Conservation Status of Vascular Plant Species in Tāmaki Makaurau / Auckland

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Regionally Vulnerable *Pomaderris hamiltonii*. Photograph by Jack Hobbs.
Regionally Vulnerable *Veronica bishopiana*. Photograph by Peter de Lange.

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Executive summary

The conservation status of all known indigenous vascular plant taxa in Tāmaki Makaurau / Auckland was assessed using the New Zealand Threat Classification System (NZTCS). This is the first time Auckland Council has facilitated this assessment. Department of Conservation draft regional guidelines were used and a process outlined by the Greater Wellington Regional Council followed.

A total of 786 vascular plant species were identified as present in Tāmaki Makaurau / Auckland. Two hundred species were assessed as Threatened, 105 as At Risk, four as Non-resident Native (Regional Vagrant or Coloniser) and 88 as Data Deficient. Forty-five per cent of vascular plant species are Threatened or At Risk. An additional 27 species were identified that have become extinct or may have formerly occurred in the region.

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1 Introduction

Completing regional conservation status assessments for vascular plants in Tāmaki Makaurau / Auckland is a component of Auckland Council's Biodiversity Focus Area (BFA) Programme. Under this programme, several projects are being established to deliver on council's obligations for regional biodiversity management under Te Tahua Pūtea Tau 2021-2031 Long-term Plan (Auckland Council 2021), the Auckland Council Indigenous Biodiversity Strategy (Auckland Council 2012), Te Mana o te Taiao – Aotearoa New Zealand Biodiversity Strategy 2020 (Department of Conservation), the draft National Policy Statement for Indigenous Biodiversity (Ministry for the Environment) and Mahere ā-Rohe Whakahaere Kaupapa Koiora Orotā mō Tāmaki Makaurau Auckland Regional Pest Management Plan 2020-2030 (Auckland Council 2020).

The Department of Conservation (DOC) regularly assesses the national conservation status of many taxa using the New Zealand Threat Classification System (NZTCS; Townsend et al., 2008, Rolfe et al., 2021). National conservation status assessments of New Zealand vascular plants are published every five years as part of the DOC New Zealand Threat Classification Series (de Lange et al., 1999, 2004, 2009, 2013, 2018). While the national assessments are helpful for prioritising conservation management, research, monitoring and natural resource management decisions, regional considerations are not taken into account. In the Tāmaki Makaurau / Auckland context, this is particularly relevant where a species is more threatened in the region than nationally or where the region represents a national stronghold for a species.

Regional threat status of a species is particularly important in the context of consenting processes under the Resource Management Act (RMA), and in conservation planning where habitat loss as a result of land use changes or activities may occur at a site that supports the type locality or a regionally rare population of a species. Under the RMA, regional and district councils have a statutory obligation to manage threatened species habitats. A key requirement of achieving recovery of threatened species and managing their habitats in Tāmaki Makaurau / Auckland is to have a good understanding of regional population sizes and know where declines are occurring. Furthermore, regional assessments will provide a much stronger foundation for assessing species nationally as they utilize regional expert knowledge and data that may not otherwise be readily available.

Wellington Regional Council has completed threat assessments for vascular plants and several other taxon groups (Crisp, 2020). Methodologies for that work were based on the national NZTCS system (Townsend et al., 2008, Rolfe et al., 2021) and thresholds for area of occupancy/species number adjusted for land area in the region (Appendix A). National strongholds and additional regional qualifiers including natural or historic range limits were also considered (Appendix B).

This report is the first conservation status assessment facilitated by Auckland Council for vascular plants in Tāmaki Makaurau / Auckland using this methodology. Previous conservation assessments for vascular plants in Tāmaki Makaurau / Auckland were completed by de Lange and Cameron 1997a; de Lange and Cameron 1997b; de Lange et al., 1999; Stanley et al., 2005. The results presented in this assessment were not compared to previous assessments as the methodologies in the most recent NZTCS has been significantly revised since Stanley et al., (2005) who used Molloy et al., (2002). Changes to population size and trend, the structure of the classification system and additional qualifiers to better represent the issues arising with many threatened species are now in the current NZTSC manual (Townsend et al., 2008, Rolfe et al., 2021).

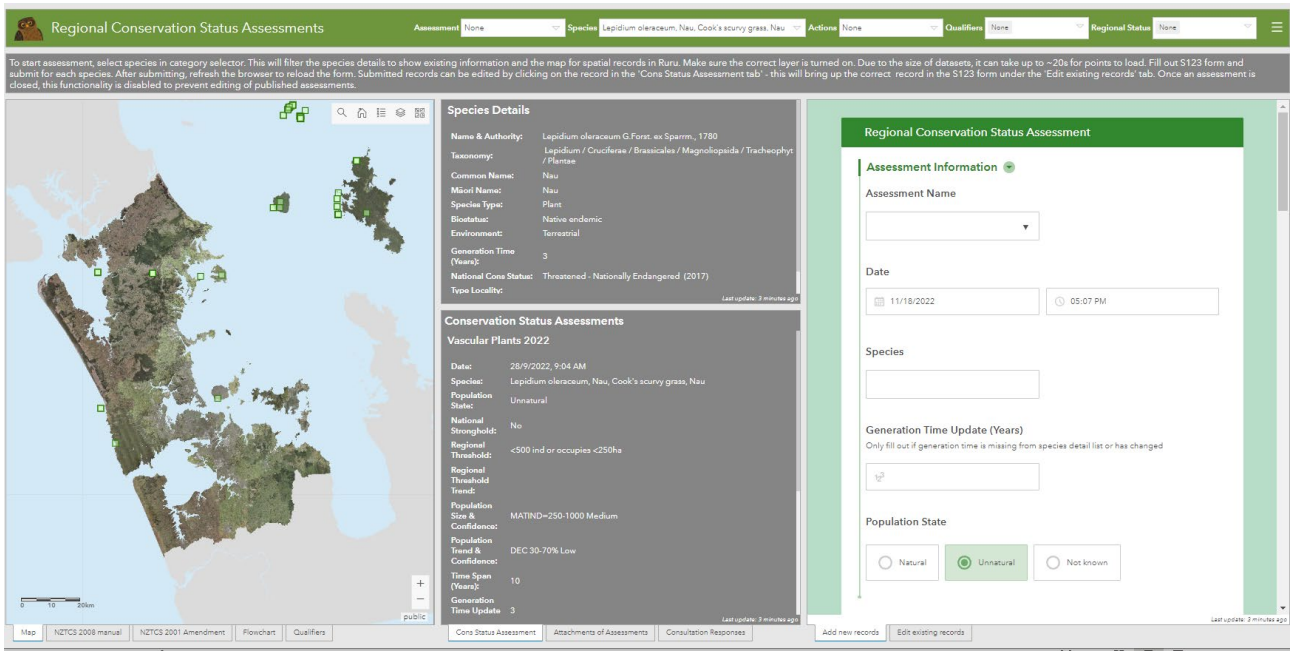
2 Methods

A panel comprised of external experts (Peter de Lange, Cameron Kilgour and Ewen Cameron) and Auckland Council internal staff (Emma Simpkins, Jacinda Woolly and Sabine Melzer), assessed the status of the vascular plant species in Tāmaki Makaurau / Auckland in August and September 2022.

This report covers all native terrestrial, estuarine and freshwater vascular plant species in the region and followed the draft Department of Conservation (DOC) process for assessing regional conservation status (Department of Conservation 2014, pers. comm. Pascale Michel). Taxa that have become naturalised in Tāmaki Makaurau / Auckland after being deliberately or accidentally introduced by human agency and would be considered as Introduced and Naturalised have not been included in this assessment. The assessment is based on consideration of natural populations and their natural distribution within the region.

We used plant data from Auckland Council, the New Zealand Plant Conservation Network (NZPCN), Auckland Herbarium, the Australasian Virtual Herbarium (AVH) and the Department of Conservation in conjunction with other map layers, including vegetation cover (Land Cover Database v. 5.0; Manaaki Whenua – Landcare Research 2020) and land water boundaries to inform decisions on area of occupancy and distribution. Spatial data was viewed in the Auckland Council Conservation Information System Ruru. A decision support tool was developed in Ruru consisting of an ESRI dashboard (geographic information software system) with an embedded web map and ArcGIS survey123 form to facilitate assessing each species following the process outlined in Appendix 1 (Fig. 1). The tool allows for seeing all required information including spatial data in one place and the survey123 form contains a series of predefined questions and selections.

Figure 1. Decision support tool developed in Ruru (Auckland Council Conservation Information System).



All vascular plant species from the national NZTCS list (de Lange et al., 2018) not observed in the region were removed from consideration in the assessment. To maintain the highest protection of threatened species and for consistency between regional and national assessments, regional status must not be a lower threat category than the national status. For example, a Nationally Endangered

taxon cannot be assessed as Regionally Vulnerable or lower, but it could be assessed as Regionally Critical. Due to the timing of this assessment being prior to the national assessment, some applications of the criteria anticipated potential changes to the national status but may not always align to the national status, such as some of the myrtle species.

The process for determining the regional threat status of a species is shown in Appendix 1 and a full list of the qualifiers applied in Appendix 2. If more than 20% of the national population is producing progeny or resident for more than half their life cycle in Tāmaki Makaurau / Auckland, the species was assigned National Stronghold status and the NZTCS criteria applied. Regional thresholds, allowing for differences in land area, were applied as drafted by the Department of Conservation (Department of Conservation 2014). Thresholds are designed to be used universally across a wide range of taxa and allow for using either an area or population size estimate based on the information available for a species. For Tāmaki Makaurau / Auckland, the threshold was set at less than 500 mature individuals present or a habitat occupancy area of less than 250ha. If a species did not meet the threshold, it was assigned a regional conservation status by applying the NZTCS criteria. If it did meet the threshold and the population was ±10% stable or increasing, it was assigned the status regionally not threatened. Population trend criteria are applied based on current knowledge, representing trends over the next 10 years or 3 generations, whichever is longer.

For the purposes of this assessment the area of the entire Hunua Ranges Regional Park was included as part of the Auckland 'region'. Although a large part of the Hunua Ranges is within the Waikato region, most of the area is managed by Auckland Council as the Hunua Ranges Regional Park. This extensive tract of forest provides one of the most important opportunities to conserve and protect ecologically functional ecosystems and the diversity of native species that they support on the mainland of Tāmaki Makaurau / Auckland. The Hunua Ranges is nationally important for the protection of kauri, and they currently appear to be free of kauri dieback disease. The Hunua Ranges also contain the only example in the region of rimu-towai forest (MF24) (Singers et al., 2017) at the highest elevations around Kohukohunui. This forest also includes sub-montane species uncommon in the region, such as mountain cabbage tree, mountain horopito and hutu.

The notes column records discussion of the panel that was deemed pertinent to illustrate or reflect the threat status. Notes are not included if this was self-explanatory. Type localities are included as a qualifier and details of the type locality is specified in the notes column to highlight their scientific significance in the region. If no specific site for a type locality is known, this is recorded as 'Type locality'.

3 Results

A total of 786 native vascular plant species were identified as present in Tāmaki Makaurau / Auckland (excluding introduced and naturalised species) (Fig. 2, Tables 1-13). The region was identified as a national stronghold (>20% of the national population) for 45 species. 45% of vascular plant species are Threatened or At Risk.

Veronica pubescens subsp. *rehuarum*, Veronica *pubescens* subsp. *sejuncta*, *Senecio pokohinuensis*, *Myosotis pansa* subsp. *pansa*, *Veronica jovellanoides*, *Kunzea sinclairii, Celmisia major* var. *major, Libertia flaccidifolia, Olearia allomii* and *Veronica bishopiana* are vascular plant taxa endemic to Tāmaki Makaurau / Auckland that currently still exists in the region. An endemic taxon to Auckland, *Lepidium amissum*, is extinct.

Of the 200 Threatened species, 58 are Regionally Critical, 75 are Regionally Endangered, 64 are Regionally Vulnerable, and three are Regionally Increasing.

Of the 157 At Risk species, 104 are Declining, one is Recovering, seven are Relict, and 45 are Naturally Uncommon.

Of the four Non-resident Native species, three are Vagrant and one is a Coloniser.

Twenty-seven species were known to have formerly occurred within the region but are now thought to be regionally and/or nationally extinct (Table 1). Two species were noted to be on the brink of extinction and three species likely to be extinct but were not assessed as Extinct. Conversely *Leptinella rotundata* which was listed as regionally extinct in Stanley et al., (2005), was rediscovered in 2010, over 100 years after it was thought to be extinct in the region (Calder et al., 2014) and in this assessment is listed as Regionally Critical. Similarly, *Juncus caepiticius* regionally extinct in Stanley et al., (2005) was rediscovered in the last 10 years. Several (3) species are identified as likely to be extinct pending repeated surveys in known or expected habitats at appropriate times.

The panel also noted taxa at their northern and southern limits which will be used as a tool to identify sites that may require monitoring or management to mitigate the effects on climate change on these taxa.

There are 50 taxa with their type localities in the Auckland region.

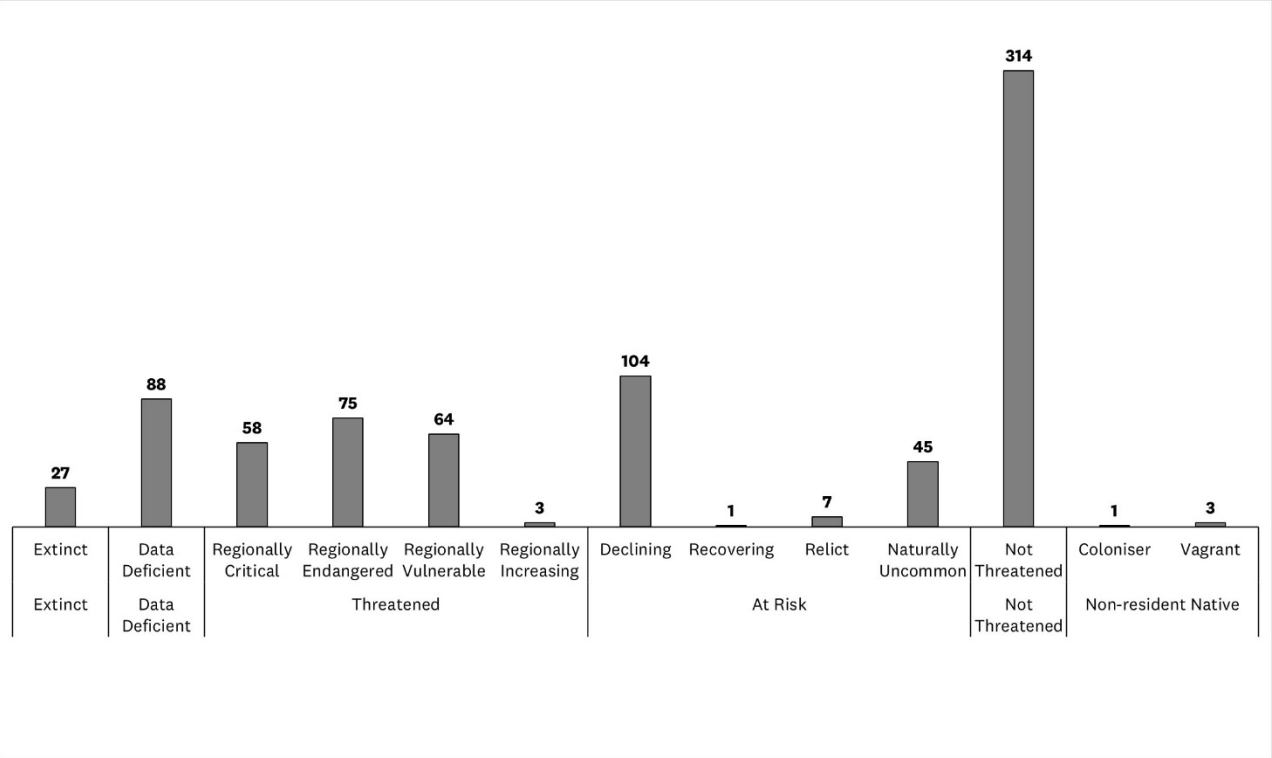


Figure 2. Regional conservation status of vascular plants in Tāmaki Makaurau / Auckland

3.1 Extinct (27)

Taxa for which there is no reasonable doubt – following repeated surveys in known or expected habitats at appropriate times (diurnal, seasonal and annual) and throughout the taxon's historic range – that the species is no longer present in the wild within Tāmaki Makaurau / Auckland.

Table 1: Extinct Vascular Plants in Tāmaki Makaurau / Auckland

Name and Authority	Family	National Conservation Status (2017)	Qualifiers	National Stronghold	Notes
Amphibromus fluitans Kirk	Gramineae	Threatened – Nationally Vulnerable	TO	No	Habitat has been lost in Auckland.
Argentina anserinoides Raoul (Holub)	Rosaceae	Not Threatened		No	
Asplenium pauperequitum Brownsey & P.J.Jacks.	Aspleniaceae	Threatened – Nationally Endangered		No	Single historic record exists.
Atriplex hollowayi de Lange & D.A.Norton	Amaranthaceae	Threatened – Nationally Critical		No	
Brachyglottis myrianthos (Cheeseman) D.G.Drury	Compositae	At Risk – Relict		No	
Clianthus maximus Colenso	Leguminosae	Threatened – Nationally Critical		No	
Clianthus puniceus (G.Don) Sol. ex Lindl.	Leguminosae	Threatened – Nationally Critical	EW	Yes	No longer on Moturemu (survey mid July 2022 found no plants). In cultivation from Moturemu Island.
Discaria toumatou Raoul	Rhamnaceae	At Risk – Declining		No	Region would have been the northern limit for the species distribution.
Drosera pygmaea DC.	Droseraceae	At Risk – Relict	EW	No	Planted populations exist. In cultivation (provenance unknown).
Epilobium alsinoides A.Cunn.	Onagraceae	Not Threatened		No	
Gratiola concinna Colenso	Plantaginaceae	Threatened – Nationally Endangered		No	
Hierochloe redolens (Vahl) Roem. & Schult.	Gramineae	Not Threatened		No	
Isolepis fluitans var. fluitans (L.) R.Br.	Cyperaceae	Taxonomically indistinct		No	
Lepidium amissum de Lange & Heenan	Brassicaceae	Extinct	TL, RE		Type locality. Regionally and nationally extinct.
Myosotis forsteri Lehm.	Boraginaceae	Not Threatened			
Myosotis antarctica subsp. *traillii* Kirk	Boraginaceae	At Risk – Declining		No	

Name and Authority	Family	National Conservation Status (2017)	Qualifiers	National Stronghold	Notes
Phylloglossum drummondii Kunze	Lycopodiaceae	Threatened – Nationally Endangered		No	
Pimelea villosa Sol. ex Sm.	Thymelaeaceae	At Risk – Declining		No	
Polygonum plebeium R.Br.	Polygonaceae	At Risk – Declining		No	
Pomaderris phylicifolia subsp. *phylicifolia* Lodd. ex Link	Rhamnaceae	Threatened – Nationally Critical	EW	No	In cultivation but not Auckland province.
Potamogeton suboblongus Hagstr.	Potamogetonaceae	Not Threatened	TL		
Prasophyllum hectorii (Buchanan) Molloy, D.L.Jones & M.A.Clem.	Orchidaceae	At Risk – Declining		No	
Pterostylis nutans R.Br.	Orchidaceae	Non-resident – Vagrant	EW, SO	No	In cultivation, Australian origin.
Rumex flexuosus Sol. ex G.Forst.	Polygonaceae	Not Threatened	NR	No	Likely to be extinct in region. Species distribution would have been at the northern limit.
Trilepidea adamsii (Cheeseman) Tiegh.	Loranthaceae	Extinct		No	Nationally extinct since 1950s.
Utricularia dichotoma Labill.	Lentibulariaceae	Not Threatened		No	
Vittadinia australis A.Rich.	Compositae	Not Threatened		No	Species at northern limit of its distribution.

3.2 Data Deficient (88)

Taxa that are suspected to be threatened or, in some instances, possibly extinct in Tāmaki Makaurau / Auckland but are not definitely known to belong to any particular category due to a lack of current information about their distribution and abundance. It is hoped that listing such taxa will stimulate research to find out the true category (for a fuller definition see Townsend et al., 2008).

Table 2: Data Deficient Plants in Tāmaki Makaurau / Auckland

Name and Authority	Family	National Cons. Status (2017)	National Stronghold	Criteria	Qualifiers	Regional Population Size	Regional Trend	Regional Confidence Population Size	Regional Confidence Trend	Notes
Astelia fragrans Colenso	Asteliaceae	Not Threatened	No							
Australina pusilla subsp. *pusilla* (Poir.) Gaudich.	Urticaceae	Not Threatened								
Bulbophyllum tuberculatum Colenso	Orchidaceae	At Risk – Naturally Uncommon								
Caladenia bartlettii (Hatch) D.L.Jones, Molloy & M.A.Clem.	Orchidaceae	At Risk – Naturally Uncommon			TL					Type locality = Wade River, Silverdale.
Carex corynoidea K.A.Ford	Cyperaceae	Not Threatened	No							
Carex dipsacea Berggr.	Cyperaceae	Not Threatened	No							
Carex sinclairii Boott	Cyperaceae	Not Threatened	No							
Centipeda elatinoides (Less.) Benth. & Hook. ex O.Hoffm.	Compositae	Data Deficient	No		SO					
Clematis foetida Raoul	Ranunculaceae	Not Threatened								
Coprosma aff. *neglecta* (a) (AK 221468; Maunganui Bluff)	Rubiaceae	At Risk – Naturally Uncommon	No							Only known at Te Hauturu-ō-Toi / Little Barrier Island.

Name and Authority	Family	National Cons. Status (2017)	National Stronghold	Criteria	Qualifiers	Regional Population Size	Regional Trend	Regional Confidence Population Size	Regional Confidence Trend	Notes
Corunastylis nuda (Hook.f.) D.L.Jones & M.A.Clem.	Orchidaceae	At Risk – Naturally Uncommon								
Corybas aff. *rivularis* (CHR 518313; "whiskers")	Orchidaceae	Not Threatened	No		DPS, DPT					Requires taxonomic review.
Corybas aff. *trilobus* (a) (CHR 518304; "pygmy")	Orchidaceae	Not Threatened	No		DPS, DPT					Requires taxonomic review.
Corybas cryptanthus Hatch	Orchidaceae	At Risk – Naturally Uncommon	No							
Corybas rivularis (A.Cunn.) Rchb.f.	Orchidaceae	At Risk – Naturally Uncommon	No		DPS, DPT					
Corybas sanctigeorgianus Lehnebach	Orchidaceae	Data Deficient	No		DPS, DPT					Type locality = Hunua.
Dichondra aff. *brevifolia* (AK 359784; "west coast")	Convolvulaceae		No		DPS, DPT					
Dracophyllum lessonianum A.Rich.	Ericaceae	Not Threatened	No							
Elatine gratioloides A.Cunn.	Elatinaceae	Not Threatened	No		DPS, DPT					
Epilobium komarovianum H.Lév.	Onagraceae	Not Threatened	No		DPS, DPT					
Euchiton limosus (D.G.Drury) Holub	Compositae	Not Threatened			SO					
Fimbristylis velata R.Br.	Cyperaceae	At Risk – Naturally Uncommon	No		SO					
Galium trilobum Colenso	Rubiaceae	Not Threatened	No		DPS, DPT					

Name and Authority	Family	National Cons. Status (2017)	National Stronghold	Criteria	Qualifiers	Regional Population Size	Regional Trend	Regional Confidence Population Size	Regional Confidence Trend	Notes
Gastrodia cunninghamii Hook.f.	Orchidaceae	Not Threatened	No							
Gastrodia minor Petrie	Orchidaceae	Not Threatened	No							Species at northern limit of its distribution.
Gastrodia sesamoides R.Br.	Orchidaceae	Not Threatened	No							Often appears sporadically in urban sites where there is pine bark/mulch presumably collected from a wild orchid habitat.
Geranium aff. *retrorsum* (b) (AK 306299; Oakley Creek)	Geraniaceae	Threatened – Nationally Critical			EW					Requires taxonomic review.
Geranium potentilloides L'Hér. ex DC.	Geraniaceae	Not Threatened	No		SO					
Glossostigma cleistanthum W.R.Barker	Phrymaceae	Not Threatened	No		DPS, DPT					
Glossostigma diandrum (L.) Kuntze	Phrymaceae	Not Threatened	No		DPR, DPS, DPT					
Hoheria sexstylosa Colenso	Malvaceae	Not Threatened	No							
Hypericum gramineum G.Forst.	Hypericaceae	Non-resident – Vagrant	No		DPS, SO					Historic records only. Has been treated as a vagrant.
Juncus distegus Edgar	Juncaceae	At Risk – Naturally Uncommon	No							
Lachnagrostis lyallii (Hook.f.) Zotov	Gramineae	Not Threatened								
Lemna aequinoctialis Welw.	Araceae	Non-resident – Coloniser			DPR, SO					
Lemna disperma Hegelm.	Araceae	Data Deficient			DPR, SO					

