

Catchment Ecological Context

Vision

To support a robust, self-sustaining ecological core at the heart of this catchment, promoting enduring renewal and expansion in the relevant Ecological Zone.

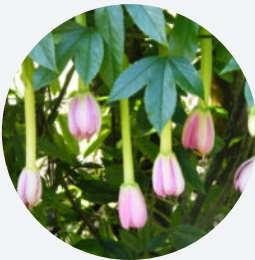
Objectives

- Plant Council land in line with relevant ecological zones.
- Enhance ecological values, including zones of vegetation, and opportunities for ecological connections, facilitating the spread of native seeds, invertebrates, and birds.
- Encourage the establishment, retention, and maintenance of appropriate plantings. Establish riparian vegetation within gullies of water tributaries.
- Manage weeds and pests that restrict the growth of young native plants.

Ecological Zones

Three key ecological zones were identified within the catchment which intersects Council land. There is the **Totara Zone**, a forest type that historically would have covered much of the Port Hills, **Kahikatea Zone** within the valley floor alluvial plain, and **Rocky Bluffs Zone**, which are a predominate feature of Barnett Park. Riparian Margins transcend all ecological zones which support waterways and tributaries.

Key Pests of the Catchment



Passiflora tripartita **Banana passionfruit**



Chrysanthemoides monilifera **Boneseed**

Binomial Name	Common Name	NOTES
<i>Ulex europaeus</i>	gorse	Common and often abundant weeds they can have a useful role in assisting native regeneration. These should be actively cleared from the fire break margins.
<i>Cytisus scoparis</i>	broom	
<i>Chrysanthemoides monilifera</i>	boneseed	
<i>Clemantis vitalba</i>	old mans beard	
<i>Passiflora tripartita</i>	banana passion-fruit	Climbing weeds should be actively managed as they smother and hinder the growth of young trees.
<i>Passiflora caerulea</i>	blue passion flower	
<i>Trichosurus vulpecula</i>	bommon brushtail possum	A prevalent animal pest in the reserve, poses a threat to young trees that they browse, necessitating effective possum control measures
<i>Rattus spp.</i>	rat	The varied omnivore diet of rats makes them competitors with native wildlife for food sources.

HISTORICAL ECOLOGY

TOTARA ZONE

An ecological system that would have once covered a majority of the Banks Peninsula. This system can support an abundance of native birds and invertebrates

KAHIKATEA ZONE

An ecological system that makes use of alluvial floodplains which hold water during the winter months. Twiggy shrubs with interlacing branches are common in the understory of this system

