

Results of vegetation survey:

Northport Beach Reclamation, Ralph Trimmer Drive, Ruakākā

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1. Summary

In February 2023 Ecology North was engaged by Reyburn and Bryant Ltd. to undertake a vegetation survey along a stretch of Whangārei Harbour edge duneland located between Northport and Marsden Point at the end of Ralph Trimmer Drive in Ruakākā. This area is proposed to be cleared as part of a land reclamation to increase the size of the port operation.

The survey area is approximately 530m in length by 30m at the narrowest (eastern end) and 45m at the widest (western end). The site consists of a long narrow section of low-moderate energy low sand dune and flats close to the Whangārei Harbour entrance, backed to the south by a raised area of tree planting and managed grass (car park, road and amenity area).

The ground cover on the raised southern edge of the site is predominantly kikuyu grass (*Cenchrus clandestinus*) to the west (adjacent to the carpark and public toilets), leading down a dominance of buffalo grass (*Stenotaphrum secundatum*) to the east. Sections of buffalo and kikuyu grass flow into the back dune.

A row of pōhutukawa (*Metrosideros excelsa*) have been planted along the length of the site. To the east, tree cover is more weedy, including pines (*Pinus* spp.) (likely to be wilding) and Sydney golden wattle (*Acacia longifolia*). A number of ecological pest plants are located below these trees, such as smilax (*Asparagus asparagoides*), bushy asparagus (*A. aethiopicus*) and agapanthus (*Agapanthus praecox*).

Moving into the dune system, the vegetation is mainly dominated by indigenous sand-binders, particularly kōwhangatara/spinifex (*Spinifex sericeus*), with patches of pīngao (*Ficinia spiralis*) (At Risk – Declining¹). Some shallow slacks at the western end contain notable areas of wīwī/knobby clubrush (*Ficinia nodosa*).

Overall, the sand dune/beach system can be described as being dominated (high abundance) by a low diversity of typical indigenous coastal sand dune species (particularly kōwhangatara) (Table 1), with a higher diversity but overall lower abundance of mixed exotic/naturalised species cover (Table 2).

A list of species recorded include:

¹ de Lange *et al.* 2018

Table 1: Indigenous vegetation recorded

Monocots		Edge	Sand	Abundance
<i>Ficinia nodosa</i>	wīwī/knobby clubrush			O
<i>Ficinia spiralis</i> ²	pīngao			O
<i>Phormium cookianum</i> *	wharariki/mountain flax			S
<i>Phormium tenax</i> *	harakeke/flax			S
<i>Spinifex sericeus</i>	kōwhangatara/spinifex			A
Dicots				
<i>Coprosma lucida</i>	karamu			S
<i>Metrosideros excelsa</i> *	pohutukawa			O
<i>Pittosporum crassifolium</i> *	karo			S
Ferns				
<i>Pyrrosia elaeagnifolia</i>	ngārara wehi/leather-leaf fern			S
Lianes				
<i>Calystegia soldanella</i>	rauparaha/shore bindweed			O
<i>Muehlenbeckia complexa</i>	pohuehue			O

*Appears to be planted

Table 2: Exotic/naturalised vegetation recorded

Monocots		Edge	Sand	Abundance
<i>Agapanthus praecox</i>	agapanthus			S
<i>Agave</i> sp.	agave			S
<i>Asparagus aethiopicus</i>	bushy asparagus			O
<i>Asparagus asparagoides</i>	smilax			S
<i>Bromus? diandrus</i>	brome			O
<i>Cenchrus clandestinum</i>	kikuyu grass			O
<i>Cyperus congestus</i>	purple umbrella sedge			O
<i>Lagurus ovatus</i>	haretail			O
<i>Stenotaphrum secundatum</i>	buffalo grass			A
Dicots				
<i>Acacia longifolia</i> #	Sydney golden wattle			O
<i>Cakile maritima</i>	sea rocket			O
<i>Carpobrotus edulis</i>	ice plant			S
<i>Conyza canadensis</i>	Canadian fleabane			A
<i>Foeniculum vulgare</i>	fennel			O
<i>Geranium</i> sp.	geranium			S
<i>Lupinus arboreus</i>	lupin			O
<i>Oenothera</i> sp.	evening primrose			S
<i>Oxalis corniculata</i>	creeping woodsorrel			S
<i>Senecio</i> sp.	groundsel			O
<i>Solanum nigra</i>	black nightshade			O
<i>Taraxacum officinale</i> agg.	dandelion			O
<i>Ulex europeaus</i> #	gorse			S

#Being actively controlled (evidence of cut or sprayed dead plants)

Abundance ranking: A – abundant, O – occasional, S – sparse,

² Pīngao is classified by de Lange *et al.* (2018) as nationally **At Risk – Declining** (Partial Decline & Range Restricted) with a large population and low to moderate ongoing or predicted decline (B2: Total area of occupancy ≤ 10 000 ha (100 km²), predicted decline 10–50%).

Photos:

View along beach from east



View to east: buffalo grass mixed with pōhuehue in foreground, dead and regrowing Sydney golden wattle and pōhutukawa to pines at the end of the site. Mixed sand-binders toward harbour



View looking northeast showing main cover of kōwhangatara with taller wīwī (erect growth - orange-brown colour)



View from beach entrance track toward Northport (west) with kōwhangatara and pīngao (orange). Taller green plant is the annual Canadian fleabane.



Section of pīngao amongst kōwhangatara



Reference

de Lange, P., Rolfe, J., Barkla, J., Courtney, S., Champion, P., Perrie, L., Beadel, S., Ford, K., Breitwieser, I Schönberger, I, Hindmarsh-Walls, R., Heenan, P., Ladley, K. 2018: Conservation Status of New Zealand Indigenous Vascular Plants 2017. *New Zealand Threat Classification Series 22*. Te Papa Atawhai/Department of Conservation, Wellington.