Name and Authority	Family	National Cons. Status (2017)	National Stronghold	Criteria	Qualifiers	Regional Population Size	Regional Trend	Regional Confidence Population Size	Regional Confidence Trend	Notes
Lemna minor L.	Araceae	Not Threatened			DPR, SO					
Lepidium desvauxii Thell.	Cruciferae	Not Threatened	No		DPS, DPT					
Lepidium flexicaule Kirk	Cruciferae	Threatened – Nationally Endangered			DPR, TO, TL					Type locality = North Head.
Leptinella squalida subsp. *squalida* Hook.f.	Compositae	Not Threatened								
Leptopteris superba (Colenso) C.Presl	Osmundaceae	Not Threatened								
Lilaeopsis ruthiana Affolter	Umbelliferae	Not Threatened								
Metrosideros colensoi Hook.f.	Myrtaceae	Threatened – Nationally Vulnerable	No							One record from Kaipatiki which is suspected to be planted.
Microlaena carsei Cheeseman	Gramineae	Threatened – Nationally Endangered	No							
Myosotis spatulata G.Forst.	Boraginaceae	At Risk – Naturally Uncommon	No							
Myriophyllum pedunculatum subsp. *novae-zelandiae* Orchard	Haloragaceae	Not Threatened	No							Included consideration of Lake Puketi in assessment despite being outside of regional boundary.
Neomyrtus pedunculata (Hook.f.) Allan	Myrtaceae	Threatened – Nationally Critical	No							The impact of myrtle rust on this species is unclear.
Notogrammitis aff. *rawlingsii* (b) (ak 236942; Auckland)	Polypodiaceae	Data Deficient	Yes							

Name and Authority	Family	National Cons. Status (2017)	National Stronghold	Criteria	Qualifiers	Regional Population Size	Regional Trend	Regional Confidence Population Size	Regional Confidence Trend	Notes
Notogrammitis angustifolia (Parris) Parris	Polypodiaceae	Not Threatened	No							
Olearia angulata Kirk	Compositae	At Risk – Naturally Uncommon	No							
Parsonsia capsularis var. *capsularis* (G.Forst.) R.Br.	Apocynaceae	Not Threatened	No							
Pentapogon avenoides (Hook.f.) P.M. Peterson, Romasch. & Soreng	Gramineae	Not Threatened	No		DPS, DPT					Threatened by weed competition.
Pentapogon micranthus (Cav.) P.M. Peterson, Romasch. & Soreng	Gramineae	Threatened – Nationally Vulnerable	No		SO					
Pentapogon quadrisetus (Labill.) P.M. Peterson, Romasch. & Soreng	Gramineae	At Risk – Declining	No		DPS, DPT					
Persicaria aff. *decipiens* (b) (AK 330801; "branched inflorescence")	Polygonaceae	Not Threatened	No							
Phlegmariurus aff. *varius* (a) (WAIK 7743;"tree fern")	Lycopodiaceae	Data Deficient	No							
Pimelea acra C.J.Burrows & de Lange	Thymelaeaceae	At Risk – Naturally Uncommon	No		DPS, DPT					
Pimelea carnosa C.J.Burrows	Thymelaeaceae	Not Threatened	No		DPS, DPT					
Pimelea prostrata subsp. *prostrata*	Thymelaeaceae	Not Threatened	No							

Name and Authority	Family	National Cons. Status (2017)	National Stronghold	Criteria	Qualifiers	Regional Population Size	Regional Trend	Regional Confidence Population Size	Regional Confidence Trend	Notes
(J.R.Forst. & G.Forst.) Willd.										
Pimelea prostrata subsp. *thermalis* C.J.Burrows	Thymelaeaceae	Not Threatened	No		DPS, DPT					
Pimelea xenica C.J.Burrows	Thymelaeaceae	Threatened – Nationally Vulnerable	No							
Pittosporum eugenioides A.Cunn.	Pittosporaceae	Not Threatened	No							
Prasophyllum colensoi Hook.f.	Orchidaceae	Not Threatened	No							
Pseudopanax colensoi var. *colensoi* (Hook.f.) Philipson	Araliaceae	Not Threatened	No							
Pterophylla racemosa (L.f.) Pillon & H.C.Hopkins	Cunoniaceae	Not Threatened	No							
Pterostylis paludosa D.L.Jones, Molloy & M.A.Clem.	Orchidaceae	At Risk – Declining	No							
Pterostylis tasmanica D.L.Jones	Orchidaceae	Threatened – Nationally Vulnerable	No							Threatened by weed competition and succession.
Ranunculus glabrifolius Hook.	Ranunculaceae	Not Threatened	No							
Raukaua simplex (G.Forst.) A.D.Mitch., Frodin & Heads	Araliaceae	Not Threatened	No							
Rorippa palustris (L.) Besser	Cruciferae	Not Threatened	No		SO					Likely to be extinct in the region but needs more survey in known or expected habitats at appropriate times.

Name and Authority	Family	National Cons. Status (2017)	National Stronghold	Criteria	Qualifiers	Regional Population Size	Regional Trend	Regional Confidence Population Size	Regional Confidence Trend	Notes
Rubus schmidelioides var. *schmidelioides* A.Cunn.	Rosaceae	Not Threatened	No							
Ruppia megacarpa R.Mason	Ruppiaceae	At Risk – Naturally Uncommon	No		SO					Likely to be extinct in the region but needs more survey in known or expected habitats at appropriate times.
Rytidosperma clavatum (Zotov) Connor & Edgar	Gramineae	Not Threatened	No		TO					
Samolus repens var. *strictus* Cockayne	Primulaceae	At Risk – Naturally Uncommon	No		SO					
Schoenus carsei Cheeseman	Cyperaceae	Threatened – Nationally Critical	No		PF, RR, SO					Likely to be extinct in the region but needs more survey in known or expected habitats at appropriate times.
Senecio repangae de Lange & B.G.Murray	Compositae	Threatened – Nationally Vulnerable	No		DPR, DPS, DPT, EF					
Solanum aviculare var. *latifolium* G.T.S.Baylis	Solanaceae	At Risk – Naturally Uncommon	No		DPR, DPS, DPT, EF, IN, RR					'Introduced Native' selected as a qualifier but it is naturally present on the outer gulf islands and once considered a Three Kings endemic, but it is naturalising on the mainland because of planting.
Stenostachys gracilis (Hook.f.) Connor	Gramineae	Not Threatened	No		DPR, DPS, DPT					Single record in region.
Stuckenia pectinata (L.) Börner	Potamogetonaceae	At Risk – Naturally Uncommon	No		SO					
Thelymitra (b) (CHR 518036; "darkie")	Orchidaceae	Not Threatened	No		DPR, DPS, DPT					Threatened by succession.
Thelymitra colensoi Hook.f.	Orchidaceae	Data Deficient	No		DPR					

Name and Authority	Family	National Cons. Status (2017)	National Stronghold	Criteria	Qualifiers	Regional Population Size	Regional Trend	Regional Confidence Population Size	Regional Confidence Trend	Notes
Thelymitra formosa Colenso	Orchidaceae	At Risk – Naturally Uncommon	No		DPR, DPS, DPT					
Thismia rodwayi F.Muell.	Burmanniaceae	At Risk – Naturally Uncommon	No		Sp, DPR, DPS, DPT, PF, SO					
Trisetum lasiorhachis (Hack.) Edgar	Gramineae	Not Threatened								Suspect record, possibly result of mislabelling.
Utricularia australis R.Br.	Lentibulariaceae	Threatened – Nationally Critical	No		Sp, DPS, DPT, PF, RR, SO					
Utricularia delicatula Cheeseman	Lentibulariaceae	At Risk – Relict	No		DPR, DPS, DPT, PF, RR					
Viola lyallii Hook.f.	Violaceae	Not Threatened	No							
Zannichellia palustris L.	Potamogetonaceae	At Risk – Naturally Uncommon	No		RR, SO					

3.3 Threatened (200)

Taxa that meet the criteria specified by Townsend et al., (2008) for the categories Regionally Critical, Regionally Endangered, Regionally Vulnerable and Regionally Increasing.

3.3.1 Regionally Critical (58)

Criteria for Regionally Critical:

A – very small population (natural or unnatural)

A(1) <250 mature individuals
A(2) ≤2 subpopulations, ≤200 mature individuals in the larger subpopulation
A(3) Total area of occupancy ≤1 ha (0.01 km^2)

B – small population (natural or unnatural) with a moderate ongoing or predicted decline of 50-70%

B(1) 250-1000 mature individuals
B(2) ≤5 subpopulations, ≤300 mature individuals in the largest subpopulation
B(3) Total area of occupancy ≤10 ha (0.1 km^2)

C – population (irrespective of size or number of subpopulations) with a very high ongoing or predicted decline of >70%

Table 3: Regionally Critical Vascular Plants in Tāmaki Makaurau / Auckland

Name and Authority	Family	National Cons. Status (2017)	National Stronghold	Criteria	Qualifiers	Regional Population Size	Regional Trend	Regional Confidence Population	Regional Confidence Trend	Notes
Anogramma leptophylla (L.) Link	Pteridaceae	Threatened – Nationally Vulnerable	Yes	A (3)	CD, DPS, DPT, OL, SO, Sp	AREA<=1	DEC 30-50%	Medium	Low	Only at one location. Conservation dependant.
Anthosachne solandri (Steud.) Barkworth & S.W.L.Jacobs	Gramineae	Not Threatened	No	A (3)	DPR, DPT, OL	AREA<=1	DEC 10-30%	Low	Low	
Austroblechnum penna-marina subsp.	Blechnaceae	Not Threatened	No	A (3)	DPS, DPT, SO	AREA<=1		Low		

Name and Authority	Family	National Cons. Status (2017)	National Stronghold	Criteria	Qualifiers	Regional Population Size	Regional Trend	Regional Confidence Population	Regional Confidence Trend	Notes
alpina (R.Br.) A.R.Field										
Bolboschoenus caldwellii (V.J.Cook) Soják	Cyperaceae	Not Threatened	No	A (3)	DPR, DPS, DPT, PF, RR, SO, Sp	AREA<=1	DEC 10-50%	Low	Low	
Botrychium australe R.Br.	Ophioglossaceae	At Risk – Naturally Uncommon	No	A (3)	DPS, DPT, RR, SO, Sp	AREA<=1	DEC>70%	Medium	High	
Caladenia atradenia D.L.Jones, Molloy & M.A.Clem.	Orchidaceae	At Risk – Naturally Uncommon	No	B (3)	DPR, DPS, DPT, EF, PF, Sp	AREA<=10	DEC 50-70%	Low	Low	Threatened by weed competition.
Callitriche petriei R.Mason	Plantaginaceae	Not Threatened	No	A (3)	DPR, DPS, DPT, EF, PF, RR, Sp	AREA<=1	STABLE +/-10%	Low	Low	
Calochilus herbaceus Lindl.	Orchidaceae	Threatened – Nationally Critical	No	A (3)	RR, Sp, TO	AREA<=1	DEC>70%	High	High	
Calochilus paludosus R.Br.	Orchidaceae	At Risk – Naturally Uncommon	No	A (3)	DPR, PF, RR, SO, Sp	AREA<=1	DEC>70%	High	High	
Calystegia marginata R.Br.	Convolvulaceae	At Risk – Naturally Uncommon	No	A (1)	DPR, DPS, DPT, EF, PF, SO, Sp	MATIND<250	DEC 10-50%	Low	Low	Vulnerable to weed competition and accidental control due to identification error.
Carex litorosa L.H.Bailey	Cyperaceae	At Risk – Declining	No	A (3)	DPR, DPS, DPT, PF, RR, Sp	AREA<=1	DEC 50-70%	Medium	Medium	
Coprosma parviflora Hook.f.	Rubiaceae	Not Threatened	No	A (1)	DPR, DPS, DPT, PF, RF	MATIND<250	DEC 10-30%	Low	Low	Species at southern limit of its distribution.
Cordyline indivisa (G.Forst.) Endl.	Asparagaceae	Not Threatened	No	A (1)	CI, CD, DPS, DPT, RR	MATIND<250	DEC>70%	High	Medium	Species at northern limit of its distribution.
Corybas aff. *rivularis* (AK 251833; Kaitarakihi)	Orchidaceae	Threatened – Nationally Critical	Yes	A (3)	DPR, NStr, RR	AREA<=1	STABLE +/-10%	High	High	National stronghold.

Name and Authority	Family	National Cons. Status (2017)	National Stronghold	Criteria	Qualifiers	Regional Population Size	Regional Trend	Regional Confidence Population	Regional Confidence Trend	Notes
Cranfillia deltoides (Colenso) de Lange et Parris	Blechnaceae	Not Threatened	No	A (3)	DPS, DPT, RR	AREA<=1	STABLE +/-10%	Low	Low	
Elaeocarpus hookerianus Raoul	Elaeocarpaceae	Not Threatened	No	A (1)	DPR, DPS, PF, RF	MATIND<250	DEC 10-30%	High	Low	
Eleocharis neozelandica C.B.Clarke ex Kirk	Cyperaceae	At Risk – Declining	No	A (3)	DPR, DPS, DPT, EF, PF, RR, Sp	AREA<=1	DEC 10-70%	High	Medium	
Epilobium insulare Hausskn.	Onagraceae	At Risk – Declining	No	A (3)	DPR, DPT, PF, RR, Sp	AREA<=1	DEC 10-30%	High	Low	Auckland is northern limit for its distribution.
Euchiton delicatus (D.G.Drury) Holub	Compositae	Not Threatened	No	A (1)	DPR, DPS, DPT, EF	MATIND<250	DEC 10-30%	Low	Low	Threatened by weed competition.
Fuscospora solandri (Hook.f.) Heenan & Smissen	Nothofagaceae	Not Threatened	No	A (3)	DPT, OL, RF	AREA<=1	STABLE +/-10%	High	Medium	North limit of distribution at Te Hauturu-ō-Toi / Little Barrier.
Hydrocotyle hydrophila Petrie	Araliaceae	Not Threatened	No	A (3)	DPR, DPT, RR	AREA<=1	STABLE +/-10%	Medium	Low	Species at northern limit of its distribution.
Hymenophyllum bivalve (G.Forst.) Sw.	Hymenophyllaceae	Not Threatened	No	A (3)	DPR, DPS, DPT, SO	AREA<=1	STABLE +/-10%	Low	Low	The region is likely to be at its northern limit.
Hypericum involutum (Labill.) Choisy	Hypericaceae	At Risk – Declining	No	A (1)	DPR, DPS, DPT, SO	MATIND<250		Low		
Lepidium oleraceum G.Forst. ex Sparrm.	Cruciferae	Threatened – Nationally Endangered	No		CD, DPS, DE, EF, PF, RR	MATIND=250-1000	DEC 30-70%	Medium	Low	Conservation dependent for weed control and mouse control. Designated as the panel felt the population trend did not accurately represent its situation.
Leptinella dioica Hook.f.	Compositae	Not Threatened	No		DE, Sp, DPR, DPS, DPT, PF, RR, RF	AREA<=100	DEC 10-30%	Medium	Low	Designated as panel felt the population trend did not accurately reflect its situation.
Leptinella dispersa subsp. *rupestris* (D.G.Lloyd) D.G.Lloyd & C.J.Webb	Compositae	Threatened – Nationally Critical	No	B (3)	DPS, DPT, PF, RR, RF	AREA<=10	DEC 10-30%	Medium	Medium	National stronghold. Threatened by erosion in catchments and recruitment failure.

Name and Authority	Family	National Cons. Status (2017)	National Stronghold	Criteria	Qualifiers	Regional Population Size	Regional Trend	Regional Confidence Population	Regional Confidence Trend	Notes
Leptinella rotundata (Cheeseman) D.G.Lloyd & C.J.Webb	Compositae	Threatened – Nationally Endangered	Yes	A (3)	Sp, NStr, PF, RR, RF, TL	AREA<=1	STABLE +/-10%	Medium	Medium	Previously listed as Regionally Extinct but rediscovered in 2006. National stronghold. Type locality. Threatened by coastal erosion, weed competition and recruitment failure.
Leptolepia novae-zelandiae (Colenso) Mett. ex Diels	Dennstaedtiaceae	Not Threatened	No	A (1)	Sp, DPR, DPS, DPT	MATIND<250	STABLE +/-10%	Medium	Medium	
Leptostigma setulosum (Hook.f.) Fosberg	Rubiaceae	Not Threatened	No		DE, DPS, DPT, PF, RR	AREA<=100	DEC 10-30%	Low	Low	Designated as panel felt the population trend did not accurately reflect it situation.
Libertia flaccidifolia Blanchon & J.S.Weaver	Iridaceae	Threatened – Nationally Critical	Yes	B (3)	DPR, DPS, DPT, PF, TL, RE	AREA<=10	DEC 10-70%	Medium	Medium	National stronghold. Type locality = Mount Tamahunga.
Lindsaea viridis Colenso	Lindsaeaceae	At Risk – Naturally Uncommon	No	A (1)	Sp, DPS, DPT, PF, RR	MATIND<250	DEC 10-50%	Low	Low	On brink of extinction. Threatened by flooding and collection pressures.
Linum monogynum var. *monogynum* G.Forst.	Linaceae	At Risk – Declining	No	B (3)	DPR, DPS, DPT, PF, RR	AREA<=10	DEC 10-70%	Medium	Low	Threatened by a rust pathogen.
Lobelia physaloides A.Cunn.	Campanulaceae	Threatened – Nationally Vulnerable	No	A (3)	CI	AREA<=1	DEC 10-30%	High	Medium	At southern limit of species distribution.
Manoao colensoi (Hook.) Molloy	Podocarpaceae	Not Threatened	No	A (1)	Sp, DPR, PF, RF, Rel	MATIND<250	STABLE +/-10%	High	High	Threatened by recruitment failure.
Mazus novaezeelandiae subsp. *impolitus* f. *impolitus* Heenan	Phrymaceae	Threatened – Nationally Endangered	No	A (3)	Sp, DPS, DPT, PF, RR	AREA<=1	STABLE +/-10%	Low	Low	
Melicytus lanceolatus Hook.f.	Violaceae	Not Threatened	No	A (1)	Sp, DPS, DPT, NR, RR	MATIND<250	STABLE +/-10%	Low	Low	Species distribution at northern limit within region.
Myosotis pansa subsp. *pansa* (L.B.Moore) Meudt, Prebble, R.J.Stanley & Thorsen	Boraginaceae	Threatened – Nationally Endangered	Yes		DPT, DE, NStr, NR, PF, RR, RE	MATIND=250-1000	DEC 10-50%	Medium	Medium	Designated as panel felt that the loss of individuals was not captured by the decline rates. Type locality = Auckland. Threatened by weed

Name and Authority	Family	National Cons. Status (2017)	National Stronghold	Criteria	Qualifiers	Regional Population Size	Regional Trend	Regional Confidence Population	Regional Confidence Trend	Notes
										competition and succession. Species at northern limit of its distribution.
Myriophyllum robustum Hook.f.	Haloragaceae	At Risk – Declining	No	A (3)	DPR, DPS, DPT, PF, RR	AREA<=1	DEC 10-30%	High	Low	Considered Lake Otamatearoa for the assessment despite area outside of regional boundary.
Oxybasis ambigua (R.Br.) de Lange & Mosyakin	Amaranthaceae	At Risk – Declining	No		Sp, DPR, DPS, DPT, DE, EF, PF, RR, SO	MATIND=250-1000	DEC 30-70%	Low	Low	Designated as uncertainty on rate of decline but panel felt species should be listed higher. Threatened by habitat loss as mangroves encroach.
Pimelea orthia subsp. *orthia* C.J.Burrows & Thorsen	Thymelaeaceae	Threatened – Nationally Critical	No	C	DPR, DPS, DPT, EF, PF, RR, TL	AREA<=100	DEC>70%	Low	Medium	Most significant threat is succession. Weed competition also a key threat. Type locality = Avondale.
Plantago raoulii Decne.	Plantaginaceae	Not Threatened	No	A (1)	DPR, DPS, DPT, PF	MATIND<250	DEC 10-50%	Low	Low	Threatened by weed competition.
Polystichum silvaticum (Colenso) Diels	Dryopteridaceae	Not Threatened	No	A (1)	Sp, CD, DPR, DPS, DPT, RR	MATIND<250	STABLE +/-10%	Low	Low	Species at its northern limit within region.
Pseudowintera axillaris (J.R.Forst. & G.Forst.) Dandy	Winteraceae	Not Threatened	No	A (1)	NS	MATIND<250	STABLE +/-10%	High	Low	
Pseudowintera colorata (Raoul) Dandy	Winteraceae	Not Threatened	No	A (1)	NS	MATIND<250	STABLE +/-10%	High	Low	
Pterostylis cardiostigma D.Cooper	Orchidaceae	Not Threatened	No	A (1)	DPR, DPS, DPT	MATIND<250	STABLE +/-10%	Low	Low	
Ranunculus acaulis Banks & Sol. ex DC.	Ranunculaceae	Not Threatened	No	A (3)	CI, DPS, DPT, PF, RR, S?O	AREA<=1	DEC 50-70%	Low	Medium	
Rubus squarrosus Fritsch	Rosaceae	Not Threatened	No	A (1)	Sp, DPS, DPT, PF	MATIND<250	STABLE +/-10%	High	Low	
Scleranthus biflorus (J.R.Forst. & G.Forst.) Hook.f.	Caryophyllaceae	Not Threatened	No	B (3)	Sp, CI, DPS, DPT, PF, RR, SO	AREA<=10	DEC 50-70%	Low	Low	Likely to be impacted by climate change.

Name and Authority	Family	National Cons. Status (2017)	National Stronghold	Criteria	Qualifiers	Regional Population Size	Regional Trend	Regional Confidence Population	Regional Confidence Trend	Notes
Senecio rufiglandulosus Colenso	Compositae	Not Threatened	No	A (3)	Sp, DPR, DPS, DPT, EF, NR, RR	AREA<=1	DEC 10-30%	High	Low	Currently known from one location. Threatened by weed competition and succession. Species distribution at its northern limit.
Senecio scaberulus (Hook.f.) D.G.Drury	Compositae	Threatened – Nationally Critical	No	A (1)	Sp, DPR, DPS, DPT, EF, PF	MATIND<250	DEC>70%	High	Medium	Threatened by weed competition, succession and hybridisation.
Sicyos australis Endl.	Cucurbitaceae	At Risk – Naturally Uncommon	No	A (1)	CD, EF, SO	MATIND<250	DEC>70%	High	High	Known from only one location. Conservation dependent with weed control (however control can also impact this species).
Sicyos mawhai I.Telford & P.Sebastian	Cucurbitaceae	At Risk – Relict	No	A (1)	CD, EF, PF, RR	MATIND<250	DEC 10-30%	Low	Low	Conservation dependent on islands where pathogen pathway is managed.
Solanum aviculare var. *aviculare* G.Forst.	Solanaceae	Threatened – Nationally Vulnerable	No	A (1)	DPR, DPS, DPT, EF, PF, TO	MATIND<250	DEC>70%	Medium	Medium	Reason for decline unknown.
Spiranthes australis (R.Br.) Lindl	Orchidaceae	At Risk – Declining	No	A (1)	DPR, DPS, DPT, EF, PF, RR, SO	MATIND<250	DEC 10-30%	Medium	Low	Threatened by succession.
Syzygium maire (A.Cunn.) Sykes & Garn.-Jones	Myrtaceae	Threatened – Nationally Critical	No		DPS, DPT, DE, PF, RR, RF	MATlND= 1000-5000	DEC 30-50%	Low	Medium	Designated as regionally critical due to serious impacts of myrtle rust on it (population size used for assessment would result in lower status otherwise). Prior to myrtle rust it was in decline due to possum and rat browse.
Tupeia antarctica (G.Forst.) Cham. & Schltdl.	Loranthaceae	At Risk – Declining	No	A (1)	DPR, DPT, INC, PF	MATIND<250	INC >10%	Low	Low	Restricted to one location. Conservation dependent on islands where pests are managed or absent/eradicated.
Veronica jovellanoides Garn.-Jones & de Lange	Plantaginaceae	Threatened – Nationally Critical	Yes	A (1)	Sp, CD, DPR, DPS, DPT, NStr, NR, OL, RR, RF, RE, TL	MATIND<250	DEC>70%	High	Low	National stronghold. Only known from one site. Conservation dependent with weed control and regular monitoring.

Name and Authority	Family	National Cons. Status (2017)	National Stronghold	Criteria	Qualifiers	Regional Population Size	Regional Trend	Regional Confidence Population	Regional Confidence Trend	Notes
Veronica speciosa R.Cunn. ex A.Cunn.	Plantaginaceae	At Risk – Declining	No	A (1)	DPS, DPT, NR	MATIND<250	STABLE +/-10%	High	Low	Natural southern limit for this species distribution is within the region. Threatened by deer browse.