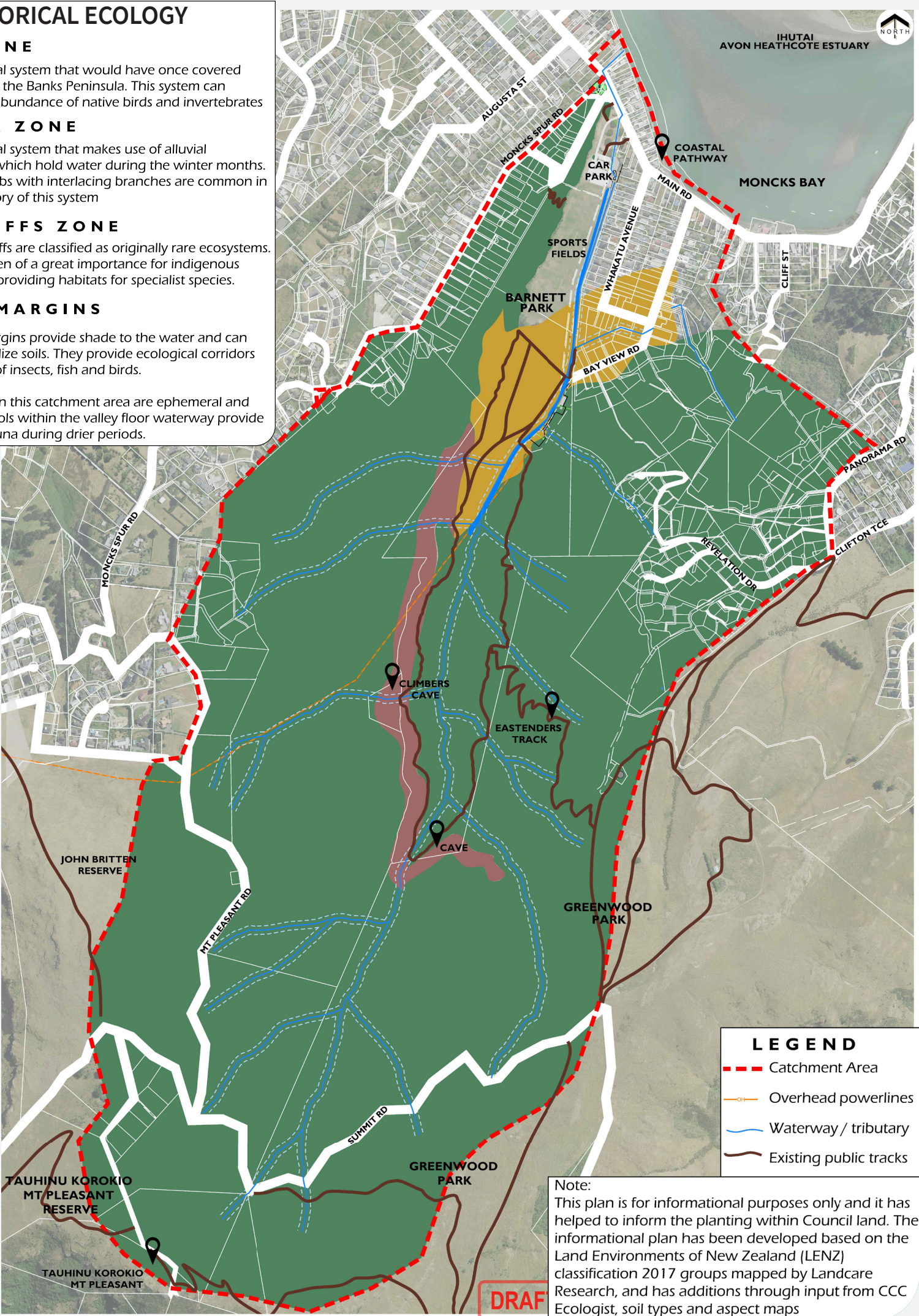
ROCKY BLUFFS ZONE

Volcanic bluffs are classified as originally rare ecosystems. They are often of a great importance for indigenous biodiversity providing habitats for specialist species.

RIPARIAN MARGINS

Riparian margins provide shade to the water and can help to stabilize soils. They provide ecological corridors to a variety of insects, fish and birds.

Waterways in this catchment area are ephemeral and the small pools within the valley floor waterway provide refuge to fauna during drier periods.



Catchment Flora and Fauna

Key flora and fauna that could be found and establish within these ecological zones.

