\checkmark$	$\checkmark$	$\checkmark$	$\checkmark$
Coprosma lucida	Karamu/shining karamu	$\checkmark$			
Coprosma microcarpa	Small-seeded coprosma	$\checkmark$	$\checkmark$	$\checkmark$	$\checkmark$
Coprosma rhamnoides	Coprosma sp.	$\checkmark$	$\checkmark$	$\checkmark$	$\checkmark$
Coprosma robusta	Karamu	$\checkmark$	$\checkmark$	$\checkmark$	$\checkmark$
Cordyline australis	Tī kōuka/cabbage tree	$\checkmark$	$\checkmark$	√*	√*
Cordyline banksii	Tī ngahere/forest cabbage tree	$\checkmark$	$\checkmark$		
Gaultheria antipoda	Tāwiniwini/bush snowberry	$\checkmark$	$\checkmark$	$\checkmark$	$\checkmark$
Griselinia littoralis	Kāpuka/broadleaf	$\checkmark$	$\checkmark$	$\checkmark$	$\checkmark$
Griselinia lucida	Puka	$\checkmark$	$\checkmark$	$\checkmark$	$\checkmark$
Kunzea robusta	Kānuka	$\checkmark$	$\checkmark$	$\checkmark$	
Leptospermum scoparium agg.	Mānuka	$\checkmark$	$\checkmark$	√*	$\checkmark^*$
Melicytus ramiflorus	Māhoe	$\checkmark$	$\checkmark$		
Myrsine australis	Māpou	$\checkmark$			
Ozothamnus leptophyllus	Tauhinu	$\checkmark$			
Pittosporum eugenioides	Tarata	$\checkmark$	$\checkmark$	$\checkmark$	$\checkmark$
Pittosporum tenuifolium	Kohuhu/black matipo	$\checkmark$	$\checkmark$	$\checkmark$	$\checkmark$
Podocarpus totara var. totara	Totara	$\checkmark$	$\checkmark$		
Pseudopanax arboreus	Whauwhaupaku/five-finger	$\checkmark$	$\checkmark$	$\checkmark$	$\checkmark$
Pseudopanax crassifolius	Horoeka/lancewood	$\checkmark$	$\checkmark$	$\checkmark$	$\checkmark$
Pseudowintera axillaris	Horopito	$\checkmark$			
Schefflera digitata	Patē/seven-finger	1	$\checkmark$	$\checkmark$	
Sophora sp.	Kōwhai	$\checkmark$	$\checkmark$	$\checkmark$	$\checkmark$
Veronica stricta var. stricta	Koromiko	$\checkmark$	$\checkmark$		

#### **Primary Species – Herbaceous Plants**

Species	Common/Māori name	VS	VF	RI	WE
Dianella nigra	Tūrutu/blueberry		$\checkmark$		
Phormium cookianum subsp. cookianum	Wharariki/mountain flax	$\checkmark$			

#### **Primary Species – Grasses and Sedges**

	Thinking Species Grasses and Sea	and Scages				
Species	Common/Māori name	VS	VF	RI	WE	
Austroderia fulvida	Toetoe sp.	$\checkmark$	$\checkmark$	$\checkmark$	$\checkmark$	
Austroderia toetoe	Toetoe sp.	$\checkmark$	$\checkmark$	$\checkmark$	$\checkmark$	
Poa anceps agg.	Broad-leaved poa	$\checkmark$				
Carex dissita	Hooked sedge sp.		$\checkmark$			
Carex flagellifera (unc)	Hooked sedge sp.	$\checkmark$		√*		
Cyperus ustulatus	Upoko tangata/giant umbrella sedge			$\checkmark$	$\checkmark$	
Ficinia nodosa	Wīwī/knotted sedge				$\checkmark$	

### Secondary/Enrichment Species – Trees and Shrubs

Species	Common/ Māori name	VS	VF	RI	WE
Alectryon excelsus subsp. excelsus	Tītoki		$\checkmark$		
Beilschmiedia tawa	Tawa		$\checkmark$		
Carpodetus serratus	Putaputawētā/marble leaf		$\checkmark$	$\checkmark$	
Dacrycarpus dacrydioides	Kahikatea		$\checkmark$	√*	√*
Dacrydium cupressinum	Rimu	$\checkmark$	$\checkmark$		
Elaeocarpus dentatus var. dentatus	Hīnau		$\checkmark$		
Elaeocarpus hookerianus	Pokaka		$\checkmark$		
Fuchsia excorticata	Kōtukutuku/tree fuchsia		$\checkmark$	$\checkmark$	
Fuscospora solandri	Tawhai rauriki/black beech	$\checkmark$			
Fuscospora truncata	Tawhai raunui/hard beech	$\checkmark$			
Hedycarya arborea	Porokaiwhiri/pigeonwood	$\checkmark$	$\checkmark$		
Hoheria sp.	Houhere/lacebark	$\checkmark$			
Knightia excelsa	Rewarewa	$\checkmark$	$\checkmark$		
Laurelia novae-zelandiae	Pukatea		$\checkmark$	√*	√*
Lophomyrtus bullata	Ramarama	$\checkmark$			
Metrosideros robusta	Northern rātā	$\checkmark$	$\checkmark$		
Nestegis cunninghamii	Black maire		$\checkmark$	$\checkmark$	
Nestegis lanceolata	White maire		$\checkmark$	$\checkmark$	
Pennantia corymbosa	Kaikōmako		$\checkmark$	$\checkmark$	
Podocarpus totara var. totara	Totara	$\checkmark$	$\checkmark$		
Prumnopitys ferruginea	Miro	$\checkmark$	$\checkmark$		
Prumnopitys taxifolia	Matai	$\checkmark$	$\checkmark$		
Rhopalostylis sapida	Nīkau		$\checkmark$		
Streblus heterophyllus	Tūrepo/small-leaved milk tree		$\checkmark$		
Syzygium maire	Tawake maire/swamp maire		$\checkmark$	√*	√*
Weinmannia racemosa	Kāmahi	$\checkmark$			

(See following page for Map of applicable planting zones)

# **Map of Revised Planting Zones**

VS = Valley Slopes; VF = Valley Floor; RI = Riparian Margins; WE = Wetland.