3.3.2 Regionally Endangered (75)

Criteria for Regionally Endangered:

A – small population (natural or unnatural) that has a low to high ongoing or predicted decline

A(1) 250-1000 mature individuals, predicted decline 10-50%
A(2) ≤ 5 subpopulations, ≤ 300 mature individuals in the largest subpopulation, predicted decline 10-50%
A(3) Total area of occupancy ≤ 10 ha (0.1 km^2), predicted decline 10-50%

B – small stable population (unnatural)

B(1) 250-1000 mature individuals, stable population
B(2) ≤ 5 subpopulations, ≤ 300 mature individuals in the largest subpopulation, stable population
B(3) Total area of occupancy ≤ 10 ha (0.1 km^2), stable population

C – moderate population and high ongoing or predicted decline

C(1) 1000-5000 mature individuals, predicted decline 50-70%
C(2) ≤ 15 subpopulations, ≤ 500 mature individuals in the largest subpopulation, predicted decline 50-70%
C(3) Total area of occupancy ≤ 100 ha (1 km^2), predicted decline 50-70%

Table 4: Regionally Endangered Vascular Plants in Tāmaki Makaurau / Auckland

Name and Authority	Family	National Cons. Status (2017)	National Stronghold	Criteria	Qualifiers	Regional Population Size	Regional Trend	Regional Confidence Population	Regional Confidence Trend	Notes
Alseuosmia banksii var. *banksii* A.Cunn.	Alseuosmiaceae	Not Threatened	No	B (3)	DPR, DPS, DPT, PF, RF, Sp	AREA<=10	STABLE +/-10%	Low	Low	Southern limit of distribution within the region.
Archeria racemosa Hook.f.	Ericaceae	Not Threatened	No	B (3)	DPS, DPT, RR, TL	AREA<=10	STABLE +/-10%	Low	Low	Type locality = Aotea / Great Barrier Island.
Arthropodium candidum Raoul	Asparagaceae	Not Threatened	No	A (3)	DPR, DPS, DPT, PF, Sp	AREA<=10	DEC 10-30%	Low	Low	Threatened by weed competition and succession.
Ascarina lucida var. *lucida* Hook.f.	Chloranthaceae	Not Threatened	No	B (3)	DPR, DPS, DPT, RR	AREA<=10	STABLE +/-10%	Low	Low	
Asplenium appendiculatum subsp. *maritimum* (Brownsey) Brownsey	Aspleniaceae	Not Threatened	No	A (3)	DPR, DPS, DPT, Sp	AREA<=10	DEC 10-30%	Low	Low	Northern limit of distribution within region.
Austroblechnum colensoi (Hook.f.) Gasper & V.A.O.Dittrich	Blechnaceae	Not Threatened	No	B (1)	DPS, DPT, PF, RR, Sp	MATIND=250-1000	STABLE +/-10%	Low	Low	
Austroblechnum norfolkianum (Heward) Gasper & V.A.O.Dittrich	Blechnaceae	At Risk – Naturally Uncommon	No	B (1)	DPR, DPS, DPT, PF, RR, TO	MATIND=250-1000	STABLE +/-10%	Low	Low	Predominantly on Hauraki Gulf islands.
Austroderia aff. *fulvida* (Buchanan) N.P.Barker & H.P.Linder	Gramineae	Not Threatened	No	A (1)	DPR, DPS, DPT, PF, RR, Sp	MATIND=250-1000	DEC 10-30%	Low	Low	Threatened by flood events and weed competition.
Bromus arenarius Labill.	Gramineae	At Risk – Naturally Uncommon	Yes	A (1)	DPR, DPS, DPT, EF, NStr, PF, RR, TO	MATIND=250-1000	DEC 10-50%	Low	Low	National Stronghold. Threats from veldt grass competition.
Caladenia alata R.Br.	Orchidaceae	At Risk – Naturally Uncommon	No	A (1)	DPR, DPS, DPT, RR, SO, Sp	MATIND=250-1000	DEC 10-50%	Low	Low	
Carex erythrovaginata K.A.Ford	Cyperaceae	Not Threatened	No	A (1)	DPR, DPS, DPT, PF, RR, Sp	MATIND=250-1000	DEC 10-30%	Low	Low	Threatened by habitat degradation.

Name and Authority	Family	National Cons. Status (2017)	National Stronghold	Criteria	Qualifiers	Regional Population Size	Regional Trend	Regional Confidence Population	Regional Confidence Trend	Notes
Carex forsteri Wahlenb.	Cyperaceae	Not Threatened	No	A (1)	DPR, DPS, DPT, PF, RR, Sp	MATIND=250-1000	DEC 10-30%	Low	Low	
Carex healyi K.A.Ford	Cyperaceae	Not Threatened	No	A (1)	DPR, DPS, DPT, PF, Sp	MATIND=250-1000	DEC 10-30%	Low	Low	Threatened by weed competition.
Carmichaelia williamsii Kirk	Leguminosae	At Risk – Relict	No	B (1)	CD, DPS, DPT, PF	MATIND=250-1000	STABLE +/-10%	Low	High	Known in the region now only on Te Hauturu-ō-Toi / Little Barrier Island.
Chionochloa bromoides (Hook.f.) Zotov	Gramineae	At Risk – Naturally Uncommon	No		RR	MATIND=250-1000	DEC 10-30%	Low	Low	Species at southern distribution limit within the region.
Chionochloa conspicua subsp. *cunninghamii* (Hook.f.) Zotov	Gramineae	Not Threatened	No	B (3)	DPR, DPS, DPT, RR, Sp	AREA<=10	STABLE +/-10%	Low	Low	
Coprosma rotundifolia A.Cunn.	Rubiaceae	Not Threatened	No	A (1)	DPS, DPT, PF, RR	MATIND=250-1000	DEC 10-30%	Low	Low	Very localised.
Corybas rotundifolius (Hook.f.) Rchb.f.	Orchidaceae	Not Threatened	No	B (3)	DPR, DPS, DPT, PF, Sp	AREA<=10	STABLE +/-10%	Low	Low	Species at southern limit of its distribution.
Cranfillia nigrum (Colenso) Gasper & V.A.O.Dittrich	Blechnaceae	Not Threatened	No	B (1)	DPS, DPT, PF, RR, Sp	MATIND=250-1000	STABLE +/-10%	Low	Low	
Crassula ruamahanga A.P.Druce emend de Lange & Heenan	Crassulaceae	At Risk – Naturally Uncommon	No	B (3)	DPR, DPS, DPT, EF, RR	AREA<=10	STABLE +/-10%	Medium	Medium	Type locality = Hunua Falls for *Crassula hunua*, which is now treated as *Crassula ruamahanga*
Cyperus insularis Heenan & de Lange	Cyperaceae	At Risk – Declining	No	A (1)	DPR, DPS, DPT, PF, RR	MATIND=250-1000	DEC 10-30%	Low	Low	Associated with seabird colonies. Now restricted to islands. Threatened by weed competition and loss of soil nutrients.
Doodia mollis Parris	Blechnaceae	At Risk – Naturally Uncommon	No	A (1)	DPR, DPS, DPT, PF, Sp	MATIND=250-1000	DEC 10-30%	Low	Low	Threatened by weed competition.
Epacris pauciflora A.Rich.	Ericaceae	Not Threatened	No	A (3)	DPR, DPS, DPT, PF, RR, Sp	AREA<=10	DEC 10-30%	Low	Low	

Name and Authority	Family	National Cons. Status (2017)	National Stronghold	Criteria	Qualifiers	Regional Population Size	Regional Trend	Regional Confidence Population	Regional Confidence Trend	Notes
Epilobium billardiereanum DC.	Onagraceae	Not Threatened	No	A (3)	DPR, DPS, DPT, EF, SO, Sp	AREA<=10	DEC 10-30%	Medium	Low	Short lived species. Threats include weed competition, dune stabilisation and changes in hydrology (water table/flooding).
Epilobium pedunculare A.Cunn.	Onagraceae	Not Threatened	No	A (1)	DPR, DPS, DPT, PF, RR, Sp	MATIND=250-1000	DEC 10-30%	Low	Low	
Euchiton involucratus (G.Forst.) Holub	Compositae	Not Threatened	No	A (1)	DPR, DPS, DPT, PF, SO, Sp	MATIND=250-1000	DEC 10-30%	Low	Low	Threatened by weed competition.
Euphorbia glauca G.Forst.	Euphorbiaceae	At Risk – Declining	No	B (3)	PF	AREA<=10	STABLE +/-10%	Medium	High	Restricted to Te Hauturu-ō-Toi / Little Barrier Island and Motukorea / Brown's Island. Almost extinct. Threats include exotic grasses and erosion of habitat.
Griselinia littoralis (Raoul) Raoul	Griseliniaceae	Not Threatened	No	B (3)	DPS, DPT, RR	AREA<=10	STABLE +/-10%	Low	Low	Found on high points on Te Hauturu-ō-Toi / Little Barrier Island and in Hunua. Commonly planted.
Gunnera arenaria Kirk	Gunneraceae	Not Threatened	No	A (3)	DPR, DPS, DPT, PF, RR, TL	AREA<=10	DEC 10-30%	Low	Low	Type locality = Waitākere.
Gunnera monoica Raoul	Gunneraceae	Not Threatened	No	A (3)	DPR, DPS, DPT, PF, RR	AREA<=10	DEC 10-30%	Low	Low	Threatened by weed competition.
Hydrocotyle microphylla A.Cunn.	Araliaceae	Not Threatened	No	A (3)	DPR, DPS, DPT	AREA<=10	DEC 10-30%	Low	Low	Can appear in urban lawns, but not representative of natural abundance.
Ileostylus micranthus (Hook.f.) Tiegh.	Loranthaceae	Not Threatened	No	A (1)	CD, DPS, DPT, PF, RR, TO	MATIND=250-1000	DEC 10-30%	Low	Low	Decline from possum browse.
Ipomoea cairica (L.) Sweet	Convolvulaceae	At Risk – Naturally Uncommon	No	B (3)	SO	AREA<=10	STABLE +/-10%	High	High	Species distribution at southern limit at Tiritiri Matangi Island.
Juncus caepiticius Meyer in Lehm	Juncaceae	At Risk – Declining	No	A (3)	DRP, DPS, DPT, PF, RR, SO	AREA<=10	DEC 10-30%	Low	Low	Previously listed as Regionally Extinct but rediscovered in last 10 years. Threatened by coastal erosion and weed competition.

Name and Authority	Family	National Cons. Status (2017)	National Stronghold	Criteria	Qualifiers	Regional Population Size	Regional Trend	Regional Confidence Population	Regional Confidence Trend	Notes
Juncus pauciflorus R.Br.	Juncaceae	Threatened – Nationally Vulnerable	No	A (1)	Sp, DPR, DPS, DPT, PF, RR, S?O	MATIND=250-1000	DEC 10-30%	Low	Low	Threatened by weed competition and succession.
Kunzea linearis (Kirk) de Lange & Toelken	Myrtaceae	Threatened – Nationally Vulnerable	No	C (1)	DPR, DPS, DPT, PF, RR, RF, TL	MATlND=1000-5000	DEC 50-70%	Low	Medium	Type locality = Ahatawapa, northern side of Harbour Bridge. Impact of myrtle rust on this species is unclear. Threatened by natural succession and hybridisation.
Leptinella tenella (A.Cunn.) D.G.Lloyd & C.J.Webb	Compositae	Threatened – Nationally Vulnerable	No	A (3)	Sp, DPR, DPS, DPT, PF, RR	AREA<=10	DEC 10-30%	Medium	Low	
Leptospermum aff. *scoparium* (b) (AK 247250; “coastal silver prostrate”)	Myrtaceae	Threatened – Nationally Vulnerable	No	B (3)	DPR, DPS, DPT	AREA<=10	STABLE +/-10%	Medium	Medium	Impact of myrtle rust on this species is unclear.
Luzula banksiana var. *banksiana* E.Mey.	Juncaceae	Not Threatened	No	A (3)	Sp, DPR, DPS, DPT, PF, RR	AREA<=10	DEC 10-30%	Low	Low	Threatened by weed competition and succession.
Machaerina complanata (Berggr.) T.Koyama	Cyperaceae	Threatened – Nationally Vulnerable	No	B (3)	Sp, DPR, DPS, DPT, PF, RR	AREA<=10	STABLE +/-10%	Medium	Low	
Melicope simplex A.Cunn.	Rutaceae	Not Threatened	No	B (1)	DPR, DPS, DPT, PF, RR, RF	MATIND=250-1000	STABLE +/-10%	Low	Low	Historic habitat loss and recruitment failure.
Metrosideros parkinsonii Buchanan	Myrtaceae	Threatened – Nationally Vulnerable	No	A (3)	DPT, NR, RR, RF	AREA<=10	DEC 10-30%	High	Low	Impact of myrtle rust on this species is unclear. Threatened by recruitment failure. Species distribution at its northern limit within the region.
Metrosideros umbellata Cav.	Myrtaceae	Threatened – Nationally Vulnerable	No	A (1)	DPS, DPT, PF, RR, Rel	MATIND=250-1000	DEC 10-30%	Medium	Low	Impact of myrtle rust on this species is unclear.
Myriophyllum votschii Schindl.	Haloragaceae	Not Threatened	No	A (3)	Sp, DPR, DPS, DPT, EF, PF, RR, TL	AREA<=10	DEC 10-30%	Low	Low	Type locality = Manukau Harbour. Threatened by aquatic weeds and saltwater paspalum.

Name and Authority	Family	National Cons. Status (2017)	National Stronghold	Criteria	Qualifiers	Regional Population Size	Regional Trend	Regional Confidence Population	Regional Confidence Trend	Notes
Nertera villosa B.H.Macmill. & R.Mason	Rubiaceae	Not Threatened	No	B (3)	DPR, DPS, DPT, PF, RR	AREA<=10	STABLE +/-10%	Low	Low	
Nestegis cunninghamii (Hook.f.) L.A.S.Johnson	Oleaceae	Not Threatened	No	B (1)	DPR, DPS, DPT, PF, RF	MATIND=250-1000	STABLE +/-10%	Low	Low	Impacted by recruitment failure.
Olearia albida (Hook.f.) Hook.f.	Compositae	Not Threatened	No	A (1)	Sp, DPR, DPS, DPT, PF, TL	MATIND=250-1000	DEC 10-30%	Low	Low	
Oxalis magellanica G.Forst.	Oxalidaceae	Not Threatened	No	B (3)	Sp, DPS, DPT, PF, RR, SO	AREA<=10	STABLE +/-10%	Low	Low	Threatened by weed competition.
Oxalis thompsoniae B.J.Conn & P.G.Richards	Oxalidaceae	At Risk – Naturally Uncommon	No	A (3)	Sp, DPR, DPS, DPT, PF, SO	AREA<=10	DEC 10-30%	Low	Low	Threatened by weed competition.
Pelargonium inodorum Willd.	Geraniaceae	Not Threatened	No	A (1)	DPR, DPS, DPT, EF, PF, SO	MATIND=250-1000	DEC 10-50%	Low	Low	Threatened by weed competition. Requires disturbance and fires to persist.
Pellaea aff. *falcata* (b) (AK 330788; "Auckland volcanoes")	Pteridaceae	Threatened – Nationally Critical	No	A (1)	Sp, DPR, DPS, DPT, PF	MATIND=250-1000	DEC 10-30%	Low	Low	National stronghold. Threatened by weed competition.
Pennantia corymbosa J.R.Forst. & G.Forst.	Pennantiaceae	Not Threatened	No	A (1)	DPS, DPT, PF, RR, RF	MATIND=250-1000	DEC 10-30%	Low	Low	Threatened by weed competition and grazing animals impacting recruitment.
Pimelea longifolia Sol. ex Wikstr.	Thymelaeaceae	At Risk – Declining	No	A (1)	Sp, DPS, DPT, PF	MATIND=250-1000	DEC 10-50%	Low	Low	Impacted by track maintenance and weed control.
Pimelea tomentosa (J.R.Forst. & G.Forst.) Druce	Thymelaeaceae	Threatened – Nationally Vulnerable	No		Sp, DPS, DPT, DE, PF, RF	AREA<=1000	DEC 30-50%	Low	Low	Threatened by loss of habitat, succession, weed competition, browsing and lack of disturbance. Designated as panel felt the threats the species faces weren't reflected in the criteria.
Plagianthus regius subsp. *regius* (Poit.) Hochr.	Malvaceae	Not Threatened	No	A (1)	DPS, DPT, PF, RR, RF	MATIND=250-1000	DEC 10-50%	Low	Low	Threatened by grazing animals. Management required to support recruitment.

Name and Authority	Family	National Cons. Status (2017)	National Stronghold	Criteria	Qualifiers	Regional Population Size	Regional Trend	Regional Confidence Population	Regional Confidence Trend	Notes
Poa billardierei (Spreng.) St.-Yves	Gramineae	At Risk – Declining	No	A (1)	CD, DPR, DPS, DPT, PF, RR, SO	MATIND=250-1000	DEC 10-30%	Low	Low	Conservation dependent where vehicles are kept out of its habitat and weeds are controlled.
Pseudopanax ferox Kirk	Araliaceae	At Risk – Naturally Uncommon	No	C (3)	CD, DPS, DPT, DE, PF, RR, RF	AREA<=100	DEC 10-50%	Low	Low	Conservation dependent with browser and weed control. Designated as panel felt its situation justified a higher threat status.
Pterostylis puberula Hook.f.	Orchidaceae	Threatened – Nationally Vulnerable	No	B (3)	Sp, DPR, DPS, DPT, RR	AREA<=10	STABLE +/-10%	Low	Low	
Puccinellia stricta (Hook.f.) C.H.Blom	Gramineae	Not Threatened	No	A (3)	CD, DPR, DPS, DPT, NR	AREA<=10	DEC 10-30%	Low	Low	Conservation dependent on rabbit control.
Ranunculus amphitrichus Colenso	Ranunculaceae	Not Threatened	No	A (3)	CI, DPR, DPS, DPT, PF, RR, SO?	AREA<=10	DEC 10-50%	Low	Low	Threatened by weed competition, loss of habitat and eutrophication.
Ranunculus macropus Hook.f.	Ranunculaceae	Data Deficient	No	A (3)	Sp, DPR, DPS, DPT, PF, RR	AREA<=10	DEC 10-50%	Low	Low	Threatened by weed competition and loss of habitat.
Rorippa divaricata (Hook.f.) Garn.-Jones & Jonsell	Cruciferae	Threatened – Nationally Vulnerable	No	A (1)	Sp, CD, DPR, DPS, DPT, EF, PF	MATIND=250-1000	DEC 10-30%	Low	Low	Conservation dependent on pest free islands.
Scandia rosifolia (Hook.f.) J.W.Dawson	Umbelliferae	Threatened – Nationally Critical	Yes	C (1)	DPS, DPT, NStr, PF, RR, RF	MATlND= 1000-5000	DEC 50-70%	Low	Medium	National stronghold. Threatened by succession, weed competition and recruitment issues.
Schoenus concinnus (Hook.f.) Hook.f.	Cyperaceae	Not Threatened	No	A (3)	Sp, DPR, DPS, DPT, PF, RR	AREA<=10	DEC 10-30%	Low	Low	Threatened by weed competition and habitat restrictions.
Sonchus kirkii Hamlin	Compositae	At Risk – Declining	No	C (1)	DPR, DPS, DPT, EF, PF, RR	MATlND= 1000-5000	DEC 50-70%	Medium	Low	Considered population south of Kariotahi in the assessment which is outside of the region.
Streblus banksii (Cheeseman) C.J.Webb	Moraceae	At Risk – Relict	No	B (1)	CD, DPR, DPS, DPT, INC, PF, RF	MATIND=250-1000	STABLE +/-10%	Low	Low	Conservation dependent on islands with pest control to ensure recruitment.

Name and Authority	Family	National Cons. Status (2017)	National Stronghold	Criteria	Qualifiers	Regional Population Size	Regional Trend	Regional Confidence Population	Regional Confidence Trend	Notes
Tetragonia tetragonoides (Pall.) Kuntze	Aizoaceae	At Risk – Naturally Uncommon	No	B (1)	Sp, DPR, DPS, DPT, EF, NO, RR, SO	MATIND=250-1000	STABLE +/-10%	Low	Low	Natural population fluctuations.
Thelymitra aemula Cheeseman	Orchidaceae	Not Threatened	No	A (1)	Sp, DPR, DPS, DPT, EF, PF, RR, TL	MATIND=250-1000	DEC 10-50%	Low	Low	Threatened by weed competition and collection pressures.
Thelymitra ixioides Sw.	Orchidaceae	At Risk – Naturally Uncommon	No	A (3)	DPR, DPS, DPT, EF	AREA<=10	DEC 10-30%	Medium	Low	Threatened by weed competition.
Thyridia repens (R.Br.) W.R.Barker & Beardsley	Phrymaceae	At Risk – Naturally Uncommon	No	A (3)	Sp, DPS, DPT, EF, PF, RR, SO	AREA<=10	DEC 10-50%	Low	Low	Populations naturally fluctuate. Threatened by mangrove encroachment and weed competition.
Trichomanes strictum Menzies ex Hook. & Grev.	Hymenophyllaceae	Not Threatened	No	B (3)	DPR, DPS, DPT, PF, RR	AREA<=10	STABLE +/-10%	Low	Low	
Trisetum arduanum Edgar & A.P.Druce	Gramineae	Not Threatened	No	A (1)	Sp, DPR, DPS, DPT, PF, RR	MATIND=250-1000	DEC 10-30%	Low	Low	Threatened by weed competition and coastal erosion.
Urtica sykesii Grosse-Veldman & Weigend	Urticaceae	Not Threatened	No	A (3)	DPS, DPT, PF, RR	AREA<=10	DEC 10-30%	Low	Low	Threatened by weed competition.
Veronica diosmifolia A.Cunn.	Plantaginaceae	Not Threatened	No	A (3)	DPS, DPT, NR, RR, RF	AREA<=10	DEC 10-30%	Medium	Low	Known from one location. Species distribution at its southern limit in the region. Impacted by deer browse.
Zoysia minima (Colenso) Zotov	Gramineae	At Risk – Declining	No	A (3)	DPR, DPS, DPT, PF, RR	AREA<=10	DEC 10-30%	Low	Low	

3.3.3 Regionally Vulnerable (64)

Criteria for Regionally Vulnerable:
A – small, increasing population (unnatural)

A(1) 250-1000 mature individuals, predicted increase > 10%
A(2) ≤ 5 subpopulations, ≤ 300 mature individuals in the largest subpopulation, predicted increase > 10%
A(3) Total area of occupancy ≤ 10 ha (0.1 km^2), predicted increase > 10%

B – moderate, stable population (unnatural)

B(1) 1000-5000 mature individuals, stable population
B(2) ≤ 15 subpopulations, ≤ 500 mature individuals in the largest subpopulation, stable population
B(3) Total area of occupancy ≤ 100 ha (1 km^2), stable population

C – moderate population, with population trend that is declining

C(1) 1000-5000 mature individuals, predicted decline 10-50%
C(2) ≤ 15 subpopulations, ≤ 500 mature individuals in the largest subpopulation, predicted decline 10-50%
C(3) Total area of occupancy ≤ 100 ha (1 km^2), predicted decline 10-50%

D – moderate to large population and moderate to high ongoing or predicted decline

D(1) 5000-20 000 mature individuals, predicted decline 30-70%
D(2) ≤ 15 subpopulations, ≤ 1000 mature individuals in the largest subpopulation, predicted decline 30-70%
D(3) Total area of occupancy ≤ 1000 ha (10 km^2), predicted decline 30-70%

E – large population and high ongoing or predicted decline

E(1) 20 000-100 000 mature individuals, predicted decline 50-70%
E(2) Total area of occupancy ≤ 10 000 ha (100 km^2), predicted decline 50-70%

Table 5: Regionally Vulnerable Vascular Plants in Tāmaki Makaurau / Auckland

Name and Authority	Family	National Cons. Status (2017)	National Stronghold	Criteria	Qualifiers	Regional Population Size	Regional Trend	Regional Confidence Population	Regional Confidence Trend	Notes
Asplenium hookerianum Colenso	Aspleniaceae	Not Threatened	No		DE, DPS, DPT, Sp, TO	AREA<=100	STABLE +/-10%	Low	Low	Designated as panel disagreed with threshold trend and status did not reflect the situation. The population is stable but shouldn't be 'Not Threatened'.
Astelia grandis Hook.f. ex Kirk	Asteliaceae	Not Threatened	No	D (3)	DPS, DPT, PF, TL	AREA<=100	DEC 10-30%	Low	Low	Type locality = Ponsonby Road. Threatened by habitat loss, recruitment failure and browsing.
Astelia microsperma Colenso	Asteliaceae	Not Threatened	No	B (1)	DPR, DPS, DPT, RR	MATlND= 1000-5000	STABLE +/-10%	Low	Low	
Brachyglottis kirkii var. *kirkii* (Kirk) C.Webb	Compositae	Threatened – Nationally Vulnerable	No	C (1)	CD, DPR, DPS, DPT, PF, RR	MATlND= 1000-5000	DEC 10-30%	Low	Low	
Carex megalepis K.A.Ford	Cyperaceae	Not Threatened	No	D (3)	DPR, DPS, DPT, RR, Sp	AREA<=100	DEC 10-30%	Low	Low	Threatened by weed competition.
Carex subdola Boott	Cyperaceae	Not Threatened	No	C (1)	DPR, DPS, DPT, PF, RR	MATlND= 1000-5000	DEC 10-50%	Low	Low	
Coprosma acerosa A.Cunn.	Rubiaceae	At Risk – Declining	No	C (1)	DPS, DPT, PF, RF, RR	MATlND= 1000-5000	DEC 10-30%	Low	Low	Threatened by slug, snail and rabbit browsing.
Coprosma crassifolia Colenso	Rubiaceae	Not Threatened	No	C (1)	DPS, DPT, PF, TL	MATlND= 1000-5000	DEC 10-30%	Low	Low	Type locality = Ann’s Creek.
Coprosma propinqua var. *propinqua* A.Cunn.	Rubiaceae	Not Threatened	No	C (1)	DPR, DPS, DPT, PF, RF	MATlND= 1000-5000	DEC 10-30%	Low	Low	
Coprosma rigida Cheeseman	Rubiaceae	Not Threatened	No	C (1)	DPR, DPS, DPT, PF	MATlND= 1000-5000	DEC 10-30%	Low	Low	
Corokia cotoneaster Raoul	Argophyllaceae	Not Threatened	No	C (1)	DPS, DPT, PF, RF	MATlND= 1000-5000	DEC 10-30%	Low	Low	
Cyclosorus interruptus (Willd.) H.Itô	Thelypteridaceae	At Risk – Declining	No	B (3)	DPS, DPT, PF, RR, SO	AREA<=100	STABLE +/-10%	Low	Low	