Totara Forest



Podocarpus totara
Totara



Lophomyrtus obcordata
Rohutui - NZ Myrtle



Hemiphaga novaeseelandiae **Kererū**



Pseudopanax crassifolius **Horoeka - Lancewood**



Gerygone igata **Riroriro - Grey Warbler**



Microlaena polynoda
Bamboo grass



Anthornis melanura
Korimako - Bellbird

Kahikatea Forest



Dacrycarpus dacrydioides
Kahikatea



Elaeocarpus hookerianus
Pokaka



Plagianthus regius
Mānatu - Lowland Ribbonwood



Cordyline australis **tī kōuka - Cabbage Tree**



Prosthemadera novaeseelandiae **Tūī**



Rhipidura fuliginosa
Pīwakawaka - Fantail



Todiramphus sanctus
Kōtare - kingfisher

Rocky Bluffs



Disphyma australe
Horokaka - Native Ice-Plant



Sophora prostrata
Prostrate Kōwhai



Olearia paniculata
Akiraho - Golden Akeake



Hebe (Veronica) salicifolia
Koromiko - Willow-leaf Hebe



Asplenium oblongifolium
Huruhuruwhenua - Shining Spleenwort



Lycaena salustius complex **Pepe para riki - Copper Butterfly**



Oligosoma aff. polychroma, Clade 4
Southern Grass Skink



Hemideina ricta | **Banks Peninsula Tree Weta**

Riparian Margins



Phormium tenax
Harakeke - Flax



Libertia ixioides **Mikoikoi - NZ Iris**



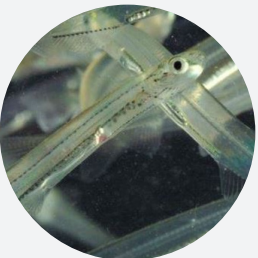
Leptospermum scoparium **Manuka - Tea Tree**



Austroderia richardii
South Island Toetoe



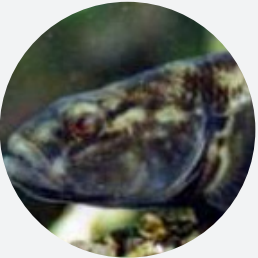
Juncus sarophorus
Tussock Rush



Common galaxias
Inanga



Anguilla australis
Shortfin Eel



Gobiomorphus cotidianus
Toitoi - Common Bully

Plant List

This plant list is informed by the ecological zones. It has been compiled to support the establishment of a self-sustaining ecological core. All species are not intended to be used in every situation.

KEY	Plant Typically Present in:			
	T	Totara Ecology Zone	K	Kahikatea Ecology Zone
	Dry slope: Species can be tolerant of dry exposed areas			
	Flammability Category (where tested)			
	vL	Very low	L	Low
	M	Medium	H	High
	Height: Plant height at maturity (metres)			
	L	Low plants less then 3m in height		
	C	Climber		

ZONE				NOTES		
T	K	Botanical Name	Te Reo - Common Name	Flammability	Dry slope	Height
		<i>Anemanthele lessoniana</i>	hunangamoho, bamboo/ wind grass		y	L
		<i>Aristotelia serrata</i>	makomako - wineberry	L		10
		<i>Astelia fragrans</i>	kakaha - bush flax		y	L
		<i>Astelia grandis</i>	kakaha - swamp flax		y	L
		<i>Austroderia richardii</i>	South Island toetoe		y	L
		<i>Carex lambertiana</i>	forest sedge		y	L
		<i>Carex secta</i>	pukio		y	L
		<i>Carex virgata</i>	pukio - swamp sedge		y	L
		<i>Carpodetus serratus</i>	putaputaweta - Marble Leaf			10
		<i>Clematis feotida/ paniculata</i>	clematis			L
		<i>Coprosma areolata</i>	thin/net-leaved coprosma			5
		<i>Coprosma linariifolia</i>	linear-leaved coprosma		y	8
		<i>Coprosma lucida</i>	Karamū - shining karamū		y	6
		<i>Coprosma propinqua</i>	mingimingi	L	y	6
		<i>Coprosma rhamnoides</i>	red-fruited mikimiki			L
		<i>Coprosma robusta</i>	karamū - glossy karamū		y	6
		<i>Coprosma rotundifolia</i>	coprosma			6
		<i>Coprosma rubra</i>	coprosma		y	5