Name and Authority	Family	National Cons. Status (2017)	National Stronghold	Criteria	Qualifiers	Regional Population Size	Regional Trend	Regional Confidence Population	Regional Confidence Trend	Notes
Dactylanthus taylorii Hook.f.	Mystropetalaceae	Threatened – Nationally Vulnerable	No		CR, DE, DPS, DPT, PF, Rel	MATIND=5000-20000, FRMHAB<10%	STABLE +/-10% or INC >=10%	Low	Low	Only on Te Hauturu-ō-Toi / Little Barrier Island. Designated as national status higher, but species is regionally relicted.
Doodia squarrosa Colenso	Blechnaceae	At Risk – Naturally Uncommon	No	C (1)	DPR, DPS, DPT, PF, RR, Sp	MATlND= 1000-5000	DEC 10-30%	Low	Low	Threatened by weed competition.
Epacris sinclairii Hook.f.	Ericaceae	At Risk – Naturally Uncommon	Yes	B (3)	DPR, DPS, DPT, RR, TL	AREA<=100	STABLE +/-10%	Low	Medium	National stronghold.
Epilobium chionanthum Hausskn.	Onagraceae	Not Threatened	No	D (3)	DPR, DPS, DPT, PF, RR, Sp, TL	AREA<=100	DEC 10-30%	Low	Low	Type locality = Lake Pupuke.
Fuchsia procumbens A.Cunn.	Onagraceae	At Risk – Naturally Uncommon	No	B (3)	DPS, DPT, PF, Sp	AREA<=100	STABLE +/-10%	Low	Medium	
Geranium solanderi Carolin	Geraniaceae	At Risk – Declining	No	C (1)	DPR, DPS, DPT, PF, SO	MATlND= 1000-5000	DEC 10-30%	Low	Low	
Gratiola sexdentata R.Cunn. ex A.Cunn.	Plantaginaceae	Not Threatened	No	D (3)	DPR, DPS, DPT, PF, RR, Sp	AREA<=100	DEC 10-30%	Low	Low	Requires disturbance. Threatened by browsing and weed competition.
Isolepis distigmatosa (C.B.Clarke) Edgar	Cyperaceae	Not Threatened	No	D (3)	DPR, DPS, DPT, RR, Sp	AREA<=100	DEC 10-30%	Low	Low	
Isolepis inundata R.Br.	Cyperaceae	Not Threatened	No	D (3)	DPR, DPS, DPT, PF, RR, SO, Sp	AREA<=100	DEC 10-30%	Low	Low	
Juncus prismatocarpus R.Br.	Juncaceae	Not Threatened	No	C (1)	DPS, DPT, PF, RR, SO	MATlND= 1000-5000	DEC 10-30%	Low	Low	Threatened by weed competition and succession.
Kunzea amathicola de Lange & Toelken	Myrtaceae	Threatened – Nationally Vulnerable	No	D (1)	DPR, DPS, DPT, PF, RR, RF	MATIND=5000-20000	DEC 10-50%	Medium	Medium	National stronghold. Impact of myrtle rust on this species is unclear. Threatened by habitat change, succession, browse and weed competition.
Kunzea sinclairii (Kirk) W.Harris	Myrtaceae	Threatened – Nationally Critical	Yes	D (3)	DPS, IE, NStr, RR, RE, TL	AREA<=100	DEC 10-30%	Low	High	National stronghold and endemic to Aotea / Great Barrier Island. Type locality = Aotea / Great

Name and Authority	Family	National Cons. Status (2017)	National Stronghold	Criteria	Qualifiers	Regional Population Size	Regional Trend	Regional Confidence Population	Regional Confidence Trend	Notes
										Barrier Island. Impact of myrtle rust on this species is unclear.
Lagenophora stipitata (Labill.) Druce	Compositae	At Risk – Naturally Uncommon	Yes	C (1)	DPR, DPS, DPT, PF, RR, SO	MATlND= 1000-5000	DEC 10-30%	Low	Low	National stronghold. Threatened by succession.
Leionema nudum (Hook.) Paul G.Wilson	Rutaceae	Not Threatened	No	B (1)	DPS, DPT, PF	MATlND= 1000-5000	STABLE +/-10%	Low	Low	Threatened by browse and succession.
Leptospermum scoparium var. *scoparium* J.R.Forst. & G.Forst.	Myrtaceae	At Risk – Declining	No	B (3)	DPR, DPS, DPT	AREA<=100	STABLE +/-10%	Low	Medium	Impact of myrtle rust on this species is unclear.
Lobelia aff. *angulata* (AK 212143; Woodhill)	Lobeliaceae	Taxonomically indistinct	Yes	B (3)	Sp, DPR, DPS, DPT, PF, RR	AREA<=100	STABLE +/-10%	Low	Medium	Has been planted throughout the Waitākere Ranges so some records treated with caution.
Lophomyrtus bullata Burret	Myrtaceae	Threatened – Nationally Critical	No	D (1)	DPS, DPT, PF	MATlND=5000-20000	DEC 10-50%	Low	Medium	Seriously threatened by myrtle rust.
Lophomyrtus obcordata (Raoul) Burret	Myrtaceae	Threatened – Nationally Critical	No	C (1)	DPS, DPT, PF	MATlND= 1000-5000	DEC 10-30%	Low	Low	National stronghold. Threatened by myrtle rust.
Luzula picta var. *picta* A.Rich.	Juncaceae	Not Threatened	No	D (3)	Sp, DPR, DPS, DPT, PF	AREA<=100	DEC 10-30%	Low	Low	Threatened by weed competition and track maintenance.
Melicope ternata J.R.Forst. & G.Forst.	Rutaceae	Not Threatened	No	C (1)	CD, DPS, DPT, PF, RF	MATlND= 1000-5000	DEC 10-30%	Low	Low	Threatened by browsing and recruitment failure. Conservation dependent where pests are controlled.
Melicytus micranthus (Hook.f.) Hook.f.	Violaceae	Not Threatened	No	C (1)	DPS, DPT, PF, RR, RF	MATlND= 1000-5000	DEC 10-30%	Low	Low	
Mentha cunninghamii Benth.	Labiatae	At Risk – Declining	No	C (3)	Sp, DPS, DPT, PF	AREA<=100	DEC 10-50%	Low	Low	Threatened by succession, weed competition and track maintenance/changes.
Microtis parviflora R.Br.	Orchidaceae	Not Threatened	No	D (3)	DPR, DPS, DPT, PF, RR, SO	AREA<=100	DEC 10-30%	Low	Medium	

Name and Authority	Family	National Cons. Status (2017)	National Stronghold	Criteria	Qualifiers	Regional Population Size	Regional Trend	Regional Confidence Population	Regional Confidence Trend	Notes
Muehlenbeckia complexa var. *grandifolia* Carse	Polygonaceae	Data Deficient	No	B (1)	Sp, DPR, DPS, DPT, PF, RR	MATlND= 1000-5000	STABLE +/-10%	Low	Low	
Myriophyllum triphyllum Orchard	Haloragaceae	Not Threatened	No	D (3)	DPR, DPS, DPT, PF, RR	AREA<=100	DEC 10-30%	Low	Low	
Myrsine divaricata A.Cunn.	Primulaceae	Not Threatened	No	C (1)	DPS, DPT, NR, PF, RF	MATlND= 1000-5000	DEC 10-30%	Low	Low	Threatened by deer browse.
Nestegis apetala (Vahl) L.A.S.Johnson	Oleaceae	At Risk – Relict	No	B (1)	CD, DPS, DPT, PF, Rel, TO	MATlND= 1000-5000	STABLE +/-10%	Low	Low	Conservation dependent on pest free islands.
Nestegis montana (Hook.f.) L.A.S.Johnson	Oleaceae	Not Threatened	No	C (1)	DPR, DPS, DPT, PF, RF	MATlND= 1000-5000	DEC 10-30%	Low	Low	
Notogrammitis pseudociliata (Parris) Parris	Polypodiaceae	Not Threatened	No	B (3)	Sp, DPR, DPS, DPT, PF, RR, TL	AREA<=100	STABLE +/-10%	Low	Low	
Notogrammitis rawlingsii (Parris) Parris	Polypodiaceae	At Risk – Naturally Uncommon	Yes	B (3)	Sp, DPR, DPS, DPT, NStr, PF, RR	AREA<=100	STABLE +/-10%	Low	Medium	National stronghold. Threatened by collection pressures.
Olearia allomii Kirk	Compositae	At Risk – Naturally Uncommon	Yes	B (3)	DPR, DPS, DPT, IE, NStr, RR, TL, RE	AREA<=100	STABLE +/-10%	Medium	Medium	National stronghold and local endemic to Aotea / Great Barrier Island (type locality). Threatened by weed competition, fire and succession.
Ophioglossum coriaceum A.Cunn.	Ophioglossaceae	Not Threatened	No	D (3)	Sp, DPR, DPS, DPT, EF, PF	AREA<=100	DEC 10-30%	Low	Low	Threatened by weed competition, succession and collection pressures.
Ophioglossum petiolatum Hook.	Ophioglossaceae	Threatened – Nationally Critical	No	C (3)	Sp, DPR, DPS, DPT, EF, PF, SO?	AREA<=100	DEC 10-50%	Low	Low	Threatened by succession and collection pressures.
Paspalum orbiculare G.Forst.	Gramineae	Threatened – Nationally Vulnerable	No	D (1)	DPR, DPS, DPT, EF, PF, SO	MATlND=5000-20000	DEC 10-50%	Low	Low	Threatened by weed competition and track maintenance.
Pentapogon inaequiglumis (Hack. ex Cheeseman)	Gramineae	At Risk – Naturally Uncommon	No	D (3)	DPR, DPS, DPT, EF, PF,	AREA<=1000	DEC 30-50%	Low	Low	Type locality.

Name and Authority	Family	National Cons. Status (2017)	National Stronghold	Criteria	Qualifiers	Regional Population Size	Regional Trend	Regional Confidence Population	Regional Confidence Trend	Notes
P.M.Peterson, Romasch. & Soreng					RR, SO, Sp, TL					
Peraxilla tetrapetala (L.f.) Tiegh.	Loranthaceae	At Risk – Declining	No	B (3)	CD, DPS, PF, RR, Rel	AREA<=100	STABLE +/-10%	High	High	Restricted to one location. Conservation dependent where possums are controlled.
Planchonella costata (Endl.) Pierre	Sapotaceae	At Risk – Relict	No	B (1)	CD, DPS, DPT, PF, RF, Rel, TO	MATlND= 1000-5000	STABLE +/-10%	Low	Low	Conservation dependent where islands have pest management.
Pomaderris hamiltonii L.B.Moore	Rhamnaceae	At Risk – Naturally Uncommon	Yes	C (1)	DPS, DPT, NStr, PF, RR, TL	MATlND= 1000-5000	DEC 10-30%	Low	Low	National stronghold. Threatened by restriction to roadside habitat but disturbance to this habitat currently maintains populations. Type locality.
Pomaderris rugosa Cheeseman	Rhamnaceae	At Risk – Naturally Uncommon	No	D (1)	DPS, DPT, PF	MATlND=5000-20000	DEC 10-50%	Low	Low	Threatened by weed competition and succession.
Ranunculus urvilleanus Cheeseman	Ranunculaceae	At Risk – Declining	No	D (3)	DPR, DPS, DPT, PF, RR	AREA<=100	DEC 10-30%	Low	Low	Threatened by weed competition and succession.
Raukaua edgerleyi (Hook.f.) Seem.	Araliaceae	Not Threatened	No	C (1)	CD, DPR, DPS, DPT, INC, PF, RR, RF	MATlND= 1000-5000	DEC 10-30%	Low	Low	Conservation dependent on possum management.
Ruppia polycarpa R.Mason	Ruppiaceae	Not Threatened	No	B (3)	Sp, DPR, DPS, DPT, EF, PF, RR, SO	AREA<=100	STABLE +/-10%	Low	Low	Threatened by drainage and eutrophication.
Senecio biserratus Belcher	Compositae	At Risk – Declining	No	C (1)	DPR, DPS, DPT, EF, PF, RR, SO	MATlND= 1000-5000	DEC 10-50%	Low	Low	Unclear reasons for decline but impact by an exotic rust.
Sophora microphylla Aiton	Leguminosae	Not Threatened	No	C (1)	DPR, DPS, DPT, PF, RF	MATlND= 1000-5000	DEC 10-30%	Low	Low	
Sparganium subglobosum Morong	Sparganiaceae	Not Threatened	No	C (1)	DPS, DPT, PF, RR, SO	MATlND= 1000-5000	DEC 10-30%	Low	Low	Threatened by weed competition, wetland drainage and clearing, and trampling/browsing livestock.

Name and Authority	Family	National Cons. Status (2017)	National Stronghold	Criteria	Qualifiers	Regional Population Size	Regional Trend	Regional Confidence Population	Regional Confidence Trend	Notes
Stellaria parviflora Hook.f.	Caryophyllaceae	Not Threatened	No	C (1)	Sp, DPR, DPS, DPT, PF	MATlND= 1000-5000	DEC 10-30%	Low	Low	Threatened by weed competition.
Thelymitra cyanea (Lindl.) Benth.	Orchidaceae	Not Threatened	No	D (3)	DPR, DPS, DPT, PF, RR, SO	AREA<=100	DEC 10-30%	Low	Low	Threatened by weed competition and collection pressures.
Thelymitra tholiformis Molloy & Hatch	Orchidaceae	At Risk – Naturally Uncommon	No	C (1)	DPR, DPS, DPT, EF, PF, RR	MATlND= 1000-5000	DEC 10-30%	Low	Low	
Thelypteris confluens (Thunb.) C.V.Morton	Thelypteridaceae	At Risk – Naturally Uncommon	No	D (3)	Sp, DPT, PF, RR, TO	AREA<=100	DEC 10-30%	Low	Low	
Veronica bishopiana Petrie	Plantaginaceae	Threatened – Nationally Vulnerable	Yes	D (3)	DPS, DPT, NStr, NR, PF, RR, RE, TL	AREA<=100	DEC 10-30%	Low	Low	National stronghold. Type locality = Mount Donald Mclean, Auckland.
Veronica parviflora Vahl	Plantaginaceae	Not Threatened	No	D (3)	Sp, DPR, DPS, DPT	AREA<=100	DEC 10-30%	Low	Low	Threatened by succession.
Veronica pubescens subsp. *pubescens* Benth.	Plantaginaceae	Not Threatened	No	C (1)	DPS, DPT, NR, PF	MATlND= 1000-5000	DEC 10-30%	Low	Low	Threatened by weed competition and coastal erosion.

3.3.4 Regionally Increasing (3)

Regionally Increasing
(This name replaces At Risk – Recovering A of Townsend et al., (2008).)

Taxa that have undergone a documented decline within the last 1000 years to a population size of 1000-5000 mature individuals or a total area of occupancy of ≤ 100 ha (1 km^2) and now have an ongoing or predicted increase of > 10% in the total population or area of occupancy, taken over the next 10 years or three generations, whichever is longer. Taxa that are increasing but have a population size of < 1000 mature individuals (or total area of occupancy of < 10 ha) are listed in one of the other Threatened categories, depending on their population size (see Townsend et al., 2008).

Table 6: Regionally Increasing Vascular Plants in Tāmaki Makaurau / Auckland

Name and Authority	Family	National Cons. Status (2017)	National Stronghold	Criteria	Qualifiers	Regional Population Size	Regional Trend	Regional Confidence Population	Regional Confidence Trend	Notes
Alternanthera denticulata R.Br.	Amaranthaceae	Not Threatened	No	A	DE, DPS, DPT, EF, INC, SO	AREA<=1000	INC >10%	Low	Low	Species has benefited from human created disturbance but will suffer if succession occurs. Designated by panel as unsure of population size and by using area, panel did not agree with the status. Species is benefiting from human created disturbance and therefore currently increasing.
Schoenoplectus pungens (Vahl) Palla	Cyperaceae	Not Threatened	No	A	DPR, DPS, DPT, RR, SO	AREA<=100	INC >10%	Low	Low	
Schoenus nitens (R.Br.) Roem. & Schult.	Cyperaceae	Not Threatened	No	A	CI, DPR, DPS, DPT, INC	AREA<=100	INC >10%	Low	Low	

3.4 At Risk (157)

Taxa that meet the criteria specified by Townsend et al., (2008) for Declining, Recovering, Relict or Naturally Uncommon.

3.4.1 Declining (104)

A – moderate to large population and low ongoing or forecast decline of 10-30%

A(1) 5000-20 000 mature individuals
A(2) Total area of occupancy ≤ 1000 ha (10 km^2)

B – large population and low to moderate ongoing or forecast decline of 10-50%

B(1) 20 000-100 000 mature individuals
B(2) Total area of occupancy ≤ 10 000 ha (100 km^2)

C – very large population and low to high ongoing or forecast decline of 10-70%

C(1) > 100 000 mature individuals
C(2) Total area of occupancy > 10 000 ha (100 km^2)

Table 7: Declining Vascular Plants in Tāmaki Makaurau / Auckland

Name and Authority	Family	National Cons. Status (2017)	National Stronghold	Criteria	Qualifiers	Regional Population Size	Regional Trend	Regional Confidence Population	Regional Confidence Trend	Notes
Agathis australis (D.Don) Lindl. ex Loudon	Araucariaceae	Threatened – Nationally Vulnerable	No	B (1)	CI, CD, DPS, DPT, PF, Rel	MATIND=20000-100000	DEC 10-30%	Medium	Low	Conservation dependent for managing pathogen spread. Historic decline as a result of logging and clearance so dealing with a relict population.
Anthosachne kingiana subsp. *multiflora* (Banks & Sol. ex Hook.f.) Govaerts	Gramineae	At Risk – Declining	No	A (2)	DPR, DPS, DPT, RR	AREA<=1000	DEC 10-30%	Low	Low	Threatened by exotic grasses.
Arthropodium cirratum (G.Forst.) R.Br.	Asparagaceae	Not Threatened	No	A (1)	DPR, DPS, DPT, PF, RF	MATIND=5000-20000	DEC 10-30%	Low	Low	Threatened by browsing from slugs and snails and competition from weeds.
Austroblechnum banksii (Hook.f.) Gasper & V.A.O.Dittrich	Blechnaceae	Not Threatened	No	A (2)	DPS, DPT, PF, RR, Sp	AREA<=1000	DEC 10-30%	Low	Low	Threatened by habitat erosion and weed competition.
Austroderia aff. *splendens* (AK 207096; “small”)	Gramineae	Not Threatened	No	A (1)	DPR, DPS, DPT, PF	MATIND=5000-20000	DEC 10-30%	Low	Low	Taxonomic revision required. Impacted by weed competition.
Austroderia splendens (Connor) N.P.Barker & H.P.Linder	Gramineae	Not Threatened	No	A (2)	DPR, DPS, DPT, PF, RR	AREA<=1000	DEC 10-30%	Low	Low	Two forms exist which are both outcompeted by pampas. Occurs in mobile sand
Brachyglottis kirkii var. *angustior* (Allan) C.J.Webb	Compositae	Not Threatened	No	A (1)	DPR, DPS, DPT, PF, RR	MATIND=5000-20000	DEC 10-30%	Low	Low	Type locality = Waitākere. Threatened by browsing goats, deer and possums.
Cardamine forsteri Govaerts	Cruciferae	Not Threatened	No	A (1)	DPR, DPS, DPT, PF	MATIND=5000-20000	DEC 10-30%	Low	Low	
Carex breviculmis R.Br.	Cyperaceae	Not Threatened	No	A (1)	DPR, DPS, DPT, PF, SO	MATIND=5000-20000	DEC 10-30%	Low	Low	Threatened by weed competition.
Carex ochrosaccus (C.B.Clarke ex Cheeseman) Hamlin	Cyperaceae	Not Threatened	No	A (1)	DPR, DPS, DPT, TL	MATIND=5000-20000	DEC 10-30%	Low	Low	Type locality = St Heliers.

Name and Authority	Family	National Cons. Status (2017)	National Stronghold	Criteria	Qualifiers	Regional Population Size	Regional Trend	Regional Confidence Population	Regional Confidence Trend	Notes
Carex subviridis K.A.Ford	Cyperaceae	Not Threatened	No	A (2)	DPR, DPS, DPT, PF	AREA<=1000	DEC 10-30%	Low	Low	
Carmichaelia australis R.Br.	Leguminosae	Not Threatened	No	A (1)	DPS, DPT, PF, RF	MATIND=5000-20000	DEC 10-30%	Low	Low	Threatened by browsing.
Celmisia major var. *major* Cheeseman	Compositae	At Risk – Naturally Uncommon	Yes	A (1)	DPS, DPT, PF, RR, TL, RE	MATIND=5000-20000	DEC 10-30%	Low	Low	Type locality = cliffs near north Manukau Heads.
Centipeda aotearoana N.G.Walsh	Compositae	Not Threatened	No	A (2)	DPR, DPS, DPT, EF, RR	AREA<=1000	DEC 10-30%	Low	Low	Threatened by groundcover weeds.
Centipeda minima subsp. *minima* (L.) A.Braun & Asch.	Compositae	Threatened – Nationally Endangered	Yes	A (2)	DPR, DPS, DPT, EF, SO	AREA<=1000	DEC 10-30%	Low	Low	National stronghold. Threatened by succession and weed competition.
Cheilanthes distans (R.Br.) Mett.	Pteridaceae	Not Threatened	No	B (2)	DPR, DPT, RR, SO	AREA<=10000	DEC 10-30%	Low	Low	Threatened by weed competition.
Cheilanthes sieberi Kunze	Pteridaceae	Not Threatened	No	C (2)	DPR, DPS, DPT, RR, SO	AREA>10000	DEC 10-30%	Low	Low	Threatened by weed competition.
Chenopodium trigonon subsp. *trigonon* Schult.	Amaranthaceae	Not Threatened	No	B (2)	CD, DPR, DPS, DPT, PF, SO	AREA<=10000	DEC 10-30%	Low	Low	Strongholds on islands.
Clematis cunninghamii Turcz.	Ranunculaceae	Not Threatened	No	B (2)	DPS, DPT	AREA<=10000	DEC 10-30%	Low	Low	
Coprosma repens Hook.f.	Rubiaceae	Not Threatened	No	B (1)	DPS, DPT	MATIND=20000-100000	DEC 10-30%	Low	Low	Distinction between indigenous and planted populations is difficult. Wild indigenous sites without predator control are in serious decline.
Coprosma tenuicaulis Hook.f.	Rubiaceae	Not Threatened	No	A (1)	DPR, DPS, DPT, PF, RR	MATIND=5000-20000	DEC 10-30%	Low	Low	
Corokia buddleioides var. *buddleioides* A.Cunn.	Argophyllaceae	Not Threatened	No	A (1)	DPS, DPT, PF	MATIND=5000-20000	DEC 10-30%	Low	Low	
Corunastylis pumila (Hook.f.) D.L.Jones & M.A.Clem.	Orchidaceae	At Risk – Naturally Uncommon	No	A (2)	DPR, DPS, DPT, PF, RR, SO	AREA<=1000	DEC 10-30%	Low	Low	

Name and Authority	Family	National Cons. Status (2017)	National Stronghold	Criteria	Qualifiers	Regional Population Size	Regional Trend	Regional Confidence Population	Regional Confidence Trend	Notes
Crassula colligata subsp. *colligata* Toelken	Crassulaceae	Not Threatened	No	B (2)	DPR, DPS, DPT, EF, PF, RR, SO, Sp	AREA<=10000	DEC 10-30%	Low	Low	
Daucus glochidiatus (Labill.) Fisch., C.A.Mey. & Ave-Lall.	Umbelliferae	At Risk – Declining	No	B (2)	DPR, DPS, DPT, EF, PF, RR, SO, Sp	AREA<=10000	DEC 10-50%	Low	Low	Extreme population fluctuations.
Dianella haematica Heenan & de Lange	Hemerocallidaceae	Not Threatened	No	B (2)	DPR, DPS, DPT, PF, Sp	AREA<=10000	DEC 10-30%	Low	Low	
Dichondra brevifolia Buchanan	Convolvulaceae	Not Threatened	No	B (2)	DPR, DPS, DPT, PF, RR	AREA<=10000	DEC 10-30%	Low	Low	Threatened by weed competition.
Dracophyllum sinclairii Cheeseman	Ericaceae	Not Threatened	No	A (1)	DPS, DPT, PF, RR, TL	MATIND=5000-20000	DEC 10-30%	Medium	Medium	Type locality = Manukau.
Drosera binata Labill.	Droseraceae	Not Threatened	No	A (2)	DPS, DPT, RR, SO	AREA<=1000	DEC 10-30%	Low	Low	Threats from succession and weed competition.
Echinopogon ovatus (G.Forst.) P.Beauv.	Gramineae	Not Threatened	No	B (2)	DPR, DPS, DPT, SO	AREA<=10000	DEC 10-30%	Low	Low	Requires disturbance. Threatened by weed competition.
Eleocharis gracilis R.Br.	Cyperaceae	Not Threatened	No	B (2)	DPR, DPS, DPT, PF, RR, SO	AREA<=10000	DEC 10-30%	Low	Low	Locally found but habitat unsecure.
Entelea arborescens R.Br.	Malvaceae	Not Threatened	No	A (1)	DPS, DPT, EF, PF, RF	MATIND=5000-20000	DEC 10-30%	Low	Low	Difficult to distinguish natural populations as commonly planted around region.
Epilobium nerteroides A.Cunn.	Onagraceae	Not Threatened	No	A (1)	DPR, DPS, DPT, PF, RR	MATIND=5000-20000	DEC 10-30%	Low	Low	Catchment issues with increased flood events and siltation, and weed competition.
Epilobium pallidiflorum A.Cunn.	Onagraceae	Not Threatened	No	A (1)	DPR, DPS, DPT, PF, RR, SO	MATIND=5000-20000	DEC 10-30%	Medium	Medium	Threatened by weed competition.
Epilobium pubens A.Rich.	Onagraceae	Not Threatened	No	A (2)	DPR, DPS, DPT, PF, RR, Sp	AREA<=1000	DEC 10-30%	Low	Low	Threatened by weed competition.
Euchiton audax (D.G.Drury) Holub	Compositae	Not Threatened	No	A (1)	DPR, DPS, DPT, PF, RR	MATIND=5000-20000	DEC 10-30%	Low	Low	Threatened by weed competition.

Name and Authority	Family	National Cons. Status (2017)	National Stronghold	Criteria	Qualifiers	Regional Population Size	Regional Trend	Regional Confidence Population	Regional Confidence Trend	Notes
Ficinia spiralis (A.Rich.) Muasya & de Lange	Cyperaceae	At Risk – Declining	No	A (1)	CD, DPS, DPT, PF, RR	MATIND=5000-20000	DEC 10-30%	Low	Low	Threatened by marram grass, browsing and dune stabilisation.
Fuchsia excorticata (J.R.Forst. & G.Forst.) L.f.	Onagraceae	Not Threatened	No	A (1)	CI, DPS, DPT, RF	MATIND=5000-20000	DEC 10-30%	Low	Low	Threatened by drought and weed competition.
Fuscospora truncata (Colenso) Heenan & Smissen	Nothofagaceae	Not Threatened	No	A (1)	CI, DPS, DPT, PF, RF, Sp	MATIND=5000-20000	DEC 10-30%	Low	Low	Poor recruitment. Impacted by drought (likely to increase with climate change).
Galium propinquum A.Cunn.	Rubiaceae	Not Threatened	No	B (2)	DPR, DPS, DPT, EF, PF, RR, Sp	AREA<=10000	DEC 10-30%	Low	Low	Threatened by weed competition.
Geranium retrorsum L'Hér. ex DC.	Geraniaceae	Threatened – Nationally Vulnerable	Yes	A (1)	DPR, DPS, DPT, PF, RR, SO, Sp, NS	MATIND=5000-20000	DEC 10-30%	Low	Low	National Stronghold. Possibly more common in Auckland than elsewhere in New Zealand but defaulted to national status. Locally common on Waiheke.
Gleichenia microphylla R.Br.	Gleicheniaceae	Not Threatened	No	B (2)	DPR, DPS, DPT, SO	AREA<=10000	DEC 10-30%	Low	Low	Localised but widespread. Threats from weeds and habitat loss (removal and succession).
Glossostigma elatinoides Benth. ex Hook.f.	Phrymaceae	Not Threatened	No		DPS, DPT, PF, RR, SO, Sp	AREA<=1000	DEC 10-30%	Low	Low	Currently threats at Cannibal Creek site are managed.
Helichrysum lanceolatum (Buchanan) Kirk	Compositae	Not Threatened	No	A (1)	DPS, DPT, PF, RF	MATIND=5000-20000	DEC 10-30%	Low	Low	Habitat is variable and threatened by succession and weed competition.
Hiya distans (Hook.) Brownsey & Perrie	Dennstaedtiaceae	Not Threatened	No	A (2)	DPS, DPT, PF, Sp, TO	AREA<=1000	DEC 10-30%	Low	Low	Threatened by succession.
Hydrocotyle novae-zeelandiae var. *novae-zeelandiae* DC.	Araliaceae	Not Threatened	No	A (2)	DPR, DPS, DPT, PF, RR, Sp	AREA<=1000	DEC 10-30%	Low	Low	Historic decline with wetland loss.
Hydrocotyle pterocarpa F.Muell.	Araliaceae	Not Threatened	No	A (2)	DPR, DPS, DPT, PF, RR, SO	AREA<=1000	DEC 10-30%	Low	Low	Scattered around Auckland region but not abundant where found.

Name and Authority	Family	National Cons. Status (2017)	National Stronghold	Criteria	Qualifiers	Regional Population Size	Regional Trend	Regional Confidence Population	Regional Confidence Trend	Notes
Hydrocotyle robusta Kirk	Araliaceae	Not Threatened	Yes	B (2)	DPR, DPS, DPT, NStr, PF, TL	AREA<=10000	DEC 10-30%	Low	Low	Type locality = Tryphena, Aotea / Great Barrier Island. Possible taxonomic issues require resolving.
Hypericum pusillum Choisy	Hypericaceae	Not Threatened	No	A (2)	DPR, DPS, DPT, EF, PF, SO	AREA<=1000	DEC 10-30%	Low	Low	Threatened by weeds such as rank grass.
Korthalsella salicornioides (A.Cunn.) Tiegh.	Santalaceae	Threatened – Nationally Critical	No	A (2)	Sp, DPS, DPT, PF	AREA<=1000	DEC 10-30%	Low	Low	
Kunzea robusta de Lange & Toelken	Myrtaceae	Threatened – Nationally Vulnerable	No	B (1)	DPR, DPT, PF	MATIND=20000-100000	DEC 10-30%	Medium	Medium	Impact of myrtle rust on the species is unclear. Threatened by natural succession.
Lagenophora sublyrata (Cass.) A.R.Bean & Jian Wang	Asteraceae	At Risk – Naturally Uncommon	No	A (1)	DPR, DPS, DPT, PF, RR, SO	MATIND=5000-20000	DEC 10-30%	Low	Medium	Threatened by weed competition and succession. Wallabies on Kawau Island assist this species.
Libocedrus plumosa (D.Don) Sarg.	Cupressaceae	Not Threatened	No		DPS, DPT, DE, PF, RF	MATlND= 1000-5000	STABLE +/-10%	Low	Low	Designated as very slight decline rather than stable population trend.
Limosella lineata Glück	Scrophulariaceae	Not Threatened	No	A (2)	DPR, DPS, DPT, PF, RR	AREA<=1000	DEC 10-30%	Low	Medium	Threatened by weed competition.
Litsea calicaris (Sol. ex A.Cunn.) Benth. & Hook.f. ex Kirk	Lauraceae	Not Threatened	No	A (1)	DPS, DPT, PF, RF	MATIND=5000-20000	DEC 10-30%	Low	Low	Threatened by droughts and likely climate change impacts.
Machaerina tenax (Hook.f.) T.Koyama	Cyperaceae	Not Threatened	No	A (2)	Sp, DPR, DPS, DPT, PF, RR, SO, TL	AREA<=1000	DEC 10-30%	Low	Low	Type locality. Threatened by drainage and cattle trampling.
Melicytus novae-zelandiae subsp. *novae-zelandiae* (A.Cunn.) P.S.Green	Violaceae	Not Threatened	No	A (1)	DPS, DPT, PF, Rel	MATIND=5000-20000	DEC 10-30%	Low	Low	Threatened by recruitment failure.
Metrosideros carminea W.R.B.Oliv.	Myrtaceae	Threatened – Nationally Vulnerable	No	A (1)	DPR, DPS, DPT, PF, RF	MATIND=5000-20000	DEC 10-30%	Low	Low	Impact of myrtle rust on this species is unclear. Threatened by browsing.
Metrosideros diffusa (G.Forst.) Sm.	Myrtaceae	Threatened – Nationally Vulnerable	No	B (1)	DPT	MATIND=20000-100000	DEC 10-30%	Low	Low	Impact of myrtle rust on this species is unclear.

Name and Authority	Family	National Cons. Status (2017)	National Stronghold	Criteria	Qualifiers	Regional Population Size	Regional Trend	Regional Confidence Population	Regional Confidence Trend	Notes
Metrosideros excelsa Sol. ex Gaertn.	Myrtaceae	Threatened – Nationally Vulnerable	Yes	B (1)	DPS, DPT, NStr	MATIND=20000-100000	DEC 10-30%	Low	Low	National stronghold. Impact of myrtle rust on this species is unclear. Threatened by possum browse, coastal development and clearance, and hybridisation.
Metrosideros fulgens Sol. ex Gaertn.	Myrtaceae	Threatened – Nationally Vulnerable	No	B (1)	DPS, DPT	MATIND=20000-100000	DEC 10-30%	Low	Low	Impact of myrtle rust on this species is unclear.
Metrosideros perforata (J.R.Forst. & G.Forst.) A.Rich.	Myrtaceae	Threatened – Nationally Vulnerable	No	B (1)	DPS, DPT	MATIND=20000-100000	DEC 10-30%	Low	Low	Impact of myrtle rust on this species is unclear.
Metrosideros robusta A.Cunn.	Myrtaceae	Threatened – Nationally Vulnerable	No	A (1)	CD, DPS, DPT, PF, RF	MATIND=5000-20000	DEC 10-30%	Low	Low	Impact of myrtle rust on this species is unclear. Conservation dependent with possum control.
Microlaena polynoda (Hook.f.) Hook.f.	Gramineae	Not Threatened	No	A (1)	DPR, DPS, DPT, PF	MATIND=5000-20000	DEC 10-30%	Low	Low	Threatened by weed competition and track maintenance.
Mida salicifolia A.Cunn.	Nanodeaceae	At Risk – Declining	Yes	A (1)	CD, DPR, DPS, DPT, PF, RF	MATIND=5000-20000	DEC 10-30%	Low	Low	Conservation dependent on possum control.
Myoporum laetum G.Forst.	Scrophulariaceae	Not Threatened	No	A (1)	DPR, DPS, DPT, PF, RF	MATIND=5000-20000	DEC 10-30%	Low	Low	Threatened by hybridisation and recruitment pressures.
Myrsine salicina Heward ex Hook.f.	Primulaceae	Not Threatened	No	A (1)	Sp, DPS, DPT, PF, RF	MATIND=5000-20000	DEC 10-30%	Low	Low	
Nertera scapanioides Lange	Rubiaceae	Not Threatened	No	A (2)	DPR, DPS, DPT, PF, RR	AREA<=1000	DEC 10-30%	Low	Low	
Netrostylis capillaris (F.Muell.) R.L.Barrett, J.J.Bruhl & K.L.Wilson	Cyperaceae	Not Threatened	No	A (2)	DPR, DPS, DPT, PF, RR, SO	AREA<=1000	DEC 10-30%	Low	Low	Threatened by weed competition and stock trampling.
Olearia solandri (Hook.f.) Hook.f.	Compositae	Not Threatened	No	A (1)	DPS, DPT, PF, RF	MATIND=5000-20000	DEC 10-30%	Low	Low	Potentially threatened by increased sedimentation leading to competition from mangrove spread.
Orthoceras novae-zeelandiae (A.Rich.) M.A.Clem., D.L.Jones & Molloy	Orchidaceae	Not Threatened	No	A (1)	Sp, DPS, DPT, PF	MATIND=5000-20000	DEC 10-30%	Low	Low	Threatened by habitat loss, succession and weed competition.

Name and Authority	Family	National Cons. Status (2017)	National Stronghold	Criteria	Qualifiers	Regional Population Size	Regional Trend	Regional Confidence Population	Regional Confidence Trend	Notes
Ozothamnus leptophyllus (G.Forst.) Breitw. & J.M.Ward	Compositae	Not Threatened	No		DPS, DPT, DE, PF, RF	MATIND=5000-20000	STABLE +/-10%	Low	Low	Designated as many individuals but low recruitment, leading to slow decline. It is not yet a relict because it hasn't declined more than 90% of its range in the region. Threatened by dune restoration through stabilisation of sand dunes and coastal development.
Parablechnum minus (R.Br.) Gasper & Salino	Blechnaceae	Not Threatened	No		DPR, DPS, DPT, DE, PF, RR, SO	MATIND=5000-20000	STABLE +/-10%	Low	Low	Designated as almost a relict with ongoing slight decline in wetlands.
Parablechnum triangularifolium (T.C.Chambers & P.A.Farrant) Gasper & Salino	Blechnaceae	Not Threatened	No	A (1)	DPR, DPS, DPT, PF, RR, TL	MATIND=5000-20000	DEC 10-30%	Low	Low	Type locality = Green Bay, Manukau Harbour.
Parietaria debilis G.Forst.	Urticaceae	Not Threatened	No	A (1)	DPR, DPS, DPT, EF, PF, RR	MATIND=5000-20000	DEC 10-30%	Low	Low	Range restricted to seabird sites.
Parsonsia capsularis var. *grandiflora* Carse	Apocynaceae	Not Threatened	No	A (1)	DPR, DPS, DPT, PF	MATIND=5000-20000	DEC 10-30%	Low	Low	Threatened by weed competition, succession and coastal development.
Pellaea calidirupium Brownsey & Lovis	Pteridaceae	Not Threatened	No	A (1)	DPR, DPS, DPT, PF, RR, SO	MATIND=5000-20000	DEC 10-30%	Low	Low	Threatened by weed competition.
Picris burbidgeae S.Holzapfel	Compositae	Threatened – Nationally Vulnerable	No	A (2)	Sp, DPR, DPS, DPT, EF, PF, SO	AREA<=1000	DEC 10-30%	Low	Low	Threatened by weed competition. Often mistaken as a weed.
Pimelea urvilleana A.Rich.	Thymelaeaceae	Not Threatened	No	A (1)	DPR, DPS, DPT, PF, RF	MATIND=5000-20000	DEC 10-30%	Low	Low	Threatened by weed competition and browsing mammals.
Pittosporum cornifolium A.Cunn.	Pittosporaceae	Not Threatened	Yes	A (1)	CD, DPS, DPT, NStr, PF	MATIND=5000-20000	DEC 10-30%	Low	Low	Conservation dependent on possum control.
Pittosporum ellipticum Kirk	Pittosporaceae	At Risk – Naturally Uncommon	No	A (1)	Sp, DPR, DPS, DPT, PF	MATIND=5000-20000	DEC 10-30%	Low	Low	Threatened by succession.

Name and Authority	Family	National Cons. Status (2017)	National Stronghold	Criteria	Qualifiers	Regional Population Size	Regional Trend	Regional Confidence Population	Regional Confidence Trend	Notes
Pittosporum umbellatum Banks & Sol. ex Gaertn.	Pittosporaceae	Not Threatened	No	A (1)	DPS, DPT, PF	MATIND=5000-20000	DEC 10-30%	Low	Low	Threatened by possum browse.
Pittosporum virgatum Kirk	Pittosporaceae	Threatened – Nationally Vulnerable	Yes	A (1)	CD, DPS, DPT, NStr, PF, TL	MATIND=5000-20000	DEC 10-30%	Low	Low	National stronghold. Conservation dependent with possum and weed control. Type locality = Aotea / Great Barrier Island.
Poa imbecilla Spreng.	Gramineae	Not Threatened	No	B (2)	CD, DPR, DPS, DPT, EF, PF	AREA<=10000	DEC 10-50%	Low	Low	Conservation dependent on weed control.
Poa pusilla Berggr.	Gramineae	Not Threatened	Yes	C (2)	DPR, DPS, DPT, NStr, PF, RR	AREA>10000	DEC 10-30%	Low	Low	National stronghold.
Pomaderris kumeraho A.Cunn.	Rhamnaceae	Not Threatened	No	B (1)	DPS, DPT, PF	MATIND=20000-100000	DEC 10-30%	Low	Low	Threatened by weed competition and succession.
Potamogeton ochreatus Raoul	Potamogetonaceae	Not Threatened	No	B (2)	DPR, DPS, DPT, PF, RR, SO	AREA<=10000	DEC 10-30%	Low	Low	
Ptisana salicina (Sm.) Murdock	Marattiaceae	At Risk – Declining	No	A (1)	DPS, DPT, PF, TO	MATIND=5000-20000	DEC 10-30%	Low	Low	Threatened by browse, habitat loss, pig damage and collection pressures.
Schoenus brevifolius R.Br.	Cyperaceae	Not Threatened	No	A (2)	Sp, DPR, DPS, DPT, PF, RR, SO	AREA<=1000	DEC 10-30%	Low	Low	Threatened by weed competition and succession.
Senecio diaschides D.G.Drury	Compositae	Not Threatened	No	A (1)	DPS, SO	MATIND=5000-20000	DEC 10-30%	Low	Low	Threatened by hybridisation.
Senecio glomeratus subsp. *glomeratus* Poir.	Compositae	Not Threatened	No	A (1)	Sp, DPR, DPS, DPT, EF, PF, SO	MATIND=5000-20000	DEC 10-30%	Low	Low	
Senecio minimus Poir.	Compositae	Not Threatened	No	A (1)	Sp, DPR, DPS, DPT, EF, SO	MATIND=5000-20000	DEC 10-30%	Low	Low	
Senecio quadridentatus Labill.	Compositae	Not Threatened	No	A (1)	Sp, DPR, DPS, DPT, EF, PF, SO	MATIND=5000-20000	DEC 10-30%	Low	Low	

Name and Authority	Family	National Cons. Status (2017)	National Stronghold	Criteria	Qualifiers	Regional Population Size	Regional Trend	Regional Confidence Population	Regional Confidence Trend	Notes
Sticherus flabellatus var. *flabellatus* (R.Br.) H.St. John	Gleicheniaceae	Not Threatened	No	B (2)	DPS, DPT, PF, SO	AREA<=10000	DEC 10-30%	Low	Low	Threatened by succession and weed competition.
Suaeda novae-zelandiae Allan	Amaranthaceae	Not Threatened	No	A (2)	Sp, DPS, DPT, PF, RR	AREA<=1000	DEC 10-30%	Low	Low	Threatened by coastal development and erosion.
Thelymitra carnea R.Br.	Orchidaceae	Not Threatened	No	A (1)	DPR, DPS, DPT, EF, PF, RR, SO	MATIND=5000-20000	DEC 10-30%	Low	Low	Threatened by weed competition and loss of habitat.
Toronia toru (A.Cunn.) L.A.S.Johnson & B.G.Briggs	Proteaceae	Not Threatened	No	A (1)	DPS, DPT, PF, RF	MATIND=5000-20000	DEC 10-30%	Low	Low	Threatened by succession.
Veronica macrocarpa var. *latisepala* (Kirk) Cheeseman	Plantaginaceae	Not Threatened	Yes	A (1)	DPR, DPS, DPT, NStr, PF, TL	MATIND=5000-20000	DEC 10-30%	Low	Low	
Veronica obtusata Cheeseman	Plantaginaceae	At Risk – Naturally Uncommon	Yes	A (1)	DPR, DPS, DPT, NStr, PF, TL	MATIND=5000-20000	DEC 10-30%	Low	Low	National stronghold. Threatened by succession and weed competition. Type locality.
Veronica pubescens subsp. *rehuarum* (Bayly & de Lange) Garn.-Jones	Plantaginaceae	At Risk – Naturally Uncommon	Yes	A (1)	DPR, DPS, DPT, IE, NStr, OL, RE, TL	MATIND=5000-20000	DEC 10-30%	Low	Low	National stronghold. Endemic to Aotea / Great Barrier Island. Type locality = Aotea / Great Barrier Island.
Veronica pubescens subsp. *sejuncta* (Bayly & de Lange) Garn.-Jones	Plantaginaceae	At Risk – Naturally Uncommon	Yes	A (1)	DPR, DPS, DPT, IE, NStr, PF, RE, TL	MATIND=5000-20000	DEC 10-30%	Low	Low	National stronghold. Type locality = Te Hauturu-ō-Toi / Little Barrier Island.
Wahlenbergia vernicosa J.A.Petterson	Campanulaceae	Not Threatened	Yes	A (1)	CD, DPR, DPS, DPT, EF, NStr, PF	MATIND=5000-20000	DEC 10-30%	Low	Low	Restricted to offshore islands and coastal rocky outcrops. National stronghold. Threatened by weed competition. Conservation dependent on islands where there is pest control.
Wahlenbergia violacea J.A.Petterson	Campanulaceae	Not Threatened	No	A (1)	DPR, DPS, DPT, EF, PF	MATIND=5000-20000	DEC 10-30%	Low	Low	Threatened by weed competition.
Zoysia pauciflora Mez	Gramineae	Not Threatened	No	A (1)	DPR, DPS, DPT, PF, RR	MATIND=5000-20000	DEC 10-30%	Low	Low	Threatened from erosion, weed competition and rabbit browse.

3.4.2 Recovering (1)

Taxa that have undergone a documented decline within the last 1000 years to a population size of 5000-20 000 mature individuals or a total area of occupancy of ≤ 1000 ha (10 km^2) and now have an ongoing or predicted increase of > 10% in the total population or area of occupancy, taken over the next 10 years or three generations, whichever is longer. Taxa that are increasing but have a population size of < 5000 mature individuals (or total area of occupancy of < 100 ha) are listed in one of the Threatened categories, depending on their population size (for more details, see the description of Nationally Increasing above and Townsend et al., (2008)).

Table 8: Recovering Vascular Plants in Tāmaki Makaurau / Auckland

Name and Authority	Family	National Cons. Status (2017)	National Stronghold	Criteria	Qualifiers	Regional Population Size	Regional Trend	Regional Confidence Population	Regional Confidence Trend	Notes
Piper excelsum subsp. *peltatum* (R.O.Gardner) de Lange	Piperaceae	At Risk – Naturally Uncommon	No		CD, DPR, DPS, DPT	AREA<=1000	STABLE +/- 10% or INC >=10%	Low	Low	Conservation dependent on pest free islands and free of browsing mammals.

3.4.3 Relict (7)

Taxa that have undergone a documented decline within the last 1000 years, now occupy
< 10% of their former range and meet one of the following criteria:

A 5000-20 000 mature individuals; population stable (± 10%)
B > 20 000 mature individuals; population stable (± 10%) or increasing at > 10%

The range of a relictual taxon takes into account the area currently occupied as a ratio of its former extent. Relict can also include taxa that exist as reintroduced and self-sustaining populations within or outside their former known range (for more details, see Townsend et al., (2008)).

Table 9: Relict Vascular Plants in Tāmaki Makaurau / Auckland

Name and Authority	Family	National Cons. Status (2017)	National Stronghold	Criteria	Qualifiers	Regional Population Size	Regional Trend	Regional Confidence Population	Regional Confidence Trend	Notes
Arthropodium bifurcatum Heenan, A.D.Mitch. & de Lange	Asparagaceae	At Risk – Relict	No		DPR, DPS, DPT	MATIND=5000-20000, FRMHAB<10%	STABLE +/- 10%	Low	Low	Restricted to predator free offshore islands. Auckland stronghold is Mokohinau islands. Decline is historical.
Azolla rubra R.Br.	Salviniaceae	Not Threatened	No		DPR, DPS, DPT, PF	MATIND=5000-20000, FRMHAB<10%	STABLE +/- 10% or INC >=10%	Low	Low	Threats from other competing *Azolla* species.
Carex fascicularis Boott	Cyperaceae	At Risk – Declining	No		DE, DPR, DPS, DPT, PF, RR, SO?, Sp	MATIND=250-1000	STABLE +/- 10% or INC >=10%	Medium	Medium	Designated by panel as disagreed with population size for relict status.
Carex spinirostris Colenso	Cyperaceae	Not Threatened	No		DE, DPR, DPS, DPT, RR					Naturally uncommon. Found in forest petrel colony habitat. Designated as disagreed with threshold. The habitat is now less than 10% of its former range.
Ceodes brunoniana Skottsb.	Nyctaginaceae	At Risk – Relict	No		DE, DPS, DPT	AREA<=1000	STABLE +/- 10% or INC >=10%	Medium	Medium	Designated as panel disagreed with the threshold trend. The population is stable but shouldn't be 'Not Threatened'.
Empodisma robustum Wagstaff & B.R.Clarkson	Restionaceae	At Risk – Declining	No		DPT, PF, RR	MATIND=5000-20000, FRMHAB<10%	STABLE +/- 10% or INC >=10%	Low	Low	
Halocarpus kirkii (F.Muell. ex Parl.) Quinn	Podocarpaceae	At Risk – Relict	Yes		DE, DPS, DPT, PF, RR	AREA<=1000	STABLE +/- 10% or INC >=10%	Low	Medium	Type locality = Aotea / Great Barrier Island. National Stronghold. Requires frequent disturbance for recruitment. Designated relict as logging has eliminated it from 90% of its potential natural range.

3.4.4 Naturally Uncommon (45)

Taxa whose distribution is confined to a specific geographical area or which occur within naturally small and widely scattered populations, where this distribution is not the result of human disturbance.

Table 10: Naturally Uncommon Vascular Plants in Tāmaki Makaurau / Auckland

Name and Authority	Family	National Cons. Status (2017)	National Stronghold	Criteria	Qualifiers	Regional Population Size	Regional Trend	Regional Confidence Population	Regional Confidence Trend	Notes
Alseuosmia quercifolia A.Cunn.	Alseuosmiaceae	Not Threatened	No		CD, DPR, DPS, DPT, INC	AREA<=10000	STABLE +/-10%	Low	Low	Recruitment is dependent on pest mammal control.
Anaphalioides trinervis (G.Forst.) Anderb.	Compositae	Not Threatened	No		DPS, DPT, Sp	MATlND= 1000-5000	STABLE +/-10%	Low	Low	Scattered in its range.
Coprosma dodonaeifolia W.R.B.Oliv.	Rubiaceae	At Risk – Naturally Uncommon	Yes		DPR, DPS, DPT, RR, TL	AREA<=100	STABLE +/-10%	Medium	Medium	Type locality = Aotea / Great Barrier Island.
Cyathea cunninghamii Hook.f.	Cyatheaceae	Not Threatened	No		DPR, DPS, DPT, PF	MATIND=5000-20000	STABLE +/-10%	Low	Low	
Danhatchia australis (Hatch) Garay & Christenson	Orchidaceae	At Risk – Naturally Uncommon	Yes		DPS, DPT, PF, RR, Sp, TO?	AREA<=1000	STABLE +/-10%	Low	Medium	Type locality = Atuanui (Mt Auckland), near Glorit.
Dicksonia lanata subsp. *hispida* (Colenso) Perrie & Brownsey	Dicksoniaceae	At Risk – Naturally Uncommon	No		DPS, DPT, PD, RR	AREA<=100	STABLE +/-10%	Low	Low	Restricted to kauri forest. Naturally uncommon on Aotea / Great Barrier Island.
Dracophyllum patens W.R.B.Oliv.	Ericaceae	At Risk – Naturally Uncommon	Yes		DPS, DPT, PD, PF, RR, TL	AREA<=10000	STABLE +/-10%	Medium	Medium	Type locality = Aotea / Great Barrier Island. National Stronghold.
Dracophyllum traversii Hook.f.	Ericaceae	Not Threatened	No		DPS, DPT, OL	AREA<=10	STABLE +/-10%	High	Low	
Hydrocotyle aff. *robusta* (a) (CHR 354383; Ototoa)	Araliaceae	At Risk – Naturally Uncommon	Yes		DPR, DPS, DPT, RR	AREA<=1000	STABLE +/-10%	Medium	Medium	Taxonomic issues require resolving. National stronghold.