ZONE				NOTES		
T	K	Botanical Name	Te Reo - Common Name	Flammability	Dry slope	Height
		<i>Cordyline australis</i>	tī kōuka - cabbage tree	L	y	12
		<i>Cyperus ustulatus</i>	upoko tangata-tangata		y	L
		<i>Dacrycarpus dacrydioides</i>	kahikatea	H		50
		<i>Dodonea viscosa</i>	akeake	M	y	12
		<i>Elaeocarpus dentatus</i>	hinau			20
		<i>Elaeocarpus hookerianus</i>	pokaka			15
		<i>Fuchsia perscandens</i>	scrambling fuchsia			s
		<i>Fuchsia excorticata</i>	kōtukutuku - tree fuchsia	L		15
		<i>Griselinia littoralis</i>	kāpuka - broadleaf	L		15
		<i>Hebe/Veronica salicifolia</i>	koromiko - willow-leaf hebe	L/M	y	L
		<i>Hedycaria arborea</i>	porokaiwhiri - pigeonwood			12
		<i>Hoheria angustifolia</i>	narrow-leaved houhere - narrow-leaved lacebark	L	y	18
		<i>Kunzea robusta</i>	kānuka	H	y	14
		<i>Leptospermum scoparium</i>	manuka - tea tree	H	y	10
		<i>Melicope simplex</i>	poataniwha		y	3
		<i>Melicytus ramiflorus</i>	māhoe - whitey wood	L/M	y	15
		<i>Myoporum laetum</i>	ngaio	L/M	y	10
		<i>Myrsine australis</i>	māpau - red mapou	L/M	y	8
		<i>Myrsine divaricata</i>	weeping mapou		y	7
		<i>Parsonsia capsuaris</i>	kaiwhiria - NZ jasmine		y	C
		<i>Parsonsia heterophylla</i>	NZ jasmine		y	C
		<i>Pennantia corymbosa</i>	kaikomako - ducksfeet	L	y	10
		<i>Phormium tenax</i>	harakeke - flax	L	y	L
		<i>Pittosporum eugeniodes</i>	tarata - lemonwood	L/M	y	12
		<i>Pittosporum tenuifolium</i>	kōhūhū - black matipo	M	y	11
		<i>Plagianthus regius</i>	mānatu - lowland ribbonwood	L/M	y	15
		<i>Podocarpus totara</i>	tōtara	M	y	18

ZONE				NOTES		
T	K	Botanical Name	Te Reo - Common Name	Flammability	Dry slope	Height
		<i>Prumnopitys taxifolia</i>	mataī - black pine			18
		<i>Pseudopanax arboreus</i>	whauwhaupuku - fivefinger	vL	y	
		<i>Pseudopanax crassifolius</i>	horoeke - lancewood	vL	y	8
		<i>Schefflera digitata</i>	patete - seven-finger	L		8
		<i>Sophora microphylla</i>	kōwhai- small-leaved kōwhai	L/M	y	15
		<i>Streblus heterophyllus</i>	turepo - small-leaved milk tree			12

Supporting plants for established areas

	<i>Acaena novae-zelandiae</i>	red bidibidi			L
	<i>Alectryon excelsus</i>	titoki			18
	<i>Asplenium flaccidum</i>				L
	<i>Asplenium terrestre</i>	ground spleenwort			L
	<i>Blechnum discolor</i>	piupiu - crown fern			L
	<i>Blechnum fluviatile</i>	kiwakiwa - creek fern			L
	<i>Blechnum penna marina</i>	kiokio - little hard fern	L		L
	<i>Cyathea dealbata</i>	ponga - silver (tree) fern			12
	<i>Cyathea smithii</i>	katote - soft tree fern			5
	<i>Dicksonia squarrosa</i>	wheki - rough tree fern	H		6
	<i>Leucopogon fasciculatus</i>	mingimingi			5
	<i>Melicytus micranthus</i>	manakur - shrubby mahoe			5
	<i>Microsorium pustulatum</i>	kowaowao, paraharaha - hound’s tongue			L
	<i>Pellaea rotundifolia</i>	tarawera - round-leaved fern			L
	<i>Polystichum zelandica/ richardii</i>	pikopiko/tutoke - shield fern			L
	<i>Pratia angulata</i>	panakeneke - creeping pratia			L
	<i>Rubus squarrosus</i>	leafless lawyer			L