Name and Authority	Family	National Cons. Status (2017)	National Stronghold	Criteria	Qualifiers	Regional Population Size	Regional Trend	Regional Confidence Population	Regional Confidence Trend	Notes
Hydrocotyle heteromeria A.Rich.	Araliaceae	Not Threatened	No		DPS, PF	MATIND=5000-20000	STABLE +/-10%	Low	Low	
Hymenophyllum armstrongii (Baker) Kirk	Hymenophyllaceae	Not Threatened	No		DPS, DPT, RR	AREA<=10000	STABLE +/-10%	Low	Medium	
Hymenophyllum cupressiforme Labill.	Hymenophyllaceae	At Risk – Naturally Uncommon	No		DPR, DPS, DPT, SO	AREA<=10000	STABLE +/-10%	Low	Low	Benefits from forest establishment and possum control.
Hymenophyllum lyallii Hook.f.	Hymenophyllaceae	Not Threatened	No		DPS, DPT, RR, SO	AREA<=10000	STABLE +/-10%	Low	High	Quite common where present.
Hypolepis dicksonioides (Endl.) Hook.	Dennstaedtiaceae	At Risk – Naturally Uncommon	No		DPS, DPT, EF, SO, Sp	MATlND= 1000-5000	STABLE +/-10%	Low	Low	Identification issues which can lead to being mis-identified as exotic and receiving control.
Hypolepis lactea Brownsey & Chinnock	Dennstaedtiaceae	Not Threatened	No		DPR, DPS, DPT, EF, Sp	AREA<=1000	STABLE +/-10%	Low	Low	
Hypolepis rufobarbata (Colenso) N.A.Wakef.	Dennstaedtiaceae	Not Threatened	No		DPR, DPS, DPT, Sp	AREA<=100	STABLE +/-10%	Low	Low	
Ixerba brexioides A.Cunn.	Strasburgeriaceae	Not Threatened	No		DPS, DPT, RF, RR	MATlND= 1000-5000	STABLE +/-10%	Low	Low	Habitat restricted in Auckland. Long lived, but with poor recruitment.
Lastreopsis velutina (A.Rich.) Tindale	Dryopteridaceae	Not Threatened	No		Sp, DPS, DPT, DE	MATlND= 1000-5000	STABLE +/-10%	Low	Low	Designated as panel disagreed with thresholds.
Lateristachys lateralis (R.Br.) Holub	Lycopodiaceae	Not Threatened	No		DPS, DPT, PF, RR, SO	AREA<=10000	STABLE +/-10%	Low	Low	Threatened by weed competition and succession.
Lepidothamnus intermedius (Kirk) Quinn	Podocarpaceae	Not Threatened	No		RR	AREA<=1000	STABLE +/-10%	High	High	
Libertia micrantha A.Cunn.	Iridaceae	Not Threatened	No		Sp, DPS, DPT, DE, PF, RR					Designated as panel disagrees with threshold trend. Population is stable but shouldn't be 'Not Threatened' which doesn’t reflect the species situation.
Loxsoma cunninghamii R.Br. ex Hook.	Loxsomataceae	Not Threatened	Yes		DPS, DPT, PF, RR	AREA<=10000	STABLE +/-10%	Low	Medium	National stronghold. Designated as population is relatively stable, but more likely to be naturally

Name and Authority	Family	National Cons. Status (2017)	National Stronghold	Criteria	Qualifiers	Regional Population Size	Regional Trend	Regional Confidence Population	Regional Confidence Trend	Notes
										uncommon rather than not threatened.
Luzuriaga parviflora (Hook.f.) Kunth	Luzuriagaceae	Not Threatened	No		DPS, DPT, RR	AREA<=1000	STABLE +/-10%	Low	Medium	
Machaerina arthrophylla (Nees) T.Koyama	Cyperaceae	Not Threatened	No		DPR, DPS, DPT, PF, RR, SO	AREA<=1000	STABLE +/-10%	Low	Low	
Melicytus macrophyllus A.Cunn.	Violaceae	Not Threatened	No		DPS, DPT, NR	MATIND=5000-20000	STABLE +/-10%	Low	Medium	Species distribution at southern limit.
Metrosideros albiflora Sol. ex Gaertn.	Myrtaceae	Threatened – Nationally Vulnerable	No		DPS, DPT, PF, RR, Rel	MATIND=5000-20000	STABLE +/-10%	Low	Low	Impact of myrtle rust is unclear. Threatened by browsing.
Parablechnum procerum (G.Forst.) C.Presl	Blechnaceae	Not Threatened	No		DPR, DPS, DPT, RR	MATIND=5000-20000	STABLE +/-10%	Low	Low	
Phyllocladus toatoa Molloy	Podocarpaceae	Not Threatened	No		DPS, DPT, PF, TL	AREA<=1000	STABLE +/-10%	Low	Medium	
Pittosporum huttonianum Kirk	Pittosporaceae	At Risk – Naturally Uncommon	Yes		DPS, DPT, NStr, PF, TL	MATIND=20000-100000	STABLE +/-10%	Low	Low	National stronghold. Type locality = Aotea / Great Barrier Island.
Pittosporum kirkii Hook.f. ex Kirk	Pittosporaceae	At Risk – Declining	Yes		CD, DPS, DPT, NStr, PD, PF, TL	AREA<=10000	STABLE +/-10%	Low	Low	National stronghold. Conservation dependent on possum control. Type locality = Aotea / Great Barrier Island.
Pseudopanax discolor (Kirk) Harms	Araliaceae	Not Threatened	Yes		DPS, DPT, NStr, TL	MATIND=20000-100000	STABLE +/-10%	Low	Medium	National stronghold.
Pteris carsei Braggins & Brownsey	Pteridaceae	Not Threatened	No		DPS, DPT	MATIND=20000-100000	STABLE +/-10%		Low	Threatened by weed competition and development pressures on coastal forest.
Quintinia serrata A.Cunn.	Paracryphiaceae	Not Threatened	No		CI, DPS, DPT, PF, RR	MATIND=5000-20000	STABLE +/-10%	Low	Low	
Raukaua anomalus (Hook.) A.D.Mitch., Frodin & Heads	Araliaceae	Not Threatened	No		DPR, DPS, DPT, DE, PF, RF	MATIND=250-1000	STABLE +/-10%	Low	Medium	Threats from recruitment failure. Designated as population is stable with a narrow range of

Name and Authority	Family	National Cons. Status (2017)	National Stronghold	Criteria	Qualifiers	Regional Population Size	Regional Trend	Regional Confidence Population	Regional Confidence Trend	Notes
										habitats, and no active threats beyond recruitment failure.
Senecio marotiri C.J.Webb	Compositae	At Risk – Naturally Uncommon	Yes		Sp, DPR, DPS, DPT, EF, NStr, RR	MATlND= 1000-5000	STABLE +/-10%	Low	Low	National stronghold. Threatened by weed competition and succession. Species at southern limit of its distribution.
Senecio pokohinuensis (de Lange & B.G.Murray) de Lange	Compositae	At Risk – Naturally Uncommon	Yes		DPS, DPT, EF, IE, NStr, RR, RE, TL	AREA<=1000	STABLE +/-10%	Low	High	National stronghold. Endemic to the Mokohinau Islands. Type locality = Burgess (Pokohinu) Island. Range restricted to occupying seabird sites.
Sophora fulvida (Allan) Heenan & de Lange,	Leguminosae	At Risk – Naturally Uncommon	Yes		DPS, DPT, NStr, TL	MATlND=5000-20000	STABLE +/-10%	Medium	Medium	National stronghold. Hybridisation is an issue. Type locality = Waitākere.
Stellaria aff. *parviflora* (AK 169580; Poor Knights)	Caryophyllaceae	At Risk – Naturally Uncommon	No		DPR, DPS, DPT, DE, EF, RR	MATlND= 1000-5000	STABLE +/-10%	Medium	Medium	Designated as panel disagreed with threshold. Population stable but shouldn't be 'Not Threatened' which doesn't reflect its situation.
Tmesipteris sigmatifolia Chinnock	Psilotaceae	Not Threatened	No		DPR, DPS, DPT	AREA<=10000	STABLE +/-10%	Low	Medium	

3.5 Non-resident Native (4)

Taxa whose natural presence in Tāmaki Makaurau / Auckland is either discontinuous (Migrant) or sporadic or temporary (Vagrant) or which have succeeded in recently (since 1950) establishing a resident breeding population (Coloniser).

3.5.1 Vagrant (3)

Table 11: Vagrant Vascular Plants in Tāmaki Makaurau / Auckland

Name and Authority	Family	National Cons. Status (2017)	National Stronghold	Criteria	Qualifiers	Regional Population Size	Regional Trend	Regional Confidence Population	Regional Confidence Trend	Notes
Gratiola pubescens R.Br.	Plantaginaceae	Non-resident – Vagrant	No		OL, SO					
Ipomoea pes-caprae subsp. *brasiliensis* (L.) Ooststr.	Convolvulaceae	At Risk – Naturally Uncommon	No							
Senecio australis Willd.	Compositae	Non-resident – Vagrant			SO					

3.5.2 Coloniser (1)

Table 12: Coloniser Vascular Plants in Tāmaki Makaurau / Auckland

Name and Authority	Family	National Cons. Status (2017)	National Stronghold	Criteria	Qualifiers	Regional Population Size	Regional Trend	Regional Confidence Population	Regional Confidence Trend	Notes
Drosera gunniana (Planch.) de Salas	Droseraceae	Non-resident – Coloniser	No		DPS, DPT, SO	AREA<=10000	INC >10%	Low	Low	Naturally arrived in Northland and spreading through Auckland and Waikato regions.

3.6 Not Threatened (314)

Resident native taxa that have large, stable populations.

Table 13: Not Threatened Vascular Plants in Tāmaki Makaurau / Auckland

Name and Authority	Family	National Cons. Status (2017)	National Stronghold	Criteria	Qualifiers	Regional Population Size	Regional Trend	Regional Confidence Population Size	Regional Confidence Trend	Notes
Acaena anserinifolia (J.R.Forst. & G.Forst.) J.B.Armstr.	Rosaceae	Not Threatened			DPS, DPT					
Acaena novae-zelandiae Kirk	Rosaceae	Not Threatened			DPS, DPT, TL					
Acianthus sinclairii Hook.f.	Orchidaceae	Not Threatened			DPS, DPT					
Adiantum aethiopicum L.	Pteridaceae	Not Threatened			DPS, DPT					
Adiantum cunninghamii Hook.	Pteridaceae	Not Threatened			DPS, DPT					
Adiantum diaphanum Blume	Pteridaceae	Not Threatened			DPS, DPT					
Adiantum fulvum Raoul	Pteridaceae	Not Threatened			DPS, DPT					
Adiantum hispidulum Sw.	Pteridaceae	Not Threatened			DPS, DPT					
Alectryon excelsus subsp. *excelsus* Gaertn.	Sapindaceae	Not Threatened			DPS, DPT					
Alseuosmia macrophylla A.Cunn.	Alseuosmiaceae	Not Threatened			DPS, DPT					
Alternanthera nahui Heenan & de Lange	Amaranthaceae	Not Threatened			DPS, DPT					
Apium prostratum subsp. *prostratum* var. *filiforme* (A.Rich.) Kirk	Umbelliferae	Not Threatened			DPS					
Apodasmia similis (Edgar) B.G.Briggs & L.A.S.Johnson	Restionaceae	Not Threatened			DPS, DPT					
Aristotelia serrata (J.R.Forst. & G.Forst.) W.R.B.Oliv.	Elaeocarpaceae	Not Threatened			DPS, DPT					
Arthropteris tenella (G.Forst.) J.Sm. ex Hook.f.	Tectariaceae	Not Threatened			DPS, DPT					

Name and Authority	Family	National Cons. Status (2017)	National Stronghold	Criteria	Qualifiers	Regional Population Size	Regional Trend	Regional Confidence Population Size	Regional Confidence Trend	Notes
Asplenium bulbiferum G.Forst.,	Aspleniaceae	Not Threatened			DPS, DPT					
Asplenium flabellifolium Cav.	Aspleniaceae	Not Threatened			DPS, DPT					
Asplenium flaccidum G.Forst.	Aspleniaceae	Not Threatened			DPS, DPT					
Asplenium gracillimum Colenso	Aspleniaceae	Not Threatened			DPS, DPT					
Asplenium lamprophyllum Carse	Aspleniaceae	Not Threatened			DPS, DPT					
Asplenium oblongifolium Colenso	Aspleniaceae	Not Threatened			DPS, DPT					
Asplenium polyodon G.Forst.	Aspleniaceae	Not Threatened			DPS, DPT					
Astelia banksii A.Cunn.	Asteliaceae	Not Threatened			DPS, DPT					
Astelia hastata Colenso	Asteliaceae	Not Threatened			DPS, DPT					
Astelia solandri A.Cunn.	Asteliaceae	Not Threatened			DPS, DPT					
Astelia trinervia Kirk	Asteliaceae	Not Threatened			DPS, TL					Type locality = Omaha.
Austroblechnum lanceolatum (R.Br.) Gasper & V.A.O.Dittrich	Blechnaceae	Not Threatened			DPS, DPT					
Austroblechnum membranaceum (Colenso ex Hook.) Gasper & V.A.O.Dittrich.	Blechnaceae	Not Threatened			DPS, DPT					
Austrostipa stipoides (Hook.f.) S.W.L.Jacobs & J.Everett	Gramineae	Not Threatened			DPS, DPT					
Avicennia marina subsp. *australasica* (Walp.) J.Everett	Acanthaceae	Not Threatened			DPS, INC	AREA>10000	INC >10%	High	Low	

Name and Authority	Family	National Cons. Status (2017)	National Stronghold	Criteria	Qualifiers	Regional Population Size	Regional Trend	Regional Confidence Population Size	Regional Confidence Trend	Notes
Beilschmiedia tarairi (A.Cunn.) Benth. & Hook.f. ex Kirk	Lauraceae	Not Threatened			DPS, DPT					
Beilschmiedia tawa (A.Cunn.) Benth. & Hook.f. ex Kirk	Lauraceae	Not Threatened			DPS, DPT					
Bolboschoenus fluviatilis (Torr.) Soják	Cyperaceae	Not Threatened			DPS, DPT					
Bolboschoenus medianus (V.J.Cook) Soják	Cyperaceae	Not Threatened			DPS, DPT					
Brachyglottis repanda J.R.Forst. & G.Forst.	Compositae	Not Threatened			DPS, DPT					
Bulbophyllum pygmaeum (Sm.) Lindl.	Orchidaceae	Not Threatened			DPS, DPT					
Caladenia chlorostyla D.L.Jones, Molloy & M.A.Clem.	Orchidaceae	Not Threatened			DPS, DPT					
Callitriche muelleri Sond.	Plantaginaceae	Not Threatened			DPS, DPT					
Calystegia sepium subsp. *roseata* Brummitt	Convolvulaceae	Not Threatened			DPS, DPT					
Calystegia soldanella (L.) R.Br.	Convolvulaceae	Not Threatened			DPS, DPT					
Calystegia tuguriorum (G.Forst.) R.Br. ex Hook.f.	Convolvulaceae	Not Threatened			DPS, DPT					
Carex banksiana K.A.Ford	Cyperaceae	Not Threatened			DPS, DPT					
Carex dissita Sol. ex Boott	Cyperaceae	Not Threatened			DPS, DPT					
Carex flagellifera Colenso	Cyperaceae	Not Threatened			DPS, DPT					
Carex geminata Schkuhr	Cyperaceae	Not Threatened			DPS, DPT					Some taxonomic issues that require resolving.
Carex inversa R.Br.	Cyperaceae	Not Threatened			DPS, DPT					
Carex lambertiana Boott	Cyperaceae	Not Threatened			DPS, DPT					

Name and Authority	Family	National Cons. Status (2017)	National Stronghold	Criteria	Qualifiers	Regional Population Size	Regional Trend	Regional Confidence Population Size	Regional Confidence Trend	Notes
Carex lessoniana Steud.	Cyperaceae	Not Threatened			DPS, DPT					Taxonomic issues with *Carex geminata* that needs resolving.
Carex maorica Hamlin	Cyperaceae	Not Threatened			DPS, DPT					
Carex pumila Thunb.	Cyperaceae	Not Threatened			DPS, DPT					
Carex secta Boott	Cyperaceae	Not Threatened			DPS, DPT					
Carex solandri Boott	Cyperaceae	Not Threatened			DPS, DPT					
Carex testacea Sol. ex Boott	Cyperaceae	Not Threatened			DPS, DPT					
Carex uncinata L.f.	Cyperaceae	Not Threatened			DPS, DPT					
Carex virgata Sol. ex Boott	Cyperaceae	Not Threatened			DPS, DPT					
Carex zotovii (Hamlin) K.A.Ford	Cyperaceae	Not Threatened			DPS, DPT					
Carpodetus serratus J.R.Forst. & G.Forst.	Rousseaceae	Not Threatened			DPS, DPT					
Centella uniflora (Colenso) Nannf.	Umbelliferae	Not Threatened			DPS, DPT					
Centipeda cunninghamii (DC.) A.Braun & Asch.	Compositae	Not Threatened			DPS, DPT					
Clematis paniculata J.F.Gmel.	Ranunculaceae	Not Threatened			DPS, DPT					
Coprosma arborea Kirk	Rubiaceae	Not Threatened			DPS, DPT					
Coprosma areolata Cheeseman	Rubiaceae	Not Threatened			DPS, DPT					
Coprosma autumnalis Colenso	Rubiaceae	Not Threatened			DPS, DPT					
Coprosma lucida J.R.Forst. & G.Forst.	Rubiaceae	Not Threatened			DPS, DPT					
Coprosma macrocarpa subsp. *minor* A.P.Druce ex R.O.Gardner & Heads	Rubiaceae	Not Threatened			DPS, DPT					

Name and Authority	Family	National Cons. Status (2017)	National Stronghold	Criteria	Qualifiers	Regional Population Size	Regional Trend	Regional Confidence Population Size	Regional Confidence Trend	Notes
Coprosma rhamnoides A.Cunn.	Rubiaceae	Not Threatened			DPS, DPT					
Coprosma robusta Raoul	Rubiaceae	Not Threatened			DPS, DPT					
Coprosma spathulata subsp. *spathulata* A.Cunn.	Rubiaceae	Not Threatened			DPS, DPT					
Cordyline australis (G.Forst.) Endl.	Asparagaceae	Not Threatened			DPS, DPT					
Cordyline banksii Hook.f.	Asparagaceae	Not Threatened			DPS, DPT					
Cordyline pumilio Hook.f.	Asparagaceae	Not Threatened			DPS, DPT					
Coriaria arborea var. *arborea* Linds.	Coriariaceae	Not Threatened			DPS, DPT					
Corybas acuminatus M.A.Clem. & Hatch	Orchidaceae	Not Threatened			DPS, DPT					
Corybas cheesemanii (Hook.f. ex Kirk) Kuntze	Orchidaceae	Not Threatened			DPS, TL					Type locality = Titirangi.
Corybas macranthus (Hook.f.) Rchb.f.	Orchidaceae	Not Threatened			DPS, DPT					
Corybas oblongus (Hook.f.) Rchb.f.	Orchidaceae	Not Threatened			DPS, DPT					
Corybas trilobus (Hook.f.) Rchb.f.	Orchidaceae	Not Threatened			DPS, DPT					
Corynocarpus laevigatus J.R.Forst. & G.Forst.	Corynocarpaceae	Not Threatened			DPS, DPT					
Cotula australis (Spreng.) Hook.f.	Compositae	Not Threatened			DPS, DPT					
Cotula coronopifolia L.	Compositae	Not Threatened			DPS, DPT					
Cranfillia fluviatalis (R.Br.) Gasper et V.A.O.Dittrich	Blechnaceae	Not Threatened			DPS, DPT					
Crassula sieberiana (Schult. & Schult.f.) Druce	Crassulaceae	Not Threatened			DPS, DPT					Locally common on islands.

Name and Authority	Family	National Cons. Status (2017)	National Stronghold	Criteria	Qualifiers	Regional Population Size	Regional Trend	Regional Confidence Population Size	Regional Confidence Trend	Notes
Cyathea dealbata (G.Forst.) Sw.	Cyatheaceae	Not Threatened			DPS, DPT					
Cyathea medullaris (G.Forst.) Sw.	Cyatheaceae	Not Threatened			DPS, DPT					
Cyathea smithii Hook.f.	Cyatheaceae	Not Threatened			DPS, DPT					
Cyperus ustulatus A.Rich.	Cyperaceae	Not Threatened			DPS, DPT					
Cyrtostylis oblonga Hook.f.	Orchidaceae	Not Threatened			DPS, DPT					
Dacrycarpus dacrydioides (A.Rich.) de Laub.	Podocarpaceae	Not Threatened			DPS, DPT					
Dacrydium cupressinum Sol. ex G.Forst.	Podocarpaceae	Not Threatened			DPS, DPT					
Dendrobium cunninghamii Lindl.	Orchidaceae	Not Threatened			DPS, DPT					
Deparia petersenii subsp. *congrua* (Brack.) M.Kato	Dryopteridaceae	Not Threatened			DPS, DPT					
Dianella latissima Heenan & de Lange	Hemerocallidaceae	Not Threatened			DPS, DPT					
Dianella nigra Colenso	Hemerocallidaceae	Not Threatened			DPS, DPT					
Dichondra repens J.R.Forst. & G.Forst.	Convolvulaceae	Not Threatened			DPS, DPT					
Dicksonia fibrosa Colenso,	Dicksoniaceae	Not Threatened			DPS, DPT					
Dicksonia squarrosa (G.Forst.) Sw.	Dicksoniaceae	Not Threatened			DPS, DPT					
Didymocheton spectabilis (G.Forst.) Mabb. & Holzmeyer	Meliaceae	Not Threatened			DPS, DPT					
Diplazium australe (R.Br.) N.A.Wakef.	Dryopteridaceae	Not Threatened			DPS, DPT					
Diploblechnum fraseri (A.Cunn.) De Vol	Blechnaceae	Not Threatened			DPS, DPT					

Name and Authority	Family	National Cons. Status (2017)	National Stronghold	Criteria	Qualifiers	Regional Population Size	Regional Trend	Regional Confidence Population Size	Regional Confidence Trend	Notes
Disphyma australe subsp. *australe* (W.T.Aiton) N.E.Br.	Aizoaceae	Not Threatened			DPT					
Dodonaea viscosa Jacq.	Sapindaceae	Not Threatened			DPS, DPT					
Doodia australis Parris (Parris)	Blechnaceae	Not Threatened			DPS, DPT					
Dracophyllum latifolium A.Cunn.	Ericaceae	Not Threatened			DPS, DPT					
Drosera auriculata Backh. ex Planch.	Droseraceae	Not Threatened			DPS, DPT					
Drosera spatulata Labill.	Droseraceae	Not Threatened			DPS, DPT					
Drymoanthus adversus (Hook.f.) Dockrill	Orchidaceae	Not Threatened			DPS, DPT					
Earina aestivalis Cheeseman	Orchidaceae	Not Threatened			DPR, TL					Type locality = Muriwai. Taxonomic issues require resolving.
Earina autumnalis (G.Forst.) Hook.f.	Orchidaceae	Not Threatened			DPS, DPT					
Earina mucronata Lindl.	Orchidaceae	Not Threatened			DPS, DPT					
Elaeocarpus dentatus var. *dentatus* (J.R.Forst. & G.Forst.) Vahl	Elaeocarpaceae	Not Threatened			DPS, DPT					
Elatostema rugosum A.Cunn.,	Urticaceae	Not Threatened			DPS, DPT					
Eleocharis acuta R.Br.	Cyperaceae	Not Threatened			DPS, DPT					
Eleocharis sphacelata R.Br.	Cyperaceae	Not Threatened			DPS, DPT					
Epilobium cinereum A.Rich.	Onagraceae	Not Threatened			DPS, DPT					
Epilobium hirtigerum A.Cunn.	Onagraceae	At Risk – Recovering			DPR, INC, NStr, SO					National stronghold.
Epilobium nummulariifolium A.Cunn.	Onagraceae	Not Threatened			DPS, DPT					

Name and Authority	Family	National Cons. Status (2017)	National Stronghold	Criteria	Qualifiers	Regional Population Size	Regional Trend	Regional Confidence Population Size	Regional Confidence Trend	Notes
Epilobium rotundifolium G.Forst.	Onagraceae	Not Threatened			DPS, DPT					
Euchiton japonicus (Thunb.) Holub	Compositae	Not Threatened			DPS, DPT					
Euchiton sphaericus (Willd.) Holub	Compositae	Not Threatened			DPS, DPT					
Ficinia nodosa (Rottb.) Goetgh., Muasya & D.A.Simpson	Cyperaceae	Not Threatened			DPS, DPT					
Freycinetia banksii A.Cunn.	Pandanaceae	Not Threatened			DPS, DPT					
Gahnia lacera (A.Rich.) Steud.	Cyperaceae	Not Threatened			DPS, DPT					
Gahnia pauciflora Kirk	Cyperaceae	Not Threatened			DPS, DPT					
Gahnia setifolia (A.Rich.) Hook.f.	Cyperaceae	Not Threatened			DPS, DPT					
Gahnia xanthocarpa (Hook.f.) Hook.f.	Cyperaceae	Not Threatened			DPS, DPT					
Gaultheria antipoda G.Forst.	Ericaceae	Not Threatened			DPS, DPT					
Geniostoma ligustrifolium var. *ligustrifolium* A.Cunn.	Loganiaceae	Not Threatened			DPS, DPT					
Geranium homeanum Turcz.	Geraniaceae	Not Threatened			DPS, DPT					
Gleichenia dicarpa R.Br.	Gleicheniaceae	Not Threatened			DPS, DPT					
Gonocarpus incanus (A.Cunn.) Orchard	Haloragaceae	Not Threatened			DPS, DPT					
Gonocarpus micranthus subsp. *micranthus* Thunb.	Haloragaceae	Not Threatened			DPS, DPT					
Goodenia radicans (Cav.) Pers.	Goodeniaceae	Not Threatened			DPS, DPT					
Griselinia lucida (J.R.Forst. & G.Forst.) G.Forst.	Griseliniaceae	Not Threatened			DPS, DPT					

Name and Authority	Family	National Cons. Status (2017)	National Stronghold	Criteria	Qualifiers	Regional Population Size	Regional Trend	Regional Confidence Population Size	Regional Confidence Trend	Notes
Haloragis erecta subsp. *erecta* Banks ex Murray	Haloragaceae	Not Threatened			DPS, DPT					
Hedycarya arborea J.R.Forst. & G.Forst.	Monimiaceae	Not Threatened			DPS, DPT					
Histiopteris incisa (Thunb.) J.Sm.	Dennstaedtiaceae	Not Threatened			DPS, DPT					
Hoheria populnea A.Cunn.	Malvaceae	Not Threatened			DPS, DPT					
Hydrocotyle dissecta Hook.f.	Araliaceae	Not Threatened			DPS, DPT					
Hydrocotyle elongata A.Cunn.	Araliaceae	Not Threatened			DPS, DPT					
Hydrocotyle moschata var. *moschata* G.Forst.,	Araliaceae	Not Threatened			DPS, DPT					
Hydrocotyle moschata var. *parviflora* Carse	Araliaceae	Not Threatened			DPS, DPT					
Hymenophyllum aff. *rarum* (AK 330262; New Zealand)	Hymenophyllaceae	Not Threatened			DPS, DPT					
Hymenophyllum demissum (G.Forst.) Sw.	Hymenophyllaceae	Not Threatened			DPS, DPT					
Hymenophyllum dilatatum (G.Forst.) Sw.	Hymenophyllaceae	Not Threatened			DPS, DPT					
Hymenophyllum flabellatum Labill.	Hymenophyllaceae	Not Threatened			DPS, DPT					
Hymenophyllum flexuosum A.Cunn.	Hymenophyllaceae	Not Threatened			DPS, DPT					
Hymenophyllum frankliniae Colenso	Hymenophyllaceae	Not Threatened			DPS, DPT					
Hymenophyllum multifidum (G.Forst.) Sw.	Hymenophyllaceae	Not Threatened			DPS, DPT					
Hymenophyllum nephrophyllum Ebihara & K.Iwats.	Hymenophyllaceae	Not Threatened			DPS, DPT					

Name and Authority	Family	National Cons. Status (2017)	National Stronghold	Criteria	Qualifiers	Regional Population Size	Regional Trend	Regional Confidence Population Size	Regional Confidence Trend	Notes
Hymenophyllum revolutum Colenso	Hymenophyllaceae	Not Threatened			DPS, DPT					
Hymenophyllum sanguinolentum (G.Forst.) Sw.	Hymenophyllaceae	Not Threatened			DPS, DPT					
Hymenophyllum scabrum A.Rich.	Hymenophyllaceae	Not Threatened			DPS, DPT					
Hypolepis ambigua (A.Rich.) Brownsey & Chinnock	Dennstaedtiaceae	Not Threatened			DPS, DPT					
Icarus filiformis (A.Cunn.) Gasper & Salino	Blechnaceae	Not Threatened			DPS, DPT					
Isachne globosa (Thunb.) Kuntze	Gramineae	Not Threatened			DPS, DPT					
Isolepis cernua var. *cernua* (Vahl) Roem. & Schult.	Cyperaceae	Not Threatened			DPS, DPT					
Isolepis prolifera (Rottb.) R.Br.	Cyperaceae	Not Threatened			DPS, DPT					
Isolepis reticularis Colenso	Cyperaceae	Not Threatened			DPS, DPT					
Juncus australis Hook.f.	Juncaceae	Not Threatened			DPS, DPT					
Juncus edgariae L.A.S.Johnson & K.L.Wilson	Juncaceae	Not Threatened			DPS, DPT					
Juncus kraussii subsp. *australiensis* (Buchenau) Snogerup	Juncaceae	Not Threatened			DPS, DPT					
Juncus pallidus R.Br.	Juncaceae	Not Threatened			DPS, DPT					
Juncus planifolius R.Br.	Juncaceae	Not Threatened			DPS, DPT					
Juncus sarophorus L.A.S.Johnson	Juncaceae	Not Threatened			DPS, DPT					
Juncus usitatus L.A.S.Johnson	Juncaceae	Not Threatened			DPS, DPT					
Knightia excelsa R.Br.	Proteaceae	Not Threatened			DPS, DPT					

Name and Authority	Family	National Cons. Status (2017)	National Stronghold	Criteria	Qualifiers	Regional Population Size	Regional Trend	Regional Confidence Population Size	Regional Confidence Trend	Notes
Lachnagrostis billardierei subsp. *billardierei* (R.Br.) Trin.	Gramineae	Not Threatened			DPS, DPT					
Lachnagrostis filiformis (G.Forst.) Trin.	Gramineae	Not Threatened			DPS, DPT					
Lachnagrostis littoralis subsp. *littoralis* (Hack.) Edgar	Gramineae	Not Threatened			DPS, DPT					
Lagenophora pumila (G.Forst.) Cheeseman	Compositae	Not Threatened			DPS, DPT					
Lastreopsis hispida (Sw.) Tindale	Dryopteridaceae	Not Threatened			DPS, DPT					
Laurelia novae-zelandiae A.Cunn.	Atherospermataceae	Not Threatened			DPS, DPT					
Lecanopteris pustulata subsp. *pustulata* Perrie & Brownsey	Polypodiaceae	Not Threatened								
Lecanopteris scandens (G.Forst.) Perrie & Brownsey	Polypodiaceae	Not Threatened			DPS, DPT					
Lepidosperma australe (A.Rich.) Hook.f.	Cyperaceae	Not Threatened			DPS, DPT					
Lepidosperma laterale R.Br.	Cyperaceae	Not Threatened			DPS, DPT					
Leptecophylla juniperina subsp. *juniperina* (J.R.Forst. & G.Forst.) C.M.Weiller	Ericaceae	Not Threatened			DPS, DPT					
Leptopteris hymenophylloides (A.Rich.) C.Presl	Osmundaceae	Not Threatened			DPS, DPT					
Leptospermum aff. *scoparium* (a) (ak 284541; Auckland)	Myrtaceae	Threatened – Nationally Vulnerable			DPR					Impact of myrtle rust on this species is unclear.
Leucopogon fasciculatus (G.Forst.) A.Rich.	Ericaceae	Not Threatened			DPS, DPT					

Name and Authority	Family	National Cons. Status (2017)	National Stronghold	Criteria	Qualifiers	Regional Population Size	Regional Trend	Regional Confidence Population Size	Regional Confidence Trend	Notes
Leucopogon fraseri A.Cunn.	Ericaceae	Not Threatened			DPS, DPT					
Libertia grandiflora (R.Br.) Sweet	Iridaceae	Not Threatened			DPS, DPT					
Libertia ixioides (G.Forst.) Spreng.	Iridaceae	Not Threatened			DPS, DPT					
Lilaeopsis novae-zelandiae (Gand.) A.W.Hill	Umbelliferae	Not Threatened			DPT					
Lindsaea linearis Sw.	Lindsaeaceae	Not Threatened			DPS, DPT					
Lindsaea trichomanoides Dryand.	Lindsaeaceae	Not Threatened			DPS, DPT					
Lobelia anceps L.f.	Campanulaceae	Not Threatened			DPS, DPT					
Lobelia angulata G.Forst.	Campanulaceae	Not Threatened			DPS, DPT					
Lomaria discolor (G.Forst.) Willd.	Blechnaceae	Not Threatened			DPS, DPT					
Loxogramme dictyopteris (Mett.) Copel.	Polypodiaceae	Not Threatened			DPS, DPT					
Lycopodium deuterodensum Herter	Lycopodiaceae	Not Threatened			DPS, DPT					
Lycopodium scariosum G.Forst.	Lycopodiaceae	Not Threatened			DPS, DPT					
Lycopodium volubile G.Forst.	Lycopodiaceae	Not Threatened			DPS, DPT					
Lygodium articulatum A.Rich.	Lygodiaceae	Not Threatened			DPS, DPT					
Machaerina articulata (R.Br.) T.Koyama	Cyperaceae	Not Threatened			DPS, DPT					
Machaerina juncea (R.Br.) T.Koyama	Cyperaceae	Not Threatened			DPS, DPT					
Machaerina rubiginosa (Spreng.) T.Koyama	Cyperaceae	Not Threatened			DPS, DPT					

Name and Authority	Family	National Cons. Status (2017)	National Stronghold	Criteria	Qualifiers	Regional Population Size	Regional Trend	Regional Confidence Population Size	Regional Confidence Trend	Notes
Machaerina sinclairii (Hook.f.) T.Koyama	Cyperaceae	Not Threatened			DPS, DPT					
Machaerina teretifolia (R.Br.) T.Koyama	Cyperaceae	Not Threatened			DPS, DPT					
Melicytus ramiflorus subsp. *ramiflorus* J.R.Forst. & G.Forst.	Violaceae	Not Threatened			DPS, DPT					
Microlaena avenacea (Raoul) Hook.f.	Gramineae	Not Threatened			DPS, DPT					
Microlaena stipoides (Labill.) R.Br.	Gramineae	Not Threatened			DPS, DPT					
Microschizaea fistulosa Labill.	Schizaeaceae	Not Threatened			RR, SO					Specific habitat requirements therefore range restricted.
Microtis unifolia (G.Forst.) Rchb.f.	Orchidaceae	Not Threatened								
Morelotia affinis (Brongn.) S.T.Blake	Cyperaceae	Not Threatened								
Muehlenbeckia australis (G.Forst.) Meisn.	Polygonaceae	Not Threatened			DPS, DPT					
Muehlenbeckia complexa var. *complexa* (A.Cunn.) Meisn.	Polygonaceae	Not Threatened			DPS, DPT					
Myriophyllum propinquum A.Cunn.	Haloragaceae	Not Threatened			DPS, DPT					
Myrsine australis (A.Rich.) Allan	Primulaceae	Not Threatened			DPS, DPT					
Nertera depressa Banks & Sol. ex Gaertn.	Rubiaceae	Not Threatened			DPS, DPT					
Nertera dichondrifolia (A.Cunn.) Hook.f.	Rubiaceae	Not Threatened			DPS, DPT					
Nestegis lanceolata (Hook.f.) L.A.S.Johnson	Oleaceae	Not Threatened			DPS, DPT					

Name and Authority	Family	National Cons. Status (2017)	National Stronghold	Criteria	Qualifiers	Regional Population Size	Regional Trend	Regional Confidence Population Size	Regional Confidence Trend	Notes
Notogrammitis billardierei (Willd.) Parris	Polypodiaceae	Not Threatened								
Notogrammitis ciliata (Colenso) Parris	Polypodiaceae	Not Threatened			DPS, DPT					
Notogrammitis heterophylla (Labill.) Parris	Polypodiaceae	Not Threatened			DPS, DPT					
Olearia furfuracea (A.Rich.) Hook.f.	Compositae	Not Threatened			DPS, DPT					
Olearia rani var. *rani* (A.Cunn.) Druce	Compositae	Not Threatened			DPS, DPT					
Oplismenus hirtellus subsp. *imbecillis* (R.Br.) U.Scholz	Gramineae	Not Threatened			DPS, DPT					
Oxalis exilis A.Cunn.	Oxalidaceae	Not Threatened			DPS, DPT					
Oxalis rubens Haw.	Oxalidaceae	Not Threatened			DPS, DPT					
Paesia scaberula (A.Rich.) Kuhn	Dennstaedtiaceae	Not Threatened			DPS, DPT					
Pakau pennigera (G.Forst.) S.E.Fawc. & A.R.Sm.	Thelypteridaceae	Not Threatened			DPS, DPT					
Palhinhaea cernua (L.) Vasc. & Franco	Lycopodiaceae	Not Threatened			DPS, DPT					
Parablechnum novae-zelandiae (T.C.Chambers & P.A.Farrant) Gasper & Salino	Blechnaceae	Not Threatened			DPS, DPT					
Parapolystichum glabellum (A.Cunn.) Labiak, Sundue & R.C.Moran	Dryopteridaceae	Not Threatened			DPS, DPT					
Parapolystichum microsorum (Endl.) Labiak, Sundue & R.C.Moran	Dryopteridaceae	Not Threatened			DPS, DPT					
Parsonsia heterophylla A.Cunn.	Apocynaceae	Not Threatened			DPS, DPT					

Name and Authority	Family	National Cons. Status (2017)	National Stronghold	Criteria	Qualifiers	Regional Population Size	Regional Trend	Regional Confidence Population Size	Regional Confidence Trend	Notes
Passiflora tetrandra Banks ex DC.	Passifloraceae	Not Threatened			DPS, DPT					
Pectinopitys ferruginea (G.Benn. ex D.Don) C.N.Page	Podocarpaceae	Not Threatened			DPS, DPT					
Pellaea rotundifolia (G.Forst.) Hook.,	Pteridaceae	Not Threatened			DPS, DPT					
Pentapogon crinitus (L.f.) P.M. Peterson, Romasch. & Soreng	Gramineae	Not Threatened			DPS, DPT					
Peperomia urvilleana A.Rich.	Piperaceae	Not Threatened			DPS, DPT					
Persicaria decipiens (R.Br.) K.L.Wilson	Polygonaceae	Not Threatened								
Phlegmariurus billardierei (Spring) Brownsey & Perrie	Lycopodiaceae				DPS, DPT					
Phormium cookianum subsp. *hookeri* (Hook.f.) Wardle	Hemerocallidaceae	Not Threatened			DPS, DPT					
Phormium tenax J.R.Forst. & G.Forst.	Hemerocallidaceae	Not Threatened			DPS, DPT					
Phyllocladus trichomanoides G.Benn ex D.Don	Podocarpaceae	Not Threatened			DPS, DPT					
Piper excelsum subsp. *excelsum* G.Forst.	Piperaceae	Not Threatened			DPS, DPT					
Pittosporum crassifolium Banks & Sol. ex A.Cunn.	Pittosporaceae	Not Threatened			DPS, DPT					
Pittosporum tenuifolium Sol. ex Gaertn.	Pittosporaceae	Not Threatened								
Plagianthus divaricatus J.R.Forst. & G.Forst.	Malvaceae	Not Threatened			DPS, DPT					
Poa anceps G.Forst.	Gramineae	Not Threatened			DPS, DPT					

Name and Authority	Family	National Cons. Status (2017)	National Stronghold	Criteria	Qualifiers	Regional Population Size	Regional Trend	Regional Confidence Population Size	Regional Confidence Trend	Notes
Podocarpus laetus Hooibr. ex Endl.	Podocarpaceae	Not Threatened			DPS, DPT					
Podocarpus totara var. *totara* G.Benn. ex D.Don	Podocarpaceae	Not Threatened			DPS, DPT					
Polystichum neozelandicum Fee	Dryopteridaceae	Not Threatened			DPS, DPT					
Polystichum wawranum (Szyszyl.) Perrie	Dryopteridaceae	Not Threatened			DPS, DPT					
Pomaderris amoena Colenso	Rhamnaceae	Not Threatened			DPS, DPT					
Potamogeton cheesemanii A.Benn.	Potamogetonaceae	Not Threatened			DPS, DPT					
Prumnopitys taxifolia (Sol. ex D.Don) de Laub.	Podocarpaceae	Not Threatened			DPS, DPT					
Pseudognaphalium lanatum (G.Forst) Smissen, Breitw. & de Lange	Compositae	Not Threatened			DPS, DPT					
Pseudopanax arboreus (L.f.) K.Koch	Araliaceae	Not Threatened			DPS, DPT					
Pseudopanax crassifolius (Sol. ex A.Cunn.) K.Koch	Araliaceae	Not Threatened			DPS, DPT					
Pseudopanax lessonii (DC.) K.Koch	Araliaceae	Not Threatened			DPS, DPT					
Psilotum nudum (L.) P.Beauv.	Psilotaceae	Not Threatened			DPS, DPT					
Pteridium esculentum (G.Forst.) Cockayne	Dennstaedtiaceae	Not Threatened			DPS, DPT					
Pteris macilenta A.Rich.	Pteridaceae	Not Threatened			DPS, DPT					
Pteris saxatilis (Carse) Carse	Pteridaceae	Not Threatened			DPS, DPT					
Pteris tremula R.Br.	Pteridaceae	Not Threatened			DPS, DPT					

Name and Authority	Family	National Cons. Status (2017)	National Stronghold	Criteria	Qualifiers	Regional Population Size	Regional Trend	Regional Confidence Population Size	Regional Confidence Trend	Notes
Pterophylla sylvicola (Sol. ex A.Cunn.) Pillon & H.C.Hopkins	Cunoniaceae	Not Threatened								Relatively uncommon on the mainland. Locally common in some pockets on mainland and offshore islands.
Pterostylis agathicola D.L.Jones, Molloy & M.A.Clem.	Orchidaceae	Not Threatened			DPS, DPT					
Pterostylis alobula (Hatch) L.B.Moore	Orchidaceae	Not Threatened			DPS, DPT					
Pterostylis banksii A.Cunn.	Orchidaceae	Not Threatened			DPS, DPT					
Pterostylis brumalis L.B.Moore	Orchidaceae	Not Threatened			DPS, DPT					
Pterostylis graminea Hook.f.	Orchidaceae	Not Threatened			DPS, DPT					
Pterostylis trullifolia Hook.f.	Orchidaceae	Not Threatened			DPS, DPT					
Pyrrosia eleagnifolia (Bory) Hovenkamp	Polypodiaceae	Not Threatened			DPS, DPT					
Ranunculus reflexus Garn.-Jones	Ranunculaceae	Not Threatened			DPS, DPT					
Rhabdothamnus solandri A.Cunn.	Gesneriaceae	Not Threatened			DPS, DPT					
Rhopalostylis sapida H.Wendl. & Drude	Palmae	Not Threatened			DPS, DPT					
Ripogonum scandens J.R.Forst. & G.Forst.	Ripogonaceae	Not Threatened			DPS, DPT					
Rubus australis G.Forst.	Rosaceae	Not Threatened			DPS, DPT					
Rubus cissoides A.Cunn.	Rosaceae	Not Threatened			DPS, DPT					
Rumohra adiantiformis (G.Forst.) Ching	Dryopteridaceae	Not Threatened			DPS, DPT					
Rytidosperma biannulare (Zotov) Connor & Edgar	Gramineae	Not Threatened			DPS, DPT					

Name and Authority	Family	National Cons. Status (2017)	National Stronghold	Criteria	Qualifiers	Regional Population Size	Regional Trend	Regional Confidence Population Size	Regional Confidence Trend	Notes
Rytidosperma gracile (Hook.f.) Connor & Edgar	Gramineae	Not Threatened			DPS, DPT					
Rytidosperma unarede (Raoul) Connor & Edgar	Gramineae	Not Threatened			DPS, DPT					
Salicornia quinqueflora subsp. *quinqueflora* Bunge ex Ung.-Sternb.	Amaranthaceae	Not Threatened			DPS, DPT					
Samolus repens var. *repens* (J.R.Forst. & G.Forst.) Pers.	Primulaceae	Not Threatened			DPS, DPT					
Schefflera digitata J.R.Forst. & G.Forst.	Araliaceae	Not Threatened			DPS, DPT					
Schizaea bifida Willd.	Schizaeaceae	Not Threatened								Declines with succession.
Schizaea dichotoma (L.) Sm.	Schizaeaceae	At Risk – Naturally Uncommon								
Schoenoplectus tabernaemontani (C.C.Gmel.) Palla	Cyperaceae	Not Threatened			DPS, DPT					
Schoenus apogon Roem. & Schult.	Cyperaceae	Not Threatened			DPS, DPT					
Schoenus maschalinus Roem. & Schult.	Cyperaceae	Not Threatened			DPS, DPT					
Schoenus tendo (Hook.f.) Banks & Sol. ex Hook.f.	Cyperaceae	Not Threatened			DPS, DPT					
Senecio esleri C.J.Webb	Compositae	Not Threatened			DPS, TO, TL					
Senecio hispidulus A.Rich.	Compositae	Not Threatened			DPS, DPT					
Senecio lautus G.Forst. ex Willd.	Compositae	Not Threatened			DPS, DPT					
Solanum americanum Mill.	Solanaceae	Not Threatened			DPS, DPT					
Solanum laciniatum Aiton	Solanaceae	Not Threatened			DPS, DPT					In part this was introduced to the region. Aside from old records, it was unknown

Name and Authority	Family	National Cons. Status (2017)	National Stronghold	Criteria	Qualifiers	Regional Population Size	Regional Trend	Regional Confidence Population Size	Regional Confidence Trend	Notes
										from the region until the 1960s.
Solanum opacum A.Braun & Bouché	Solanaceae	Data Deficient			SO					
Sophora chathamica Cockayne	Leguminosae	Not Threatened								Hybridisation is an issue.
Spergularia tasmanica (Kindb.) L.G.Adams	Caryophyllaceae	Not Threatened			SO					
Spinifex sericeus R.Br.	Gramineae	Not Threatened			DPS, DPT					
Sticherus cunninghamii (Heward ex Hook.) Ching	Gleicheniaceae	Not Threatened								
Streblus heterophyllus (Blume) Corner	Moraceae	Not Threatened								
Tetragonia trigyna Banks & Sol. ex Hook.f.	Aizoaceae	Not Threatened			DPS, DPT					
Thelymitra longifolia J.R.Forst. & G.Forst.	Orchidaceae	Not Threatened			DPS, DPT					
Thelymitra pauciflora R.Br.	Orchidaceae	Not Threatened			DPS, DPT					
Thelymitra pulchella Hook.f.	Orchidaceae	Not Threatened			DPS, DPT					
Tmesipteris elongata P.A.Dang.	Psilotaceae	Not Threatened			DPS, DPT					
Tmesipteris lanceolata P.A.Dang.	Psilotaceae	Not Threatened			DPS, DPT					
Tmesipteris tannensis (Spreng.) Bernh.	Psilotaceae	Not Threatened			DPR, DPS, DPT					
Trichomanes elongatum A.Cunn.	Hymenophyllaceae	Not Threatened			DPS, DPT					
Trichomanes endlicherianum C.Presl	Hymenophyllaceae	Not Threatened			DPS, DPT					
Trichomanes venosum R.Br.	Hymenophyllaceae	Not Threatened			SO					

Name and Authority	Family	National Cons. Status (2017)	National Stronghold	Criteria	Qualifiers	Regional Population Size	Regional Trend	Regional Confidence Population Size	Regional Confidence Trend	Notes
Triglochin striata Ruiz & Pav.	Juncaginaceae	Not Threatened			DPS, DPT					
Typha orientalis C.Presl	Typhaceae	Not Threatened			DPS, DPT					
Veronica macrocarpa var. *macrocarpa* Vahl	Plantaginaceae	Not Threatened								
Veronica plebeia R.Br.	Plantaginaceae	Not Threatened			SO					
Veronica stricta var. *stricta* Banks & Sol. ex Benth.	Plantaginaceae	Not Threatened			DPS, DPT					
Vitex lucens Kirk	Labiatae	Not Threatened			DPS, DPT					
Wolffia australiana (Benth.) Hartog & Plas	Araceae	Not Threatened								
Zostera muelleri subsp. *novazelandica* (Setch.) S.W.L.Jacobs	Zosteraceae	At Risk – Declining			DPT, RR, SO					

4 Discussion

Completing regional conservation status assessments for vascular plants in Tāmaki Makaurau / Auckland is a component of Auckland Council's Biodiversity Focus Area (BFA) Programme. BFAs represent the minimum set of sites requiring targeted management of critical pressures to ensure regional viability of indigenous ecosystems, sequences and species is maintained in the region over the long-term (>50 years). Under this programme, several projects are being established to deliver on council's obligations for regional biodiversity management.

Regional conservation status assessments will help guide the prioritisation of species for targeted management, survey, monitoring and research to ensure regional viability of indigenous species is maintained in the region over the long-term. Following on from the vascular plant conservation assessment Auckland Council staff will be continuing to work on identifying species BFAs for threatened plant species, confirming key pressures and threats; survey needs; management prescriptions; monitoring; and research needs.

While work under the different projects is being shaped to improve outcomes for threatened plant species in the region, Auckland Council has been undertaking survey, monitoring, and management of a subset of threatened plant species:

Examples:

- Threatened plant survey 2022/23 targeting 10 species in the region to collect more data and understanding of these species.
- Monitoring and management of *Lepidium oleraceum* at Mahuki Island. The removal of livestock and rats from the island caused a decline of *Lepidium* because of increased exotic grass competition. This project includes ongoing management of exotic grasses.
- *Leptinella rotundata* and coastal turf management. Since its rediscovery after being listed as regionally extinct in Stanley et al., 2005, Auckland Council have been doing monitoring and management at a couple of known sites.
- Unique species (including several species of terrestrial orchids and short-hair plume grass) and gumland habitat management at Waikumete Cemetery to protect the core habitat from invasive weeds and ecosystem transforming exotic species.
- Exotic species management at the dune lakes at Te Arai Regional Park for the benefit of *Centipeda minima* subsp. *minima* and lakeshore turf to reduce competition and maximise habitat available to the *Centipeda*.
- *Thyridia repens* at Puketutu Island overflow ponds has had exotic species management over several years to protect this species at this site by maximising the area available for this species through reducing competition from exotic species.

Management of threatened plant species requires careful consideration when part of large-scale programmes where pest control or eradication is conducted. Several species that benefit from sustained pest control include *Chenopodium trigonon* subsp. *trigonon*, *Rorippa divaricata*, *Streblus banksii*, *Nestegis apetala*, *Piper excelsum* subsp. *peltatum* and *Tupeia antarctica*. Several plant species only exist on mammal free islands and therefore are conservation dependent because of this. Others have been adversely impacted by pest control or eradication programmes where exotic plants have taken hold of habitats and outcompeted native species or it has led to natural succession which

many of our threatened plants do not tolerate. For some species, natural disturbance processes they rely on for maintaining suitable habitat have been lost or are prevented from occurring.

Some species, threatened and not threatened, are secure on offshore islands but on the mainland can be less common than on islands, such as *Pterophylla sylvicola*, or potentially declining on the mainland, such as *Chenopodium triandrum.* This is a unique situation for Tāmaki Makaurau / Auckland and is difficult to account for in the classification system. There are a few species that are commonly planted in the region but are naturally uncommon and these plantings can impact natural populations and our understanding of them. For example, taupata (*Coprosma repens*) is locally common on offshore islands where it can occasionally grow into a small tree, such as on Rakitu Island. On the mainland, it is often stunted on coastal cliffs, sparse to locally common on the west coast but almost always heavily browsed. This is well illustrated by the small island at Karekare, Paratahi Island, where taupata is locally abundant on the steep eastern side, yet virtually absent from the adjacent Waitākere cliffs. Plants are more numerous on the rocky coastline of Rodney (north Auckland), where a recent survey of c500 individuals noted moderate mammalian browse on almost every plant. Suspected recruitment failure along with impacts of browsing, despite prolific planting, could indicate a decline in natural areas throughout the region. The natural distribution in the region is poorly known and complicated by excessive amenity and re-vegetation plantings, often of unknown provenance and including cultivars. In habitats adjoining urban areas it is common and weedy, and often difficult to distinguish natural from planted. Similarly, for akeake (*Dodonaea viscosa*), it is common in amenity and re-vegetation plantings throughout the region but is usually sparse to very locally common in natural, successional environments. On the mainland, it is found occasionally in small groups or scattered individuals.

Special consideration to the classification of kauri (*Agathis australis*) was necessary with the long-term effects of kauri dieback (*Phytophthora agathidicida*) yet to be fully understood. Kauri is an incredibly long-lived species, capable of a lifespan over 2000 years (Palmer et al., 2006), but has suffered historic decline due to extensive logging and land clearance so the current population could be described as ‘residual’. As keystone species and rākau Rangatira (chiefly trees), kauri health is connected to the health of the entire forest and in turn to the health of the iwi. A precautionary approach was taken with the risk of loss of the species considered in the assessment. With the Hunua Ranges currently free, as far as we know, of kauri dieback, the population remains relatively stable. However, the drastic population decline in the Waitākere Ranges has resulted in a conservative estimate of decline across the region. The species is conservation dependent in terms of mitigating the spread of kauri dieback through managing soil movement of the pathogen (e.g. hygiene stations, pig control, closing kauri forest areas, track upgrades) as well as needing to address the National PA Pest Management Plan (2022). Climate change may also play a role in the long-term survival of kauri, particularly seedling recruitment and on the impacts of the disease. The investment in research, surveillance and protection of kauri has been significant and this was considered as part of the assessment. Although the region is not the national stronghold, kauri are a keystone species and a critical part of the ecosystems in which it is found. Historically, kauri forest ecosystems (WF10 Kauri forest, WF11 Kauri, podocarp, broadleaved forest and WF12 Kauri, podocarp, broadleaved, beech forest) (Singers et al., 2017) would have been the dominant forest type in Auckland. Kauri have been assessed as declining to reflect current and future risk and uncertainty of the threats impacting the species.

There are 21 taxa of Myrtaceae in the region that were assessed, many of which are susceptible to myrtle rust (*Austropuccinia psidii*). A conservative approach was taken in this assessment while our understanding of the long-term potential impacts of myrtle rust remains unclear. There is likely to be declines in some species populations and reproductive failure, but further research is required to better understand this. Some Myrtaceae are relatively common in the region and have few pressures that would trigger a lower threat status, however the potential future impacts of myrtle rust meant a

higher threat status has been designated. Ongoing research and monitoring of the impacts of myrtle rust will provide valuable information for future assessments.

36 species were identified during the workshops as needing further surveys to determine if the species are present and to better understand their distribution. About half of these were data deficient species. A survey programme has been initiated with the first phase targeting 10 species across the region. Species identified with survey requirements will be prioritised, and clustered based on location and timing for efficient future survey efforts.

Although 27 species are listed as Extinct, there are likely to be an additional three species extinct. We have insufficient data due to the lack of survey work to classify them accordingly. A further two species were noted to be on the brink of extinction.

A comprehensive framework and plan for management needs for threatened species as well as species-led outcome monitoring are planned to be developed under Auckland Council's BFA programme. This should provide better population trend data, allow for adaptive management, and improve outcomes for threatened species in the region. Due to the large number of threatened vascular plant species, there is a significant amount of future work required to monitor, manage and protect these species within the region. Working alongside mana whenua and in partnership with communities, researchers, private landowners, and other agencies will be critical for ensuring the long-term survival of these species in Tāmaki Makaurau / Auckland.

5 References

Auckland Council (2012). Auckland Council's Indigenous Biodiversity Strategy. Auckland: Environmental Policy and Strategy, Auckland Council.

Auckland Council (2020). Mahere ā-Rohe Whakahaere Kaupapa Koiora Orotā mō Tāmaki Makaurau Auckland Regional Pest Management Plan 2020-2030, Auckland Council.

Auckland Council (2021). Te Tahua Pūtea Tau 2021-2031, Long-term Plan, Auckland Council.

Calder, M., Townsend, A.J., Kilgour, C., de Lange, P.J. (2014) *Leptinella rotundata* – an enigmatic plant living life on the edge. *Trilepidea,* 133: 8-12.

Crisp, P. (2020). Conservation status of lizard species in the Wellington region. Greater Wellington Regional Council, Publication No. WRC/ESCI-G-20/2, Wellington.

Crisp, P. (2020). Conservation status of native bird species in the Wellington region. Greater Wellington Regional Council, Publication No. GW/ESCI-G-20/75, Wellington.

Crisp, P. (2020). Conservation status of indigenous vascular plant species in the Wellington region. Greater Wellington Regional Council Publication No. GW/ESCI-G-20/20 Wellington

de Lange, P.J., Cameron, E.K. (1997a). Auckland regional threatened plant list. *Auckland Botanical Society Journal* 52(1): 1-4.

de Lange, P.J. and Cameron E.K. (1997b). Additional comments to Auckland threatened plant list. *Auckland Botanical Society Journal* 52(2): 80.

de Lange, P.J., Cameron, E.K., Stanley, R. (1999). Threatened and uncommon plants of the Auckland region and Kermadec Islands. *Auckland Botanical Society Journal* 54(1): 37-41.

de Lange, P.J., Heenan, P.B., Given, D.R., Norton, D.A., Ogle, C.C., Johnson, P.N., Cameron, E.K. (1999): Threatened and uncommon plants of New Zealand. *New Zealand Journal of Botany* 37: 603-628. https://doi.org/10.1080/002882 5X.1999.9512657

de Lange, P.J., Norton, D.A., Courtney, S.P., Heenan, P.B., Barkla, J.W., Cameron, E.K., Hitchmough, R., Townsend, A.J. (2009). Threatened and uncommon plants of New Zealand (2008 revision). *New Zealand Journal of Botany* 47: 61-96. https://doi.org/10.1080/00288250909509794

de Lange, P.J., Norton, D.A., Heenan, P.B., Courtney, S.P., Molloy, B.P.J., Ogle, C.C., Rance, B.D., Johnson, P.N., Hitchmough, R. (2004). Threatened and uncommon plants of New Zealand. *New Zealand Journal of Botany 42*: 45-76. https://doi.org/10.1080/0028825X.2004.9512890.

de Lange, P.J., Rolfe, J.R., Barkla, J.W., Courtney, S.P., Champion, P.D., Perrie, L.R., Beadel, S.M., Ford, K.A., Breitwieser, I., Schonberger, I., Hindmarsh-Walls, R., Heenan, P.B., Ladley, K. (2018). Conservation status of New Zealand indigenous vascular plants, 2017. *New Zealand Threat Classification Series 22*. Department of Conservation, Wellington. 82p.

de Lange, P.J., Rolfe, J.R., Champion, P.D., Courtney, S.P., Heenan, P.B., Barkla, J.W., Cameron, E.K., Norton, D.A., Hitchmough, R.A. (2013). Conservation status of New Zealand indigenous vascular plants, 2012. *New Zealand Threat Classification Series 3*. Department of Conservation, Wellington. 70p.

Department of Conservation (2014). Draft RTCS Definition and Criteria.

Department of Conservation (2020). Te Mana o Te Taiao – Aotearoa New Zealand Biodiversity Strategy 2020. https://www.doc.govt.nz/globalassets/documents/conservation/biodiversity/anzbs-2020.pdf

Ministry for the Environment (2019). Draft National Policy Statement for Indigenous Biodiversity. Proposals for consultation November 2019. https://environment.govt.nz/assets/Publications/Files/draft-npsib.pdf

Molloy, J., Bell, B., Clout, M., de Lange, P., Gibbs, G., Given, D., Norton, D., Smith, N., Stephens, T. (2002). Classifying species according to threat of extinction. A system for New Zealand. *Threatened species occasional publication 22*, 26 p.

National PA Pest Management Plan 2022 (NZ). Accessed https://www.legislation.govt.nz/regulation/public/2022/0208/latest/whole.html

Palmer, J., Lorrey, A., Turney, C.S.M., Hogg, A., Baille, M., Fifield, K. and Ogden, J. (2006). Extension of New Zealand kauri (*Agathis australis*) tree-ring chronologies into Oxygen Isotope Stage (OIS) 3. *Journal of Quarterly Science,* 21(7): 779-787.

Rolfe, J., Makan, T. and Tait, A. (2021). Supplement to the New Zealand Threat Classification System manual 2008: new qualifiers and amendments to qualifier definitions, 2021. Department of Conservation, Wellington. 7 p.

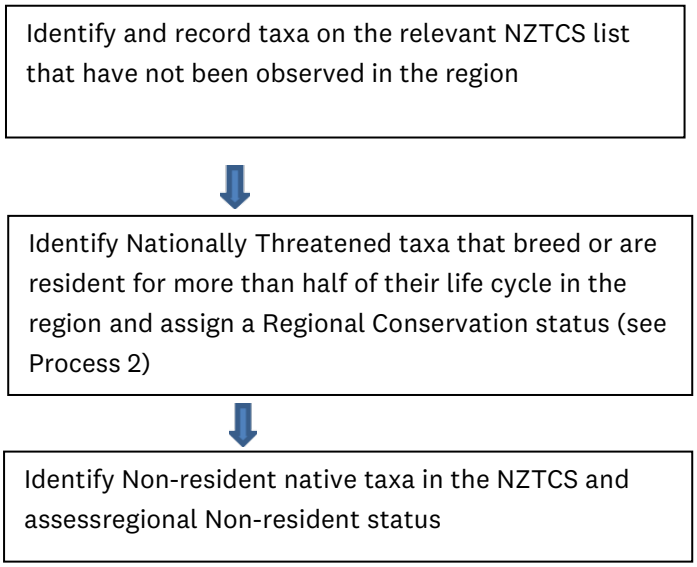
Singers, N., Osborne, B., Lovegrove, T., Jamieson, A., Boow, J., Sawyer, J., Hill, K., Andrews, J., Hill, S., Webb, C. (2017) Indigenous terrestrial and wetland ecosystems of Auckland. Auckland Council.

Stanley, R., de Lange, P.J., Cameron, E.K. (2005). Auckland regional threatened and uncommon vascular plants list. *Auckland Botanical Society Journal* 60(2): 152-157.

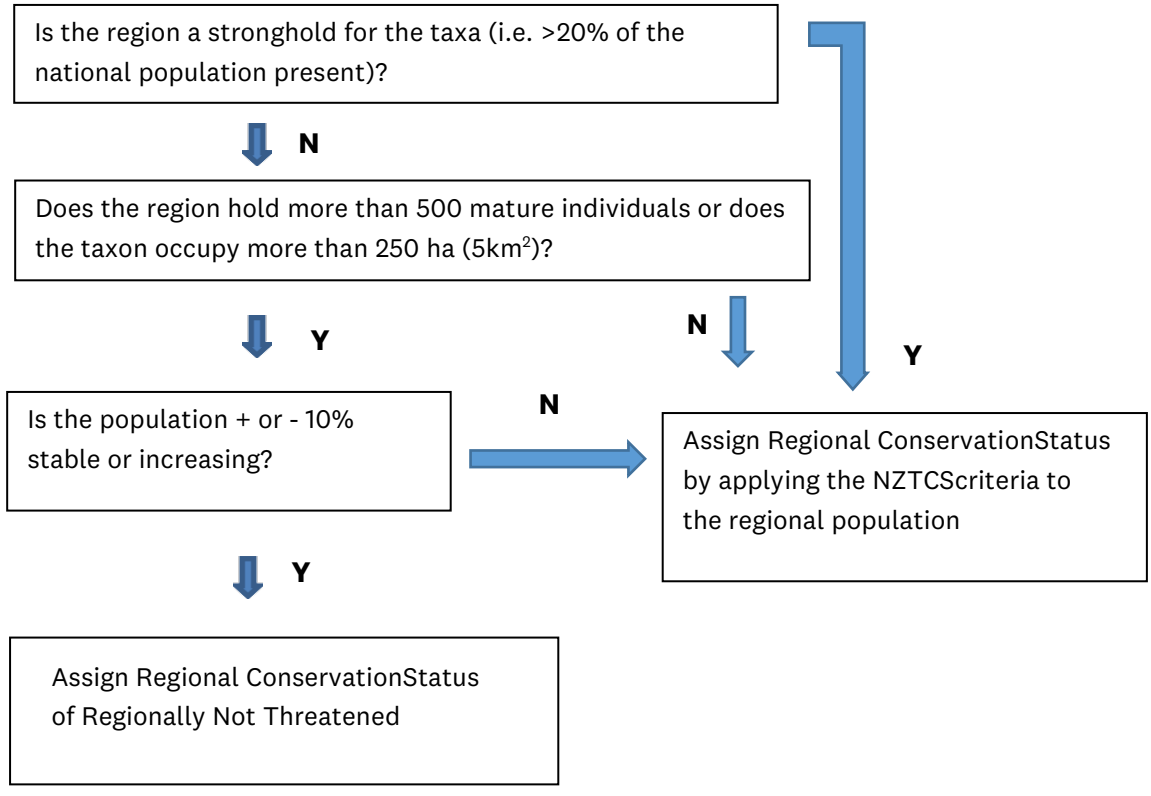
Townsend, A.J., de Lange, P.J., Duffy, C.A.J., Miskelly, C.M., Molloy, J., Norton, D.A. (2008): New Zealand Threat Classification System manual. Department of Conservation, Wellington. 35 p.

Appendix 1: Process for determining the regional threat status of a species

Process 1: Determination of regional threat status



Process 2: Determination of strongholds and Regionally Not Threatened species



Appendix 2: List of national and regional qualifiers

Code	Qualifier	Qualifier Type	National/ Regional	Description
DPR	Data Poor: Recognition	Assessment Process Qualifier	National	Confidence in the assessment is low because of difficulties in determining the identity of the taxon in the field and/or in the laboratory. Taxa that are DPR will often be DPS and DPT. In such cases, the taxon is most likely to be Data Deficient.
DPS	Data Poor: Size	Assessment Process Qualifier	National	Confidence in the assessment is low because of a lack of data on population size.
DPT	Data Poor: Trend	Assessment Process Qualifier	National	Confidence in the assessment is low because of a lack of data on population trend.
DE	Designated	Assessment Process Qualifier	National	A taxon that the Expert Panel has assigned to what they consider to be the most appropriate status without full application of the criteria. For example, a commercial fish stock that is being fished down to Biomass Maximum Sustainable yield (BMSy) may meet criteria for 'Declining', however, it could be designated as 'Not Threatened' if the Expert Panel believes that this better describes the taxon's risk of extinction
IE	Island Endemic	Biological Attribute Qualifier	National	A taxon whose natural distribution is restricted to one island archipelago (e.g. Auckland Islands) and is not part of the North or South Islands or Stewart Island/Rakiura. This qualifier is equivalent to the 'Natural' Population State value in the database.
NS	Natural State	Biological Attribute Qualifier	National	A taxon that has a stable or increasing population that is presumed to be in a natural condition, i.e., has not experienced historical human-induced decline.
RR	Range Restricted	Biological Attribute Qualifier	National	A taxon naturally confined to specific substrates, habitats or geographic areas of less than 1000 km^2 (100 000 ha), this is assessed by taking into account the area of occupied habitat of all sub-populations (and summing the areas of habitat if there is more than one sub-population), e.g. Chatham Island forget-me-not (*Myosotidium hortensia*) and Auckland Island snipe (*Coenocorypha aucklandica aucklandica*). This qualifier can apply to any 'Threatened' or 'At Risk' taxon. It is redundant if a taxon is confined to 'One Location' (OL).
Sp	Sparse	Biological Attribute Qualifier	National	The taxon naturally occurs within typically small and widely scattered subpopulations. This qualifier can apply to any 'Threatened' or 'At Risk' taxon.
NO	Naturalized Overseas	Population State Qualifier	National	A New Zealand endemic taxon that has been introduced by human agency to another country (deliberately or accidentally) and has naturalised there e.g., *Olearia traversiorum* in the Republic of Ireland.
OL	One Location	Population State Qualifier	National	Found at one location in New Zealand (geographically or ecologically distinct area) of less than 100 000 ha (1000 km^2), in which a single event (e.g. a predator irruption) could easily affect all individuals of the taxon, e.g. L'Esperance Rock groundsel (Senecio esperensis) and Open Bay Island leech (*Hirudobdella antipodum*). 'OL' can apply to all 'Threatened', 'At Risk', Non-resident Native – Coloniser and Non-resident Native – Migrant taxa, regardless of whether their restricted distribution in New Zealand is natural or human-induced. Resident native taxa with restricted distributions but where it is unlikely that all sub-populations would be threatened by a single event (e.g. because water channels within an archipelago are larger than known terrestrial predator swimming

Code	Qualifier	Qualifier Type	National/ Regional	Description
				distances) should be qualified as 'Range Restricted' (RR).
SO	Secure Overseas	Population State Qualifier	National	The taxon is secure in the parts of its natural range outside New Zealand.
SO?	Secure Overseas?	Population State Qualifier	National	It is uncertain whether a taxon of the same name that is secure in the parts of its natural range outside New Zealand is conspecific with the New Zealand taxon.
S?O	Secure? Overseas	Population State Qualifier	National	It is uncertain whether the taxon is secure in the parts of its natural range outside New Zealand.
TO	Threatened Overseas	Population State Qualifier	National	The taxon is threatened in the parts of its natural range outside New Zealand.
TO?	Threatened Overseas?	Population State Qualifier	National	It is uncertain whether a taxon of the same name that is threatened in the parts of its natural range outside New Zealand is conspecific with the New Zealand taxon.
T?O	Threatened? Overseas	Population State Qualifier	National	It is uncertain whether the taxon is threatened in the parts of its natural range outside New Zealand.
CI	Climate Impact	Pressure Management Qualifier	National	The taxon is adversely affected by long-term climate trends and/or extreme climatic events. The following questions provide a guide to using the CI Qualifier: Is the taxon adversely affected by long-term changes in the climate, such as an increase in average temperature or sea-level rise? If NO = no Qualifier but needs monitoring and periodic re-evaluation because projected changes to the average climate and sea-level rise may adversely impact the taxon (including via changes to the distribution and prevalence of pests, weeds and predators) in the future. If YES = CI Qualifier Is the taxon adversely affected by extreme climate events, such as a drought, storm or heatwave? If No = no Qualifier but needs monitoring and periodic re-evaluation because projected changes to the climate are likely to increase the frequency and/or severity of these events in the future. If YES = CI Qualifier Use of the Climate Impact Qualifier would indicate the need for more in-depth research, ongoing monitoring of climate impacts, and potentially a climate change adaptation plan for the taxon.
CD	Conservation Dependent	Pressure Management Qualifier	National	The taxon is likely to move to a worse conservation status if current management ceases. The term 'management' can include indirect actions that benefit taxa, such as island biosecurity. Management can make a taxon CD only if cessation of the management would result in a worse conservation status. The influence of the benefits of management on the total population must be considered before using CD. The benefit of managing a single subpopulation may not be adequate

Code	Qualifier	Qualifier Type	National/ Regional	Description
				to trigger CD, but may trigger Partial Decline (PD). Taxa qualified CD may also be PD because of the benefits of management.
CR	Conservation Research Needed	Pressure Management Qualifier	National	Causes of decline and/or solutions for recovery are poorly understood and research is required.
EW	Extinct In The Wild	Pressure Management Qualifier	National	The taxon is known only in captivity or cultivation or has been reintroduced to the wild but is not self-sustaining. Assessment of a reintroduced population should be considered only when it is self-sustaining. A population is deemed to be self-sustaining when the following two criteria have been fulfilled: it is expanding or has reached a stable state through natural replenishment and at least half the breeding adults are products of the natural replenishment, and it has been at least 10 years since reintroduction
EF	Extreme Fluctuations	Pressure Management Qualifier	National	The taxon experiences extreme unnatural population fluctuations, or natural fluctuations overlaying human-induced declines, that increase the threat of extinction. When ranking taxa with extreme fluctuations, the lowest estimate of mature individuals should be used for determining population size, as a precautionary measure.
INC	Increasing	Pressure Management Qualifier	National	There is an ongoing or forecast increase of > 10% in the total population, taken over the next 10 years or three generations, whichever is longer. This qualifier is redundant for taxa ranked as 'Recovering'.
PD	Partial Decline	Pressure Management Qualifier	National	The taxon is declining over most of its range, but with one or more secure populations (such as on offshore islands). Partial decline taxa (e.g. North Island kākā *Nestor meridionalis septentrionalis* and Pacific gecko *Dactylocnemis pacificus*) are declining towards a small stable population, for which the Relict qualifier may be appropriate.
PF	Population Fragmentation	Pressure Management Qualifier	National	Gene flow between subpopulations is hampered as a direct or indirect result of human activity. Naturally disjunct populations are not considered to be 'fragmented'.
PE	Possibly/Presumed Extinct	Pressure Management Qualifier	National	A taxon that has not been observed for more than 50 years but for which there is little or no evidence to support declaring it extinct. This qualifier might apply to several Data Deficient and Nationally Critical taxa.
RF	Recruitment Failure	Pressure Management Qualifier	National	The age structure of the current population is such that a catastrophic decline is likely in the future. Failure to produce new progeny or failure of progeny to reach maturity can be masked by apparently healthy populations of mature specimens.

Code	Qualifier	Qualifier Type	National/ Regional	Description
Rel	Relict	Pressure Management Qualifier	National	The taxon has declined since human arrival to less than 10% of its former range but its population has stabilised. The range of a relictual taxon takes into account the area currently occupied as a ratio of its former extent. Reintroduced and self-sustaining populations within or outside the former known range of a taxon should be considered when determining whether a taxon is relictual. This definition is modified from the definition of the At Risk – Relict category in the NZTCS manual (Townsend et al., 2008). The main difference is that trend is not included in the qualifier definition. This enables the qualifier to be applied to any taxon that has experienced severe range contraction, regardless of whether that contraction continues or has been arrested. This qualifier complements the 'Naturally Uncommon (NU)' qualifier which can be applied to taxa whose abundance has declined but which continue to occupy a substantial part of their natural range.
FR	Former Resident		Regional	Breeding population (existed for more than 50 years) extirpated from region but continues to arrive as a regional vagrant or migrant. FR and RN are mutually exclusive.
HR	Historical Range		Regional	The inferred range (extending in any direction) of the taxon in pre-human times meets its natural limit in the region.
IN	Introduced Native		Regional	Introduced to the region, though not known to have previously occurred in it.
NS	National Stronghold		Regional	More than 20% of the national population breeding or resident for more than half their life cycle in the region.
NR	Natural Range		Regional	The known range (extending in any direction) of the taxon meets it natural limit in the region.
RE	Regional Endemic		Regional	Known to breed only in the region.
RN	Restored Native		Regional	Reintroduced to the region after having previously gone extinct there.
TL	Type Locality		Regional	The type locality of the taxon is within the region. Ignore if the taxon is or has ever been regionally extinct.

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